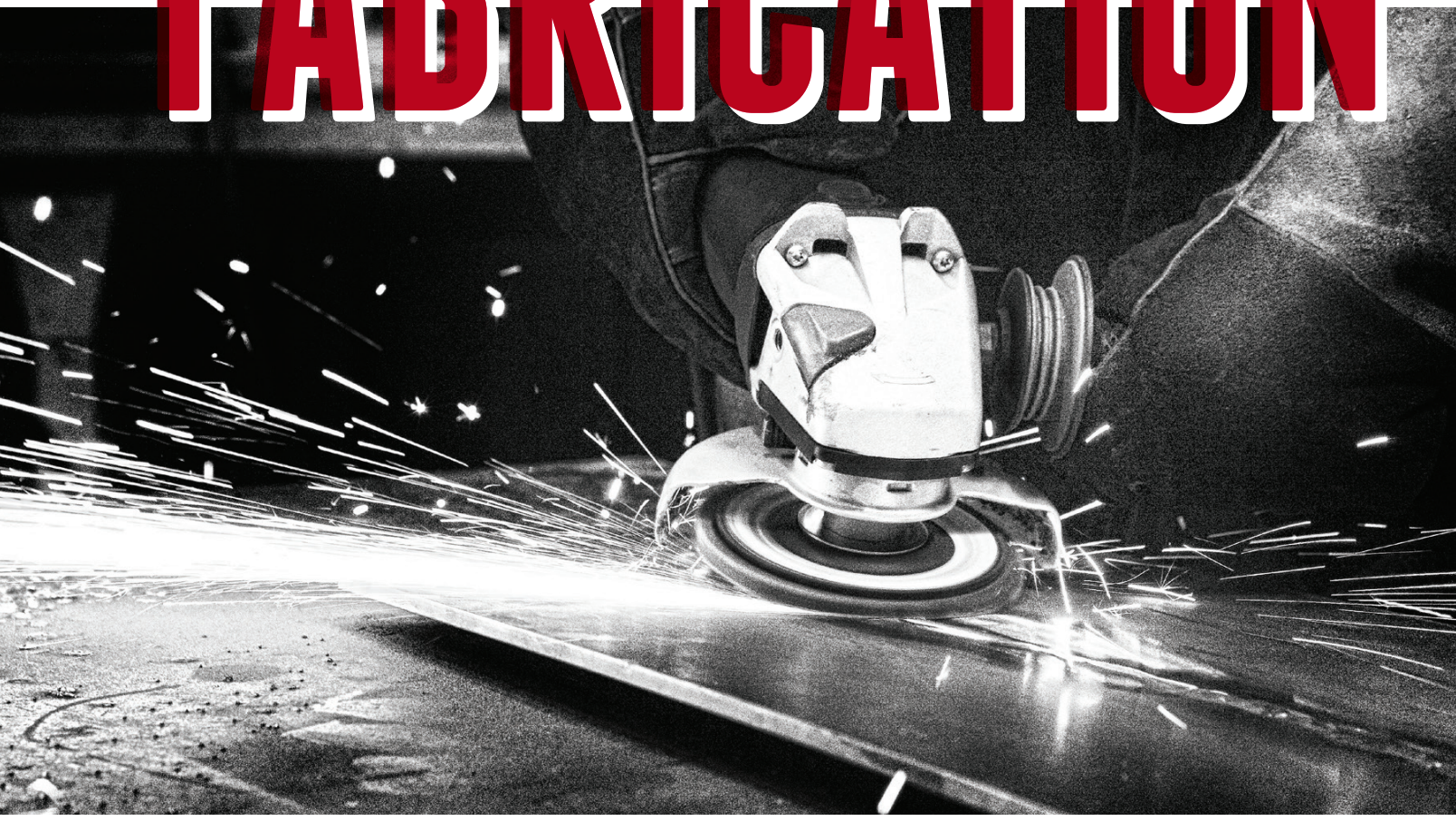
CATALOG

# WELDING & FABRICATION



WEILER®

Solutions for Cutting, Grinding, Cleaning and Finishing.



We are Weiler: Cresco, PA Headquarters

# WHY WEILER

If you think Weiler is an old fashioned company nestled in the beautiful Pocono Mountains of Pennsylvania, you would only be half right.

We are, of course, based in Cresco, PA and proud of the fact that we have built a **progressive**, **innovative**, and **high growth company** headquartered right here in the USA. Our world class products are built here by Weiler Co-Workers who embrace our commitment to Customers, the Community, and to one another.

Weiler Corporation's **heritage dates to 1898**. Today, the tradition of excellence continues under the leadership of the fourth generation, Chris Weiler, President/CEO. Having grown from a power brush manufacturer to a global surface conditioning problem-solver, Weiler's mission is to partner with our customers and business partners to ensure their businesses stay productive and profitable. Our people, products and our strong desire to win deliver a competitive edge that creates growth.

# WORK FASTER:

Before, during and after the weld, Weiler products are **designed to provide superior performance through maximum aggression and long life**. That means you get your work done faster and more efficiently. Our extensive and knowledgeable field sales team works alongside your team to make sure you have the right product to get the job done fast - and done right.

YouTube

*See how Weiler gives you a competitive edge. youtube.com/WeilerCorpVideos*

# WORK SAFER:

Weiler products are designed and manufactured to the strictest standards to ensure the highest level of quality and safety. But safety doesn't stop there; raising awareness of basic safety practices and thinking about safety before the job starts — and after the job is complete — can help curb accidents and injuries in the shop. That's why Weiler offers customers a Safety Training Program based on the SPOT (Speed & Size, Pressure, Orientation, Time ) methodology to help promote safe and proper product usage.

THINK S.P.O.T. WHEN USING BRUSHES & ABRASIVES

Deploying our **SPOT Safety Training Program** in your facility helps improve safety, regardless of your application or work environment.

# WORK BETTER:

**We partner with you** to improve your productivity and drive cost out of your business. Our experts will evaluate and **quantify your consumable spend** and labor productivity. Our analysis provides hard data as to how product is used, how long it lasts and how productive it is, enabling our team to make recommendations to improve your operation.

In addition to our field sales support, Weiler provides world-class Customer Service (800-835-9999) and Application Assistance (888-299-2777).

**If you have a problem that can be solved, we will solve it.**



*A recent study generated*

**$70,000**

*in annual savings.*







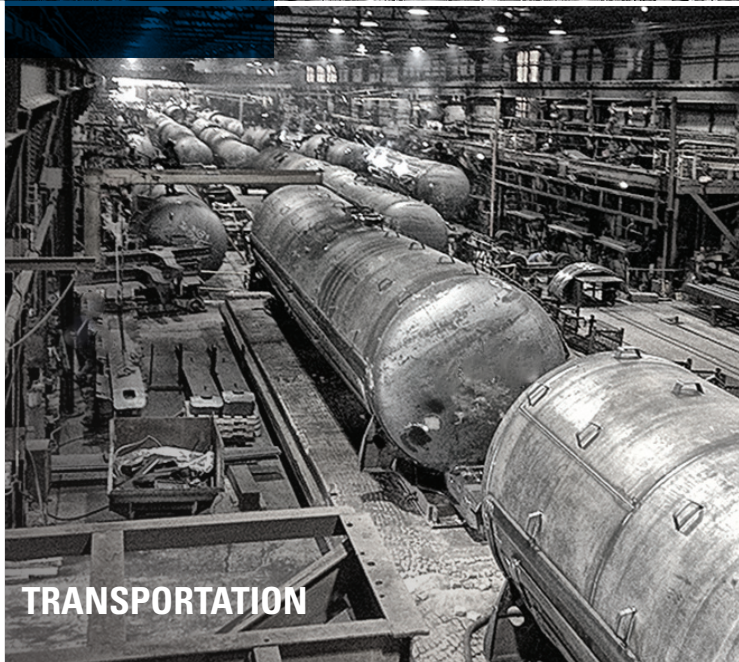



Tackle your work faster, safer and better every day with Weiler. We work with you to solve your challenges, enabling your business to get more done and, ultimately, improve your top and bottom line.









# BEFORE, DURING, AND AFTER THE WELD, WE HAVE YOU COVERED

## COATED ABRASIVES

From the company that brought flap discs to the US, Weiler coated abrasive products continue to set the standard. Our Premium Tiger® flap discs are engineered to conquer any material or application.

Weiler recently raised the bar by adding two new flap discs to it's abrasive line. The **Tiger X** flap disc leverages industry-first technology to grind faster AND last longer, while the **Tiger Paw** flap disc is specifically designed for superior edge grinding.


**Flap Disc Selection Guide** ..... 8-9

**Flap Discs** ..... 10-21

**Flap Wheels** ..... 22-23

**Resin Fiber Discs** ..... 24

**Al-tra Cut™ Discs** ..... 25

**Blending Discs** ..... 26


## BONDED ABRASIVES

Specifically designed for general purpose cutting and grinding applications on a budget, "Vortec Pro®" resin bonded products are fiberglass reinforced and provide the quality and performance that you expect from Weiler without breaking the bank. For rough grinding, weld removal, snagging, cutting, and parting, Vortec Pro delivers a great combination of performance and value.


**Bonded Selection Guide** ..... 29

**Cutting Wheels** ..... 30-31

**Grinding Wheels** ..... 32-33


## WIRE BRUSHES

Superior construction, the highest quality materials, state of the art manufacturing, and exacting quality standards deliver the most consistent brush performance. Each Weiler brush is designed to provide the best performance at the lowest cost-of-use. In addition, our experience in providing surface conditioning solutions translates to unparalleled customer support for the most demanding applications.


**Wire Brush Selection Guide** ..... 35

**Weld Cleaning Brushes** ..... 36-38

**Knot Wire Wheels** ..... 39

**Wire Cup Brushes** ..... 40-41

**Stem-Mounted End Brushes** ..... 42-43

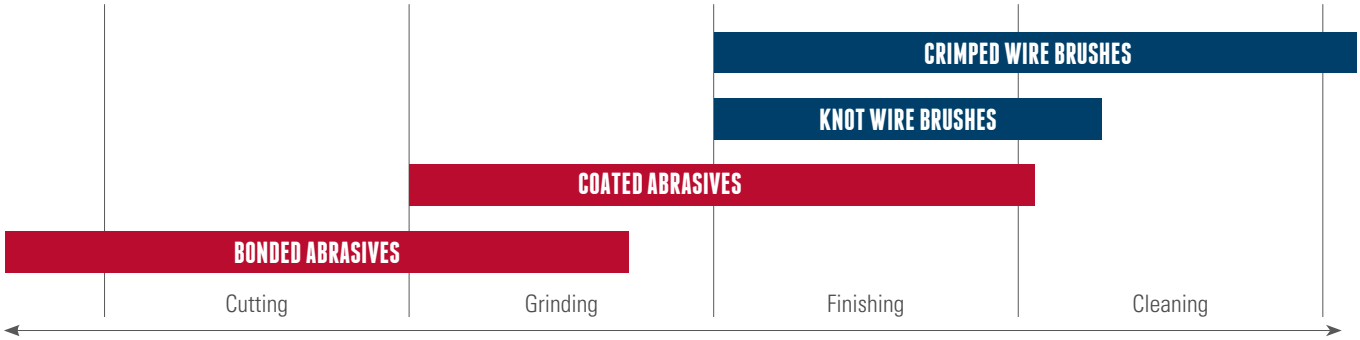
**Crimped Wire Wheels** ..... 44

**Scratch, Chip & Oil Brushes** ..... 47-49




### PRODUCT SELECTION:

Cutting, grinding, cleaning, or finishing. Weiler can help you select the right product to get the job done right, and done fast. Pick the type of product you need based on surface finish and degree of aggression for your application.




Note: If you need assistance selecting the right product for your specific application, contact our Application Engineering Team at: **888-299-APPS (2777)**

# SAFETY INFORMATION

All of Weiler's products are made to the strictest quality standards and specifications and are designed to provide superior work performance and safe operation when used properly.



**WARNING: Failure to observe safety precautions may result in injury.**

Many manufacturers mark some safety warnings, recommendations and usage restrictions directly on the product. However, it is not always practical to include even the most limited safety information on the product itself. Therefore, the operator MUST READ and FOLLOW all instructions supplied in or on the product container as well as those marked on the product.

## SAFETY STANDARDS - ESTABLISHED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

Weiler power brushes and abrasives conform to the ANSI standards listed below. All operators of power brushes and abrasives must comply with these safety standards.

- ANSI B165.1 "Power Tools - Power Driven Brushing Tools - Safety Requirements for Design, Care and Use"
- ANSI B7.1 "Safety Requirements - For the Use, Care and Protection of Abrasive Wheels"

## AVAILABILITY OF ANSI STANDARDS

Based on the collective experience of the American Brush Manufacturers Association Industrial Division members (ANSI B165.1) and the United Abrasives Manufacturers Association's Bonded Division (ANSI B7.1), both ANSI Standards are referenced and provided solely as a public service for the guidance of the users of the members' products. All Brush and Abrasive recommendations are not necessarily complete with respect to any particular application and common sense safety considerations should generally be followed. Any applicable federal, state, local law or regulation must be strictly adhered to and is controlling over any recommendation contained herein.

## TOOL/WORK REST

On bench grinders, tool/work rests should be used to support the work-piece during use. It should have a maximum opening of 1/8" to the product face. Only adjust the rest when the product is not in motion.

THINK S.P.O.T. WHEN USING BRUSHES & ABRASIVES

For **SPOT Safety Training** contact your Weiler representative.

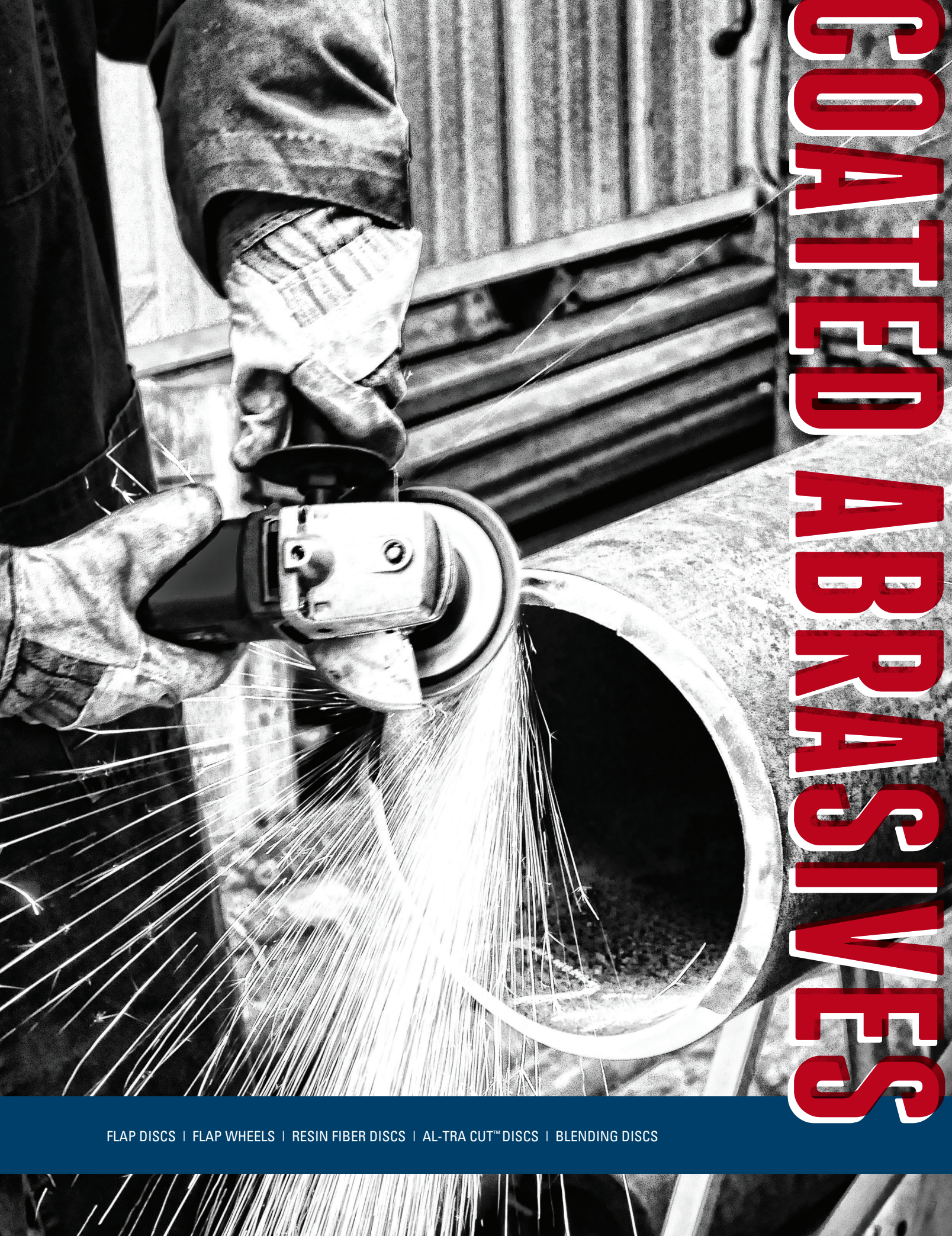
- Safety Goggles / Face Shield
- Protective Clothing
- Hearing Protection
- Safety Gloves
- Respiratory Protection
- Speed (MAX. RPM)
- Tool Guard




Tiger® Grinding Wheel

Tiger® X Flap Disc

Dually® Stringer Bead Wheel



# COATED ABRASIVES

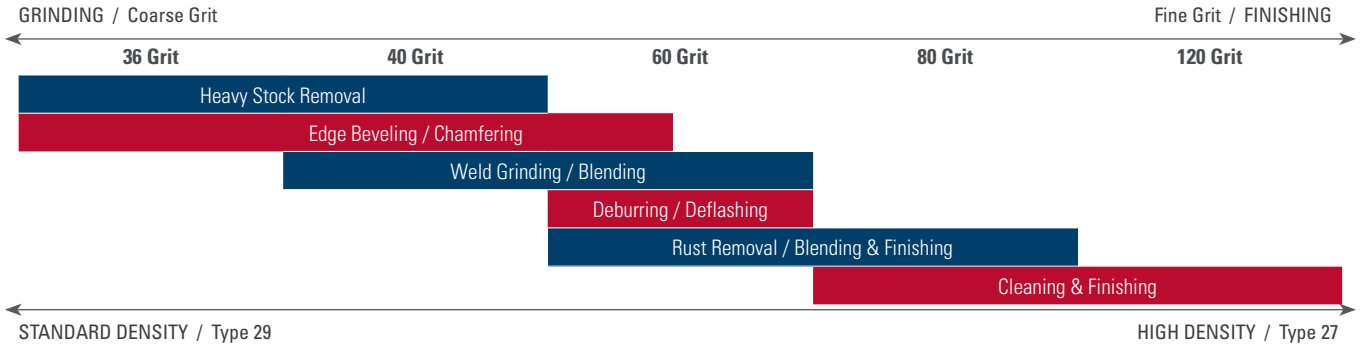
FLAP DISCS | FLAP WHEELS | RESIN FIBER DISCS | AL-TRA CUT™ DISCS | BLENDING DISCS

# SELECTING THE RIGHT FLAP DISC

Weiler's made in the U.S.A. Coated Abrasive flap discs grind and finish in one step, saving you time and money. There's no switching from a Type 27 Grinding Wheel to a Resin Fiber Disc. Use the information provided to help select the right solution for your application.



## GRIT SIZE BY DESIRED FINISH




## DISC STYLE COMPARISON

### Type 27 – Flat Style

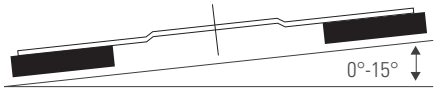
Provides smooth grinding and finishing.



Used primarily on flat surfaces.

The best choice for blending and smooth grind/finishing.

Ideal working angle of less than 15°.




### Type 29 – Angled Style

Provides maximum aggression for stock removal.

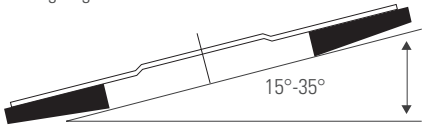


Used on both contoured and edge work.

The angle provides greater surface contact for stock removal on flat surfaces.

The best choice for fast stock removal.

Ideal working angle between 15°-35°.




## FLAP DENSITY

### Type 27 Standard Density

Standard aggression/smooth grinding



### Type 27 High Density

Maximum conformability & life



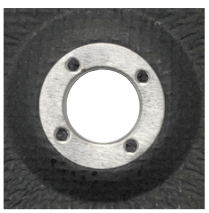
### Type 29 Standard Density

Maximum aggression/stock removal



## BACKING SELECTION

### Phenolic



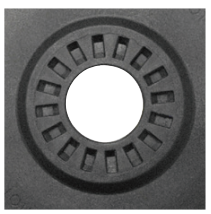
Prevents backing from scratching the workpiece.

### Aluminum



Rigid support for maximum aggression; recyclable.

### Composite*



Trimmable, non-marking backing; allows access to hard-to-reach areas.

*BobCat™ Discs are not Trimmable.

# P PERFORMANCE LINE - INDUSTRIAL GRADE

Engineered and manufactured to maximize performance and minimize operating costs. Superior construction, highest quality materials and the most stringent manufacturing processes deliver premium performance.




Page 10-11

**TIGER® X**

**Grinds More, Lasts Longer.**

Advanced anchoring system, dual flap design and newly engineered backing for uncompromised performance and life.




Page 12-13

**TIGER®**

**Aluminum Back.**

Rigid and recyclable, designed for the industrial user who requires a fast even-cut in pipeline applications.




Page 14

**BIG CAT®**

**Most Conformable, High Density.**

Conforms to curved and irregular surfaces. Extended performance on Steel and Stainless.




Page 15

**TRIMMABLE TIGER®**

**Versatile, Trimmable, Flexible.**

For extended life and fillet welds on Steel and Stainless.




Page 16

**SABER TOOTH™**

**Exotic & Non-Ferrous Metals.**

Fast cutting cool top-coat prevents loading on Aluminum and heat discoloration on Stainless.




Page 18-19

**TIGER PAW™**

**Edge Beveling & Grinding.**

For heavy-duty edge-grinding on Steel and Stainless.




Page 17

**BOBCAT™**

**Compact, Nimble.**

Makes grinding in tight areas on Steel and Stainless easy.

# V VALUE LINE - PROFESSIONAL GRADE

Similar construction and standards as our premium grade products. The economical choice for low volume and professional contractors.




Page 20-21

**VORTEC PRO®**

**Efficient & Economical.**

Standard performance on Steel and Stainless.

# TIGER® FLAP DISCS / PERFORMANCE LINE



Grinding & blending a weld between two Steel plates.

## TIGER® X

**UNLEASH TIGER X:** Tiger X flap discs raise the bar for those who are driven to get the job done right and done fast. Tiger X holds nothing back with its industry-first X3 technology that combines an advanced anchoring system, dual flap design and engineered backing. The combination delivers fast grinding AND long disc life for increased productivity.

MADE IN USA

Tiger X delivers the ultimate productivity enhancing X-Factors so you can do more in less time while lowering your consumable costs.

- **Increased Productivity** – The combination of aggressive grinding and long disc life deliver the ultimate X-Factor, a disc that gets more done in less time.
- **Lower Consumable Costs** – The combination of extreme aggressive grinding and long disc life means you get more for your money.
- **Enhanced Worker Safety** – Increased aggression requires less force to get equal or better results. This means less stress and reduced fatigue.
- **Greater Versatility** – X3 technology allows for greater versatility, reducing the need to switch discs when changing applications.

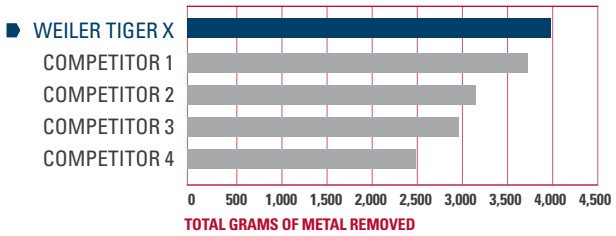
### APPLICATIONS

- Flat surface grinding
- Light pressure / blending
- Weld grinding / blending
- Heavy stock removal
- Deburring, etc.

**TESTED. PROVEN. TIGER X WORKS FASTER, LONGER.**

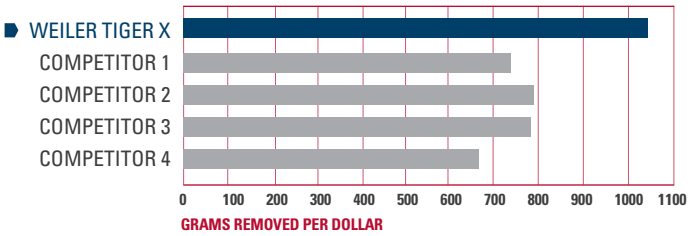
## TIGER X REMOVES UP TO 40% MORE MATERIAL

**TOTAL GRAMS OF METAL REMOVED FROM WORKPIECE OVER LIFE OF FLAP DISC**




## GET UP TO 40% MORE FOR YOUR MONEY

**TOTAL GRAMS OF METAL REMOVED FOR EVERY DOLLAR YOU SPEND**




***Test Procedure:*** *Weiler Tiger X 4-1/2" Type 29 standard density flap disc vs. similar competing flap discs. Test grinder mounted at 15° angle against 1/2" workpiece with 15 pounds of pressure. Bi-directional 8" travel. Discs and workpiece weighed after 5 minutes intervals for the life of the product. Tiger X usable life: 100 minutes. Competitors' usable life: 65 – 90 minutes.*

Ceramic Alumina and Zirconia Alumina grain mix **Grinds Faster and Lasts Longer.**

**Industry First X3 Technology** grain anchoring system, dual flap design, & engineered backing.



## P TIGER X FLAP DISCS Angled Style (Type 29) / Phenolic Backing

Designed for aggressive grinding and long life when used on Steel and Stainless Steel.

LIFE ●●●●○
AGGRESSION ●●●●●

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Ceramic & Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51200 |
| | | 40 | | | 51201 |
| | | 60 | | | 51202 |
| | | 80 | | | 51203 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51204 |
| | | 40 | | | 51205 |
| | | 60 | | | 51206 |
| | | 80 | | | 51207 |
| 5" | 7/8" | 36 | 12,000 | 10 | 51208 |
| | | 40 | | | 51209 |
| | | 60 | | | 51210 |
| | | 80 | | | 51211 |
| 5" | 5/8"-11 Nut | 40 | 12,00 | 10 | 51212 |
| | | 60 | | | 51213 |
| | | 80 | | | 51214 |
| 7" | 7/8" | 36 | 8,600 | 10 | 51215 |
| | | 40 | | | 51216 |
| | | 60 | | | 51217 |
| | | 80 | | | 51218 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51219 |
| | | 40 | | | 51220 |
| | | 60 | | | 51221 |
| | | 80 | | | 51222 |




51205






51216

## P TIGER X FLAP DISCS Flat Style (Type 27) / Phenolic Backing

Ideal working angle of less than 15° provides smooth grinding when used on Steel and Stainless Steel.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Ceramic & Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40 | 13,000 | 10 | 51223 |
| | | 60 | | | 51224 |
| | | 80 | | | 51225 |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 51226 |
| | | 60 | | | 51227 |
| | | 80 | | | 51228 |
| 7" | 7/8" | 40 | 8,600 | 10 | 51229 |
| | | 60 | | | 51230 |
| | | 80 | | | 51231 |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 51232 |
| | | 60 | | | 51233 |
| | | 80 | | | 51234 |




51229

Key:

P PERFORMANCE LINE Industrial Grade

V VALUE LINE Professional Grade



Blending the weld of a Steel frame prior to painting.

TIGER®

Weiler's Original Tiger flap discs are the brand you have trusted for over 20 years and THE flap discs that set the standard in the industry for performance, consistency, reliability and quality. Aluminum back flap discs are the benchmark for the pipeline industry, among others, providing rigid support for maximum aggression.

MADE IN USA

## APPLICATIONS

- Flat surface grinding
- Light pressure / blending
- Weld grinding / blending
- Heavy stock removal
- Edge grinding
- Pipeline

LIFE ●●●○○
AGGRESSION ●●●○○
PIPELINE USE ●●●●●

P

## TIGER DISCS Angled Style (Type 29) / Phenolic & Aluminum Backing

Designed for the industrial user who values high cut rate and long life.






50603



50519




50543

| Dia. | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|
| | | | | | Phenolic Backing | | Aluminum Backing |
| | | | | | Zirconia Alumina | Alum. Oxide | Zirconia Alumina |
| 4 | 5/8" | 36 | 15,000 | 10 | 50592 | 50552 | 50502 |
| | | 40 | | | 50593 | 50553 | 50503 |
| | | 60 | | | 50594 | 50554 | 50504 |
| | | 80 | | | 50595 | 50555 | 50505 |
| | | 120 | | | 50596 | — | 50506 |
| 4-1/2" | 7/8" | 24 | 13,000 | 10 | 50601 | 50561 | 50511 |
| | | 36 | | | 50602 / 51200** | 50562 | 50512 |
| | | 40 | | | 50603 / 51201** | 50563 | 50513 |
| | | 60 | | | 50604 / 51202** | 50564 | 50514 |
| | | 80 | | | 50605 / 51203** | 50565 | 50515 |
| | | 120 | | | 50606 | — | 50516 |
| 4-1/2" | 5/8"-11 Nut | 24 | 13,000 | 10 | — | — | 50510* |
| | | 36 | | | — | — | 50517* |
| | | 40 | | | 50608* / 51205** | — | 50518* |
| | | 60 | | | 50609* / 51206** | — | 50519* |
| | | 80 | | | 50610* / 51207** | — | 50520* |
| | | 120 | | | — | — | 50509* |
| 5" | 7/8" | 24 | 12,000 | 10 | 50611 | — | 50521 |
| | | 36 | | | 50612 / 51208** | 50572 | 50522 |
| | | 40 | | | 50613 / 51209** | 50573 | 50523 |
| | | 60 | | | 50614 / 51210** | 50574 | 50524 |
| | | 80 | | | 50615 / 51211** | 50575 | 50525 |
| | | 120 | | | 50616 | — | 50526 |
| 6" | 7/8" | 40 | 10,200 | 10 | 50649 | — | — |
| | | 60 | | | 50650 | — | — |
| | | 80 | | | 50651 | — | — |
| 6" | 5/8"-11 Nut | 40 | 10,200 | 10 | 50659 | — | — |
| | | 60 | | | 50660 | — | — |
| | | 80 | | | 50661 | — | — |
| 7" | 7/8" | 24 | 8,600 | 10 | 50621 | — | 50531 |
| | | 36 | | | 50622 / 51215** | 50582 | 50532 |
| | | 40 | | | 50623 / 51216** | 50583 | 50533 |
| | | 60 | | | 50624 / 51217** | — | 50534 |
| | | 80 | | | 50625 / 51218** | 50585 | — |
| | | 120 | | | 50626 | — | 50536 |
| 7" | 5/8"-11 Nut | 24 | 8,600 | 10 | 50641* | — | 50541* |
| | | 36 | | | 50642* / 51219** | 50632* | 50542* |
| | | 40 | | | 50643* / 51220** | 50633* | 50543* |
| | | 60 | | | 50644* / 51221** | 50634* | 50544* |
| | | 80 | | | 50645* / 51222** | 50635* | 50545* |
| | | 120 | | | 50646* | — | 50546* |

* Patent # 6,945,863

** Original Tiger will be converted to Tiger X in October 2015. This chart provides the associated Tiger X conversion number. Orange numbers represent Tiger X - available July 2015.

## P TIGER DISCS Flat Style (Type 27) / Phenolic Backing

High stock removal, long life and flexibility.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Zirconia Alumina | Alum. Oxide |
| 4 | 5/8" | 40 | 15,000 | 10 | 50693 | 50653 |
| | | 60 | | | 50694 | 50654 |
| | | 80 | | | 50695 | 50655 |
| | | 120 | | | 50696 | — |
| 4-1/2" | 7/8" | 40 | 13,000 | 10 | 50703 / 51223** | 50663 |
| | | 60 | | | 50704 / 51224** | 50664 |
| | | 80 | | | 50705 / 51225** | 50665 |
| | | 120 | | | 50706 | — |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 50708* / 51226** | 50668* |
| | | 60 | | | 50709* / 51227** | 50669* |
| | | 80 | | | 50710* / 51228** | 50670* |
| | | 120 | | | 50699* | — |
| 5" | 7/8" | 40 | 12,000 | 10 | 50713 | 50673 |
| | | 60 | | | 50714 | 50674 |
| | | 80 | | | 50715 | 50675 |
| | | 120 | | | 50716 | — |
| 7" | 7/8" | 40 | 8,600 | 10 | 50723 / 51229** | 50683 |
| | | 60 | | | 50724 / 51230** | 50684 |
| | | 80 | | | 50725 / 51231** | — |
| | | 120 | | | 50726 | — |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 50743* / 51232** | 50733* |
| | | 60 | | | 50744* / 51233** | 50734* |
| | | 80 | | | 50745* / 51234** | 50735* |
| | | 120 | | | 50746* | — |

* Patent # 6,945,863

** Original Tiger will be converted to Tiger X in October 2015. This chart provides the associated Tiger X conversion number. Orange numbers represent Tiger X - available July 2015.






50708

## ADAPTING NUTS & SPANNER WRENCH

For use with Tiger, High Density and Vortec Pro Flap Discs.

| Description | Thread Size | For Use With | Standard Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 3/8" - 24 | 4" Flap Disc with 5/8" arbor hole (can be used with an adjustable or combination wrench) | 1 | 56484 |
| Adapting Nuts | 5/8" -11 | 4-1/2", 5" & 7" Flap Discs with 7/8" arbor hole | 1 | 56494 |
| Spanner Wrench | — | Item No. 56494 only | 1 | 56495 |

When mounting, adapters must be nested, see illustration below.

56494



56495





Blending and finishing a weld.

TIGER BIG CAT

Weiler's Big Cat flap discs offers the widest footprint in the industry. The wider flaps better conform to curved and irregular surfaces, producing a consistent finish and lasting 30-40% longer than a standard flap disc.

MADE IN USA

## APPLICATIONS

Provides increased conformability and long life when:

- Flat surface grinding
- Weld grinding / blending
- Irregular surface
- Light pressure / blending
- Heavy stock removal

## FEATURES AND BENEFITS

Enhanced **conformability** helps reduce gouging and undercutting.

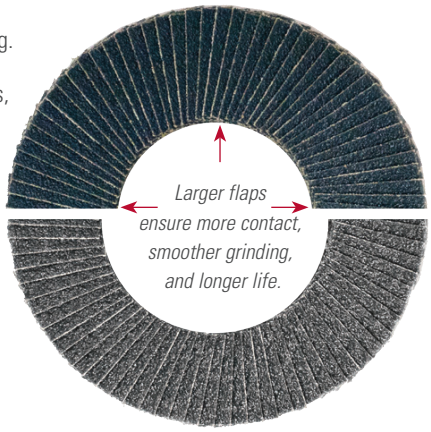
Thicker phenolic back (more layers of fiberglass) than competitors, provides **more stability** for the thicker cloth configuration.

**Largest flap area** in the industry as a result of the unique combination of flap count, height and width.

**Longest lasting** high density discs provide as much as 20% more life than the top competitors discs.

Big Cat is well known in the industry – ask for it by name for **increased productivity**, reduced operating cost and maximum disc life.

**Big Cat HD Flap Disc**




**Competitors HD Flap Disc**

LIFE ●●●●●
AGGRESSION ●●●○○
CONFORMABLE ●●●●●




50804




50823

P

## BIG CAT FLAP DISCS Flat Style (Type 27) / Phenolic Backing

Increased conformability and maximum life.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Zirconia Alumina | Aluminum Oxide |
| 4-1/2" | 7/8" | 40 | 12,000 | 10 | 50803 | 50763 |
| | | 60 | | | 50804 | 50764 |
| | | 80 | | | 50805 | 50765 |
| | | 120 | | | 50806 | — |
| 4-1/2" | 5/8"-11 Nut | 40 | 12,000 | 10 | 50808* | 50768* |
| | | 60 | | | 50809* | 50769* |
| | | 80 | | | 50810* | 50770* |
| 7" | 7/8" | 40 | 8,600 | 10 | 50823 | 50783 |
| | | 60 | | | 50824 | 50784 |
| | | 80 | | | 50825 | — |
| | | 120 | | | 50826 | 50786 |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 50843* | 50833* |
| | | 60 | | | 50844* | 50834* |
| | | 80 | | | 50845* | — |
| | | 120 | | | 50846* | — |

*Patent # 6,945,863

TIGER TRIM

Weiler's Trimmable Tiger flap discs are designed for hard-to-reach areas such as fillet welds and irregular shapes while grinding on-edge without changing tools. The unique composite backing can be trimmed, exposing more abrasive material and extending disc life, resulting in lower grinding and finishing costs. The backing can be trimmed up to 3/8" from the original diameter, dramatically extending flap length for grinding into fillet welds.

MADE IN USA



To trim backing, run against a sharp edge until desired backing diameter is achieved.

## APPLICATIONS

- Light pressure / blending
- Weld grinding / blending
- Heavy stock removal
- Fillet grinding
- Irregular surface



A trimmed back dramatically extends disc life, allowing the operator to use the entire flap while maintaining a consistent working angle.

P

## TRIMMABLE TIGER FLAP DISCS Angled Style (Type 29) / Composite Backing

High stock removal, long life and flexibility, ideal for working into fillet welds.

LIFE ●●●●○
AGGRESSION ●●●○○
VERSATILITY ●●●●●

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Zirconia Alumina |
| 4-1/2" | 7/8" | 40 | 13,000 | 10 | 50002 |
| | | 60 | | | 50003 |
| | | 80 | | | 50004 |
| | | 120 | | | 50005 |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 50006* |
| | | 60 | | | 50007* |
| | | 80 | | | 50008* |
| | | 120 | | | 50009* |
| 5" | 7/8" | 40 | 12,000 | 10 | 50010 |
| | | 60 | | | 50011 |
| | | 80 | | | 50012 |
| | | 120 | | | 50013 |
| 5" | 5/8"-11 Nut | 40 | 12,000 | 10 | 50014 |
| | | 60 | | | 50015 |
| | | 80 | | | 50016 |
| | | 120 | | | 50017 |

*Patent # 6,945,863






50002

*"We get a competitive edge with Weiler because their prices are competitive but they last far longer."*

- **Jim Martin**, Vice President, Karnel Incorporated





Grinding and beveling Stainless Steel tubing a with a Saber Tooth abrasive flap disc.

# TIGER SABER TOOTH

Weiler's Saber Tooth flap discs deliver real performance on Stainless Steel, Aluminum, Inconel, Titanium and other hard-to-grind metals. A grinding aid protects high value parts from heat discoloration and the self-sharpening Ceramic Alumina grain provides cool, fast-cutting action, allowing you to do more work, more quickly. Discs are contaminant free, with Iron, Sulfur and Chlorine ≤ 0.1%.

MADE IN USA

## APPLICATIONS

- Flat surface grinding
- Light pressure / blending
- Weld grinding / blending
- Heavy stock removal
- Edge grinding
- Fillet grinding
- Irregular surface

LIFE ●●●●○
AGGRESSION ●●●●●
USE ON SS / AL ●●●●●




50102



## P SABER TOOTH FLAP DISCS Angled Style (Type 29) / Phenolic Backing

Cool, fast cutting on hard-to-grind metals.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Ceramic Alumina |
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 50100 |
| | | 40 | | | 50101 |
| | | 60 | | | 50102 |
| | | 80 | | | 50103 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 50104* |
| | | 40 | | | 50105* |
| | | 60 | | | 50106* |
| | | 80 | | | 50107* |
| 7" | 7/8" | 36 | 8,600 | 10 | 50108 |
| | | 40 | | | 50109 |
| | | 60 | | | 50110 |
| | | 80 | | | 50111 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 50112* |
| | | 40 | | | 50113* |
| | | 60 | | | 50114* |
| | | 80 | | | 50115* |




50121

## P SABER TOOTH TRIM FLAP DISCS Angled Style (Type 29) / Composite Backing

Cool, fast cutting on hard-to-grind metals. High stock removal, long life and flexibility.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Ceramic Alumina |
| 4-1/2" | 7/8" | 40 | 13,000 | 10 | 50117 |
| | | 60 | | | 50118 |
| | | 80 | | | 50119 |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 50121* |
| | | 60 | | | 50122* |
| | | 80 | | | 50123* |




50139



## P SABER TOOTH HIGH DENSITY (HD) FLAP DISCS Flat Style (Type 27) / Phenolic Backing

Cool, fast cutting on hard-to-grind metals. Increases conformability and provides 30-40% longer life than standard (Type 29) flap discs.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Ceramic Alumina |
| 4-1/2" | 7/8" | 40 | 13,000 | 10 | 50130 |
| | | 60 | | | 50131 |
| | | 80 | | | 50132 |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 50133* |
| | | 60 | | | 50134* |
| | | 80 | | | 50135* |
| 7" | 7/8" | 40 | 8,600 | 10 | 50136 |
| | | 60 | | | 50137 |
| | | 80 | | | 50138 |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 50139* |
| | | 60 | | | 50140* |
| | | 80 | | | 50141* |

*Patent # 6,945,863

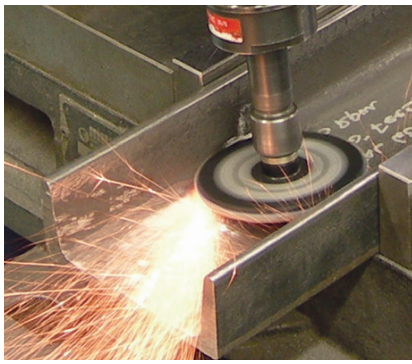
TIGER BOBCAT

Weiler's BobCat flap discs are designed for use on right angle die grinders without the need for a back-up pad. The 2" and 3" mini discs provide smooth grinding and enhanced conformability in tight areas.

MADE IN USA

## APPLICATIONS

- Grinding and finishing for hard to reach areas
- High, aggression, rapid stock removal
- Grinding, deburring and blending
- Metal fabrication, weld blending or edge chamfering



Blending welds on a Steel rule die with a BobCat disc.

P

## BOBCAT MINI FLAP DISCS Plastic Backing (No back-up pad required)

Ideal for tight spaces and in heavy-duty applications where blending discs do not hold up.

LIFE ●●●○○
AGGRESSION ●●●○○
NIMBLE ●●●●●

| Diameter | Grit Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Zirconia Alumina | |
| | | | | Type 29 | Type 27 |
| 2" | 36 | 30,000 | 10 | 50922 | 50932 |
| | 40 | | | 50923 | 50933 |
| | 60 | | | 50924 | 50934 |
| | 80 | | | 50925 | 50935 |
| | 120 | | | 50926 | 50936 |
| 3" | 36 | 20,000 | 10 | 50902 | 50912 |
| | 40 | | | 50903 | 50913 |
| | 60 | | | 50904 | 50914 |
| | 80 | | | 50905 | 50915 |
| | 120 | | | 50906 | 50916 |

*Patent # 5,951,389




50924 & 50904

## BOBCAT DRIVE MANDREL

For mounting BobCat Discs without a backing pad.

| Description | Standard Pack | Item Number |
|---|---|---|
| For mounting 2"& 3" BobCats on tools with 1/4" collets | 1 | 07766 |

3" BobCats can also be mounted on Weiler metal hub pad #60509.



07766



*"Weiler products are very rugged consumables. They have a long life.*

- **Dave Porzuczek**, Assistant Foreman, Karnel Incorporated

# TIGER PAW™ FLAP DISCS / PERFORMANCE LINE



Beveling pipe on edge with a Tiger Paw flap disc.

TIGER PAW™

Weiler's Tiger Paw flap discs are designed for the user looking for aggressive performance and long life in heavy-duty applications like **grinding on the edge of pipe**.

MADE IN USA

**100% Zirconia Alumina grain** is fast cutting with long life, resulting in fewer changeovers and increased productivity.

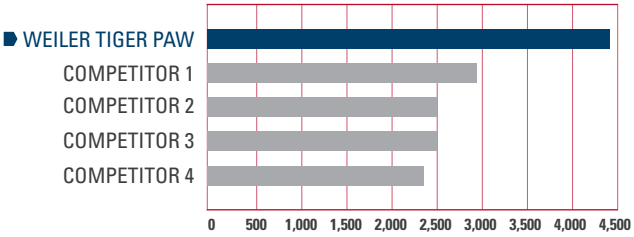
**Superior grain retention** - lasts longer and maintains perfect cutting angle to provide excellent performance and sustained stock removal when grinding on-edge while the engineered poly/cotton cloth features excellent grain retention for maximum disc life.

## APPLICATIONS

- Light pressure / blending
- Weld grinding / blending
- Heavy stock removal
- Edge grinding
- Irregular surface

## TIGER PAW REMOVES MORE MATERIAL

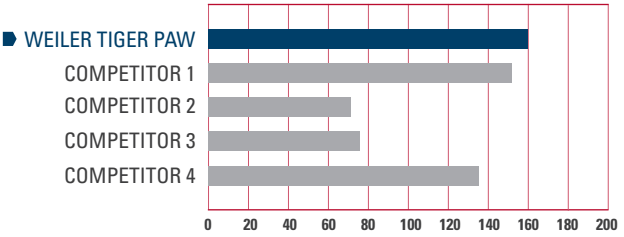
**TOTAL GRAMS OF METAL REMOVED FROM WORKPIECE OVER LIFE OF FLAP DISC**




**TOTAL GRAMS OF METAL REMOVED IN EDGE GRINDING APPLICATIONS**

## GET MORE FOR YOUR MONEY

**TOTAL GRAMS OF METAL REMOVED FOR EVERY DOLLAR YOU SPEND**




**GRAMS REMOVED PER DOLLAR**

***Test Procedure:*** *Weiler Tiger Paw 4-1/2" Type 29 standard density flap disc vs. similar competing flap discs. Test grinder mounted at 15° angle against 1/8" workpiece with 15 pounds of pressure. Bi-directional 8" travel. Discs and workpiece weighed after 5 minutes intervals for the life of the product. Tiger Paw usable life: 17 minutes. Competitors' usable life: 8 – 10 minutes.*

LIFE ●●●●○
AGGRESSION ●●●●○
EDGE GRINDING ●●●●●






**51118**



**51147**

**P** **TIGER PAW** Angled Style (Type 29) / Phenolic Backing

Aggressive action and long life; for heavy-duty applications on Steel and Stainless.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|
| 4" | 5/8" | 40 | 15,000 | 10 | 51104 |
| | | 60 | | | 51105 |
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51118 |
| | | 40 | | | 51119 |
| | | 60 | | | 51120 |
| | | 80 | | | 51121 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51123* |
| | | 40 | | | 51124* |
| | | 60 | | | 51125* |
| | | 80 | | | 51126* |
| 5" | 7/8" | 40 | 12,000 | 10 | 51129 |
| | | 60 | | | 51130 |
| 5" | 5/8"-11 Nut | 36 | 12,000 | 10 | 51153* |
| | | 40 | | | 51132* |
| | | 60 | | | 51133* |
| | | 80 | | | 51154* |
| 7" | 7/8" | 40 | 8,600 | 10 | 51145 |
| | | 60 | | | 51150 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51149* |
| | | 40 | | | 51146* |
| | | 60 | | | 51147* |
| | | 80 | | | 51148* |

*Patent # 6,945,863

## P TIGER PAW Flat Style (Type 27) / Phenolic Backing

Smooth action and long life; for heavy-duty applications on Steel and Stainless.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Zirconia Alumina |
| 4″ | 5/8″ | 40 | 15,000 | 10 | 51101 |
| | | 60 | | | 51102 |
| 4-1/2″ | 7/8″ | 36 | 13,000 | 10 | 51107 |
| | | 40 | | | 51108 |
| | | 60 | | | 51109 |
| | | 80 | | | 51110 |
| 4-1/2″ | 5/8″-11 Nut | 36 | 13,000 | 10 | 51112* |
| | | 40 | | | 51113* |
| | | 60 | | | 51114* |
| | | 80 | | | 51115* |
| 5″ | 7/8″ | 40 | 12,000 | 10 | 51134 |
| | | 60 | | | 51135 |
| 5″ | 5/8″-11 Nut | 36 | 12,000 | 10 | 51155* |
| | | 40 | | | 51156* |
| | | 60 | | | 51157* |
| | | 80 | | | 51158* |
| 7″ | 7/8″ | 40 | 8,600 | 10 | 51137 |
| | | 60 | | | 51138 |
| 7″ | 5/8″-11 Nut | 36 | 8,600 | 10 | 51139* |
| | | 40 | | | 51140* |
| | | 60 | | | 51142* |
| | | 80 | | | 51143* |

*Patent # 6,945,863





51115

# HIGH DENSITY

Tiger Paw Extreme High Density flap discs feature thicker and larger flaps that conform to curved and irregular surfaces while producing a consistent finish. These high density flap discs are designed for the user looking for **extended life and conformability** in heavy-duty applications.

- 40% more abrasive cloth than a standard flap disc.
- 100% Zirconia Alumina grain provides superior edge grinding.
- Engineered poly/cotton cloth features excellent grain retention for maximum disc life.



## P TIGER PAW HD FLAP DISCS Flat Style (Type 27) / Phenolic Backing

Extended life and conformability; for heavy-duty applications on Steel and Stainless Steel.

LIFE ●●●●●
AGGRESSION ●●●●○
EDGE GRINDING ●●●●○

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Zirconia Alumina |
| 4-1/2″ | 7/8″ | 36 | 12,000 | 10 | 51160 |
| | | 40 | | | 51161 |
| | | 60 | | | 51162 |
| | | 80 | | | 51163 |
| 4-1/2″ | 5/8″-11 Nut | 36 | 12,000 | 10 | 51164* |
| | | 40 | | | 51165* |
| | | 60 | | | 51166* |
| | | 80 | | | 51167* |
| 7″ | 7/8″ | 40 | 8,600 | 10 | 51170 |
| | | 60 | | | 51171 |
| 7″ | 5/8″-11 Nut | 40 | 8,600 | 10 | 51168* |
| | | 60 | | | 51169* |

*Patent # 6,945,863



51168



Grinding welds on a fabricated Steel part.

# VORTEC PRO® FLAP DISCS / VALUE LINE

VORTEC PRO®

Weiler's Vortec Pro flap discs are fast cutting professional grade products using the same exacting standards as the Weiler performance line flap discs, but engineered to be cost-effective. Vortec Pro Abrasives are an economical choice for the construction trades, low volume production shops and the professional contractor.

MADE IN USA

## APPLICATIONS

- Flat surface grinding
- Light pressure / blending
- Weld grinding / blending
- Heavy stock removal
- Irregular surface

LIFE ●●○○○
AGGRESSION ●●●○○
PRICE/DISC ●●●●●

V

## VORTEC PRO FLAP DISCS Angled Style (Type 29) / Phenolic & Aluminum Backing

High cut rate at a value price.






31350



31369

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Phenolic Backing | Aluminum Backing |
| | | | | | Zirconia Alumina | |
| 4" | 5/8" | 36 | 15,000 | 10 | 31337 ■ | — |
| | | 40 | | | 31338 | 31302 |
| | | 60 | | | 31339 ■ | — |
| | | 80 | | | 31340 ■ | — |
| | | 120 | | | 31341 | — |
| 4-1/2" | 7/8" | 24 | 13,000 | 10 | 31342 | — |
| | | 36 | | | 31343 ■ | 31307 ■ |
| | | 40 | | | 31344 | 31308 |
| | | 60 | | | 31345 ■ | 31309 ■ |
| | | 80 | | | 31346 ■ | 31310 ■ |
| | | 120 | | | 31347 | — |
| 4-1/2" | 5/8"-11 Nut | 24 | 13,000 | 10 | 31348* | — |
| | | 36 | | | 31349* | 31313* |
| | | 40 | | | 31350* | 31314* |
| | | 60 | | | 31351* | 31315* |
| | | 80 | | | 31352* | 31316* |
| | | 120 | | | 31353* | 31317* |
| 5" | 7/8" | 36 | 12,000 | 10 | 31355 | 31319 |
| | | 40 | | | 31356 | — |
| | | 60 | | | 31357 | — |
| | | 80 | | | 31358 | — |
| 7" | 7/8" | 24 | 8,600 | 10 | 31360 | — |
| | | 36 | | | 31361 ■ | — |
| | | 40 | | | 31362 | 31326 |
| | | 60 | | | 31363 ■ | — |
| | | 80 | | | 31364 ■ | — |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 31367* | 31331* |
| | | 40 | | | 31368* | 31332* |
| | | 60 | | | 31369* | 31333* |
| | | 80 | | | 31370* | 31334* |

*Patent # 6,945,863

Key:

P PERFORMANCE LINE Industrial Grade

V VALUE LINE Professional Grade

## VORTEC PRO FLAP DISCS Flat Style (Type 27) / Phenolic Backing

Smooth grinding action at a value price.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Zirconia Alumina |
| 4-1/2″ | 7/8″ | 36 | 13,000 | 10 | 31401 |
| | | 40 | | | 31402 |
| | | 60 | | | 31403 |
| | | 80 | | | 31404 |
| 4-1/2″ | 5/8″-11 Nut | 36 | 13,000 | 10 | 31407* |
| | | 40 | | | 31408* |
| | | 60 | | | 31409* |
| | | 80 | | | 31410* |
| 7″ | 7/8″ | 40 | 8,600 | 10 | 31414 |
| | | 60 | | | 31415 |
| 7″ | 5/8″-11 Nut | 36 | 8,600 | 10 | 31419* |
| | | 40 | | | 31420* |
| | | 60 | | | 31421* |
| | | 80 | | | 31422* |

*Patent # 6,945,863



31402

## VORTEC PRO HD FLAP DISCS Flat Style (Type 27) / Phenolic Backing

Increased life and conformability over other Vortec Pro discs at a value price.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Zirconia Alumina |
| 4-1/2″ | 7/8″ | 40 | 12,000 | 10 | 31387 |
| | | 60 | | | 31388 |
| | | 80 | | | 31389 |
| 4-1/2″ | 5/8″-11 Nut | 40 | 12,000 | 10 | 31390* |
| | | 60 | | | 31391* |
| | | 80 | | | 31392* |

*Patent # 6,945,863



31390

## VORTEC PRO DISPLAY PACKS Angled Style (Type 29) / Phenolic & Aluminum Backing

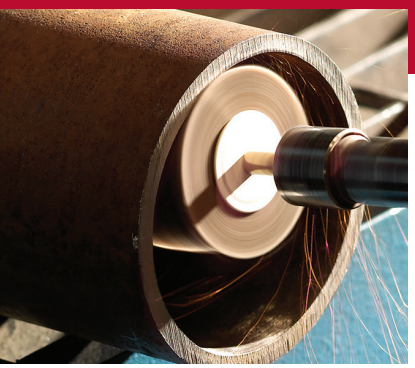
Standard performance on Steel and Stainless.

| Diameter | Arbor Hole | Grit Size | Max. RPM | Item Number | |
|---|---|---|---|---|---|
| | | | | Phenolic Backing | Aluminum Backing |
| | | | | Zirconia Alumina | |
| 4″ | 5/8″ | 36 | 15,000 | 30822 | — |
| | | 60 | | 30825 | — |
| | | 80 | | 30826 | — |
| 4″ | 5/8-11 Nut | 36 | 15,000 | — | 30821 |
| | | 60 | | — | 30823 |
| | | 80 | | — | 30824 |
| 4-1/2″ | 7/8″ | 36 | 13,000 | 30828 | — |
| | | 60 | | 30831 | — |
| | | 80 | | 30832 | — |
| 4-1/2″ | 5/8″-11 Nut | 36 | 13,000 | — | 30827 |
| | | 60 | | — | 30829 |
| | | 80 | | — | 30830 |



30831

# ABRASIVE FLAP WHEELS



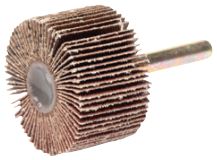
Removing burrs from the inside diameter (ID) of a cut tube.

TIGER®

Weiler's abrasive flap wheels are designed with a solid hub construction that enables wheels to be rated at higher RPM's and provide more aggressive cutting action and increased productivity. They provide perfect balance leading to smooth, chatter-free finishing.

## APPLICATIONS

- Internal diameter cleaning
- Finishing metal surfaces
- Deburring machined parts
- Cleaning and reconditioning pipe threads
- Polishing, blending & finishing
- Prepping surface for painting or plating
- Edge blending



52010



52027

## P TIGER MOUNTED 1/4" STEM FLAP WHEELS

A premium line designed to provide long life. Ideal for medium to high production environments.



| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Aluminum Oxide |
| 1" | 1" | 60 | 30,000 | 10 | 52003 |
| | | 80 | | | 52004 |
| | | 120 | | | 52005 |
| 1-1/2" | 1" | 60 | 25,000 | 10 | 52009 |
| | | 80 | | | 52010 |
| | | 120 | | | 52011 |
| 2" | 1/2" | 60 | 25,000 | 10 | 52366 |
| | | 80 | | | 52367 |
| 2" | 1" | 60 | 25,000 | 10 | 52015 |
| | | 80 | | | 52016 |
| | | 120 | | | 52017 |
| 2-1/2" | 1" | 60 | 23,000 | 10 | 52486 |
| | | 80 | | | 52487 |
| 3" | 1/2" | 60 | 23,000 | 10 | 52024 |
| | | 80 | | | 52025 |
| 3" | 1" | 60 | 23,000 | 10 | 52027 |
| | | 80 | | | 52028 |
| | | 120 | | | 52029 |



52621

## P TIGER MOUNTED 1/4"-20 THREADED STEM FLAP WHEELS

A premium line designed to provide long life. Ideal for medium to high production environments.



| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Aluminum Oxide |
| 1" | 1" | 60 | 30,000 | 10 | 52601 |
| | | 80 | | | 52603 |
| | | 120 | | | 52605 |
| 2" | 1" | 60 | 25,000 | 10 | 52611 |
| | | 80 | | | 52613 |
| 3" | 1" | 60 | 20,000 | 10 | 52621 |
| | | 80 | | | 52623 |

Key:

P PERFORMANCE LINE Industrial Grade

V VALUE LINE Professional Grade

VORTEC PRO®

## GREAT VALUE AT THE RIGHT PRICE

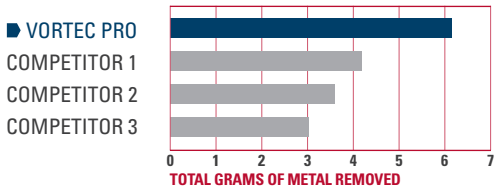
Vortec Pro Flap Wheels offer a high cut rate at a cost-effective price. The smart option for use in medium production environments.

## APPLICATIONS

- Internal diameter cleaning
- Finishing metal surfaces
- Deburring machined parts
- Cleaning and reconditioning pipe threads
- Polishing, blending & finishing
- Prepping surface for painting or plating
- Edge blending

## VORTEC PRO FLAP WHEELS OUTPERFORM

**3"x1", 60 GRIT FLAP WHEEL PERFORMANCE OVER 30 MINUTES**




Performance comparison based on automated lab testing completed by Weiler.

## V VORTEC PRO 1/4" STEM MOUNTED FLAP WHEELS

Provide fast cutting action at a value price. Ideal for low to medium production environments.



| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Aluminum Oxide |
| 1" | 1" | 60 | 30,000 | 10 | 30720 |
| | | 80 | | | 30721 |
| | | 120 | | | 30722 |
| 2" | 1" | 60 | 25,000 | 10 | 30723 |
| | | 80 | | | 30724 |
| | | 120 | | | 30725 |
| 3" | 1" | 60 | 23,000 | 10 | 30726 |
| | | 80 | | | 30727 |
| | | 120 | | | 30728 |



30726

## V VORTEC PRO 1/4"-20 THREADED STEM MOUNTED FLAP WHEELS

Provide fast cutting action at a value price. Ideal for low to medium production environments.



| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Aluminum Oxide |
| 1" | 1" | 60 | 30,000 | 10 | 30745 |
| | | 80 | | | 30746 |
| 2" | 1" | 60 | 25,000 | 10 | 30737 |
| | | 80 | | | 30738 |
| 3" | 1" | 60 | 20,000 | 10 | 30735 |
| | | 80 | | | 30736 |



30735

## DRIVE ARBOR

For 1/4"-20 Thread Mounted Flap Wheels.

| Thread Size | Adapted Size | Standard Pack | Item Number |
|---|---|---|---|
| 1/4"-20 | 1/4" | 5 | 07756 |



07756

## NOTE

- Drive arbor is to be used with Weiler flap wheels only.
- Stems must be fully chucked before using and should not be run above the maximum RPM listed.



Blending welds on the corner of a Steel furniture frame.

# RESIN FIBER DISCS

Weiler's premium resin fiber discs are suitable for light grinding, blending, surface preparation and finishing on a variety of materials.

## APPLICATIONS

**Saber Tooth™ Ceramic Alumina:**
Cool, fast cutting action on Aluminum, Stainless Steel and other hard-to-grind metals.

**Zirconia Alumina:**
High performance grinding of Stainless Steel, tool Steel and hard-to-grind materials.

**Aluminum Oxide:**
All purpose weld blending, grinding, surface preparation and finishing of metals, plastic, wood and fiberglass.

## SABER TOOTH RESIN FIBER DISCS

These coated abrasive discs are designed for cool, fast weld blending, grinding, surface preparation and finishing on Aluminum, Stainless Steel and other hard-to-grind metals.



59557

| Diameter | Arbor Hole | Grit Size | Std. Pack | Item Number - Ceramic Alumina |
|---|---|---|---|---|
| 4-1/2" | 7/8" | 24 | 25 | 59550 |
| | | 36 | | 59551 |
| | | 50 | | 59552 |
| | | 60 | | 59553 |
| | | 80 | | 59554 |
| 5" | 7/8" | 24 | 25 | 59557 |
| | | 36 | | 59558 |
| | | 50 | | 59559 |
| | | 60 | | 59560 |
| | | 80 | | 59561 |
| 7" | 7/8" | 24 | 25 | 59564 |
| | | 36 | | 59565 |
| | | 50 | | 59566 |
| | | 60 | | 59567 |
| | | 80 | | 59568 |

## RESIN FIBER DISCS

Ideal for blending, finishing and surface preparation.



59732



59503

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Zirconia Alumina | Aluminum Oxide |
| 4" | 5/8" | 24 | 25 | — | 59491 |
| | | 36 | | — | 59492 |
| | | 50 | | — | 59493 |
| | | 60 | | — | 59494 |
| | | 80 | | — | 59495 |
| | | 120 | | — | 59497 |
| 4-1/2" | 7/8" | 24 | 25 | 59731 | 59571 |
| | | 36 | | 59732 | 59573 |
| | | 50 | | 59733 | 59575 |
| | | 60 | | — | 59576 |
| | | 80 | | — | 59577 |
| | | 100 | | — | 59578 |
| | | 120 | | — | 59579 |
| 5" | 7/8" | 16 | 25 | — | 59500 |
| | | 24 | | 59701 | 59501 |
| | | 36 | | 59702 | 59503 |
| | | 50 | | — | 59505 |
| | | 60 | | — | 59506 |
| | | 80 | | — | 59507 |
| | | 100 | | — | 59508 |
| 7" | 7/8" | 16 | 25 | — | 59520 |
| | | 24 | | 59711 | 59521 |
| | | 36 | | 59712 | 59523 |
| | | 50 | | — | 59525 |
| | | 60 | | — | 59526 |
| | | 80 | | — | 59527 |
| | | 100 | | — | 59528 |
| | | 120 | | — | 59529 |
| 9" | 7/8" | 16 | 25 | — | 59540 |
| | | 36 | | 59722 | 59543 |

Do not exceed maximum RPM of back-up pad.

# AL-TRA CUT™ DISCS

Weiler's Al-tra CUT discs are specially formulated for superior grinding performance on Aluminum. AL-tra CUTs **improve grinding on Aluminum 400-800%!** These revolutionary discs resist loading, ensure higher cut rates, prolong disc life and achieve a superior finish compared to conventional sanding and grinding discs in the market. AL-tra CUT discs outlast conventional resin fiber discs 5 to 1.

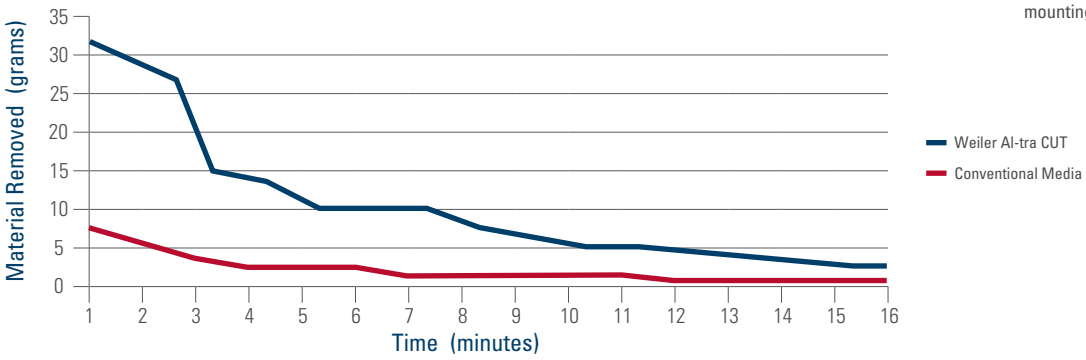
## ALUMINUM APPLICATIONS

- Weld blending
- Grinding
- Deburring
- Finishing



Blending welds and saw marks on a mounting bracket.

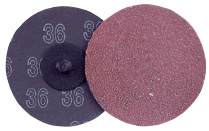
## MATERIAL REMOVED VS. TIME



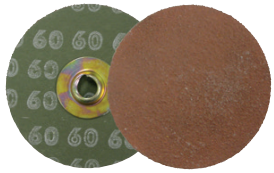



## 2" & 3" AL-TRA CUT DISCS

| Diameter | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Aluminum Oxide | |
| | | | Metal Hub+ | Plastic Button* |
| 2" | 36 | 50 | 59869 | 59806 |
| | 60 | | 59870 | 59807 |
| | 80 | | 59871 | 59808 |
| | 120 | | — | 59809 |
| 3" | 36 | 25 | 59874 | 59811 |
| | 60 | | 59875 | 59812 |
| | 80 | | 59876 | 59813 |
| | 120 | | 59877 | 59814 |



59806



59875

## 4-1/2" & 7" AL-TRA CUT DISCS

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item Number |
|---|---|---|---|---|
| | | | | Aluminum Oxide |
| 4-1/2" | 7/8" | 36 | 25 | 59821 |
| | | 60 | | 59823 |
| | | 80 | | 59824 |
| | | 120 | | 59826 |
| 7" | 7/8" | 36 | 25 | 59862 |
| | | 60 | | 59864 |
| | | 80 | | 59865 |

Do not exceed maximum RPM of back-up pad.
Do not store AL-tra Cut discs above 120° F.



59821

## ACCESSORIES FOR RESIN FIBER & AL-TRA CUT DISCS

| Description | Thread Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" Back-up Pad | 5/8"-11* | 12,000 | 1 | 59605 |
| 4-1/2" Back-up Pad | 5/8"-11* | 11,000 | 1 | 59611 |
| 5" Back-up Pad | 5/8"-11* | 10,000 | 1 | 59600 |
| 7" Back-up Pad | 5/8"-11 | 8,500 | 1 | 59601 |
| 9" Back-up Pad | 5/8"-11 | 6,500 | 1 | 59602 |
| Spanner Wrench | — | — | 1 | 59603 |
| Disc Nut | 5/8"-11 | — | 1 | 59604 |

* Other thread sizes available on special orders.



59601



59604 59603

# BLENDING DISCS



Blending surface imperfections prior to painting.

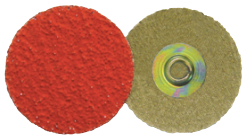
Weiler's cloth backed coated abrasive discs are for use on right angle air tools. Available with either a metal hub or a plastic button fastening system, the flexible back-up pads give the discs a great deal of conformability. Weiler's blending discs are suitable for a wide range of light fabrication, repair and maintenance applications.

## APPLICATIONS

**Saber Tooth™ Ceramic Alumina:**
Cool, fast cutting action on Aluminum, Stainless Steel and other hard-to-grind metals.

**Zirconia Alumina:**
High performance grinding of Stainless Steel, tool Steel and hard-to-grind materials.

**Aluminum Oxide:**
All purpose weld blending, grinding, surface preparation and finishing of metals, plastic, wood and fiberglass.



60150

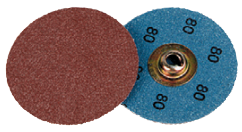
P

## SABER TOOTH BLENDING DISCS Plastic Button / Metal Hub Style

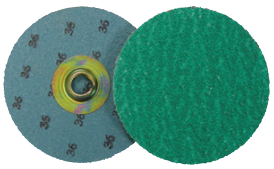


For Aluminum, Stainless and other hard-to-grind metal applications.

| Diameter | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Ceramic Alumina | |
| | | | Metal Hub | Plastic Button |
| 2" | 36 | 100 | 60150 | 60170 |
| | 60 | | 60151 | 60171 |
| | 80 | | 60152 | 60172 |
| 3" | 36 | 50 | 60155 | 60175 |
| | 60 | | 60156 | 60176 |
| | 80 | | 60157 | 60177 |



60044



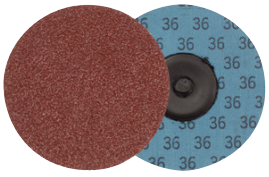
60391

P

## BLENDING DISCS Metal Hub Style



| Diameter | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 2" | 36 | 100 | 60378 | 60040 |
| | 60 | | 60381 | 60043 |
| | 80 | | 60382 | 60044 |
| | 120 | | 60384 | 60046 |
| 3" | 36 | 50 | 60391 | 60053 |
| | 60 | | 60394 | 60056 |
| | 80 | | 60395 | 60057 |
| | 120 | | 60397 | 60059 |



60131

P

## BLENDING DISCS Plastic Button Style



| Diameter | Grit Size | Standard Pack | Item Number |
|---|---|---|---|
| | | | Aluminum Oxide |
| 2" | 36 | 100 | 60118 |
| | 60 | | 60121 |
| | 80 | | 60122 |
| | 120 | | 60124 |
| 3" | 36 | 50 | 60131 |
| | 60 | | 60134 |
| | 80 | | 60135 |
| | 120 | | 60137 |



51552

60508

## BACK-UP PADS 1/4" Stem

| Diameter | Max. RPM | Standard Pack | Metal Hub | Plastic Button |
|---|---|---|---|---|
| 2" | 25,000 | 1 | 60508 | 51551 |
| 3" | 20,000 | 1 | 60509 | 51552 |

Do not exceed maximum RPM of back-up pad.

Do Not store AL-tra Cut Discs above 120° F.

* Compatible with 3M Roloc™ back-up pads. (Roloc™ is a trademark of 3M)

+ Compatible with Norton Speed-Lok® TS back-up pads. (Speed-Lok® TS is a registered trademark of Norton Co.)



# BONDED ABRASIVES

CUTTING WHEELS | GRINDING WHEELS

# SELECTING A BONDED WHEEL

Specifically designed for general purpose grinding & cutting applications requiring heavy material removal such as rough grinding, weld removal, snagging, cutting and parting. All Weiler bonded abrasives are resin formulated for aggressive stock removal, fast cutting and reinforced with fiberglass webbing for stability.



## TYPE 27 – DEPRESSED CENTER

5/8"-11 hub option






## TYPE 1 – CUTTING

For use with mounting mandrels or adapting nut assembly




## GRAIN SELECTION

Medium — CUT RATE — High

| A | WA | Z |
|---|---|---|
| ALUMINUM OXIDE: For use on all metals except Titanium and Ductile Iron | WHITE ALUMINUM OXIDE: Longer wheel life on metals except Titanium & Ductile Iron | ZIRCONIA ALUMINA: For higher cut rates in high pressure applications (Type 27 only) |

## GRIT SELECTION

Extra Coarse — Fine

| 16 | 24 | 30 | 36 | 46 | 60 |
|---|---|---|---|---|---|
| EXTRA COARSE: Most aggressive cutting and maximum wheel life | COARSE: For fast, aggressive cutting and maximum wheel life | MEDIUM/ COARSE: For fast cutting and long wheel life | MEDIUM/ COARSE: Excellent for general purpose cutting | FINE/MEDIUM: For a smoother finish and reduced burr | FINE: For a burr-free cut |

## GRADE SELECTION

SOFT (Fast/Clean Cut) — HARD (Last Longer)

| N | R | S-V |
|---|---|---|
| SOFT: For maximum cut rate | MEDIUM/HARD: For cutting large cross sections; improved stock removal rate | HARD: For maximum wheel life |

# CUTTING WHEELS



Cutting a piece of Steel tubing to length.

For general purpose cutting applications on Steel, Iron, and other ferrous metals. Formulated for aggressive stock removal and fast cutting and reinforced with fiberglass webbing for stability.

## APPLICATIONS

- Weld removal
- Cutting and parting
- Notching

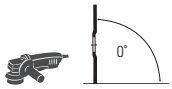



56388

P

## THIN CUTTING WHEELS Depressed Center (Type 27)

For fast, burr-free cutting with longer life and less resistance on various metals.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | Z46T - Metal | 13,300 | 25 | 56389 |
| 5" | .045" | 7/8" | Z46T - Metal | 12,200 | 50 | 56388 |
| 7" | .060" | 7/8" | Z36T - Metal | 8,500 | 25 | 56387 |

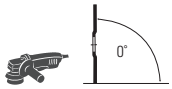



56283

V

## VORTEC PRO® THIN CUTTING WHEELS Depressed Center (Type 27)

For general purpose, burr-free cutting with less resistance on various metals.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | WA60S - Metal | 13,300 | 25 | 56393* |
| 5" | .045" | 7/8" | WA60S - Metal | 12,200 | 100 | 56392* |
| 6" | .045" | 7/8" | WA60S - Metal | 10,200 | 25 | 56283* |
| 7" | .060" | 7/8" | WA60S - Metal | 8,500 | 25 | 56391* |

*Contaminant-free.

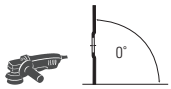


56385

V

## VORTEC PRO® CUTTING WHEELS Depressed Center (Type 27)

For general purpose cutting on ferrous metals.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 4" | 3/32" | 5/8" | A24T - Metal | 15,200 | 25 | 56474 |
| 4-1/2" | 3/32" | 5/8"-11 | A24T - Metal | 13,300 | 10 | 56385 |
| | | 7/8" | | | 25 | 56475 |
| 5" | 3/32" | 5/8"-11 | A24T - Metal | 12,200 | 10 | 56384 |
| | | 7/8" | | | 25 | 56476 |
| 6" | 3/32" | 5/8"-11 | A24R - Metal | 10,200 | 10 | 56278 |
| | | 7/8" | | | 25 | 56277 |
| 7" | 3/32" | 5/8"-11 | A24R - Metal | 8,500 | 10 | 56477 |
| | | 7/8" | | | 25 | 56383 |

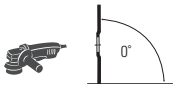



56430

V

## VORTEC PRO® CUTTING & NOTCHING WHEELS Depressed Center (Type 27)

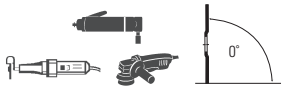
General purpose light grinding and cutting. For root pass cutting and light grinding.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 4-1/2" | 1/8" | 5/8"-11 | A24R - Metal | 13,300 | 10 | 56429 |
| | | 7/8" | | | 25 | 56430 |
| 5" | 1/8" | 5/8"-11 | A24T - Metal | 12,200 | 10 | 56427 |
| | | 7/8" | | | 25 | 56428 |
| 7" | 1/8" | 5/8"-11 | A24T - Metal | 8,500 | 10 | 56425 |
| | | 7/8" | | | 25 | 56426 |
| 9" | 1/8" | 5/8"-11 | A24T - Metal | 6,600 | 10 | 56423 |

## V VORTEC PRO® SMALL CUTTING WHEELS Reinforced (Type 1)

General purpose cutting applications in tool rooms and machine shops.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 2" | .035" | 1/4" | WA60T - Metal | 30,000 | 100 | 56013* |
| | 1/16" | 1/4" | A36T - Metal | | 50 | 56015 |
| | 1/4" | 3/8" | A36T - Metal | | 25 | 56131 |
| 3" | .035" | 1/4" | WA60T - Metal | 25,000 | 100 | 56061* |
| | .035" | 3/8" | WA60T - Metal | | 100 | 56062* |
| | 1/16" | 1/4" | A36T - Metal | | 100 | 56065 |
| | 1/16" | 3/8" | A36T - Metal | | 100 | 56068 |
| | 1/8" | 3/8" | A36T - Metal | | 50 | 56076 |
| | 1/8" | 1/4" | A36T - Metal | | 50 | 56270 |
| 4" | .035" | 5/8" | WA60T - Metal | 19,000 | 50 | 56271* |
| | .035" | 3/8" | WA60T - Metal | | 50 | 56080* |
| | 1/16" | 3/8" | A36T - Metal | | 50 | 56086 |
| | 1/4" | 3/8" | A36T - Metal | | 25 | 56163 |
| | 1/8" | 3/8" | A36T - Metal | | 50 | 56099 |
| 4-1/2" | .045" | 7/8" | WA60T - Metal | 13,500 | 50 | 56281* |
| | 1/16" | 7/8" | A60T - Metal | | 50 | 56103 |
| 5" | .035" | 5/8" | WA60T - Metal | 12,200 | 100 | 56108* |
| | 1/16" | 7/8" | A36T - Metal | | 100 | 56118 |

*Contaminant-free.




56013




56103

## V VORTEC PRO® THIN CUTTING WHEELS Reinforced (Type 1)

General purpose metal applications in tool rooms and machine shops.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 6" | .040" | 7/8" | WA60T - Metal | 10,200 | 25 | 56282* |
| | .045" | 7/8" | WA60T - Metal | | | 56273* |
| 7" | .045" | 7/8" | WA60T - Metal | 8,740 | 25 | 56275* |

*Contaminant-free. DIA. = 5/8" arbor with diamond knockout adapter for circular saws.




56282

## MOUNTING MANDRELS 1/4" Stem. For Type 1 wheels only.

| Arbor Size | Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | .035" to 1/4" | 10 | 56489 |
| 3/8" | .035" to 1/4" | 10 | 56490 |
| 1/4", 3/8" * | .035" to 1/4" | 10 | 56491* |
| 1/4", 3/8"+ | .035" to 1/4" | 1 | 36512+ |

*Combination pack +Display packaged



56489

Key:

P PERFORMANCE LINE Industrial Grade

V VALUE LINE Professional Grade

# GRINDING WHEELS



Grinding out weld defects for repair.

For general purpose grinding applications on Steel, Iron, and other ferrous metals. Formulated for aggressive stock removal and fast grinding and reinforced with Fiberglass webbing for stability.

## APPLICATIONS

- Weld removal
- Rough grinding
- Notching

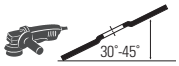



56453

P

## GRINDING WHEELS Depressed Center (Type 27)

High performance grain that cuts faster with long life. For general purpose, rough grinding.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|---|
| 4-1/2" | 1/4" | 5/8"-11 | Z24T - Metal | 13,300 | 10 | 56453 |
| | | 7/8" | | | 10 | 56456 |




56464

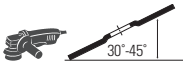



56468

V

## VORTEC PRO® GRINDING WHEELS Depressed Center (Type 27)

For general purpose, rough grinding.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 4" | 1/4" | 5/8" | A24R - Metal | 15,200 | 25 | 56473 |
| 4-1/2" | 1/4" | 5/8"-11 | A24R - Metal | 13,300 | 10 | 56454 |
| | | 7/8" | | | 25 | 56464 |
| 4-1/2" | 1/4" | 5/8"-11 | A24N - Metal | 13,300 | 10 | 56455 |
| | | 7/8" | | | 25 | 56457 |
| 5" | 1/4" | 5/8"-11 | A24R - Metal | 12,200 | 10 | 56449 |
| | | 7/8" | | | 25 | 56466 |
| 6" | 1/4" | 5/8"-11" | A24R - Metal | 10,200 | 10 | 56279 |
| | | 7/8" | | | 25 | 56280 |
| 7" | 1/4" | 5/8"-11 | A24R - Metal | 8,500 | 10 | 56468 |
| | | 7/8" | | | 20 | 56467 |
| 9" | 1/4" | 5/8"-11 | A24R - Metal | 6,600 | 10 | 56470 |

## V VORTEC PRO® LARGE REINFORCED CUT-OFF WHEEL Reinforced (Type 1)

General purpose - For stationary machines.

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 14" | 1/8" | 1" | A30R - Metal | 4,400 | 10 | 56230 |



56239

## V VORTEC PRO® LARGE REINFORCED CUT-OFF WHEELS Reinforced (Type 1)

General purpose - For low horsepower chop saws.

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number Aluminum Oxide |
|---|---|---|---|---|---|---|
| 12" | 3/32" | 1" | A46T - Metal | 5,100 | 10 | 56239 |
| 14" | 3/32" | 1" | A46T - Metal | 4,400 | 10 | 56240 |

## ADAPTING NUTS For 4-1/2" & 9" Angle Grinders.

| Adapts To | Min. Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 7/8" to 5/8"-11 | 1/16" | 1 | 56494 |
| 5/8" to 3/8"-24 | 1/16" | 1 | 56484 |

When mounting, adapters must be nested, see illustration below.



56494

56495



# POWER BRUSHES



CLEANING BRUSHES | KNOT WIRE WHEELS | WIRE CUP BRUSHES | STEM MOUNTED END BRUSHES | CRIMPED WIRE WHEELS

# SELECTING THE RIGHT BRUSH

Need to clean a surface without removing base material? Nothing beats a power-driven wire brush for cleaning hot welds. The high quality wheels, end and cup brushes from Weiler can effectively handle tube end, corrosion, scale removal, inter-pass weld cleaning, and many other jobs. The varied trim lengths, knot configurations and wire sizes in our lineup offer optimal speed and effectiveness for any job.

## P PERFORMANCE LINE

### INDUSTRIAL GRADE

Engineered and manufactured to maximize performance and minimize operating costs in the most demanding surface conditioning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost-of-use and most consistent performance in heavy production environments.

## V VALUE LINE

### PROFESSIONAL GRADE

Weiler's value line is manufactured using similar product construction and the same exacting standards as other Weiler power brushes, but engineered to provide cost-effective use in less demanding environments. Vortec Pro® brushes are an economical choice for the construction trades, low volume production shops and light duty industrial MRO use.

## KNOT CONFIGURATIONS



**Standard Twist**
Provides some flexibility for use on irregular surfaces. Sharp wire tips make this knot aggressive right from the start.



**Hurricane® Twist**
Provides smoother operation but sacrifices much of the cleaning action.



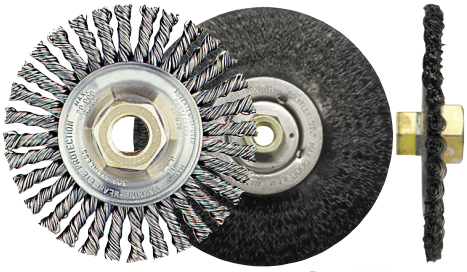
**Cable Twist**
Provides very aggressive brushing action. Sharp wire tips make this knot aggressive right from the start.



**Stringer Bead Twist**
High-impact action, primarily for weld cleaning. Sharp wire tips make this knot aggressive right from the start.

## BRUSH TYPES

ROUGHNECK® ENCAPSULATED DUALLY®



Page 36-38

**Stringer Bead Wheels**
For **root and hot pass weld cleaning**, heavy deburring, deflashing, surface prep, remove oxides and rust.



Page 39

**Bevel Brushes**
For aggressive-yet-flexible brushing action for **cleaning fillet welds** and into corners.



Page 40-41

**Cup Brushes**
For **weld prep on large surface areas**, heavy deburring, surface prep, remove oxides and rust.

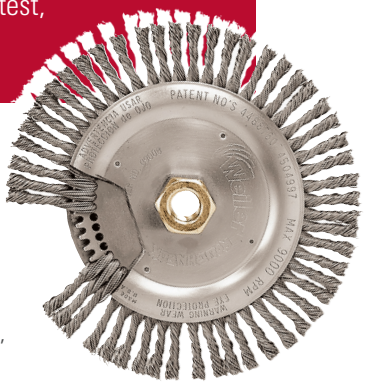


Page 42-43

**End Brushes**
For weld cleaning **applications in recessed areas,** heavy deburring, surface prep, remove oxides and rust.

# WELD CLEANING BRUSHES

Weiler's stringer bead wheels are the most effective weld cleaning tools for the most demanding users. Our premium weld cleaning brushes are manufactured to the most stringent quality standards, utilizing the highest quality wire available. The twist puts all the sharp tips at the end of the knots, making them the fastest, most aggressive weld cleaning tools on the market.



## WEILER ROUGHNECK®

MADE IN USA



13131

*Weiler's Roughneck brush construction virtually eliminates knot movement resulting in the most effective cleaning action, smoothest operation, and longest wheel life.*

Offered in a variety of widths for efficient use in inter-pass weld cleaning operations, our entire line of Roughnecks excel at removing slag, spatter, and oxidation without damaging the filler material. They are engineered to maximize your efficiency and minimize your costs.



09000



08776

### P ROUGHNECK STRINGER BEAD WHEELS are the standard for high-performance weld cleaning brushes. Narrow face brushes are suitable for cleaning root and hot passes and reaching into corners; wider face wheels can be used for cleaning filler and cap passes as well as for other surface prep and cleaning applications.

| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | | |
| 4" | .020 | 1/2"-3/8" | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 13124 | 08954* |
| | | M10 x 1.25 | | | | | | | 13125 ■ | 13132 |
| | | M10 x 1.50 | | | | | | | 13126 | 13133 |
| | | M14 x 2.0 | | | | | | | 13127 | 13134 |
| | | 3/8"-24 UNF | | | | | | | 13128 | 13135 |
| | | 1/2"-13 UNC | | | | | | | 13130 | 13137 |
| | | 5/8"-11 UNC | | | | | | | 13131 ■ | 13138 ■ |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 15,000 | 5 | 13232 | 13238 |
| | | M14 x 2.0 | | | | | | | 13233 | 13239 |
| | | 7/8" | | | | | | | 13234 | 13249 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 08756 | 08806 |
| | | 7/8" | | | | | | | 08750 | – |
| 6" | .020 | 5/8"-11 UNC | 48 | 3/16" | 1-1/8" | 3/8" | 12,500 | 10 | 08766† | – |
| | | | 38 | | 1-3/8" | 3/8" | | | – | 08786†• |
| | | | 56 | | 1-1/8" | 7/16" | | | 09400 ■ | 09500 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 09000 ■ | 09200 |
| | | | 76 | | | | | | 09100 | – |
| **Filler Pass Brushes** | | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 09856 | 09866 |
| 6" | .023 | 5/8"-1/2" | 24 | 1/2" | 1-3/8" | 9/16" | 12,500 | 10 | 08775 | – |
| | | 5/8"-11 UNC | 24 | 1/2" | 1-3/8" | 9/16" | | | 08776 ■ | 08796• |
| | | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | | | 08916 | 08926• |
| | | 5/8"-11 UNC | 30 | 5/16" | 1-3/8" | 1/2" | | | 09386 | 09396• |

† Light Duty • Standard Pack 5 * Standard Pack 10

■ Available in Display Packaging. Add "P" to end of Item Number when placing order.



35216

### P POLYFLEX™ ENCAPSULATED WELD CLEANING WHEELS Black Elastomer

Feature a heat-stabilized encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life; suitable for cleaning hot welds.

| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 35800 ▲ |
| 6" | .014 | 5/8"-11 UNC | - | 3/16" | 1-7/16" | 3/8" | 9,000 | 5 | 35206 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 35600 ▲ |
| 7" | .014 | 5/8"-11 UNC | - | 3/16" | 1-15/16" | 3/8" | 9,000 | 5 | 35216 |

▲ Stringer Bead Wheels

# THE DUALLY® FROM WEILER

Featuring a unique dual-hex nut, this full line of weld cleaning brushes simplifies periodic flipping of the wheels for maximum cutting action, long life, and safer use.

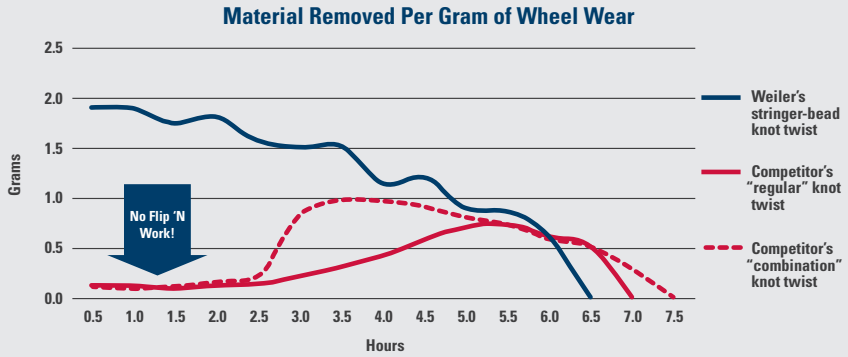
MADE IN USA

*These "Flip 'N Fast" Wheels offer:*

- **Maximum Cleaning Action —** Featuring a knot twist with the most aggressive cutting action, the new dual-hex nut makes it easier for the user to regularly switch mounting position and keep the brush running at peak performance.
- **Long Wheel Life** — Utilizing the highest quality heat-treated Steel wire and construction that virtually eliminates knot movement, the Dually delivers smooth operation and long life for the lowest cleaning costs in demanding multi-pass welding applications such as pipeline construction.
- **Improved User Safety —** The one-piece, dual-hex nut is designed to provide adequate tool clearance so there is no need to remove the guard from the grinder in order to change the position of the wheel.

**The Dually features a wire twist that produces the fastest, most effective cleaning action right out of the box!**

Competing knot styles feature much less effective knot twists. As the graph shows, it is only after these brushes have been used for a long enough period of time for wire breakage to occur that they go to work.




P

## DUALLY STRINGER BEAD WHEELS feature a dual-hex nut design that simplifies periodic flipping of the wheel for maximum cleaning action, long life, and safer use.

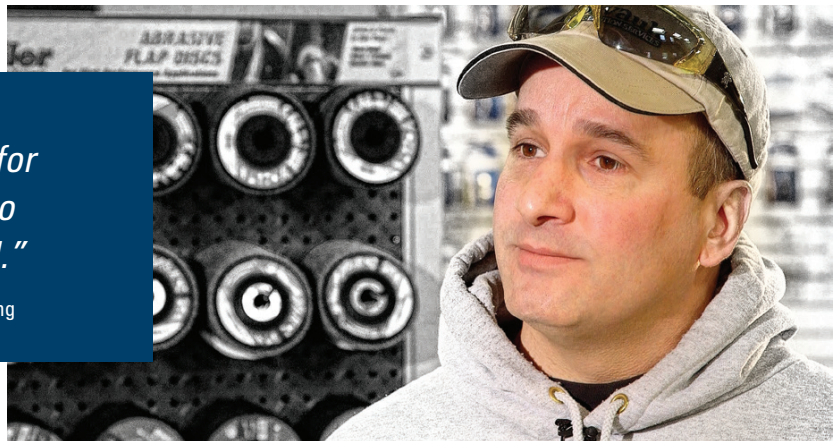
| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Steel | Stainless |
| **Root Pass Brushes** | | | | | | | | | | |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 15,000 | 5 | 79801 | 79811 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 79802 | 79812 |
| 6" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 5 | 79805 | 79815 |
| 7" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 5 | 79800 | 79810 |
| **Filler Pass Brushes** | | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 79803 | 79813 |
| 6" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 5 | 79804 | 79814 |



79802

*"I have been in the business for 20+ years and I find Weiler to be the best I have ever used."*

– **Andy Bettelli**, Pipeline Contractor, A B Welding



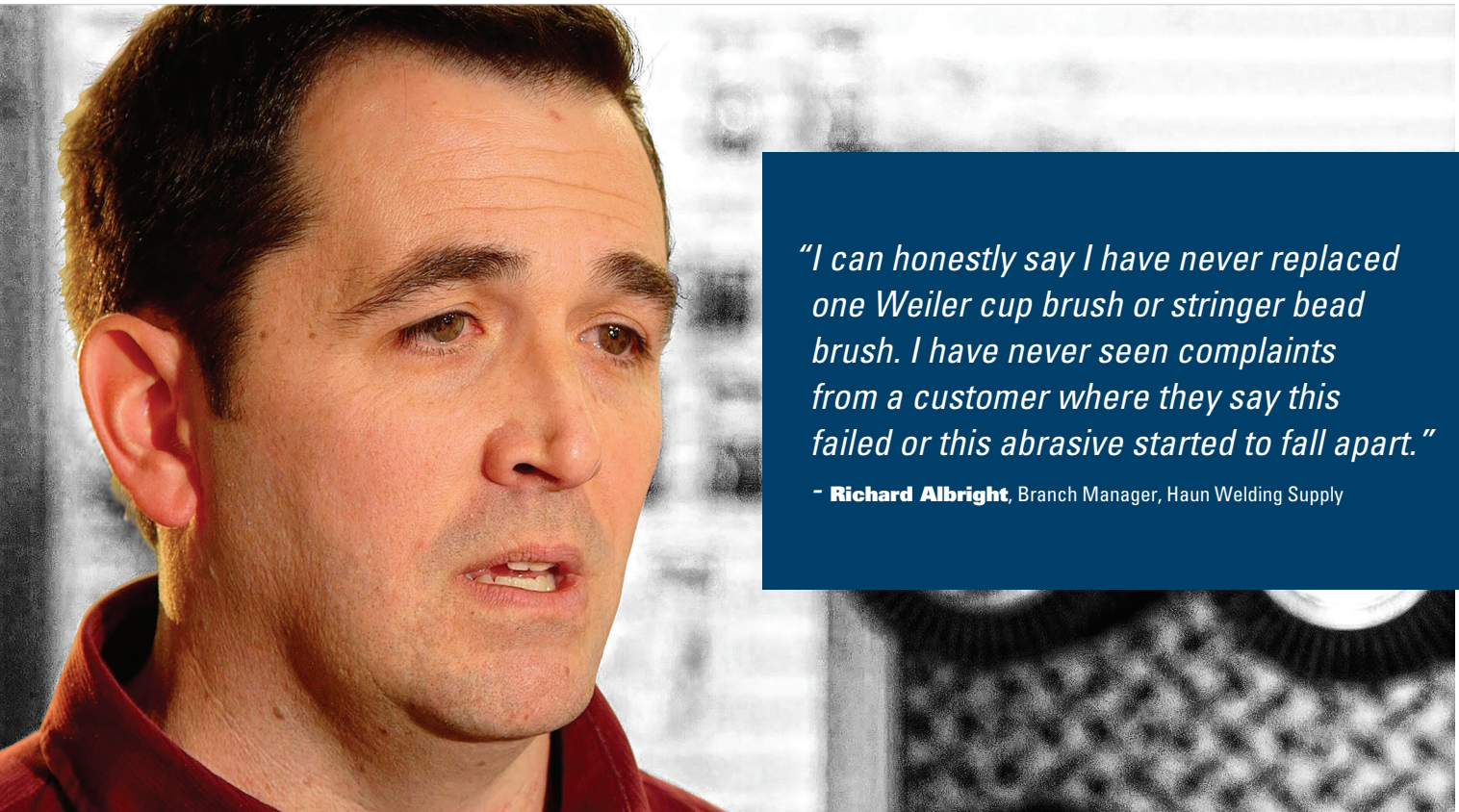


36218

## V VORTEC PRO® STRINGER BEAD WHEELS are manufactured using similar product construction and to the same exacting standards as other Weiler weld cleaning brushes; they have been engineered for cost-effective use in less demanding applications.

| Diameter | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Display Pack | Box Quantity |
| 4″ | .020″ Coarse | Carbon | 5/8″-11 | Narrow | 20,000 | 36018 | 36218 |
| | | Stainless | 5/8″-11 | | | – | 36219 |
| | | Carbon | M10 x 1.25 | | | 36021 | 36221 |
| | | Carbon | M10 x 1.50 | | | – | 36222 |
| | | Carbon | M14 x 2.0 | | | – | 36223 |
| 5″ | .020″ Coarse | Carbon | 5/8″-11 | Narrow | 12,500 | – | 36295 |
| | | Stainless | | | | – | 36296 |
| 6″ | .020″ Coarse | Carbon | 5/8″-11 | Narrow | 12,500 | – | 36225 |
| | | Carbon | | | | – | 36307** |
| 6-7/8″ | .020″ Coarse | Carbon | 5/8″-11 | Narrow | 9,000 | – | 36297 |

**Light Duty



*"I can honestly say I have never replaced one Weiler cup brush or stringer bead brush. I have never seen complaints from a customer where they say this failed or this abrasive started to fall apart."*

– **Richard Albright**, Branch Manager, Haun Welding Supply

# KNOT WIRE WHEELS



Cleaning a fillet weld with a bevel brush.

Weiler's knot wire wheels with a threaded nut are intended for use primarily on small and large right angle grinders. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated Steel and Type 302 Stainless Steel wire for use in a wide variety of applications.

MADE IN USA

## APPLICATIONS

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting

P

## STANDARD TWIST BEVEL BRUSHES feature a tufted knot end and a saucer shaped radial wheel to provide an aggressive-yet-flexible brushing action for cleaning fillet welds and into corners.

| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 4" | .014 | M10 x 1.25 | 20 | 3/8" | 3/4" | 12,500 | 1 | 13401 | – |
| | | M10 x 1.50 | | | | | | 13402 | 13412 |
| | | 5/8"-11 UNC | | | | | | 13406 | 13416 |
| 4" | .020 | M14 x 2.0 | 20 | 3/8" | 3/4" | 12,500 | 1 | 13423 | – |
| | | 5/8"-11 UNC | | | | | | 13426 | 13436 |
| 4-1/2" | .014 | 5/8"-11 UNC | 20 | 3/8" | 1" | 12,500 | 1 | 13456 | 13466 |
| | .020 | | | | | | | 13476 | 13486 |



13456

P

## CABLE TWIST WHEELS provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface preparation applications on relatively smooth surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Steel | Stainless |
| 4" | .020 | M10 x 1.25 | 24 | 1/4" | 7/8" | 1/2" | 7/16" | 20,000 | 5 | 13261 | – |
| | | M10 x 1.50 | | | | | | | | – | 13272 |
| | | 5/8"-11 UNC | | | | | | | | 13266 ■ | 13276 |

■ Available in display packaging. Add "P" to end of item number when placing order.



13266

V

## VORTEC PRO® CABLE TWIST WHEELS provide the most aggressive brushing action for general purpose cleaning and surface preparation applications.

| Diameter | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Display Pack | Box Quantity |
| 4" | .020" Coarse | Carbon | M10 x 1.50 | Medium | 20,000 | – | 36257 |
| | | | M10 x 1.25 | | | – | 36258 |
| | | | 5/8"-11 | | | 36055 | 36255 |



36255

Key:

P PERFORMANCE LINE Industrial Grade

V VALUE LINE Professional Grade

# WIRE CUP BRUSHES



Removing slag from a flame-cut Steel plate.

Weiler's wire cup brushes are intended primarily for use on portable power tools for addressing larger surface areas more efficiently than a wheel brush. Cup brushes are designed for smooth, efficient operation on angle grinders to make quick work of large jobs.

MADE IN USA

Cup brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and they are manufactured with individual knot hole and solid ring construction for high performance and long life. Weiler's cup brushes are available in heat-treated Steel, Type 302 Stainless Steel, and Brass wire.

## APPLICATIONS

- Removal of slag from the edges of plasma-cut or flame-cut plates
- Removing paint and coatings
- Cleaning rust, scale, and corrosion
- Deburring
- Weld prep and cleaning



13016



13156



12276

## P KNOT WIRE CUP BRUSHES Single Row

Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.

| Diameter | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Bronze |
| 2-3/4" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13015 | – | – |
| | | M10 x 1.50 | | | | 13016 | – | – |
| | | M14 x 2.0 | | | | 13020 | – | – |
| | | 3/8"-24 UNF | | | | 13021 | – | – |
| | | 5/8"-11 UNC | | | | 13025 ■ | – | – |
| 2-3/4" | .020 | M10 x 1.25 | 1" | 14,000 | 1 | 13281 ■ | 13253 | – |
| | | M10 x 1.50 | | | | 13282 | 13254 | – |
| | | M14 x 2.0 | | | | 13283 | 13255 | – |
| | | 3/8"-24 UNF | | | | 13284 | 13256 | – |
| | | 1/2"-13 UNC | | | | 13285 | 13257 | – |
| | | 5/8"-11 UNC | | | | 13286 ■ | 13258 | 13299 |
| 3-1/2" | .023 | M10 x 1.25 | 7/8" | 13,000 | 1 | 13150 | – | – |
| | | M10 x 1.50 | | | | 13151 | – | – |
| | | M14 x 2.0 | | | | 13152 | 13159 | – |
| | | 3/8"-24 UNF | | | | 13153 | 13160 | – |
| | | 1/2"-13 UNC | | | | 13155 | – | – |
| | | 5/8"-11 UNC | | | | 13156 ■ | 13163 | – |
| 3-1/2" | .014 | 5/8"-11 UNC | 1-1/4" | 9,000 | 1 | 12736 | – | – |
| | .020 | | | | | 12746 | – | – |
| 4" | .014 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12306 | 12406 | – |
| | .020 | | | | | – | – | 12776 |
| | .023 | | | | | 12316 ■ | 12416 | – |
| | .035 | | | | | 12326 | – | – |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12206 ❖ | – | – |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12826* | – | – |
| 5" | .014 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12256* | – | – |
| | .023 | | | | | 12276 ■* | – | – |
| 6" | .014 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12356 | 12456 | – |
| | .023 | | | | | 12376 ■ | 12476 | – |
| | .035 | | | | | 12396 | – | – |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12816* | – | – |
| 6" | .014 | 5/8"-11 UNC | 1-5/8" | 6,000 | 1 | 12846 | – | – |
| | .023 | | | | | 12856 | 12886 | – |
| | .035 | | | | | 12866 | – | – |

* With internal nut ❖ Cable Twist

■ Available in Display Packaging. Add "P" to end of Item Number when placing order.

## V VORTEC PRO® KNOT WIRE CUP BRUSHES Single Row

Provide an aggressive brushing action for general-purpose surface cleaning applications.

| Diameter | Wire Size | Wire Type | Arbor Hole | Max. RPM | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Display Pack | Box Quantity |
| 2-3/4" | .020" Coarse | Carbon | 5/8"-11 | 14,000 | 36038 | 36238 |
| | | Stainless | 5/8"-11 | | 36039 | 36239 |
| | | Carbon | M14 x 2.0 | | 36043 | – |
| 3-1/2" | .020" Coarse | Carbon | 5/8"-11 | 13,000 | 36066 | – |
| 4" | .025" Coarse | Carbon | 5/8"-11 | 10,200 | 36044 | 36244 |
| 5" | .023" Coarse | Carbon | 5/8"-11 | 7,000 | 36070 | – |
| 6" | .025" Coarse | Carbon | 5/8"-11 | 6,600 | 36045 | 36245 |



36244

## P CRIMPED WIRE CUP BRUSHES

Provide very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; feature a threaded nut for use on angle grinders.

| Diameter | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 3-1/2" | .014 | M10 x 1.25 | 7/8" | 12,000 | 1 | 13175 | 13182 | – |
| | | M10 x 1.50 | | | | 13176 | – | – |
| | | M14 x 2.0 | | | | 13177 | 13184 | – |
| | | 3/8"-24 UNF | | | | 13178 | 13185 | – |
| | | 1/2"-13 UNC | | | | – | 13187 | – |
| | | 5/8"-11 UNC | | | | 13181 | 13188 | – |
| 4" | .0118 | 5/8"-11 UNC | 1-3/8" | 10,200 | 1 | 14016 | – | – |
| | .014 | | | | | 14026 | – | – |
| | .020 | | | | | 14036 ■▲ | 14126 | – |
| 5" | .014 | 5/8"-11 UNC | 1-1/4" | 8,000 | 1 | – | – | 14606 |
| | .014 | | | 9,000 | | 14206 ▲ | – | – |
| | .020 | | | | | 14216 | 14256 | – |
| 6" | .014 | 5/8"-11 UNC | 1-1/4" | 6,600 | 1 | 14066 *▲ | – | – |
| | .020 | | | | | 14076 ■* | 14166* | – |

* With internal nut

■ Available in display packaging. Add "P" to end of item number when placing order.

▲ Available in non-sparking Bronze wire.



14026

## V VORTEC PRO CRIMPED WIRE CUP BRUSHES

Provide flexible brushing action and cost-effective performance in general purpose cleaning applications.

| Diameter | Wire Size | Wire Type | Arbor Hole | Max. RPM | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Display Pack | Box Quantity |
| 3-1/2" | .014" Coarse | Carbon | 5/8"-11 | 12,000 | 36068 | – |
| 4" | .020" Coarse | Carbon | 5/8"-11 | 9,000 | 36036 | 36236 |
| 5" | .020" Coarse | Carbon | 5/8"-11 | 9,000 | 36061 | – |
| 6" | .020" Coarse | Carbon | 5/8"-11 | 6,600 | 36037 | 36237 |



36037

## P THREADED ADAPTERS

For mounting brushes with a 5/8"-11 UNC nut to other threaded spindles.

| Fixed Thread Size | Adapted Thread Size | Standard Pack | Item Number |
|---|---|---|---|
| 5/8" - 11 UNC | M10 x 1.25 | 10 | 07771 ■ |
| 5/8" - 11 UNC | M10 x 1.50 | 10 | 07772 ■ |
| 5/8" - 11 UNC | 3/8" - 16 UNC | 10 | 07769 |
| 5/8" - 11 UNC | 3/8" - 24 UNF | 10 | 07746 |

■ Available in display packaging. Add "P" to end of item number when placing order.



07771

# STEM-MOUNTED END BRUSHES



Cleaning hard-to-reach fillet welds with a Controlled Flare End Brush.

Weiler's wire end brushes are intended primarily for use on high-speed portable power tools for addressing smaller surfaces and recessed areas. End brushes feature an integral 1/4" Steel stem for safe operation at high speed and quick mounting into the collet or chuck of either electric or pneumatic die grinders.

MADE IN USA

End brushes are manufactured with the highest quality construction for smooth, efficient performance and long life. Weiler's end brushes are available in heat-treated Steel, Type 302 Stainless Steel, and Bronze wire.

## APPLICATIONS

- Cleaning ID's, internal passages & recessed areas
- Removing die flash and excess molded material
- Deburring internal edges and cross-hole intersections
- Spot facing

## P KNOT WIRE END BRUSHES

Features a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.





10026

| Diameter | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless | Bronze |
| 1/2" | .006 | 1-1/8" | 20,000 | 10 | – | 10215 | – |
| | .0104 | | | | 10208 | 10216 | – |
| | .014 | | | | 10217 | 10218 | – |
| 3/4" | .006 | 1-1/8" | 20,000 | 10 | – | 10220 | – |
| | .0104 | | | | 10210 | 10211 | – |
| | .014 | 7/8" | 22,000 | | 10025 ■ | 10029 | – |
| | .014 | | | | – | 10387 ◆ | – |
| | .020 | | | | 10026 ■ | 10030 | – |
| | .020 | | | | – | 10388 ◆ | – |
| 1-1/8" | .006 | 1" | 20,000 | 10 | 10141 | 10142 • | – |
| | .0104 | 1-1/8" | | | 10212 | 10213 | – |
| | .0118 | | | | 10187 | – | – |
| | .014 | 7/8" | 22,000 | | 10027 ■ | 10031 | – |
| | .014 | | | | – | 10392 ◆ | – |
| | .020 | | | | 10028 ■ | 10032 | 10067 |
| | .020 | | | | – | 10393 ◆ | – |

◆ Nickel-plated cup compliant with DOD MIL STD 2041D(SH)
■ Available in display packaging. Add "P" to end of item number when placing order.
• Coated Cup

## V VORTEC PRO® KNOT WIRE END BRUSHES

Features a similar hollow-end construction and provides heavy-duty brushing action, but have been engineered to provide cost-effective use for less demanding applications.





36251

| Diameter | Wire Size | Wire Type | Trim Length | Max. RPM | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Display Pack | Box Quantity |
| 3/4" | .014" Fine | Carbon | 7/8" | 22,000 | – | 36286 |
| | .014" Fine | Stainless | | | – | 36287 |
| | .020" Coarse | Carbon | | | 36050 | 36250 |
| 1" | .014" Fine | Carbon | 7/8" | 22,000 | – | 36288 |
| | .014" Fine | Stainless | | | – | 36289 |
| | .020" Coarse | Carbon | | | 36051 | 36251 |

## P KNOT WIRE END BRUSHES Banded

Features a pair of bands around the fill to reduce the exposed trim length and limit brush flaring to provide a very aggressive, controlled brushing action.





11141

| Diameter | Wire Size | Trim* Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Steel |
| 1-1/8" | .014 | 3/8" | 18,000 | 10 | 11140 |
| | .020 | | | | 11141 |

* Trim length from bands

## P CRIMPED WIRE END BRUSHES

Features a solid end construction and very flexible brushing, ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.



| Diameter | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2" | .006 | 7/8" | 25,000 | 10 | 10001 | 10370 ◆ |
| | .0104 | | | | 10002 | 10371 ◆ |
| | .014 | | | | 10003 | 10372 ◆ |
| | .020 | | | | 10004 | 10373 ◆ |
| 3/4" | .006 | 7/8" | 22,000 | 10 | 10005 | 10374 ◆ |
| | .0104 | | | | 10006 | 10375 ◆ |
| | .014 | | | | 10007 | 10376 ◆ |
| | .020 | | | | 10008 | 10377 ◆ |
| 1" | .006 | 1" | 22,000 | 10 | 10009 | 10378 ◆ |
| | .0104 | | | | 10010 | 10379 ◆ |
| | .014 | | | | 10011 | 10380 ◆ |
| | .020 | 1-1/8" | | | 10012 ■ | 10381 ◆ |

◆ Nickel-plated Cup compliant with DOD MIL STD 2041D(SH)

■ Available in display packaging. Add "P" to end of item number when placing order.



10374

## V VORTEC PRO® CRIMPED WIRE END BRUSHES

Features similar solid end construction and flexible brushing action, but they have been engineered to provide cost-effective use for less demanding applications.



| Diameter | Wire Size | Wire Type | Trim Length | Max. RPM | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Display Pack | Box Quantity |
| 1/2" | .0104" Medium | Carbon | 7/8" | 25,000 | – | 36282 |
| 3/4" | .006" Fine | Stainless | 7/8" | 22,000 | – | 36283 |
| | .0104" Medium | Carbon | | | 36047 | 36247 |
| | .014" Coarse | Carbon | | | 36046 | 36246 |
| 1" | .006" Fine | Carbon | 7/8" | 22,000 | – | 36284 |
| | .006" Fine | Stainless | | | – | 36285 |
| | .0104" Medium | Carbon | | | 36049 | 36249 |
| | .014" Coarse | Carbon | | | 36048 | 36248 |



36247

## P CONTROLLED FLARE END BRUSHES*

Features uniquely trimmed crimped wire fill for more effective brushing action and greatly enhanced durability when cleaning corners and fillet welds.



| Diameter | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2" | .0104 | 7/8" | 25,000 | 10 | 10301 | 10313 |
| | .014 | | | | 10302 | 10314 |
| | .020 | | | | 10303 | 10315 |
| 3/4" | .0104 | 7/8" | 22,000 | 10 | 10305 | 10317 |
| | .014 | | | | 10306 | – |
| | .020 | | | | 10307 | 10319 |
| 1" | .0104 | 1" | 22,000 | 10 | 10309 | 10321 |
| | .014 | | | | 10310 | 10322 |
| | .020 | 1-1/8" | | | 10311 | 10323 |

*Patent #8,186,000 B2



10310

Key:

P PERFORMANCE LINE Industrial Grade

V VALUE LINE Professional Grade

# CRIMPED WIRE WHEELS



Removing carbon build-up from an engine.

Identifiable by their copper center, crimped wire wheels are used on a variety of portable tools and stationary machines. These radial brushes are available in heat-treated Steel, Type 302 Stainless Steel and Brass wire.

MADE IN USA

## APPLICATIONS

- Cleaning threads
- Cleaning and finishing ID's and recessed areas
- Paint removal and surface cleaning
- Light deburring
- Removing rust and light corrosion
- Removing carbon build-up and deposits

## SMALL DIAMETER WHEELS

Provides a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheels.



15533

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Steel | Stainless |
| 2″ | .006 | 1/2″ | 3/8″ | 1/2″ | 20,000 | 10 | 15433 | – |
| | .0104 | 1/2″ | | | | | 15453 | – |
| | .014 | 1/2″-3/8″ | | | | | 15473 | – |
| 3″ | .006 | 1/2″-3/8″ | 5/8″ | 1″ | 20,000 | 10 | 15533 | 16933 |
| | .006 | 5/8″ | | 15/16″ | | | 15637 | – |
| | .0104 | 1/2″ | | 1″ | | | 15553 | – |
| | .014 | 1/2″-3/8″ | | 1″ | | | 15573 | 16973 |

## THREADED SHAFT DRIVE ARBOR

For mounting small diameter wheels into a collet or chuck.



07721

| Arbor Dia. | Stem Dia. | Stem Length | Length of Shaft | For Brushes w/ Max. Dia. | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 1/2″ | 1/4″ | 7/8″ | 3/4″ | 3″ | 20,000 | 5 | 07721 |

## CONFLEX BRUSHES

Small diameter copper center wheels permanently mounted onto a 1/4″ stem to provide a very flexible brushing action.



17641

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 2″ | .006 | 3/8″ | 1/2″ | 20,000 | 10 | 17609 | – | – |
| | .0118 | | | | | 17610 | 17611 | – |
| 3″ | .008 | 1/2″ | 1″ | 20,000 | 10 | 17615 ■ | – | – |
| | .0118 | | | | | 17616 | – | 17641 |
| | .014 | | | | | 17617 ■ | 17618 | – |

■ Available in display packaging. Add "P" to end of item number when placing order.

## WIDE FACE CONFLEX BRUSHES

Small diameter copper center wheels permanently mounted onto a 1/4″ stem to provide a very flexible brushing action.

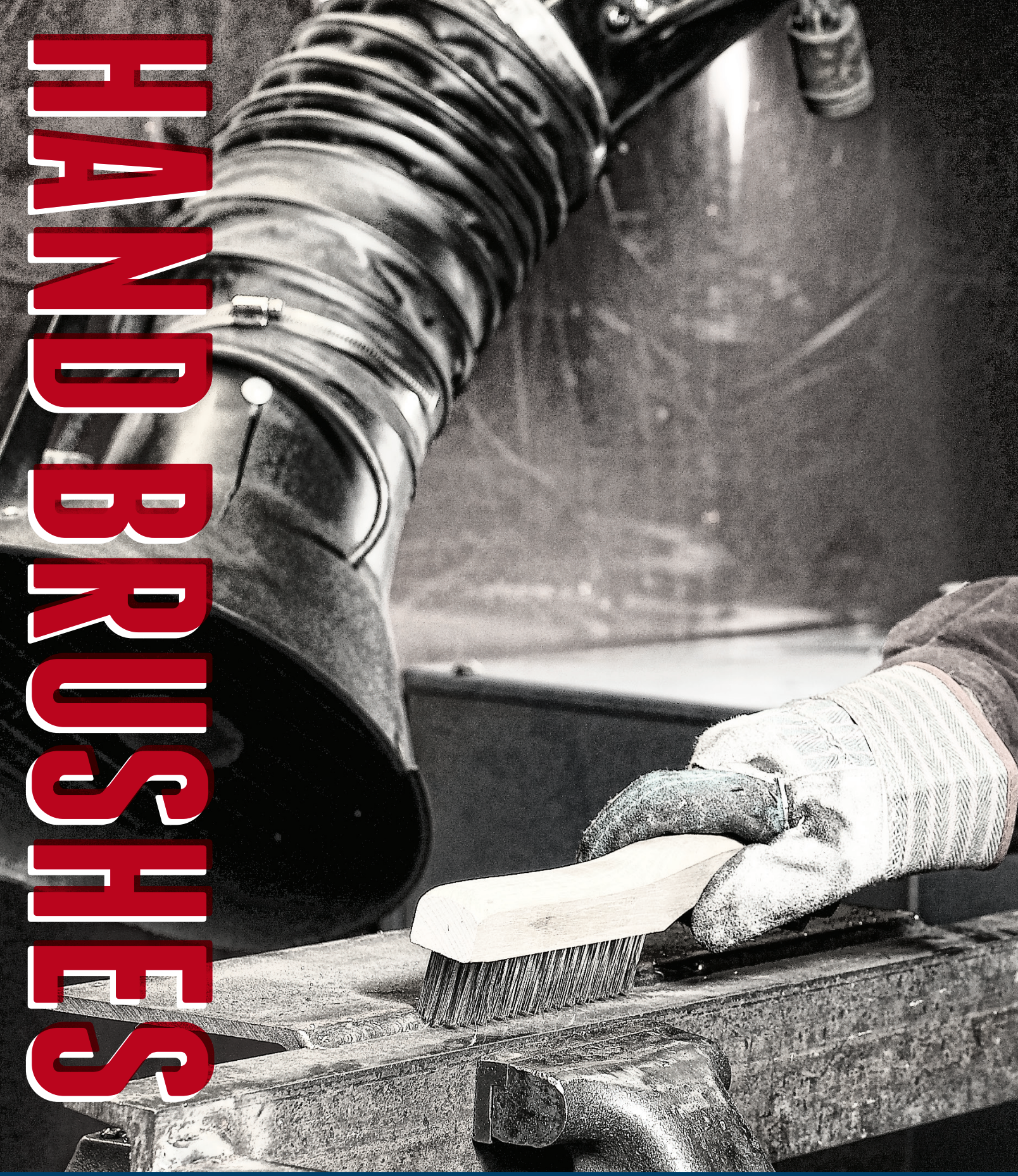


17637

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2″ | .0118 | 3/4″ | 7/16″ | 20,000 | 10 | 17619 | – |
| 3″ | .008 | 1″ | 15/16″ | 20,000 | 10 | 17621 | 17637 |
| | .0118 | | | | | 17622 | – |
| | .014 | | | | | 17623 | – |

BRUSHES

# HAND BRUSHES



SCRATCH BRUSHES | CHIP & OIL BRUSHES

# SCRATCH BRUSHES

Weiler's extensive Scratch Brush offering includes many block and handle types and sizes. The wide variety of fill materials available assures the right brush for the right job. Common applications are cleaning dirt, rust, scale, chips and paint; plating and welding operations.



Cleaning surface rust in order to repair a weld.

## P CURVED HANDLE SCRATCH BRUSHES Hardwood block

Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **.012 Steel Wire** | | | | | |
| 13-3/4" x 1-1/8" | 5-1/4" | 3 x 14 | 1-1/4" | 12 | 44594* |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44053 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44056 |
| **.012 Steel Wire with Scraper** | | | | | |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44055 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44058 |
| **.012 Stainless Steel Wire** | | | | | |
| 13-3/4" x 1-1/8" | 5-1/4" | 3 x 14 | 1-1/4" | 12 | 44432* |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44054 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44057 |

* V-Groove



44594
Top View



44053



44055

## V VORTEC PRO® CURVED HANDLE SCRATCH BRUSHES

Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **.012 Steel Wire** | | | | | |
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25150 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1" | 12 | 25201 |
| **.012 Stainless Steel Wire** | | | | | |
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25154 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1" | 12 | 25202 |



25150

## P SHOE HANDLE SCRATCH BRUSHES Hardwood block

Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **.012 Steel Wire** | | | | | |
| 10" x 3/8" | 5" | 1 x 17 | 1-1/16" | 12 | 44100 |
| 10" x 5/8" | 5" | 2 x 17 | 1-3/16" | 12 | 44061 |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44063 |
| 11" | 5" | 4 x 16 | 1-3/16" | 12 | 73217• |
| **.012 Steel Wire with Scraper** | | | | | |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44065 |
| **.012 Stainless Steel Wire** | | | | | |
| 10" x 3/8" | 5" | 1 x 17 | 1-1/16" | 12 | 44101 |
| 10" x 3/8" | 5" | 1 x 17 | 3/4" | 12 | 44235 |
| 10" x 5/8" | 5" | 2 x 17 | 1-3/16" | 12 | 44062 |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44064 |
| 11" | 5" | 4 x 16 | 1-3/16" | 12 | 44299• |
| **.012 Brass Wire** | | | | | |
| 11" | 5" | 4 x 16 | 1-1/4" | 12 | 73218• |

• Plastic block



44063



44065


25100

## V VORTEC PRO® SHOE HANDLE SCRATCH BRUSHES

Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **.012 Steel Wire** | | | | | |
| 10" x 1" | 5" | 4 x 16 | 1" | 12 | 25100 |
| **.012 Stainless Steel Wire** | | | | | |
| 10" x 1" | 5" | 4 x 16 | 1" | 12 | 25104 |


44069

## P HEAVY-DUTY SCRATCH BRUSH WITH SCRAPER .012 Steel Wire

Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 11-1/2" x 1-1/2" | 5-1/2" | 4 x 11 | 1-1/2" | 12 | 44069 |


25211

## V VORTEC PRO HEAVY-DUTY SCRATCH BRUSH WITH SCRAPER .012 Steel Wire

Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 11-1/2" x 1-1/2" | 5" | 4 x 11 | 1-5/8" | 12 | 25211 |

## P SMALL HAND SCRATCH BRUSHES

Ideal for cleaning and prepping surfaces.


44075


44551


44189


95151


99383


44732

| Block Size | Block | Number of Rows | Wire Size | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Stainless Steel Wire** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006 | 1/2" | 36 | 44075 |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44167+ |
| 7-3/4" x 3/8" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44551* |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .006 | 5/8" | 36 | 95013 |
| **Straight Brass Wire** | | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44189 |
| **Crimped Brass Wire** | | | | | | |
| 6" x 1/2" | Wood | 3 x 10 | .005 | 5/8" | 72 | 44619 |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .008 | 5/8" | 36 | 95014 |
| **Crimped Aluminum** | | | | | | |
| 6-3/4" x 1-5/8" | Wood | 6 x 9 | .008 | 5/8" | 12 | 95151 |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .008 | 5/8" | 36 | 44251 |
| **Straight Black Nylon** | | | | | | |
| 6-1/2" x 1/2" | Plastic | 4 x 15 | .010 | 1/2" | 24 | 99383 |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .012 | 1/2" | 36 | 44637 |
| **White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .016 | 1/2" | 36 | 44609 |
| **Double-Sided Brass/White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44731 |
| **Double-Sided Brass/Stainless Steel** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44732 |
| **Double-Sided Stainless Steel/White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44733 |

+ Countertop display available.
* Wire drawn

*Wire drawn

## V VORTEC PRO SMALL HAND SCRATCH BRUSHES

Reliable and efficient brushes at a value price.


44806

| Block Size | Handle | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **.006 Stainless Steel Wire** | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | 1/2" | 36 | 44805 |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | 1/2" | 36 | 44806 |
| **.006 Straight Brass Wire** | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | 1/2" | 36 | 44810 |

# CHIP AND OIL BRUSHES

Chip and Oil brushes are inexpensive, multi-purpose brushes for use in applications requiring disposable brushes.



Applying pipe coating to weld seams.

## P CHIP AND OIL BRUSHES

High quality disposable brushes.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **White Bristle - Wood Handle** | | | | |
| 1/2" | 5/16" | 1-1/2" | 30 | 40065 |
| 1" | 5/16" | 1-1/2" | 30 | 40066 |
| 1-1/2" | 5/16" | 1-1/2" | 30 | 40067 |
| 2" | 5/16" | 1-1/2" | 20 | 40068 |
| 2-1/2" | 3/8" | 1-1/2" | 20 | 40069 |
| 3" | 3/8" | 1-1/2" | 10 | 40070 |
| 4" | 5/8" | 1-5/8" | 10 | 40071 |
| | 3/8" | 2" | | 40076 |



40068

## V VORTEC PRO® CHIP AND OIL BRUSHES

Reliable and efficient brushes at a value price.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **White Bristle - Wood Handle** | | | | |
| 1/2" | 5/16" | 1-1/2" | 36 | 40177 |
| 1" | 5/16" | 1-1/2" | 36 | 40179 |
| 1-1/2" | 5/16" | 1-1/2" | 24 | 40180 |
| 2" | 5/16" | 1-1/2" | 24 | 40181 |
| 2-1/2" | 3/8" | 1-1/2" | 12 | 40182 |
| 3" | 3/8" | 1-1/2" | 12 | 40183 |
| 4" | 5/8" | 1-3/4" | 12 | 40184 |
| | 3/8" | | | 40185 |
| **Black Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-5/8" | 30 | 40160 |
| 1" | 5/16" | 1-5/8" | 30 | 40161 |
| 1-1/2" | 5/16" | 1-5/8" | 30 | 40162 |
| 2" | 5/16" | 1-5/8" | 20 | 40163 |
| 2-1/2" | 3/8" | 1-3/4" | 20 | 40164 |
| 3" | 3/8" | 1-3/4" | 10 | 40165 |
| 4" | 11/16" | 2" | 10 | 40166 |
| **Grey China Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-1/2" | 48 | 40026 |
| 1" | 5/16" | 1-1/2" | 36 | 40027 |
| 1-1/2" | 5/16" | 1-1/2" | 24 | 40028 |
| 2" | 3/8" | 1-1/2" | 24 | 40029 |
| 2-1/2" | 1/2" | 1-1/2" | 12 | 40030 |
| 3" | 1/2" | 1-1/2" | 12 | 40031 |
| 4" | 11/16" | 1-1/2" | 12 | 40032 |
| **Black Synthetic - Red Plastic Handle** | | | | |
| 1" | 5/16" | 1-3/4" | 36 | 40137 |
| 2" | 3/8" | 1-3/4" | 24 | 40139 |
| 3" | 1/2" | 1-3/4" | 12 | 40140 |
| 4" | 11/16" | 2-3/4" | 12 | 40141 |



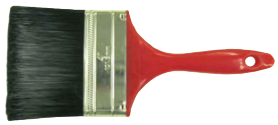
40181



40161



40029



40141

Key:

P PERFORMANCE LINE
Industrial Grade

V VALUE LINE
Professional Grade

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# THE WEILER PROMISE

At Weiler, we passionately embrace change to improve our products and our processes to move the company and our customers forward. By bringing new ideas and creative problem solving together in an open, collaborative environment, we will improve our customers' productivity and create profitable growth.




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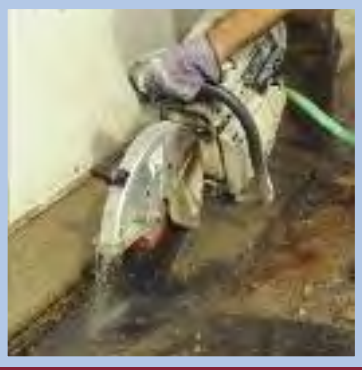
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# Weiler® Abrasives

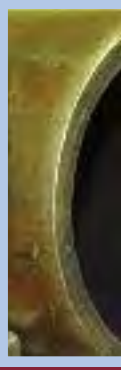


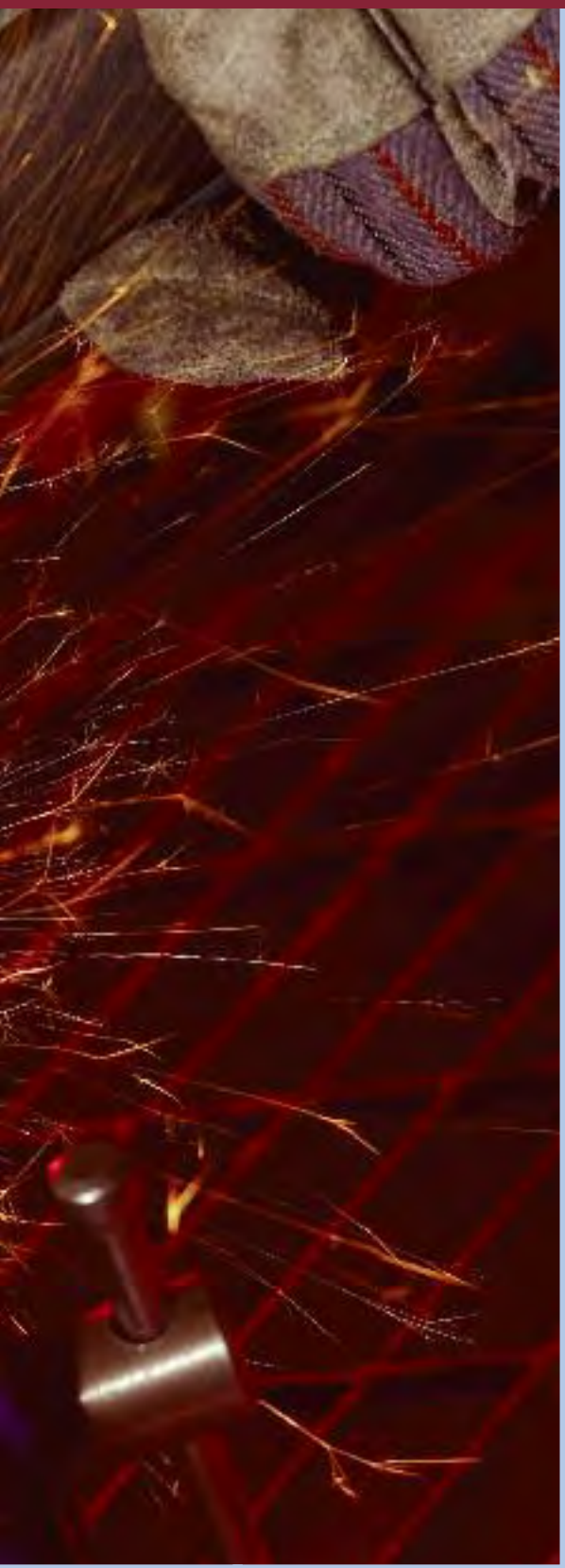












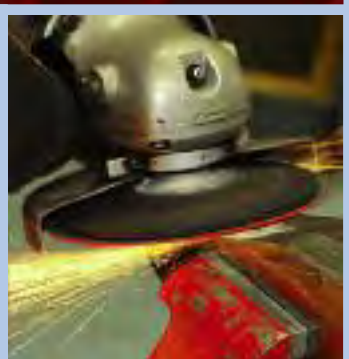
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- AL-tra CUT™ Discs
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## Steel Piping

**Problem:** A clean bevel end free of any surface imperfections is critical to a strong joint when welding heavy-wall piping. Unfortunately, lengths of steel pipe can sit in yards for significant periods of time, and pitting of the bevel ends is usually the result.

**Solution:** Coated abrasive flap discs like Weiler's original Tiger Disc are ideal tools for quickly removing heavy corrosion and blending pitting from bevel ends. The chatter-free, compliant grinding action and smooth, consistent finish produced by these discs make them the preferred choice for this application.






## Steel Channel

**Problem:** Burrs produced by cut-off operations are dangerous and can prevent parts from fitting together properly which can cause potential structural weak points.

**Solution:** Weiler's coated abrasive flap wheels are flexible grinding products which are ideal for light stock removal applications. A 60 grit wheel can be used to remove a large burr and produce a smooth blended edge.





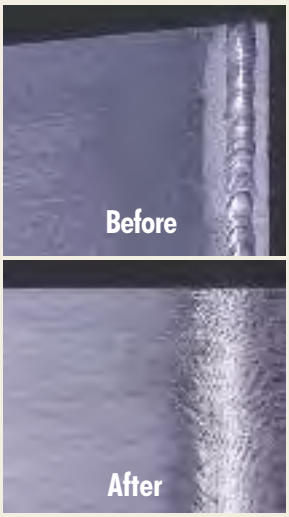

Photos courtesy of On-Line Services.

## Aluminum Frames

**Problem:** Aluminum welds are particularly difficult to blend due to the tendency of the chips to become welded to the abrasive media. This causes the cut rate of the abrasive to fall rapidly and generates an expensive grinding operation.

**Solution:** Weiler's AL-tra Cut™ discs are specially formulated to prevent loading by lowering the grinding temperature. A 60 grit AL-tra Cut disc can blend an aluminum weld bead much faster than a conventional disc without loading.





# Solutions Showcase

## Snow Plow Blade









**Problem:** Grinding fillet welds is a difficult, time-consuming process that is often expensive to perform.

**Solution:** Weiler's Trimmable Tiger® flap disc offers the ability to create a flexible grinding media that can easily blend fillet welds. The disc's trimmable design also extends the life of the disc, resulting in lower grinding and finishing costs.

## Steel Handle









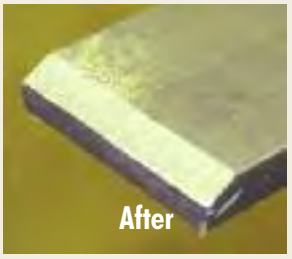
**Problem:** The removal of parting lines is a common application in the foundry business.

**Solution:** Weiler's selection of coated abrasive belts includes high performance and value products that help users control their production costs. Belts with 36 and 40 grit are commonly used for parting line removal.

## Steel Rack Braces






**Problem:** To prevent weldments used in the construction of offshore oil platforms from "racking" under load, lengths of steel bar stock are added as braces during the fabrication of these structural members. Beveling or chamfering the ends of the bars increases weld penetration and strengthens the joint.

**Solution:** The requirement for fast stock removal and long wheel life makes this an ideal application for a good quality Type 27 grinding wheel like those in Weiler's Vortec Pro® line of general-purpose bonded abrasives.

# Coated Abrasive Flap Disc Technical Information

## PREMIUM PERFORMANCE



### Saber Tooth™
**Use:** Cool, fast cutting on SS, AL & hard-to-grind metals
**Cloth Type:** Top coated ceramic alumina poly-backed
**Styles:** Type 27 HD or type 29 standard
**Backing:** Phenolic
PAGE 102

### Big Cat®
**Use:** Conformable with superior life; industrial applications on steel and stainless
**Cloth Type:** Premium zirconia alumina or aluminum oxide
**Style:** Type 27 high density
**Backing:** Phenolic
PAGE 103

### Trimmable
**Use:** Trimmable and flexibile; for extended life and fillet welds on steel and stainless
**Cloth Type:** Premium zirconia alumina or top coated ceramic alumina poly-backed
**Style:** Type 29 standard
**Backing:** Non-marking composite
PAGE 104

### Original Tiger®
**Use:** Premium performance; industrial applications on steel and stainless
**Cloth Type:** Premium zirconia alumina or aluminum oxide
**Styles:** Type 29 or 27 standard
**Backings:** Phenolic or aluminum
PAGE 105-106



### BobCat™ Mini Flap Discs
**Use:** Fast grinding in tight areas on steel and stainless
**Cloth Type:** Premium zirconia alumina
**Mounting:** Threaded arbor, drive mandrel or Norton Speed-Lok®
**Styles:** Type 29 or 27 standard
**Backing:** Non-marking composite
PAGE 111

## Flap Disc Product Tiers

### Weiler Tiger®
**Premium Industrial Grade Products -**
Engineered and manufactured to maximize performance and minimize operating costs in all surface grinding applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver consistent performance and the lowest cost-of-use.

- **Saber Tooth™ Ceramic Alumina Flap Discs**
- **Big Cat® High Density Flap Discs**
- **Original Tiger® Abrasive Flap Discs**
- **Trimmable Tiger® Flap Discs**
- **BobCat™ Mini Flap Discs**

## HIGH PERFORMANCE



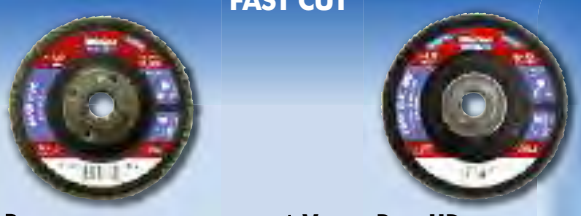

### Tiger Paw™
**Use:** Aggressive performance and long life; heavy-duty edge-grinding applications on steel and stainless
**Cloth Type:** 100% zirconia alumina poly cotton-backed
**Styles:** Type 29 or 27 standard
**Backing:** Phenolic
PAGE 107

### Tiger Paw™ Super HD
**Use:** Conformable with extended life; heavy-duty edge-grinding applications on steel and stainless
**Cloth Type:** 100% zirconia alumina poly cotton-backed
**Style:** Type 27 high density
**Backing:** Phenolic
PAGE 108

### Weiler Tiger Paw™
**High Performance Industrial Grade Products -**
Engineered and manufactured to maximize performance on heavy-duty edge grinding applications such as pipe beveling and breaking the edge on plasma torch cut materials. The combination of 100% Zirconia Alumina grain, poly-cotton cloth and superior grain retention ensures long life and a consistent material removal rate over the life of the disc, increasing production throughput and lowering overall grinding costs.

- **Tiger Paw™ Abrasive Flap Discs**
- **Tiger Paw™ Super High Density Flap Discs**

## FAST CUT



### Vortec Pro®
**Use:** Standard performance on steel and stainless
**Cloth Type:** Zirconia alumina cotton-backed
**Styles:** Type 29 or 27 standard
**Backing:** Phenolic or aluminum
PAGE 109

### Vortec Pro® HD
**Use:** Conformable with long life; applications on steel and stainless
**Cloth Type:** Zirconia alumina cotton-backed
**Style:** Type 27 high density
**Backing:** Phenolic
PAGE 110

### Weiler Vortec Pro®
**Fast Cut Professional Grade Products -**
Manufactured using similar product construction and to the same exacting standards as other Weiler flap discs, but engineered to provide cost-effective use. Vortec Pro Abrasives are an economical choice for the construction trades, low volume production shops and the professional contractor.

- **Vortec Pro® Abrasive Flap Discs**
- **Vortec Pro® High Density Flap Discs**

# Coated Abrasive Flap Disc Technical Information

## Flap Disc Product Construction

**Grind and Finish in One Step!** Weiler's Coated Abrasive Flap Discs save you time and money. There's no need to switch from a Type 27 Grinding Wheel to a Resin Fiber Disc because flap discs grind and finish in one step. This results in fewer changeovers and increased productivity.

### Flap Disc Construction Styles:



**Angled Style - Type 29**
- Maximum aggression
- Long life
- Ideal working angle of 15-35˚



**Flat Style - Type 27**
- Smooth grinding action
- Long life
- Ideal working angle of less than 15˚



**High Density Style - Type 27**
- Thicker disc with longer flaps
- Conforms to curved & irregular surfaces
- Maximum life
- Ideal working angle of less than 15˚

## Why Choose Flap Discs?

Flap discs replace grinding wheels and resin fiber discs by grinding and finishing in ONE step!

### Flap Discs vs. Grinding Wheels:





- Rapid stock removal
- Smooth finish without gouging
- Cool cutting and less glazing
- Lightweight
- Less vibration reduces operator fatigue
- Reduced noise

### Flap Discs vs. Resin Fiber Discs:





- Last 20 times longer
- Fewer changeovers reduce overall grinding and finishing costs
- Consistent finish
- No back-up pad needed
- Easy to store, no curling
- Reduced loading

## Grain Selection

| Grain Type | Grain Features | Application |
|---|---|---|
| Ceramic Alumina | • Numerous crystals<br>• Cut rate constant for 75% of grinding life<br>• Self-sharpening grain - consistent sharp edge<br>• Long life - dissipates heat | High cut rate and long life on stainless, aluminum and other hard-to-grind metals. |
| Zirconia Alumina | • Multi-Crystal<br>• Fast cut rate<br>• Self-sharpening<br>• Stands up to heavy pressure & high temps. | High rate of stock removal and long life in demanding applications. |
| Aluminum Oxide | • Single Crystal<br>• Cut rate declines at start of grinding<br>• Fracturing - dulling | General purpose metalworking applications. |

## Grit Size Selection

**Coarser Grits: 24, 36, 40**
Maximum material removal.

**Finer Grits: 60, 80, 120**
Achieve desired finishes.

**For Best Results:**
Use 1 grit size coarser than resin fiber disc. 36 grit, use same size.




Weiler's Ceramic Alumina and Zirconia Alumina Flap Discs are contaminant-free, which means Iron, Sulfur and Chlorine are ≤ 0.1%.

## Backing Selection

### Aluminum:



Rigid support for maximum aggression; recyclable.

### Composite*:



Trimmable, non-marking backing; allows access to hard-to-reach angles.

*BobCat Discs are not trimmable.

### Phenolic:



Prevents backing from scratching the workpiece.

# Coated Abrasive Flap Disc Technical Information

## Flap Disc Product Features



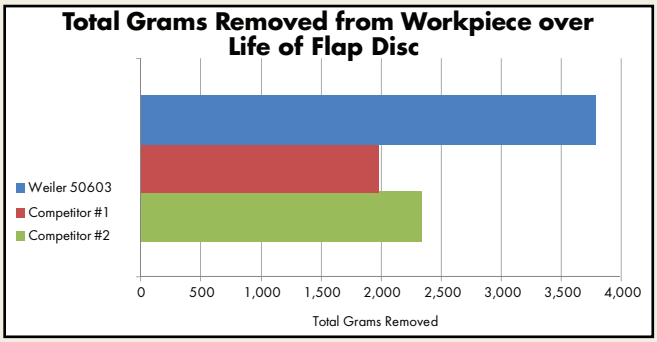

- Product Diameter
- Product is Contaminant-free
- Performance Level, Application and Material
- Visit Our Website
- Bar Code, Item Number and Grit Size
- Grain Type
- Max. RPM Rating
- Wear Eye Protection
- Wear Respiratory Protection
- Wear Hand Protection
- Read Safety Information
- Wear Hearing Protection
- Wear Protective Clothing
- Keep All Guards In Place
- Made in U.S.A. Product

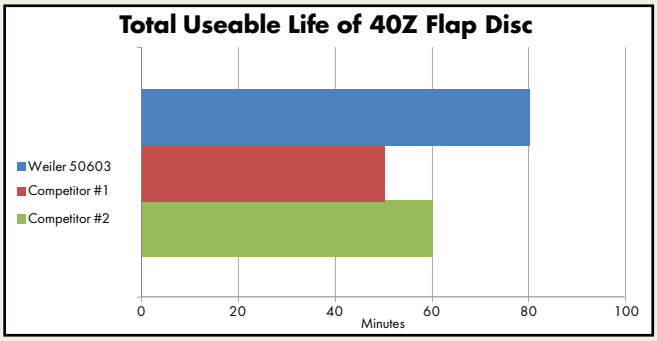
## Lab Testing Results

### Item(s) Tested: 4-1/2" x 7/8" Flap Discs - 40 Grit Zirconia Alumina

The following are the results of an automated test comparing the Weiler Tiger 4-1/2" Type 29 standard Flap Disc vs. two major manufacturers of flap discs products. The test involved grinding for up to 80 minutes (only the Tiger made it that long) on mild steel bar stock.

**Reciprocating Flap Disc Machine -** The angle grinder is mounted at a 15˚ angle and applies 15 pounds of weight to the 1/8" thick workpiece. The grinder moves back & forth over an 8" path and the flap disc and workpiece weights are taken every minute.




**The 50603 flap disc outperformed the competition in both material removal and life. More work and fewer changeovers increases productivity and reduces overall grinding & finishing costs.**

## Important Safety Information

**Read and comply with the Safety Standards of the American National Standards Institute - ANSI B7.1 "Safety Requirements - For the Use, Care and Protection of Abrasive Wheels".**

Observe all speed restrictions indicated on products, containers, labels or printed in literature. NEVER exceed the Maximum RPM!

Safety goggles and face shields worn over safety glasses with side shields MUST BE WORN BY ALL OPERATORS AND OTHERS IN AREA OF ABRASIVE OPERATIONS. Comply with the requirements of ANSI Z87.1 "Occupational Eye and Face Protection".

Appropriate clothing must be used where there is a possibility of injury that can be prevented.

Hearing protection must be worn where required.

Wear respiratory protection against dust and fumes (see ANSI Z88.2).

Safety gloves must be worn.

Keep all guards in place.

# Saber Tooth™ Ceramic Alumina Flap Discs

## Saber Tooth™ Ceramic Alumina Flap Discs

provide cool, fast cutting action on hard-to-grind metals, resulting in lower grinding and finishing costs.

- Fast cut and long life due to the aggressive self-sharpening ceramic alumina grain.
- Specially formulated grinding aid prevents dulling and glazing of grain and allows for "cool-cutting" protecting high value parts from heat discoloration.
- Designed to work with heat sensitive materials such as Aluminum, Stainless Steel, Inconel, Titanium and other hard-to-grind metals.

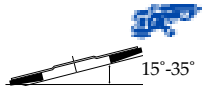
Bright Red Grinding Aid Dissipates Heat



CHECK OUT THE VIDEO

### Saber Tooth™ Flap Disc - Angled Style (Type 29) -

**Cool, fast cutting on hard-to-grind metals.**

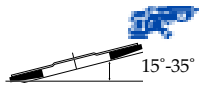



| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 50100<br>50101<br>50102<br>50103 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 13,000 | 10 | 50104*<br>50105*<br>50106*<br>50107* |
| 7" | 7/8" | 36<br>40<br>60<br>80 | 8,600 | 10 | 50108<br>50109<br>50110<br>50111 |
| 7" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 8,600 | 10 | 50112*<br>50113*<br>50114*<br>50115* |

*Patent # 6,945,863

### Trimmable Back Saber Tooth™ - Angled Style (Type 29) -

**Cool, fast cutting on hard-to-grind metals. High stock removal, long life and flexibility.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50117<br>50118<br>50119 |
| 4 1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 13,000 | 10 | 50121*<br>50122*<br>50123* |

*Patent # 6,945,863

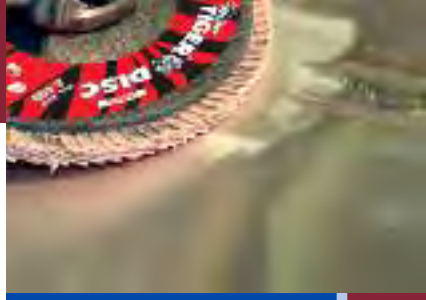
### Saber Tooth™ Phenolic Back - High Density - Flat Style (Type 27) -

**Cool, fast cutting on hard-to-grind metals. Increased conformability and 30-40% longer life than standard flap discs.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50130<br>50131<br>50132 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 13,000 | 10 | 50133*<br>50134*<br>50135* |
| 7" | 7/8" | 40<br>60<br>80 | 8,600 | 10 | 50136<br>50137<br>50138 |
| 7" | 5/8"-11 Nut | 40<br>60<br>80 | 8,600 | 10 | 50139*<br>50140*<br>50141* |

*Patent # 6,945,863



Weld blending on stainless steel with a Saber Tooth Abrasive Flap Disc.





50109



Weiler Innovation!

Weiler's Ceramic Alumina Flap Discs were the first line in the marketplace to include a trimmable backed disc, providing:

- Extended disc life.
- High flexibility which enables access to hard-to-reach areas such as right angles and irregular shapes.
- Non-marking backing will not damage the workpiece, resulting in less rework and scrap.

# High Density Abrasive Flap Discs



Blending and finishing edges of a flame-cut steel part.

**High Density Flap Discs -** Due to their thickness and larger flaps, Weiler's made in the U.S.A., high density flap discs conform to curved and irregular surfaces while producing a consistent finish and a 30-40% longer life than standard flap discs.

**22% MORE CLOTH than competitors' high density flap discs!**

## Applications

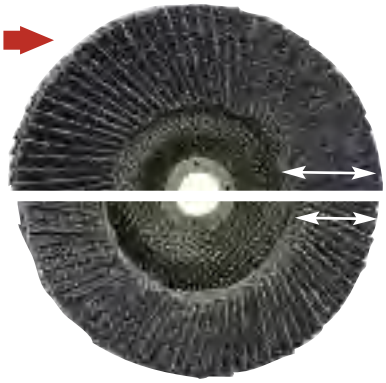
Provides increased conformability and long life when:

- Grinding and finishing in one step
- Weld blending
- Deburring
- Deflashing
- Edge chamfering
- Stock removal



**Weiler Big Cat Flap Disc**

Larger flaps ensure more contact with the work surface, providing smoother grinding action and longer life.



**Competitor High Density Flap Disc**

## Features And Benefits

- **Enhanced conformability** helps reduce gouging and undercutting.
- **Thicker phenolic back** (more layers of fiberglass) than competitors, provides more stability for thicker cloth configuration.
- **Most flap area in the industry** – unique combination of flap count, height and width.
- **Longest lasting high density disc** – as much as 20% over top competitors discs.
- **Big Cat is well known in the industry** – ask for it by name for increased productivity, reduced operating costs and maximum disc life.
- **Weiler's 20 years of experience** producing flap discs has yielded our proprietary cloth which has a unique combination of grain, grain placement, size, make coats and woven backing material.
- **Made in the U.S.A.** – satisfaction guaranteed!



50804



50765

NOTE

See adapters on page 106.

**Big Cat® - High Density Flat Style (Type 27)**
**Increased conformability and maximum life.**






| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing | |
|---|---|---|---|---|---|---|
| | | | | | Zirconia Alumina | Aluminum Oxide |
| 4-1/2" | 7/8" | 40<br>60<br>80<br>120 | 12,000 | 10 | 50803<br>50804<br>50805<br>50806 | 50763<br>50764<br>50765<br>50766 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 12,000 | 10 | 50808*<br>50809*<br>50810* | 50768*<br>50769*<br>50770* |
| 7" | 7/8" | 40<br>60<br>80<br>120 | 8,600 | 10 | 50823<br>50824<br>50825<br>50826 | 50783<br>50784<br>50785<br>50786 |
| 7" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 8,600 | 10 | 50843*<br>50844*<br>50845*<br>50846* | 50833*<br>50834*<br>50835*<br>50836* |

*Patent # 6,945,863

# Trimmable Abrasive Flap Discs

**Trimmable Tiger® Flap Discs -** Durable and efficient, Weiler's made in the U.S.A., Trimmable Tiger is designed for hard-to-reach angles and increased life!

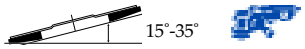
- The unique composite backing can be trimmed, exposing more abrasive material and extending disc life, resulting in lower grinding and finishing costs.
- The trimmable backing also allows for high flexibility, enabling the operator to access hard-to-reach areas such as right angles and irregular shapes, and grind on-edge without changing tools, increasing productivity.
- The non-marking backing will not damage the workpiece, resulting in less re-work and scrap.
- Like all Tiger Discs, the Trimmable Tiger aggressively removes stock while providing excellent finish consistency - all in one step.

## Applications

- Grinding and finishing in one step
- Deburring
- Deflashing
- Edge chamfering
- Stock removal
- Weld blending

### Trimmable Tiger Disc - Angled Style (Type 29)

**High stock removal, long life and flexibility.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40<br>60<br>80<br>120 | 13,000 | 10 | 50002<br>50003<br>50004<br>50005 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 13,000 | 10 | 50006*<br>50007*<br>50008*<br>50009* |
| 5" | 7/8" | 40<br>60<br>80<br>120 | 12,000 | 10 | 50010<br>50011<br>50012<br>50013 |
| 5" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 12,000 | 10 | 50014<br>50015<br>50016<br>50017 |

*Patent # 6,945,863

**Weiler Innovation!**

**1st in the market to offer trimmable backed flap discs with Metal 5/8"-11 Nuts!**
(Eliminates the possibility of cross-threading or nut sticking to spindle after use.)

Tech Note

## Trimmable Backing For Extended Disc Life.

The Trimmable Tiger Disc's innovative design enables the operator to reduce the diameter of the backing to extend disc life. To trim backing, run against a sharp metal edge until desired backing diameter is achieved as shown at right.





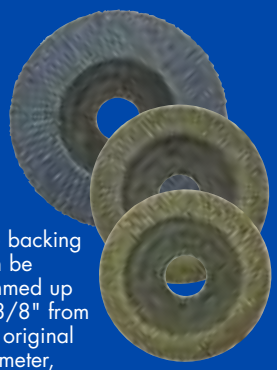
Trimmable Tigers are packaged in a convenient display box with a window and perforated sides for quick, easy opening and display.

**DID YOU KNOW?**

Trimmable Flap Discs are used in the construction and fabrication of the "Up-Armored" Humvees used by the United States Military.



Grinding in corners just got easier with the flexibility of the Trimmable Tiger Disc!



The backing can be trimmed up to 3/8" from the original diameter, dramatically extending the life of the disc.





50002

NOTE

**Visit www.weilercorp.com to see a video demonstrating applications and advantages of our Trimmable Tiger Disc.**

# Tiger® Disc Abrasive Flap Discs



Removing rust, corrosion and pitting from the bevel end of pipe.

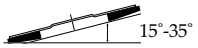
**Original Tiger® Disc -** Weiler's "made in U.S.A." Tiger Discs are the benchmark of the industry. They are designed for the serious industrial user who values both a high cut rate and long life.

#1 Seller

## Applications

- Grinding and finishing in one step
- Weld blending
- Deburring
- Deflashing
- Edge chamfering
- Stock removal

**Tiger Disc - Angled Style (Type 29). Maximum aggression and long life.**








50603



50513



50543

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number: Phenolic Backing, Zirconia Alumina | Item Number: Phenolic Backing, Alum. Oxide | Item Number: Aluminum Backing, Zirconia Alumina |
|---|---|---|---|---|---|---|---|
| 4" | 5/8" | 36 | 15,000 | 10 | 50592 | 50552 | 50502 |
| | | 40 | | | 50593 | 50553 | 50503 |
| | | 60 | | | 50594 | 50554 | 50504 |
| | | 80 | | | 50595 | 50555 | 50505 |
| | | 120 | | | 50596 | 50556 | 50506 |
| 4-1/2" | 7/8" | ★24 | 13,000 | 10 | 50601 | 50561 | 50511 |
| | | 36 | | | 50602 | 50562 | 50512 |
| | | 40 | | | 50603 | 50563 | 50513 |
| | | 60 | | | 50604 | 50564 | 50514 |
| | | 80 | | | 50605 | 50565 | 50515 |
| | | 120 | | | 50606 | 50566 | 50516 |
| 4-1/2" | 5/8"-11 Nut | ★24 | 13,000 | 10 | – | – | 50510* |
| | | 36 | | | – | – | 50517* |
| | | 40 | | | 50608* | – | 50518* |
| | | 60 | | | 50609* | – | 50519* |
| | | 80 | | | 50610* | – | 50520* |
| | | 120 | | | – | – | 50509* |
| 5" | 7/8" | ★24 | 12,000 | 10 | 50611 | 50571 | 50521 |
| | | 36 | | | 50612 | 50572 | 50522 |
| | | 40 | | | 50613 | 50573 | 50523 |
| | | 60 | | | 50614 | 50574 | 50524 |
| | | 80 | | | 50615 | 50575 | 50525 |
| | | 120 | | | 50616 | 50576 | 50526 |
| 6" | 7/8" | 40 | 10,200 | 10 | 50649 | – | – |
| | | 60 | | | 50650 | – | – |
| | | 80 | | | 50651 | – | – |
| 6" | 5/8"-11 Nut | 40 | 10,200 | 10 | 50659 | – | – |
| | | 60 | | | 50660 | – | – |
| | | 80 | | | 50661 | – | – |
| 7" | 7/8" | ★24 | 8,600 | 10 | 50621 | 50581 | 50531 |
| | | 36 | | | 50622 | 50582 | 50532 |
| | | 40 | | | 50623 | 50583 | 50533 |
| | | 60 | | | 50624 | 50584 | 50534 |
| | | 80 | | | 50625 | 50585 | 50535 |
| | | 120 | | | 50626 | 50586 | 50536 |
| 7" | 5/8"-11 Nut | ★24 | 8,600 | 10 | 50641* | 50631* | 50541* |
| | | 36 | | | 50642* | 50632* | 50542* |
| | | 40 | | | 50643* | 50633* | 50543* |
| | | 60 | | | 50644* | 50634* | 50544* |
| | | 80 | | | 50645* | 50635* | 50545* |
| | | 120 | | | 50646* | 50636* | 50546* |

*Patent # 6,945,863

★ When grinding steel and other ferrous materials, a 36 grit Tiger Disc is more productive than a 24 grit. 24 grit Tiger Discs are most productive when used on aluminum and other soft materials.

Weiler Innovation!

1st in the market to offer aluminum backed flap discs! (Strongest in the industry)

NOTE

See adapters on page 106.

Tech Note

## Grit Size Selection

**For Best Results:**
Use 1 grit size coarser than resin fiber disc.

**Exception:**
36 grit, use same size.

# Tiger® Disc Abrasive Flap Discs

**Tiger Disc -** Flat Style (Type 27). Smooth grinding action and long life.




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing | |
|---|---|---|---|---|---|---|
| | | | | | Zirconia Alumina | Aluminum Oxide |
| 4" | 5/8" | 40<br>60<br>80<br>120 | 15,000 | 10 | 50693<br>50694<br>50695<br>50696 | 50653<br>50654<br>50655<br>50656 |
| 4-1/2" | 7/8" | 40<br>60<br>80<br>120 | 13,000 | 10 | 50703<br>50704<br>50705<br>50706 | 50663<br>50664<br>50665<br>50666 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 13,000 | 10 | 50708*<br>50709*<br>50710*<br>50699* | 50668*<br>50669*<br>50670*<br>50671* |
| 5" | 7/8" | 40<br>60<br>80<br>120 | 12,000 | 10 | 50713<br>50714<br>50715<br>50716 | 50673<br>50674<br>50675<br>50676 |
| 7" | 7/8" | 40<br>60<br>80<br>120 | 8,600 | 10 | 50723<br>50724<br>50725<br>50726 | 50683<br>50684<br>50685<br>50686 |
| 7" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 8,600 | 10 | 50743*<br>50744*<br>50745*<br>50746* | 50733*<br>50734*<br>50735*<br>50736* |

*Patent # 6,945,863

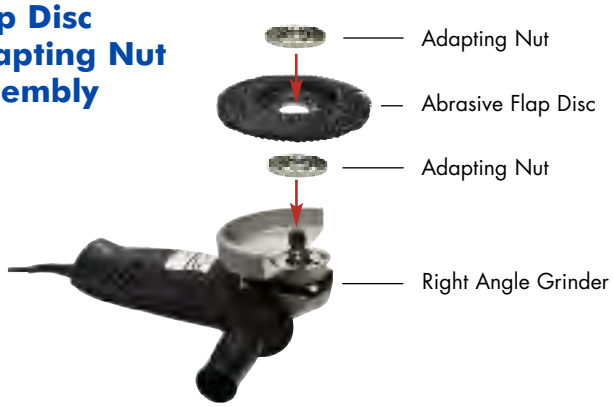
**Adapting Nuts & Spanner Wrench -** For use with Tiger, Vortec Pro and High Density Flap Discs.

| Description | Thread Size | For Use With | Standard Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 3/8" - 24 | 4" Flap Disc with 5/8" arbor hole (Can be used with an adjustable or combination wrench.) | 1 | 56484 |
| Adapting Nuts | 5/8"-11 | 4-1/2", 5" & 7" Flap Discs with 7/8" arbor hole | 1 | 56494 |
| Spanner Wrench | – | Item No. 56494 only | 1 | 56495 |

When mounting, adapters must be nested, see illustration below.




## Flap Disc Adapting Nut Assembly






Removing heavy weld spatter while prepping surface for painting.





50664



50708

56494



56495

Tiger® Disc Abrasive Flap Discs

# Tiger Paw™ Abrasive Flap Discs



Beveling a pipe edge with a Tiger Paw Flap Disc.

**Tiger Paw™ Flap Discs** are designed for the user looking for aggressive performance and long life in heavy-duty applications like edge grinding.

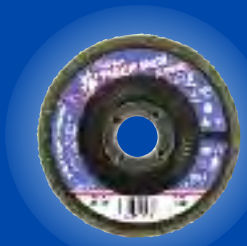
**CHECK OUT THE VIDEO**

Get The EDGE

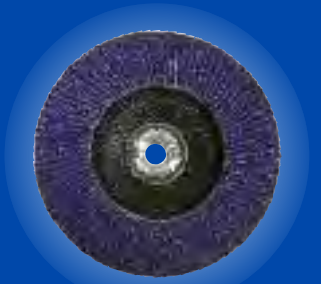
New!

- **100% zirconia alumina grain** is fast cutting with long life, resulting in fewer changeovers and increased productivity.
- **Superior grain retention** - lasts longer and maintains perfect cutting angle to provide excellent performance and sustained stock removal when grinding on-edge.
- **Engineered poly/cotton cloth** features excellent grain retention for maximum disc life.





51118



51147



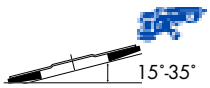


51115

NOTE

See adapters on page 106.

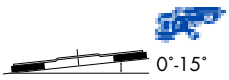
**Tiger Paw - Phenolic Back - Angled Style (Type 29) - Aggressive action and long life; for heavy-duty applications on steel and stainless.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|
| 4" | 5/8" | 40<br>60 | 15,000 | 10 | 51104<br>51105 |
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 51118<br>51119<br>51120<br>51121 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 13,000 | 10 | 51123*<br>51124*<br>51125*<br>51126* |
| 5" | 7/8" | 40<br>60 | 12,000 | 10 | 51129<br>51130 |
| 5" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 12,000 | 10 | 51153*<br>51132*<br>51133*<br>51154* |
| 7" | 7/8" | 40<br>60 | 8,600 | 10 | 51145<br>51150 |
| 7" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 8,600 | 10 | 51149*<br>51146*<br>51147*<br>51148* |

*Patent # 6,945,863

**Tiger Paw - Phenolic Back - Flat Style (Type 27) - Smooth action and long life; for heavy-duty applications on steel and stainless.**




| Diameter | Arbor Hole | Zirconia Alumina Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" | 5/8" | 40<br>60 | 15,000 | 10 | 51101<br>51102 |
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 51107<br>51108<br>51109<br>51110 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 13,000 | 10 | 51112*<br>51113*<br>51114*<br>51115* |
| 5" | 7/8" | 40<br>60 | 12,000 | 10 | 51134<br>51135 |
| 5" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 12,000 | 10 | 51155*<br>51156*<br>51157*<br>51158* |
| 7" | 7/8" | 40<br>60 | 8,600 | 10 | 51137<br>51138 |
| 7" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 8,600 | 10 | 51139*<br>51140*<br>51142*<br>51143* |

*Patent # 6,945,863

# Tiger Paw™ Abrasive Flap Discs

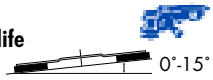


Weld blending on the corner of a security gate with a Tiger Paw XHD.

**Tiger Paw™ Super High Density Flap Discs** feature thicker and larger flaps that conform to curved and irregular shapes while producing a consistent finish. These high density flap discs are designed for the user looking for extended life and conformability in heavy-duty applications.

- **40% more abrasive cloth** than a standard flap disc.
- **100% zirconia alumina grain** provides superior edge grinding.
- **Engineered poly/cotton cloth** features excellent grain retention for maximum disc life.

**Tiger Paw XHD - Super High Density - Phenolic Back - Flat Style (Type 27) - Extended life and conformability; for heavy-duty applications on steel and stainless steel.**



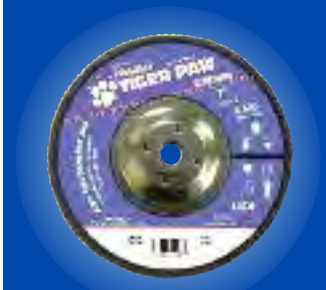

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 12,000 | 10 | 51160<br>51161<br>51162<br>51163 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 12,000 | 10 | 51164*<br>51165*<br>51166*<br>51167* |
| 7" | 7/8" | 40<br>60 | 8,600 | 10 | 51170<br>51171 |
| 7" | 5/8"-11 Nut | 40<br>60 | 8,600 | 10 | 51168*<br>51169* |

*Patent # 6,945,863



51165



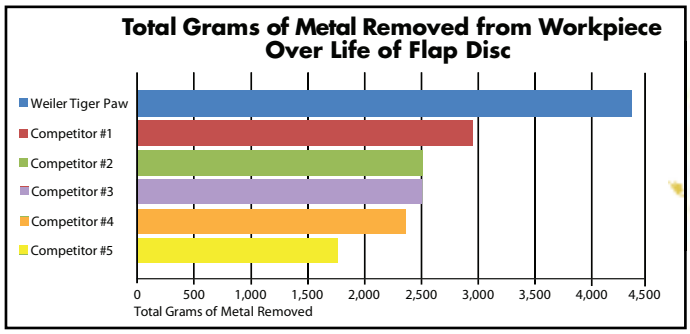


51168

## When Performance Counts, Count On Weiler!

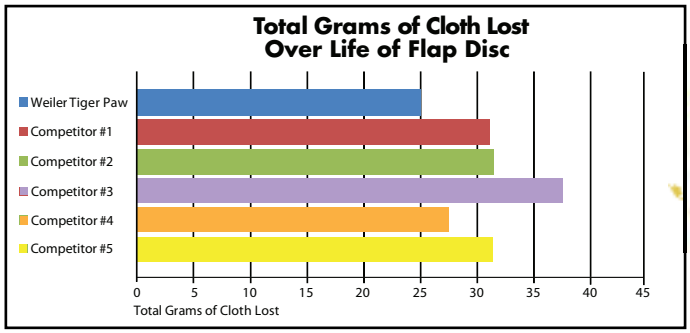
The following are the results of automated testing comparing the Weiler Tiger Paw 4-1/2" Type 29 standard density Flap Disc vs. five major manufacturers of flap disc products.

**Reciprocating Flap Disc Machine -** The angle grinder is mounted at a 15° angle and applies 15 pounds of weight to the 1/8" thick workpiece. The grinder moves back & forth over an 8" path and the flap disc and workpiece weights are taken every minute.













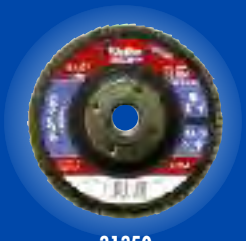
**The Weiler Tiger Paw flap disc outperformed the competition in both material removal and life. More work and fewer changeovers increases productivity and reduces overall grinding and finishing costs.**

# Vortec Pro® Abrasive Flap Discs

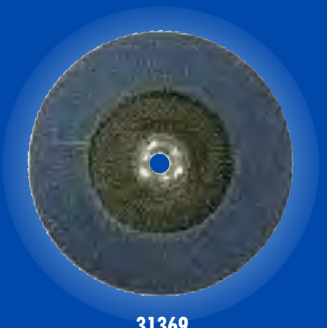


Grinding welds on a fabricated steel part.

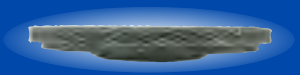


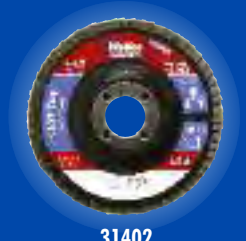


31350



31369



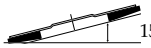


31402




See adapters on page 106.

**Vortec Pro® Flap Discs -** Made in the U.S.A., these flap discs are designed for the user looking for a high cut rate at a value price (maintains similar cut rate as original Tiger® Discs).

**Vortec Pro® - Angled Style (Type 29) - High cut rate at a value price.**  15°-35°

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing Zirconia Alumina | Item Number Aluminum Backing Zirconia Alumina |
|---|---|---|---|---|---|---|
| 4" | 5/8" | 36 | 15,000 | 10 | 31337 ■ | 31301 ■ |
| | | 40 | | | 31338 | 31302 |
| | | 60 | | | 31339 ■ | 31303 ■ |
| | | 80 | | | 31340 ■ | 31304 ■ |
| | | 120 | | | 31341 | 31305 |
| 4-1/2" | 7/8" | ★24 | 13,000 | 10 | 31342 | 31306 |
| | | 36 | | | 31343 ■ | 31307 ■ |
| | | 40 | | | 31344 | 31308 |
| | | 60 | | | 31345 ■ | 31309 ■ |
| | | 80 | | | 31346 ■ | 31310 ■ |
| | | 120 | | | 31347 | 31311 |
| 4-1/2" | 5/8"-11 Nut | ★24 | 13,000 | 10 | 31348* | 31312* |
| | | 36 | | | 31349* | 31313* |
| | | 40 | | | 31350* | 31314* |
| | | 60 | | | 31351* | 31315* |
| | | 80 | | | 31352* | 31316* |
| | | 120 | | | 31353* | 31317* |
| 5" | 7/8" | ★24 | 12,000 | 10 | 31354 | 31318 |
| | | 36 | | | 31355 | 31319 |
| | | 40 | | | 31356 | 31320 |
| | | 60 | | | 31357 | 31321 |
| | | 80 | | | 31358 | 31322 |
| | | 120 | | | 31359 | 31323 |
| 7" | 7/8" | ★24 | 8,600 | 10 | 31360 | 31324 |
| | | 36 | | | 31361 ■ | 31325 ■ |
| | | 40 | | | 31362 | 31326 |
| | | 60 | | | 31363 ■ | 31327 ■ |
| | | 80 | | | 31364 ■ | 31328 ■ |
| | | 120 | | | 31365 | 31329 |
| 7" | 5/8"-11 Nut | ★24 | 8,600 | 10 | 31366* | 31330* |
| | | 36 | | | 31367* | 31331* |
| | | 40 | | | 31368* | 31332* |
| | | 60 | | | 31369* | 31333* |
| | | 80 | | | 31370* | 31334* |
| | | 120 | | | 31371* | 31335* |

*Patent # 6,945,863

★ When grinding steel and other ferrous materials, a 36 grit Vortec Pro flap disc is more productive than a 24 grit. 24 grit Vortec Pro flap discs are most productive when used on aluminum and other soft materials.

■ Available in display pack. See page 172 for details.

**Vortec Pro® - Flat Style (Type 27) - Smooth grinding action at a value price.**  0°-15°

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 31401 |
| | | 40 | | | 31402 |
| | | 60 | | | 31403 |
| | | 80 | | | 31404 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 31407* |
| | | 40 | | | 31408* |
| | | 60 | | | 31409* |
| | | 80 | | | 31410* |
| 7" | 7/8" | 36 | 8,600 | 10 | 31413 |
| | | 40 | | | 31414 |
| | | 60 | | | 31415 |
| | | 80 | | | 31416 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 31419* |
| | | 40 | | | 31420* |
| | | 60 | | | 31421* |
| | | 80 | | | 31422* |

*Patent # 6,945,863

# High Density Abrasive Flap Discs



Blending and finishing edges of a flame-cut steel part.

## Vortec Pro® - High Density Flat Style (Type 27)

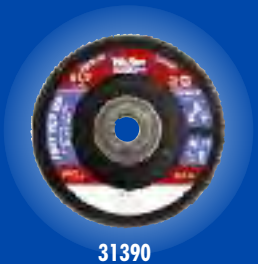
**Increased conformability at a value price.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40<br>60<br>80 | 12,000 | 10 | 31387<br>31388<br>31389 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 12,000 | 10 | 31390*<br>31391*<br>31392* |

*Patent # 6,945,863

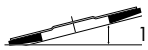




31390

## Vortec Pro® - Display Packaged - Angled Style (Type 29) -

**Standard performance on steel and stainless.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Item Number Phenolic Backing Zirconia Alumina | Item Number Aluminum Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4" | 5/8" | 36<br>40<br>60 | 15,000 | 30822<br>30825<br>30826 | –<br>–<br>– |
| 4" | 5/8"-11 Nut | 36<br>60<br>80 | 15,000 | –<br>–<br>– | 30821<br>30823<br>30824 |
| 4-1/2" | 7/8" | 36<br>60<br>80 | 13,000 | 30828<br>30831<br>30832 | –<br>–<br>– |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60 | 13,000 | –<br>–<br>– | 30827<br>30829<br>30830 |




30831

**DID YOU KNOW?** Weiler was the first manufacturer of Abrasive Flap Discs in the U.S.A.

# BobCat™ Mini Flap Discs



Surface blending with a BobCat disc in a tight area.

**BobCat™ Mini Flap Discs -** Weiler's made in the U.S.A. BobCats are designed for use on right angle die grinders, providing smooth grinding and enhanced conformability in tight areas.

## Applications

- Grinding and finishing in one step
- Grinding, deburring and blending on steel, stainless steel and other metals
- Jobs requiring high aggression and rapid stock removal
- Metal fabrication requiring light weld blending or edge chamfering



Type 29



Type 27

Outlasts Blending Discs 19 to 1!

**BobCat Mini Flap Discs - Zirconia Alumina Grain - Plastic Backing**
**Ideal for tight spaces and in heavy-duty appplications where blending discs do not hold up.**




| Diameter | Grit Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Type 29 | Type 27 |
| 2" | 36 | 30,000 | 10 | 50922 | 50932 |
| | 40 | | | 50923 | 50933 |
| | 60 | | | 50924 | 50934 |
| | 80 | | | 50925 | 50935 |
| | 120 | | | 50926 | 50936 |
| 3" | 36 | 20,000 | 10 | 50902 | 50912 |
| | 40 | | | 50903 | 50913 |
| | 60 | | | 50904 | 50914 |
| | 80 | | | 50905 | 50915 |
| | 120 | | | 50906 | 50916 |

Patent #5,951,389



50914

**BobCat Drive Mandrel - For mounting BobCat Discs without a backing pad.**

| Description | Standard Pack | Item Number |
|---|---|---|
| For mounting 2" & 3" BobCats on tools with 1/4" collets | 1 | 07766 |



07766

3" BobCats can also be mounted on Norton Speed-Lok® TS back-up pads and Weiler metal hub pad #60509. Speed-Lok® TS is a registered trademark of Norton Co.

**DID YOU KNOW?** Our website features a Distributor Locator to make it easy to find Weiler products in your area.

# Resin Fiber Discs

**Resin Fiber Discs -** These fiber backed, coated abrasive discs are for use on right angle grinders. Weiler's line of premium resin fiber discs are suitable for light grinding, blending, surface preparation and finishing on a variety of materials.

## Applications

- Saber Tooth™ Ceramic Alumina: Cool, fast cutting action on aluminum, stainless steel and other hard-to-grind metals.
- Zirconia Alumina: High performance grinding of stainless steel, tool steel and hard-to-grind materials.
- Aluminum Oxide: All purpose weld blending, grinding, surface preparation and finishing of metals, plastic, wood and fiberglass.



Blending welds on the corner of a steel furniture frame.

### Saber Tooth Resin Fiber Discs - Ideal for aluminum and stainless steel.

Dissipates Heat

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item No. - Ceramic Alumina |
|---|---|---|---|---|
| 4-1/2" | 7/8" | 24 | 25 | 59550 |
| | | 36 | | 59551 |
| | | 50 | | 59552 |
| | | 60 | | 59553 |
| | | 80 | | 59554 |
| 5" | 7/8" | 24 | 25 | 59557 |
| | | 36 | | 59558 |
| | | 50 | | 59559 |
| | | 60 | | 59560 |
| | | 80 | | 59561 |
| 7" | 7/8" | 24 | 25 | 59564 |
| | | 36 | | 59565 |
| | | 50 | | 59566 |
| | | 60 | | 59567 |
| | | 80 | | 59568 |



59557

### Resin Fiber Discs - Ideal for blending, finishing and surface preparation.

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Zirconia Alumina | Aluminum Oxide |
| 4" | 5/8" | 24 | 25 | – | 59491 |
| | | 36 | | – | 59492 |
| | | 50 | | – | 59493 |
| | | 60 | | – | 59494 |
| | | 80 | | – | 59495 |
| | | 120 | | – | 59497 |
| 4-1/2" | 7/8" | 24 | 25 | 59731 | 59571 |
| | | 36 | | 59732 | 59573 |
| | | 50 | | 59733 | 59575 |
| | | 60 | | – | 59576 |
| | | 80 | | 59735 | 59577 |
| | | 100 | | – | 59578 |
| | | 120 | | – | 59579 |
| 5" | 7/8" | 16 | 25 | – | 59500 |
| | | 24 | | 59701 | 59501 |
| | | 36 | | 59702 | 59503 |
| | | 50 | | 59703 | 59505 |
| | | 60 | | – | 59506 |
| | | 80 | | 59705 | 59507 |
| | | 100 | | – | 59508 |
| | | 120 | | – | 59509 |
| 7" | 7/8" | 16 | 25 | 59710 | 59520 |
| | | 24 | | 59711 | 59521 |
| | | 36 | | 59712 | 59523 |
| | | 50 | | 59713 | 59525 |
| | | 60 | | 59714 | 59526 |
| | | 80 | | 59715 | 59527 |
| | | 100 | | – | 59528 |
| | | 120 | | – | 59529 |
| 9" | 7/8" | 16 | 25 | – | 59540 |
| | | 24 | | – | 59541 |
| | | 36 | | 59722 | 59543 |
| | | 50 | | – | 59545 |
| | | 60 | | – | 59546 |



59732



59503

Do not exceed maximum RPM of back-up pad.

NOTE

See back-up pads on page 113.

# AL-tra CUT™ Discs – For Grinding Aluminum



Blending welds and saw marks on a mounting bracket.

**AL-tra CUT™ Discs –** Specially formulated for superior grinding performance on aluminum, **AL-tra CUTs improve grinding on aluminum 400-800%!** These revolutionary discs resist loading, ensure higher cut rates, prolong disc life and achieve a superior finish compared to conventional sanding/grinding discs in the market. AL-tra CUT Discs replace conventional resin fiber discs 5 to 1 or more.

## Applications

For aluminum applications such as:

- Weld blending
- Grinding
- Deburring
- Finishing

## AL-tra CUT Performance



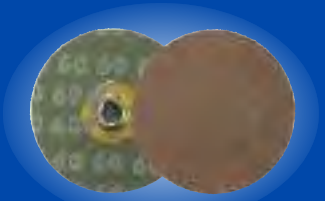
**Weiler's exclusive AL-tra CUT Discs resist loading when grinding aluminum, ensuring constant grain contact with the work surface.**



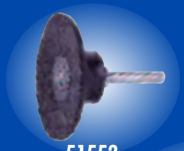
**Conventional resin fiber discs load when grinding aluminum. This prevents the abrasive grain from contacting the work surface and dramatically decreases performance.**



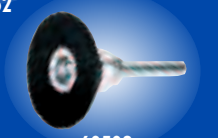
59806



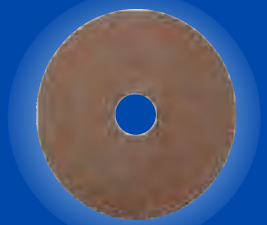
59875



51552



60508



59821



59601



59604



59603

### 2" & 3" AL-tra CUT Discs - Aluminum Oxide

| Diameter | Grit Size | Standard Pack | Item Number: Plastic Button* | Item Number: Metal Hub+ |
|---|---|---|---|---|
| 2" | 36 | 50 | 59806 | 59869 |
| | 60 | | 59807 | 59870 |
| | 80 | | 59808 | 59871 |
| | 120 | | 59809 | 59872 |
| 3" | 36 | 25 | 59811 | 59874 |
| | 60 | | 59812 | 59875 |
| | 80 | | 59813 | 59876 |
| | 120 | | 59814 | 59877 |

### 2" & 3" Back-up Pads - 1/4" stem

| Diameter | Max. RPM | Std. Pack | Plastic Button | Metal Hub |
|---|---|---|---|---|
| 2" | 25,000 | 1 | 51551 | 60508 |
| 3" | 20,000 | 1 | 51552 | 60509 |

Do not exceed maximum RPM of back-up pad.

Do not store AL-tra CUT Discs above 120° F.

* Compatible with 3M Roloc™ back-up pads. (Roloc™ is a trademark of 3M.)

\+ Compatible with Norton Speed-Lok® TS back-up pads. (Speed-Lok® TS is a registered trademark of Norton Co.)

### 4-1/2" & 7" AL-tra CUT Discs - Aluminum Oxide

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item Number |
|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 25 | 59821 |
| | | 60 | | 59823 |
| | | 80 | | 59824 |
| | | 120 | | 59826 |
| 7" | 7/8" | 36 | 25 | 59862 |
| | | 60 | | 59864 |
| | | 80 | | 59865 |
| | | 120 | | 59867 |

Do not exceed maximum RPM of back-up pad.

Do not store AL-tra CUT Discs above 120° F.

### Accessories for Resin Fiber & AL-tra CUT Discs

| Description | Thread Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" Back-up Pad | 5/8"-11* | 12,000 | 1 | 59605 |
| 4-1/2" Back-up Pad | 5/8"-11* | 11,000 | 1 | 59611 |
| 5" Back-up Pad | 5/8"-11* | 10,000 | 1 | 59600 |
| 7" Back-up Pad | 5/8"-11 | 8,500 | 1 | 59601 |
| 9" Back-up Pad | 5/8"-11 | 6,500 | 1 | 59602 |
| Spanner Wrench | – | – | 1 | 59603 |
| Disc Nut | 5/8"-11 | – | 1 | 59604 |

*Other thread sizes available on special orders.

# Blending Discs

**Blending Discs -** These cloth backed, coated abrasive discs are for use on right angle air tools. Available with either a metal hub or a plastic button fastening system, the flexible back-up pads give the discs a great deal of conformability. Weiler's blending discs are suitable for a wide range of light fabrication, repair and maintenance applications.

## Applications

- Saber Tooth™ Ceramic Alumina: Cool, fast cutting action on aluminum, stainless steel and other hard-to-grind metals.
- Zirconia Alumina: High performance blending of stainless steel, tool steel and hard-to-grind materials.
- Aluminum Oxide: All purpose blending or finishing metal surfaces, light weld removal, removing handling marks, surface imperfections and mill marks.

### Saber Tooth™ Ceramic Alumina Blending Discs -

**For aluminum, stainless and other hard-to-grind metal applications.**


Compatible with Norton Speed-Lok® TS back-up pads.


Compatible with 3M Roloc™ back-up pads.

Dissipates Heat



| Diameter | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Metal Hub | Plastic Button |
| 2" | 36 | 100 | 60150 | 60170 |
| | 60 | | 60151 | 60171 |
| | 80 | | 60152 | 60172 |
| 3" | 36 | 50 | 60155 | 60175 |
| | 60 | | 60156 | 60176 |
| | 80 | | 60157 | 60177 |

### Blending Discs - Metal Hub Style - Compatible with Norton Speed-Lok® TS back-up pads.



| Diameter | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 2" | 36 | 100 | 60378 | 60040 |
| | 60 | | 60381 | 60043 |
| | 80 | | 60382 | 60044 |
| | 120 | | 60384 | 60046 |
| 3" | 36 | 50 | 60391 | 60053 |
| | 60 | | 60394 | 60056 |
| | 80 | | 60395 | 60057 |
| | 120 | | 60397 | 60059 |

### Blending Discs - Plastic Button Style - Compatible with 3M Roloc™ back-up pads.



| Diameter | Grit Size | Standard Pack | Item Number |
|---|---|---|---|
| | | | Aluminum Oxide |
| 2" | 36 | 100 | 60118 |
| | 60 | | 60121 |
| | 80 | | 60122 |
| | 120 | | 60124 |
| 3" | 36 | 50 | 60131 |
| | 60 | | 60134 |
| | 80 | | 60135 |
| | 120 | | 60137 |

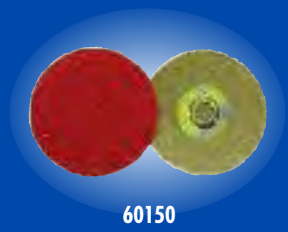
### Back-up Pads - 1/4" Stem

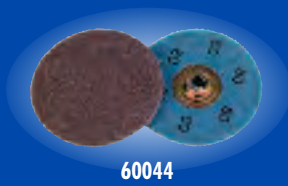
| Diameter | Max. RPM | Standard Pack | Metal Hub Style | Plastic Button Style |
|---|---|---|---|---|
| 2" | 25,000 | 1 | 60508 | 51551 |
| 3" | 20,000 | 1 | 60509 | 51552 |

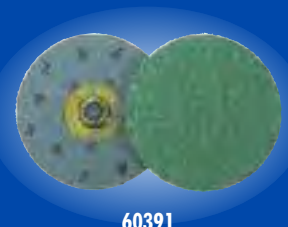
Do not exceed maximum RPM of back-up pad.
(Speed-Lok® TS is a registered trademark of Norton Co.) (Roloc™ is a trademark of 3M.)

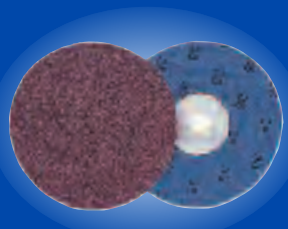


Blending surface imperfections prior to painting.

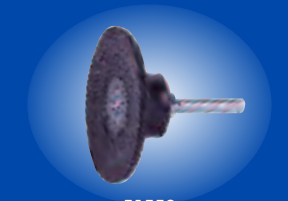

60150


60044


60391


60131


60508


51552

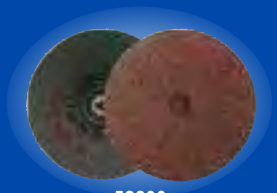


Deburring and chamfering a section of pipe after cutting.

**TRIM-KUT® Discs -** Trim-Kuts are abrasive discs designed for light grinding and blending applications on a variety of materials. The abrasive grains are fused directly onto a wearable polymer backing, resulting in a disc that requires no back-up pad. The polymer backing trims during use to expose new grains to the work surface. 3" discs are designed for use on right angle air die grinders, and 4-1/2" discs are for use on right angle grinders.

## Applications

- Edge blending
- Preparation for painting and surface finishing
- Light weld and stock removal
- Deburring



59300



59403



59327



59326

56485



56496

### TRIM-KUT Discs - Aluminum Oxide

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3" | 5/16" - 18 | 36<br>60<br>120 | 21,000 | 25 | 59300<br>59305<br>59315 |

Do not use TRIM-KUT discs in temperatures lower than 48° fahrenheit. Store at 50% relative humidity.

### TRIM-KUT Discs - Aluminum Oxide

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36<br>60<br>120 | 13,000 | 25 | 59403<br>59404<br>59405 |

Do not use TRIM-KUT discs in temperatures lower than 48° fahrenheit. Store at 50% relative humidity.

### TRIM-KUT Adapters

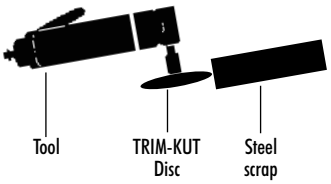
| Description | For Use With | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" Mandrel | 3" TRIM-KUT Discs | 25 | 59327 |
| 3/8"-24 UNF Adapter | 3" TRIM-KUT Discs | 25 | 59326 |
| Adapting Nuts | 4-1/2" TRIM-KUT Discs | 1 | 56485 |
| Spanner Wrench | Item No. 56485 only | 1 | 56496 |

NOTE

**If you are using a blending disc or TRIM-KUT Disc, ask our Application Engineering Department if Weiler's BobCat Abrasive Flap Discs can enhance your productivity. BobCats dramatically outperform blending and TRIM-KUT Discs by reducing changeovers and providing consistently high cut rates and extended life. See page 107 for more information.**

Tech Note

**Extend disc life 2-3 times.**
**Renew TRIM-KUT's sharp cutting edge by running the edge against a clamped piece of steel scrap.**



# Coated Abrasive Flap Wheels

**Flap Wheels** are designed with a solid hub construction that:

- Enables flap wheels to be rated at higher RPM's, providing more aggressive cutting action and increased productivity.
- Provides perfect balance leading to smooth, chatter-free finishing.

## Applications

- Final finishing metal surfaces
- Deburring and mis-match removal on machined parts
- Blending and finishing dies, molds, tools, tubing, and channels
- Smoothing metal, plastics and wood
- Finish prior to painting or plating
- Cleaning
- Edge blending

### Tiger® Mounted Flap Wheels - 1/4" Stem - Aluminum Oxide. A premium line designed to provide long life. Ideal for medium to high production environments.

| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60<br>80<br>120 | 30,000 | 10 | 52003<br>52004<br>52005 |
| 1-1/2" | 1/2" | 60<br>80<br>120 | 25,000 | 10 | 52226<br>52227<br>52229 |
| 1-1/2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 52009<br>52010<br>52011 |
| 2" | 1/2" | 60<br>80<br>120 | 25,000 | 10 | 52366<br>52367<br>52369 |
| 2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 52015<br>52016<br>52017 |
| 2-1/2" | 1" | 60<br>80<br>120 | 23,000 | 10 | 52486<br>52487<br>52489 |
| 3" | 1/2" | 60<br>80<br>120 | 23,000 | 10 | 52024<br>52025<br>52026 |
| 3" | 1" | 60<br>80<br>120 | 23,000 | 10 | 52027<br>52028<br>52029 |

### Tiger® Mounted Flap Wheels - 1/4"-20 Threaded Stem - Aluminum Oxide

| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60<br>80<br>120 | 30,000 | 10 | 52601<br>52603<br>52605 |
| 2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 52611<br>52613<br>52615 |
| 3" | 1" | 60<br>80<br>120 | 20,000 | 10 | 52621<br>52623<br>52625 |

### Drive Arbor - For 1/4"-20 Mounted Flap Wheels

| Thread Size | Adapted Size | Standard Pack | Item Number |
|---|---|---|---|
| 1/4"-20 | 1/4" | 5 | 07756 |



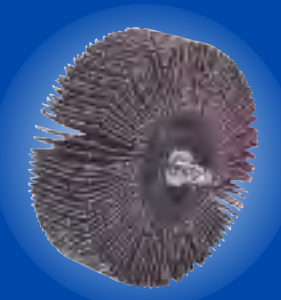
Deburring perforated steel channel after saw-cut.



52010



52027



52621



07756

NOTE

- Drive arbor is used individually and must be ordered individually.
- Drive arbor is to be used with Weiler flap wheels only.
- Stems must be fully chucked before using and should not be run above the maximum RPM listed.

# Coated Abrasive Flap Wheels



Removing burrs from the inside diameter of a cut tube.

## Vortec Pro® Mounted Flap Wheels - 1/4" Stem - Aluminum Oxide

**Provide fast cutting action at a value price. Ideal for low to medium production environments.**

| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60<br>80<br>120 | 30,000 | 10 | 30720<br>30721<br>30722 |
| 2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 30723<br>30724<br>30725 |
| 3" | 1" | 60<br>80<br>120 | 23,000 | 10 | 30726<br>30727<br>30728 |



30726

## Tiger® Unmounted Flap Wheels - Aluminum Oxide

| Diameter | Width | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | 1" | 5/8" | 60<br>80<br>120 | 9,000 | 10 | 53166<br>53167<br>53169 |
| 6" | 1" | 1" | 50<br>60<br>80<br>120 | 6,000 | 5 | 53285<br>53286<br>53287<br>53289 |
| 6" | 1-1/2" | 1" | 50<br>60<br>80<br>120 | 5,700 | 4 | 53305<br>53306<br>53307<br>53309 |
| 6" | 2" | 1" | 50<br>60<br>80<br>120 | 5,700 | 3 | 53325<br>53326<br>53327<br>53329 |



53166



53286

## Metal Adapters - For Unmounted Flap Wheels. Used in pairs and priced per pair.

| Wheel Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 1/2"<br>5/8"<br>3/4" | 1 | 03833<br>03834<br>03835 |



03834

**DID YOU KNOW?** Weiler products were used in the construction of the 'Oasis of the Sea', the world's largest ocean liner.

# Coated Abrasive Belts

**Coated Abrasive Belts -** Enhance productivity and lower operating costs with our wide assortment of coated abrasive belts in sizes ranging from 1/4" x 18" to 6" x 132". We also have the ability to provide custom made belts in sizes, backings and grains for specialized applications.

## Portable File Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 1/4" x 18" | 80 | 10 | 68524 | 67023 |
| 1/4" x 24" | 60 | 10 | 68541 | 67040 |
| | 80 | | 68542* | 67041 |
| | 120 | | – | 67043 |
| 3/4" x 18" | 40 | 10 | 68575 | 67074 |
| | 60 | | 68577 | 67076 |
| | 80 | | 68578 | 67077 |
| | 120 | | – | 67079 |
| 1/2" x 24" | 36 | 10 | 68592 | 67091 |
| | 40 | | 68593 | 67092 |
| | 50 | | 68594 | 67093 |
| | 60 | | 68595 | 67094 |
| | 80 | | 68596 | 67095 |
| | 100 | | – | 67096 |
| | 120 | | – | 67097 |
| 3/4"x 20-1/2" | 40 | 10 | 68629 | 67128 |
| | 50 | | 68630 | 67129 |
| | 60 | | 68631 | 67130 |
| | 80 | | 68632 | 67131 |
| | 100 | | – | 67132 |
| | 120 | | – | 67133 |
| 1" x 12" | 60 | 10 | 68649 | 67148 |
| | 80 | | 68650 | 67149 |
| | 120 | | – | 67151 |
| 1" x 30" | 60 | 10 | 68667 | 67166 |
| | 80 | | 68668 | 67167 |
| | 120 | | – | 67169 |

## Portable Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 3" x 18" | 60 | 10 | – | 67488 |
| | 80 | | – | 67489 |
| | 120 | | – | 67491 |
| 3" x 21" | 40 | 10 | 69005 | 67504 |
| | 50 | | 69006 | 67505 |
| | 60 | | 69007 | 67506 |
| | 80 | | 69008 | 67507 |
| | 100 | | – | 67508 |
| | 120 | | – | 67509 |
| 3" x 24" | 36 | 10 | 69040 | 67539 |
| | 40 | | 69041 | 67540 |
| | 50 | | 69042 | 67541 |
| | 60 | | 69043 | 67542 |
| | 80 | | 69044 | 67543 |
| | 100 | | – | 67544 |
| | 120 | | – | 67545 |
| 3-1/2"x15-1/2" | 60 | 10 | – | 67614 |
| | 80 | | – | 67615 |
| | 120 | | – | 67617 |
| 4" x 21-3/4" | 60 | 10 | – | 67632 |
| | 80 | | – | 67633 |
| | 100 | | – | 67634 |
| | 120 | | – | 67635 |
| 4" x 24" | 36 | 10 | 69148 | 67647 |
| | 40 | | 69149 | 67648 |
| | 50 | | 69150 | 67649 |
| | 60 | | 69151 | 67650 |
| | 80 | | 69152 | 67651 |
| | 100 | | – | 67652 |
| | 120 | | – | 67653 |

*Standard Pack 50



Blending a weld using a portable file belt.



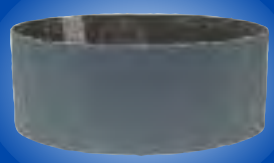
68524



67091



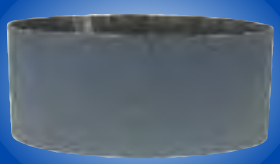
68650



69008



67614



69152

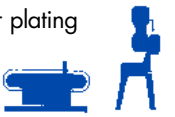
# Coated Abrasive Belts



Blending parting lines on a grey iron casting.

## Applications

- Decorative finishing of metal surfaces
- Grinding, deburring and flash removal on saw-cut parts
- Edge blending
- Smoothing metal, plastic & wood
- Removing tool marks & forging scale
- Finishing prior to painting or plating
- Grinding gates off castings



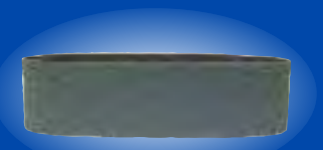
## Benchstand/Backstand Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 1" x 42" | 40 | 10 | 68683 | 67182 |
| | 60 | | 68685 | 67184 |
| | 80 | | 68686 | 67185 |
| | 100 | | – | 67186 |
| | 120 | | – | 67187 |
| 1" x 132" | 36 | 10 | 68718 | 67217 |
| | 40 | | 68719 | 67218 |
| | 60 | | 68721 | 67220 |
| | 80 | | 68722 | 67221 |
| | 100 | | – | 67222 |
| 2" x 60" | 60 | 10 | 68828 | 67327 |
| | 80 | | 68829 | 67328 |
| | 120 | | – | 67330 |
| 2" x 118" | 40 | 10 | 68879 | 67378 |
| | 60 | | 68881 | 67380 |
| 2" x 132" | 24 | 10 | 68895 | 67394 |
| | 36 | | 68896 | 67395 |
| | 40 | | 68897 | 67396 |
| | 50 | | 68898 | 67397 |
| | 60 | | 68899 | 67398 |
| | 80 | | 68900 | 67399 |
| | 100 | | – | 67400 |
| | 120 | | – | 67401 |
| 2-1/2" x 60" | 36 | 10 | 68950 | 67449 |
| | 40 | | 68951 | 67450 |
| | 50 | | 68952 | 67451 |
| | 60 | | 68953 | 67452 |
| | 80 | | 68954 | 67453 |
| | 100 | | – | 67454 |
| | 120 | | – | 67455 |
| 3" x 132" | 24 | 10 | 69075 | 67574 |
| | 36 | | 69076 | 67575 |
| | 40 | | 69077 | 67576 |
| | 50 | | 69078 | 67577 |
| | 60 | | 69079 | 67578 |
| | 80 | | 69080 | 67579 |
| | 100 | | – | 67580 |
| | 120 | | – | 67581 |
| | 150 | | – | 67582 |
| | 180 | | – | 67583 |
| | 220 | | – | 67584 |
| | 240 | | – | 67585 |
| | 320 | | – | 67586 |
| 4" x 36" | 36 | 10 | 69166 | 67665 |
| | 40 | | 69167 | 67666 |
| | 50 | | 69168 | 67667 |
| | 60 | | 69169 | 67668 |
| | 80 | | 69170 | 67669 |
| | 100 | | – | 67670 |
| | 120 | | – | 67671 |
| 4" x 132" | 24 | 10 | 69291 | 67790 |
| | 36 | | 69292 | 67791 |
| | 40 | | 69293 | 67792 |
| | 50 | | 69294 | 67793 |
| | 60 | | 69295 | 67794 |
| | 80 | | 69296 | 67795 |
| | 100 | | – | 67796 |
| | 120 | | – | 67797 |

Note: Other belt sizes available by special order.



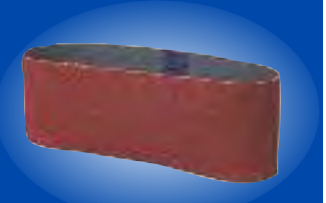
68828



69166

NOTE

**Saber Tooth™ Ceramic Belts also available! Contact Customer Service at 800-835-9999 for available sizes and grits.**



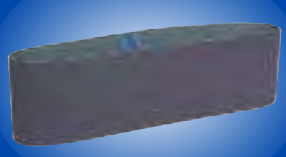
# Coated Abrasive Belts & Shop Rolls



Polishing the O.D. of a part turning in a lathe.

## Benchstand/Backstand Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 6" x 48" | 36 | 10 | 69346 | 67845 |
| | 40 | | 69347 | 67846 |
| | 50 | | 69348 | 67847 |
| | 60 | | 69349 | 67848 |
| | 80 | | 69350 | 67849 |
| | 100 | | – | 67850 |
| | 120 | | – | 67851 |
| | 150 | | – | 67852 |
| | 180 | | – | 67853 |
| 6" x 60" | 36 | 10 | 69382 | 67881 |
| | 40 | | 69383 | 67882 |
| | 50 | | 69384 | 67883 |
| | 60 | | 69385 | 67884 |
| | 80 | | 69386 | 67885 |
| 6" x 132" | 36 | 10 | 69400 | 67899 |
| | 40 | | 69401 | 67900 |
| | 50 | | 69402 | 67901 |
| | 60 | | 69403 | 67902 |
| | 80 | | 69404 | 67903 |
| | 120 | | – | 67905 |



67845

**Shop Rolls -** Weiler's Shop Rolls are resin over resin bonded - providing a stronger, heat and moisture resistant bond that better utilizes the abrasive grains. The cotton cloth provides a tougher, durable backing for longer life. J-flex cloth provides a higher degree of flexibility to conform to contoured parts.

### Applications

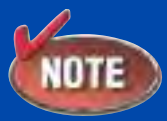
- Off-hand polishing of metal surfaces
- Off-hand deburring
- General purpose machine shop use
- Cleaning stock that is being turned in a lathe



65204

## Shop Rolls - Aluminum Oxide - 50 Yards. One roll per box.

| Roll Width | Grit Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 50 | 1 | 65204 |
| | 60 | | 65205 |
| | 80 | | 65206 |
| | 100 | | 65207 |
| | 120 | | 65208 |
| | 150 | | 65209 |
| | 180 | | 65210 |
| | 240 | | 65212 |
| | 320 | | 65213 |
| 1-1/2" | 50 | 1 | 65217 |
| | 60 | | 65218 |
| | 80 | | 65219 |
| | 100 | | 65220 |
| | 120 | | 65221 |
| | 150 | | 65222 |
| | 180 | | 65223 |
| | 240 | | 65225 |
| | 320 | | 65226 |
| 2" | 50 | 1 | 65230 |
| | 60 | | 65231 |
| | 80 | | 65232 |
| | 100 | | 65233 |
| | 120 | | 65234 |
| | 150 | | 65235 |
| | 180 | | 65236 |
| | 240 | | 65238 |
| | 320 | | 65239 |




**Use light machine oil with shop rolls as a lubricant for finer finishes and quicker cut.**

# Bonded Abrasive Technical Information

**Vortec Pro® Bonded Abrasives -** Specifically designed for general purpose grinding & cutting applications requiring heavy material removal such as rough grinding, weld removal, snagging, cutting and parting. All product is resin bond formulated for aggressive stock removal and fast cutting and are reinforced with fiberglass webbing for stability.




## Grinding

### Type 27 Products:

These products range from 4" to 9" diameter and are available in 1/4" thick for grinding and 1/8" thick for light grinding. Type 27 Wheels are offered in aluminum oxide, silicon carbide or zirconia alumina grain with a 5/8"-11 hub option.



## Cutting

### Type 27 Products:

Type 27 Wheels are offered in .045", .060", 3/32" and 1/8" wheel thicknesses. Diameters range from 4" to 9" and are available in aluminum oxide, silicon carbide or zirconia alumina grain, with an option of a 5/8"-11 hub.



### Type 1 Products:

This product category includes wheels ranging from 2" to 14" diameter in various thicknesses and grit sizes in aluminum oxide, silicon carbide or zirconia alumina grain. Type 1 Wheels are for use on right angle grinders, electric or air die grinders, tool room grinders, circular saws, stationary saws, chop saws and high speed portable gas and electric saws and walk-behind machines.



## Safety



Abrasive users and others in area must wear goggles or face shields over safety glasses. Safety guards must be used. Do not exceed maximum RPM.

## Bonded Abrasives Safety Guide - *For complete and detailed safety information see ANSI safety code B7.1.*

### — DO —

1. ALWAYS handle and store wheels in a careful manner.
2. ALWAYS visually inspect all wheels before mounting for possible damage.
3. ALWAYS make sure operation speed established for machine does not exceed wheel speed.
4. ALWAYS check mounting flanges for equal and correct diameter.
5. ALWAYS use mounting blotters when supplied with wheels.
6. ALWAYS keep grinder work rest properly adjusted within 1/8" of wheel face.
7. ALWAYS wear safety glasses or some type of eye protection equipment.
8. ALWAYS use a safety guard covering at least one-half of the wheel diameter.
9. ALWAYS allow newly mounted wheels to run at operation speed, with guard in place, for at least one minute before applying to workpiece.

### — DON'T —

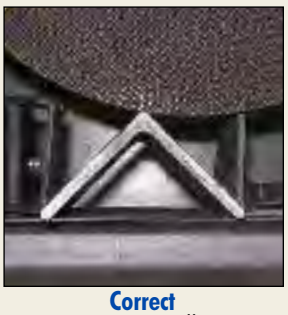
1. DON'T use a wheel that has been dropped.
2. DON'T force a wheel onto the spindle or alter the hole size of the wheel.
3. DON'T use a wheel that fits the arbor too loosely.
4. DON'T exceed maximum operation speed established for the wheel.
5. DON'T use dirty, nicked, warped or sprung mounting flanges.
6. DON'T tighten the mounting nut excessively.
7. DON'T grind on the side of the wheel unless the wheel is specifically designed for that purpose.
8. DON'T start machine without safety guard in place.
9. DON'T jam work into the wheel.
10. DON'T stand directly in front of a grinding wheel whenever a grinder is started.
11. DON'T grind or cut material for which the wheel is not designed.
12. DON'T grind or cut without proper ventilation.

## Bonded Wheel General Operating Recommendations

**Fixture the work-piece**
to minimize wheel contact area for a faster, cooler cut.

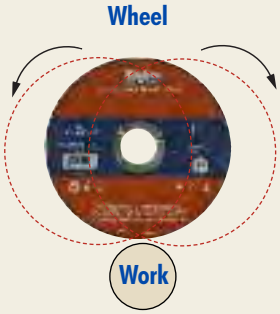


**Incorrect**
(Wide contact point)



**Correct**
(Two small contact points)

**Use an oscillating head**
when cutting thicker cross sections (over 3"). This reduces arc of contact and permits larger sections to be cut with a given diameter wheel.




**Counter rotation of the work-piece**
is recommended for cutting large cross sections (over 8") and when cutting tubular stock.




**Tech Note**

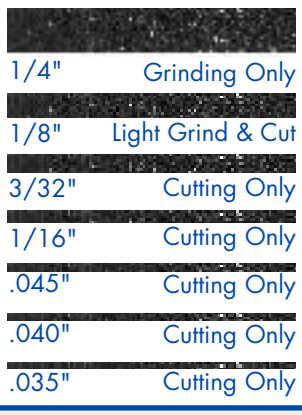
- To maximize performance, run at or close to the Maximum Safe Free Speed or RPM. NEVER EXCEED the MSFS or RPM.
- For maximum wheel life, select the coarsest, hardest wheel that will perform the cut.
- How to determine proper wheel wear:
  - Convex wheel wear is a sign of proper wheel usage.
  - Pointed wheel wear is a sign of improper usage. Wheel is too hard for application or feed rate is too slow for application.

## Bonded Wheel Product Selection

### Grain/Grit/Grade Guide

| | | |
|---|---|---|
| Grain | WA | White Aluminum Oxide: Longer wheel life on all metals except titanium & ductile iron |
| | A | Aluminum Oxide: for use on all metals except titanium and ductile iron |
| | C | Silicon Carbide: for use on non-metallics, titanium, ductile iron & stone |
| | Z | Zirconia Alumina: for higher cut rates in high pressure applications (Type 27 only) |
| Grit | 16 | Extra Coarse: for fast, aggressive cutting and maximum wheel life |
| | 24 | Coarse: for fast, aggressive cutting and maximum wheel life |
| | 30 | Medium/Coarse: for fast cutting and long wheel life |
| | 36 | Medium/Coarse: excellent for general purpose cutting |
| | 46 | Fine/Medium: for a smoother finish and reduced burr |
| | 60 | Fine: for a burr-free cut |
| Grade | S-V | Hard: for maximum wheel life |
| | R | Medium/Hard: for cutting large cross sections; improved stock removal rate |
| | N | Soft: for maximum cut rate |

### Thickness Guide




### Application Guide

| | |
|---|---|
| A24N | Aluminum Oxide - Fast Cut - Ideal for use on hard welds and steel, stainless steel, and in low pressure, large contact grinding where the harder wheel grade (R) dulls or glazes. |
| A24R | Aluminum Oxide - Long Life - Offers longer life than the softer wheel grade (N). Ideal for all general purpose grinding on structural steel, or in foundries or heavy fabrication applications. |
| Z24T | High Performance Zirconia Alumina - Offers improved cut rate in high pressure applications. Ideal when grinding or cutting stainless steel, high carbon steel, cast iron and other metals. |
| C24R | High Performance Silicon Carbide - Offers an excellent cut rate on concrete, stone and non-ferrous metals. |

## Application Solutions Guide

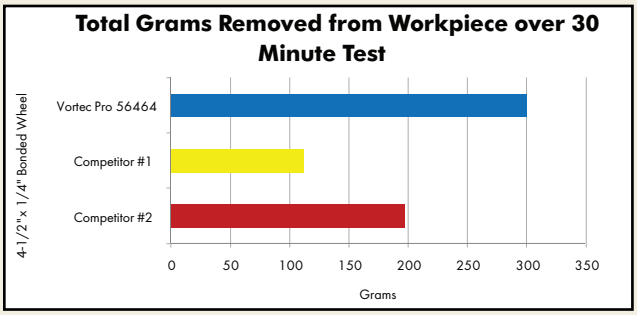
There are many variables in using Cut-Off Wheels. If the product you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's **Application Engineering Hotline at 888-299-2777.**

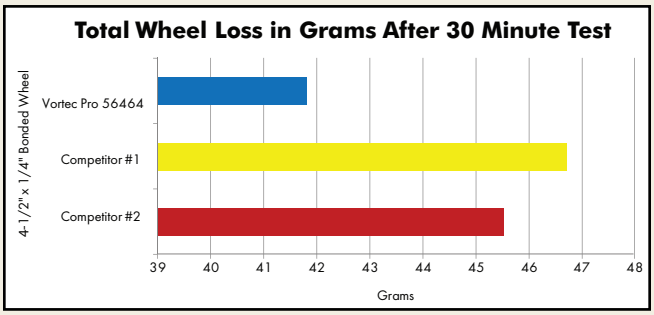
| Problem | Possible Cause | Recommended Solution |
|---|---|---|
| Slow cut rate | • Insufficient power being used | • Increase feed rate; run machine at full power |
| | • Contact area too large | • Reduce contact area |
| | • Side run out | • Check for spindle run out |
| | • Wheel binding | • Provide relief under part |
| Workpiece burn | • Insufficient feed rate | • Increase feed rate |
| | • Wheel speed too slow | • Check for wheel slippage |
| | • Wheel too coarse | • Use finer grit or increase power |
| Non-square cuts | • Work not properly fixtured | • Support both sides and fixture properly |
| | • Worn spindle bearings | • Check spindle |
| Too much burr | • Improper fixturing | • Check part fixturing |
| | • Grit too coarse | • Use a finer grit |

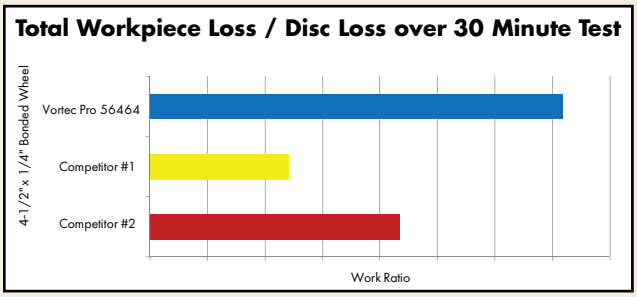
## Lab Testing Results

**Item(s) Tested: 4-1/2" x 1/4" x 7/8" Bonded Grinding/Cutting Wheels in A24R**

The following are the results of an automated test comparing the Weiler Vortec Pro Type 27 4-1/2 X 1/4" general purpose grinding wheel vs. two major manufacturers of general purpose bonded products. The test involved grinding for 30 minutes on mild steel bar stock.




As you can see from this data, the Vortec Pro #56464 Grinding Wheel removed more total material from the workpiece while losing less gram mass than the competition. Combining the higher workpiece removal with the least disc loss makes the Vortec Pro product the obvious choice for your bonded abrasive applications.

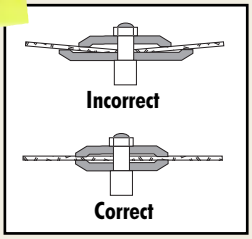






### Storage and Handling:

- Handle bonded product in a manner to prevent dropping or bumping.
- Do not roll wheels
- Use trucks or other appropriate conveyances to provide support and protection in transporting all bonded products that cannot be carried by hand.
- Store in suitable racks, bins or drawers.
- Store in a dry area not subject to extreme temperature changes. Some bonded product may be affected by excessive humidity and temperature changes.
- Locate racks as near as practical to the grinding location, but never where there is damage from passing trucks, crane handling equipment or excessive vibration.




Flanges should be of equal diameter, recessed and at least one-third the diameter of the wheel.

# Vortec Pro® Bonded Abrasives

**Cutting & Grinding Wheels -** The Vortec Pro® bonded abrasive line is specifically designed for general purpose cutting and grinding applications on steel, iron, and other ferrous metals. All product is resin-bond formulated for aggressive stock removal and fast cutting, and are reinforced with fiberglass webbing for stability.

## Applications

- Weld removal
- Cutting and parting
- Rough Grinding
- Notching



Cutting a piece of steel tubing to length.

### Vortec Pro® Small Type 1 Reinforced Cut-Off Wheels -

**General purpose cutting applications in toolrooms and machine shops.**




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2" | .035" | 1/4" | WA60T - Metal | 30,000 | 100 | 56013* |
| | 1/16" | 1/4" | A36T - Metal | | 50 | 56015 |
| | 1/4" | 3/8" | A36T - Metal | | 25 | 56131 |
| 3" | .035" | 1/4" | WA60T - Metal | 25,000 | 100 | 56061* |
| | .035" | 3/8" | WA60T - Metal | | 100 | 56062* |
| | 1/16" | 1/4" | A36T - Metal | | 100 | 56065 |
| | 1/16" | 3/8" | A36T - Metal | | 100 | 56068 |
| | 1/16" | 1/4" | A60T - Metal | | 100 | 56067 |
| | 1/16" | 3/8" | A60T - Metal | | 100 | 56070 |
| | 1/8" | 3/8" | A36T - Metal | | 50 | 56076 |
| | 1/8" | 1/4" | A36T - Metal | | 50 | 56270 |
| | 1/4" | 3/8" | A36T - Metal | 23,000 | 25 | 56147 |
| 4" | .035" | 5/8" | WA60T - Metal | 19,000 | 50 | 56271* |
| | .035" | 1/4" | WA60T - Metal | | 50 | 56079* |
| | .035" | 3/8" | WA60T - Metal | | 50 | 56080* |
| | 1/16" | 1/4" | A36T - Metal | | 50 | 56083 |
| | 1/16" | 3/8" | A36T - Metal | | 50 | 56086 |
| | 1/16" | 1/4" | A60T - Metal | | 50 | 56085 |
| | 1/16" | 3/8" | A60T - Metal | | 50 | 56088 |
| | 1/16" | 5/8" | A60T - Metal | | 50 | 56272 |
| | 1/4" | 3/8" | A36T - Metal | | 25 | 56163 |
| | 1/8" | 3/8" | A36T - Metal | | 50 | 56099 |
| 4-1/2" | .045" | 7/8" | WA60T - Metal | 13,500 | 50 | 56281* |
| | 1/16" | 7/8" | A60T - Metal | | 50 | 56103 |
| 5" | .035" | 3/8" | WA60T - Metal | 12,200 | 100 | 56106* |
| | .035" | 5/8" | WA60T - Metal | | 100 | 56108* |
| | 1/16" | 5/8" | A36T - Metal | | 25 | 56115 |
| | 1/16" | 5/8" | A60T - Metal | | 25 | 56117 |
| | 1/16" | 7/8" | A36T - Metal | | 100 | 56118 |

*Contaminant-free.




### Vortec Pro® Type 1 Reinforced Cut-Off Wheels -

**General purpose metal applications in toolrooms and machine shops.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 6" | .035" | 1/2" | WA60T - Metal | 10,200 | 25 | 56170* |
| | .035" | 5/8" | WA60T - Metal | | | 56171* |
| | .040" | 7/8" | WA60T - Metal | | | 56282* |
| | .045" | 7/8" | WA60T - Metal | | | 56273* |
| | 1/16" | 5/8" | A60T - Metal | | | 56274 |
| 7" | .035" | 5/8" | WA60T - Metal | 8,740 | 25 | 56183* |
| | .045" | 7/8" | WA60T - Metal | | | 56275* |
| | 1/16" | 5/8" | A36T - Metal | | | 56188 |
| | 1/16" | 1-1/4" | A60T - Metal | | | 56193 |
| 7" | 1/8" | 5/8"/DIA. | A24T - Metal | 8,740 | 15 | 56208 |
| | | | C24T - Concrete | | | 56209 |

*Contaminant-free.

DIA. = 5/8" arbor with diamond knockout adapter for circular saws.

### Mounting Mandrels - 1/4" Stem. For Type 1 Wheels only

| Arbor Size | Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | .035" to 1/4" | 10 | 56489 |
| 3/8" | .035" to 1/4" | 10 | 56490 |
| 1/4", 3/8" * | .035" to 1/4" | 10 | 56491* |
| 1/4", 3/8"+ | .035" to 1/4" | 1 | 36512+ |

*Combination pack +Display packaged



56013



56103




**All Weiler grinding and cutting wheels are resin bonded and contain at least 2-layers of fiberglass reinforcement.**



56282



56489

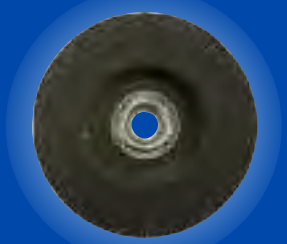
# Vortec Pro® Bonded Abrasives



Notching a steel bar prior to welding.



56283



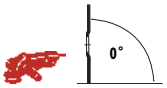
56385



56430

## Vortec Pro® Type 27 Thin Cutting Wheels - Aluminum Oxide

**For general purpose, burr-free cutting with less resistance on various metals.**

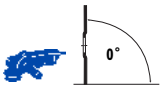



| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | WA60S - Metal | 13,300 | 25 | 56393* |
| 5" | .045" | 7/8" | WA60S - Metal | 12,200 | 100 | 56392* |
| 6" | .045" | 7/8" | WA60S - Metal | 10,200 | 25 | 56283* |
| 7" | .060" | 7/8" | WA60S - Metal | 8,500 | 25 | 56391* |

*Contaminate-free.

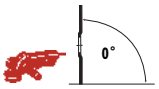
## Type 27 Thin Cutting Wheels - Zirconia Alumina

**For fast, burr-free cutting with longer life and less resistance on various metals.**




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | Z46T - Metal | 13,300 | 25 | 56389 |
| 5" | .045" | 7/8" | Z46T - Metal | 12,200 | 50 | 56388 |
| 7" | .060" | 7/8" | Z36T - Metal | 8,500 | 25 | 56387 |

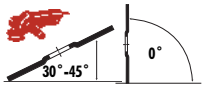
## Vortec Pro® Type 27 Cutting Wheels - For general purpose cutting on ferrous metals.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | 3/32" | 5/8" | A24T - Metal | 15,200 | 25 | 56474 |
| 4-1/2" | 3/32" | 5/8"-11<br>7/8" | A24T - Metal | 13,300 | 10<br>25 | 56385<br>56475 |
| 5" | 3/32" | 5/8"-11<br>7/8" | A24T - Metal | 12,200 | 10<br>25 | 56384<br>56476 |
| 6" | 3/32" | 5/8"-11<br>7/8" | A24R - Metal | 10,200 | 10<br>25 | 56278<br>56277 |
| 7" | 3/32" | 5/8"-11<br>7/8" | A24R - Metal | 8,500 | 10<br>25 | 56477<br>56383 |

## Vortec Pro® Type 27 - Pipeline Cutting & Light Grinding Wheels -

**General purpose light grinding and cutting. For root pass cutting and light grinding.**



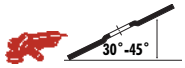

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | 1/8" | 5/8" | A24R - Metal | 15,200 | 25 | 56431 |
| 4-1/2" | 1/8" | 5/8"-11<br>7/8" | A24R - Metal | 13,300 | 10<br>25 | 56429<br>56430 |
| 5" | 1/8" | 5/8"-11<br>7/8" | A24T - Metal | 12,200 | 10<br>25 | 56427<br>56428 |
| 7" | 1/8" | 5/8"-11<br>7/8" | A24T - Metal | 8,500 | 10<br>25 | 56425<br>56426 |
| 9" | 1/8" | 5/8"-11<br>7/8" | A24T - Metal | 6,600 | 10<br>20 | 56423<br>56424 |




- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) contain White AO for a longer life vs the standard brown AO other manufactures use to save cost.**
- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) are contaminant free, which means Iron, Sulfur and Chlorine is ≤ 0.1% - they will not rust stainless steel.**

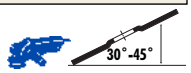
# Vortec Pro® Bonded Abrasives

## Vortec Pro® Type 27 Grinding Wheels - For general purpose, rough grinding.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Silicon Carbide - For Stone/Concrete Applications** | | | | | | |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | C24R<br>Stone/Concrete | 13,300 | 10<br>25 | 56482<br>56483 |
| 7" | 1/4" | 5/8"-11<br>7/8" | C24R<br>Stone/Concrete | 8,500 | 10<br>20 | 56486<br>56487 |
| 9" | 1/4" | 5/8"-11<br>7/8" | C24R<br>Stone/Concrete | 6,600 | 10<br>20 | 56492<br>56493 |
| **Aluminum Oxide - For General Purpose Steel Applications** | | | | | | |
| 4" | 1/4" | 5/8" | A24R - Metal | 15,200 | 25 | 56473 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 13,300 | 10<br>25 | 56454<br>56464 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24N - Metal | 13,300 | 10<br>25 | 56455<br>56457 |
| 5" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 12,200 | 10<br>25 | 56449<br>56466 |
| 6" | 1/4" | 5/8"-11"<br>7/8" | A24R - Metal | 10,200 | 10<br>25 | 56279<br>56280 |
| 7" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 8,500 | 10<br>20 | 56468<br>56467 |
| 9" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 6,600 | 10<br>20 | 56470<br>56442 |

## Type 27 Grinding Wheels - For general purpose, rough grinding.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Zirconia Alumina - High Performance Grain That Cuts Faster with Long Life** | | | | | | |
| 4-1/2" | 1/8" | 5/8"-11<br>7/8" | Z24T - Metal | 13,300 | 10<br>25 | 56420<br>56421 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | Z24T - Metal | 13,300 | 10<br>10 | 56453<br>56456 |
| 7" | 1/8" | 5/8"-11<br>7/8" | Z24T - Metal | 8,500 | 10<br>20 | 56416<br>56417 |
| 7" | 1/4" | 5/8"-11<br>7/8" | Z24T - Metal | 8,500 | 10<br>10 | 56444<br>56446 |

## Vortec Pro® Type 1 Vitrified Grinding Wheels -

**For general purpose rough grinding and heavy stock removal.**




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 6" | 3/4" | 1" | 36AO - Metal<br>60AO - Metal | 4,100 | 5 | 36459<br>36460 |
| 8" | 1" | 1" | 36AO - Metal<br>60AO - Metal | 3,600 | 5 | 33052<br>33053 |

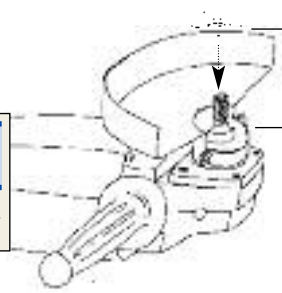


56494

## Adapting Nuts - For 4-1/2" & 5" Angle Grinders.

| Adapts To | Min. Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 7/8" to 5/8"-11 | 1/16" | 1 | 56494 |
| 5/8" to 3/8"-24 | 1/16" | 1 | 56484 |

When mounting, adapters must be nested, see illustration at right.





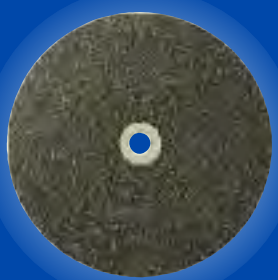

Grinding out weld defects for repair.



56464



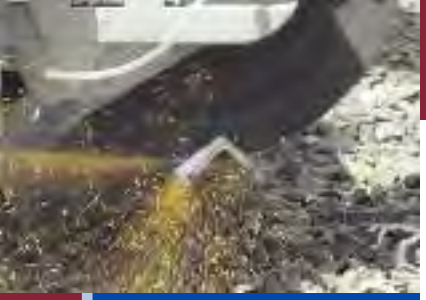
56468



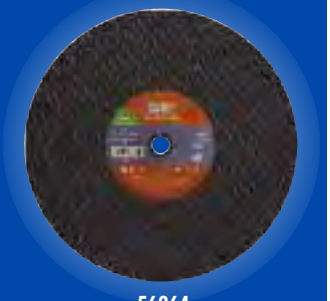
33052

**Tech Note**

# Vortec Pro® Bonded Abrasives



Cutting angle iron with a chopsaw.



56264



56238



04455

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For stationary machines.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 12" | 1/8" | 1" | C24T - Stone/Concrete | 5,100 | 10 | 56234 |
| 14" | 1/8" | 1" | A30R - Metal | 4,400 | 10 | 56230 |
| 14" | 1/8" | 1" | C20R - Stone/Concrete | 4,400 | 10 | 56246 |

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For portable gas or electric saws.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 12" | 1/8" | 1" | A24T - Metal | 6,300 | 10 | 56241 |
| 12" | 1/8" | 1" | C24T - Stone/Concrete | 6,300 | 10 | 56242 |
| 12" | 1/8" | 20mm | A24T - Metal | 6,300 | 10 | 56254 |
| 12" | 1/8" | 20mm | C24T - Stone/Concrete | 6,300 | 10 | 56255 |
| 14" | 1/8" | 1" | A24T - Metal | 5,400 | 10 | 56250 |
| 14" | 1/8" | 1" | C24T - Stone/Concrete | 5,400 | 10 | 56251 |
| 14" | 1/8" | 20mm | A24T - Metal | 5,460 | 10 | 56263 |
| 14" | 1/8" | 20mm | C24T - Stone/Concrete | 5,460 | 10 | 56264 |

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For low horsepower chop saws.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 12" | 3/32" | 1" | A46T - Metal | 5,100 | 10 | 56239 |
| 12" | 3/32" | 1" | A46S - Metal | 5,100 | 10 | 56238 |
| 14" | 3/32" | 1" | A46T - Metal | 4,400 | 10 | 56240 |
| 14" | 3/32" | 1" | A46S - Metal | 4,400 | 10 | 56244 |

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For walk behind machines.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 14" | 3/16" | 1" | C16T - Stone/Concrete<br>C16R - Stone/Concrete | 4,400 | 10 | 56268<br>56267 |

## Plastic Adapters - Allows Type 1 wheels to work on machines with a 20mm arbor hole.

| Wheel Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 20mm | 10 | 04455 |

Tech Note

**The following factors can cause wheel breakage:**

- Excessive speed
- Excessive wheel feed rate
- Improper mounting
- Improper machine conditions
- Work improperly clamped
- Misuse

**DID YOU KNOW?**

All Weiler Vortec Pro Cutting Wheels have a metal reinforcement ring around the arbor hole.

# Non-Woven Unitized Wheels

## Non-Woven Abrasives Technical Information

Non-woven abrasive products can be used in a broad range of surface-conditioning applications from cleaning and finishing to deburring and light blending. Unlike bonded and coated abrasives, they cannot be used for applications requiring heavy stock removal such as grinding and weld blending.

All non-woven products are fabricated from base materials that are composed of a random "web" of nylon fibers that have been bonded together with synthetic resins and impregnated with abrasive grains. Although these materials vary in fiber density, their three dimensional nature results in specialty abrasive products that are pliable, conformable to the work surface, and limited in their ability to remove base stock.

Non-woven products resist loading and perform consistently as new, fresh abrasive grains are exposed as the nylon fibers wear away from the product during use. Non-woven abrasives can be used either wet or dry on a range of materials including ferrous and non-ferrous metals, ceramics, plastics, composites, and wood. Non-woven products are designed for use where stock removal is not required. Non-wovens begin where coated abrasives leave off.



A unitized wheel deburring a ring gear.

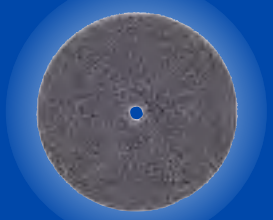
**Unitized Wheels -** Designed for use on die grinders and are ideal for a variety of cleaning, finishing, deburring and edge blending applications.

### Applications

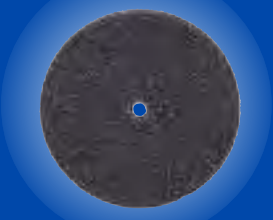
- Deburring machined surfaces
- Removing heat discoloration, rust and oxidation
- Blending saw and machine marks

### Unitized Wheels

| Diameter | Face Width | Arbor Hole | Grain | Grade | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| **Series 2 - Cleaning & Finishing - Hardness: Soft** | | | | | | | |
| 2" | 1/4" | 1/4" | Silicon Carbide | Fine | 18,000 | 10 | 55511 |
| 3" | 1/4" | 1/4" | Aluminum Oxide | Fine | 12,000 | 10 | 55512 |
| | 1/4" | | Silicon Carbide | Fine | | | 55513 |
| **Series 4 - General Purpose - Hardness: Medium** | | | | | | | |
| 2" | 1/4" | 1/4" | Aluminum Oxide | Fine | 18,000 | 10 | 55520 |
| | 1/2" | | Aluminum Oxide | Fine | | | 55481 |
| 3" | 1/4" | 1/4" | Aluminum Oxide | Fine | 12,000 | 10 | 55522 |
| | 1/2" | | Aluminum Oxide | Fine | | | 55487 |
| **Series 6 - Deburring - Hardness: Medium/Hard** | | | | | | | |
| 1" | 1" | 3/16" | Aluminum Oxide | Fine | 30,000 | 10 | 55531 |
| 2" | 1/4" | 1/4" | Aluminum Oxide | Fine | 22,000 | 10 | 54488 |
| 3" | 1/4" | 1/4" | Aluminum Oxide | Fine | 18,000 | | 54492 |
| | 1/2" | | Aluminum Oxide | Fine | | | 55530 |
| **Series 8 - HD Deburring & Polishing - Hardness: Hard (Heavy-Duty)** | | | | | | | |
| 1" | 1" | 3/16" | Aluminum Oxide | Medium | 30,000 | 10 | 55543 |
| 2" | 1/8" | 1/4" | Aluminum Oxide | Coarse | 22,000 | 10 | 55545 |
| | 1/4" | | Aluminum Oxide | Medium | | | 55540 |
| 3" | 1/8" | 1/4" | Aluminum Oxide | Coarse | 18,000 | 10 | 55546 |
| | 1/4" | | Aluminum Oxide | Medium | | | 55541 |
| | 1/2" | | Aluminum Oxide | Medium | | | 55542 |



55512



55541



56489

### Mandrels

| Stem Diameter | For Wheel Diameter | For Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/4" | 2" - 3" | 1/2" | 1 | 07761 |
| | 1" | 1" | 1 | 07764 |
| | 2" - 3" | 1/8" - 1/4" | 10 | 56489 |

# Non-Woven Convolute Wheels



Polishing a stainless steel door handle.

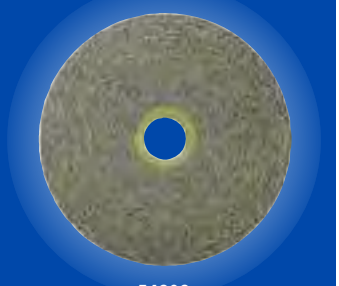
**Convolute Wheels -** Weiler's Convolute Wheels are designed for a wide variety of cleaning, finishing, deburring and edge blending needs on straight shaft tools and bench/pedestal grinders.

## Applications

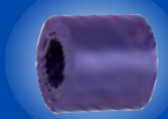
- Cleaning and polishing metal surfaces
- Deburring stamped metal parts
- Blending edges
- Polishing and finishing machined parts
- Removing parting lines
- Removing coated abrasive grind lines



54455



54303



04440



03804

NOTE

Lubricut™ Lubricant is available for use on Convolute Wheels. See page 73 for usage recommendations.

## Convolute Wheels

| Dia. | Face Width | Arbor Hole | Grain | Grade | Density | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| **MRO/General Purpose - For general cleaning and finishing** | | | | | | | | |
| 6" | 1/2" | 1" | Silicon Carbide | Fine | 7 | 6,000 | 4 | 54450 |
| | 1" | | Silicon Carbide | Fine | 7 | | 3 | 54455 |
| | 1" | | Silicon Carbide | Medium | 8 | | 3 | 54456 |
| 8" | 1" | 3" | Silicon Carbide | Fine | 7 | 4,500 | 3 | 54460 |
| | | | Silicon Carbide | Medium | 7 | | ? | 54461 |
| **Deburring Wheels - For deburring and edge blending** | | | | | | | | |
| 6" | 1/2" | 1" | Silicon Carbide | Fine | 8 | 6,000 | 4 | 54300 |
| | 1/2" | | Silicon Carbide | Fine | 9 | | 4 | 54301 |
| | 1/2" | | Silicon Carbide | Medium | 9 | | 4 | 54401 |
| | 1" | | Silicon Carbide | Fine | 8 | | 3 | 54303 |
| | 1" | | Silicon Carbide | Fine | 9 | | 3 | 54304 |
| | 1" | | Silicon Carbide | Medium | 8 | | 3 | 54050 |
| | 2" | | Silicon Carbide | Fine | 9 | | 2 | 54307 |
| 8" | 1" | 3" | Silicon Carbide | Fine | 8 | 4,500 | 3 | 54309 |
| | | | Silicon Carbide | Fine | 9 | | 3 | 54310 |
| | | | Silicon Carbide | Medium | 8 | | 3 | 54052 |

## Adapters

| Wheel Inside Diameter | Arbor Hole | Standard Pack | Item Number |
|---|---|---|---|
| **Telescoping Plastic Adapter** | | | |
| 1" | 3/4" - 5/8" - 1/2" | 1 | 04440 |
| **Metal Adapters** | | | |
| 3" | 1/2" | 1 | 03804 |
| | 5/8" | | 03805 |
| | 3/4" | | 03806 |
| | 1" | | 03807 |
| | 1-1/4" | | 03808 |

Tech Note

## Suggested Wheel Dressing Method

**The initial dressing is most important to achieve maximum cutting and face uniformity. This process takes less than one minute.**

**Step 1:** Mount a 36 grit abrasive cloth strip to a solid backing (plywood).

**Step 2:** Run the wheel at a high RPM (not to exceed Maximum Safe Free Speed). Apply the abrasive strip to the wheel face using light, uniform pressure.

**Step 3:** Move the abrasive strip across the wheel face until the wheel face is uniform.

**Step 4:** Use a piece of hardwood to burn away the excess nylon fiber. Hold the wood against the face until the wheel cuts the wood, exposing fresh grain and eliminating excess nylon.



Wheel that needs to be dressed.



Illustration of Step 2.

# Non-Woven Surface Conditioning Discs



**Surface Conditioning Discs -** Have an open construction, scrim reinforcement and a superior resin system. These features minimize loading, heat build-up, fraying of disc edges, grain shedding and extend disc life, providing superior performance.

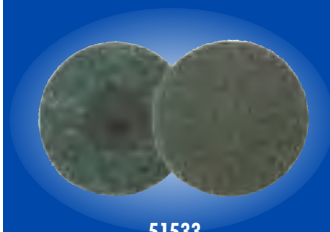
## Applications

- Light deburring
- Surface preparation
- Blending light scratches
- Removing rust and corrosion
- Removing rust and oxidation
- Cleaning and removing stains from stainless steel
- Producing satin finishes on aluminum and stainless steel

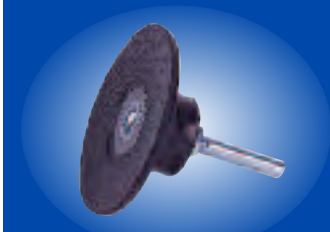
Finishing the surface for a stainless steel part for the food service industry.



51532



51533



51552

## Plastic Button Style Discs - Compatible with 3M Roloc™ back-up pads.

| Diameter | Grade | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | General Purpose | High Performance |
| 1-1/2" | Very Fine (Blue) | 50 | 51527 | - |
| | Medium (Maroon) | | 51528 | - |
| | Coarse (Brown) | | 51529 | - |
| 2" | Very Fine (Blue) | 50 | 51530 | 57324 |
| | Medium (Maroon) | | 51531 | 57323 |
| | Coarse (Brown) | | 51532 | 57322 |
| 3" | Very Fine (Blue) | 25 | 51533 | 57327 |
| | Medium (Maroon) | | 51534 | 57326 |
| | Coarse (Brown) | | 51535 | 57325 |
| 4" | Very Fine (Blue) | 10 | 51536 | - |
| | Medium (Maroon) | | 51537 | - |
| | Coarse (Brown) | | 51538 | - |

Roloc™ is a trademark of 3M.

## Plastic Button Style Back-up Pads - 1/4" Stem

| Diameter | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|
| 1-1/2" | 30,000 | 1 | 51550 |
| 2" | 30,000 | 1 | 51551 |
| 3" | 20,000 | 1 | 51552 |
| 4" | 12,000 | 1 | 51553 |

Do not exceed maximum RPM of back-up pad.




- **The flexible, open style construction of non-wovens makes them conformable, non-loading and ideal for finishing non-ferrous metals such as aluminum and brass.**
- **Unlike steel wool, the non-metallic construction of non-wovens will not contaminate metals and cause surface rust.**

# Non-Woven Surface Conditioning Discs



Putting a decorative satin finish on a stainless steel door.



51508



51561

## Hook & Loop Style Discs

| Diameter | Grade | Standard Pack | Item Number |
|---|---|---|---|
| 2" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 50 | 51503<br>51504<br>51505 |
| 3" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 25 | 51506<br>51507<br>51508 |
| 4" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51509<br>51510<br>51511 |
| 4-1/2" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51512<br>51513<br>51514 |
| 5" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51515<br>51516<br>51517 |
| 6" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51518<br>51519<br>51520 |
| 7" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51521<br>51522<br>51523 |
| 8" | Medium (Maroon)<br>Coarse (Brown) | 10 | 51525<br>51526 |

## Hook & Loop Style Back-up Pads

| Diameter | Arbor Hole or Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|
| 2" | 1/4" Stem | 16,000 | 1 | 51561 |
| 3" | 1/4" Stem | 18,000 | 1 | 51562 |
| 4" | 1/4" Stem | 16,000 | 1 | 51563 |
| 4-1/2" | 5/8" -11 Arbor | 13,000 | 1 | 51569 |
| 5" | 5/8" -11 Arbor | 10,000 | 1 | 51575 |
| 6" | 5/8" -11 Arbor | 8,000 | 1 | 51577 |
| 7" | 5/8" -11 Arbor | 6,000 | 1 | 51578 |
| 8" | 5/8" -11 Arbor | 4,500 | 1 | 51579 |

Do not exceed maximum RPM of back-up pad.

**DID YOU KNOW?** Weiler operates 6 warehouses in the U.S.A., Canada & Mexico.

# Non-Woven Hand Pads

**Hand Pads -** For cleaning and conditioning surfaces by hand. Unlike steel wool, hand pads are non-metallic, and do not produce "after-rust" on work surfaces. Hand pads can be used in wet applications.



Cleaning a restaurant sink with a commercial hand pad.

## Applications

Industrial Grade:

- Producing satin finishes on aluminum and stainless steel
- Light deburring
- Surface preparation
- Blending light scratches

Commercial Grade:

- Cleaning and removing stains from stainless steel
- Removing rust, corrosion and oxidation

### Hand Pads - Industrial Grade

| Size | Grain | Grade | Description | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 9" | Silicon Carbide | Ultra Fine | Finishing (Grey) | 60 | 51434 |
| 6" x 9" | Aluminum Oxide | Medium | Economy General Purpose (Maroon) | 60 | 51460 |
| 6" x 9" | Aluminum Oxide | Med/ Coarse | General Purpose (Maroon) | 60 | 51444 |
| 6" x 9" | Aluminum Oxide | Heavy-Duty | Heavy-Duty (Tan) | 40 | 51454 |



51460

### Hand Pads - Commercial Grade

| Size | Grain | Grade | Description | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 9" | Aluminum Oxide | Fine | Economy (Green) | 400 | 51456 |
| 6" x 9" | Aluminum Oxide | Medium | Standard-Duty (Green) | 60 | 51457 |
| 6" x 9" | Aluminum Oxide | Heavy-Duty | Heavy-Duty (Green) 20% thicker than Standard Duty | 60 | 51458 |



51457

### Hand Pad Holder

| Description | Standard Pack | Item Number |
|---|---|---|
| For 3" x 6" Pad | 1 | 59616 |



59616




Although denser non-woven abrasive products are suitable for applications requiring light stock removal such as removing large, well-attached burrs and blending minor tool marks and imperfections, the strength of these products is producing decorative finishes ranging from satin to near-mirror polish. The various grades of non-woven products produce scratch patterns which can be compared to those produced by coated abrasive products. However, their pliable nature results in a softer, less pronounced scratch-line pattern.

| Grade | Grit Range |
|---|---|
| Ultra Fine | 600 |
| Very Fine | 240-360 |
| Fine | 180-220 |
| Medium | 100-150 |
| Coarse | 50-80 |

# Non-Woven Interleaf Flap Wheels



Deburring the I.D. of a steel pipe with an interleaf flap wheel.

**Interleaf Flap Wheels -** Provide a combination of non-woven and coated abrasive material to produce a very conformable product compared to a standard coated abrasive flap wheel. They are designed to be a finishing and surface blending tool as compared to a material-removing coated abrasive flap wheel. They are ideal for producing satin or decorative finishes on irregular or contoured surfaces.

## Applications

- General decorative finishing
- Applying satin finishes
- Producing antique finishes
- Final sandings
- Soft metal finishing
- Removing oxides from precious metals
- Fine burr removal



54500



54510

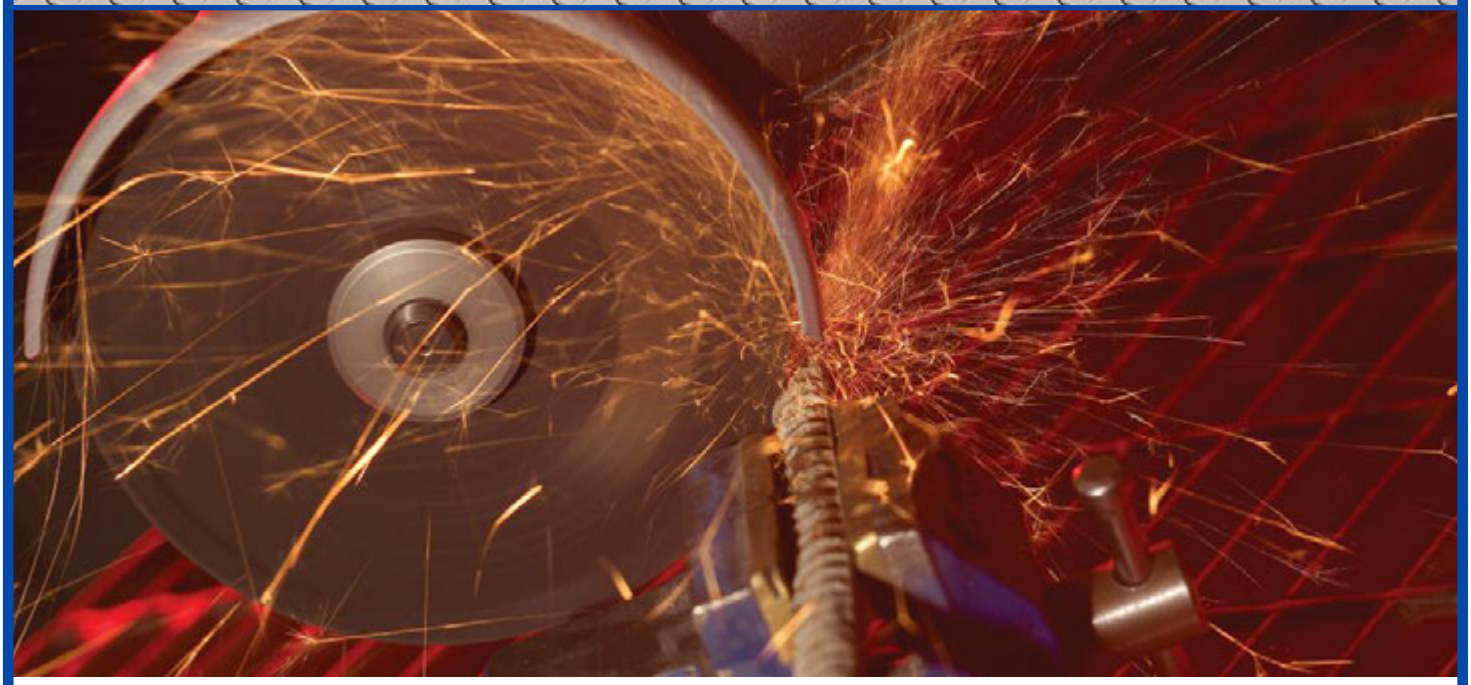
### Stem-Mounted Interleaf Flap Wheels - Aluminum Oxide

| Diameter | Face Width | Grit Size | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2" | 1" | 120<br>180<br>320 | 1/4" | 13,700 | 10 | 54500<br>54501<br>54502 |
| 3" | 1" | 120<br>180<br>320 | 1/4" | 8,600 | 5 | 54506<br>54507<br>54508 |
| 3" | 2" | 120<br>180<br>320 | 1/4" | 8,600 | 5 | 54509<br>54510<br>54511 |

**DID YOU KNOW?**

Defuzzing coconuts, finishing casket hardware and cleaning blades used for lasik surgery are all applications in which Weiler products are used.

# Weiler® Bonded Abrasives For General Purpose Applications



## Cutting & Grinding Wheels

The Vortec Pro® bonded abrasive line is specifically designed for general purpose grinding and cutting applications. Offering includes products for use on steel, iron, and other ferrous metals or stone, concrete & ductile iron. All product is resin-bond formulated for aggressive stock removal and fast cutting, and are reinforced with fiberglass webbing for stability.

## Grinding

### Type 27 Products:



These products range from 4" to 9" diameter and are available in 1/4" thick for grinding. Type 27 Wheels are offered in aluminum oxide and silicon carbide grain with a 5/8"-11 hub option.

## Cutting

### Type 27 Products:



Type 27 Wheels are offered in .045", .060", 3/32" and 1/8" wheel thicknesses. Diameters range from 4" to 9" and are available in aluminum oxide, with an option of a 5/8"-11 hub.

### Type 1 Products:



This product category includes wheels ranging from 2" to 14" diameter in various thicknesses and grit sizes in aluminum oxide and silicon carbide grain. Type 1 Wheels are for use on right angle grinders, electric or air die grinders, tool room grinders, circular saws, stationary saws, chop saws, high speed portable gas and electric saws and walk-behind machines.

**Tech Note**

- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) contain White AO for a longer life vs the standard brown AO other manufactures use to save cost.**
- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) are contaminant free, which means Iron, Sulfur and Chlorine is ≤ 0.1% - they will not rust stainless steel.**

## Wheel Selection Guide

**Grain**

| | |
|---|---|
| **WA** | White Aluminum Oxide: Longer wheel life on all metals except titanium & ductile iron |
| **A** | Aluminum Oxide: for use on all metals except titanium and ductile iron |
| **C** | Silicon Carbide: for use on non-metallics, titanium, ductile iron & stone |

**Grit**

| | |
|---|---|
| **16** | Extra Coarse: for fast, aggressive cutting and maximum wheel life |
| **24** | Coarse: for fast, aggressive cutting and maximum wheel life |
| **30** | Medium/Coarse: for fast cutting and long wheel life |
| **36** | Medium/Coarse: excellent for general purpose cutting |
| **46** | Fine/Medium: for a smoother finish and reduced burr |
| **60** | Fine: for a burr-free cut |

**Grade**

| | |
|---|---|
| **N** | Soft/Medium: for maximum cut rate |
| **R** | Medium/Hard: for cutting large cross sections; improved stock removal rate |
| **S-V** | Hard: for maximum wheel life |

## Warning!

**The following factors can cause wheel breakage and personal injury:**

- **Excessive speed**
- **Improper mounting**
- **Work improperly clamped**
- **Excessive wheel feed rate**
- **Improper machine conditions**
- **Misuse**

# Cutting Wheels



Notching a steel bar prior to welding.



56013



56076



56273

## Small Type 1 Reinforced Cut-Off Wheels - General purpose cutting applications in toolrooms and machine shops.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 2" x .035" x 1/4" | 30,000 | WA60T | Metal Applications | 100 | 56013* |
| 2" x 1/16" x 1/4" | | A36T | | 50 | 56015 |
| 2" x 1/4" x 3/8" | | A36T | | 25 | 56131 |
| 3" x .035" x 1/4" | 25,000 | WA60T | | 100 | 56061* |
| 3" x .035" x 3/8" | | WA60T | | 100 | 56062* |
| 3" x 1/16" x 1/4" | | A36T | | 100 | 56065 |
| 3" x 1/16" x 1/4" | | A60T | | 100 | 56067 |
| 3" x 1/16" x 3/8" | | A36T | | 100 | 56068 |
| 3" x 1/16" x 3/8" | | A60T | | 100 | 56070 |
| 3" x 1/8" x 1/4" | | A36T | | 50 | 56270 |
| 3" x 1/8" x 3/8" | | A36T | | 50 | 56076 |
| 3" x 1/4" x 3/8" | 23,000 | A36T | | 25 | 56147 |
| 4" x .035" x 1/4" | 19,000 | WA60T | | 50 | 56079* |
| 4" x .035" x 3/8" | | WA60T | | 50 | 56080* |
| 4" x .035" x 5/8" | | WA60T | | 50 | 56271* |
| 4" x 1/16" x 1/4" | | A36T | | 50 | 56083 |
| 4" x 1/16" x 1/4" | | A60T | | 50 | 56085 |
| 4" x 1/16" x 3/8" | | A36T | | 50 | 56086 |
| 4" x 1/16" x 3/8" | | A60T | | 50 | 56088 |
| 4" x 1/8" x 3/8" | | A36T | | 50 | 56099 |
| 4" x 1/16" x 5/8" | | A60T | | 50 | 56272 |
| 4" x 1/4" x 3/8" | | A36T | | 25 | 56163 |
| 4-1/2 x .045" x 7/8" | 13,500 | WA60T | | 50 | 56281* |
| 4-1/2 x 1/16" x 7/8" | | A60T | | 50 | 56103 |
| 5" x .035" x 3/8" | 12,200 | WA60T | | 100 | 56106* |
| 5" x .035" x 5/8" | | WA60T | | 100 | 56108* |
| 5" x 1/16" x 5/8" | | A36T | | 25 | 56115 |
| 5" x 1/16" x 5/8" | | A60T | | 25 | 56117 |
| 5" x 1/16" x 7/8" | | A36T | | 100 | 56118 |

*Contaminant-free.

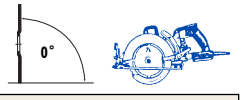
## Type 1 Reinforced Cut-Off Wheels - General purpose toolroom and machine shop use.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x .035" x 1/2" | 10,200 | WA60T | Metal Applications | 25 | 56170* |
| 6" x .035" x 5/8" | | WA60T | | | 56171* |
| 6" x .040" x 7/8" | | WA60T | | | 56282* |
| 6" x .045" x 7/8" | | WA60T | | | 56273* |
| 6" x 1/16" x 5/8" | | A60T | | | 56274 |
| 7" x .035" x 5/8" | 8,740 | WA60T | | 25 | 56183* |
| 7" x .045" x 7/8" | | WA60T | | | 56275* |
| 7" x 1/16" x 5/8" | | A36T | | | 56188 |
| 7" x 1/16" x 1-1/4" | | A60T | | | 56193 |

*Contaminant-free.

## Type 1 Reinforced Cut-Off Wheels - General purpose - With diamond arbor for circular saws.

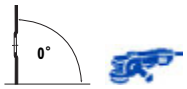



| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7" x 1/8" x DIA. | 8,740 | A24T | Metal Applications | 15 | 56208 |
| 7" x 1/8" x DIA. | 8,740 | C24T | Stone/Concrete | 15 | 56209 |

DIA. = 5/8" arbor with diamond knockout adapter.

## Type 27 Thin Cutting Wheels - General purpose

**For fast, burr-free cutting with less resistance.**




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" x .045" x 7/8" | 13,300 | WA60S | Metal Applications | 25 | 56393* |
| 5" x .045" x 7/8" | 12,200 | WA60S | | 100 | 56392* |
| 6" x .045" x 7/8" | 10,200 | WA60S | | 100 | 56283* |
| 7" x .060" x 7/8" | 8,500 | WA60S | | 25 | 56391* |

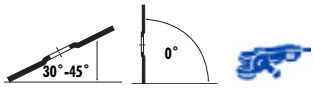
*Contaminant-free.

## Type 27 Cutting Wheels - For general purpose cutting on ferrous metals.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" x 3/32" x 5/8" | 15,200 | A24T | Metal Applications | 25 | 56474 |
| 4-1/2" x 3/32" x 7/8" | 13,300 | A24T | | 25 | 56475 |
| 4-1/2" x 3/32" x 5/8"-11 | | A24T | | 10 | 56385 |
| 5" x 3/32" x 7/8" | 12,200 | A24T | | 25 | 56476 |
| 5" x 3/32" x 5/8"-11 | | A24T | | 10 | 56384 |
| 6" x 3/32" x 7/8" | 10,200 | A24R | | 25 | 56277 |
| 6" x 3/32" x 5/8"-11 | | A24R | | 10 | 56278 |
| 7" x 3/32" x 7/8" | 8,500 | A24R | | 25 | 56383 |
| 7" x 3/32" x 5/8"-11 | | A24R | | 10 | 56477 |

## Type 27 Cutting Wheels - For root pass cutting and light grinding. General purpose light grinding and cutting.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" x 1/8" x 5/8" | 15,200 | A24R | Metal Applications | 25 | 56431 |
| 4-1/2" x 1/8" x 7/8" | 13,300 | A24R | | 25 | 56430 |
| 4-1/2" x 1/8" x 5/8"-11 | | | | 10 | 56429 |
| 5" x 1/8" x 7/8" | 12,200 | A24T | | 25 | 56428 |
| 5" x 1/8" x 5/8"-11 | | | | 10 | 56427 |
| 7" x 1/8" x 7/8" | 8,500 | A24T | | 25 | 56426 |
| 7" x 1/8" x 5/8"-11 | | | | 10 | 56425 |
| 9" x 1/8" x 7/8" | 6,600 | A24T | | 20 | 56424 |
| 9" x 1/8" x 5/8"-11 | | | | 10 | 56423 |

## Type 27 Grinding Wheels - For general purpose rough grinding.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" x 1/4" x 5/8" | 15,200 | A24R | Metal Applications | 25 | 56473 |
| 4-1/2" x 1/4" x 7/8" | 13,300 | A24N | | 25 | 56457 |
| 4-1/2" x 1/4" x 5/8"-11 | | | | 10 | 56455 |
| 4-1/2" x 1/4" x 7/8" | 13,300 | A24R | | 25 | 56464 |
| 4-1/2" x 1/4" x 5/8"-11 | | | | 10 | 56454 |
| 4-1/2" x 1/4" x 7/8" | 13,300 | C24R | Stone/Concrete | 10 | 56483 |
| 4-1/2" x 1/4" x 5/8"-11 | | | | 10 | 56482 |
| 5" x 1/4" x 7/8" | 12,200 | A24R | Metal Applications | 25 | 56466 |
| 5" x 1/4" x 5/8"-11 | | | | 10 | 56449 |
| 6" x 1/4" x 5/8"-11 | 10,200 | A24R | | 10 | 56279 |
| 6" x 1/4" x 7/8" | | | | 25 | 56280 |
| 7" x 1/4" x 7/8" | 8,500 | A24R | | 20 | 56467 |
| 7" x 1/4" x 5/8"-11 | | | | 10 | 56468 |
| 7" x 1/4" x 7/8" | 8,500 | C24R | Stone/Concrete | 10 | 56487 |
| 7" x 1/4" x 5/8"-11 | | | | 10 | 56486 |
| 9" x 1/4" x 7/8" | 6,600 | A24R | Metal Applications | 20 | 56442 |
| 9" x 1/4" x 5/8"-11 | | | | 10 | 56470 |
| 9" x 1/4" x 7/8" | 6,600 | C24R | Stone/Concrete | 20 | 56493 |
| 9" x 1/4" x 5/8"-11 | | | | 10 | 56492 |



Cutting angle iron with a chopsaw.




56283



56430



56464



56468

# Large Type 1 Cutting Wheels & Accessories



56264



56491

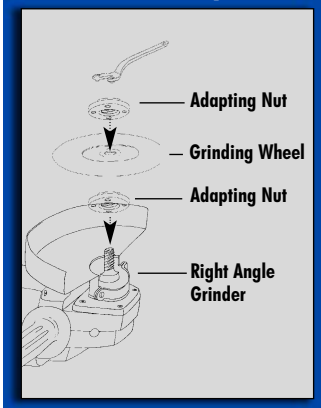


56494



04455

**Right Angle Grinder Adapting Nut Assembly**




## Large Type 1 Reinforced Wheels - General purpose - For stationary machines

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 12" x 1/8" x 1" | 5,100 | C24T | Stone/Concrete | 10 | 56234 |
| 14" x 1/8" x 1" | 4,400 | A30R | Metal Applications | 10 | 56230 |
| 14" x 1/8" x 1" | 4,400 | C20R | Stone/Concrete | 10 | 56246 |

## Large Type 1 Reinforced Wheels - General purpose - For portable gas or electric saws

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 12" x 1/8" x 1" | 6,300 | A24T | Metal Applications | 10 | 56241 |
| 12" x 1/8" x 1" | 6,300 | C24T | Stone/Concrete | 10 | 56242 |
| 12" x 1/8" x 20mm | 6,300 | A24T | Metal Applications | 10 | 56254 |
| 12" x 1/8" x 20mm | 6,300 | C24T | Stone/Concrete | 10 | 56255 |
| 14" x 1/8" x 1" | 5,400 | A24T | Metal Applications | 10 | 56250 |
| 14" x 1/8" x 1" | 5,400 | C24T | Stone/Concrete | 10 | 56251 |
| 14" x 1/8" x 20mm | 5,460 | A24T | Metal Applications | 10 | 56263 |
| 14" x 1/8" x 20mm | 5,460 | C24T | Stone/Concrete | 10 | 56264 |

## Large Type 1 Reinforced Wheels - General purpose - For low horsepower chop saws

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 12" x 3/32" x 1" | 5,100 | A46T | Metal Applications | 10 | 56239 |
| 12" x 3/32" x 1" | 5,100 | A46S | | 10 | 56238 |
| 14" x 3/32" x 1" | 4,400 | A46T | | 10 | 56240 |
| 14" x 3/32" x 1" | 4,400 | A46S | | 10 | 56244 |

## Large Type 1 Reinforced Wheels - General purpose - For walk behind machines

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 14" x 3/16" x 1" | 4,400 | C16T<br>C16R | Stone/Concrete | 10 | 56268<br>56267 |

## Mounting Mandrels - 1/4" Stem. For 1"-3" Type 1 Wheels only

| Arbor Size | Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | .035" to 1/4" | 10 | 56489 |
| 3/8" | .035" to 1/4" | 10 | 56490 |
| 1/4", 3/8"* | .035" to 1/4" | 10 | 56491 |

*Combination pack

## Adapting Nuts - For 4-1/2" & 5" Angle Grinders. Use with Item Numbers 56103 & 56118

| Adapts To | Minimum Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 7/8" to 5/8"-11<br>5/8" to 3/8"-24 | 1/16" | 1 | 56494<br>56484 |

When mounting, adapters must be nested, see illustration on left.

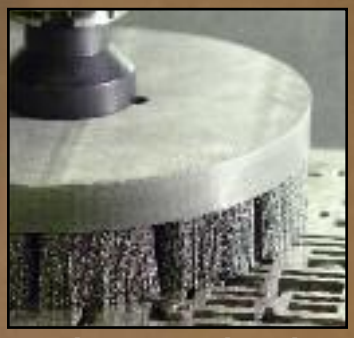
## Plastic Adapters - For Cut-Off Wheels with 1" arbor holes.

| Wheel Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 20mm | 10 | 04455 |


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Form Reorder No.: WC660 Rev. 5-14

# Weiler® Burr-Rx® Brushes

## The Original Ceramic Grain NAF Deburring Tool!



Brush mounts directly onto Shell Mill Holder!

PERFORMANCE COUNTS • USA COMPANY • SATISFACTION GUARANTEED™

**Black Ceramic Filament Cuts 400% Faster!**

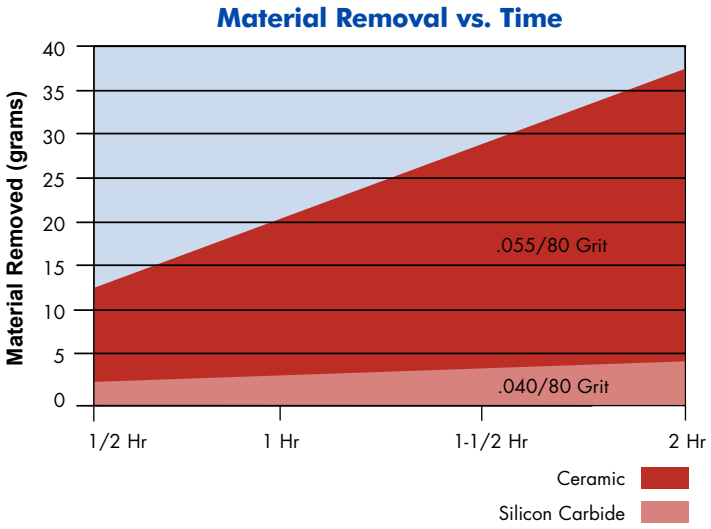
MADE IN U.S.A.

# New Filament Technology

## Black Ceramic Filament Cuts 400% Faster!

The Burr-Rx® brush is the ultimate high aggression, compliant deburring tool. The latest addition to Weiler's Nylox® abrasive filament product line, **Burr-Rx brushes utilize advanced filament technology, resulting in maximum aggression.** The black nylon filaments are co-extruded with high aggression ceramic grains providing cut rates never seen before with abrasive filament brushes!

*As the chart to the right illustrates, the ceramic filament cuts 400% faster than conventional filaments with silicon carbide grain.*




## High Aggression Means Minimum Cycle Time

The extreme aggression of Burr-Rx brushes reduces processing time by allowing the use of high feed rates and short dwell times, resulting in increased throughput and lower deburring costs. In addition, Burr-Rx brushes can remove burrs which were previously impossible to remove with conventional nylon abrasive filament brushes.

The pictures below show Weiler's burr classification system which qualitatively describes burr types produced by common metalworking processes. Burr-Rx brushes are especially well-suited for applications involving Class 3 and Class 4 burrs.

**Class 1**



Microburrs can only be observed using magnification. To the unaided eye, they appear as sharp edges. Grinding operations are a common source of this type of burr.

**Class 2**



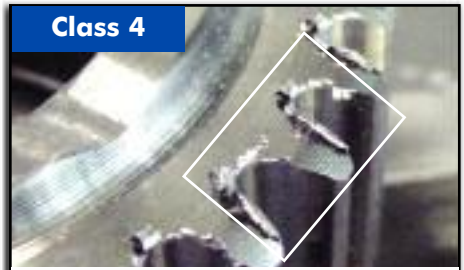
Feather burrs are readily visible without magnification and are characterized by extremely thin roots. They can be removed with a tip of a pencil.

**Class 3**



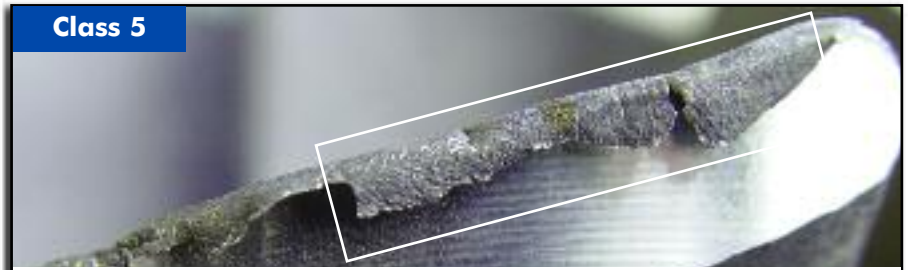
Burrs in this group are well-attached, but relatively small in size. Despite their size, significant mechanical energy must be applied to remove them.

**Class 4**



Like Class 3 burrs, the burrs in this class are well-attached. The primary difference is size and root thickness.

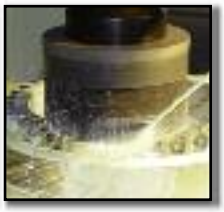
**Class 5**



Class 5 burrs are very large with thick, rigid roots. Burrs in this class are different than conventional burrs because they are comprised of displaced base material which is still fully-attached to the parent part. Brushes can sometimes remove Class 5 burrs, but often a stock removal operation such as grinding or machining is required for complete removal.

## General Operating Guidelines





**Ceramic Cut Rate -** Burr-Rx® brushes are especially well-suited for deburring materials such as inconel, stainless steel and titanium due to the unique cutting characteristics of the ceramic grain. Because they contain this ceramic abrasive, Burr-Rx brushes can also be used in the medical and aerospace industries where conventional silicon carbide brushes are often prohibited.

**Operating Speed -** Burr-Rx abrasive brushes work with a wiping and filing action. They are like a collection of flexible files and work best when operated at speeds that allow fairly deep penetration of the workpiece into the tips of the brush filaments. **The maximum RPM marked on the brush is not the optimum working speed.** Faster speeds do not work as well as slower speeds because the filaments do not maintain contact with an edge. A good rule of thumb is to stay under 3,000 SFPM.

**Coolants -** Burr-Rx brushes can be run dry, without coolants. However, certain deburring conditions, such as high speeds and depths of penetration can create excessive heat buildup, causing the filaments to transfer nylon to the workpiece. If the speed or depth of penetration cannot be changed, coolants are recommended to overcome nylon transfer. The use of coolants will also improve surface finish.

## Wear Compensation for Automated Systems



On dedicated equipment, it is possible to automate wear compensation by using electronic controls to monitor the load on drive motors and adjust the position of the brushing tool to maintain a relatively consistent amount of interference or pressure. Since this is typically not possible with standard CNC machine tools and robots, automatic indexing, probing and manual adjustment are three other possible methods of compensating for tool wear.

**Automatic Indexing -** Most CNC controllers allow tool wear compensation to be accomplished by programming a "macro" - routine to periodically adjust the position of the tool based upon the number of parts produced. Some experimentation may be required to determine the frequency and the amount of adjustment that will result in the most consistent performance and maximum brush life.

**Probing -** If the machining center has the capability to probe the face of the brush, this feature can be used to gauge the true position of the filament tips. Adjustments to the brush position can then be made to maintain a consistent amount of interference between the tool and the part.

**Manual -** If the other methods cannot possibly be used, machine operators can adjust the brush position based on either statistical process control data or visual inspection of completed parts.

## Wheel Brush Operating Parameters

### Wheel Brush Penetration

When using nylon abrasive wheel brushes, optimum aggression is obtained and wheel life maximized when the workpiece penetrates into the face of the brush approximately 10% of the trim length. The sides of the Burr-Rx® filament do the work. To achieve a maximum edge radius and complete burr removal, parts should be penetrated into the brush face at a low RPM following the recommendations listed below.



Low density/long trim wheel brushes are best suited for operations requiring a high degree of conformability.



High density/short trim wheel brushes are ideal for users who need minimum cycle times and maximum brush life.

### Parameter Recommendations

| Brush Diameter | Wheel Brush Spindle Speed (RPM) | *Wheel Brush Depth of Penetration |
|---|---|---|
| 2" | 3,450 - 5,000 | 10% of trim length |
| 3" - 4" | 1,750 - 3,450 | 10% of trim length |
| 6" | 1,350 - 1,750 | 10% of trim length |
| 8" | 1,150 - 1,350 | 10% of trim length |
| 10" | 950 - 1,150 | 10% of trim length |
| 12" | 750 - 950 | 10% of trim length |
| 14" | 650 - 850 | 10% of trim length |

*Call Weiler's Application Hotline at 888-299-2777 if this depth of penetration is not aggressive enough.

| Material | Feed Rate |
|---|---|
| Non-Ferrous | 80 in./min. |
| Cast Iron | 60 in./min. |
| Mild Steel & Ductile Iron | 50 in./min. |
| Alloy & Stainless Steels | 30 in./min. |
| Titanium & High Nickel Alloys | 30 in./min. |

## Filament Density vs. Trim Length



Proper selection of brush density and trim length is critical in optimizing the output of brush operation. High density/short trim brushes offer better cycle times and longer brush life, but are not effective in operations requiring a high degree of brush conformability. The picture above highlights the brush density differences.



86131



83394



31110

### Burr-Rx Crimped Filament Wheels - Composite Metal Hub* - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness At Face Plates | Max. RPM | Item Number |
|---|---|---|---|---|---|---|---|
| 6" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2" | 3/4" | 1" | 15/16" | 4,500 | 86123<br>86181<br>86124<br>86120 |
| 8" | .026/120<br>.043/120<br>.055/80 | 2" | 7/8" | 2" | 15/16" | 4,500 | 86126<br>86127<br>86128 |
| 10" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1-1/8" | 2" | 7/8" | 1,800 | 86129<br>86182<br>86130<br>86131 |
| 12" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 86132<br>86133<br>86134 |
| 14" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1" | 1-3/4" | 3/4" | 1,800 | 86135<br>86108<br>86136<br>86137 |
| 14" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 4" | 7/8" | 1,800 | 86138<br>86139<br>86140 |

*Patent Pending
★ 1/2" x 1/4" Double Keyway

Arbor hole adapters are available, contact Customer Service.

### Burr-Rx Crimped Filament Wheels - Composite Hub - Round Black Ceramic Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Item Number |
|---|---|---|---|---|---|---|
| 8" x 3-1/4" | .043/120 | 1" | 1-5/16" | 13/16" | 1,800 | 83394 |
| 14" x 7-1/4" | .026/120<br>.043/120<br>.035/80<br>.055/80 | 1" | 2-3/4" | 15/16" | 1,800 | 84926<br>84941<br>84925<br>83405 |

### Burr-Rx Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Item Number |
|---|---|---|---|---|---|---|---|
| 3" | .026/120<br>.035/80<br>.043/120 | 1/2"-3/8" | 3/8" | 1/2" | 7/16" | 6,000 | 86164<br>31102<br>31101 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 9/16" | 1/2" | 7/16" | 6,000 | 31240*<br>31241*<br>31242*<br>31246* |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2"-3/8" | 1/2" | 7/8" | 7/16" | 6,000 | 86165<br>31103<br>31100<br>31105 |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 5/8" | 1" | 7/16" | 6,000 | 31110*<br>31270*<br>31280*<br>31290* |
| 6" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 5/8" | 7/8" | 11/16" | 4,500 | 31134<br>31135<br>31136<br>31137 |

*Heavy-Duty

## Burr-Rx Small Diameter Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Max. RPM | Item Number |
|---|---|---|---|---|---|---|
| 1-1/4" | .026/120 | 1/4" | 5/16" | 5/16" | 10,000 | 17551 |
| 1-1/2" | .026/120 | 1/2" | 3/8" | 1/4" | 10,000 | 17541 |
| 2" | .026/120<br>.035/80<br>.055/80 | 1/2" | 3/8" | 1/2" | 10,000 | 17548<br>17555<br>17542 |
| 2-1/2" | .026/120<br>.035/80 | 5/8" | 1/2" | 11/16" | 10,000 | 17556<br>17557 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2" | 1/2" | 1" | 10,000 | 17565<br>17567<br>17568<br>16000 |

Other diameters and grit sizes available upon request.



Robotic deburring applications using Burr-Rx brushes take advantage of the aggression and compliance of the product.

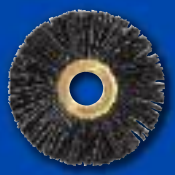
## Bore-Rx™ Radial Brushing Tools

Designed for automated applications in CNC machining centers and dedicated machines, these brushes can be used to easily remove burrs from external features as well as internal edges and crosshole intersections on larger parts. Since these wheels eliminate off-hand deburring, they improve part-to-part consistency and reduce direct labor content.

| Diameter | Filament Dia./Grit | Face Width | Stem Diameter | Overall Length | Max. RPM | Item Number |
|---|---|---|---|---|---|---|
| 7/8" | .026"/120 | 3/4" | 3/8" | 4-3/4" | 8,000 | 17206 |
| 1" | .026"/120 | 3/4" | 3/8" | 4-3/4" | 8,000 | 17208 |
| 1-1/4" | .026"/120 | 3/4" | 3/8" | 4-3/4" | 8,000 | 17210 |
| 1-1/2" | .026"/120 | 1" | 3/8" | 5" | 8,000 | 17212 |
| 2" | .026"/120 | 1" | 3/8" | 4-1/4" | 6,000 | 17215 |
| 2-1/2" | .055"/80 | 1" | 3/8" | 4-3/4" | 6,000 | 17217 |
| 3" | .026/120<br>.043/120<br>.055/80 | 1" | 3/8" | 5-1/4" | 6,000 | 86150<br>86151<br>86152 |
| 4" | .026/120<br>.043/120<br>.055/80 | 1" | 3/8" | 6-1/4" | 6,000 | 86154<br>86155<br>86156 |

Stems feature a 2" long flat for use in end mill holders or 3/8" collets.

**NOTE:** See our *Solutions Resource Guide* WC670 or call our Application Hotline at 888-299-APPS (2777) for recommended operating parameters.



16000



86155

## Burr-Rx Tube Brushes - 1/4" Cadmium Plated Stems - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Length of Brush Part | Stem Diameter | Overall Length | Item Number |
|---|---|---|---|---|---|
| 3/8" | .026/120 | 1" | 1/4" | 3-1/2" | 21758 |
| 1/2" | .026/120 | 1" | 1/4" | 3-1/2" | 21759 |
| 5/8" | .026/120 | 1" | 1/4" | 3-1/2" | 21761 |
| 3/4" | .026/120 | 1" | 1/4" | 3-1/2" | 21762 |
| 7/8" | .026/120 | 1" | 1/4" | 3-1/2" | 21763 |
| 1" | .026/120 | 1" | 1/4" | 3-1/2" | 21764 |
| 1-1/4" | .026/120 | 1" | 1/4" | 3-1/2" | 21765 |

**NOTE:** See our *Solutions Resource Guide* WC670 or call our Application Hotline at 888-299-APPS (2777) for recommended operating parameters.



21759

# Deburring Flat Parts and Milled Surfaces With Burr-Rx® Disc Brushes

## New Product Features

### No Drive Arbor Required

Weiler's 4" diameter and larger Burr-Rx® high aggression disc brushes can be mounted in CNC machines without a separate drive arbor. All of the brushes are designed with a 1-1/4" arbor hole and 1/2" wide keyways which should be compatible with most 3" diameter shell mill holders.





### Precision Brush Face

All of the Burr-Rx disc brushes are manufactured using a new process which results in a very consistent, flat brush face in comparison to traditional construction which utilizes a molded backing. The high dimensional precision of these new tools means that the brushes are suitable for the most critical applications and perform more consistently from first part to last.

## Operating Parameters



### Disc Brush Penetration

When using Burr-Rx disc brushes, a good starting point for a depth of penetration between the brush face and work surface is 0.075". This depth of interference produces the best compromise between aggression and brush life.

### Feed Rate

Feed rate is determined by the amount of deburring, edge radiusing or surface finishing required, and the type of material that is being processed. It is generally application specific. The feed rate starting point of Burr-Rx disc brushes on various materials is listed below. This feed rate should be adjusted to achieve optimum operating conditions. On soft materials and parts with small burrs, much higher feed rates can be achieved. Slower feeds result in a more aggressive brushing action.

## Parameter Recommendations

| Brush Diameter | Disc Brush Spindle Speed (RPM) | **Disc Brush Depth of Penetration |
|---|---|---|
| 2" | 1750 - 2000 | .050" - .125" |
| 3" - 4" | 1500 - 1750 | .050" - .125" |
| 6" | 1250 - 1500 | .050" - .125" |
| 8" | 800 - 1000 | .050" - .125" |
| 10" | 700 - 800 | .050" - .125" |
| 12" | N/A | .050" - .125" |
| 14" | N/A | .050" - .125" |

| Material | Feed Rate |
|---|---|
| Non-Ferrous | 80 in./min. |
| Cast Iron | 60 in./min. |
| Mild Steel & Ductile Iron | 50 in./min. |
| Alloy & Stainless Steels | 30 in./min. |
| Titanium & High Nickel Alloys | 30 in./min. |

Call Weiler's Application Hotline at 888-299-2777 if the 0.125" depth of penetration is not aggressive enough.

**Set depth of penetration when the brush is rotating at the operational speed. Use 0.075" depth of penetration as a starting point for all disc brush applications.

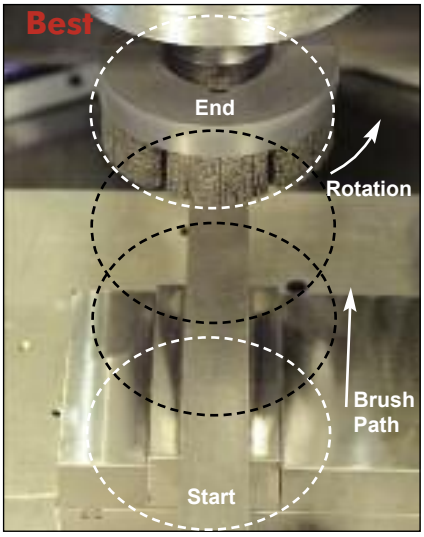
## Operating Parameters

### Tool Path

The ideal tool path for a Burr-Rx® Disc brush is very similar to the path of the face mill that produced the burr. However, three differences exist:

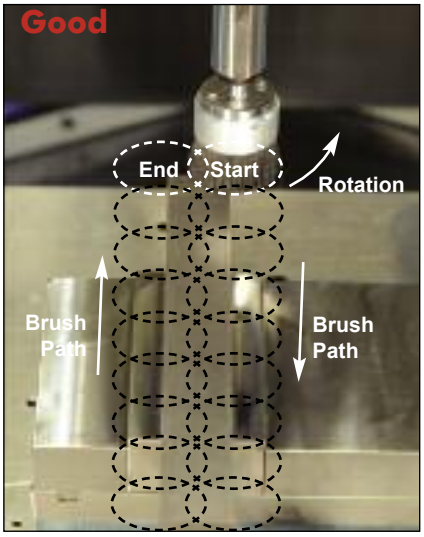
- The rotational direction of the brush should be opposite of the cutting tool that created the burr.
- The length of the path must be longer than the part. Unlike a cutter path that can stop when the leading edge of the cutter reaches the end of the part, the tool path of a brush should continue until the trailing edge of the brush reaches the end of the part.
- The centerline of the brush may need to be off-set from the center of the part in order to maximize the number of filaments that strike the part at a perpendicular angle. This is especially important when the diameter of the brush is similar to the width of the part.

**A** The part is deburred in the shortest cycle time with the lowest consumable cost-per-part.



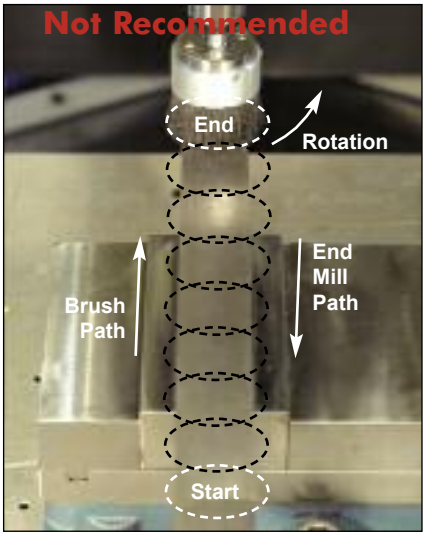

If a large diameter brush can be used, the centerline of the brush should be positioned on the center of the part. Ideally, the brush should be 3-4" wider than the part.

**B** The part is deburred, but requires a longer cycle time. When a large brush will not fit in the tool changer, this method is recommended.




If a small diameter brush must be used, the centerline of the brush should be positioned on the edge of the part. This maximizes aggression by increasing the amount of perpendicular contact between the brush filaments and the burred edge.

**C** Produces less deburring than A & B.




Positioning a small diameter brush with its centerline on the center of the part is not recommended. This configuration will not allow perpendicular contact of the filaments against the burred edge.



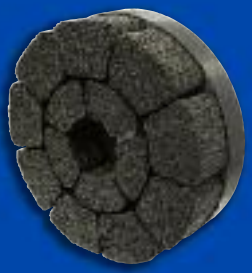
### Programming Warning

Unlike conventional nylon abrasive filament brushes, **Burr-Rx brushes can change part dimensions if they are allowed to dwell in one area for an excessive time period.** To prevent this, the depth of penetration and feed rate guidelines in this brochure should be carefully followed. In addition, test runs using low-aggression operating parameters are recommended.

# Burr-Rx® Disc and End Brushes



86112



86143



85733



89029



89033



86104

## Burr-Rx Shell Mill Holder Disc Brushes - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Arbor Hole | Trim Length | Max. RPM | Item Number |
|---|---|---|---|---|---|
| **Round Filament** | | | | | |
| 4" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86112<br>86113<br>86114* |
| 6" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86115<br>86116<br>86117* |
| 8" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86141<br>86142<br>86143* |
| 10" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86125<br>86121<br>86122* |
| **Rectangular Filament** | | | | | |
| 4" | 80 | 1-1/4" | 1-1/2" | 1,800 | 86167* |
| 6" | 80 | 1-1/4" | 1-1/2" | 1,800 | 86198* |
| 8" | 80 | 1-1/4" | 1-1/2" | 1,800 | 86199* |

* Maximum Density

## Burr-Rx Mini Disc Brushes - Maximum Density - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Trim Length | Max. RPM | Item Number |
|---|---|---|---|---|
| **Round Filament** | | | | |
| 2" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 86106<br>85738<br>86107<br>85733 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 86109<br>86013<br>86110<br>86111 |
| **Rectangular Filament** | | | | |
| 2" | 80 | 1-1/4" | 4,500 | 85736 |
| 3" | 80 | 1-1/4" | 4,500 | 86014 |

## Mini Disc Brush Drive Arbors - Supplied with set screw and wrench for mounting

| Stem Diameter | Stem Length | Max. RPM | Item Number |
|---|---|---|---|
| 1/2" | 1-3/4" | 6,000 | 89029 |
| 1/2" | 1-3/4" | 6,000 | 89033* |

*Recommended for operations in which brush rotation alternates between forward and reverse.

## End Brushes (Banded)

| Diameter | Filament Diameter/Grit | Trim Length (From Bands) | Stem Size | Max. RPM | Item Number |
|---|---|---|---|---|---|
| 3/8" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86098<br>86099 |
| 1/2" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86100<br>86101 |
| 3/4" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86102<br>86103 |
| 1" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86104<br>86105 |

**For Application Assistance Call 888-299-APPS (2777)**


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# Weiler® In-Machine CNC Deburring of Flat Surfaces









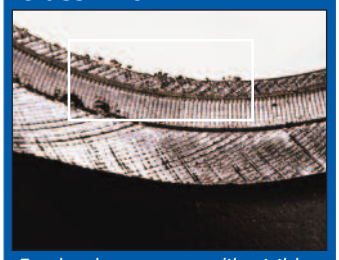
- Direct Labor Reduction
- Improved Part Quality and Consistency
- Part Dimensions and Machined Finishes Remain Unchanged
- Made in the U.S.A

PERFORMANCE COUNTS • USA COMPANY • SATISFACTION GUARANTEED ™

**Reduce Direct Labor While Improving Quality with Nylox® Disc Brushes!**

## Burr Classification

### Class Two



*Feather burrs are readily visible without magnification and are characterized by extremely thin roots. They can be removed with a tip of a pencil.*

### Class Three



*Burrs in this group are well-attached, but relatively small in size. Despite their size, significant mechanical energy must be applied to remove them.*

### Class Four



*Like Class Three burrs, the burrs in this class are well-attached. The primary difference is size and root thickness.*

MADE IN U.S.A.

## Introduction

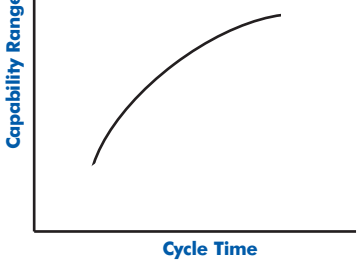
After milling, burrs must frequently be removed from part edges in order to ensure proper part functionality. Among the various means of deburring flat parts, Nylox® Disc brushes are one of the most attractive. Disc brushes are easily adapted to automated equipment such as CNC machining centers and facilitate operational improvements including direct labor reduction and improved part quality/consistency. Additionally, they will not change part dimensions or deteriorate machined finishes. They are especially well-suited for deburring complicated parts on which all of the burrs lie in a single plane.

The most critical part of creating a consistent automated deburring operation is burr size control and minimization. Since burr size varies with cutting tool life, it is imperative that a worst case burr condition be defined and that the deburring process be established to address this condition. The photos on the left illustrate common burr conditions that are produced by milling and can be removed with Nylox disc brushes.

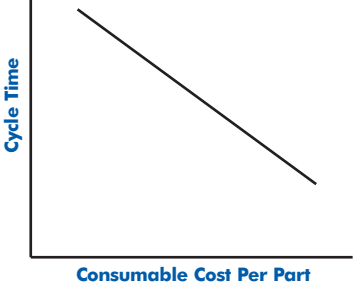
## Determining Operational Priorities

What is the most important attribute of your deburring operation: Shortest cycle time? Minimum consumable cost per part? Greatest production stability? In a perfect world, it would be possible to have all of these things. In reality, there are tradeoffs between them. As a result, the design of the deburring process should be based on a clear ranking of priorities. The following graphs illustrate the tradeoffs between cycle time, consumable cost, and capability range (the range of burr sizes which can be removed by a specific brush and operating parameters).

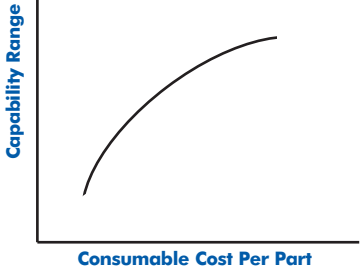
**A** *Capability Range can be expanded by extending cycle time. Reducing the feed rate of the brush will generate this result.*




**B** *Cycle time can be reduced by increasing Consumable Cost Per Part. This tradeoff can be accomplished by simultaneously increasing the depth of interference and the feed rate.*

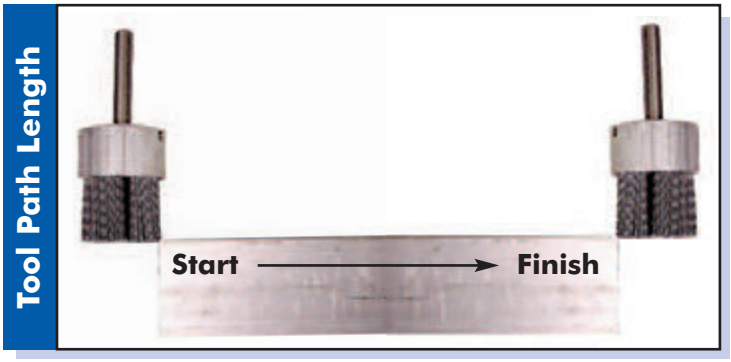



**C** *Capability Range can be expanded by increasing Consumable Cost Per Part. This can be achieved by increasing depth of interference and holding the feed rate constant.*



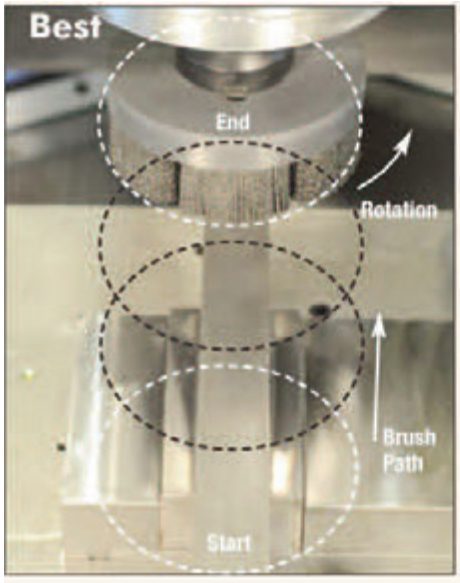
## Tool Path Selection

**The ideal tool path for a Nylox Disc brush is very similar to the path of the face mill which produced the burr. However three significant differences exist:**



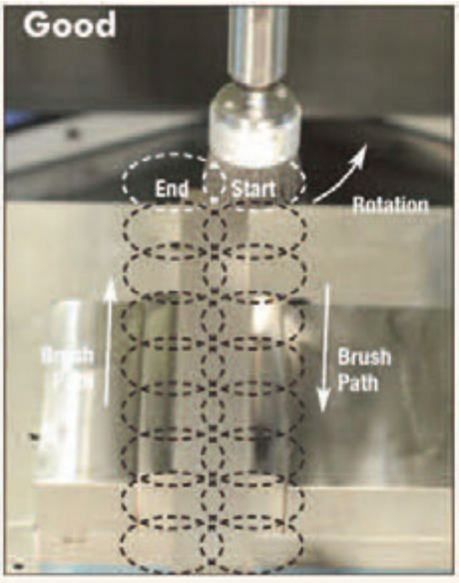

- The rotation direction of the brush should be opposite of the cutting tool that created the burr.
- The length of the path must be longer than the part. Unlike a cutter path that can stop when the leading edge of the cutter reaches the end of the part, the tool path of a brush should continue until the trailing edge of the brush reaches the end of the part. This concept is illustrated in the picture to the right.
- The centerline of the brush may need to be off-set from the center of the part in order to maximize the number of filaments that strike the part at a perpendicular angle. This is especially important when the diameter of the brush is similar to the width of the part. This important point is illustrated by the pictures below.

**A The part is deburred in the shortest cycle time with the lowest consumable cost per part.**



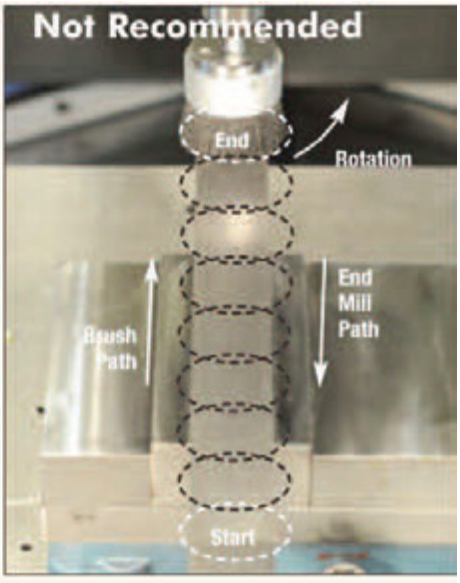

*If a large diameter brush can be used, the centerline of the brush should be positioned on the center of the part. Ideally, the brush should be 3-4" wider than the part.*

**B The part is deburred, but requires a longer cycle time. When a large brush will not fit in the tool changer, this method is recommended.**




*If a small diameter brush must be used, the centerline of the brush should be positioned on the edge of the part. This maximizes aggression by increasing the amount of perpendicular contact between the brush filaments and the burred edge.*

**C Produces less deburring than A & B.**




*Positioning a small diameter brush with its centerline on the center of the part is not recommended. This configuration will not allow perpendicular contact of the filaments against the burred edge.*

# Technical Information

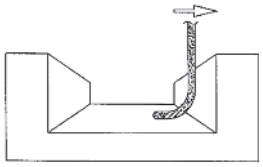
## Wear Compensation - Three techniques are widely used to compensate for brush wear.

### Automatic Indexing
Depending on the capability of the machining center, it may be possible to index the brush in the z-direction after a predetermined number of parts. When available, this simple technique maximizes consistency.

### Probing
If the machining center has the capability to probe the face of the brush, this feature can be used to maintain a constant depth of interference.

### Manual
If the other two methods are not possible, operators can adjust depth of interference based on statistical process control data.

## Operating Guidelines - The filaments in Nylox Disc brushes work like flexible files. They work best when operated at spindle speeds that allow fairly deep penetration of the work-piece into the brush filaments. This means higher spindle speeds do not usually work as well as lower spindle speeds. Surface speeds should always be kept below 3500 surface feet per minute.



The following table contains recommended starting points for disc brushes.

**NOTE:**
**For a detailed product offering, request our Solutions Resource Guide #WC670**

| Brush Diameter | Disc Brush Spindle Speed (RPM) | * Disc Brush Depth of Penetration | ** Steel/Harder Metals Feed Rate | **Aluminum Feed Rate |
|---|---|---|---|---|
| 1-3/4" - 2" | 1750 - 2000 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 3" - 4" | 1500 - 1750 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 5" - 6" | 1250 - 1500 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 8" | 800 - 1000 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 10" | 700 - 800 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 12" | 600 - 700 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 14" | 500 - 600 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |

* *Set depth of penetration when the brush is rotating at the operational speed. Use 0.100" depth of penetration as a starting point for all disc brush applications.*

** *Feed rate is determined by the amount of deburring, edge radiusing or surface finishing required, and the type of material that is being processed. It is generally application specific. Slower feeds result in a more aggressive brushing action.*

### Need More Aggression?

**Increasing spindle speed does not result in a more aggressive action. If more aggression is required, the following steps can be used to achieve the desired results:**

- **Reduce RPM and increase depth of penetration**
- **Use rectangular filaments**
- **Use a brush with a shorter trim length**
- **Increase brush diameter**
- **Reduce the feed rate**
- **Increase the filament diameter and the grit size**
- **Use a Burr-Rx® Disc Brush featured in Catalog #WC670**

### Coolants:

**When available, the use of coolant is recommended. By reducing heat build-up and improving surface finish, coolants enhance the performance of Nylox brushes.**

Weiler® Performance Counts

**For Application Assistance Call: (888) 299-APPS (2777)**
**or complete our online Application Assistance form at: www.weilercorp.com**


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Partners in: Welding & Fabrication / Industrial Production / Maintenance, Repair & Operations



WEILER



# THE CLEAR PATH TO SUCCESS

## ... BEGINS WITH A PARTNERSHIP.

People who take work *seriously* partner with Weiler. Today — and for more than a century. Weiler works collaboratively to help solve our customers' challenges. **Because it isn't enough to meet your expectations — we're driven to exceed them.**

To develop the products you need, we develop an understanding of your needs. Weiler products help you work better. Faster. Safer. Because that's how Weiler products work, too.

Weiler shares your goals of growth and profitability. For both, you need the right tools for the job. We don't just supply those products — we work with you to create solutions. Because that's what you deserve from a partner.

**Weiler. Your partner in success.**










*"In our shop, people have a choice of brushes. Everyone just reaches for Weiler's first."*








## WELDING & FABRICATION

Time is money. The more time spent building a product, the more it costs. And every step adds time. Grinding. Cutting. Cleaning. Finishing.

You want solutions to get the job *done*. Done right — but done *fast*.

**Weiler hears you.**

Before, during and after the weld, we have you covered. Superior performance means maximum aggression and long life. Saving more time. For more productivity. And more profit. **That's the Weiler difference.**






***"They've earned their good reputation in the oil and gas industry."***









***"Adding Nylox® brushes to our CNC mill has saved tons of time in deburring — and also provides a superior-looking finished product."***

## INDUSTRIAL PRODUCTION

There may be hundreds of differences between your industrial production operation and a competitor's. The ones that matter to you are far fewer.

Cost. Quality. Delivery.

Weiler helps sharpen your competitive edge. Like every production operation is different, so is every production challenge. One solution does not fit all. Weiler experts can examine your specific deburring and cleaning challenges and recommend customized solutions—solutions designed to optimize your operation.

Those solutions can reduce costs. Improve quality. Shorten delivery. And make your competition … less competitive.

**Don't compromise. Optimize. With Weiler.**

# PRODUCTION. SOLUTION.

800.835.9999 / weilercorp.com



# WHAT YOU NEED.
# WHEN YOU NEED IT.

*"I consider Weiler to be a long-term partner. Their history of meeting our specific application needs has been great."*



*"The support team and distributors are fantastic. I'm always able to get whatever I need in a timely fashion."*



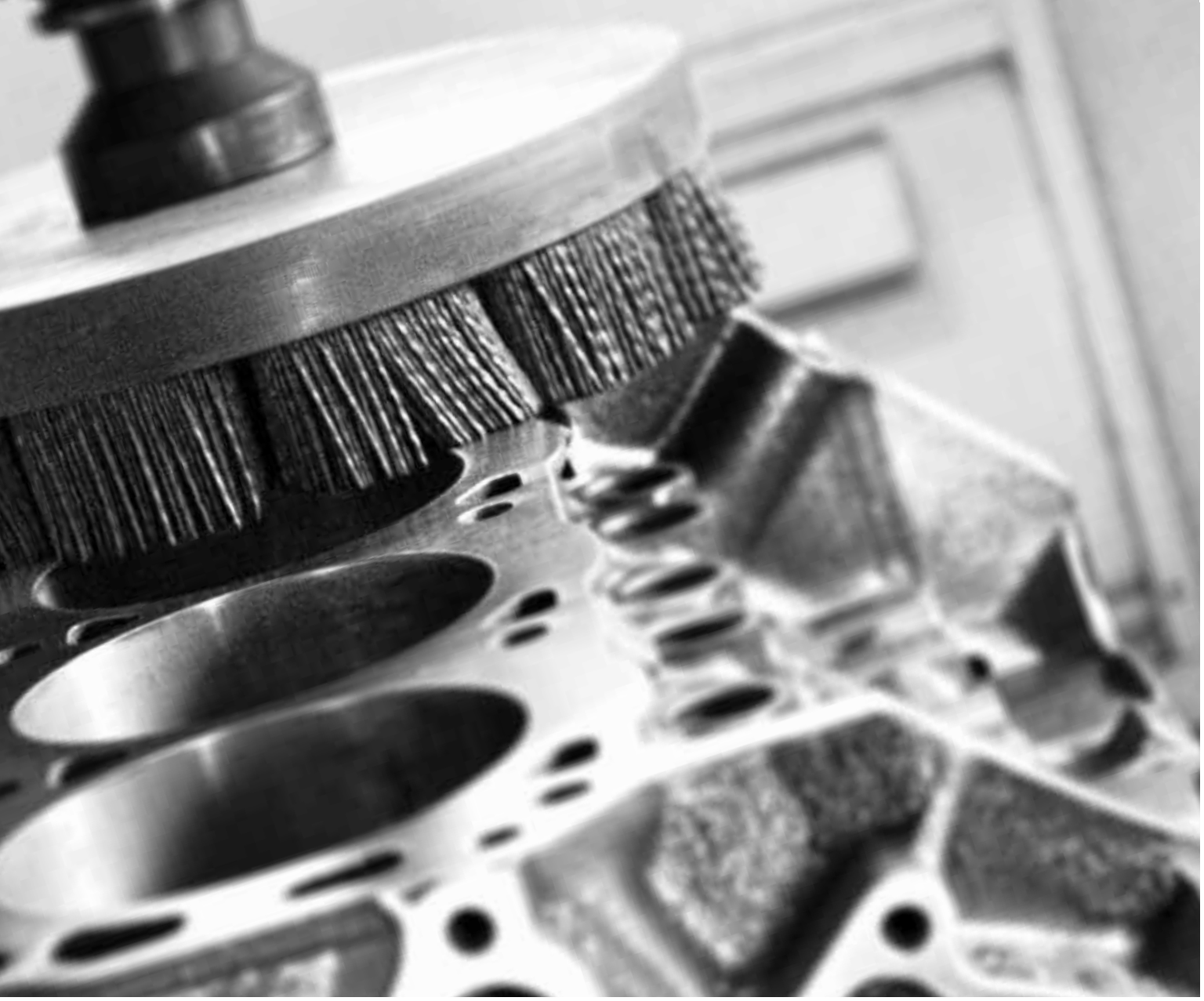
## MAINTENANCE, REPAIR & OPERATIONS

The facility doesn't run itself. In fact, keeping things going is more than a full-time job. So you depend on MRO supplies to be ready at a moment's notice — if not before.

Weiler has you covered. We know that when certain products are out of stock, certain activities come to a stop. You aren't going to let that happen on your watch — and neither are we.

No matter where you need them. No matter what they are. If they're Weiler products, they're only a click or a phone call away.

**You keep the shop running — Weiler stands ready.**



Partners in: Welding & Fabrication / Industrial Production / Maintenance, Repair & Operations

Every day, all over the world, businesses find clearer paths to success using Weiler solutions. Together, we can evaluate your operation, identify opportunities for improvement … and find *your* clear path to success. **Weiler. Your partner in success.**

Weiler Corporation
One Weiler Drive
Cresco, PA 18326
USA

**800.835.9999 / weilercorp.com**

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# FLAP DISC FIELD SELECTION GUIDE

MADE IN USA

## Grind & Finish in one step.

There's no need to switch from a grinding wheel to a resin fiber disc, **saving time and money.**

**Select the right flap disc in 3 easy steps.**




## STEP 1 — APPLICATION & MATERIAL

PREMIUM LINE ◀ ▶ VALUE LINE

| | SABER TOOTH (CA) | BIG CAT (ZA) | TIGER X (CA & ZA) | TIGER ALUMINUM BACK (ZA) | TRIMMABLE (ZA) | BOBCAT (ZA) | TIGER PAW (ZA) | VORTEC PRO (ZA) |
|---|---|---|---|---|---|---|---|---|
| **APPLICATION** | | | | | | | | |
| Flat Surface Grinding | ★★★ | | ★★★ | | | | | ★ |
| Light Pressure / Blending | ★★★ | ★★★ HD | ★★★ | | ★★ | | ★★ | ★ |
| Weld Grinding / Blending | ★★★ | ★★★ HD | ★★★ | | ★★ | | ★★★ | ★ |
| Heavy Stock Removal | ★★★ | | ★★ | | | | ★★★ | ★ |
| Edge Grinding | ★★ | | | | | | ★★★ | |
| Pipeline | | | | ★★★ | | | | |
| Fillet Grinding | ★★★ TRIM | | | | ★★★ | | | |
| Irregular Surface | ★★★ HD | ★★★ HD | | | | | ★★ HD | ★ HD |
| Hard To Reach | | | | | | ★★★ | | |
| **MATERIAL** | | | | | | | | |
| Carbon Steel | ★★ | ★★★ | ★★★ | ★★★ | ★★★ | ★★★ | ★★★ | ★★ |
| Stainless Steel | ★★★ | | ★★ | | | ★★ | ★★ | ★ |
| Aluminum / Non-Ferrous | ★★★ | | | | | | | |
| Armored Steel / Titanium / Exotic | ★★★ | | | | | | | |
| Cast Iron | ★★★ | | ★★ | | | | ★★ | |

## STEP 2 — STYLE

### Angled Style (Type 29)




Maximum aggression for fast stock removal.
Used on both flat surface and edge work.
The angle provides greater surface contact for stock removal on flat surfaces.

### Flat Style (Type 27)



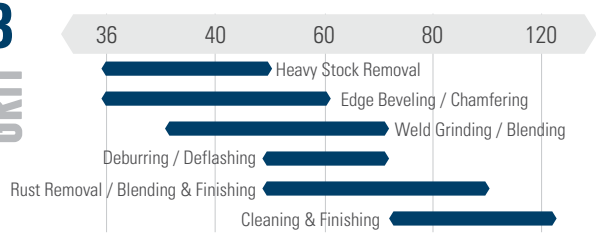

Smooth grinding, blending and finishing.
Used primarily on flat surfaces and slight contours.

### High Density (Type 27)



Maximum conformability and life.
Provides smooth grinding, blending and finishing on flat and irregular surfaces.
Larger flaps ensure more contact and extend life.

## STEP 3 — GRIT



# FLAP DISC FIELD SELECTION GUIDE

MADE IN USA

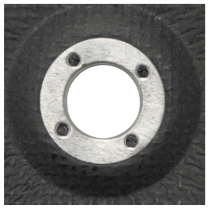
## DISC SIZE

| | 2" | 3" | 4" | 4.5" | 5" | 6" | 7" |
|---|---|---|---|---|---|---|---|
| SABER TOOTH | | | | ✔ | | | ✔ |
| BIG CAT | | | | ✔ | | | ✔ |
| TIGER X | | | | ✔ | ✔ | | ✔ |
| TIGER | | | ✔ | | | ✔ | |
| TIGER ALUMINUM BACK | | | ✔ | ✔ | ✔ | | ✔ |
| TIGER TRIMMABLE | | | | ✔ | ✔ | | |
| BOBCAT | ✔ | ✔ | | | | | |
| TIGER PAW | | | ✔ | ✔ | ✔ | | ✔ |
| VORTEC PRO | | | ✔ | ✔ | ✔ | | ✔ |

KEY: PREMIUM LINE  VALUE LINE

## BACKING

### Phenolic



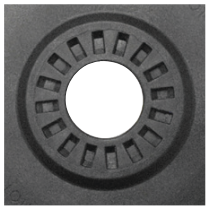
Prevents backing from scratching the workpiece.

### Aluminum



Rigid support for maximum aggression; recyclable.

### Composite*



Trimmable, non-marking backing; allows access to hard-to-reach areas.

*BobCat™ Discs are not Trimmable.

## GRAIN

### Aluminum Oxide (AO)



- Single crystal
- Durable for short term grinding
- Hard
- Inexpensive

### Zirconia Alumina (ZA)



- Self-sharpening multi crystals
- Holds up under extreme pressure
- Self-sharpening
- Sharper, faster cut

### Ceramic Alumina (CA)



- Self-sharpening multi crystals with predetermined fracture points
- Self-sharpening
- Maintains cut-rate for 75% of life

### X3 Technology

- Proprietary mix of Ceramic and Zirconia Alumina
- Triple split grain anchoring system
- Dual flap design
- Grinds faster AND lasts longer

## ARBORS

### 5/8" & 7/8" Arbor

- Cost-effective
- Requires adapting nuts



Mounting Flap Discs with 5/8" & 7/8" Arbors







### 5/8" - 11 Nut

- Quick change over
- Eliminates cross-threading experienced with plastic backs
- Metal nut eliminates the disc from sticking to the grinder due to heat build up






WEILER

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# Weiler® Maintenance

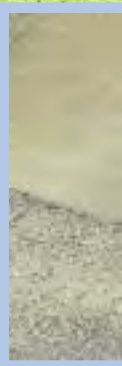














New! Green Works™ Maintenance Products
*Environmentally-friendly!*

New! Pro-Flex™ Sweeps
*Ships complete with handle, ready to assemble - no tools!*

- Floor, Garage and Street Brushes
- Handles
- Upright and Whisk Brooms
- Dusters and Dust Pans
- Squeegees & Window Brushes
- Vehicle Care Products
- Scrub & Utility Brushes
- Mops & Accessories
- Masonry & Applicator Brushes
- Scratch Brushes
- Flue Brushes
- Tube Fitting Brushes
- Paint Brushes, Rollers & Accessories

**Knowledgeable and Responsive Customer Service Team:**
**800-835-9999**

**Application Engineering Support:**
**888-299-APPS (2777)**

**Interactive Website:**
**www.weilercorp.com**









# Maintenance Product Technical Information

## Maintenance Brush Terminology and Features

**Block:** Fill material is set into this part of the sweep.

**Synthetic Foam Block:**
- Made with a synthetic cellular core surrounded by a solid skin.
- Will not crack, split, warp or house contaminating bacteria.
- Water, solvent and mild acid resistant
- Lighter weight than hardwood blocks

**Lacquered Hardwood Block:**
- Made of natural, kiln-dried hardwood
- Resists moisture
- Helps prevent cracking, increasing brush life.

**Dense Fill:**
- Set into the block and serves as the actual working part of the brush.
- More efficient sweeping
- Longer brush life

**Reorder Number:**
- Shown on block

**Two Handle Holes:**
- Allows user to change sweeping direction to prevent the fill material from setting in one direction. Periodically changing sweeping direction increases the life of the brush.

**Staggered Hole Pattern:**
- Prevents gaps in the fill material so brush sweeps up all the dirt in its path.



**Flagged Tips:**
- Each synthetic filament end is mechanically split, forming multiple tips which "pick up" fine dust and dirt particles.
- Horsehair has naturally tapered or flagged tips.

**Solid Brush Face with Flared Ends:**
- The tufts of fill material on each end of a contractor, floor, garage or street brush are flared outward.
- Flared ends allow the brushing material to get into corners without marking or scraping the wall with the block.
- Prevents a gap in the middle of the brush.

**Center / Border Fill**



**Center**
Loosens and moves heavy dirt

**Border (Casing)**
Moves fine dust and dirt

## Care of Floor Brushes

**Storage -** Floor brushes should be hung when not in use so no weight is against the fill material. This will help keep the shape and prolong the life of the brush.

**Handles -** The handle should be periodically re-positioned from one staff hole to the other to prevent fill material from setting in one position. The use of a brace will help prevent handle breakage. Perma-Flex™ (#44301) handles are guaranteed to outlast the life of the brush.

**Blocks -** Avoid knocking a wood block against the floor to remove imbedded material, as this will damage the end of the block.

**Cleaning -** Synthetic filled brushes can be cleaned with detergent and water. Fiber filled brushes should be combed to remove dirt and other foreign material. Dip coarse natural fiber brushes in water to help prevent breakage due to dry fiber.

## Product Selection

### Floor Brush Selection Guide

| Surface Type | Debris | Recommended Brush |
|---|---|---|
| Tile, linoleum, highly polished | Fine dust | #42001 black horsehair |
| Smooth wood | Fine to medium dirt | #42041 flagged silver polystyrene |
| Smooth concrete | Fine to medium dirt | #42035 black polypropylene |
| Uneven or rough floors, heavy traffic areas | Medium to heavy dirt and debris | #42007 black tampico |
| Rough concrete, asphalt | Heavy, caked dirt, grease, litter | #42134 black tampico - inner row of steel wire<br>#42023 palmyra |

# Maintenance Product Technical Information

**Weiler Industrial Grade Products -** Engineered and manufactured to maximize performance and minimize operating costs in all cleaning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost of use and most consistent performance available in a maintenance product.

**Weiler Vortec Pro® Professional Grade Products -** Manufactured using similar product construction and to the same exacting standards as other Weiler Maintenance products, but engineered to provide cost-effective use specifically designed for the professional, providing a cost effective price. Vortec Pro Maintenance products are an economical choice for the construction trades, low volume production shops and the professional contractor.

## Fill Materials Used In Maintenance Brushes

### Animal

| Type | Advantages | Applications | Notes |
|---|---|---|---|
| Horsehair  | • Very durable and resilient<br>• Naturally flagged tips<br>• Resistant to high temperatures (to 370˚F)<br>• Can be blended with other materials<br>• Fine texture | • Fine particles<br>• Ideal for polished and smooth surfaces<br>• Scratch-free sweeping | • Not for use on oily or wet surfaces |

### Natural

| Type | Advantages | Applications | Notes |
|---|---|---|---|
| Tampico  | • Material holds water very well<br>• Heat, alkali and acid resistant (to 283˚F)<br>• Soft to medium texture<br>• Good durability | • Polishing, buffing and cleaning<br>• Scrubbing and washing<br>• Ideal for wet and dry applications | • Natural color is off white<br>• Can be dyed or bleached |
| Palmyra  | • Softer and finer texture than Bassine<br>• More economical than Bassine<br>• Medium to coarse texture<br>• Good durability | • Used in garage, scrub, deck and patio brushes<br>• Ideal for wet and dry applications | • Brown in color |
| Bassine  | • Coarse, tough fibers<br>• Excellent durability | • Heavy scrubbing and cleaning<br>• Tasks requiring a tough, long lasting natural fiber | • Dark brown in color |
| Bass  | • Good flexibility<br>• Very coarse, tough fibers<br>• Excellent durability | • Heavy-duty cleaning applications<br>• Use on rough surfaces | • Dark brown in color |

### Synthetic

| Type | Advantages | Applications | Notes |
|---|---|---|---|
| Nylon  | • Excellent durability<br>• Resistant to most acids & alkalis<br>• High water absorbency<br>• Resistant to high temperatures (to 350˚F)<br>• Best man-made fiber to resist fatigue | • Heavy-duty industrial<br>• Scrubbing and cleaning<br>• Wet and dry applications | • May be level or crimped |
| Polypropylene  | • Very durable<br>• Acid, oil, bacteria and fungus resistant<br>• Versatile<br>• Resistant to high temperatures (to 225˚F)<br>• Will not absorb moisture | • Variety of medium to coarse industrial applications<br>• Wet and dry applications | • May be level or crimped |
| Polystyrene  | • Extremely durable<br>• Liquid and oil resistant<br>• Resistant to temperatures (to 180˚F)<br>• Ends can be flagged | • Used in vehicle care brushes<br>• Used in fruit and vegetable wash brushes<br>• Wet and dry applications | • May be level or crimped<br>• Not for use with sweeping compounds |
| Recycled PET  | • Environmentally-friendly<br>• Less landfill waste | • Fine, Medium & Coarse for a variety of applications | • Fill made from recycled water bottles |

# Green Works™ Maintenance Products

**Green Works™ Maintenance Products -** Sustainable, recyclable, environmentally-friendly, ***Green*** - all of these come to mind with the new Green Works line from Weiler. Made from recycled or sustainable raw materials, the Green Works line is manufactured in a LEED (Leadership in Energy & Environmental Design) approved facility to insure that even the production environment is environmentally-friendly. All of this, plus the same great performance! Every product is made to the quality levels you expect when you hear the name Weiler.

## Green Works Product Construction

- Fill material is made out of recycled water bottles, giving a second life to these waste products and helping to clean up the environment.
- Rubberwood blocks are made from the wood of rubber trees that have ended their life cycle in the rubber production industry. We are putting the waste product of that industry to good use.
- Foam blocks are made from recycled plastics.
- Handles are made from bamboo - a very strong and durable natural resource that replenishes at a very rapid rate in the environment.



42352



42357



42360



42365

### Floor Sweeps -
**Choose from flagged tips that pick-up fine dust and dirt to durable fibers that sweep heavy, caked dirt and debris.**

| Block Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Fine Sweeping - For fine dust and dirt on smooth surfaces** | | | | | |
| 24" | Recycled Black Foam | Recycled Grey Fill | 3" | 12 | 42352 |
| 24" | Renewable Rubberwood | Recycled Grey Fill | 3" | 12 | 42355 |
| **Medium Sweeping - For general purpose sweeping on semi-smooth surfaces** | | | | | |
| 24" | Recycled Black Foam | Recycled Blue Fill | 3" | 12 | 42353 |
| 24" | Renewable Rubberwood | Recycled Blue Fill | 3" | 12 | 42356 |
| **Coarse Sweeping - For heavy dirt and debris on very rough surfaces** | | | | | |
| 24" | Recycled Black Foam | Recycled Maroon Fill | 3" | 12 | 42354 |
| 24" | Renewable Rubberwood | Recycled Maroon Fill | 3" | 12 | 42357 |

Handle #42380 or #42381 are recommended for use with these sweeps. See page 136 for details.

### Street Broom - Ideal for wet or dry sweeping on streets, parking lots, loading docks and driveways.

| Block Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 16" | Renewable Rubberwood | Recycled Black Fill | 6" | 6 | 42360 |

Handle #42382 is recommended for use with this broom. See page 136 for details.

### Duo Sweep - Heavy-duty upright with two handle holes - one straight and one angled.

| Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 9" | Recycled Black Foam | Recycled Yellow Fill | 7" | 12 | 42365 |

Handle #42383 is recommended for use with this sweep. See page 143 for details.

# Green Works™ Maintenance Products

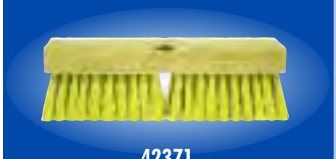





36 billion water bottles end up in landfills every year. Help us make a difference!



42368



42371



42375



42380

**Counter Duster -** Ideal for quick clean-ups. Features a comfortable grip handle.

| Block Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Recycled Black Foam | Recycled Grey Fill | 2-1/2" | 12 | 42368 |

**Scrub Brushes -** Designed to provide the most effective brushing and cleaning action.

| Block Size | Type | Block Type | Fill Material | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Utility | Recycled Black Foam | Recycled Yellow Fill | 12 | 42375 |
| 9" | Pointed Deck | Renewable Rubberwood | Recycled Yellow Fill | 12 | 42373 |
| 10" | Deck | Renewable Rubberwood | Recycled Yellow Fill | 12 | 42371 |
| 10" | Bi-Level | Recycled Black Foam | Recycled Yellow Fill | 12 | 42372 |
| 20" | Utility | Recycled Black Foam | Recycled Yellow Fill | 12 | 42376 |

Handle #42380 or #42381 are recommended for use with these scrub brushes.

**Solid Bamboo Handles -** Very strong, abundant source material.

| Length | Diameter | Tip Type | Std. Pack | Item Number |
|---|---|---|---|---|
| 5' | 7/8" | Threaded Wood | 12 | 42380 |
| 5' | 7/8" | Threaded Metal | 12 | 42381 |
| 5' | 1-1/8" | Tapered Wood | 12 | 42382 |

**DID YOU KNOW?**

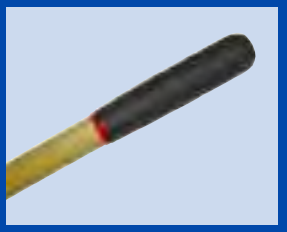
Weiler's 76,000 sq. ft. distribution center was specifically designed with energy conservation in mind.



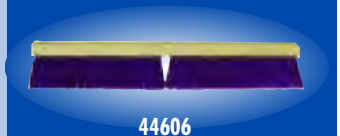
The Pro-Flex Sweep's indestructible design will make it the last sweep you will ever buy!



Flexible connection makes these sweeps the strongest on the market!



Foam grip handle is strategically placed for users' comfort during long periods of sweeping.



44606

## Weiler Pro-Flex™ Sweep Quick Assembly & Unbreakable!



- Easy-to-Assemble: The convenient and easy-to-assemble T-knob construction of the Pro-Flex Sweep ***takes less than 1 minute to assemble.*** The handle connects easily and securely to the broom head, and there's no need for a brace!
- Unbreakable: Utilizing an advanced polymer technology, the Pro-Flex Sweep's unique handle/sweep connector flexes on impact, providing unbelievable shock absorbency...and it's unbreakable! Ideal for the most demanding applications on a construction site.
- More Maneuverable: Without the need for a brace, the Pro-Flex Sweep is lighter, easy to maneuver and eliminates potential damage to low surface areas.
- The Pro-Flex Sweep... the strongest sweep on the market AND the easiest to assemble!

**DID YOU KNOW?** This is how the Pro-Flex Sweep looks straight out of the box, ready to display.

**Pro-Flex™ Sweeps - Hardwood Block**
**Includes comfort grip Pro-Flex handle and scraper for removal of heavy, caked dirt and debris.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Convenient scraper attaches handle to sweep head for display and shipping purposes | | | | |
| 24" | Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center | 3" | 1 | 44600 |
| 24" | Palmyra | 4" | 1 | 44601 |
| 24" | Medium Maroon Polypropylene | 3-1/4" | 1 | 44604 |
| 24" | Stiff Blue Polypropylene | 3-1/4" | 1 | 44606 |




## Pro-Flex Sweep Assembly - No Tools Required!



Remove nuts from broom assembly



Flip scraper and place over bolts



Place handle connector over bolts and tighten nuts securely

# Specialty Floor Brushes



Sweeping leaves from a garage floor.

**Contractor Brooms -** Designed to withstand rugged, every day use. The 1-1/8" bolt-on handle design combined with a lacquered hardwood block and 12-gauge steel brace makes the Contractor Broom the most durable sweep in our product line.

**Contractor Brooms - Hardwood Block - Heavy-duty brace included with all brooms. Ideal for construction sites and other heavy use environments.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Fine Sweeping - For fine dust and dirt on smooth surfaces** | | | | |
| 24" | Flagged Silver Polystyrene | 3" | 1 | 44553 |
| **Medium Sweeping - For general purpose sweeping on semi-smooth surfaces** | | | | |
| 18"<br>24"<br>30" | Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center | 3" | 1 | 44580<br>44581<br>44582 |
| **Coarse Sweeping - For heavy dirt and debris on very rough surfaces** | | | | |
| 24" | Palmyra | 4" | 1 | 44584 |
| 24" | Medium Maroon Polypropylene | 3-1/4" | 1 | 44587 |
| 24"<br>30" | Stiff Blue Polypropylene | 3-1/4" | 1 | 44590<br>44591 |




- For Contractor Brooms, use Handle No. 44635 (1-1/8" x 60").
- Handle not included in price - order handle separately. See page 147.
- Bolt to assemble broom is included with the broom, not with the handle.

**Perma-Sweep™ Floor Brushes -** Weiler offers color-coded floor sweeps to make product selection and identification easier. Constructed with foam blocks and synthetic filaments, these materials are durable, resist acid and bacteria and can be used in wet or dry sweeping applications.

**Perma-Sweep™ - Synthetic Foam Block - Made of durable materials designed to resist acid and bacteria.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Fine Sweeping - For fine dust and dirt on smooth surfaces** | | | | |
| 18"<br>24" | Flagged Green Polystyrene | 3" | 1 | 42163<br>42164 |
| **Medium Sweeping - For general purpose sweeping on semi-smooth surfaces** | | | | |
| 18"<br>24" | Yellow Polypropylene | 3" | 1 | 42165<br>42166 |
| **Coarse Sweeping - For heavy dirt and debris on very rough surfaces** | | | | |
| 18"<br>24" | Maroon Polypropylene | 3" | 1 | 42167<br>42168 |




- For Perma-Sweep Floor Brushes, use Perma-Flex Handle No. 44301 (15/16" x 60") Guaranteed for the life of the brush!
- Handle not included in price - order handle separately. See page 147.



44553



44584



44590



42164



42165



42167

# Floor Brushes



Sweeping saw dust on a smooth surface.

**Floor Brushes -** Weiler offers a broad array of floor brushes in various sizes and fill materials for fine, medium and coarse sweeping applications. Choose from flagged tips that pick up fine dust and dirt to durable fibers that sweep heavy-caked dirt and debris. The lacquered hardwood blocks resist moisture and help prevent cracking, thereby increasing brush life.



42001



42042



77013



42007



25234



Sweeping Center available. See page 176.

## Fine Sweeps - Lacquered Hardwood Block

**For dust and fine dirt on smooth surfaces: Tile, Wood, Linoleum, Marble, Ceramic Tile and Smooth Concrete.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Black Horsehair | 3" | 1 | 42001 | 44855 |
| 24" | | | | 42002 | 44856 |
| 18" | Black Horsehair and Black Polypropylene Blend | 3" | 1 | 42013 | – |
| 24" | | | | 42014 | – |
| 10" | Flagged Silver Polystyrene | 3" | 1 | 70312 | – |
| 18" | | | | 42041 | 44857 |
| 24" | | | | 42042 | 44858 |
| 36" | | | | 42098✳ | – |

✳ Brace included ★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

## Vortec Pro® Fine Sweeps - Lacquered Hardwood Block

**Reliable and efficient sweeps at a value price.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 18" | Flagged Grey Polystyrene | 3" | 12 | 77013 |
| 24" | | | | 77014 |

## Medium Sweeps - Lacquered Hardwood Block

**General purpose sweeping on semi-smooth surfaces: Wood, Smooth Concrete, Asphalt and Factory/Shop Floors.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 12" | Black Tampico | 3" | 1 | 70112 | – |
| 14" | | | | 42114 | – |
| 16" | | | | 42006 | – |
| 18" | | | | 42007 | 44859 |
| 24" | | | | 42008 | 44860 |
| 36" | | | | 42047✳ | – |
| 24" | Horsehair Border with Black Tampico Center | 3" | 1 | 42017 | – |
| 36" | | | | 42049✳ | – |
| 18" | Horsehair and Polystyrene Border with Black Polypropylene Center | 3" | 1 | 70067 | – |
| 24" | | | | 70068 | – |
| 18" | Black Polypropylene | 3" | 1 | 42035 | 44861 |
| 24" | | | | 42037 | 44862 |
| 36" | | | | 42095✳ | – |

✳ Brace included ★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

## Vortec Pro® Medium Sweeps - Lacquered Hardwood Block

**Reliable and efficient sweeps at a value price.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Dark Grey Polystyrene Border with Black Polypropylene Center | 3" | 1 | 25234 | 44851 |
| 24" | | | | 25235 | 44852 |
| 18" | Black Tampico | 3" | 1 | 25231 | 44853 |
| 24" | | | | 25232 | 44819 |

★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).




- **Handle No. 44300 (15/16" x 60") recommended for use with all Floor Brushes.**
- **Handle not included in price - order handle separately. See pages 147-148 for additional options.**

# Floor Brushes



Sweeping cinders from the surface of a parking lot.

## Coarse Sweeps - Lacquered Hardwood Block

**For heavy dirt and debris on rough surfaces: Wood, Concrete, Asphalt and Brick.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18"<br>24" | Black Tampico with 1 row Tempered Steel Wire in Center | 3" | 1 | 42134<br>42135 | 44871<br>44872 |

★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).




- Handle No. 44300 (15/16" x 60") recommended for use with all Floor Brushes.
- Handle not included in price - order handle separately. See pages 147-148 for additional options.



42134



42135

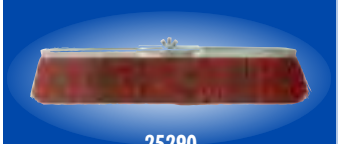
## Strip Brooms - The corrosion-resistant frame is lightweight, resulting in less user fatigue! Efficient and economical, Strip Brooms make quick work of dirt and debris on all types of surfaces.

## Vortec Pro® Strip Brooms - Economy brushes provide lasting, efficient service at minimal cost.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Fine Sweeping - For smooth surfaces** | | | | |
| 24" | Green Polypropylene | 3" | 12 | 25299 |
| **Medium Sweeping - For semi-rough surfaces** | | | | |
| 18"<br>24" | Red Polypropylene | 3" | 12 | 25290<br>25291 |
| **Coarse Sweeping - For rough surfaces** | | | | |
| 18"<br>24" | Brown Polypropylene | 3" | 12 | 25294<br>25295 |



25299



25290



25294




- For Strip Brooms, use Handle No. 25297 (15/16" x 60").
- Handle not included in price - order handle separately. See page 147.

**DID YOU KNOW?**

Weiler scrubs, handles and sweeps were used in the BP oil spill clean-up.

# Garage Brushes



Sweeping metal shavings from a shop floor.

## Garage Brushes - Palmyra Fill - Lacquered Hardwood Block

**For sweeping heavy, caked dirt and debris on rough surfaces: Concrete, Garage/Factory Floors, Rough Wood, Sidewalks, Barns and Brick Surfaces.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 16" | Wet or dry sweeping | 4" | 1 | 42021 | – |
| 18" | | | | 42022 | 44867 |
| 24" | | | | 42023 | 44868 |
| 36" | | | | 42138✳ | – |

✳ Brace included ★ Combo Packs include 12 brushes per pack and 12 #44300 handles (not assembled).



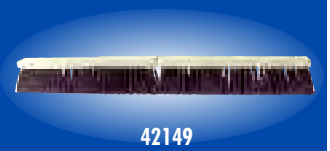
42023

## Garage Brushes - Maroon Polypropylene Fill - Lacquered Hardwood Block

**For sweeping heavy, caked dirt and debris on rough surfaces: Concrete, Garage/Factory Floors, Rough Wood, Sidewalks, Barns and Brick Surfaces.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Wet or dry sweeping Solvent, oil, chemical & liquid resistant | 3-1/4" | 1 | 42025 | 44869 |
| 24" | | | | 42026 | 44870 |
| 36" | | | | 42149✳ | – |

✳ Brace included ★ Combo Packs include 12 brushes per pack and 12 #44300 handles (not assembled).



42149

## Vortec Pro® Garage Brushes - Lacquered Hardwood Block

**Reliable and efficient brushes at a value price.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Palmyra | 4" | 1 | 25241 | 44865 |
| 24" | | | | 25242 | 44866 |
| 18" | Maroon Polypropylene | 3-1/4" | 1 | 25238 | 44863 |
| 24" | | | | 25239 | 44864 |

★ Combo Packs include 12 brushes per pack and 12 #44300 handles (not assembled).



25241

## Driveway Coaters - For applying blacktop driveway and parking lot dressings; asphalt, sealers or roof coatings.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 10" | Black Tampico | 2-5/8" | 12 | 73180 | – |
| 18" | Palmyra | 2" | 12 | 73182✳ | 44885 |

✳ With squeegee ★ Combo Packs include 12 brushes per pack and 12 #75527 handles (not assembled).



73180



73182




- Handle No. 44019 (1-1/8" x 60") recommended for use with all Garage Brushes.
- Handle No. 75527 (7/8" x 48") recommended for Driveway Coaters.
- Handle not included in price - order handle separately. See pages 147-148 for additional options.

# Street and Wire Brooms

**Street Brooms - Hardwood Block - Wide flared ends for sweeping close to curbs and walls. For heavy-duty wet or dry sweeping: Streets, Sidewalks, Loading Docks, Parking Lots, Driveways and all Asphalt Surfaces.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 16" | Natural Palmyra | 6-1/4" | 6 | 70208 | – |
| 16" | Dyed Palmyra | 6-1/4" | 6 | 70209 | – |
| 16"<br>16" | Bass & Palmyra Blend | 6-1/4"<br>7-1/4" | 6 | 42032<br>42099 | 44873<br>– |
| 16"<br>18"<br>24" | Brown Polypropylene | 5-1/4" | 6 | 42033<br>42173<br>42174 | 44874<br>–<br>– |
| 16"<br>18"<br>24" | Orange Polypropylene | 5-1/4" | 6 | 70212<br>42054<br>42055 | –<br>–<br>– |
| 14"<br>16" | White Polypropylene Fill<br>Orange Block | 4" | 6 | 70210<br>70211 | –<br>– |

★ Combo Packs include 12 brooms per pack and 12 #44020 handles (not assembled).

**Wire Brooms - Hardwood Block**

**For sweeping or scrubbing concrete or stone floors, driveways, etc. Ideal for sweeping heavy chips and debris.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 16" | Round Wire | 3-3/4" | 6 | 70215 |
| 14" | Flat Wire | 5" | 1 | 42030 |




- All sweeps on this page require a tapered tip handle.
- Handle No. 44020 (1-1/8" x 60") recommended for use with all Street & Wire Brooms.
- Use Spring-Loc Adapter to keep tapered wood handle securely fastened to the block.
- Handle not included in price - order handle separately. See pages 147-148 for adapter and handle.

**DID YOU KNOW?** Weiler now has a line of environmentally-friendly maintenance products. See pages 139-140 for details.



Sweeping debris in a parking lot.



70209



42032



42033



42054



70210



42030

# Handles



The Perma-Flex tip is guaranteed not to break when used with a Perma-Sweep.

**Handles -** Weiler's wood and metal handles are constructed for long life. Handles are available in a large variety of styles and tips to fit a wide selection of block types. The following charts provide recommended uses for each style handle.


44018


44020

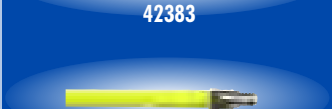

44300


44301


25297


44635


42383


44577


44578


75555

## Wood Handles - Quality hardwood handles.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 48" | 7/8" | Threaded Wood | Use with floor and garage brushes. | 12 | 75527 |
| 48" | 15/16" | | | | 44571 |
| 54" | 15/16" | | | | 44572 |
| 60" | 15/16" | | | | 44018 |
| 60" | 1-1/8" | | | | 44019 |
| 72" | 15/16" | | | | 44303 |
| 11" | 3/4" | Tapered Wood | Use with masonry and roof brushes, street brooms, floor and deck scrubs and squeegees. | 36 | 75528 |
| 48" | 7/8" | | | 12 | 44574 |
| 54" | 1-1/8" | | | 12 | 44573 |
| 60" | 1-1/8" | | | 12 | 44020 |
| 72" | 1-1/8" | | | 12 | 44306 |
| 48" | 15/16" | Threaded Metal | Heavy-duty metal tip provides additional strength. | 12 | 75525 |
| 60" | 15/16" | | | | 44300 |
| 60" | 1-1/8" | | | | 44435 |
| 72" | 15/16" | | | | 44302 |
| 48" | 15/16" | Perma-Flex™ | Durable threaded plastic tip guaranteed not to break when used with Perma-Sweep™ Floor Brushes. | 12 | 75516 |
| 60" | 15/16" | | | | 44301 |
| 60" | 15/16" | – | Use with Strip Brooms. | 12 | 25297 |
| 60" | 1-1/8" | – | Use with Contractor Brooms. | 12 | 44635 |

## Metal Handles - Reinforced, heavy-duty metal handles are available in two colors and optional foam cover.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 48" | 3/4" | Threaded Plastic | Black metal with plastic hang cap. | 12 | 42383 |
| 60" | 15/16" | Threaded Metal | Yellow plastic coat with plastic hang cap. | 12 | 44577 |
| 60" | 15/16" | Threaded Metal | Black plastic coat with black foam cover and plastic hang cap. | 12 | 44578 |

## Vortec Pro® Metal Handles - Reliable and efficient handles at a value price.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 60" | 15/16" | Threaded Plastic | Black plastic coat with convenient hang-up cap. | 12 | 75555 |

# Handles, Braces and Tips



Heavy-duty steel brace (Item #44290) provides extra support.

**Metal Telescoping and Fountain Tube Handles -** Use telescoping handles to shorten or extend the reach of the handle. Use fountain tube handles when a continuous flow of water is needed, i.e. car/truck washing.

| Length | Diameter | Type | Use | Standard Pack | Item No. |
|---|---|---|---|---|---|
| 6' extends to 12' | – | Telescoping | Window, wall and Vehicle wash brushes | 6 | 44499 |
| 5' | 7/8" | Fountain Tube | Vehicle wash brushes | 12 | 44319 |



44499



44319

**Fiberglass Handles -** Fiberglass handles are stronger than wood or metal. Virtually indestructible.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 60" | 1" | Tapered/Threaded | Hollow handle | 12 | 44561* |
| 60" | 1" | Threaded | Honeycomb core | 12 | 44562 |
| 60" | 1" | Threaded | All white | 12 | 44563+ |

* For use with both tapered and threaded holes
\+ Approved for the food service industry



44561

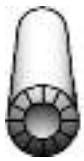


44562



44563



Fiberglass with polyethylene reinforced honeycomb core



Fiberglass hollow handle.

**Handle Accessories**

| Description | Use | Std. Pack | Item No. |
|---|---|---|---|
| Steel brace. Fits all handle sizes. | Reinforces & locks handle to block. (Standard with sweeps 30" and larger) | 12 | 44021 |
| Heavy-duty steel brace attaches to block with wood screws and wraps around handle. Fits all handle sizes. | Increases life of the brush by providing extra support for handle and block. | 12 | 44290 |
| Replacement handle thread. Made of heavy-duty fiberglass. For any 15/16" diameter handle. | Cut off damaged threads and slip this tip in place for a new handle. | 12 | 44317 |
| Tapered Adapter to tapered ends. | Converts threaded handle ends | 12 | 75505 |
| Spring Loc Adapter for any 1-1/8" diameter tapered wood handle for street brooms and window brushes. | Keeps tapered wood handles from separating from the block. | 6 | 44624 |




**DID YOU KNOW?** Weiler handles are sanded to avoid splinters.

# Upright and Whisk Brooms



Sweeping plastic and metal chips in a tool room

**Upright & Whisk Brooms -** Made of fine quality broom corn, fiber or synthetic material, Weiler's upright brooms and whisks are durable enough to meet all industrial and commercial applications.

**Upright Brooms - Ideal for sweeping floors, reaching into corners, cleaning ceilings, etc.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Household Broom - Good Quality** | | | | | |
| 4 sews - 7/8" handle | Corn & Fiber | 15" | 54" | 12 | 44547 |
| **Light Industrial Brooms - Better Quality** | | | | | |
| 5 sews - 7/8" handle | Corn & Fiber | 17" | 57" | 12 | 44548 |
| 5 sews - 7/8" handle | 100% Corn | 15" | 56" | 12 | 44009 |
| 6 sews - 1-1/8" handle | 100% Black Corn | 16" | 56" | 12 | 70304 |
| **Janitor's Broom - Best Quality** | | | | | |
| 5 sews - 1-1/8" handle Wire banded | Corn & Fiber | 17" | 57" | 12 | 70308 |
| **Warehouse Broom - Heavy-Duty** | | | | | |
| 4 sews - 1-1/8" handle Wire banded | Corn & Fiber | 18" | 57" | 12 | 44008 |



44009

**Angle Broom - Angled trim allows access to corners, under low cabinets and other hard-to-reach areas.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Large Plastic - 12" sweep face | Flagged Plastic | 7-1/2"–6" | 54" | 12 | 44305 |



44305

**Vortec Pro® Angle Broom - Reliable and efficient broom at a value price.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Small Plastic - 8" sweep face | Flagged Plastic | 3-3/4"–5" | 54" | 6 | 75160 |



70325

**Cap Brooms - Metal top for added durability. Ideal for wet or dry applications.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Metal Cap - Wire banded 12" sweep face | Palmyra | 10" | 55" | 6 | 44007 |
| Metal Cap - Wire banded 12" sweep face | Brown Poly | 10" | 55" | 6 | 70325 |
| Track & Switch - Steel chisel point on handle end | Palmyra | 8" | 55" | 6 | 70324 |

**Lobby Broom - For light-duty spot sweeping.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Lobby Broom - 3 sews | Black Synthetic | 10" | 38" | 12 | 70327 |

**Vortec Pro® Lobby Brooms - Reliable and efficient brooms at a value price.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Plastic Cap - 8" sweep face | Flagged Plastic | 5" | 36" | 12 | 44546 |
| Toy/Lobby - 3 sews, 7/8" handle | Corn & Fiber | 11" | 40" | 12 | 70300 |



70300

**Whisk Brooms - For fast, efficient clean-up.**

| Use | Number of Sews | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| General purpose - all applications | 3 | Corn & Fiber | 10" | 12 | 44266 |
| Sweeping coarse & heavy material | 2 | Palmetto | 7" | 12 | 44099 |
| Coarse sweeping of hot chips | - | Bassine | 5-1/4" | 12 | 44103 |



44266

# Dusters and Dust Pans



Cleaning up oil absorbent from a shop floor.

**Dusters & Dust Pans -** Whether cleaning fine particles or heavy debris, Weiler has a Counter Duster to do the job. These brushes are available in a wide selection of fill materials and have comfortably shaped blocks in wood or foam. Also choose from an array of Dust Pans to meet the application requirements.

## Counter Dusters - For clean up in hard-to-reach areas.

| Fill Material | Trim Length | Brush Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Horsehair** | | | | | |
| Horsehair | 2-1/4"<br>2-1/4" | 8"<br>9" | Wood | 12 | 44003<br>44351 |
| Black Horsehair and Fiber Mix | 2-1/2" | 8" | Wood | 12 | 71019 |
| **Synthetic** | | | | | |
| Flagged Silver Polystyrene | 2-1/2" | 8" | Wood | 12 | 44354 |
| Black Polystyrene | 2-1/2" | 8" | Wood | 12 | 25252 |
| Orange Polystyrene | 2" | 9" | Foam | 12 | 42213 |
| **Natural Fiber** | | | | | |
| Black Tampico | 2-1/2" | 8" | Wood | 12 | 25251 |
| Tri-colored Tampico | 2-1/2" | 8" | Wood | 12 | 44004 |



44003



42213



44004

## Dust Pans - Durable, industrial grade - For quick clean-ups.

| Description | Height | Width | Depth | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Heavy-duty 20 gauge steel Black enamel finish | – | 12" | 13-1/2" | 12 | 71078 |
| Extra wide - Heavy-duty 20 gauge steel Black enamel finish | – | 16" | 15" | 12 | 71079 |
| Lobby Dust Pan Black enamel metal hopper Aluminum handle | 39-1/2" | 12" | 9" | 6 | 71081 |



71078

71077

71080

## Vortec Pro® Dust Pans - Reliable and efficient pans at a value price.

| Description | Height | Width | Depth | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Molded plastic | – | 12-1/4" | 12" | 12 | 71077 |
| Lobby Dust Pan Molded plastic hopper Aluminum handle | 39-1/2" | 12" | 11" | 6 | 71080 |

## Radiator Brushes - 24" Overall Length. Ideal for cleaning radiators and narrow, hard-to-reach places.

| Fill Material | Type | Brush Part | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Black Horsehair | Foam Handle | 9-1/2" | 2-1/2" | 12 | 73050 |
| Black Horsehair | Twisted-in-Wire Handle | 7-1/2" | 2-1/2" | 12 | 73055 |



73050



73055

## Wall Dusting Brush - For dusting ceilings, valances, high moldings and other hard-to-reach places. Twisted-in-wire construction with plastic handle.

| Fill Material | Overall Length | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Horsehair | 12" x 5" | 2-3/4" | 2 | 71076 |



71076

# Squeegees & Window Brushes



Cleaning a window with a window squeegee.

**Squeegees -** For fast, efficient cleaning, Weiler provides a variety of non-scratching floor and window squeegees and window brushes. Designed for high durability.



45507



45510



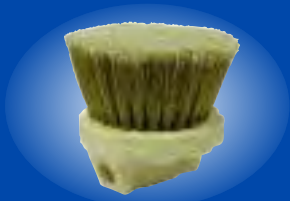
75242



45500



45503



25271

## Floor Squeegees - Heavy-duty construction, iron handle socket.

| Description | Length | Type | Standard Pack | Item Number | Standard Pack | Refill Blade Item No. |
|---|---|---|---|---|---|---|
| Black rubber blade for rough, heavy use | 18" | Straight | 6 | 45506 | 12 | 45508 |
| | 24" | | | 45507 | | 45512 |
| | 30" | | | 45534 | | 45536 |
| | 36" | | | 75202 | | 45513 |
| Black rubber blade for rough, heavy use | 18" | Curved | 12 | 75206 | 12 | 75225 |
| | 24" | | 6 | 45510 | | 45512 |
| | 30" | | 6 | 45535 | | 45536 |
| | 36" | | 6 | 45511 | | 45513 |
| Stainless steel scraper | 8" | – | 12 | 75242 | – | – |

## Window Squeegees - Rust-proof handle socket and frame.

| Description | Length | Standard Pack | Item Number | Standard Pack | Refill Blade Item No. |
|---|---|---|---|---|---|
| One piece frame with hard rubber section joined with a soft, red rubber blade. | 6" | 12 | 45537 | 12 | 75233 |
| | 12" | | 45500 | 24 | 45503 |
| | 14" | | 45538 | 24 | 75228 |
| | 16" | | 45501 | 24 | 45504 |
| | 18" | | 45502 | 24 | 45505 |




- All squeegees require a tapered tip handle.
- Handle No. 44020 (1-1/8" x 60") recommended for use with all Squeegees.
- Use Spring-Loc Adapter to keep tapered wood handle securely fastened to the block.
- Handle not included in price - order handle separately. See pages 147-148 for adapter and handle.

## Window Brushes - Two threaded handle holes

**High quality, non-scratching brushes used for industrial window washing.**

| Description | Block Size | Block | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Round Style | | | | | |
| Flagged Gold Polystyrene | 4-1/2" | Plastic | 2-1/2" | 12 | 25271 |
| Stiff Black Horsehair and Polypropylene Mix | 4-1/2" | Plastic | 2-3/4" | 12 | 73003 |




- Handle No. 44019 (1-1/8" x 60") recommended for use with #25271 & #73003 Window Brushes.
- Handle not included in price - order handle separately. See page 147 for handle.

# Vehicle Care Products

**Vehicle Care Brushes -** Weiler's line of vehicle care brushes meets the cleaning needs of car and truck fleets. Brushes are also popular in the marine industry. All products are designed to provide professional results.

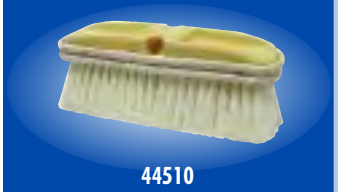


Washing a car with a vehicle wash brush and fountain tube handle.

### Vehicle Wash Brushes - Protective bumper - Foam block with two handle holes. Can be used with flow-through handle #44319 on page 148.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 9-1/2" x 2-3/4" | Grey Fiber | 2-1/2" | 12 | 44318* | – |
| 9-1/2" x 2-3/4" | Flagged White Polystyrene | 2-1/2" | 12 | 44510 | 44875 |
| 9-1/2" x 2-3/4" | Flagged Orange Polystyrene | 2-1/2" | 12 | 42210 | – |
| 9-1/2" x 2-3/4" | Flagged Green Polystyrene | 2-1/2" | 12 | 73146 | – |

*May scratch smooth or high gloss surfaces, use polystyrene filled products for these surfaces.
★ Combo Packs include 12 brushes per pack and 12 #44319 handles (not assembled).



44510

### School Bus Brush - Easily sweeps between school bus seats. Lacquered hardwood block with one threaded handle hole. Use handle #44571 on page 147.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 10" x 2-1/2" | Flagged Silver-grey Polystyrene | 3" | 12 | 70312 |



70312

### Bi-Level Scrub Brushes - Foam Block - The bi-level design allows the brush to stay in contact with the surface at various working angles. Can be used with flow-through handle #44319 on page 148.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 10" | Flagged White Polystyrene | 2-3/4" | 6 | 44699 |
| 10" | Fine Green Nylex | 2-3/4" | 12 | 44693 |



44699

### Upholstery/Spotting Brush - Wet & dry cleaning, prespotting, carpet touch-up, etc. Shaped plastic handle.

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8-1/2" x 2-9/16" | .016 Crimped Polypropylene | 5/8" | 8 x 9 | 12 | 44307 |



44307

### Spoke Brushes - Ideal for cleaning spokes or confined spaces.

| Length of Brush Part | Fill Material | Brush Part | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" | Polypropylene | 2" tapered to 3/4" | 11" | 12 | 44482 |
| 10" | White Tampico | 2-7/8" tapered to 1-1/4" | 15" | 12 | 44315 |



44315

### Tire Cleaning Brushes - Foam block - Used for cleaning sidewalls of tires.

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8-1/2" x 2-9/16" | .008 Brass | 5/8" | 8 x 9 | 12 | 99593 |
| 7" x 1-9/16" | .008 Brass | 5/8" | 6 x 8 | 12 | 73156 |



99593

# Scrub Brushes



Scrubbing a stainless steel sink.

**Scrub & Utility Brushes -** A broad range of high quality scrub and utility brushes are available from Weiler. From quick cleaning to heavy-duty scrubbing, Weiler's brushes are designed to provide the most effective brushing and cleaning action.

## Hand Scrub Brushes - Heavily filled for heavy-duty scrubbing.

| Block Size | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7-1/2" | Light Blue Polypropylene | 1" | Contoured Plastic w/Rubber Insert | 24 | 43999 |
| 6" | White Polypropylene | 1-1/8" | Iron Style - Plastic | 12 | 44395 |
| 7-1/4" | Palmyra | 1" | Square - Wood | 24 | 72034 |
| 8" | White Tampico<br>White Tampico<br>Palmyra | 1-1/8"<br>1"<br>1-1/8" | Square - Wood | 12 | 44024<br>72058*<br>44025 |
| 8-1/4" | White Tampico | 1-1/8" | Square - Wood | 12 | 73111 |
| 9" | White Tampico | 1-1/8" | Pointed - Wood | 12 | 44023 |

* Threaded handle hole



43999



44395



44024



44023

## Deck Scrub Brushes - Excellent for scrubbing decks or floors. One threaded and one tapered handle hole. Can be used with threaded handle #44018 or tapered handle #44020 on page 147.

| Block Size | Fill Material | Trim Length | Number of Rows | Block Type | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|---|
| 9" | Palmyra<br>Tampico | 2" | 5 x 14 | Wood | 12 | 44428<br>44429 | –<br>– |
| 10" | Palmyra<br>Tampico<br>Polypropylene | 2″ | 6 x 18 | Wood | 12 | 44026<br>44028<br>44434 | 44876<br>44877<br>44878 |
| 10" | Polypropylene | 2" | 5 x 14 | Foam | 12 | 44728* | – |
| 12" | Palmyra<br>Tampico<br>Polypropylene | 2" | 6 x 20 | Wood | 12 | 44027<br>44029<br>44438 | –<br>–<br>– |

* Threaded handle hole ★ Combo Packs include 12 scrubs per pack and 12 #44018 handles (not assembled).



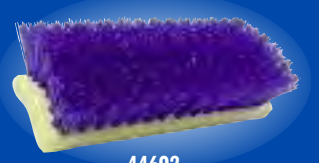
44026



44434

## Bi-Level Scrub Brushes - The bi-level design allows the brush to stay in contact with the surface. Can be used with flow-through handle #44319 on page 148 or the Perma-Flex handle #44301 on page 147.

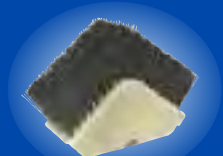
| Block Size | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 10" | Stiff Crimped Blue Polypropylene | 1-3/4" | Foam | 6 | 44692 |
| 10" | Flagged White Polystyrene | 2-3/4" | Foam | 6 | 44699 |
| 10" | Fine Green Nylex | 2-3/4" | Foam | 12 | 44693 |



44692

## Baseboard Brush - Can be used with threaded handle #44018 on page 147.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 5-1/2" x 2-7/8" | Black Polypropylene | 1-3/4" | 12 | 73075 |



73075

## Vortec Pro® Boot Brush - Reliable and efficient brush at a value price.

| Size | Description | Item Number |
|---|---|---|
| 9" x 6" | Boot Cleaning Brush - Metal Frame - Wood Block - Black Nylon Fill | 44391 |



44391

# Scrub Brushes & Utility Brushes

**Utility Scrub Brushes -** Wood Block. For general scrubbing in factories, kitchens, institutions, etc.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Wood | 12 | 72086<br>44013<br>44014 |
| 20" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Wood | 12 | 72101<br>44016<br>44017 |

**Utility Scrub Brushes -** Foam Block. Chemical and water resistant, will not warp or crack.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Foam | 12 | 79101<br>79120<br>79100 |
| 20" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Foam | 12 | 79107<br>79109<br>44663 |

**Utility Scrub Brushes -** Plastic Block. Designed for high temperature cleaning, ideal for food service.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | White Nylon | 2" | Plastic | 12 | 44416 |
| 20" | White Nylon | 2" | Plastic | 12 | 44418 |

**Vortec Pro® Utility Scrub Brushes -** Ideal for general purpose cleaning.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Tampico | 2" | Foam | 12 | 25262 |
| 20" | Tampico | 2" | Foam | 12 | 25263 |

**Vortec Pro® Dish/Sink Brush -** Plastic Block - Reliable and efficient brush at a value price.

| Overall Length | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 8-3/4" | White Plastic with Blue Polypropylene Border | 1" | 12 | 75002 |

**Grout Detail Brush -** Use for removing stubborn dirt, grime and mildew from tiled surfaces.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 8-1/2" | Stiff Black Nylon | 7/8" | 24 | 73233 |

**Bowl Brushes -** 2" Trim Length - For thorough, efficient cleaning.

| Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3-1/2" x 3-3/4" | White Plastic | Plastic | 14-1/2" | 12 | 75001 |
| 4-1/2" x 4" | White Plastic | Plastic | 16" | 12 | 75070 |
| 5-3/4" x 4-3/4" | Black Nylon | Plastic | 21" | 12 | 75068 |
| 6-1/2" x 4" | Black Saran | Wood | 21" | 12 | 75071 |



Removing stubborn dirt, grime and mildew from a tiled surface with a grout detail brush.


44014


44016


79120


79107


44418


25262


75002


73233


75071

# Utility Brushes



Cleaning a toilet with a Weiler Bowl Brush.



44001



75000



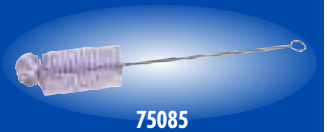
44314



75003



99594



75085



44111



44115



44316



75570

## Professional Bowl Brushes - Hardwood handle and natural fiber - For thorough cleaning.

| Brush Part | Fill Material | Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 5" | White Tampico | 2" | 20" | 12 | 44001* |
| 6-1/2" | Tampico | 3-1/4" | 23" | 12 | 75060 |
| 7-1/4" x 6" | Marble Union Fiber | 2-1/2" | 22" | 12 | 75072 |

* Foam handle

## Vortec Pro® Bowl Brush Set - 2" Trim Length - Reliable and efficient brushes at a value price.

| Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3-1/2" x 3-3/4" | White Plastic | Plastic | 14-1/2" | 6 | 75000 |

## Vortec Pro® Nail Brushes - Great for use in shop or industrial settings.

| Brush Part | Fill Material | Block Type | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-3/4" x 1-1/2" | Plastic | Wood | 3/4" | 4 x 15 | 36 | 44314 |
| 3-1/2" x 1-1/4" | Poly-propylene | Plastic | 3/8" | 6 x 18 • 4 x 17 (double-sided) | 24 | 75003 |
| 4-3/4" x 1-1/2" | White Tampico | Wood | 11/16" | 4 x 15 | 12 | 75021 |

## Bottle Washing Brush - Brush shape enables access to hard-to-reach areas when cleaning.

| Length of Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" | Black Horsehair | Wood | 16" | 12 | 99594 |

## Vortec Pro® Bottle Washing Brush - Reliable and efficient brush at a value price.

| Length of Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 5-1/2" x 2-3/8" | White Nylon | Twisted-in-wire | 17" | 24 | 75085 |

## Nylon Tube Brushes - Loop handle, Straight black nylon fill.

| Diameter | Fill Diameter | Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/4" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44110 |
| 3/8" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44213 |
| 1/2" | .010 | 3" | 1/8" | 8-1/2" | 36 | 44111 |
| 3/4" | .012 | 3" | 1/8" | 8-1/2" | 36 | 44112 |
| 1" | .014 | 4" | 5/32" | 12-1/4" | 36 | 44113 |
| 1-1/4" | .014 | 4" | 5/32" | 13" | 36 | 44114 |
| 2" | .014 | 5" | 3/16" | 16-3/4" | 36 | 44115 |

## Percolator Brush - Straight white nylon fill

Ideal for internal cleaning in industrial, laboratory and food service.

| Diameter | Fill Diameter | Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7/16" | .010 | 3-1/2" | 5/32" | 11-1/2" | 10 | 44316 |

## Vat Brush - For valves, outlets, small tanks, beverage dispensers & coffee urns.

Can be used with the Perma-Flex handle #44301 on page 147.

| Fill Material | Block Type | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| White Nylon | White Nylon | 8" | 1 | 75570 |

# Mops & Accessories

**Industrial Grade Mops -** Our wet and dry mops are made with industrial grade cotton and can be laundered. They will not scratch floors or unravel.



Cleaning a corner with a dust mop.

### Wet Mop Heads - Durable, ideal for all-purpose cleaning. Can be laundered.

| Weight | Material | Standard Pack | Item Number |
|---|---|---|---|
| **Cut End** | | | |
| 12 oz.<br>16 oz.<br>20 oz.<br>24 oz.<br>32 oz. | 8-ply tight twist cotton | 12 | 75100<br>75102<br>75103<br>75104<br>75105 |
| Small<br>Medium<br>Large<br>X-Large | 4-ply high bulk cotton economy | 12 | 75170<br>75171<br>75172<br>75173 |
| **Loop End** | | | |
| Small<br>Medium<br>Large<br>X-Large | 4-ply tight twist cotton | 12 | 75180<br>75181<br>75182<br>75183 |
| Small<br>Medium<br>Large<br>X-Large | 4-ply tight twist rayon finishing candy striped | 12 | 75190<br>75191<br>75192<br>75193 |



75102



75171



75190

### Wet Mop Handles - Industrial Grade. Hardwood handle with plated metal heads.

| Description | Size | Standard Pack | Item Number |
|---|---|---|---|
| Quick-Change Plastic Head | 54" x 15/16" | 12 | 75140 |
| Screw Type | 54" x 1-1/8" | 12 | 75131 |
| Spring Type | 54" x 1-1/8" | 12 | 75132 |
| Jaw Type | 54" x 1-1/8" | 12 | 75130 |



75140

### Professional Dust Mops - Tie-on style, 4-ply cotton. Can be laundered.

| Mop Size | Frame Size | Standard Pack | Item Number |
|---|---|---|---|
| 18" | 5" x 18" | 12 | 75116 |
| 24" | 5" x 24" | 12 | 75117 |
| 36" | 5" x 36" | 12 | 75118 |



75131

### Professional Dust Mop Frames - Heavy-duty full swivel frame.

| Mop Size | Frame Size | Standard Pack | Item Number |
|---|---|---|---|
| 18" | 5" x 18" | 12 | 75136 |
| 24" | 5" x 24" | 12 | 75137 |
| 36" | 5" x 36" | 12 | 75138 |



75116



75136

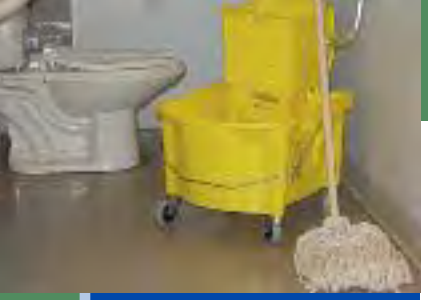
### Professional Dust Mop Handle - Heavy-duty clamp-on style.

| Length | Diameter | Standard Pack | Item Number |
|---|---|---|---|
| 60" | 15/16" | 12 | 75133 |



75133

# Mops & Accessories



Use the Combo Bucket with 12 to 32 oz. mop heads

## Wedge-Style Dust Mop - Tie-on style, 4-ply cotton

**Durable, ideal for all-purpose cleaning. Can be laundered.**

| Size | Frame Size | Standard Pack | Item Number |
|---|---|---|---|
| 8" wedge | 5" x 8" | 12 | 75127 |



75127

## Wedge-Style Frame and Handle

| Length | Diameter | Standard Pack | Item Number |
|---|---|---|---|
| 60" | 15/16" | 12 | 75126 |



75126

## One-Piece Cotton Deck Mops - Industrial grade. Mop head securely tied to handle.

| Description | Weight | Standard Pack | Item Number |
|---|---|---|---|
| #10 | 10 oz. | 12 | 75096 |
| #12 | 12 oz. | 12 | 75097 |
| #16 | 16 oz. | 12 | 75109 |
| #20 | 20 oz. | 12 | 75098 |
| #24 | 24 oz. | 12 | 75110 |



36666

## Vortec Pro® Combo Bucket - One-piece construction that will not rust, fade, crack, peel, chip, dent or warp.

**Wringer fits all sizes of plastic or metal buckets.**

| Bucket Size | Wringer | Standard Pack | Item Number |
|---|---|---|---|
| 36 qt. | 12-32 oz. | 1 | 36666 |

## Wax Applicators - 100% lambswool. Washes easily and dries quickly. Pads are easily changed.

**Can be used with threaded handle #44018 on page 147.**

| Block and Pad Size | Pad Refill Number | Standard Pack | Item Number |
|---|---|---|---|
| 6" x 10" | 75155 | 1 | 75150 |
| 6" x 12" | 75156 | 12 | 75151 |
| 6" x 14" | 75157 | 12 | 75152 |
| 6" x 16" | 75158 | 12 | 75153 |
| 6" x 18" | 75159 | 12 | 75154 |



75150

# Masonry & Applicator Brushes

**Masonry & Applicator Brushes -** Weiler's full line of Masonry & Applicator Brushes covers everything from the ground up - cement finishing and stippling brushes for texturing and applying cement and asphalt; whitewashing and masonry brushes for applying cement, water paints and liquid waterproofing materials on concrete block and masonry walls; smoothing brushes for applying wallpaper; and roof brushes for spreading roofing tar and coatings.



Applying waterproofing material with a masonry brush.

**Knot-Type Roof Brushes - For application of roof coatings.**
**Can be used with tapered handle #44574 on page 147.**

| Block Size | Fill Material | Trim Length | Number of Knots | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|
| 6-1/4" | Tampico | 3-1/4" | 3 | 12 | 44010 | 44883 |
| 8-3/4" | Tampico | 3-1/4" | 4 | 12 | 73177 | – |

★ Combo Packs include 12 brushes per pack and 12 #44574 handles (not assembled).



44010

**Block-Type Roof Brushes - For application of roof coatings.**
**Can be used with tapered handle #44574 or threaded handle #75527 on page 147.**

| Block Size | Fill Material | Trim Length | Number of Knots | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|
| 7" | White Tampico<br>One tapered handle hole | 2" | 5 | 12 | 44011 | 44884 |
| 7" | Cream Colored Polypropylene<br>One tapered handle hole | 2" | 5 | 12 | 73171 | – |
| 7" | White Tampico<br>One threaded handle hole | 2" | 5 | 12 | 73195 | – |

★ Combo Packs include 12 brushes per pack and 12 #44574 handles (not assembled).



44011



44031

**Masonry Brushes - Useful tools for applying cement, waterpaints and liquid waterproofing materials on masonry walls. Handle attached.**

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7" | White Tampico | 3-1/4" | 2 | 12 | 44032 |
| 6" | Solvent Resistant Polypropylene | 3-1/4" | 3 | 12 | 74020 |
| 4" | White Tampico | 3" | 4 | 12 | 74004 |
| 6-1/2" | White Tampico | 3-1/2" | 4 | | 44031 |
| 6" | White Tampico | 3" | 5 | 12 | 74002 |
| 6-1/2" | White Tampico | 4" | 5 | | 44448 |



44448

**Whitewash Brushes - Two tapered handle holes allow user to choose the correct brush angle needed.**
**Can be used with tapered handle #75528 on page 147.**

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" | White Tampico | 2-5/8" | 2 | 12 | 74048 |
| 7" | White Tampico | 2-5/8" | 2 | 12 | 44034<br>74053* |

* Includes a 12" tapered wood handle.



44034

# Masonry & Applicator Brushes



Creating texture on newly poured concrete.

## Acid Brush - Detachable handle.

**For the application of Kalsomine, cold water, acid and water repellents to concrete and other rough surfaces.**

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7" | White Tampico | 3-1/2" | 3 | 12 | 74015 |



74015

## Acid Scrub Brush - Hardwood block- Tapered handle hole

**Recommended for applying sealcoating, cement slurry, water-proofing, etc.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 8-1/4" x 2-3/4" | White Tampico | 1-1/8" | 12 | 73111 |

NOTE: Handle not included - can be used with tapered handle #44574 on page 147.

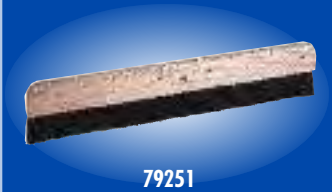


73111

## Cement Finishing Brushes - Hardwood block. Ideal for creating texture to newly poured cement and for applying coatings on asphalt or concrete. Use handle #44303 on page 147.

| Block Length | Fill Material | Trim Length | No. of Rows | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|
| 24" | Black Polypropylene | 2-1/4" | 3 | 6 | 79251 | – |
| 24" | Black Polypropylene | 3-1/4" | 3 | 6 | 79252 | 44879 |
| 36" | Black Polypropylene | 3-1/4" | 3 | 6 | 79253 | 44880 |
| 24" | Horsehair | 2-1/2" | 3 | 6 | 79255 | 44881 |
| 36" | Horsehair | 2-1/2" | 3 | 6 | 79256 | 44882 |

★ Combo Packs include 12 brushes per pack and 12 #44303 handles (not assembled).



79251

## Smoothing Brush - Hardwood block. For smoothing wallpaper.

| Block Length | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 12" | White Tampico | 2" | 12 | 74078 |



74078

**DID YOU KNOW?** Weiler scrubs and sweeps were used to help with the clean-up after Hurricane Katrina.

# Scratch Brushes



**Scratch Brushes -** Weiler's extensive Scratch Brush offering includes many block and handle types and sizes. The wide variety of fill materials available assures the right brush for the right job. Common applications are cleaning dirt, rust, scale, chips and paint; plating and welding operations.

## Curved Handle Scratch Brushes - Hardwood block - Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 13-3/4" x 1-1/8" | 5-1/4" | 3 x 14 | 1-1/4" | 12 | 44594* |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44053 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44056 |
| .012 Steel Wire with Scraper | | | | | |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44055 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44058 |
| .012 Stainless Steel Wire | | | | | |
| 13-3/4" x 1-1/8" | 5-1/4" | 3 x 14 | 1-1/4" | 12 | 44432* |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44054 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44057 |

* V-Groove

## Vortec Pro® Curved Handle Scratch Brushes - Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25150 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1" | 12 | 25201 |
| .012 Stainless Steel Wire | | | | | |
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25154 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1" | 12 | 25202 |

## Shoe Handle Scratch Brushes - Hardwood blocks - Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 10" x 3/8" | 5" | 1 x 17 | 1-1/16" | 12 | 44100 |
| 10" x 5/8" | 5" | 2 x 17 | 1-3/16" | 12 | 44061 |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44063 |
| 11" | 5" | 4 x 16 | 1-3/16" | 12 | 73217• |
| .012 Steel Wire with Scraper | | | | | |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44065 |
| .012 Stainless Steel Wire | | | | | |
| 10" x 3/8" | 5" | 1 x 17 | 1-1/16" | 12 | 44101 |
| 10" x 3/8" | 5" | 1 x 17 | 3/4" | 12 | 44235 |
| 10" x 5/8" | 5" | 2 x 17 | 1-3/16" | 12 | 44062 |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44064 |
| 11" | 5" | 4 x 16 | 1-3/16" | 12 | 44299• |
| .012 Brass Wire | | | | | |
| 11" | 5" | 4 x 16 | 1-1/4" | 12 | 73218• |

• Plastic block

## Vortec Pro® Shoe Handle Scratch Brushes - Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 10" x 1" | 5" | 4 x 16 | 1" | 12 | 25100 |
| .012 Stainless Steel Wire | | | | | |
| 10" x 1" | 5" | 4 x 16 | 1" | 12 | 25104 |

Removing excess concrete from the surface of a steel support plate.



44594 Top View



44053



44055



25150



44063



44065



73218



25100



Removing dirt and oil from a lathe.



44069



44076



44116



44119



44075



44551



44189



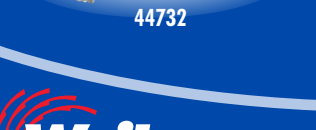
44619



95151



99383



44732

## Heavy-Duty Scratch Brush with Scraper - .012 Steel Wire - Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 11-1/2" x 1-1/2" | 5-1/2" | 4 x 11 | 1-1/2" | 12 | 44069 |

## Vortec Pro® Heavy-Duty Scratch Brush with Scraper -

.012 Steel Wire - Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 11-1/2" x 1-1/2" | 5" | 4 x 11 | 1-5/8" | 12 | 25211 |

## Plater's Brushes - Hardwood block. For general cleaning in the plating, metal finishing, aircraft and missile industries. Also used with inert arc aluminum welding.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Tampico** | | | | | |
| 13" x 1-1/4" | 5-1/4" | 4 x 18 | 1" | 12 | 44076 |
| **Nylon** | | | | | |
| 13" x 1-1/8" | 5-1/4" | 4 x 19 | 1" | 12 | 44077 |
| **.006 Steel Wire** | | | | | |
| 10" x 1-1/8" | 5" | 4 x 16 | 1" | 12 | 44117 |
| 13" x 7/8" | 5-1/2" | 3 x 19 | 1" | 12 | 44116 |
| **.006 Stainless Steel Wire** | | | | | |
| 10" x 1-1/8" | 5" | 4 x 18 | 1" | 12 | 44240 |
| 13" x 7/8" | 5-1/2" | 3 x 19 | 1" | 12 | 44660 |
| 13" x 1-1/8" | 5-1/2" | 4 x 19 | 1" | 12 | 44232 |
| **.006 Brass Wire** | | | | | |
| 10" x 1-1/8" | 5" | 4 x 18 | 1" | 12 | 44119 |
| 13" x 7/8" | 5-1/2" | 3 x 19 | 1" | 12 | 44118 |

## Small Hand Scratch Brushes - Ideal for cleaning and prepping surfaces.

| Block Size | Block | No. of Rows | Wire Size | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Stainless Steel Wire** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006 | 1/2" | 36 | 44075 |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44167+ |
| 7-3/4" x 3/8" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44551* |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .006 | 5/8" | 36 | 95013 |
| **Straight Brass Wire** | | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44189 |
| **Crimped Brass Wire** | | | | | | |
| 6" x 1/2" | Wood | 3 x 10 | .005 | 5/8" | 72 | 44619 |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .008 | 5/8" | 36 | 95014 |
| **Crimped Aluminum** | | | | | | |
| 6-3/4" x 1-5/8" | Wood | 6 x 9 | .008 | 5/8" | 12 | 95151 |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .008 | 5/8" | 36 | 44251 |
| **Straight Black Nylon** | | | | | | |
| 6-1/2" x 1/2" | Plastic | 4 x 15 | .010 | 1/2" | 24 | 99383 |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .012 | 1/2" | 36 | 44637 |
| **White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .016 | 1/2" | 36 | 44609 |
| **Double-Sided Brass/White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44731 |
| **Double-Sided Brass/Stainless Steel** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44732 |
| **Double-Sided Stainless Steel/White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44733 |

+ Countertop display available. See page 176.
*Wire drawn

# Scratch Brushes



Removing chips from the slots of a milling machine.

## Vortec Pro® Small Hand Scratch Brushes - Reliable and efficient brushes at a value price.

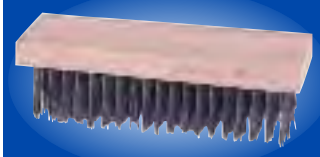
| Block Size | Handle | No. of Rows | Wire Size | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Stainless Steel Wire** | | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44805 |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006 | 1/2" | 36 | 44806 |
| **Straight Brass Wire** | | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44810 |



44806

## Block Type Scratch Brushes - For rugged cleaning on bricks, stone and similar large flat areas.

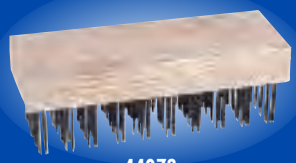
| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7-1/4" x 2-5/8" | .012 Round Wire Curved Face | 7" | 9 x 21 | 1-3/16" | 12 | 44066 |
| 7-1/4" x 2-1/4" | .014 Round Wire Flat Face | 7" | 6 x 19 | 1-5/8" | 12 | 44067 |



44067

## Vortec Pro® Block Type Scratch Brush - Reliable and efficient brushes at a value price.

| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7-1/4" x 2-1/4" | .012 Steel | 7" | 6 x 19 | 1-5/8" | 12 | 25212 |



44073

## Butcher Block Brush - For cleaning concrete forms and green concrete after forms have been removed.

| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7-1/2" x 2-3/4" | .017 x .110 Flat Wire | 7" | 5 x 10 | 1-1/4" | 12 | 44073 |



44070

## Chipping Hammer Refill - A refill brush for most chipping hammers. Used for weld cleaning.

| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-5/8" x 7/8" | .012 Steel | 4-1/2" | 3 x 15 | 1-1/8" | 12 | 44070 |



44451

## Wire Duster - For cleaning chips, borings, solder, rust, dirt & corrosion from castings.

| Block Size | Fill Material | Handle Length | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3" x 1-1/8" | .012 Steel | 5-3/4" | 4 x 8 | 2-1/2" | 12 | 44451 |

## File Card Brush - Waxed hardwood block. Use for file cleaning or to roughen and prepare surface material prior to sweating and soldering.

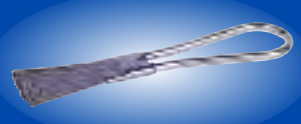
| Overall Length | Fill Material | Brush Part | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8-1/4" | .012 Steel | 1-5/8" x 4" | 1/4" | 12 | 44260 |



44260

## Metal Chip Brush - Small stiff wire brush for brushing hot metal. Can be exposed to flames without burning.

| Overall Length | Fill Material | Trim Length | Face Width | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 5-1/2" | .012 Steel | 1-1/2" | 1-1/4" | 12 | 44074 |



44074

# Flue Brushes



Cleaning boiler pipes with a flue brush.

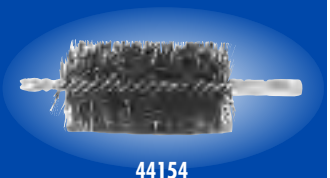
**Flue Brushes -** Designed and engineered from black oil-tempered wire. Flue brushes are available in single spiral and double spiral construction. Other fill materials and sizes available by special order. Contact Customer Service for details.

## Applications

- Pipe cleaning
- Flue cleaning
- Boiler tube cleaning



44131



44154



95925

**Flue Brushes - Filled with .012 round wire and fitted with 1/4" x 2" NPT pipe nipple. For internal cleaning of pipes and flues.**

| Brush Diameter | Brush Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Single Spiral** | | | | |
| 7/8" | 4-1/2" | 7-1/2" | 1 | 44124 |
| 1" | 4-1/2" | 7-1/2" | 1 | 44125 |
| 1-1/4" | 4-1/2" | 7-1/2" | 1 | 44047 |
| 1-1/2" | 4-1/2" | 7-1/2" | 1 | 44128 |
| 1-3/4" | 4-1/2" | 7-1/2" | 1 | 44048 |
| 2" | 4-1/2" | 7-1/2" | 1 | 44131 |
| 2-1/2" | 4-1/2" | 7-1/2" | 1 | 44133 |
| 3" | 4-1/2" | 7-1/2" | 1 | 44135 |
| 3-1/2" | 4-1/2" | 7-1/2" | 1 | 44137 |
| 4" | 4-1/2" | 7-1/2" | 1 | 44139 |
| **Double Spiral** | | | | |
| 1" | 4-1/2" | 7-1/2" | 1 | 44149 |
| 1-1/4" | 4-1/2" | 7-1/2" | 1 | 44035 |
| 1-1/2" | 4-1/2" | 7-1/2" | 1 | 44150 |
| 1-3/4" | 4-1/2" | 7-1/2" | 1 | 44036 |
| 2" | 4-1/2" | 7-1/2" | 1 | 44152 |
| 2-1/4" | 4-1/2" | 7-1/2" | 1 | 44037 |
| 2-1/2" | 4-1/2" | 7-1/2" | 1 | 44154 |
| 2-3/4" | 4-1/2" | 7-1/2" | 1 | 44038 |
| 3" | 4-1/2" | 7-1/2" | 1 | 44156 |
| 4" | 4-1/2" | 7-1/2" | 1 | 44169 |
| 4-7/8" | 4-1/2" | 7-1/2" | 1 | 44159 |

**Flue Brush Extension Rod - One 1/4" male pipe nipple and one 1/4" female pipe coupling allows user to extend flue brush.**

| Description | Standard Pack | Item Number |
|---|---|---|
| 36" Fiberglass Extension Rod | 1 | 95925 |

NOTE

"Pipeline" Flue Brushes By Special Order Only.
- Heavy-duty. Exact size diameter. Rugged double stem, single spiral.
- Fitted with 1/4" pipe nipple. Available in diameters of 1-5/8" - 15".

DID YOU KNOW?

Flue Brushes are available in additional sizes and fill materials.

# Tube Fitting Brushes

**Tube Fitting Brushes -** Several configurations and sizes of Tube Fitting Brushes are available for cleaning and deburring copper, internal and external tube fittings. The handy 4-in-1 tube fitting brush cleans both outside and inside diameters of multiple tube sizes.



Cleaning the inside of a copper fitting prior to soldering.

**Internal Tube Fitting Brushes - Wire Fill - For internal cleaning and deburring of copper tube fittings. Also used in trucking and marine industries as a light socket cleaning brush.**

| Tube Diameter | Actual Diameter | Brush Length | Overall Length | Handle Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/8" | 1/4" | 1" | 6-1/2" | 3-1/4" | 12 | 44078 |
| 1/4" | 3/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44079 |
| 3/8" | 1/2" | 1" | 6-1/2" | 3-1/4" | 12 | 44080 |
| 1/2" | 5/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44081 |
| 5/8" | 3/4" | 1" | 6-1/2" | 3-1/4" | 12 | 44082 |
| 3/4" | 7/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44083 |
| 7/8" | 1" | 1" | 6-1/2" | 3-1/4" | 12 | 44084 |
| 1" | 1-1/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44085 |
| 1-1/4" | 1-3/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44086 |
| 1-1/2" | 1-5/8" | 1-1/2" | 6-1/2" | 3-1/4" | 6 | 44087 |



44079

**External Tube Fitting Brushes - 1/4" Stem**
**Ideal for cleaning tube ends. Mount to a hand drill for fast results.**

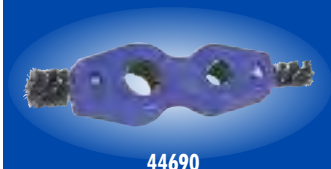
| Outside Diam. | Standard Pack | Item Number |
|---|---|---|
| 3/8" | 40 | 44734 |
| 1/2" | 40 | 44735 |
| 5/8" | 40 | 44736 |
| 3/4" | 40 | 44737 |
| 7/8" | 40 | 44738 |
| 1" | 40 | 44739 |



44734

**4-in-1 Tube Fitting Brush**
**One Brush Replaces Four! - Steel Wire**
**Cleans the outside and inside diameters of 1/2" and 3/4" tubes and fittings.**
**Use for soldering prep, deburring, drill hole cleaning and cleaning battery terminals.**

| Tube Inside Diameter | Tube Outside Diameter | Standard Pack | Item Number |
|---|---|---|---|
| 3/4" and 1/2" | 7/8" and 5/8" | 1 | 44690 |



44690

**Turbo Tube™ Brushing Tool -** The Turbo Tube Brushing Tool is two brushes in one, so fittings and copper tubing can be easily cleaned without changing tools!

## Applications

- Fitting brush cleans outside diameter
- Tube brush cleans inside diameter
- Ideal for plumbing and HVAC projects

**Vortec Pro® Turbo Tube Brushes - Clean I.D. and O.D. with the same tool.**
**Rust-proof stainless steel bristles. Reliable and efficient brushes at a value price.**



| I.D. Size | O.D. Size | Wire Type | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 5/8" | Stainless | 1 | 36303 |
| 3/4" | 7/8" | Stainless | 1 | 36304 |
| 1" | 1-1/8" | Stainless | 1 | 36305 |



36303

# Paint & Varnish Brush Technical Information

## General Information

### Brush Types:

Weiler brushes are designed for industrial use. These quality brushes are made with the finest materials, yet priced to give the lowest cost-per-use.

- Wall Paint
- Varnish
- Flat Sash
- Angular Sash
- Oval Sash
- Chip & Oil
- Acid
- Glue
- Stencil
- Parts Cleaning
- Marking
- Round Sash

## Paint Brush Terminology

**Fill Material:** The part of the brush that actually does the work. Weiler brushes are filled with Natural China Bristle or Tapered Polyester. Various sizes of fill material are blended together to create the proper taper.

**Ferrule:** The metal band that holds the fill material and handle together. All Weiler paint and varnish brushes are made with plated metal ferrules which will not rust or corrode.

**Flagged Ends:** A split at the end of each tapered fiber of fill material. Bristle is naturally tapered with a flagged tip. Polyester fibers are made tapered and then mechanically processed to form a flagged tip. Flagging allows each tip to pick up more paint and spread it more evenly.



**Handle:** Weiler handles are made of quality wood or synthetics. Wood handles are sanded and lacquered. Synthetic handles are not affected by paints, varnishes or solvents. All handles provide a comfortable grip for hours of fatigue-free use.

**Thickness:** The thickness of the brush, measured at the ferrule, will determine the quality level of the brush. The thicker the brush, the more paint pick-up and release.

**Trim Length:** The length of the fill material extending from the ferrule. The longer the trim, the more paint is picked up and released for a quicker, easier job.

## Paint & Varnish Brush Selection Guide

**The chart below provides information on paint brush fill types to allow you to recommend the correct brush for the job.**

| Brush Fill | Recommended For | Benefits |
|---|---|---|
| China Bristle | All oil based and alkyd paints, stains, varnish urethane & shellac | • Softest tip for fewest brush marks<br>• Natural fibers hold paint better than synthetics |
| Polyester/Nylon blend | All paints and coatings | • Most durable material<br>• Precise tipping<br>• Cleans up easily |
| Polyester | All paints and coatings | • Low cost<br>• Does not absorb water |

## Paint & Varnish Brush Care

| Brushes Used In | Clean With |
|---|---|
| • Oil base paint | • Turpentine or mineral spirits |
| • Latex paint | • Warm soapy water |
| • Water base paint | • Warm soapy water |
| • Varnish | • Turpentine or mineral spirits |
| • Shellac | • Alcohol |

Note: After cleaning, shake out, comb bristles and hang by handle.

## Special Paint Brushes

The brushes listed in this catalog will cover the major requirements of industry. However, if an application requires another type, size or style of brush, contact your nearest Weiler distributor or Weiler's Customer Service Team.

# Professional Paint, Varnish & Sash Brushes

**Professional Wall, Varnish and Sash Brushes -** These high quality brushes are available in a wide variety of sizes and materials to fill all applications. The Profesional Wall Brushes have a sanded wooden handle, the preferred standard among professional users. The Professional Varnish and Sash Brushes are color coded - Blue for Bristle and Red for Polyester/Nylon Blend, and feature painted foam handles in the "beaver tail" style. These handles are attractive and easier to grip, reducing user fatigue.



Applying paint to clap board siding.

### Wall Paint Brushes - For interior/exterior painting of large flat surfaces.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Sanded Wood Handle | | | | |
| 3" | 7/8" | 3-1/4" | 6 | 40022 |
| 4" | 7/8" | 3-3/4" | 6 | 40023 |
| Poly/Nylon - Sanded Wood Handle | | | | |
| 3" | 7/8" | 3" | 6 | 40061 |
| 4" | 7/8" | 3" | 6 | 40062 |

### Varnish Brushes - Comfortable foam grip handle; smooth paint flow.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Blue Foam Handle | | | | |
| 1" | 7/16" | 2" | 12 | 40000 |
| 1-1/2" | 1/2" | 2-1/4" | 12 | 40001 |
| 2" | 9/16" | 3" | 12 | 40002 |
| 2-1/2" | 5/8" | 3" | 12 | 40003 |
| 3" | 11/16" | 3" | 12 | 40004 |
| 4" | 11/16" | 3" | 12 | 40010 |
| Poly/Nylon - Red Foam Handle | | | | |
| 1" | 7/16" | 2-1/4" | 12 | 40058 |
| 2" | 3/4" | 2-3/4" | 12 | 40059 |
| 3" | 7/8" | 3" | 12 | 40060 |
| 4" | 7/8" | 3" | 6 | 40106 |

### Angled Sash Brushes - For trim or cut work like window sills, door frames, etc.

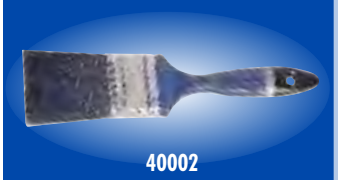
| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Blue Foam Handle | | | | |
| 1-1/2" | 7/16" | 2-1/4" | 12 | 40041 |
| 2" | 1/2" | 2-1/4" | 12 | 40008 |
| Poly/Nylon - Red Foam Handle | | | | |
| 1-1/2" | 7/16" | 2-1/2" | 12 | 40011 |
| 2" | 1/2" | 2-1/2" | 12 | 40040 |

### Flat Sash Brushes - For trim or cut work like window sills, door frames, or other narrow, flat surfaces.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Blue Foam Handle | | | | |
| 1" | 3/8" | 2" | 12 | 40113 |
| 1-1/2" | 7/16" | 2-1/4" | 12 | 40114 |
| 2" | 9/16" | 3" | 12 | 40115 |
| Poly/Nylon - Red Foam Handle | | | | |
| 1" | 3/8" | 2-1/4" | 12 | 40014 |
| 1-1/2" | 7/16" | 2-1/4" | 12 | 40017 |
| 2" | 9/16" | 2-1/2" | 12 | 40018 |


40022


40061


40002


40059


40041


40040


40115


40017

# Professional Sash & Parts Cleaning Brushes



Cleaning an oil pan with a parts cleaning brush.



40056



40121



40035



25222

## Oval Sash Brushes - Ideal for cleaning parts, crevices and painting hard-to-reach areas.

| Size | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Plain Foam Handle - Chisel Trim | | | | |
| #2 | 7/16" | 1-3/4" | 24 | 40116 |
| #4 | 11/16" | 1-3/4" | 12 | 40019 |
| #6 | 13/16" | 1-3/4" | 12 | 40056 |
| #8 | 15/16" | 3" | 12 | 40020 |
| #10 | 1-1/16" | 3" | 12 | 40021 |
| #12 | 1-3/16" | 3" | 12 | 40057 |

## Round Sash Brushes - Ideal for cleaning parts, crevices and painting hard-to-reach areas.

| Size | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Grey Bristle - Plain Foam Handle - Flat Trim | | | | |
| #2 | 7/16" | 1-3/4" | 24 | 40118 |
| #4 | 11/16" | 2" | 12 | 40119 |
| #6 | 13/16" | 2" | 12 | 40120 |
| #8 | 15/16" | 2-1/4" | 12 | 40121 |
| #10 | 1-1/16" | 2-1/4" | 12 | 40122 |
| #12 | 1-3/16" | 2-1/4" | 12 | 40123 |

## Parts Cleaning Brushes - Ideal for applications such as cleaning carburetors, transmission components, applying adhesives and lubricants.

## Parts Cleaning Brushes - Stainless steel ferrule - Heavily filled.

| Thickness | Fill Material | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Plain Foam Handle - Chisel Trim | | | | |
| 1" | Synthetic | 2-1/2" | 12 | 40035 |
| 1" | Tampico | 2-3/4" | 12 | 40036 |

## Vortec Pro® Parts Cleaning Brushes - Reliable and efficient brushes at a value price.

| Thickness | Fill Material | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Plain Foam Handle - Chisel Trim | | | | |
| 15/16" | Nylon | 2-1/2" | 12 | 25221 |
| 1" | Tampico | 2-3/4" | 12 | 25222 |

# Industrial Paint Brushes

**Industrial Paint Brushes -** The Industrial line features color coded plastic handles to provide quality paint brushes at competitive prices.



Painting inside the fins of a radiator with a Radiator brush.

### Industrial Varnish Brushes - Heavily-filled brush with comfortable handle in a variety of sizes.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Black Bristle - Black Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40088* |
| 1" | 3/8" | 1-3/4" | 36 | 40089 |
| 1-1/2" | 7/16" | 2" | 24 | 40101 |
| 2" | 7/16" | 1-3/4" | 12 | 40074 |
| 2-1/2" | 1/2" | 2-1/4" | 12 | 40102 |
| 3" | 1/2" | 2" | 12 | 40103 |
| 4" | 5/8" | 2-3/4" | 12 | 40104 |
| **Black Polyester - Red Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40112 |
| 1" | 3/8" | 2" | 36 | 40107 |
| 1-1/2" | 7/16" | 2" | 24 | 40108 |
| 2" | 7/16" | 2" | 12 | 40109 |
| 3" | 1/2" | 2" | 12 | 40110 |
| 4" | 11/16" | 2-3/4" | 12 | 40111 |

*Grey Bristle



40074



40109

### Bent Radiator Brush - Black Bristle - Wood Handle

**Ideal for painting radiators and other hard-to-reach areas.**

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 2" | 9/16" | 2-1/4" | 12 | 95502 |



95502

### Detail Brushes - Grey Bristle - Plastic Handle

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1-1/2" | 5/16" | 5/8" | 24 | 40012 |
| 1-1/2" | 5/16" | 1" | 24 | 40013 |

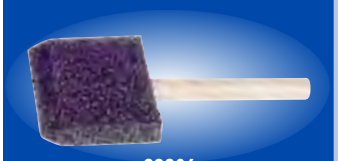


40013

### Vortec Pro® Foam Applicator Brushes - Wood Handle

**Reliable and efficient brushes at a value price. Not recommended for use with lacquer, shellac or solvents.**

| Width | Thickness | Foam Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1" | 5/8" | 2-5/8" | 50 | 99801 |
| 2" | 5/8" | 2-5/8" | 50 | 99805 |
| 3" | 7/16" | 2-5/8" | 40 | 99806 |
| 4" | 7/16" | 2-5/8" | 30 | 40199 |



99806

**DID YOU KNOW?** Flagged tips on synthetic and bristle style brushes help them carry more paint to the work surface.

# Chip and Oil Brushes



Removing chips from the ways of a lathe.

**Chip And Oil Brushes -** Chip and Oil brushes are inexpensive, multi-purpose brushes for use in applications requiring disposable brushes.

## Chip and Oil Brushes - White Bristle - Wood Handle

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 5/16" | 1-1/2" | 30 | 40065 |
| 1" | 5/16" | 1-1/2" | 30 | 40066 |
| 1-1/2" | 5/16" | 1-1/2" | 30 | 40067 |
| 2" | 5/16" | 1-1/2" | 20 | 40068+ |
| 2-1/2" | 3/8" | 1-1/2" | 20 | 40069 |
| 3" | 3/8" | 1-1/2" | 10 | 40070+ |
| 4" | 5/8"<br>3/8" | 1-5/8"<br>2" | 10 | 40071<br>40076 |

+ Countertop display available. See page 176.



40068

## Vortec Pro® Chip and Oil Brushes - Reliable and efficient brushes at a value price.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **White Bristle - Wood Handle** | | | | |
| 1/2" | 5/16" | 1-1/2" | 36 | 40177 |
| 1" | 5/16" | 1-1/2" | 36 | 40179 |
| 1-1/2" | 5/16" | 1-1/2" | 24 | 40180 |
| 2" | 5/16" | 1-1/2" | 24 | 40181 |
| 2-1/2" | 3/8" | 1-1/2" | 12 | 40182 |
| 3" | 3/8" | 1-1/2" | 12 | 40183 |
| 4" | 5/8"<br>3/8" | 1-3/4" | 12 | 40184<br>40185 |
| **Black Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-5/8" | 30 | 40160 |
| 1" | 5/16" | 1-5/8" | 30 | 40161 |
| 1-1/2" | 5/16" | 1-5/8" | 30 | 40162 |
| 2" | 5/16" | 1-5/8" | 20 | 40163 |
| 2-1/2" | 3/8" | 1-3/4" | 20 | 40164 |
| 3" | 3/8" | 1-3/4" | 10 | 40165 |
| 4" | 11/16" | 2" | 10 | 40166 |
| **Grey China Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-1/2" | 48 | 40026 |
| 1" | 5/16" | 1-1/2" | 36 | 40027 |
| 1-1/2" | 5/16" | 1-1/2" | 24 | 40028 |
| 2" | 3/8" | 1-1/2" | 24 | 40029 |
| 2-1/2" | 1/2" | 1-1/2" | 12 | 40030 |
| 3" | 1/2" | 1-1/2" | 12 | 40031 |
| 4" | 11/16" | 1-1/2" | 12 | 40032 |
| **Grey China Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40129 |
| 1" | 5/16" | 1-3/4" | 36 | 40130 |
| 1-1/2" | 5/16" | 1-3/4" | 24 | 40131 |
| 2" | 3/8" | 1-3/4" | 24 | 40132 |
| 2-1/2" | 1/2" | 1-3/4" | 12 | 40133 |
| 3" | 1/2" | 1-3/4" | 12 | 40134 |
| 4" | 11/16" | 1-3/4" | 12 | 40135 |
| **Black Synthetic - Red Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40136 |
| 1" | 5/16" | 1-3/4" | 36 | 40137 |
| 1-1/2" | 5/16" | 1-3/4" | 24 | 40138 |
| 2" | 3/8" | 1-3/4" | 24 | 40139 |
| 3" | 1/2" | 1-3/4" | 12 | 40140 |
| 4" | 11/16" | 2-3/4" | 12 | 40141 |



40181



40161



40029



40141

# Marking Brushes

**Marking Brushes -** Weiler's high quality Marking Brushes come in a variety of animal, natural and synthetic bristles in numerous handle styles for many applications such as fine artwork, pin striping and sign painting.



Painting a tight area on a steel door with a Marking Brush.

### Red Sable Watercolor Brushes - Seamless ferrule. Pointed tip - Round black handle

| Size | Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 3/0 | 3/64" | 1/4" | 12 | 41000 |
| 0 | 1/16" | 5/16" | 12 | 41001 |
| 2 | 3/32" | 7/16" | 12 | 41002 |
| 4 | 1/8" | 5/8" | 12 | 41003 |



41003

### Black Bristle Marking Brushes - Long, lacquered handle

| Size | Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1 | 1/8" | 3/4" | 12 | 41004 |
| 2 | 5/32" | 15/16" | 12 | 41005 |
| 4 | 7/32" | 1-1/8" | 12 | 41007 |
| 5 | 1/4" | 1-1/4" | 12 | 41008 |
| 6 | 9/32" | 1-3/8" | 12 | 41009 |



41009

### Flat Marking Brushes - Ox hair - Single stroke - Round black handle

| Width | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | 7/8" | 12 | 41018 |
| 1/2" | 1" | 12 | 41019 |
| 3/4" | 1-1/4" | 12 | 41020 |
| 1" | 1-3/8" | 12 | 41021 |



41021

### Sign Brushes - Ox hair - Flat red handle

| Width | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | 3/4" | 12 | 41014 |
| 1/2" | 1" | 12 | 41015 |
| 3/4" | 1-1/8" | 12 | 41016 |
| 1" | 1-1/4" | 12 | 41017 |



41015

### Fitch Brushes - Black china bristle - Chiseled edge - Clear lacquered handle

| Width | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | 13/16" | 12 | 41022 |
| 1/2" | 1-1/16" | 12 | 41023 |
| 3/4" | 1-5/16" | 12 | 41024 |
| 1" | 1-9/16" | 12 | 41025 |



41024

### Lacquering Brushes - Seamless aluminum ferrule. Camel hair - Round black handle

| Size | Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1 | 5/32" | 11/16" | 12 | 41010 |
| 3 | 7/32" | 13/16" | 12 | 41011 |
| 5 | 1/4" | 1-1/8" | 12 | 41012 |
| 6 | 5/16" | 1-3/16" | 12 | 41013 |



41011

# Glue and Acid Brushes



Applying flux to a copper tube prior to soldering.

**Glue And Acid Brushes -** Weiler's Glue and Acid Brushes come in multiple sizes, ferrule types, handles and fill materials for a wide variety of cleaning and coating applications.



40078



44089



44097



40082



44262



44259

## Bridled Glue Brushes - Grey china bristle - Steel ferrule - Long foam handle

| Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 7/16" | 1-1/4" | 36 | 40077 |
| 13/16" | 1-3/4" | 24 | 40078 |
| 15/16" | 1-3/4" | 24 | 40079 |

## Acid/Flux Brushes - Horsehair - Tin ferrule

| Width | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 5/16" | 3/4" | 5-3/4" | 144 | 44088 |
| 3/8" | 3/4" | 5-3/4" | 144 | 44089 |
| 1/2" | 3/4" | 5-3/4" | 144 | 44090 |

## Stylus Brush - Stiff grey horsehair. Aluminum tube with cork to hold cleaning fluid. For cleaning electrical contact points.

| Width | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 3/8" | 5" | 100 | 44097 |

## Stencil Brushes - China bristle - Seamless steel ferrule - Lacquered wood handle

| Diameter | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 1-3/8" | 12 | 40080 |
| 1-1/2" | 1-5/8" | 12 | 40081 |
| 2" | 1-3/4" | 12 | 40082 |

## Dope Brushes - With hanger for coating applications in drilling operations.

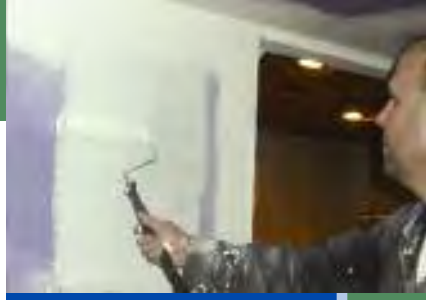
| Brush Part | Fill Material | Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" | Mixed Tampico | 2"<br>2-1/2"<br>3" | 16" | 12 | 44261<br>44262<br>44263 |

## Dauber Brush - For applying dope to the thread ends of drill pipe.

| Brush Size | Fill Material | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" | White Tampico | 16" | 12 | 44259 |

# Paint Rollers and Accessories

**Paint Rollers And Accessories -** Paint Rollers can be used almost anywhere including walls, ceilings, floors, decks, fences, metal surfaces, concrete, and brick walls. Weiler carries a wide variety of rollers for the professional painter, industrial use and those weekend DIY projects. Accessories include roller frames, paint trays, bucket grids and painter's mitts.



Applying primer to new drywall.

## Paint Roller Selection Guide

| Work Surface | Coating | Recommended Nap |
|---|---|---|
| Metal, Smooth Wood, Smooth Concrete | Enamels, Epoxies Adhesives, Paint | 3/16", 3/8" (Low nap) |
| Rough Wood, Drywall, Cement Block | All Paint | 1/2", 3/4" (Medium nap) |
| Stucco, Brick, Concrete | All Paint | 1" (High nap) |

### Professional Grade Rollers - Poly blend with phenolic core.

| Size | Nap | Painting Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 9" | 3/16"<br>1/2"<br>3/4" | Smooth<br>Semi-smooth<br>Rough | 12 | 49050<br>49051<br>49052 |

### Industrial Grade Rollers - Poly blend with PVC core.

| Size | Nap | Painting Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 3" | 3/8" | Semi-smooth | 24 | 49046 |
| 4" | 3/8"<br>3/4" | Semi-smooth<br>Rough | 12 | 49044<br>49045 |
| 9" | 3/16"<br>1/2"<br>3/4"<br>1" | Smooth<br>Semi-smooth<br>Rough<br>Extra Rough | 12 | 49061<br>49062<br>49063<br>49053 |
| 18" | 3/8"<br>3/4" | Smooth<br>Rough | 1 | 49082<br>49086 |

### Vortec Pro® Rollers - Poly blend with PVC core. Reliable and efficient rollers at a value price.

| Size | Nap | Painting Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 9" | 3/8"<br>1/2" | Semi-smooth<br>Semi-smooth | 12 | 49070<br>49071 |

### Specialty Rollers - Can be used with all paints. Ideal for trim and touch-up.

| Description | Standard Pack | Item Number |
|---|---|---|
| 3" Roller with 3/8" nap. Standard duty frame | 24 | 49016 |
| 3" Roller with 3/8" nap. Wire frame with two tin end caps. Bent wire handle | 12 | 49015 |
| 4" Micro Perlon Roller Reach | 24 | 49025 |
| 4" Micro Perlon Twin Pack Cover | 24 | 49066 |



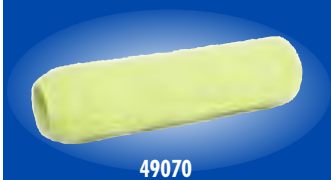
49050



49045



49063



49070



49016



49015



49025



# Paint Rollers and Accessories

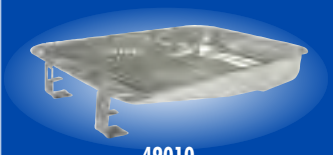
The bucket grid is a must for every painting project!



49021



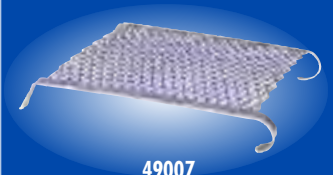
49020



49010



49011



49007

**Frames -** All metal with two plastic caps. Solid plastic handle with threaded grip. Can be used with threaded handle #44300 on page 147.

| Size | Description | Standard Pack | Item Number |
|---|---|---|---|
| 3" | Standard-duty 1/4" dia. frame with 4 wire cage | 24 | 49019 |
| 4" | Standard-duty 1/4" dia. frame with 4 wire cage | 24 | 49018 |
| 9" | Heavy-duty 5/16" dia. frame with 5 wire cage | 12 | 49022 |
| 12"-18" | Adjustable frame fits 12"-18" rollers | 1 | 49021 |

**Vortec Pro® Frame -** Reliable and efficient frame at a value price.

| Size | Description | Standard Pack | Item Number |
|---|---|---|---|
| 9" | Standard-duty 1/4" dia. frame with 4 wire cage | 24 | 49020 |

**Paint Trays -** A variety of trays available to meet users' specific needs.

| Description | Paint Capacity | Standard Pack | Item Number |
|---|---|---|---|
| 4" Plastic tray | 1 Quart | 24 | 49008 |
| 9" Galvanized steel tray; Rust resistant | 1 Quart | 24 | 49010 |
| 9" Deluxe plastic tray; Rust proof | 1 Quart | 20 | 49012 |
| 9" Paint tray liner | 1 Quart | 24 | 96702 |

**Vortec Pro® Paint Tray -** Reliable and efficient tray at a value price.

| Description | Paint Capacity | Standard Pack | Item Number |
|---|---|---|---|
| 9" Economy plastic tray; Rust proof | 1 Quart | 20 | 49011 |

**Bucket Grid -** Permits use of paint roller directly from a 5-gallon pail.

| Description | Standard Pack | Item Number |
|---|---|---|
| Heavy steel - 5 gallon size | 12 | 49007 |

# Weiler® Nylox® Brushes

Nylox® Brushes









- Engineered Products & Equipment

New! - **Wheel Brushes**
*Including an Expanded Offering of Burr-Rx® Ceramic Filament Brushes!*

New! - **Disc Brushes**
*Featuring Burr-Rx® Shell Mill Holder Brushes - No Drive Arbor Required!*

- **Cup Brushes**

- **End Brushes**

New! - **Crosshole Deburring Brushes**
*Now with Advanced Burr-Rx® Ceramic Filament Technology!*

New! - **Tube Brushes**
*Including Burr-Rx® Ceramic Filament Power Tube Brushes!*

New! - **FME Area Product Solutions**

- **Adapters & Drive Arbors**

**Knowledgeable and Responsive Customer Service Team:**
**800-835-9999**

**Application Engineering Support:**
**888-299-APPS (2777)**

**Interactive Website:**
**www.weilercorp.com**

**Nylox® Brushes**









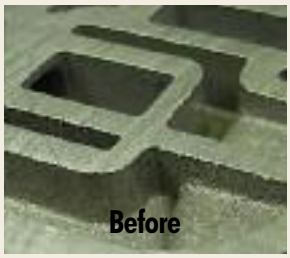
# Solutions Showcase

## Transmission Valve Body

**Problem:** Burrs on transmission components can break away from parent components during use and cause transmission wear and eventual failure. Therefore, fluid passages must be completely burr-free.

**Solution:** A 10" Nylox® disc brush operating at 825 RPM in a vertical CNC machining center is an ideal solution for deburring this component. Since all of the burrs are on a single plane, the non-directional nature of a Nylox disc brush produces a part on which all edges have been uniformly deburred.





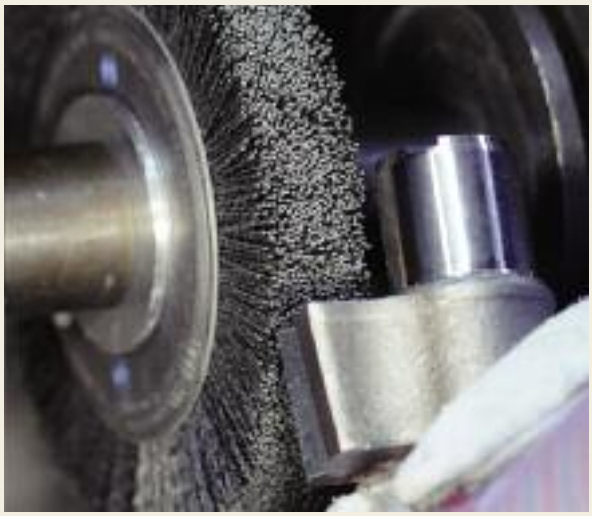




## Steering Component

**Problem:** Manual deburring can be costly in many respects. Hard deburring tools and aggressive abrasive wheels do not allow much margin for operator error and the result is often high scrap rates.

**Solution:** Nylox brushes produce a flexible filing action which concentrates all of the abrasive cutting action on sharp edges, giving them the ability to remove burrs without altering overall part dimensions. For example, a 6" Burr-Rx wheel mounted onto a 1,725 RPM pedestal buffer is capable of deburring this steering component just as quickly as a convolute wheel but without the fear of over-radiusing the edges of the teeth or producing flat spots.









## Aluminum Wheel

**Problem:** Sharp burrs cause safety concerns due to handling issues. In the production of aluminum wheels, burrs and sharp edges can also contribute to problems with painting and powder coating.

**Solution:** Weiler designs Nylox disc brushes that are tailored to match the specific geometric features of each aluminum wheel. The customized design and use of next-generation filament technology ensures wheels that are thoroughly deburred at the minimal cost-per-part.

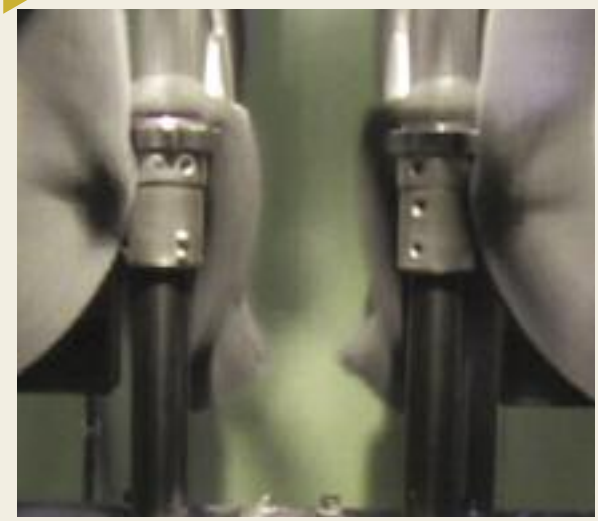







# Solutions Showcase

## Pump Gear









**Problem:** Pumps are extremely susceptible to failure due to burrs. Due to the tight fit between components, all edges must be deburred and radiused to ensure proper function. Proper deburring of rotating pump gears is especially important.

**Solution:** A dedicated machine running 14" Nylox wheel brushes at 900 RPM was a low-cost solution for deburring these gears. By using dedicated equipment, cycle time was minimized and an acceptable edge condition was achieved.

## Cast Aluminum Housing









**Problem:** Although deburring the face-milled surfaces of castings is a very straight forward application for Nylox disc brushes, the limited availability of valuable machine time can be a perceived obstacle that prevents users from reaping the many benefits of implementing in-machine deburring operations.

**Solution:** The advanced ceramic grain technology of Weiler's Burr-Rx tools offer a deburring action that is up to 400% greater than traditional abrasive nylon brushes which contain silicon carbide or aluminum oxide filaments. This allows Burr-Rx deburring tools to be used at feed rates which dramatically reduce the amount of additional machine time required to perform a brushing operation.

## Turbine Blade

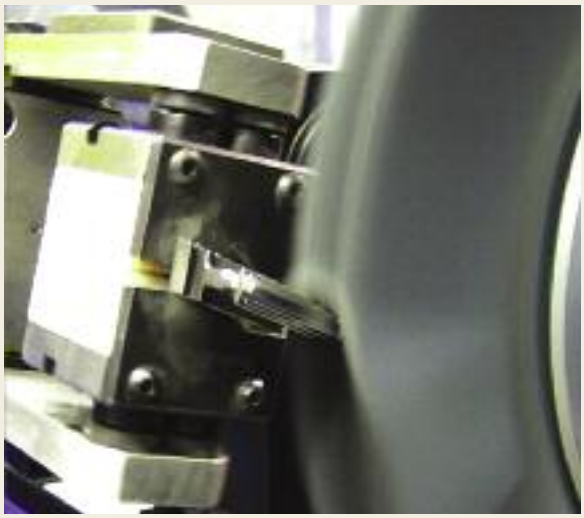








Photo courtesy of ACME Manufacturing.

**Problem:** Protecting turbine engine components against high-temperature fatigue is critical to ensure safe, reliable engine operation. Component edges must be burr-free and generally require an edge radius in the range of 0.005" to 0.060".

**Solution:** Robots are extremely well-suited for this application because they can manipulate the component in many orientations in relation to the brush. Weiler works closely with users and robot integrators to develop products and process programs which maximize brush life while generating exceptional part quality and consistency.

# Nylox® Technical Information

## Operational Advantages of Nylox® Brushes

### Aggressive Yet Compliant



Nylon filaments co-extruded with an abrasive grain act like flexible files precisely deburring and radiusing edges as they wipe across them. Because the cutting pressure with which the abrasive grains are applied against a broad surface is limited by the compliant nature of the filaments, Nylox brushes tend not to alter the overall dimensions or geometry of a part. This high degree of compliance allows them to conform to complex part shapes and reduces the need for ultra-precise programming and fixturing that is typically required with other deburring and finishing tools.

### Enhanced Surface Finishes



The compliant cutting action of Nylox brushes not only limits their ability to alter part dimensions, but it makes them an effective tool for refining surface texture characteristics without removing significant amounts of base material. Although they contain the same abrasive grain sizes, Nylox brushes will **not** generate the same prominent scratch pattern as a comparable coated abrasive product. Their limited aggression and flexible filing action also make them suitable for deburring a wider range of materials in comparison to wire filled power brushes.

### Ideal For Automation



Because the abrasive grain is evenly distributed throughout the durable nylon filament, Nylox brushes offer extremely consistent performance throughout their product life. Coupled with their extremely compliant nature, this makes them an ideal media for use in automated deburring and finishing processes involving either dedicated production equipment or flexible solutions such as robotic cells. Their use can also be directly integrated into the cycle of CNC machining centers to improve part quality and consistency while reducing direct labor costs.

## Construction Advantages of Weiler Nylox Brushes

### Metal Hub Construction

- Metal hub components are assembled under high pressure, potentially damaging the filaments and causing premature breakage.
- Retaining ring displaces filament material creating a void in the center of the brush face.
- Lower fill density can result in shorter life and less consistent performance.



### Weiler's Composite Hub Construction

- Molded hub construction eliminates filament breakage.
- Uniform distribution of fill material and superior balance.
- Higher fill density provides more aggressive brushing and longer life.
- Consistent performance as the brush wears.

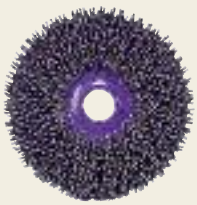


### Weiler's Composite Metal Hub Construction

- Filaments retained using the latest polymer technology to prevent filament breakage.
- Metal components add impact resistance and dimensional stability.
- The highest filament density in the market ensures lowest cost-per-part.



### Monofilament Construction



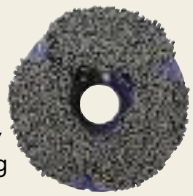
This construction is less aggressive due to lack of filament density. This hinders processing of severe burrs or generating larger edge radii in shorter cycle times. The short trim length results in less conformability and decreased brush life, resulting in fewer parts-per-brush.

### Weiler's Tufted Construction



Weiler's construction offers increased aggression due to added filament density. This enables processing of severe burrs or generating larger edge radii in shorter cycle times. Our longer trim length allows for greater conformability and longer tool life.

### Weiler's Maximum Density Construction

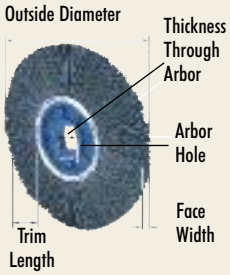


Maximum density brushes are uniquely suited for demanding applications characterized by large burrs and rapid feed rates.

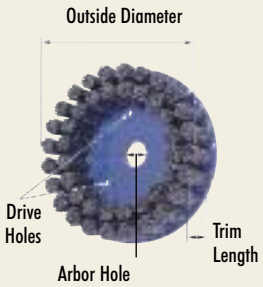
## Product Attributes

### Brush Terminology

**Wheel Brushes**




**Disc Brushes**



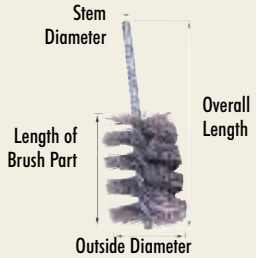

**Cup Brushes**




**End Brushes**



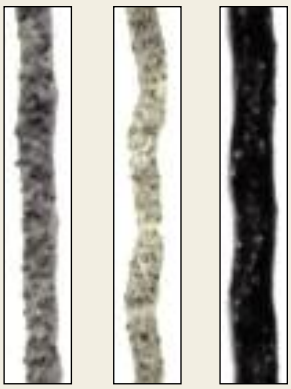

**Tube Brushes**



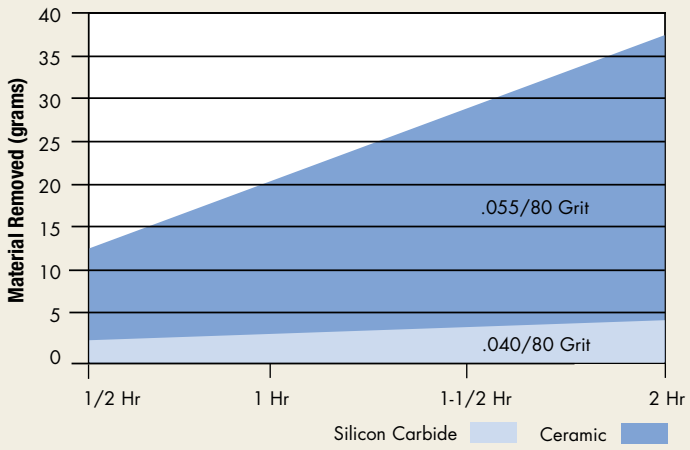

### Nylox Filaments

Abrasive brush filaments are manufactured by extruding a mixture of liquefied polymer and abrasive grain. Unlike the filaments used in DIY grade abrasive brushes, industrial grade products like Weiler's Nylox and Burr-Rx brushes feature the highest grade of abrasive filament manufactured using a Type 6.12 nylon polymer. Industrial grade filaments also feature the highest quality abrasive materials which have been sifted and sorted to insure that the grains are consistent in size. These grains may be one of three different types of abrasive:

- **Silicon Carbide (SiC) -** Is a sharp-edged grain which produces an effective cutting action. It is the most common grain used in industrial grade brushes.
- **Aluminum Oxide (AO) -** Is a duller, less aggressive grain typically used in finishing applications requiring a less pronounced scratch line pattern or deburring applications on materials where the use of SiC may be prohibited
- **Burr-Rx Ceramic (CG) -** An engineered abrasive grain that produces a superior cutting action and is compatible with the widest range of materials. It is the most effective grain available today!




### Material Removal vs. Time



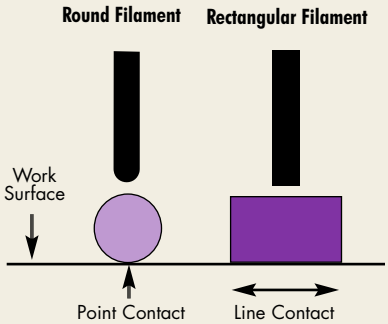

Nylox brushes containing the Burr-Rx black ceramic filament are the most cost-effective choice for a brush deburring tool because the engineered abrasive grain produces a cutting action up to 400% greater than equivalent SiC and AO filaments. This not only allows Burr-Rx brushes to remove burrs that traditional nylon abrasive filament products cannot, but it also minimizes cycle times by allowing the use of much higher feed rates and much shorter dwell times.

Burr-Rx brushes are especially well-suited for use on hard-to-deburr metals such as inconel, stainless steel and titanium, but with proper selection of the product and operating parameters, they can be used on virtually any material.

**Round Filaments -** Due to their cross-sectional shape and the reduced contact with the work surface or part edges that result, round filaments provide a more compliant brushing action for less aggression and enhanced conformability.

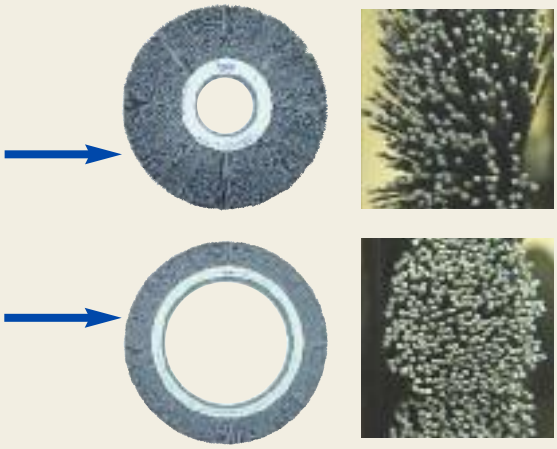
**Rectangular Filaments -** Due to their shape, larger cross-sectional area and increased contact with the work, rectangular filaments provide a less compliant brushing action for much greater aggression and reduced conformability.

Crimping either type of filament along its length enhances conformability, allowing greater penetration of part edges into the brush face, often increases aggression. Crimped filaments are especially beneficial in maximum density disc brush designs.



## Product Selection

### Trim Length and Fill Density



**Longer Trim, lower density brushes** offer a greater degree of flexibility that is ideal for applications requiring a high degree of brush conformability. However, the lower fill density can result in shorter brush life and less consistent performance.

**Shorter Trim, higher density brushes** work with a faster action and less engagement with the brush face. This produces shorter cycle times, more consistent performance and longer life in applications that do not require a high degree of brush conformability.

**To maximize brush life and reduce costs,** always use the shortest trim, highest density brush that will adequately conform to the surface or part edges.

### Nylox® Brush Selection Chart

| | Surface Finishing (Functional, Aesthetic, Decorative, Satin) | Deburring & Edge Blending | Automated Equipment Applications |
|---|---|---|---|
| Wheel | ● ● ● | ● ● ● | ● |
| Disc | ● | ● | ● |
| Cup | ● | ● | ● |
| Stem-Mounted | ● | ● | ● |
| Tube | | | |

### Product & Application Key

- ● Right Angle Grinder *
- ● Straight Grinder *
- ● Hand Drill/Drill Press
- ● Bench/Pedestal Grinder *
- ● CNC's, Milling & Automatic Machines

* Due to the low recommended operating speeds of Nylox products, they typically cannot be used on standard power tools. However, they are suitable for use on low or variable-speed tools.



## Lubricut™ Lubricant

**Prevents Smearing. Improves the Finish. Lowers Costs.**

Lubricut™ is a lubricant that can be used with Nylox wheels operating above the recommended surface speed. Directing a light spray of Lubricut into the face of the wheel permits the wheel to be operated at higher surface speeds and up to twice the normal load **without smearing** - while improving the finish.



1. Turn off machine.



2. Slowly rotate wheel by hand.



3. While rotating, direct a light spray of Lubricut into the wheel face.

## Nylox® Brush Operating Information

### Operating Speed

Nylox® abrasive brushes work with a wiping and filing action. Think of them as flexible files. They work best when operated at speeds that allow fairly deep penetration of the work-piece into the brush filaments. Usually, faster speeds do not work as well as slower speeds. The maximum RPM marked on the brush is not the optimum working speed. A good rule of thumb is to stay under 2,500 SFPM in dry applications and 3,500 SFPM in wet applications.

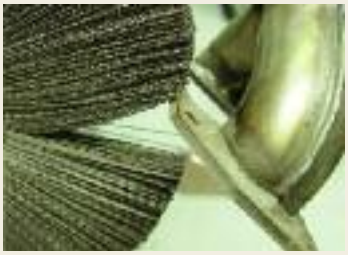
### Operating Speeds - Wheel Brushes

| Diameter | RPM |
|---|---|
| 2" | 3,450 - 5,000 |
| 3" | 2,500 - 3,450 |
| 4" | 1,750 - 2,500 |
| 6" | 1,350 - 1,750 |
| 8" | 1,150 - 1,350 |
| 10" | 950 - 1,150 |
| 12" | 750 - 950 |
| 14" | 650 - 850 |

### Operating Speeds - Disc Brushes

| Diameter | RPM |
|---|---|
| 1-3/4" & 2" | 1,750 - 2,000 |
| 3"-4" | 1,500 - 1,750 |
| 5" - 6" | 1,250 - 1,500 |
| 8" | 800 - 1,000 |
| 10" | 700 - 800 |
| 12" | 600 - 700 |
| 14" | 500 - 600 |

### Wheel Brush Penetration



When using nylon abrasive wheel brushes, optimum aggression is obtained and wheel life maximized when the work-piece penetrates into the face of the brush approximately 10% of the trim length. The sides of the Nylox filament actually do the work. To achieve a maximum edge radius and complete burr removal, parts should be buried into a slow running brush face.

### Disc Brush Penetration



When using nylon abrasive disc brushes, a good starting point for a depth of penetration between the brush face and work surface is 0.075"-0.100". This depth of interference produces the best compromise between aggression and brush life.

### Feed Rate Recommendations

Feed rate is determined by the amount of deburring, edge radiusing or surface finishing required, and the type of material that is being processed. It is generally application specific. Slower feeds result in a more aggressive brushing action. Based on the brushing action desired for a specific application, the feed rate can be increased or decreased.

| Material | SiC and AO Grain Feed Rate | Burr-Rx Grain Feed Rate |
|---|---|---|
| Non-Ferrous | 50 in./min. | 80 in./min. |
| Cast Iron | 30 in./min. | 60 in./min. |
| Mild Steel and Ductile Iron | 25 in./min. | 50 in./min. |
| Stainless and Alloy Steels | 15 in./min. | 30 in./min. |
| Titanium and High Nickel Alloys | 10 in./min. | 30 in./min. |

## Nylox Brush Operating Information

### Tool Path

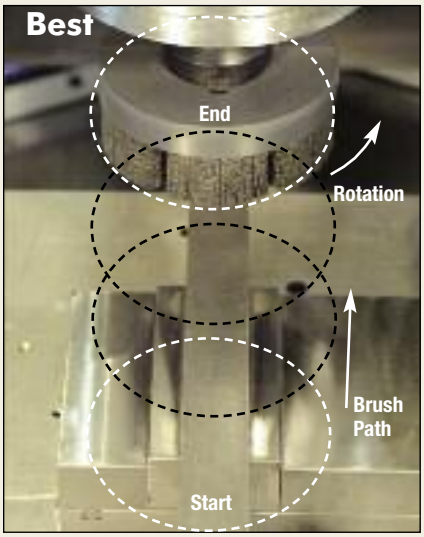
The ideal tool path for a Nylox® Disc brush is very similar to the path of the face mill that produced the burr. However, three differences exist:

- The rotation direction of the brush should be opposite of the cutting tool that created the burr.
- The length of the path must be longer than the part. Unlike a cutter path that can stop when the leading edge of the cutter reaches the end of the part, the tool path of a brush should continue until the trailing edge of the brush reaches the end of the part.
- The centerline of the brush may need to be off-set from the center of the part in order to maximize the number of filaments that strike the part at a perpendicular angle. This is especially important when the diameter of the brush is similar to the width of the part.

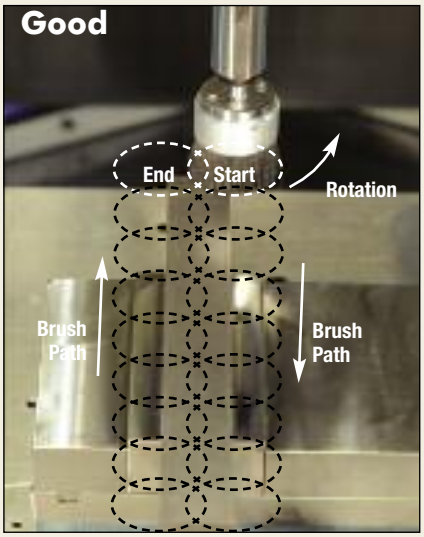
**A** The part is deburred in the shortest cycletime with the lowest consumable cost-per-part.

**B** The part is deburred, but requires a longer cycle time. When a large brush will not fit in the tool changer, this method is recommended.

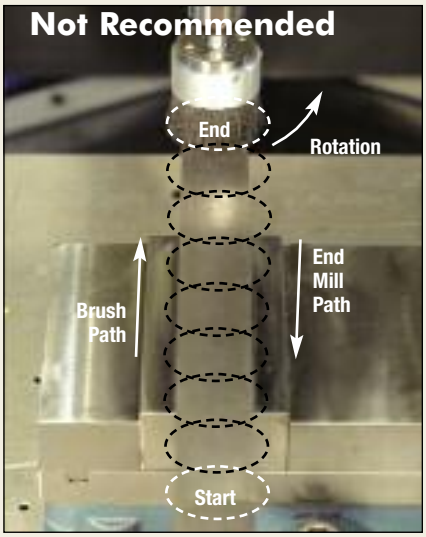
**C** Produces less deburring than A & B.




If a large diameter brush can be used, the centerline of the brush should be positioned on the center of the part. Ideally, the brush should be 3-4" wider than the part.




If a small diameter brush must be used, the centerline of the brush should be positioned on the edge of the part. This maximizes aggression by increasing the amount of perpendicular contact between the brush filaments and the burred edge.




Positioning a small diameter brush with its centerline on the center of the part is not recommended. This configuration will not allow perpendicular contact of the filaments against the burred edge.

### Coolants

Nylox® brushes can be run dry, without coolants. However, certain deburring conditions, such as higher speeds, material properties and greater depth of penetration can create excessive heat buildup, causing the nylon filaments to melt and smear on the work surface. If the speed or depth of penetration cannot be changed, coolants are recommended to overcome heat smear. Coolants will also help produce finer finishes.

### Wear Compensation

On dedicated equipment, it is possible to automate wear compensation by using electronic controls to monitor the load on drive motors and adjust the position of the brushing tool to maintain a relatively consistent amount of interference or pressure. Since this is typically not possible with standard CNC machine tools, there are three other possible methods of compensating for tool wear for "in-machine" implementations of Nylox brushes.

**Automatic Indexing:**
Most CNC controllers allow tool wear compensation to be accomplished by programming a "macro" - routine to periodically adjust the position of the tool based upon the number of parts produced. Some experimentation may be required to determine the frequency and the amount of adjustment that will result in the most consistent performance and maximum brush life.

**Probing:**
If the machining center has the capability to probe the face of the brush, this feature can be used to gauge the true position of the filament tips. Adjustments to the brush position can then be made to maintain a consistent amount of interference between the tool and the part.

**Manual:**
If the other methods cannot possibly be used, machine operators can adjust the brush position based on either statistical process control data or visual inspection of completed parts.

## Nylox Brush Operating Information

**Spindle Diameter Requirements:** The minimum Spindle Diameter standards of ANSI B165.1 for Power Brushes should also be used for Nylox Brushes. See pg. 20 for more information.

### Recommended Motor Sizes

| Brush Diameter | Motor Size | RPM* |
|---|---|---|
| 8"-4" | 1/4 HP | 3,450 |
| 6" | 1/2 HP | 1,725 |
| 8" | 3/4 HP | 1,725 |
| 10" | 1 HP | 1,140 |
| 12" | 1 HP | 1,140 |
| 14" | 1-1/2 HP | 900 |

Note: This chart is based on 1" brush face.

* A variable-speed motor control may be required to achieve optimum operating RPM; see charts on page 74.

## Nylox Brush Troubleshooting Guide

There are many variables in Nylox applications. If the Nylox brush you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's Application Engineering Hotline at 888-299-2777.

| Problem | Recommended Solutions |
|---|---|
| Brush not aggressive enough | • Increase filament diameter and/or grit size<br>• Increase filament density by using round straight rather than round crimped<br>• Increase surface contact by using rectangular rather than round<br>• Increase pressure/depth of interference<br>• Increase surface speed by increasing spindle RPM<br>• Use a larger diameter brush<br>• Reduce trim length or feed rate |
| Brush too aggressive | • Reduce filament diameter and/or grit size<br>• Reduce filament density by using round crimped rather than round straight<br>• Reduce surface contact by using round rather than rectangular<br>• Reduce pressure/depth of interference<br>• Reduce surface speed by reducing spindle RPM<br>• Use a smaller diameter brush<br>• Increase trim length or feed rate |
| Brush not conformable enough | • Increase trim length<br>• Reduce filament diameter<br>• Reduce filament density by using round crimped rather than round straight or rectangular<br>• Reduce surface speed by reducing spindle RPM<br>• Reduce feed rate |
| Finer final finish required | • Increase surface speed by increasing spindle RPM<br>• Decrease grit size<br>• Use brush with a coolant |
| Coarser final finish required | • Reduce surface speed by reducing spindle RPM<br>• Increase grit size<br>• Use brush without a coolant |
| Filaments melt/smear on workpiece | • Reduce surface speed by reducing spindle RPM<br>• Use a smaller diameter brush<br>• Use brush with a coolant |
| Short brush life | • Increase filament density<br>• Reduce pressure/depth of interference |

# Nylox® Engineered Products & Solutions



Two members of our Application Engineering Team discuss the results after testing an engineered product.

**Nylox® Engineered Products -** In order to provide you with the most cost-effective media for your particular surface conditioning application, it is sometimes necessary to design and manufacture a unique, custom tailored product to meet your requirements. Although Weiler offers such engineered solutions in all of our product lines, the innovative construction and value-added nature of the Nylox line of nylon abrasive filament brushes showcases the creativity and expertise of our Application Engineering Team in designing products that have been tailored to the needs of the customer.



Custom-engineered Nylox brushes can be designed and manufactured as variations on standard product configurations such as wheel, disc, cup, end, or tube brushes. In addition, Weiler's exclusive Burr-Rx® and Bore-Rx™ brushing tools can be engineered to meet the demands of a specific application.

Wide face brush assemblies for applications such as finishing flat surfaces or deburring cylindrical parts can also be designed and manufactured using Nylox nylon abrasive filaments. For more information on Weiler's wide face brushes, see pages 63 and 64.

For solutions to difficult applications, call our Application Engineering Hotline at 888-299-APPS.

If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or the user's facility.

## Application Engineering Solutions

Weiler Corporation is *the* source for surface conditioning solutions. Our goal is to provide solutions that will help you lower costs by increasing productivity. By combining our broad product offering with the support of our Application Engineering Team, you can count on Weiler to provide solutions to your specific application.

## Have An Application Problem?

### Option 1 - Application Hotline:

Call our Application Engineering Hotline at 888-299-APPS (2777) with all your deburring, cleaning and finishing challenges. If your question cannot be answereed on the phone...

### Option 2 - In-House Part Evaluation:

Send your component parts to our in-house lab for evaluation and product recommendation. This enables Weiler to evaluate and process parts in a controlled environment without interrupting your production schedule. We will address issues such as cycle time, finish required and product life, providing the most cost-effective solution. Weiler's in-house lab is also equipped with a Hurco VSX-40 vertical machining center, giving us the capability to perform technical viability analysis on your parts. The availability of the Hurco permits recommendations concerning speeds, feeds and tool paths to be extremely precise. This virtually eliminates technical uncertainty for customers interested in implementing in-machine deburring.

### Option 3 - On-Site Evaluation:

If it is determined that an on-site visit is required, a Weiler Application Engineer will visit your facility to review the current production process. Weiler will determine the best product and process to meet your specific application requirements.



**When Performance Counts, Turn to Weiler for assitance with product selection and application solutions!**

# Nylox® Wheel Brushes



Deburring a vane section for a jet engine.

## Nylox® Composite Metal Hub and Composite Hub Wheels -

Weiler's Nylox abrasive nylon wheel brushes featuring composite metal hub and composite hub construction are manufactured using a molded polymer material to retain the filaments. In comparison to traditional metal hub construction which folds the fill material around an internal retaining ring or wrap wire, these techniques result in a significant increase in fill density and the elimination of filament breakage offering the lowest cost-of-use and greatest consistency of performance in production applications.

Weiler's composite metal hub wheels marry the high density and superior filament retention of composite hub wheels with the dimensional stability and shock resistance of metal hub construction, and they feature 2" arbor holes which allows for convenient mounting on many pieces of equipment.

Burr-Rx wheels feature Weiler's advanced black ceramic grain filament which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action to minimize cycle times and maximize media life.

### Applications

- Precision deburring of component parts after machining or grinding
- Improving texture characteristics on machined or ground surfaces
- Honing cutting tools and generating specific edge profiles and radii
- Light duty cleaning and finishing of metals; Light sanding of woods and composites



86123



86131



86135

### Burr-Rx® Crimped Filament Wheels - Composite Metal Hub* - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness At Face Plates | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 6" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2" | 3/4" | 1" | 15/16" | 4,000 | 1 | 86123<br>86181<br>86124<br>86120 |
| 8" | .026/120<br>.043/120<br>.055/80 | 2" | 7/8" | 2" | 15/16" | 4,000 | 1 | 86126<br>86127<br>86128 |
| 10" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1-1/8" | 2" | 7/8" | 1,800 | 2 | 86129<br>86182<br>86130<br>86131 |
| 12" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 86132<br>86133<br>86134 |
| 14" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1" | 1-3/4" | 3/4" | 1,800 | 2 | 86135<br>86108<br>86136<br>86137 |
| 14" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 4" | 7/8" | 1,800 | 2 | 86138<br>86139<br>86140 |

*Patent Pending

★ 1/2" x 1/4" Double Keyway

### Burr-Rx® Crimped Filament Wheels - Composite Hub - Round Black Ceramic Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 8" x 3-1/4" | .043/120 | 1" | 1-5/16" | 13/16" | 1,800 | 2 | 83394 |
| 14" x 7-1/4" | .026/120<br>.043/120<br>.035/80<br>.055/80 | 1" | 2-3/4" | 15/16" | 1,800 | 2 | 84926<br>84941<br>84925<br>83405 |

NOTE

See adapters on page 90.

# Nylox® Wheel Brushes



Removing burrs from an aluminum heat sink.

## Crimped Filament Wheels - Composite Metal Hub* - Round Silicon Carbide Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 6" | .018/500<br>.022/320<br>.022/120<br>.035/180<br>.040/120<br>.040/80<br>.060/46 | 2" | 1" | 1-1/4" | 1-1/16" | 3,600 | 1 | 83000<br>83010<br>83011<br>83030<br>83040<br>83050<br>83070 |
| 8" | .018/500<br>.022/320<br>.022/120<br>.035/180<br>.040/120<br>.040/80 | 2" | 1" | 2-1/4" | 3/4" | 3,600 | 2 | 83100<br>83110<br>83111<br>83130<br>83140<br>83150 |
| 10" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 2"★ | 1-1/8" | 2" | 7/8" | 1,800 | 2 | 83513<br>83514<br>83515<br>83516 |
| 12" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 83715<br>83716<br>83717<br>83718 |
| 12" | .050/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 83719• |

*Patent Pending
★ 1/2" x 1/4" Double Keyway
• High Aggression



83075



83516



85014

## Rectangular Filament Wheel - Composite Metal Hub* - Straight Silicon Carbide Filament

| Dia. | Grit Size | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 12" | 80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 85014 |

*Patent Pending
★ 1/2" x 1/4" Double Keyway

**DID YOU KNOW?**

The largest special order Nylox composite hub wheel that we have manufactured was over 40" in diameter.

**Lubricut™ Lubricant**

**Prevents Smearing.
Improves the Finish.
Lowers Costs.**

Lubricut™ is a lubricant that can be used with Nylox® wheels operating above the recommended surface speed. Directing a light spray of Lubricut into the face of the wheel permits the wheel to be operated at higher surface speeds and up to twice the normal load **without smearing** - while improving the finish. ***See page 73 for recommended usage.***



83999

# Nylox® Wheel Brushes

## Crimped Filament Wheels - Composite Hub - Round Silicon Carbide Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 6" x 2" | .040/80 | 1/2" | 1-1/4" | 9/16" | 3,600 | 1 | 83116 |
| 8" x 2"* | .040/120<br>.040/80 | 7/8" | 2-1/8" | 13/16" | 3,600 | 2 | 83190<br>83180 |
| 8" x 3-1/4" | .040/80 | 1" | 1-5/16" | 13/16" | 1,800 | 2 | 83393 |
| 10" x 2" | .018/500<br>.022/320<br>.035/180<br>.040/120<br>.040/80 | 1" | 3" | 1-1/16" | 3,600 | 2 | 83300<br>83310<br>83330<br>83340<br>83350 |
| 10" x 3-1/4" | .035/180<br>.040/120<br>.040/80 | 1" | 2-5/16" | 13/16" | 1,800 | 2 | 83430<br>83440<br>83450 |
| 10" x 5-1/4" | .040/80 | 1" | 1-5/8" | 15/16" | 1,800 | 2 | 83550 |
| 12" x 3-1/4" | .035/180<br>.040/120 | 1-1/8" | 3-5/16" | 13/16" | 1,800 | 2 | 83630<br>83640 |
| 12" x 4-1/4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 1" | 3-1/8" | 15/16" | 1,800 | 2 | 84710<br>84730<br>84740<br>84750 |
| 12" x 5-1/4" | .040/120<br>.040/80 | 1-1/8" | 2-3/4" | 15/16" | 1,800 | 2 | 83740<br>83750 |
| 12" x 5-1/4"-2"* | .022/320 | 1-1/8" | 2-3/4" | 1-1/16" | 1,800 | 2 | 85156• |
| 14" x 5-1/4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 1-1/8" | 3-3/4" | 15/16" | 1,800 | 2 | 83910<br>83930<br>83940<br>83950 |
| 14" x 5-1/4"-2"* | .022/320<br>.040/80 | 1-1/8" | 3-3/4" | 1-1/16" | 1,800 | 2 | 85150•<br>85153• |
| 20" x 12" | .035/180 | 1-1/4" | 3-1/4" | 1-1/16" | 1,000 | 1 | 85440 |

• Same density as our standard 5-1/4" I.D. brushes, but requires no adapters for mounting on a 2" diameter shaft.
* 1/2" x 1/4" Double Keyway

## Rectangular Filament Wheel - Composite Hub - Straight Silicon Carbide Filament

| O.D. x I.D. | Grit Size | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 14" x 5-1/4" | 120 | 1-1/8" | 3-3/4" | 1-1/16" | 1,800 | 2 | 84640 |

Other diameters and grit sizes available upon request.

## Nylox® Metal Hub Basic Sections - Weiler also offers abrasive nylon wheels featuring traditional metal hub construction for light duty deburring and finishing in non-production applications.

### Applications

- Low volume manual deburring
- General use in a tool room or shop

## Crimped Filament Basic Sections - Metal Hub - Round Silicon Carbide Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 6" x 2" | .022/320<br>.035/180<br>.040/120 | 5/8" | 1-1/2" | 9/16" | 6,000 | 2 | 20600<br>20610<br>20620 |
| 8" x 2" | .022/320<br>.040/120 | 5/8" | 2-1/2" | 9/16" | 5,000 | 2 | 20630<br>20650 |
| 10" x 3-1/4" | .035/180 | 9/16" | 2-7/8" | 17/32" | 4,500 | 2 | 20661 |
| 14" x 5-1/4" | .035/180 | 9/16" | 3-7/8" | 9/16" | 3,000 | 2 | 20730 |



Deburring the tip of a turbine blade.



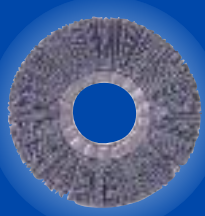
83190



85150



84640



20620

NOTE

See adapters on page 90.

Nylox® Wheel Brushes

# Nylox® Wheel Brushes



Deburring threads on a CNC lathe with live tooling.

**Nylox® Narrow Face Wheels -** Featuring a high density metal hub construction, Weiler's narrow face wheels are designed and manufactured to be the most cost-effective tool for applications requiring a 3" or 4" radial brush.



31110



86165



31255



31124

## Burr-Rx® Heavy-Duty Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 9/16" | 1/2" | 7/16" | 6,000 | 2 | 31240<br>31241<br>31242<br>31246 |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 5/8" | 1" | 7/16" | 6,000 | 2 | 31110<br>31270<br>31280<br>31290 |

## Burr-Rx® Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .026/120<br>.035/80<br>.043/120 | 1/2"-3/8" | 3/8" | 1/2" | 7/16" | 6,000 | 2 | 86164<br>31102<br>31101 |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2"-3/8" | 1/2" | 7/8" | 7/16" | 6,000 | 2 | 86165<br>31103<br>31100<br>31105 |
| 6" | .026/120<br>.043/120<br>.035/80<br>.055/80 | 5/8"-1/2" | 5/8" | 7/8" | 11/16" | 4,500 | 2 | 31134<br>31135<br>31136<br>31137 |

## Heavy-Duty Narrow Face Wheels - Metal Hub - Crimped Round Silicon Carbide Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .040/80 | 5/8"-1/2" | 9/16" | 1/2" | 7/16" | 6,000 | 2 | 31245 |
| 4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 5/8"-1/2" | 5/8" | 1" | 7/16" | 6,000 | 2 | 31255<br>31265<br>31275<br>31285 |

## Narrow Face Wheels - Metal Hub - Crimped Round Silicon Carbide Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .022/320<br>.035/180<br>.040/120 | 1/2"-3/8" | 3/8" | 1/2" | 7/16" | 6,000 | 2 | 31074<br>31084<br>31094 |
| 4" | .022/320<br>.035/180<br>.040/120 | 1/2"-3/8" | 1/2" | 7/8" | 7/16" | 6,000 | 2 | 31104<br>31114<br>31124 |
| 6" | .022/320<br>.035/180<br>.040/120 | 5/8"-1/2" | 5/8" | 7/8" | 11/16" | 4,500 | 1 | 31121<br>31122<br>31123 |

# Nylox® Wheel Brushes

**Nylox® Small Diameter Wheels -** Weiler offers the widest assortment of small diameter radial wheels for addressing recesses and internal features, or delivering a targeted brushing action to a specific area on a part.

Small diameter Burr-Rx® wheels feature Weiler's advanced black ceramic grain filament which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action for minimum cycle times and maximum media life.



Deburring the edges of a machined aluminum component.

## Applications

- Deburring keyways, slots and crosshole intersections
- Honing and finishing of cylindrical bores

### Burr-Rx® Small Diameter Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 1-1/4" | .026/120 | 1/4" | 5/16" | 5/16" | 10,000 | 10 | 17551 |
| 1-1/2" | .026/120 | 1/2" | 3/8" | 1/4" | 10,000 | 10 | 17541 |
| 2" | .026/120<br>.035/80<br>.055/80 | 1/2" | 3/8" | 1/2" | 10,000 | 10 | 17548<br>17555<br>17542 |
| 2-1/2" | .026/120<br>.035/80 | 5/8" | 1/2" | 11/16" | 10,000 | 10 | 17556<br>17557 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2" | 1/2" | 1" | 10,000 | 10 | 17565<br>17567<br>17568<br>16000 |

Other diameters and grit sizes available upon request.



16000

### Small Diameter Wheels - Metal Hub - Crimped Round Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 1-1/8" | .022/120 | 1/4" | 5/16" | 1/4" | 10,000 | 10 | 17532 |
| 1-1/4" | .022/120 | 1/4" | 5/16" | 5/16" | 10,000 | 10 | 17535 |
| 1-3/8" | .018/500 ▲ | 1/4" | 5/16" | 3/8" | 10,000 | 10 | 16310 |
| 1-1/2" | .022/120<br>.035/180 | 1/2" | 3/8" | 1/4" | 10,000 | 10 | 17628<br>29353 |
| 2" | .018/500<br>.022/320<br>.040/120 | 1/2" | 3/8" | 1/2" | 10,000 | 10 | 17533<br>17543<br>17633 |
| 2" | .022/120 | 5/8" | 7/16" | 7/16" | 10,000 | 10 | 17629 |
| 2-1/2" | .022/320<br>.022/120<br>.035/180 | 5/8" | 1/2" | 11/16" | 10,000 | 10 | 29356<br>29123<br>29280 |
| 3" | .035/180<br>.022/320<br>.022/120<br>.040/120 | 1/2" | 1/2" | 1" | 10,000 | 10 | 29088<br>17563<br>16315<br>16263 |

▲ Aluminum Oxide
Other diameters and grit sizes available upon request.



17533

NOTE

See adapters on page 90.

DID YOU KNOW?

Weiler's Application Engineering Team is available to recommend the best product and process to meet your specific application requirements.

# Nylox® Wheel Brushes



A diamond abrasive disc brush creates a small radius on a ceramic part.



83005

**Diamond Filament Wheel Brushes -** Weiler's diamond filament wheels utilize composite hub construction for high performance in precision applications. Our wheel brushes are made-to-order in a wide range of diameters and thicknesses. Additional configurations are available such as; tube brushes, composite hub disc brushes and end brushes. Common wheel configurations are listed below. Other sizes and pricing are available on request. Additional product configurations are available. Please contact Customer Service at 800-835-9999.

## Applications

Ideal for producing edge radii on hard materials:

- Diamond
- CBN
- Ceramic
- Glass

### Diamond Filament Wheels - Composite Hub - Round Diamond Filament

| O.D. x I.D. | Filament Diam. /Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 6" x 2" | .024/200<br>.014/600<br>.012/1000 | 5/16" | 1-1/4" | 1/4" | 3,600 | 1 | 83002<br>83003<br>83004 |
| 8" x 2" | .024/200<br>.014/600<br>.012/1000 | 5/16" | 2-1/4" | 1/4" | 3,600 | 1 | 83005<br>83006<br>83007 |




**Operating Speeds - Wheels -** Nylox® abrasive brushes work with a wiping and filing action. Think of them as flexible files. They work best when operated at speeds that allow penetration of the work-piece into the brush filaments. The maximum RPM marked on the brush is not the optimum working speed. A good rule of thumb is to stay under 2,500 SFPM in dry applications and 3,500 SFPM in wet applications.

| Diameter | RPM |
|---|---|
| 2" | 3,450 - 5,000 |
| 3" | 2,500 - 3,450 |
| 4" | 1,750 - 2,500 |
| 6" | 1,350 - 1,750 |
| 8" | 1,150 - 1,350 |
| 10" | 950 - 1,150 |
| 12" | 750 - 950 |
| 14" | 650 - 850 |

Note: See parameter summary on page 74 for additional information.




See adapters on page 90.

DID YOU KNOW?

Weiler was the first manufacturer of Composite Hub Nylox® Brushes.

# Nylox® Crosshole Deburring Brushes

**Bore-Rx™ Brushes -** These brushes are designed for automated applications in CNC machining centers and dedicated machines. They are ideal for removing burrs from internal edges and finishing bores. Since they eliminate off-hand deburring, they improve part-to-part consistency and reduce direct labor content. Bore-Rx brushes are available in sizes ranging from 7/8" to 4" and can be readily adapted into a machining center's tool changer using an end-mill holder or 3/8" collet.

### Bore-Rx Brushes - 3/8" stems - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Face Width | Overall Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7/8" | .026"/120 | 3/4" | 4-3/4" | 8,000 | 1 | 17206 |
| 1" | .026"/120 | 3/4" | 4-3/4" | 8,000 | 1 | 17208 |
| 1-1/4" | .026"/120 | 3/4" | 4-3/4" | 8,000 | 1 | 17210 |
| 1-1/2" | .026"/120 | 1" | 5" | 8,000 | 1 | 17212 |
| 2" | .026"/120 | 1" | 3-1/4" | 6,000 | 1 | 17215 |
| 2-1/2" | .055"/80 | 1" | 3-1/4" | 6,000 | 1 | 17217 |
| 3" | .026/120<br>.043/120<br>.055/80 | 1" | 3-1/4" | 6,000 | 1 | 86150<br>86151<br>86152 |
| 4" | .026/120<br>.043/120<br>.055/80 | 1" | 3-1/4" | 6,000 | 1 | 86154<br>86155<br>86156 |

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets.

## Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-to-order in diameters ranging from 7/8" to 1-1/2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. Contact Application Engineering at 888-299-APPS (2777) for more information.




## Operating Parameters For Bore-Rx Brushes

| Brush Diameter | Recommended RPM | Recommended Feed Rate |
|---|---|---|
| 5/8" - 7/8" | 3000 | 20"/min |
| 1" - 1-1/2" | 3000 | 20"/min |
| 2" - 2-1/2" | 2000 | 20"/min |
| 3" - 4" | 1500 | 20"/min |

### Tool Paths for Crosshole Deburring

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

■ Diameter of Interpolation = Hole Dia. - 0.975 x Brush Dia.

### Tool Paths for Bore Finishing

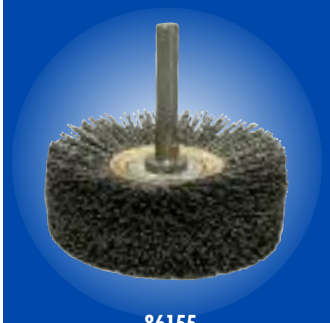
Nylox brushes can be used to improve the surface finish of bores. The best tool path normally involves helically interpolating the bore. The above recommendations for speed, feed and diameter of interpolation are also valid for bore finishing. The use of coolant is highly recommended in order to achieve maximum surface finish improvement.



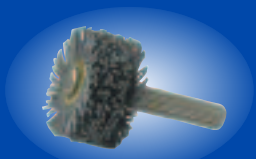
Deburring the internal bores of an air-cooled cylinder head.



17208



86155



Replacement Head



Reusable Arbor



Deburring a bearing cage in a CNC machining center.



86112



86143

**NOTE**

**See page 72 for more information about applying Nylox disc brushes in CNC applications.**

## Nylox® Disc Brushes - Weiler's Nylox disc brushes are manufactured using a tufted filament configuration and longer trim length for increased aggression, greater conformability and longer product life in comparison to monofilament disc brushes which feature a distribution of short individual bristles.

Burr-Rx® disc brushes feature Weiler's advanced black ceramic grain filament which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action for minimum cycle times and maximum media life.

All of our Burr-Rx disc brushes are manufactured using a new process which results in a very consistent, flat brush face in comparison to traditional construction which utilizes a molded backing. The high dimensional precision of these tools means that the brushes are suitable for the most critical applications and perform more consistently from first part to last. In addition, the machined polymer backings are designed to mount directly onto a standard shell mill holder for convenient use in CNC machining centers.

### Applications

- Deburring flat surfaces on machined components
- Improving texture characteristics on machined or ground surfaces
- Deburring face-milled castings or forgings
- Blending tool marks after machining or grinding

### Burr-Rx® Shell Mill Holder Disc Brushes - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Round Filament** | | | | | | |
| 4" | .026/120<br>.043/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86112<br>86113<br>86204*<br>86114* |
| 6" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86115<br>86116<br>86117* |
| 8" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86141<br>86142<br>86143* |
| 10" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86125<br>86121<br>86122* |
| **Rectangular Filament** | | | | | | |
| 4" | 80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86167* |
| 6" | 80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86198* |
| 8" | 80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86199* |

* Maximum Density

Tech Note

Note: See parameter summary on page 74 for additional information.

## Operating Speeds - Discs - Nylox® abrasive brushes work with a wiping and filing action. Think of them as flexible files. They work best when operated at speeds that allow penetration of the work-piece into the brush filaments. The maximum RPM marked on the brush is not the optimum working speed. A good rule of thumb is to stay under 2,500 SFPM in dry applications and 3,500 SFPM in wet applications.

| Diameter | RPM |
|---|---|
| 1-3/4" | 1,750 - 2,000 |
| 3"-4" | 1,500 - 1,750 |
| 5" - 6" | 1,250 - 1,500 |
| 8" | 800 - 1,000 |
| 10" | 700 - 800 |
| 12" | 600 - 700 |
| 14" | 500 - 600 |

# Nylox® Disc Brushes

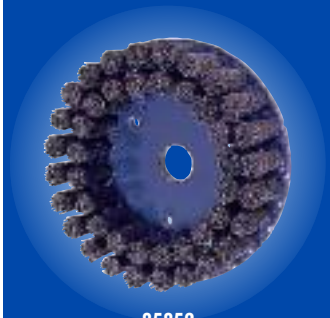
## Composite Hub Disc Brushes - Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Crimped Round Filament** | | | | | | |
| 3" | .035/180<br>.040/120 | 7/8" | 1-1/2" | 2,500 | 1 | 85776<br>85778 |
| 3-1/2" | .022/320<br>.035/180<br>.040/80 | 7/8" | 1-1/2" | 2,500 | 1 | 85792<br>85794<br>85798 |
| 4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 7/8" | 1-1/2" | 2,500 | 1 | 85812<br>85814<br>85816<br>85818 |
| 5" | .035/180<br>.040/80 | 7/8" | 1-1/2" | 2,500 | 1 | 85832<br>85836 |
| 6" | .035/180<br>.040/120<br>.040/80 | 7/8" | 1-1/2" | 2,000 | 1 | 85850<br>85852<br>85854 |
| 8" | .035/180<br>.040/120<br>.040/80 | 7/8" | 1-1/2" | 2,000 | 1 | 85908<br>85912<br>85914 |
| 10" | .040/120<br>.040/80 | 7/8" | 1-1/2" | 1,750 | 1 | 85930<br>85932 |
| 12" | .035/180<br>.040/120 | 7/8" | 1-1/2" | 1,750 | 1 | 85946<br>85948 |
| **Rectangular Filament** | | | | | | |
| 3" | 120<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85786<br>85788 |
| 3-1/2" | 320<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85800<br>85806 |
| 4" | 180<br>120<br>80<br>80<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85822<br>85824<br>85826<br>85995•<br>85900*• |
| 5" | 120<br>80<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85842<br>85844<br>85978• |
| 6" | 120<br>80<br>80<br>80 | 7/8" | 1-1/2" | 2,000 | 1 | 85860<br>85862<br>85996•<br>85901*• |
| 8" | 120<br>80 | 7/8" | 1-1/2" | 2,000 | 1 | 85920<br>85922 |
| 9" | 80 | 7/8" | 1-1/2" | 2,000 | 1 | 85997• |
| 10" | 120<br>80 | 7/8" | 1-1/2" | 1,750 | 1 | 85938<br>85940 |

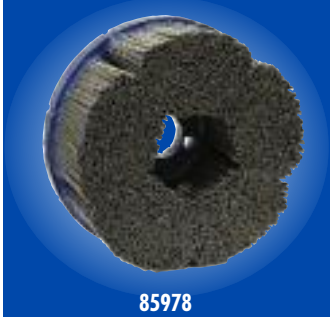
* Banded for extra aggression • Maximum density



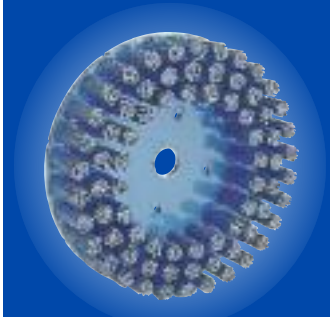
Deburring the edges of an aluminum engine cover.



85852



85978



85920

Tech Note

## Arbor & Drive Hole Specifications for Composite Hub Disc Brushes

| Brush Diameter | Arbor Hole Diameter | Drive Holes |
|---|---|---|
| 3"-5", 6" Max. Density | 7/8" | (2) 1/4" dia. on a 1-1/4" dia. bolt circle |
| 6" | 7/8" | (3) 1/4" dia. on a 3" dia. bolt circle |
| 8" | 7/8" | (4) 1/4" dia. on a 3" dia. bolt circle |
| 10" | 7/8" | (4) 1/4" dia. on a 1.625" dia. bolt circle |
| 12" | 7/8" | (4) 1/4" dia. on a 1.625" dia. bolt circle |
| 14" | 5" | N.A. |

NOTE

See adapters & drive arbors on pages 90-91.

# Nylox® Disc and Cup Brushes



Removing burrs and breaking sharp edges on a transmission component.



85733



85753



85752



85981



14413

NOTE

See adapters & drive arbors on pages 90-91.

## Nylox Mini-Disc Brushes -

Featuring a precision machined aluminum cup, Weiler's mini-disc brushes are designed to be the most cost-effective media for applications requiring a smaller brushing tool.

### Applications

- Deburring flat surfaces on machined components
- Improving texture characteristics on machined or ground surfaces
- Deburring face-milled castings or forgings
- Blending tool marks after machining or grinding

### Burr-Rx® Mini Disc Brushes - Maximum Density - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Round Filament** | | | | | |
| 2" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 1 | 86106<br>85738<br>86107<br>85733 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 1 | 86109<br>86013<br>86110<br>86111 |
| **Rectangular Filament** | | | | | |
| 2" | 80 | 1-1/4" | 4,500 | 1 | 85736 |
| 3" | 80 | 1-1/4" | 4,500 | 1 | 86014 |

### Mini Disc Brushes - Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Round Filament** | | | | | |
| 1-3/4" | .035/180<br>.022/120<br>.040/80 | 1-1/4" | 6,000 | 2 | 85753<br>85751<br>85750 |
| **Rectangular Filament** | | | | | |
| 1-3/4" | 80 | 1-1/4" | 6,000 | 2 | 85752 |
| 2" | 80 | 1-1/4" | 4,500 | 2 | 85773* |
| 3" | 80 | 1-1/4" | 4,500 | 1 | 85981* |

* Maximum Density

## Nylox Cup Brushes -

Weiler also offers an assortment of Nylox tools featuring traditional cup brush construction for deburring and finishing use in lighter duty applications. These brushing tools can be used on dedicated machines in automated processes or on low speed/high torque handheld tools for manual applications.

### Applications

- Deburring and finishing complex or contoured parts



### Cup Brushes - Crimped Round Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2-3/4" | .022/320<br>.035/180<br>.040/120 | 1/4" Stem | 1-1/4" | 6,000 | 1 | 14401<br>14403<br>14404 |
| 3-1/2" | .035/180<br>.040/120 | 5/8"-11 | 1-1/2" | 12,000 | 1 | 14413<br>14414 |
| 5" | .040/120 | 5/8"-11 | 1-1/4" | 8,000 | 1 | 14576 |
| 6" | .040/120<br>.040/80 | 5/8"-11 | 1-1/4" | 6,600 | 1 | 14516*<br>14506* |

* With internal nut

# Nylox® End Brushes

**Nylox® End Brushes and Miniature End Brushes -** Featuring an integral stem for convenient mounting into a toolholder or collet, Nylox end brushes and miniature end brushes are suitable for addressing recesses and internal features, or delivering a targeted brushing action to a specific area on a part.

## Applications

- Deburring small recessed areas and internal part features
- Finishing slots and recessed surfaces on machined parts



Blending tool marks on a hydraulic component.

### Burr-Rx® End Brushes - Banded - Crimped Round Black Ceramic Filament - Mounted on 1/4" Stems

| Diameter | Filament Diameter/Grit | Trim Length* | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3/8" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86098<br>86099 |
| 1/2" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86100<br>86101 |
| 3/4" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86102<br>86103 |
| 1" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86104<br>86105 |

* Trim length from bands



86104

### End Brushes - Banded - Crimped Round Silicon Carbide Filament - Mounted on 1/4" Stems

| Diameter | Filament Dia./Grit | Trim Length* | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1/2" | .022/320<br>.035/180<br>.040/120 | 3/8" | 10,000 | 10 | 11160<br>11161<br>11162 |
| 3/4" | .035/180<br>.040/120 | 3/8" | 10,000 | 10 | 11165<br>11166 |
| 1" | .022/320<br>.035/180<br>.040/120 | 3/8" | 10,000 | 10 | 11168<br>11169<br>11170 |

* Trim length from bands



11166

### End Brushes - Crimped Round Silicon Carbide Filament - Mounted on 1/4" Stems

| Diameter | Filament Dia./Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1/2" | .022/320<br>.035/180<br>.040/120 | 7/8" | 10,000 | 10 | 10172<br>10173<br>10174 |
| 3/4" | .022/320<br>.035/180<br>.040/120 | 7/8" | 10,000 | 10 | 10152<br>10153<br>10154 |
| 1" | .022/320<br>.035/180<br>.040/120 | 7/8" | 10,000 | 10 | 10155<br>10156<br>10157 |



10154

### Miniature End Brushes - Crimped Round Silicon Carbide Filament
**Plastic Ferrule - Mounted on 1/8" stems**

| Diameter | Filament Dia./Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3/16" | .018/500 | 1/4" | 37,000 | 144 | 26136 |
| 1/4" | .018/500 | 3/8" | 37,000 | 144 | 26138 |
| 5/16" | .018/500 | 9/16" | 25,000 | 144 | 26146 |



26136



Crosshole deburring an aluminum manifold.



21759



21128



21138



21473



26904



26908



26915

**Nylox® Power Tube Brushes -** Weiler offers a comprehensive line of Nylox power tube brushes for internal deburring and finishing applications in tubular component parts, drilled and tapered holes, and machined bores and passages. Power tube brushes are suitable for use in drill presses and manual and CNC machine tools. See pages 50-51 for operating guidelines.

### Burr-Rx® Tube Brushes - Crimped Black Ceramic Filament - 1/4" Cadmium Plated Stems

| Diameter | Filament Dia./Grit | Length of Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/8" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21758 |
| 1/2" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21759 |
| 5/8" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21761 |
| 3/4" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21762 |
| 7/8" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21763 |
| 1" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21764 |
| 1-1/4" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21765 |

### Tube Brushes - Crimped Round Silicon Carbide Filament - Double Stem, Single Spiral

| Diameter | Filament Dia./Grit | Length of Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/4" | .022/320 | 2" | 5/32" | 5" | 10 | 21126 |
| 3/8" | .022/320 | 2" | 5/32" | 5" | 10 | 21128 |
| 1/2" | .022/320<br>.040/80 | 2" | 3/16" | 5" | 10 | 21130<br>21325 |
| 5/8" | .022/320<br>.040/80 | 2" | 7/32" | 5" | 10 | 21132<br>21326 |
| 11/16" | .022/320 | 2" | 7/32" | 5" | 10 | 21133 |
| 3/4" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21134<br>21327 |
| 7/8" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21136<br>21976 |
| 1" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21138<br>21328 |
| 1-1/4" | .022/320<br>.022/120<br>.035/180<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21306<br>21304<br>21305<br>21329 |
| 1-1/2" | .022/320<br>.035/180<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21309<br>21308<br>21330 |
| 1-3/4" | .040/80<br>.035/180 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21311<br>21312 |
| 2" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21473<br>21345 |

### Tube Brushes - Micro Abrasive - For ultra-fine deburring and finishing of small internal holes.

| Diameter | Length of Brush Part | Stem Diameter | FOR HOLE DIAMETERS Decimal | FOR HOLE DIAMETERS Fraction | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| **Silicate Filament** | | | | | | | |
| .030" | 1/2" | .015 | .031" | 1/32" | 4" | 10 | 26900 |
| .050" | 1/2" | .022 | .047" | 3/64" | 4" | | 26901 |
| .075" | 3/4" | .033 | .063" | 1/16" | 4" | | 26902 |
| .090" | 3/4" | .041 | .078" | 5/64" | 4" | | 26903 |
| .105" | 1" | .041 | .094" | 3/32" | 4" | | 26904 |
| .125" | 1" | .064 | .109" | 7/64" | 4" | | 26905 |
| .135" | 1" | .075 | .125" | 1/8" | 4" | | 26906 |
| **600 Grit Aluminum Oxide Filament** | | | | | | | |
| .165" | 1" | .087 | .156" | 5/32" | 5" | 10 | 26907 |
| .190" | 1" | .087 | .188" | 3/16" | 5" | | 26908 |
| .260" | 1" | .115 | .250" | 1/4" | 5" | | 26909 |
| .325" | 1" | .115 | .313" | 5/16" | 5" | | 26910 |
| .385" | 1" | .147 | .375" | 3/8" | 5" | | 26911 |
| .515" | 1" | .194 | .500" | 1/2" | 5" | | 26912 |
| .640" | 1" | .194 | .625" | 5/8" | 5" | | 26913 |
| .765" | 1" | .212 | .750" | 3/4" | 5" | | 26914 |
| .890" | 1" | .212 | .875" | 7/8" | 5" | | 26915 |

# Nylox® Adapters and Drive Arbors

## Metal Adapters - Reusable - Used in pairs and priced per pair.

| Diameter | Arbor Hole Size | Used With | Standard Pack | Item Number |
|---|---|---|---|---|
| 2" | 1/2"<br>5/8"<br>3/4"<br>7/8"<br>1"<br>1-1/4"<br>1-1/2" | All 2" I.D. Wheels | 1 | 03809<br>03810<br>03811<br>03824<br>03812<br>03813<br>03814 |
| 3-1/4" | 3/4"<br>7/8"<br>1"<br>1-1/4"<br>2" | 3-1/4" I.D. Wheels (When mounting only one wheel) | 1 | 03910<br>03911<br>03912<br>03913<br>03915 |
| 5-1/4" | 3/4"<br>7/8"<br>1"<br>1-1/4"<br>2" | 5-1/4" I.D. Wheels (When mounting only one wheel) | 1 | 03920<br>03921<br>03922<br>03923<br>03925 |



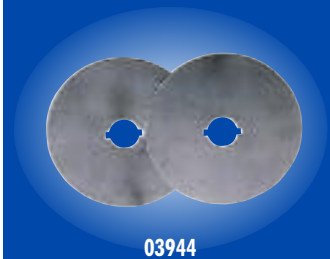
03809



03923

## Steel Flanges - Reusable - Used on the ends of a gang mount. Used in pairs and priced per pair.
Must be used in conjunction with Pressboard Adapters in chart below.

| Flange O.D. | Arbor Hole Size | Used With | Standard Pack | Item Number |
|---|---|---|---|---|
| 5-5/8" | 3/4"<br>1"<br>1-1/4"<br>2" | 3-1/4" & 4-1/4" I.D. Wheels | 1 | 03931<br>03933<br>03934<br>03936 |
| 6-1/2" | 1-1/4"<br>1-1/2"<br>2" | 5-1/4" I.D. Wheels | 1 | 03944<br>03945<br>03946 |
| 8-3/4" | 1-1/4"<br>1-1/2"<br>2" | 7-1/4" I.D. Wheels | 1 | 03954<br>03955<br>03956 |



03944

## Pressboard Adapters - Used for centering 10", 12" and 14" Nylox® Wheels when gang mounting.
Must be used in conjunction with Steel Flanges in chart above.

| Brush I.D. | Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 3-1/4" | 3/4"<br>1"<br>1-1/4"<br>2" | 1 | 03890<br>03892<br>03893<br>03895 |
| 4-1/4" | 3/4"<br>1-1/4"<br>2" | 1 | 03960<br>03963<br>03965 |
| 5-1/4" | 1-1/4"<br>1-1/2"<br>2" | 1 | 03403<br>03404<br>03405 |
| 7-1/4" | 1-1/4"<br>1-1/2"<br>2" | 1 | 03973<br>03974<br>03975 |



03403

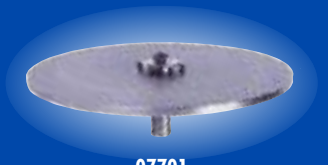

04401


04402


89029


89033


07700


07701


07718

## Plastic Adapters

| Fixed Arbor Hole Size | Adapted Arbor Hole Size | Used With | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 1/4" | Small Dia. Wheels | 10 | 04400 |
| 1/2" | 3/8" | Small Dia. Wheels | 10 | 04401 |
| 5/8" | 1/2" | Small Dia. Wheels | 10 | 04402 |

## Miniature & Burr-Rx™ Disc Brush Drive Arbors - Includes drive arbor, set screw and hex key.

| For Brush Diameter | Stem Diameter | Stem Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1-3/4"-3" | 1/4" | 1-3/4" | 6,000 | 1 | 89023* |
| 1-3/4"-3" | 3/8" | 1-3/4" | 6,000 | 1 | 89024* |
| 1-3/4"-3" | 1/2" | 1-3/4" | 6,000 | 1 | 89029* |

* For use with Burr-Rx Mini Disc brushes on page 87 only. Products supplied with set screw and wrench.

## Miniature & Burr-Rx™ Disc Brush Drive Arbors - Includes drive arbor, set screw and hex key. Recommended for operations in which brush rotation alternates between forward and reverse.

| For Brush Diameter | Stem Diameter | Stem Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 2"-3" | 1/2" | 1-3/4" | 6,000 | 1 | 89033* |

* For use with Burr-Rx Mini Disc brushes on page 87 only. Products supplied with set screw and wrench.

## Disc Brush Drive Arbors - Mounts Weiler disc brushes to any type of milling machine or CNC machine.

| Fits | Arbor Hole | Drive Studs | Bolt Circle | Plate O.D. | Shaft Dia. | Stem Length | Std. Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3", 4" and 5" Disc Brushes | 7/8" | 2 | 1-1/4" | 2-7/8" | 3/4" | 2-3/4" | 1 | 07700* |
| 6" Std. Tuft Disc Brushes NOT Max. Density | 7/8" | 3 | 3" | 5-7/8" | 3/4" | 2-1/2" | 1 | 07701* |
| 6" Max. Density Disc Brushes, also 5" Std. Tuft | 7/8" | 2 | 1-1/4" | 4-7/8" | 3/4" | 2-1/2" | 1 | 07715* |
| 8" and 9" Disc Brushes | 7/8" | 4 | 3" | 7-7/8" | 3/4" | 2-1/2" | 1 | 07702* |
| 10" and 12" Disc Brushes | 7/8" | 4 | 1-5/8" | 9-7/8" | 3/4" | 2-1/2" | 1 | 07703* |
| **Replacement kit includes:** (1) 1/2"-13 locking flow-through bolt and (1) Belleville spring washer | – | – | – | – | – | – | 1 | 07718* |

* Flow-through drive arbor.




- The adapters and drive arbors listed on this page are for use with small diameter wheel brushes only; do not attempt to use them with cutting or grinding wheels, buffing wheels, or any type of abrasive wheel or disc.
- Do not adapt a wheel brush for use on a shaft diameter less than that specified by ANSI B165.1 (see page 20) or exceed the maximum wheel diameter specified for a drive arbor.
- Never mount a drive arbor onto a tool which operates above the maximum RPM rating of either the arbor or the brush (whichever may be lower) and be sure that the stem of the arbor is properly secured in the collet or chuck before use.

**DID YOU KNOW?**

Weiler's Black Ceramic Nylon Abrasive Filament Brushes are being used on key parts of the United States Navy's newest warships.

# Nylox® FME Area Product Solutions



Removing gasket material from a pipe flange.

In nuclear power plants, Foreign Material Exclusion (FME) programs may limit or even exclude the use of wire brushes in some areas during the performance of routine maintenance, repair or shut-down activities. Weiler has developed a FME-compliant tooling system to address the needs of plant operators and maintenance contractors working in these facilities as well as other industries where the potential introduction of broken wire filaments may be of concern.

**Weiler's FME Solutions program is a complete system consisting of non-wire brushing tools designed to perform a broad range of surface cleaning and preparation applications as well as the power tools required to drive them.** For cleaning hot welds in FME-controlled areas, Weiler offers the HFR stringer bead wire wheel (see page 28) which can be used on a standard right angle grinder.

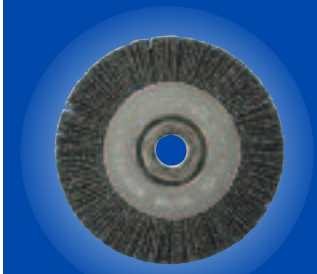
## Black Nylox Ceramic Brushes -

The engineered ceramic grain in Weiler's Black Nylox filament is up to 400% more aggressive than the silicon carbide and aluminum oxide grain in other abrasive filaments, making it much more effective in surface cleaning applications. The efficient cutting action of the Black Nylox filament also generates less heat and makes it much more resistant to "smearing" than traditional nylon abrasive filaments.

### Narrow Face Wheels - Crimped Ceramic Filament

**Used on edge for weld prep and cold weld cleaning.**

| Diameter | Filment Dia./Grit Size | Face Width | Arbor Hole | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | .055/80 | 1/2" | 5/8"-11 Nut | 4,800 | 5 | 31112 |
| 4" | .043/120 | 1/2" | 5/8"-11 Nut | 4,800 | 5 | 31111 |

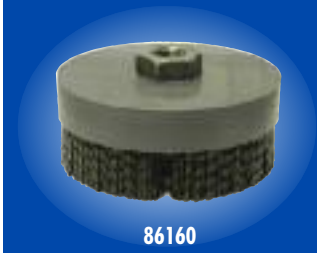


31112

### Cup Brush - Rectangular Ceramic Filament

**Used on its face for heavy-duty cleaning of broad surfaces.**

| Diameter | Filment Dia./Grit Size | Arbor Hole | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" | .049 x .098 - 80 Grit | 5/8"-11 Nut | 4,800 | 1 | 86160 |



86160

### Bevel Brush - Rectangular Ceramic Filament

**For aggressive cleaning in corners and confined areas.**

| Diameter | Filment Dia./Grit Size | Face Width | Arbor Hole | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | .049 x .098 - 80 Grit | 3/4" | 5/8"-11 Nut | 4,800 | 1 | 31113 |



31113

**Tech Note**

**Nylon abrasive filament brushes require a lower operating RPM than most other power tool accessories and they cannot be used effectively on standard grinders.**

## Weiler Grinders By Metabo® -

Engineered by Metabo exclusively for Weiler, these grinders operate at the optimum speed required to make the most effective use of the Black Nylox brushes. The critical mechanisms of these industrial grade electric grinders are sealed to protect them from the accumulation of dust and swarf. In addition, the housing and case of these virtually indestructible power tools are designed to insure optimum air flow over the motors for reliable performance and long service life. Grinders feature an extended-slide "Deadman" switch design which insures that the tool shuts off if dropped.



### Model 60012 4-1/2" Right Angle Grinder

### Features:

- Double insulation
- 4,800 RPM
- Deadman switch
- Current interruption protection
- Spindle lock
- Tool-free guard adjustment
- 2-position side handle
- 12.2 Amp
- 5/8"-11 Spindle
- Spanner wrench included

# Nylox® FME Area Product Solutions



Cleaning internal threads inside a valve.



86148



86159



86171



44144



95016

## End Brush - Crimped Ceramic Filament - 1/4" Stem

**For spot-facing or cleaning in tight areas.**

| Diameter | Filment Dia./Grit Size | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | .055/80 | 3/4" | 4,800 | 10 | 86148 |

## Controlled Flare End Brush - Crimped Ceramic Filament - 1/4" Stem

**For cleaning corners and tight areas.**

| Diameter | Filment Dia./Grit Size | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | .035/80 | 1-1/8" | 4,800 | 10 | 86159 |

## Conflex Brushes - Crimped Ceramic Filament - 1/4" Stem

**For O.D. and I.D. cleaning in confined areas.**

| Diameter | Filment Dia./Grit Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item No. |
|---|---|---|---|---|---|---|
| 3" | .043/120 | 1" | 15/16" | 4,800 | 10 | 86171 |
| 3" | .055/80 | 1" | 15/16" | 4,800 | 10 | 86172 |




**Nylon abrasive filament brushes require a lower operating RPM than most other power tool accessories and they cannot be used effectively on standard grinders.**

## Model 60006 Die Grinder



### Features:

- Double insulation
- 4,800 RPM
- Deadman switch
- Spindle lock
- Side handle included
- 7.5 Amp
- 1/4" Collet
- Extended spindle for working in confined areas

## Hand Scratch Brushes - Crimped Ceramic Filament - For general purpose, light-duty cleaning.

| Overall Length | Block Type | Brush Part | Grit Size | Trim Length | Standard Pack | Item No. |
|---|---|---|---|---|---|---|
| 10" | Wood | 5" | 80 | 3/4" | 12 | 44144 |
| 8-3/4" | Wood | 2 x 9 Rows | 120 | 5/8" | 36 | 95016 |

**DID YOU KNOW?**

Weiler's Nylox and Burr-Rx brushes are used by all three of the major jet engine manufacturers to deburr critical component parts.

# PIPELINE




## HIGH PERFORMANCE PIPELINE PRODUCTS FOR THE MOST DEMANDING CIRCUMSTANCES

# WELD CLEANING PRODUCTS





79802



79804

**Made in the U.S.A.,** the performance engineered construction of Weiler's stringer bead wheels makes them the most effective weld cleaning tools for the most demanding circumstances. Our line of premium weld cleaning brushes are designed and manufactured to the most stringent quality standards in the industry.

Utilizing the highest quality heat-treated steel wire available, they are the most aggressive weld cleaning brushes on the market. Their design virtually eliminates knot movement resulting in the greatest cleaning action, smoothest operation, and longest wheel life. From root pass to cap pass, they excel in the removal of slag, spatter, and oxidation without damaging the filler material.

## DUALLY® STRINGER BEAD WHEELS feature a dual-hex nut design that simplifies periodic flipping of the wheel for maximum cleaning action, long life, and safer use.

| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **ROOT PASS BRUSHES** | | | | | | | | | |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 15,000 | 5 | 79801 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 79802 |
| 6" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 5 | 79805 |
| 7" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 5 | 79800 |
| **FILLER PASS BRUSHES** | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 79803 |
| 6" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 5 | 79804 |



13131



08916

## ROUGHNECK® STRINGER BEAD WHEELS are the standard for high-performance weld cleaning brushes. Narrow face brushes are suitable for cleaning root and hot passes and reaching into corners; wider face wheels can be used for cleaning filler and cap passes as well as for other surface prep and cleaning applications.

| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max.RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **ROOT PASS BRUSHES** | | | | | | | | | |
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 13131 |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 15,000 | 5 | 13232 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 08756 |
| 6" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 10 | 09400 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 09000 |
| | | | 76 | | | | | | 09100 |
| **FILLER PASS BRUSHES** | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 09856 |
| 6" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 10 | 08916 |



35216

## POLYFLEX® ENCAPSULATED STRINGER BEAD WHEELS - Black Elastomer

Feature a heat-stabilized encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life; suitable for cleaning hot welds.

| Diameter | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 6" | .014 | 5/8"-11 UNC | 3/16" | 1-7/16" | 3/8" | 9,000 | 5 | 35206 ▲ |
| 7" | .014 | 5/8"-11 UNC | 3/16" | 1-15/16" | 3/8" | 9,000 | 5 | 35216 ▲ |

▲ Crimped wire

**Weiler Knot Wire Cup Brushes,** like our high-performance weld cleaning brushes, are designed and manufactured right here in the U.S.A. to the most stringent quality standards in the industry. Constructed with the highest quality heat-treated steel wire available, our cup brushes provide maximum performance and durability. They are the ideal tools for removing surface rust and light corrosion from bevel ends prior to welding.



13286

## KNOT WIRE CUP BRUSHES - Single Row

Smooth operation and efficient removal of surface rust and light corrosion.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item # Steel |
|---|---|---|---|---|---|---|
| 2-3/4" | .020 | 5/8"-11 UNC | 1" | 14,000 | 1 | 13286 |
| 3-1/2" | .023 | 5/8"-11 UNC | 7/8" | 13,000 | 1 | 13156 |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316 |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12276* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376 |

*Internal Nut



12376

## POLYFLEX® ENCAPSULATED CUP BRUSH - Black Elastomer - Extra Heavy-Duty

Heat-stabilized elastomer gradually wears away to expose a consistent short trim for higher aggression and longer life.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item # Steel |
|---|---|---|---|---|---|---|
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35760 |



35760

**Tiger Disc Abrasive Flap Discs** are the recognized performance benchmark for flap discs on the pipeline. Weiler designs and manufactures Tiger Discs to the most stringent quality standards right here in the U.S.A. Providing a high cut rate and long life, Tiger Discs are the ideal tools for removing heavy pitting from bevel ends prior to welding.

## TIGER® DISC - Angled Style (Type 29)

Rigid aluminum backing for quick removal of heavy corrosion and pitting.




| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number Aluminum Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 50518* |
| | | 60 | | | 50519* |
| | | 80 | | | 50520* |
| 5" | 5/8"-11 Nut | 40 | 12,000 | 10 | 50527* |
| | | 60 | | | 50528* |
| | | 80 | | | 50529* |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 50543* |
| | | 60 | | | 50544* |
| | | 80 | | | 50545* |

*Patent # 6,945,863




50543

# MAINTENANCE & REPAIR PRODUCTS



56283

**Cutting Wheels -** Vortec Pro® bonded abrasives are specifically designed for general purpose grinding and cutting applications on steel, iron and other ferrous metals. All products are resin-bond formulated for aggressive stock removal and fast cutting, and reinforced with fiberglass webbing for stability. Thin cutting wheels are ideal for use in yard work or field repairs.

## VORTEC PRO® TYPE 27 THIN CUTTING WHEELS - Aluminum Oxide

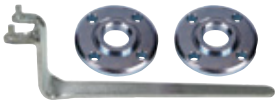



For general purpose, burr-free cutting with less resistance on various metals.

| Dia. | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | WA60S - Metal | 13,300 | 25 | 56393* |
| 5" | .045" | 7/8" | WA60S - Metal | 12,200 | 100 | 56392* |
| 6" | .045" | 7/8" | WA60S - Metal | 10,200 | 25 | 56283* |
| 7" | .060" | 7/8" | WA60S - Metal | 8,500 | 25 | 56391* |

*Contaminant-free.

56494



56495

## ADAPTING NUTS & SPANNER WRENCH - For use with Tiger, Vortec Pro and High Density Flap Discs.

| Description | Thread Size | For Use With | Std. Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 5/8" -11 | 4-1/2", 5" & 7" Flap Discs with 7/8" arbor hole | 1 | 56494 |
| Spanner Wrench | — | Item No. 56494 only | 1 | 56495 |

**Scratch Brushes** are versatile hand tools for performing a variety of cleaning applications such as removing dirt, flaking paint, loose scale, and light rust.



44053

## CURVED HANDLE SCRATCH BRUSH - Hardwood Block - .012 Steel Wire - Made in U.S.A.

High-quality construction for more effective brushing action and longer life.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44053 |



25150

## VORTEC PRO® CURVED HANDLE SCRATCH BRUSH - Hardwood Block - Steel Wire

Provides lasting, efficient service at a minimal cost. Imported.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25150 |



40185

**Chip and Oil Brushes** are inexpensive, multipurpose tools for use in applications requiring a disposable applicator or utility brush. They are ideal brushes for applying pipe coatings in the field.

## VORTEC PRO® CHIP AND OIL BRUSHES - White Bristle - Wood Handle

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" | 5/8" | 1-3/4" | 12 | 40184 |
| | 3/8" | | | 40185 |

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# Maintenance Products



Applying pipe coating with a chip and oil brush.



44053



40183

Please note that this brochure features only a small assortment of the surface conditioning products offered by Weiler. The featured items have been selected specifically based upon their popularity in the pipeline market.

For the full offering of Weiler power brushes, abrasives, and maintenance products, please refer to our Solutions Resource Guide, visit our website or call our Applications Hotline at 888-299-2777 to discuss your requirements with a product specialist.

**Scratch Brushes** are versatile hand tools for performing a variety of cleaning applications such as removing dirt, flaking paint, loose scale, and light rust.

### Curved Handle Scratch Brush - Hardwood Block - .012 Steel Wire

**High-quality construction for more effective brushing action and longer life. Made in USA.**

| Block Size | Brush Length | # of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44053 |

### Vortec Pro® Economy Curved Handle Scratch Brush - Hardwood Block - Steel Wire

**Provides lasting, efficient service at a minimal cost. Imported.**

| Block Size | Brush Length | # of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25150 |

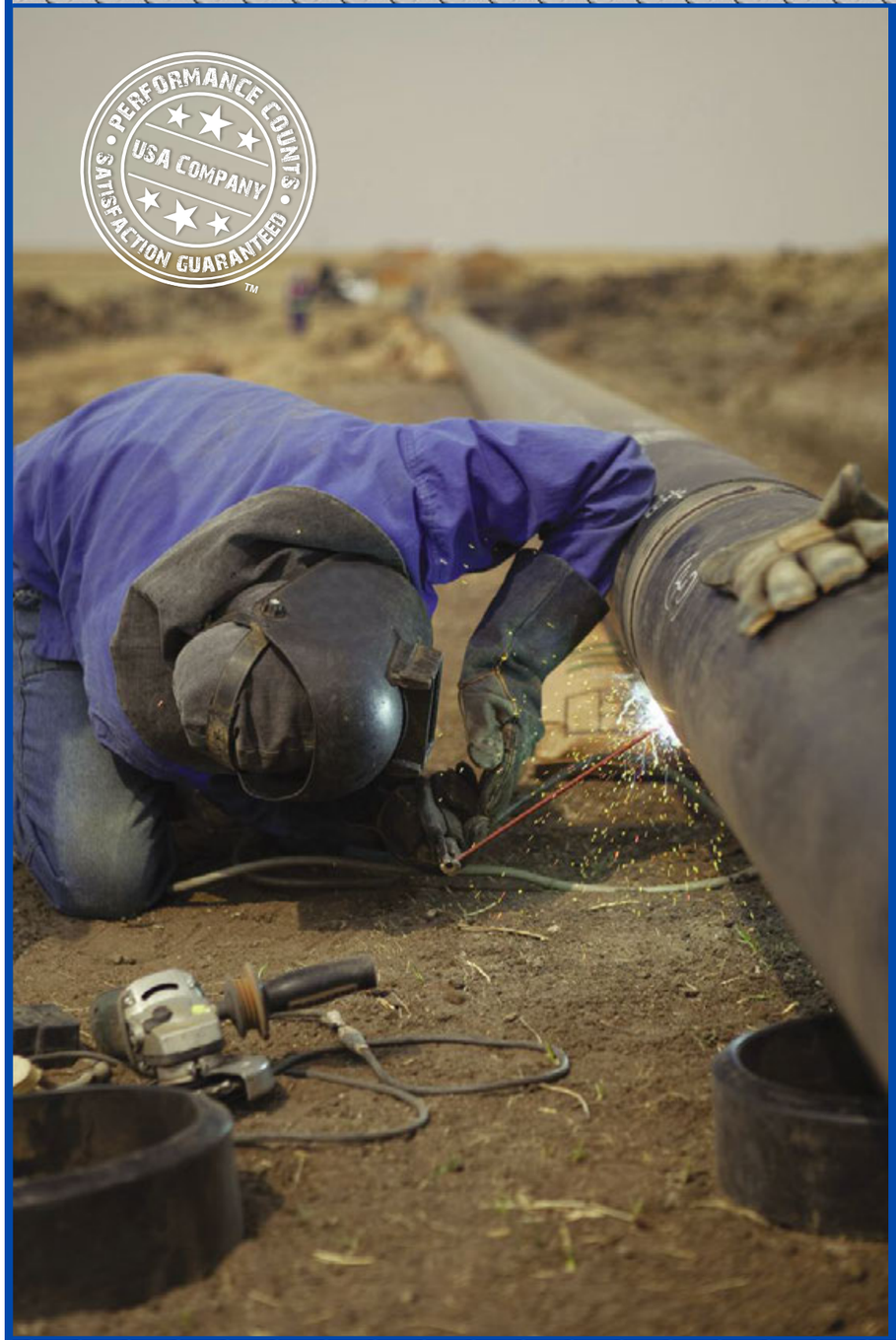
**Chip And Oil Brushes** are inexpensive, multipurpose tools for use in applications requiring a disposable applicator or utility brush. They are ideal brushes for applying pipe coatings in the field.

### Vortec Pro® Economy Chip and Oil Brushes

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| White Bristle - Wood Handle | | | | |
| 3" | 3/8" | 1-1/2" | 12 | 40183 |
| 4" | 5/8"<br>3/8" | 1-3/4" | 12 | 40184<br>40185 |
| Grey China Bristle - Plastic Handle | | | | |
| 4" | 11/16" | 1-7/8" | 12 | 40032 |

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# Weiler Products For The Oil Sands Region












- Weld Cleaning Products
- Weld Prep Products
- Maintenance Products

## High Performance Consumables For Piping Construction



Removing slag and spatter before the cap pass.



79802





09000



08916

MADE IN U.S.A.

**Weiler Stringer Bead Wheels** are the most effective weld cleaning tools for the most demanding users. Identifiable by their gold nuts, our premium weld cleaning brushes are manufactured to the most stringent quality standards in the industry using the highest quality heat-treated steel wire that is available.

We have performance-engineered our stringer bead wheels to virtually eliminate knot movement and produce the fastest, most aggressive cleaning action, smoothest operation, and longest life of any weld cleaning brush on the market. Our Dually® and Roughneck® series brushes feature:

- Individual knot holes for better balance and reduced wire fatigue. The knot plates of our 6-7/8" wheels also feature a unique "sprocket" design to lock the knots in place (see inset).
- Tumbled side plates which are projection-welded to the knot plate. This increases the torsional rigidity of the brush assembly, preventing distortion, knot movement and wire breakage.
- Trimmed knots leave sharpened wire tips on the working edge of the wheel. Other manufacturers use a "Rosette" wire twist which is less expensive to manufacture but produces a brush with a dull, less effective cleaning action.



From root pass to cap pass, Weiler stringer bead wheels excel at quickly removing slag, splatter, and oxidation from the weld zone without damaging the filler material!

New!

**Dually® Stringer Bead Twist Wheels - Dual-hex nut design simplifies periodic flipping of the wheel for maximum cutting action, long life, and safer use.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | |
| 4-7/8" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 79802 |
| 5-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 5 | 79805 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 5 | 79800 |
| **Filler Pass Brushes** | | | | | | | | | |
| 4-7/8" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 79803 |
| 5-7/8" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 5 | 79804 |

**Roughneck® Stringer Bead Twist Wheels - The original standard for inter-pass welding applications, they insure consistent weld quality and reduce cleaning costs.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | |
| 4-7/8" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 08756 |
| 5-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 10 | 09400 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56<br>76 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 09000<br>09100 |
| **Filler Pass Brushes** | | | | | | | | | |
| 4-7/8" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 09856 |
| 5-7/8" | .023 | 5/8"-11 UNC | 24<br>30 | 1/2" | 1-3/8"<br>1-1/4" | 9/16"<br>5/8" | 12,500 | 10 | 08776<br>08916 |





**Weiler Knot Wire Cup Brushes,** like our high-performance weld cleaning brushes, are manufactured to the most stringent quality standards in the industry using the highest quality heat-treated steel wire. They are designed and built for the fastest, most efficient cleaning and longest life and are the ideal tools for removing surface rust and light corrosion from bevel ends prior to welding.

**Knot Wire Cup Brushes - Single Row**
**Smooth operation and efficient removal of surface rust and light corrosion.**

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 2-3/4" | .020 | M10 x 1.25<br>3/8"-24 UNF<br>5/8"-11 UNC | 1" | 14,000 | 1 | 13281<br>13284<br>13286 |
| 3-1/2" | .023 | M14 x 2.0<br>5/8"-11 UNC | 7/8" | 13,000 | 1 | 13152<br>13156 |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316 |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12276* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376 |

* Internal Nut

**Tiger® Disc Abrasive Flap Discs** are the recognized performance benchmark for flap discs in the pipeline construction and process piping industries. Weiler designs and manufactures Tiger Discs to the most stringent quality standard, and they are performance-engineered to provide a fast, efficient cut rate and long life. Tiger Discs are the ideal tools for removing heavy pitting from bevel ends prior to welding.

**Tiger Disc - Angled Style (Type 29) - Aluminum Backing - Zirconium Grain**
**For maximum aggression and long life.**

15°-25°

| Diameter | Grit Size | Max. RPM | Standard Pack | Item Number 5/8"-11 Arbor | Item Number 22mm Arbor |
|---|---|---|---|---|---|
| 4-1/2" | 40<br>60<br>80 | 13,000 | 10 | 50518*<br>50519*<br>50520* | 50513<br>50514<br>50515 |
| 5" | 40<br>60<br>80 | 12,000 | 10 | 50527*<br>50528*<br>50529* | 50523<br>50524<br>50525 |
| 7" | 40<br>60<br>80 | 8,600 | 10 | 50543*<br>50544*<br>50545* | 50533<br>50534<br>50535 |

* Patent # 6,945,863

**Trimmable Tiger Disc - Angled Style (Type 29) - Trimmable Backing - Zirconium Grain**
**High stock removal, long life and flexibility.**

15°-35°

| Diameter | Grit Size | Max. RPM | Standard Pack | Item Number 5/8"-11 Arbor | Item Number 22mm Arbor |
|---|---|---|---|---|---|
| 5" | 40<br>60<br>80 | 12,000 | 10 | 50014<br>50015<br>50016 | 50010<br>50011<br>50012 |



Removing rust and pitting from a pipe bevel.



12376



50519





50015

MADE IN U.S.A.

# Weiler® Power Brushes

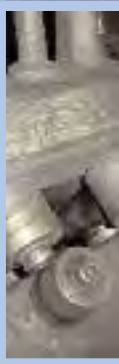














- Knot Wire Wheels
- New! Weld Cleaning Brushes
  *Dually® Line of Flip 'N Fast Wheels!*
- Crimped Wire Wheels
- Nylon and Tampico Wheels
- Cup Brushes
- New! Small Angle Grinder Brushes
  *Roughneck® Jr. 4-1/2" Stringer Bead & 2-3/4" Hurricane Twist Cups!*
- End Brushes
- Miniature Brushes
- Crosshole Deburring Brushes
  *Exclusive Bore-Rx™ Internal Deburring Tools for Automated Use!*
- Power and Hand Tube Brushes
- Non-Sparking Brushes
- Strip Brushes
- Wide Face Brushes

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# Solutions Showcase

## Tube End Deburring

**Problem:** Structural tubing is fabricated into an abundance of different forms. In order to facilitate safer handling and proper fit, the ends of the tubing must frequently be deburred.

**Solution:** Wide face crimped wire wheel brushes are an extremely effective solution for tube end deburring. Brushes can deburr the OD and ID of tubing at an extremely high rate and produce a media-cost-per-part of considerably less than $0.01 per part.

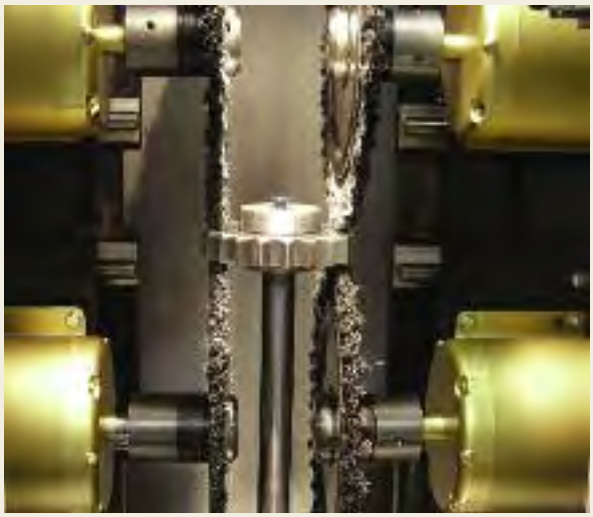





## Gear Deburring

**Problem:** Power transmission components like gears cannot function properly when burrs prevent correct engagement. Further, burrs which become detached from gears can become lodged in critical transmission components causing premature wear and potential failure.

**Solution:** Knot wire wheel brushes with surface speed in excess of 6000 SFPM are an excellent solution for deburring gears prior to heat treatment. The high energy filament tips are able to separate burrs from base material and produce a uniform edge break, which protects the edge of the gear.






Photos courtesy of On-Line Services.

## Removal of Mill Scale

**Problem:** Mill processing of steel often involves heat treating and oil quenching operations that produce an adherent scale which must be removed prior to joining or finishing operations.

**Solution:** Wire brushes are capable of quickly cleaning material to white metal and producing varying degrees of surface roughening to promote adhesion. Brushing operations are often preferred over blasting and chemical processes which generate an expensive waste stream and can be costly to operate and maintain.





# Solutions Showcase

## Inter-Pass Pipeline Weld Cleaning









**Problem:** To prevent voids and inclusions when welding multi-pass joints, the surface of each bead must be completely cleaned of slag and other residuals. Performing inter-pass weld cleaning as quickly and as thoroughly as possible is critical to avoiding costly repair work and delays.

**Solution:** Weiler's Roughneck® and Dually® stringer bead wheels have been engineered to maximize efficiency and minimize costs and are the preferred choice of welders' helpers on the pipeline. From hot pass to cap pass, these premium weld cleaning brushes excel at quickly and thoroughly removing slag, spatter, and oxidation without damaging the filler material.

## Cleaning Threaded Connections









**Problem:** The box ends of drill string and other oilfield tubular goods are examples of connections that must be periodically cleaned without altering the geometry of the threads. Abrasive products all remove base material to some extent, and are capable of damaging threads, resulting in unreliable connections and the risk of potential failures.

**Solution:** The conformability and impact action of small diameter crimped wire wheels make them ideal tools for cleaning threads without fear of damage. When used on a high-speed die grinder, these radial wheel brushes quickly remove residual dope as well as rust, corrosion and scale from male or female thread ends.

## Removal of Excess Molded Rubber









**Problem:** Mechanical rubber components such as motor mounts are produced through a process that commonly leaves flash and excess rubber on critical surfaces. In order for the component to function properly, this unwanted material must be removed.

**Solution:** The non-loading nature of wire brushes makes them the best available solution in the marketplace for removal of rubber from targeted surfaces. This solution can be implemented off-hand or using automated equipment.

# Power Brush Technical Information

## Operational Advantages of Power Brushes

### Power Brushes Do Not Remove Base Material

Unlike bonded and coated abrasive products, power brushes have the ability to clean hard surfaces without removing base material. The impact action of the sharp, hardened wire tips of a rotating brush behave in the same manner as the media in a blasting operation and they have the same ability to separate surface contaminants without damaging the substrate.

Grinding Wheel



Wire Wheel



Due to its compliant nature, a power brush focuses more of this mechanical energy on edges. This makes it an ideal tool for removing burrs and blending sharp edges without changing overall part dimensions after sawing, cutting, grinding and machining operations.

### Power Brushes Do Not Load

Unlike bonded, coated and non-woven abrasive products, power brushes will not load when used on softer materials or when removing paint or similar coatings from a harder surface. Because a power brush consists of a collection of individual wire filaments, there is no place for debris to accumulate and prevent the sharp wire tips from striking the work.

Resin Fiber Disc



Cup Brush



As a power brush is used, the wire tips will naturally tend to wear to a point due to contact with the working surface. It is possible to take advantage of this self-sharpening action by periodically switching the mounting position of wheel brushes to maintain their speed and effectiveness.

## Construction Advantages of Weiler Power Brushes





### Weiler's Solid Ring Construction

Our crimped wire brushes are constructed using solid rings to retain the fill material and our manufacturing process results in an even, consistent distribution of wire strands around the entire brush diameter. This ensures that our crimped wire products run smoother and last longer than the competition – even in the toughest applications.

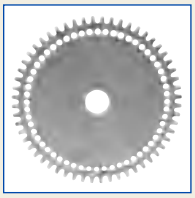




### Weiler's Individual Knot Hole Construction

Weiler's knot wheels are constructed with an internal steel plate that has equally spaced individual holes around the perimeter. Wire is inserted through each hole and twisted into a knot. Each hole has precisely the same wire count, thereby assuring perfect balance. This eliminates vibration, reduces operator fatigue and increases brush life.





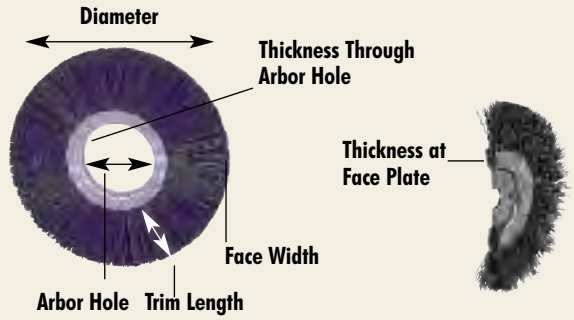
### Weiler's Roughneck® Weld Cleaning Brushes Construction

Each knot is twisted through its own hole and locked into an individual sprocket tooth. This prevents the knots from moving, providing a stronger striking action on the work surface, longer brush life and less operator fatigue. This results in the most aggressive weld cleaning in the market with the lowest cost-per-piece brushed.

# Power Brush Technical Information

## Product Attributes

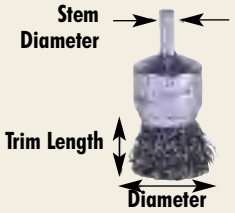
### Wheel Brush



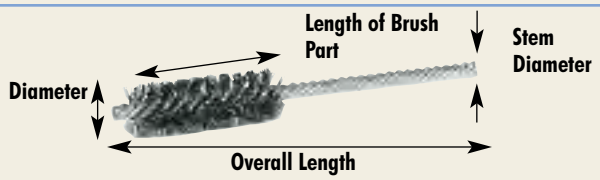

### Cup Brush




### Stem-Mounted End Brush




### Tube Brush




## Fill Materials

**Steel Wire -** Carbon steel wire is typically the most durable power brush fill material for metalworking and heavy-duty cleaning applications. **Weiler industrial grade brushes** utilize heat treated, high tensile steel wire that has been drawn to the most exacting industry standards for superior fatigue resistance and aggressive brushing action. **Vortec Pro® professional grade brushes** utilize more cost-effective grades of steel wire to deliver reliable performance in less demanding applications.

**Stainless Steel Wire -** Stainless steel wire is only recommended when brushing corrosion-resistant or non-ferrous metals such as stainless or aluminum or when the brush is being used in a wet environment. Stainless steel wire is not any more durable or aggressive than the highest grades of steel wire. All Weiler stainless steel brushes are manufactured with Type 302 stainless wire, but select items are also available with Type 316 wire by special order.

**Non-Ferrous Wire -** Brass, bronze and aluminum wire are available in assorted Weiler industrial grade power brush items. These non-ferrous materials will not generate a spark in use, but they lack the durability of carbon steel and stainless steel wire. Due to their soft brushing action, these materials may also be used in special applications such as decorative finishing.

**Animal Hair -** Natural hair bristle is used primarily in miniature power brushes for scratch-free cleaning and polishing. Depending on the animal species and type of hair, this fill material can range from relatively stiff to relatively soft, making it suitable for a variety of applications from removing dust from optical lenses to buffing precious metals using abrasive compounds.

**Vegetable Fiber -** Tampico, a natural fiber produced from the Mexican agave plant, is a common natural fill material used in wet scrubbing and cleaning applications as well as buffing and polishing metals. It is heat, alkali and acid resistant. Its natural color is off-white but it may be dyed or bleached.

**Synthetic -** Nylon is typically the most durable synthetic bristle material for use in power brushes and can be used in a variety of applications due to its flexibility, high fatigue strength and resistance to abrasion, heat, acids and alkalis. Polypropylene is less durable and used primarily in strip brushes.

## Special Information On Stainless Steel Brushes

As noted above, Weiler's complete offering of stainless steel wire brushes is manufactured using wire drawn from Type 302 stainless steel. Although 302 stainless is typically a non-magnetic material, it is important to remember that the amount of cold-working that it experiences during the wire-drawing process causes it to become magnetic. For this reason, proper storage and handling of stainless steel brushes is critical to prevent cross-contamination and "after rust" issues.

Type 302 is widely used in the manufacture of power brushes for its relative durability and aggressive action as well as for its austenitic properties which insure the corrosion resistance of the materials on which it is applied. The use of a different grade of stainless steel wire is typically required in critical weld preparation and cleaning applications, but it will not address "after rust" and other cross-contamination issues. To insure the corrosion resistance of any stainless steel surface after brushing, passivating it with a 10-20% solution of nitric acid is recommended.

## Weiler Industrial Grade Products

Engineered and manufactured to maximize performance and minimize operating costs in the most demanding surface conditioning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost-of-use and most consistent performance in heavy production environments.

## Weiler Vortec Pro® Professional Grade Products

Manufactured using similar product construction and to the same exacting standards as other Weiler power brushes, but engineered to provide cost-effective use in less demanding environments. Vortec Pro brushes are an economical choice for the construction trades, low volume production shops and light duty industrial MRO use.

### Crimped vs. Knot Wire Brushes

**Crimped Wire Brushes:**

- Made with wire that is crimped to allow individual filaments to support each other.
- Provide flexibility for light to medium duty brushing action.
- Use on parts that could be damaged by the impact of a knot brush.
- Use for a broad range of applications.

**Knot Wire Brushes:**

- Made with straight wire filaments that are twisted as a single unit like a piece of cable or wire rope.
- Provide less flexibility and more aggressive brushing action in heavy-duty applications.
- Use on parts requiring high-impact action.
- Use to remove large burrs and heavy contamination, such as multiple layers of rust, scale, paint or oxides.

### Trim Length and Fill Density

**Longer trim, lower density brushes** offer a greater degree of flexibility that is ideal for applications such as cleaning surfaces which are somewhat irregular. However, the lower fill density can result in shorter brush life and less consistent performance in production environments.



**Shorter trim, higher density brushes** are less flexible and work with a faster action which requires less applied pressure or engagement with the brush face. This produces more consistent performance and longer life in applications such as edge deburring.

**To maximize brush life and reduce costs,** always use the shortest trim, highest density brush that will adequately conform to the surface or part edges.



### Knot Configurations



**Standard Twist:** A slight tuft at the end of the wire knot provides some flexibility for use on irregular surfaces.





**Cable Twist:**
The wire is tightly twisted to the end of the knot, providing very aggressive brushing action.





**Stringer Bead Twist:**
The wire is very tightly twisted to the end of the knot, creating a narrow face with high-impact action, primarily used for weld cleaning.





**Hurricane Twist:**
A flattened, dull knot end allows the brush to last longer and provide smoother operation but sacrifices much of the cutting action of the other knot types.



# Power Brush Technical Information

## Wire Size

| Wire | Coarse | | Medium to Coarse | | Medium | | Fine | | Very Fine | |
|---|---|---|---|---|---|---|---|---|---|---|
| Gauge # | 20 | 24 | 25 | 30 | 33 | 34 | 35 | 38 | 43 | 47 |
| Dia. in Inches | .035 | .023 | .020 | .014 | .0118 | .0104 | .0095 | .008 | .006 | .005 |
| Dia. in Millimeters | 0,89 | 0,58 | 0,51 | 0,36 | 0,30 | 0,26 | 0,24 | 0,20 | 0,15 | 0,13 |

Wire sizes in decimals of an inch are shown in all tables throughout this catalog. American Steel Wire Equivalent Gauge (Formerly Washburn & Moen)

**Larger diameter wire** produces a more aggressive brushing action due to its stiffness, but it also fatigues and breaks much more quickly.

**Smaller diameter wire** can resist fatigue and breakage longer, but it produces a less aggressive and more flexible brushing action.

**To maximize brush life and reduce costs,** always use the finest wire that will accomplish the job without requiring excessive applied pressure or engagement with the brush face.

**Polyflex® Encapsulated Brushes** are suitable for extremely demanding applications which do not require a high degree of conformability. They are especially well-suited for users with the following types of requirements:

- **Extreme brushing pressure -** Encapsulation protects wires from over-flexing and extends brush life relative to conventional knot and crimped wire brushes.
- **Severe cleaning operations -** Encapsulation holds the wire tips rigidly in place and creates the most aggressive brushing action that can be achieved with a wire brush.

In order to optimize the performance of encapsulated brushes, selection of the correct elastomer is critical. The following is a description of the three types of elastomers and their performance attributes.

**Burgundy (Standard)**
General purpose elastomer; suitable for most manufacturing applications.



**Orange (Heavy-Duty)**
A more heavy-duty elastomer than burgundy; used for more demanding applications.



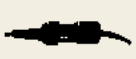
**Black (Extra Heavy-Duty)**
A heat stabilized elastomer that does not wear easily; used primarily for cleaning welds.



## Product Selection Chart:

| | Cleaning Surface Prep Roughening Weld Cleaning Remove Oxides & Rust | Surface Finishing (Functional, Aesthetic, Decorative, Satin) | Heavy Deburring | Light Deburring & Edge Blending | Deflashing |
|---|---|---|---|---|---|
| Crimped Wheels | ● ● ● | ● ● | | ● ● ● | |
| Knot Wheels | ● ● ● | | ● ● ● | | ● ● ● |
| Crimped Cups | ● | ● | | ● | |
| Knot Cups | ● | | ● | | |
| Crimped Stem-Mounted | ● ● | | | ● ● | |
| Knot Stem-Mounted | ● ● | | ● ● | | ● ● |
| Encapsulated | ● ● ● ● ● | | ● ● ● ● ● | | ● ● ● ● ● |
| Power & Hand Tube | ● | ● | | ● | |
| Miniature | ● | ● | | ● | |

## Product & Application Key

- Right Angle Grinder 
- Bench/Pedestal Grinder 
- Die Grinder 
- High Speed Pencil Grinder 
- Straight Grinder 
- Right Angle Die Grinder 
- Hand Drill/Drill Press 

# Power Brush Technical Information

## Power Brush Operating Information

### Brushing Speeds

• Power brushes, like cutting tools, operate most effectively when the speed and pressure of the operation are properly matched to the demands of the application. In most operations, the highest speed and lightest pressure will ensure the fastest brushing action and longest brush life.

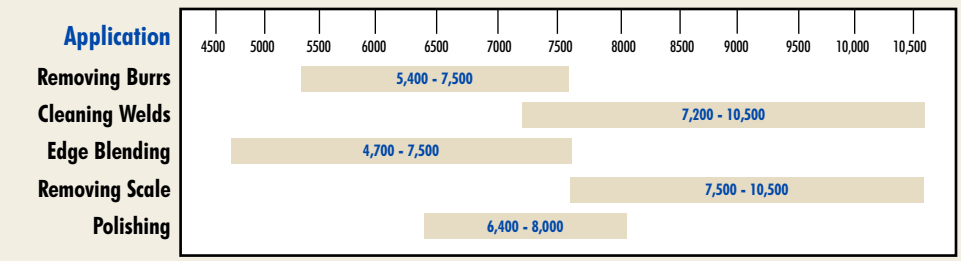
• Increasing brush speed increases the face hardness and brushing action; therefore, a fine wire brush rotating at a higher speed will often produce the same results as a coarser wire brush rotating at a slower speed. Finer wire operating at a higher speed is generally preferred and will provide a longer brush life.

• MSFS - Maximum Safe Free Speed (RPM) is the maximum speed at which the brushes may be used safely but is not necessarily the optimum speed for a given application. Operating speed should be determined by the application. When running a wire brush, a rule of thumb is to run it a "mile a minute" or a minimum of 5,000 Surface Feet Per Minute (SFPM). However, never exceed the Maximum Safe Free Speed of the brush.

• Make sure spindle size and motor of machine are large enough to accommodate the diameter of brush to be used (see table on pg. 20).

### Recommended Surface Speeds For Brushing Applications

$$SFPM = \frac{\pi \text{ Dia. (Inches)} \times RPM}{12}$$




### Table of Surface Speeds (Peripheral Speed in Ft./Min.)

| RPM | Diameter (Inches) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 15 |
| 1000 | 525 | 785 | 1,050 | 1,575 | 2,100 | 2,625 | 3,150 | 3,925 |
| 1500 | 785 | 1,175 | 1,575 | 2,350 | 3,150 | 3,925 | 4,725 | 5,900 |
| 1750 | 915 | 1,375 | 1,850 | 2,750 | 3,650 | 4,550 | 5,500 | 6,800 |
| 2500 | 1,300 | 1,950 | 2,625 | 3,925 | 5,250 | 6,550 | 7,850 | 9,825 |
| 3000 | 1,575 | 2,350 | 3,125 | 4,725 | 6,275 | 7,850 | 9,425 | 11,775 |
| 3450 | 1,800 | 2,700 | 3,600 | 5,400 | 7,200 | 9,000 | 11,000 | 13,500 |
| 4000 | 2,100 | 3,150 | 4,175 | 6,275 | 8,375 | 10,475 | – | – |
| 6000 | 3,125 | 4,700 | 6,275 | 9,425 | – | – | – | – |
| 10,000 | 5,250 | 7,850 | 10,500 | – | – | – | – | – |
| 15,000 | 7,850 | 11,775 | 15,750 | – | – | – | – | – |
| 20,000 | 10,450 | 15,700 | 20,950 | – | – | – | – | – |

**Example:** A 6" diameter wheel running at 3,450 RPM has a surface speed of 5,400 SFPM.

### Brushing Pressure

Avoid excessive pressure when using a wire brush. Excessive pressure causes over-bending of the filaments and heat build-up resulting in filament breakage, rapid dulling and reduced brush life.

Instead of greater pressure, try the following:

1. A brush with more aggressive action (increase filament diameter, decrease trim length, different brush type, i.e., knot type instead of crimped type)

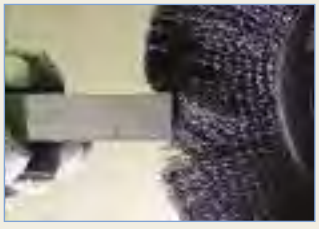
2. Higher surface speed (increase RPM or brush diameter)

Important Note: Never exceed the recommended Maximum Safe Free Speed or RPM rating of the brush.

**Correct**
**Wire Tips Doing the Work**



**Incorrect**
**Excessive Pressure Causes Wire Breakage**



## Power Brush Operating Information

### Minimum Recommended Spindle Diameter
**(from ANSI Standard B165.1)**

| Outside Dia. of Wheel Brush | Maximum Face Width of Wheel Brush | Minimum Outside Dia. of Spindle (Shaft) |
|---|---|---|
| 2" | 1/4" | 1/4" |
| 3" | 3/4" | 1/4" |
| 3" (heavy-duty) | 1" | 3/8" |
| 4" | 1" | 3/8" |
| 6" | 1-1/4" | 1/2" |
| 8" | 1-1/4" | 5/8" |
| 10" | 2" | 3/4" |
| 12" | 3" | 1" |
| 14" | 3" | 1-1/4" |
| 15" | 3" | 1-1/4" |
| 16" | 3" | 2" |

Note: These diameters are based on the wheel brush being mounted next to the supported end of the shaft rather than the unsupported end in order to minimize overhang.

### Recommended Motor Sizes

| Brush Diameter | Motor Size | RPM |
|---|---|---|
| 4" | 1/4 HP | 3,450 |
| 6" | 1/2 HP | 3,450 |
| 8" | 3/4 HP | 3,450 |
| 10" | 1 HP | 1,750 |
| 12" | 1 HP | 1,750 |
| 15" | 1-1/2 HP | 1,750 |

Note: This chart is based on 1" brush face.

### Arbor Hole Variation Table - For Weiler Industrial Grade Wheels
**If an arbor hole size other than the size listed in the product table is required, change the last digit of the Item Number as indicated in the Table.**

| Arbor Hole Diameter | Change Last Digit of Item Number to: | Arbor Hole Features |
|---|---|---|
| 1/2"-3/8" | 4 | Plastic Snap-Out Adapter |
| 5/8"-1/2" | 5 | Plastic Snap-Out Adapter |
| 5/8"-11 UNC | 6 | Threaded Nut (6", 7" & 8" Wheels Only) |
| 5/8" | 7 | 3", 4" & 6" Wheels Only |
| 3/4" | 8 | — |
| 7/8" | 0 - 11 | — |
| 1" | 0 - 12 | 1/4"*x 1/8"+ double keyway |
| 1-1/4" | 9 | 5/16"*x 5/32"+ double keyway |
| 1-1/2" | 0 - 13 | 3/8"*x 3/16"+ double keyway |
| 1-3/4" | 0 - 16 | 3/8"*x 3/16"+ double keyway |
| 2" | 0 - 14 | 1/2"*x 1/4"+ double keyway |
| 2-1/4" | 0 - 17 | 3/4"*x 3/8"+ double keyway |
| 2-1/2" | 0 - 15 | 1/2"*x 1/4"+ double keyway |

* Width of keyway + Depth of keyway

**Example:** Item Number 01228 has a listed, standard size arbor hole of 3/4". If an 1-1/4" arbor hole is desired, drop the 8 from 01228 and add 9. The Item Number becomes 01229. If a 2" arbor hole is desired, drop the 8 from 01228 and add 0-14. The Item Number becomes 01220-14.

### Self-Sharpening of Wire Wheel Brushes

When using wire wheel brushes without nuts, periodically reverse the direction of rotation to take advantage of the self-sharpening action that will result. Remove the brush from the spindle, flip the wire brush 180° and remount the brush securely.


Remove


Flip 180°


Remount Securely

## Power Brush Troubleshooting Guide

There are many variables in power brush applications. If the power brush you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's **Application Engineering Hotline at 888-299-2777.**

| Problem | Recommended Solutions |
|---|---|
| Brush works too fast | • Select a brush with longer filaments and/or lower fill density<br>• Select a brush with a smaller diameter wire<br>• Select a brush with a narrower face and/or lower fill density<br>• Select a brush with a smaller outside diameter<br>• Operate the brush at a slower RPM |
| Brush works too slowly | • Select a brush with shorter filaments and/or higher fill density<br>• Select a brush with a larger diameter wire<br>• Select a brush with a wider face and/or higher fill density<br>• Select a brush with a larger outside diameter<br>• Operate the brush at a faster RPM |
| Brushing action rolls or peens the burr over instead of removing burr | • Select a brush with a larger diameter wire<br>• Select a brush with shorter filaments and/or higher fill density<br>• Operate the brush at a faster RPM<br>• Replace the crimped wire brush with a knot wire brush |
| Finer final finish required | • Select a brush with longer filaments<br>• Select a brush with a smaller diameter wire<br>• Operate the brush at a higher RPM<br>• Replace the wire brush with a nylon abrasive brush (Nylox®) |
| Coarser final finish required | • Select a brush with shorter filaments<br>• Select a brush with a larger diameter wire<br>• Operate the brush at a slower RPM |
| Non-uniform brushing action | • Select a brush with longer filaments<br>• Select a brush with a larger diameter wire<br>• Automate the operation to reduce human variables |
| Filaments break off | • Reduce applied pressure or engagement<br>• Select a brush with a smaller diameter wire<br>• Select a brush with a lower fill density |
| Short brush life | • Reduce applied pressure or engagement<br>• Select a brush with a smaller diameter wire<br>• Select a brush with a higher fill density |




Call our Application Engineering Hotline at 888-299-APPS (2777). If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or your facility. Either way, Weiler will provide the most cost-effective solution for your specific application.

# Knot Wire Wheels with Arbor Hole

**Knot Wire Wheels with Arbor Hole -** Knot wire wheels with an arbor hole are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and bronze wire for use in a wide variety of applications.

## Applications

- Removing rust, scale and heavy corrosion
- Surface roughening and preparation
- Coating removal
- Removing excess molded rubber or plastic
- Heavy deburring

**Standard Twist Wheels - Provide heavy-duty brushing action with some flexibility; Ideal for demanding cleaning applications on somewhat irregular surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .0118<br>.014<br>.020 | 1/2"-3/8" | 20 | 3/8" | 5/8" | 1/2" | 7/16" | 25,000 | 10 | 08004<br>08014 ■<br>08024* | 08254<br>08264<br>08274 |
| 4" | .0118<br>.014<br>.020 | 1/2"-3/8" | 24 | 1/2" | 7/8" | 1/2" | 7/16" | 20,000 | 10 | 08034<br>08044 ■<br>08064 | 08284<br>08294<br>08314 |
| 4" | .014 | 5/8"-1/2" | 24 | 1/2" | 7/8" | 7/8" | 7/16" | 20,000 | 10 | 08045 | – |
| 6" | .0118<br>.014<br>.016<br>.023 | 5/8"-1/2" | 24 | 1/2" | 1-3/8" | 1-1/4" | 9/16" | 9,000 | 10 | 08075<br>08085 ■<br>08095<br>08105 | 08325<br>–<br>08345<br>– |
| 6" | .016 | 5/8"-1/2" | 30 | 5/8" | 1-1/4" | 1-1/4" | 5/8" | 9,000 | 5 | 08975 | – |
| 7" | .014 | 5/8" | 24 | 5/8" | 1-7/8" | 1-1/4" | 9/16" | 9,000 | 2 | 08835 | – |
| 8" | .0118<br>.014<br>.016<br>.023 | 5/8" | 38 | 5/8" | 1-5/8" | 2" | 1/2" | 6,000 | 2 | 08125<br>08135<br>08145<br>08155 | 08375<br>–<br>08395<br>– |
| 8" | .014 | 3/4" | 38 | 5/8" | 1-5/8" | 2" | 1/2" | 6,000 | 2 | 08138 | – |
| 10" | .014 | 3/4" | 52 | 3/4" | 1-3/4" | 2-1/2" | 3/4" | 4,500 | 2 | 08178 | – |
| 10" | .0118<br>.014<br>.016 | 1-1/4"★ | 52 | 3/4" | 1-3/4" | 2-1/2" | 3/4" | 4,500 | 2 | 08169<br>08179<br>08189 | –<br>–<br>– |
| 12" | .0118<br>.014<br>.016 | 1-1/4"★ | 52 | 3/4" | 2-3/4" | 2-1/2" | 11/16" | 3,600 | 1 | 08199<br>08209<br>08219 | –<br>–<br>– |
| 12" | .014 | 2"◆ | 52 | 3/4" | 2-3/4" | 2-1/2" | 11/16" | 3,600 | 1 | 08200-14 | – |
| 12" | .020 | 1-1/4"★ | 56 | 5/8" | 2-3/4" | 3" | 13/16" | 4,500 | 2 | 09719 | |
| 12" | .023 | 2"◆ | 66 | 3/4" | 2-1/4" | 3" | 13/16" | 5,000 | 2 | 09870 | – |
| 15" | .016 | 1-1/4"★ | 52 | 7/8" | 4-1/4" | 2-1/2" | 3/4" | 3,600 | 2 | 08249 | – |

★ 5/16" x 5/32" Double Keyway ◆ 1/2" x 1/4" Double Keyway
*Available in non-sparking bronze wire, see page 57 for details.
■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.

**Vortec Pro® Standard Twist Wheels - Provide an aggressive brushing action for general-purpose surface cleaning applications.**

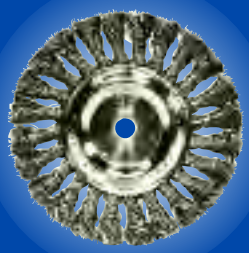
| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 3" | .014" Fine<br>.014" Fine | Carbon<br>Stainless | 1/2"-3/8" | Wide | 25,000 | –<br>– | 36290<br>36291 |
| 4" | .014" Fine<br>.014" Fine<br>.020" Coarse | Carbon<br>Stainless<br>Carbon | 1/2"-3/8" | Wide | 20,000 | 36026<br>–<br>– | 36226<br>36293<br>36294 |
| 6" | .014" Fine<br>.023" Coarse | Carbon | 5/8"-1/2" | Wide | 9,000 | 36027<br>– | 36227<br>36278 |
| 8" | .014" Fine<br>.023" Coarse | Carbon | 5/8" | Wide | 6,000 | 36028<br>– | 36228<br>36279 |



Removing rubber coating from a hydraulic hose.



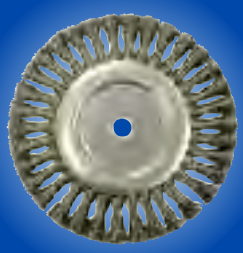
08014



08085



08189

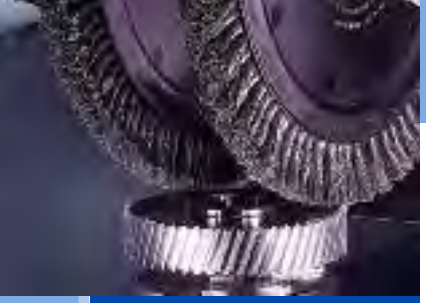


36228

NOTE

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 20.

# Knot Wire Wheels with Arbor Hole



Automotive gear deburring using heavy-duty knot wheel brushes.



08339



09020



09480



94000

## Standard Twist Wheels - High Density & Extra High Density - Engineered for maximum performance in production applications; for use on automated equipment such as dedicated gear deburring machines.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|
| **80 Knots** | | | | | | | | |
| 14" | .0118 | 1-1/4"★ | 3/4" | 2-1/2" | 5/8" | 5,000 | 2 | 08309 |
| | .0118 | 2"◆ | | | | | | 08300 |
| | .014 | 1-1/4"★ | | | | | | 08319 |
| | .014 | 2"◆ | | | | | | 08310 |
| | .020 | 1-1/4"★ | | | | | | 08339 |
| | .020 | 2"◆ | | | | | | 08330 |
| 15" | .0118 | 1-1/4"★ | 3/4" | 3" | 5/8" | 5,000 | 2 | 09969 |
| | .0118 | 2"◆ | | | | | | 09960 |
| | .014 | 1-1/4"★ | | | | | | 09989 |
| | .014 | 2"◆ | | | | | | 09980 |
| | .020 | 1-1/4"★ | | | | | | 09999 |
| | .020 | 2"◆ | | | | | | 09990 |
| **90 Knots** | | | | | | | | |
| 14" | .014 | 2"◆ | 3/4" | 1-1/2" | 5/8" | 5,000 | 2 | 09020* |
| | .014 | 1-1/4"★ | | | | | | 09029* |
| | .016 | 2"◆ | | | | | | 09790 |
| | .016 | 1-1/4"★ | | | | | | 09799 |
| | .020 | 2"◆ | | | | | | 09800 |
| | .020 | 1-1/4"★ | | | | | | 09809 |
| | .020 | 2"◆ | | | | | | 09040* |
| | .020 | 1-1/4"★ | | | | | | 09049* |
| 15" | .020 | 2"◆ | 3/4" | 2" | 5/8" | 5,000 | 2 | 09840 |
| | .020 | 2"◆ | | | | | | 09080* |
| | .020 | 1-1/4"★ | | | | | | 09089* |

★ 5/16" x 5/32" Double Keyway
◆ 1/2" x 1/4" Double Keyway
* Economy

## Standard Twist Wheels - Two Section - Provide heavy-duty brushing action with some flexibility; feature a double row of knotted wire for a wider brush face.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|---|
| 3" | .0118 | 1/2"-3/8" | 40 | 3/4" | 5/8" | 3/4" | 22,000 | 5 | 09104 |
| 4" | .0118 | 1/2"-3/8" | 48 | 3/4" | 7/8" | 3/4" | 20,000 | 5 | 09134 |
| 6" | .0118 | 2" | 60 | 7/8" | 1-3/8" | 7/8" | 8,000 | 5 | 09160 |
| | .016 | | | | | | | | 09180 |
| 8" | .0118 | 2" | 76 | 1" | 1-5/8" | 1" | 6,000 | 1 | 09410 |
| | .016 | | | | | | | | 09430 |
| | .023 | | | | | | | | 09440 |
| 10" | .0118 | 2" | 104 | 1-1/4" | 1-3/4" | 1-1/4" | 4,500 | 1 | 09460 |
| | .016 | | | | | | | | 09480 |
| | .023 | | | | | | | | 09490 |
| 12" | .0118 | 2" | 104 | 1-1/4" | 2-3/4" | 1-1/4" | 3,600 | 1 | 09510 |
| | .016 | | | | | | | | 09530 |
| | .023 | | | | | | | | 09540 |

See Metal Adapters on page 31 for brushes with 2" arbor holes.

## Standard Twist Wheels - Four Section - Featuring four rows of knotted wire; for use in automated cleaning processes such as removing light mill scale from metal rod and wire.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 12" | .0118 | 2" | 208 | 2" | 2-3/4" | 1-3/4" | 3,600 | 4 | 94098 |
| | .014 | | | | | | | | 94000 |

See Metal Adapters on page 31 for brushes with 2" arbor holes.

# Knot Wire Wheels with Arbor Hole

**Cable Twist Wheels - Provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and coating removal applications on relatively smooth surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 1/2"-3/8" | 24 | 1/4" | 7/8" | 1/2" | 7/16" | 20,000 | 10 | 08534 | – |
| 6" | .023 | 5/8"-1/2" | 24 | 3/8" | 1-3/8" | 1-1/4" | 9/16" | 9,000 | 10 | 08565 | 08695* |
| 8" | .023 | 5/8" | 38 | 1/2" | 1-5/8" | 2" | 1/2" | 6,000 | 2 | 08615 | – |
| 10" | .023 | 3/4"<br>1-1/4"★ | 52 | 1/2" | 1-3/4" | 2-1/2" | 3/4" | 4,500 | 2 | 08878<br>08879 | –<br>– |
| 12" | .023 | 1-1/4"★ | 52 | 7/16" | 2-3/4" | 3" | 3/4" | 3,600 | 2 | 09379 | – |

If a different arbor hole is required (than listed) refer to the Arbor Hole Table on page 20.
★ 5/16" x 5/32" Double Keyway *Standard Pack 2

**Joint & Crack Cleaning Wheels - Featuring heavy-duty construction and an extra long trim length for cleaning expansion joints and cracks in concrete and asphalt; for use on walk-behind machines.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 10" | .035 | 1" with two drive holes* | 38 | 3/8" | 2-5/8" | 1/2" | 5,000 | 2 | 94199 |
| 12" | .035 | 1" with two drive holes* | 38 | 3/8" | 3-5/8" | 1/2" | 5,000 | 2 | 94224 |
| 12" | .035 | 1" with two drive holes* | 52 | 3/8" | 2-3/4" | 3/4" | 5,000 | 2 | 94026 |

* Drive holes are 3/8" diameter with 1/4" x 1/8" double keyway.

**Adapter - For mounting Joint & Crack Cleaning Wheels onto a 20mm arbor.**

| For Brush Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 20mm | 10 | 04455 |

**Cable Twist Wheel - Four Section - Featuring four rows of tightly knotted wire; for use in demanding automated applications such as cleaning the OD of drill pipe and other oilfield tubular goods.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|---|
| 10" | .023 | 2" | 208 | 1-3/4" | 1-3/4" | 2" | 1-7/8" | 4,500 | 1 | 94008 |

**DID YOU KNOW?**

In addition to the products featured in this catalog, Weiler can custom-design brushes to meet your specific needs.



Cleaning a crack on an airport runway prior to filling.



08534



94224



04455



94008

# Knot Wire Wheels with Nut



Prepping a machine guard for on-site welding and repair.

**Knot Wire Wheels with Nut -** Knot wire wheels with a threaded nut are intended for use primarily on small and large right angle grinders. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and bronze wire for use in a wide variety of applications.

## Applications

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting

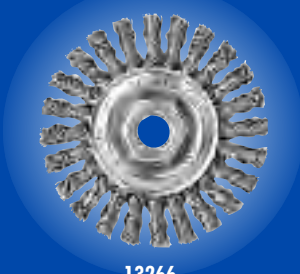


13106

**Standard Twist Wheels - Provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .014 | M10 x 1.25 | 20 | 3/8" | 5/8" | – | 7/16" | 25,000 | 5 | 13201 | 13208 |
| 4" | .014 | M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>1/2"-13 UNC<br>5/8"-11 UNC | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 5 | 13100<br>13101<br>13102<br>13103<br>13105<br>13106 ■ | 13107<br>13108<br>13109<br>13110<br>–<br>13113 ■ |
| 4" | .020 | M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>1/2"-13 UNC<br>5/8"-11 UNC | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 5 | 13114<br>13115<br>13116<br>13117<br>13119<br>13120* | –<br>–<br>–<br>–<br>–<br>– |
| 6" | .016<br>.023 | 5/8"-11 UNC | 24 | 1/2" | 1-3/8" | – | 9/16" | 9,000 | 2<br>5 | –<br>08106 | 08346<br>– |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.
* Available in non-sparking bronze wire, see page 57 for details.



13266

**Vortec Pro® Standard Twist Wheels - Provide an aggressive brushing action for general purpose deburring, cleaning, and surface preparation applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .014" Coarse | Carbon<br>Stainless<br>Carbon<br>Carbon<br>Carbon | 5/8"-11<br>5/8"-11<br>M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0 | Wide | 20,000 | 36012<br>36013<br>36015<br>36016<br>36017 | 36212<br>36213<br>36215<br>36216<br>36217 |
| 6" | .025" Extra Coarse | Carbon | 5/8"-11 | Wide | 11,000 | 36024 | 36224 |

**Cable Twist Wheels - Provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface preparation applications on relatively smooth surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | M10 x 1.25<br>M10 x 1.50<br>5/8"-11 UNC | 24 | 1/4" | 7/8" | 1/2" | 7/16" | 20,000 | 5 | 13261<br>–<br>13266 ■ | –<br>13272<br>13276 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.



36055

**Vortec Pro® Cable Twist Wheels - Provide the most aggressive brushing action for general purpose cleaning and surface preparation applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .020" Coarse | Carbon | 5/8"-11<br>M10 x 1.50<br>M10 x 1.25 | Medium | 20,000 | 36055<br>36057<br>36058 | 36255<br>36257<br>36258 |

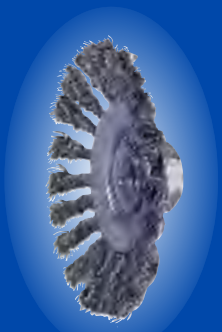
# Knot Wire Wheels with Nut or Stem

**Standard Twist Bevel Brushes - Saucer-shaped radial wheels which provide a heavy-duty brushing action with some flexibility; ideal for cleaning fillet welds and into corners.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 4" | .014 | M10 x 1.25<br>M10 x 1.50<br>5/8"-11 UNC | 20 | 3/8" | 3/4" | 12,500 | 1 | 13401<br>13402<br>13406 | –<br>13412<br>13416 |
| 4" | .020 | M14 x 2.0<br>5/8"-11 UNC | 20 | 3/8" | 3/4" | 12,500 | 1 | 13423<br>13426 | –<br>13436 |
| 4-1/2" | .014 | 5/8"-11 UNC | 20 | 3/8" | 1" | 12,500 | 1 | 13456 | 13466 |
| 4-1/2" | .020 | 5/8"-11 UNC | 20 | 3/8" | 1" | 12,500 | 1 | 13476 | 13486 |



Cleaning a corner weld with a bevel brush.



13456

**Knot Wire Wheels with Stem -** Knot wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on high-speed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's individual knot hole construction, these radial wheels are available in heat-treated steel and Type 302 stainless steel wire.

## Applications

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting

**Standard Twist Wheels - Permanently mounted on a 1/4" stem to provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.**

| Dia. | Wire Size | No. of Knots | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Steel | Stainless |
| 3-1/4" | .0118<br>.014<br>.020 | 20 | 3/8" | 5/8" | 25,000 | 5 | 17680<br>17681<br>17682 | –<br>17684<br>– |
| 4" | .0118<br>.014<br>.020 | 24 | 1/2" | 7/8" | 20,000 | 5 | 17686<br>17687<br>17689 | –<br>17691<br>– |



17681

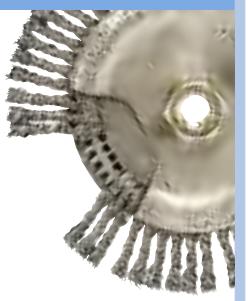
**DID YOU KNOW?**

In a year, we use 240,000 miles of our most popular wire sizes. The circumference of the Earth is 24,901 miles, so you can circle the Earth 9.6 times. Or, you can go to the moon but not make it back. The distance to the moon is 238,857 miles.

# Weld Cleaning Brushes



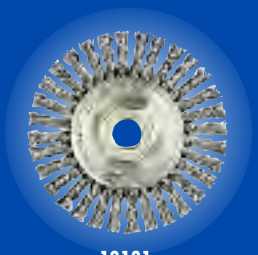
Removing weld slag before the next weld pass.



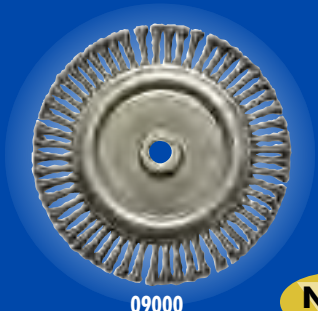
**Made in the U.S.A.,** the performance-engineered construction of Weiler's stringer bead wheels makes them the most effective weld cleaning tools for the most demanding users.

Identifiable by their gold nuts, our premium weld cleaning brushes are designed and manufactured to the most stringent quality standards in the industry. Weiler stringer bead wheels utilize the highest quality wire available and feature a twist that puts all of the sharp tips at the very end of the knots, making them the fastest, most aggressive weld cleaning tools on the market.

For example, the construction of Weiler's original Roughneck® brush virtually eliminates knot movement resulting in the most effective cleaning action, smoothest operation, and longest wheel life. Offered in a variety of widths for efficient use in inter-pass weld cleaning operations, our entire line of cleaning brushes excel at removing slag, spatter, and oxidation without damaging the filler material. They are engineered to maximize your efficiency and minimize your costs.

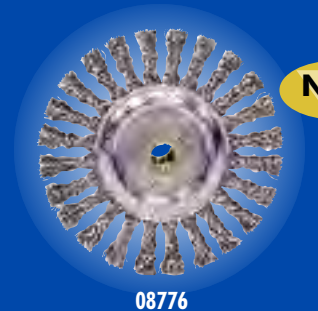


13131



09000

New!



08776

New!



35800

## Roughneck® Stringer Bead Wheels - The standard for high-performance weld cleaning brushes. Narrow face brushes are suitable for cleaning root and hot passes and reaching into corners; wider face wheels can be used for cleaning filler and cap passes as well as for other surface prep and cleaning applications.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | | |
| 4" | .020 | 1/2"-3/8"<br>M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>1/2"-13 UNC<br>5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 13124<br>13125 ■<br>13126<br>13127<br>13128<br>13130<br>13131 ■ | 08954*<br>13132<br>13133<br>13134<br>13135<br>13137<br>13138 ■ |
| 4-1/2" | .020 | 5/8"-11 UNC<br>M14 x 2.0<br>7/8" | 38 | 3/16" | 13/16" | 3/8" | 12,500 | 5 | 13232<br>13233<br>13234 | 13238<br>13239<br>13249 |
| 5" | .020<br>.020 | 5/8"-11 UNC<br>7/8" | 38<br>38 | 3/16"<br>3/16" | 7/8" | 3/8" | 12,500 | 5 | 08756<br>08750 | 08806<br>– |
| 6" | .020<br>.020<br>.020 | 5/8"-11 UNC<br>5/8"-11 UNC<br>5/8"-11 UNC | 48<br>38<br>56 | 3/16"<br>3/16"<br>3/16" | 1-1/8"<br>1-3/8"<br>1-1/8" | 3/8"<br>3/8"<br>7/16" | 12,500 | 10 | 08766†<br>–<br>09400 ■ | –<br>08786†•<br>09500 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56<br>76 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 09000 ■<br>09100 | 09200<br>– |
| **Filler Pass Brushes** | | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 09856 | 09866 |
| 6" | .023<br>.023<br>.023<br>.023 | 5/8"-1/2"<br>5/8"-11 UNC<br>5/8"-11 UNC<br>5/8"-11 UNC | 24<br>24<br>30<br>30 | 1/2"<br>1/2"<br>1/2"<br>5/16" | 1-3/8"<br>1-3/8"<br>1-1/4"<br>1-3/8" | 9/16"<br>9/16"<br>5/8"<br>1/2" | 12,500<br>12,500<br>12,500<br>12,500 | 10<br>10<br>10<br>10 | 08775<br>08776 ■<br>08916<br>09386 | –<br>08796•<br>08926•<br>09396• |

† Light Duty • Standard Pack 5 * Standard Pack 10

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.

## Polyflex™ Encapsulated Stringer Bead Wheels - Black Elastomer* - Feature a heat-stabilized encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life; suitable for cleaning hot welds.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 35800 |
| 6" | .014 | 5/8"-11 UNC | - | 3/16" | 1-7/16" | 3/8" | 9,000 | 5 | 35206 ▲ |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 35600 |
| 7" | .014 | 5/8"-11 UNC | - | 3/16" | 1-15/16" | 3/8" | 9,000 | 5 | 35216 ▲ |

* See Elastomer Color Code Chart on page 18 for more information.

▲ Crimped wire

# Weld Cleaning Brushes

**Featuring a new patent-pending design,** the Dually line of cleaning brushes is the choice for the most demanding inter-pass welding applications such as pipeline construction, boiler and pressure vessel fabrication, and shipbuilding.

Welders' assistants on the pipeline were among the first to realize the value in periodically switching the mounting position of a wheel in order to maintain cleaning speed and effectiveness. The Dually utilizes a nut design that features a hex on each side of the wheel which is high enough to insure adequate tool clearance in either mounting position. Now all users can realize the benefits of the "Flip" without compromising safety by removing the guard from their grinder.




CHECK OUT THE VIDEO

**New!** **Dually® Stringer Bead Wheels - Feature a dual-hex nut design* that simplifies periodic flipping of the wheel for maximum cleaning action, long life, and safer use.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | | |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 12,500 | 5 | 79801 | 79811 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 79802 | 79812 |
| 6" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 5 | 79805 | 79815 |
| 7" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 5 | 79800 | 79810 |
| **Filler Pass Brushes** | | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 79803 | 79813 |
| 6" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 5 | 79804 | 79814 |

**New!** **HFR™ Stringer Bead Wheels - Feature a patent-pending film coating to minimize wire loss when used within recommended operating guidelines for hot-pass weld cleaning in FME areas of nuclear power plants. Weiler HFR Brushes have been engineered and tested to meet the requirements for a High Filament Retention power brush as defined by the Electrical Power Research Institute.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 13,500 | 1 | 13381 | 13388 |

**Vortec Pro® Stringer Bead Wheels - Manufactured using similar product construction and to the same exacting standards as other Weiler weld cleaning brushes; they have been engineered for cost-effective use in less demanding applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 20,000 | 36018 | 36218 |
| | | Carbon | 5/8"-11 | | | – | 36308* |
| | | Stainless | 5/8"-11 | | | 36019 | 36219 |
| | | Carbon | M10 x 1.25 | | | 36021 | 36221 |
| | | Carbon | M10 x 1.50 | | | 36022 | 36222 |
| | | Carbon | M14 x 2.0 | | | 36023 | 36223 |
| 5" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 12,500 | – | 36295 |
| | | Stainless | | | | – | 36296 |
| 6" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 12,500 | 36025 | 36225 |
| | | Carbon | | | | – | 36307* |
| 6-7/8" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 9,000 | – | 36297 |
| | | Stainless | | | | – | 36298 |

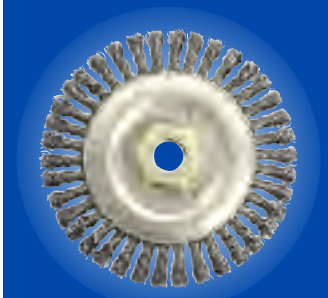
*Light Duty

**DID YOU KNOW?** Weiler's Cable Twist Wheels were used by NASA on its booster rockets.

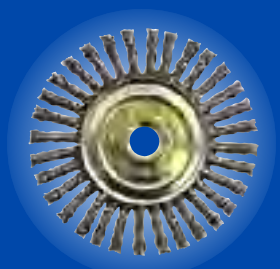


Removing slag and spatter before the cap pass.

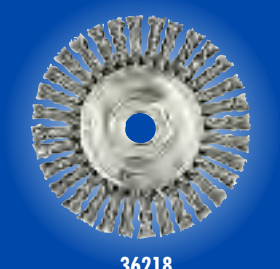




79802



13381



36218

# Crimped Wire Wheels with Arbor Hole



Removing heat discoloration from a stainless steel canister.

**Crimped Wire Wheels with Arbor Hole -** Are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and brass wire for use in a wide variety of applications.

## Applications

- Removing rust and light corrosion
- Paint removal and surface cleaning
- Decorative finishing
- Removing heat discoloration
- Light deburring

**Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.**



00184



01238

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .006 | 1/2"-3/8" | 7/16" | 1/2" | 3/4" | 7/16" | 12,500 | 2 | 00204 | 00244 |
| | .008 | | | | | | | | 00214 | – |
| | .0118 | | | | | | | | 00234 | 00264 |
| | .014 | | | | | | | | 00274 | – |
| 4" | .006 | 1/2"-3/8" | 1/2" | 7/8" | 3/4" | 7/16" | 12,500 | 2 | 00104 | 00154 |
| | .006 | 5/8"-1/2" | | | | | | | 00105 | – |
| | .008 | 1/2"-3/8" | | | | | | | 00114 | – |
| | .0095 | | | | | | | | 00124 | – |
| | .0118 | | | | | | | | 00134 | 00184 |
| | .0118 | 5/8"-1/2" | | | | | | | 00135 | – |
| | .014 | 1/2"-3/8" | | | | | | | 00144 | – |
| 6" | .006 | 5/8"-1/2" | 3/4" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 10 | 01035 ▲ | 01675* |
| | .008 | | | | | | | | 01045 | – |
| | .008 | 1-1/4"★ | | | | | | | 01049 | – |
| | .0104 | 5/8"-1/2" | | | | | | | 01055 | 01695* |
| | .0118 | | | | | | | | 01065 ▲ | 01705* |
| | .014 | | | | | | | | 01075 ■ | – |
| 6" | .0118 | 3/4" | 3/4" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 10 | 01068 | – |
| 8" | .006 | 5/8" | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 2 | 01135 | 01775 |
| | .008 | | | | | | | | 01145 | – |
| | .0104 | | | | | | | | 01155 | 01795 |
| | .0118 | | | | | | | | 01165 | 01805 |
| | .014 | | | | | | | | 01175 ■ | – |
| 8" | .006 | 3/4" | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 2 | 01138 | – |
| | .008 | | | | | | | | 01148 | – |
| | .0104 | | | | | | | | 01158 | – |
| | .0118 | | | | | | | | 01168 | – |
| | .014 | | | | | | | | 01178 | – |
| 8" | .0118 | 1-1/4"★ | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 2 | – | 01809 |
| | .014 | | | | | | | | 01179 | |
| 10" | .006 | 3/4" | 3/4" | 2-1/2" | 2" | 5/8" | 4,000 | 2 | 01228 | – |
| | .0104 | | | | | | | | 01238 | – |
| | .0118 | | | | | | | | 01248 | – |
| | .014 | | | | | | | | 01258 | 01898 |
| | .014 | 1" • | | | | | | | 01250-12 | – |
| 10" | .014 | 1-1/4"★ | 3/4" | 2-1/2" | 2" | 5/8" | 4,000 | 2 | 01259 | – |
| 12" | .006 | 1-1/4"★ | 3/4" | 2-15/16" | 2-1/2" | 1/2" | 3,000 | 2 | 01299 | 01939 |
| | .0104 | | | | | | | | 01309 | 01949 |
| | .0118 | | | | | | | | 01319 | – |
| | .014 | | | | | | | | 01329 | – |
| 12" | .014 | 2"◆ | 3/4" | 2-15/16" | 2-1/2" | 1/2" | 3,000 | 2 | 01320-14 | – |
| 15" | .0118 | 1-1/4"★ | 3/4" | 4-7/16" | 2-1/2" | 1/2" | 3,000 | 2 | 01339 | – |
| | .014 | | | | | | | | 01349 | – |

◆ 1/2" x 1/4" Double Keyway ★5/16" x 5/32" Double Keyway • 1/4" x 1/8" Double Keyway

▲ Available in non-sparking bronze wire, see page 57 for details. * Standard Pack 2

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

NOTE

**If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 20.**

DID YOU KNOW?

Crimped wire narrow face wheels can be made with nylon or abrasive nylon fill, up to 20" in diameter.

# Crimped Wire Wheels with Arbor Hole

**Vortec Pro® Crimped Wire Wheels -** Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications.

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .014" Coarse | Carbon | 1/2"-3/8" | Narrow | 6,000 | 36062 | 36262 |
| 6" | .008" Fine | Carbon | 5/8"-1/2" | Narrow | 6,000 | 36002 | 36202 |
| | .014" Coarse | Carbon | | Narrow | | 36000 | 36200 |
| | .014" Coarse | Stainless | | Narrow | | 36001 | 36201 |
| 8" | .014" Coarse | Carbon | 5/8" | Narrow | 6,000 | 36005 | 36205 |

**Polyflex™ Encapsulated Crimped Wire Wheels -** Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .0095 | 1/2"-3/8" | 3/8" | 7/8" | 3/4" | 7/16" | 6,000 | 2 | 35084 |
| 6" | .0104 | 5/8"-1/2" | 1/2" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 2 | 35105 |
| | .014 | | | | | | | | 35117 |
| 8" | .014 | 5/8" | 1/2" | 2-1/16" | 1-1/2" | 1/2" | 6,000 | 2 | 35135 |
| Orange Elastomer* - Heavy-Duty | | | | | | | | | |
| 6" | .0104 | 5/8"-1/2" | 1/2" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 2 | 35520 |

* See Elastomer Color Code chart on page 18 for more information.

**Bench Grinder Wheels -** Feature a shorter trim length, narrower face width, and the same durable construction as other Weiler crimped wire wheels; designed specifically for use on small bench grinders for reduced flaring and long life in a broad range of applications.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 6" | .006 | 5/8"-1/2" | 1/2" | 1-1/16" | 1-1/4" | 7/16" | 6,000 | 10 | 01085 |
| | .008 | | | | | | | | 01095 |
| | .0118 | | | | | | | | 01115 |
| | .014 | | | | | | | | 01125 |

**Crimped Wire Wheels - High Density -** Feature an increased fill density for greater brushing action, more consistent performance, and longer life in the most demanding applications requiring the flexibility of a crimped wire wheel.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-1/4" | .0118 | 5/8"-1/2" | 3/4" | 5/8" | 3/4" | 9/16" | 6,000 | 1 | 01501 | – |
| | .014 | | | | | | | | 01502 | |
| 6" | .008 | 5/8"-1/2" | 3/4" | 1-1/8" | 1" | 9/16" | 6,000 | 1 | 01503 | – |
| | .0118 | | | | | | | | 01504 | 01508 |
| | .014 | | | | | | | | 01505 | 01509 |
| | .020 | | | | | | | | 01506 | – |
| 7" | .014 | 5/8" | 7/8" | 1-5/8" | 1" | 9/16" | 6,000 | 1 | 01511 | – |
| 8" | .006 | 5/8" | 7/8" | 1-1/2" | 1-1/4" | 11/16" | 4,500 | 1 | 01512 | – |
| | .0104 | | | | | | | | 01513 | – |
| | .0118 | | | | | | | | 01514 | – |
| | .014 | | | | | | | | 01515 | – |
| 10" | .0118 | 3/4" | 1" | 2-1/2" | 1-1/4" | 11/16" | 4,500 | 2 | 01517 | – |
| | .014 | | | | | | | | 01518 | – |
| 12" | .014 | 1-1/4"★ | 1-1/8" | 3-1/8" | 2" | 3/4" | 3,000 | 1 | 01521 | – |

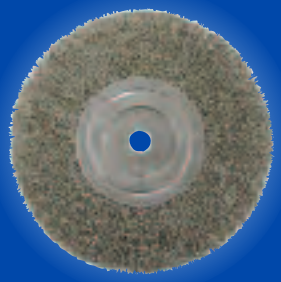
★5/16" x 5/32" Double Keyway

NOTE

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 20.



Removing heavy break-off burrs from saw-cut tube.



36205



35105



01115



01515

# Crimped Wire Wheels with Arbor Hole



Cleaning an exhaust manifold for a small gasoline engine.

## Crimped Wire Wheels - Medium Face - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 4-1/2" | .0118 | 2" | 15/16" | 3/4" | 7/8" | 6,000 | 1 | 06020 | – |
| 6" | .006 | 2" | 1" | 1-1/8" | 15/16" | 6,000 | 1 | 06040 | – |
| | .008 | | | | | | | 06050 | – |
| | .0104 | | | | | | | 06060 | 06440 |
| | .0118 | | | | | | | 06070 | 06450 |
| | .014 | | | | | | | 06080 | – |
| 8" | .006 | 2" | 1" | 1-3/8" | 1" | 4,500 | 1 | 06090 | – |
| | .0104 | | | | | | | 06100 | – |
| | .0118 | | | | | | | 06110 | 06490 |
| | .014 | | | | | | | 06120 | – |
| | .020 | | | | | | | 06620 | – |
| 10" | .0118 | 2"◆ | 1-1/8" | 2" | 1" | 3,600 | 1 | 06150 | 06530 |
| | .014 | | | | | | | 06160 | – |
| | .020 | | | | | | | 06170 | – |
| 12" | .0118 | 2"◆ | 1-1/4" | 3" | 1" | 3,600 | 1 | 06180 | – |
| | .014 | | | | | | | 06190 | – |
| | .020 | | | | | | | 06200 | – |

◆ 1/2" x 1/4" Double Keyway

For arbor hole reducing adapters, see Metal Adapter Table below.



06080



06150

## Vortec Pro® Crimped Wire Wheels - Medium Face - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications; feature a wider face width to cover more area.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|---|
| 6" | .014 Coarse | 5/8"-1/2" | 5/8" | 1-1/16" | 1/2" | 6,000 | – | 02325 |
| | | | 3/4" | 1-7/16" | 7/16" | | 36003 | 36203 |
| 7" | .014 Coarse | 5/8" | 3/4" | 1-9/16" | 1/2" | 6,000 | – | 02335 |



02325

## Metal Adapters - For Medium & Wide Face Brushes. Used in pairs & priced per pair.

| For Brush Arbor Hole Size | Adapted Arbor Hole Size | Item Number |
|---|---|---|
| 2" | 1/2" | 03809 |
| | 5/8" | 03810 |
| | 3/4" | 03811 |
| | 7/8" | 03824 |
| | 1" | 03812 |
| | 1-1/4" | 03813 |
| | 1-1/2" | 03814 |



03809

# Crimped Wire Wheels with Arbor Hole

**Crimped Wire Wheels - Wide Face - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|
| 4-1/2" | .006 | 2" | 1-1/4" | 3/4" | 7/8" | 6,000 | 1 | 03000 | – |
| | .0118 | | | | | | | 03010 | – |
| | .014 | | | | | | | 03020 | – |
| 6" | .006 | 2" | 1-1/4" | 1-1/8" | 1" | 6,000 | 1 | 03030 | 03480 |
| | .008 | | | | | | | 03040 | – |
| | .0104 | | | | | | | 03050 | – |
| | .0118 | | | | | | | 03060 | 03510 |
| | .014 | | | | | | | 03070 | 03520 |
| 7" | .0118 | 2" | 1-1/4" | 1-5/8" | 1" | 6,000 | 1 | 03090 | – |
| | .014 | | | | | | | 03100 | – |
| 8" | .006 | 2" | 1-1/2" | 1-3/8" | 1-3/8" | 4,500 | 1 | 03110 | – |
| | .0095 | | | | | | | 03130 | – |
| | .0118 | | | | | | | 03140 | 03590 |
| | .014 | | | | | | | 03150 | – |
| | .020 | | | | | | | 03160 | – |
| 10" | .0104 | 2" | 2" | 1-7/8" | 1-5/8" | 4,000 | 1 | 03180 | – |
| | .0118 | | | | | | | 03190 | – |
| | .014 | | | | | | | 03200 | – |
| | .020 | | | | | | | 03210 | – |
| 12" | .0118 | 2" | 2" | 2-7/8" | 1-9/16" | 3,000 | 1 | 03220 | – |
| | .014 | | | | | | | 03230 | 03680 |
| | .020 | | | | 1-11/16" | | | 03240 | – |

For arbor hole reducing adapters, see Metal Adapter Table on page 31.

**Vortec Pro® Crimped Wire Wheels - Wide Face - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications; feature a wider face width to cover more area.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|---|
| 6" | .014" Coarse | 5/8"-1/2" | 7/8" | 1-1/8" | 7/8" | 6,000 | – | 06645 |
| | | | | | | | 36004 | 36204 |
| 7" | .014" Coarse | 5/8" | 7/8" | 1-5/8" | 7/8" | 6,000 | – | 06655 |
| 8" | .014" Coarse | 5/8" | 1" | 1-3/8" | 1" | 4,000 | 36006 | 36206 |
| 10" | .014" Coarse | 3/4" | 1-1/8" | 2" | 1" | 3,600 | 36065 | 36265 |

**Polyflex™ Encapsulated Crimped Wire Wheel - Wide Face - Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life. Wider face width covers more area.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 6" | .0118 | 2" | 1" | 1-1/8" | 1" | 6,000 | 1 | 35160 |

* See Elastomer Color Code Chart on page 18 for more information.

For arbor hole reducing adapters, see Metal Adapter Table on page 31.

**Crimped Wire Wheels - Extra High Density - Engineered for maximum performance in production processes requiring the flexibility of a crimped wire wheel; for use on automated equipment for applications such as gear deburring, flash removal, and rubber buffing.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 12" | .006 | 2"◆ | 1-1/8" | 1-5/8" | 3/4" | 3,000 | 1 | 01531 |
| | .0118 | | | | | | | 01532 |

◆ 1/2" x 1/4" Double Keyway



Removing carbon build-up from an automotive valve.



03110



06655



35160



01533

# Crimped Wire Wheels with Arbor Hole

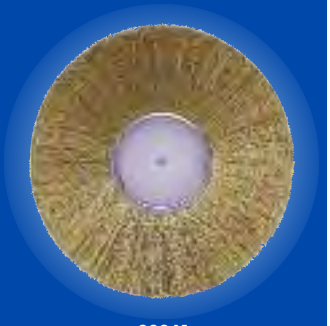


Producing an antique finish on a brass door knob rose.

**Plater's Wire Wheels - Feature a longer trim length and very small diameter fill material for producing fine satin and antique finishes on non-ferrous and precious metals.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Number of Rows | Max. RPM | Std. Pack | Item Number Brass* |
|---|---|---|---|---|---|---|---|---|
| 3" | .003 | 1/4" | 1/2" | 1" | 2 | 6,000 | 12 | 22021 |
| 4" | .004 | 1/4" | 1" | 1-1/4" | 4 | 4,000 | 5 | 22061 |
| 6" | .005 | 1/4" | 1" | 1-7/8" | 4 | 3,600 | 1 | 22241 |

* Also available in carbon steel, stainless steel and nickel silver wire.



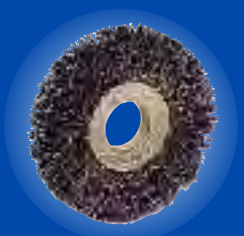
22241

## Small Diameter Crimped Wire Wheels -

Identifiable by their copper center, Weiler's small diameter crimped wire wheels feature a plain arbor hole for use on a variety of portable tools and stationary machines. Featuring Weiler's solid ring construction for high-speed use, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and brass wire.

### Applications

- Cleaning threads
- Removing rust and light corrosion
- Cleaning and finishing ID's and recessed areas
- Wire stripping
- Light deburring
- Cleaning boiler tubes and internal passages
- Removing carbon build-up and deposits



15433

**Small Diameter Wheels - Provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|
| 1" | .003 | 1/4" | 3/16" | 1/4" | 20,000 | 10 | – | 16461 |
| | .005 | | | | | | – | 16471 |
| | .006 | | | | | | 15071 | – |
| 1-1/4" | .003 | 1/4" | 1/4" | 3/8" | 20,000 | 10 | 15101 | – |
| | .006 | | | | | | 15111 | 16511 |
| | .008 | | | | | | – | 16521 |
| | .008 | 3/8" | | 5/16" | | | 15732 | – |
| 1-3/8" | .006 | 1/4" | 1/4" | 3/8" | 20,000 | 10 | 15131 | – |
| | .008 | 1/4" | | | | | 15141 | – |
| | .008 | 3/8" | | | | | 15272 | – |
| | .0104 | 1/4" | | | | | 15151 | – |
| 1-1/2" | .006 | 3/8" | 1/4" | 7/16" | 20,000 | 10 | 15302 ▲ | 16702 |
| | .008 | 3/8" | | 7/16" | | | 15312 | 16712 |
| | .008 | 1/2" | | 1/4" | | | 15753 | – |
| | .0104 | 3/8" | | 7/16" | | | 15322 | – |
| | .0118 | 3/8" | | 7/16" | | | 15332 | – |
| | .014 | 3/8" | | 7/16" | | | 15762 | – |
| 2" | .003 | 1/4" | 3/8" | 3/4" | 20,000 | 10 | 99307 | – |
| | .003 | 1/2" | | 1/2" | | | 15863 | 15973 |
| | .005 | 1/2" | | | | | – | 16833 |
| | .006 | 1/2" | | | | | 15433 ▲ | – |
| | .008 | 1/2" | | | | | 15443 | 16843 |
| | .0104 | 1/2" | | | | | 15453 | 16853 |
| | .0118 | 1/2"-3/8" | | | | | 15463 ▲ | 16863 |
| | .0118 | 9/16" | | | | | 15770 | – |
| | .014 | 1/2"-3/8" | | | | | 15473 | 16873 |
| 2-1/2" | .0118 | 1/2"-3/8" | 1/2" | 3/4" | 20,000 | 10 | 15513 | 16913 |
| | .014 | | | | | | 15523 | – |
| 3" | .003 | 1/2" | 5/8" | 1" | 20,000 | 10 | 99551 | – |
| | .006 | 1/2"-3/8" | | 1" | | | 15533 | 16933 |
| | .006 | 5/8" | | 15/16" | | | 15637 | – |
| | .008 | 1/2"-3/8" | | 1" | | | 15543 | 16943 |
| | .008 | 5/8" | | 15/16" | | | 15647 | – |
| | .0104 | 1/2" | | 1" | | | 15553 | – |
| | .0118 | 1/2"-3/8" | | 1" | | | 15563 | 16963 |
| | .0118 | 5/8" | | 15/16" | | | 15667 | – |
| | .014 | 1/2"-3/8" | | 1" | | | 15573 ▲ | 16973 |
| | .014 | 5/8" | | 15/16" | | | 15677 | 17077 |
| 4" | .006 | 1/2" | 1/2" | 1-1/2" | 20,000 | 10 | 99553 | – |

▲ Available in non-sparking brass wire, see page 57 for details.



15563

# Crimped Wire Wheels with Arbor Hole

## Polyflex™ Encapsulated Small Diameter Wheels - Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|
| 1-1/4" | .008<br>.014 | 3/8" | 3/16" | 5/16" | 20,000 | 10 | 35293<br>35294 |
| 2" | .0104<br>.014 | 1/2" | 1/4" | 1/2" | 20,000 | 10 | 35240<br>35070 |
| 3" | .008<br>.0118<br>.014 | 1/2" | 1/4" | 1" | 20,000 | 10 | 35808<br>35250<br>35260 |

* See Elastomer Color Code chart on page 18 for more information.

## Wire Stripping Brushes

Used for removing insulation from electrical wire. These brushes are made to order according to the specifications needed for the specific application.

When ordering, please specify:

- Brush diameter
- Arbor hole size
- Brush face width
- Wire size

For application assistance, call our Application Engineering Hotline toll-free at: 888-299-APPS (2777)



**Tech Note**

- **The adapters and drive arbors listed on this page are for use with small diameter wheel brushes only; do not attempt to use them with cutting or grinding wheels, buffing wheels, or any type of abrasive wheel or disc.**
- **Do not adapt a wheel brush for use on a shaft diameter less than that specified by ANSI B165.1 (see page 20) or exceed the maximum wheel diameter specified for a drive arbor.**
- **Never mount a drive arbor onto a tool which operates above the maximum RPM rating of either the arbor or the brush (whichever may be lower) and be sure that the stem of the arbor is properly secured in the collet or chuck before use.**

## Drive Arbors - For mounting small diameter wheels into a collet or chuck.

| Arbor Dia. | Stem Dia. | Stem Length | Length of Shaft | For Brushes with Max. Dia. of | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| **Unthreaded Shaft** | | | | | | | |
| 1/4" | 1/4" | 1-1/8" | 3/16" | 2" | 20,000 | 5 | 07723 |
| 3/8" | 1/4" | 1-1/8" | 3/16" | 4" | 20,000 | 5 | 07722 |
| **Threaded Shaft** | | | | | | | |
| 1/2" | 1/4" | 3/4" | 3/4" | 3" | 25,000 | 5 | 07724 |
| 3/8" | 1/4" | 3/4" | 3/4" | 3" | 25,000 | 5 | 07727 |
| 5/8" | 1/4" | 3/4" | 3/4" | 3" | 25,000 | 5 | 07729 |
| 1/2" | 1/4" | 7/8" | 3/4" | 3" | 20,000 | 5 | 07721 |
| 1/4" | 1/4" | 1-1/16" | 1-1/8" | 2" | 20,000 | 5 | 07725 |
| 3/8" | 1/4" | 1" | 1-1/8" | 3" | 20,000 | 5 | 07726 |

## Plastic Adapters - For mounting small diameter wheels onto various arbor sizes.

| Fixed Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1/2" | 1/4" | 10 | 04400 |
| 1/2" | 3/8" | 10 | 04401 |
| 5/8" | 1/2" | 10 | 04402 |
| 3/8" | 1/4" | 10 | 04403 |



Removing casting flash from ductile-iron housing with an encapsulated brush.



35070

**DID YOU KNOW?**

Small diameter wheels can be manufactured with different diameters than what appears in this catalog.



# Crimped Wire Wheels with Nut or Stem



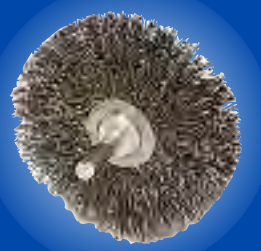
Removing flash from a sand-cast iron engine block.



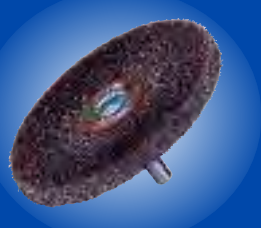
13085



13095



17616



35310

## Crimped Wire Wheels with Nut - 

Crimped wire wheels with a threaded nut are intended for use primarily on small angle grinders. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel and Type 302 stainless steel wire.

### Applications

- Removing rust and light corrosion
- Surface prep prior to welding
- Removing heat discoloration and welding residuals

**Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 4" | .006 | 5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | – | 00156 |
| 4" | .014 | M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 13076<br>13077<br>13078<br>13081 | –<br>–<br>–<br>13085 |
| 4" | .014 | 5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 35416* | – |

* Polyflex™ encapsulated - Burgundy elastomer. See Elastomer Color Code Chart on page 18 for more information.

**Vortec Pro® Crimped Wire Wheel Brushes - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .014" Coarse | Carbon | 5/8"-11 | Narrow | 14,000 | 36007 | 36207 |

**Crimped Wire Bevel Brushes - Saucer-shaped radial wheels which provide a flexible brushing action for cleaning fillet welds and into corners.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| | | | | | | | Steel |
| 3-3/8" | .0118 | M10 x 1.25<br>5/8"-11 UNC | 1/2" | 1/2" | 12,500 | 1 | 13091<br>13095 |

## Crimped Wire Wheels with Stem - 

Crimped wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on high-speed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's solid ring construction, these radial wheels are available in heat-treated steel, Type 302 stainless steel, and brass wire.

### Applications

- Cleaning threads
- Cleaning and finishing ID's and recessed areas
- Paint removal and surface cleaning
- Light deburring

**Conflex Brushes - Small diameter copper center wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.**

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 2" | .006<br>.0118 | 3/8" | 1/2" | 20,000 | 10 | 17609<br>17610 | –<br>17611 | –<br>– |
| 2-1/2" | .006<br>.014 | 3/8" | 3/4" | 20,000 | 10 | 17612<br>17614 | –<br>– | –<br>– |
| 3" | .008<br>.0118<br>.014 | 1/2" | 1" | 20,000 | 10 | 17615 ■<br>17616<br>17617 ■ | –<br>–<br>17618 | –<br>17641<br>– |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**Polyflex® Encapsulated Conflex Brushes - Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life. 1/4" Stem.**

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| | | | | | | Steel |
| 2" | .0118 | 1/4" | 1/2" | 20,000 | 10 | 35305 |
| 3" | .008<br>.0118 | 1/4" | 1" | 20,000 | 10 | 35310<br>35315 |

* See Elastomer Color Code Chart on page 18 for more information.

# Crimped Wire Wheels with Stem

**Conflex Brushes - Wide Face -** Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area. 1/4" Stem.

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|
| 1-1/4" | .006 | 1/2" | 3/8" | 20,000 | 10 | 17600 | – |
| | .008 | | | | | 17601 | – |
| 1-1/2" | .006 | 1/2" | 1/2" | 20,000 | 10 | 17602 | – |
| | .008 | | | | | 17603 | – |
| | .0118 | | | | | 17604 | – |
| 1-3/4" | .006 | 1/2" | 5/8" | 20,000 | 10 | 17605 | – |
| | .008 | | | | | – | 17608 |
| 2" | .0118 | 3/4" | 7/16" | 20,000 | 10 | 17619 | – |
| 2-1/2" | .014 | 3/4" | 11/16" | 20,000 | 10 | 17620 | – |
| 3" | .008 | 1" | 15/16" | 20,000 | 10 | 17621 | 17637 |
| | .0118 | | | | | 17622 | – |
| | .014 | | | | | 17623 | – |

**Crimped Wire Radial Wheels -** Feature side plates for a shorter trim length and more controlled brushing action in a stem-mounted crimped wire wheel. 1/4" Stem

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|
| 1-1/2" | .006 | 3/8" | 20,000 | 10 | 17950 | 17971 |
| | .008 | | | | 17951 | 17972 |
| | .0118 | | | | 17952 | 17973 |
| | .014 | | | | 17953 | – |
| 2" | .006 | 7/16" | 20,000 | 10 | 17954 | – |
| | .008 | | | | 17955 | 17974 |
| | .0118 | | | | 17956 | – |
| | .014 | | | | 17957 | 17975 |
| | .020 | | | | 17958 | – |
| 2-1/2" | .008 | 9/16" | 20,000 | 10 | 17959 | 17976 |
| | .0118 | | | | 17961 | – |
| | .014 | | | | 17962 | 17977 |
| | .020 | | | | 17963 | – |
| 3" | .008 | 13/16" | 20,000 | 10 | 17964 | 17978 |
| | .0118 | | | | 17965 | – |
| | .014 | | | | 17966 | 17979 |
| | .020 | | | | 17967 | – |
| 4" | .008 | 1-5/16" | 15,000 | 10 | 17968 | 17981 |
| | .014 | | | | 17969 | 17982 |

**Vortec Pro® Crimped Wire Radial Wheels -** Designed to be a flexible and economic small diameter brushing tool for a broad range of general purpose applications. 1/4" Stem.

| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item # | Boxed Qty. Item # |
|---|---|---|---|---|---|---|
| 1-1/2" | .0118" Coarse | Carbon | 3/8" | 20,000 | 36008 | 36208 |
| 2" | .014" Coarse | Carbon | 7/16" | 20,000 | 36009 | 36209 |
| 3" | .008" Fine | Carbon | 13/16" | 20,000 | 36059 | 36259 |
| | .014 Coarse | Carbon | | | 36011 | 36211 |

**Concave Brushes -** Saucer-shaped radial wheels permanently mounted on a 1/4" stem to provide flexible brushing action for addressing corners and hard-to-reach areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|
| 1-1/2" | .006 | 3/8" | 20,000 | 10 | 17901 | 17930 |
| | .008 | | | | 17902 | – |
| | .0118 | | | | 17903 | 17931 |
| 2" | .008 | 1/2" | 20,000 | 10 | 17906 | – |
| | .014 | | | | 17907 | 17933 |
| 2-1/2" | .006 | 5/8" | 20,000 | 10 | 17909 | – |
| | .014 | | | | 17912 | 17935 |
| 3" | .006 | 15/16" | 20,000 | 10 | 17914 | 17936 |
| | .008 | | | | 17915 | – |
| | .014 | | | | 17917 | 17937 |
| 4" | .008 | 1-1/4" | 20,000 | 10 | 17922 | – |
| | .014 | | | | 17923 | – |



Removing carbon build-up from an engine.



17603



17971



36211



17907

Crimped Wire Wheels with Stem

# Nylon and Tampico Wheels



Deburring a plastic part using a nylon brush.



17233



20490



17453



20180



03809

## Nylon Wheels -

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Synthetic filaments such as nylon are durable and provide a very flexible brushing action in applications requiring less aggression than a wire brush. The softer fill material allows them to be used on materials that a wire brush would scratch or gouge.

### Applications

- Wet or dry cleaning and scrubbing
- Removing burrs and die flash from plastic parts
- Sweeping loose chips and debris

**Nylon Wheels - Feature a chemical-resistant synthetic fill material with excellent bend recovery for use in applications requiring a soft, durable fill material.**



| Dia. | Fill Dia. | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 1-1/2" | .010 | 3/8" | 1/4" | 7/16" | 20,000 | 10 | 29025 |
| 2" | .010<br>.014 | 1/2" | 3/8" | 1/2" | 20,000 | 10 | 17223<br>17233 |
| 2-1/2" | .022 | 5/8" | 3/8" | 11/16" | 20,000 | 10 | 99346 |
| 3" | .010<br>.016 | 1/2" | 3/8" | 1" | 20,000 | 10 | 29070<br>17263 |
| 6" | .016 | 2" | 3/4" | 1-1/2" | 6,000 | 2 | 20490 |
| 8" | .020 | 2" | 3/4" | 2-1/2" | 5,000 | 2 | 20510 |

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 34.

## Tampico Wheels -

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Natural vegetable fibers such as Tampico hold abrasive compounds well and can be used for deburring, edge blending, and polishing applications.

### Applications

- Wet or dry cleaning and scrubbing
- Buffing and polishing non-ferrous and precious metals
- Removing burrs and blending edges with abrasive compounds

**Tampico Wheels - Feature a durable vegetable fiber fill material that is chemical and heat resistant and also holds abrasive compounds well.**



| Dia. | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2-1/2" | 1/2" | 1/2" | 3/4" | 20,000 | 10 | 17443 |
| 3" | 1/2" | 1/2" | 1" | 20,000 | 10 | 17453 |
| 6" | 2" | 5/8" | 1-1/2" | 6,000 | 10 | 20180 |
| 8" | 2" | 5/8" | 2-1/2" | 5,000 | 5 | 20190 |

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 34.

## Metal Adapters - For 6" & 8" Brushes. Used in pairs & priced per pair.

| For Brush Arbor Hole Size | Adapted Arbor Hole Size | Item Number |
|---|---|---|
| 2" | 1/2" | 03809 |
| | 5/8" | 03810 |
| | 3/4" | 03811 |
| | 7/8" | 03824 |
| | 1" | 03812 |
| | 1-1/4" | 03813 |
| | 1-1/2" | 03814 |

# Knot Wire Cup Brushes

**Wire Cup Brushes -** Wire cup brushes are intended primarily for use on portable power tools for addressing larger surface areas more efficiently than a wheel brush. Cup brushes featuring a threaded nut are designed for smooth, efficient operation on angle grinders to make quick work of large jobs. Utility cup brushes featuring a permanently-attached 1/4" stem are more suitable for smaller jobs and are recommended for use on high-speed air tools for the most effective brushing action and longest life.

Cup brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and they are manufactured with individual knot hole and solid ring construction for high performance and long life. Weiler's cup brushes are available in heat-treated steel, Type 302 stainless steel, and bronze or brass wire.

## Applications

- Removing paint and coatings
- Cleaning rust, scale, and corrosion
- Deburring
- Weld prep and cleaning
- Removal of slag from the edges of plasma-cut or flame-cut plates

**Knot Wire Cup Brushes - Single Row - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.**

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Bronze |
| 2-3/4" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13015 | – | – |
| | | M10 x 1.50 | | | | 13016 | – | – |
| | | M14 x 2.0 | | | | 13020 | – | – |
| | | 3/8"-24 UNF | | | | 13021 | – | – |
| | | 5/8"-11 UNC | | | | 13025 ■ | – | – |
| 2-3/4" | .020 | M10 x 1.25 | 1" | 14,000 | 1 | 13281 ■ | 13253 | – |
| | | M10 x 1.50 | | | | 13282 | 13254 | – |
| | | M14 x 2.0 | | | | 13283 | 13255 | – |
| | | 3/8"-24 UNF | | | | 13284 | 13256 | – |
| | | 1/2"-13 UNC | | | | 13285 | 13257 | – |
| | | 5/8"-11 UNC | | | | 13286 ■ | 13258 | 13299 |
| 3-1/2" | .023 | M10 x 1.25 | 7/8" | 13,000 | 1 | 13150 | – | – |
| | | M10 x 1.50 | | | | 13151 | – | – |
| | | M14 x 2.0 | | | | 13152 | 13159 | – |
| | | 3/8"-24 UNF | | | | 13153 | 13160 | – |
| | | 1/2"-13 UNC | | | | 13155 | – | – |
| | | 5/8"-11 UNC | | | | 13156 ■ | 13163 | – |
| 3-1/2" | .014 | 5/8"-11 UNC | 1-1/4" | 9,000 | 1 | 12736 | – | – |
| | .020 | | | | | 12746 | – | – |
| 4" | .014 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12306 | 12406 | – |
| | .020 | | | | | – | – | 12776 |
| | .023 | | | | | 12316 ■ | 12416 | – |
| | .035 | | | | | 12326 | – | – |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12206❖ | – | – |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12826* | – | – |
| 5" | .014 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12256* | – | – |
| | .023 | | | | | 12276 ■* | – | – |
| 6" | .014 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12356 | 12456 | – |
| | .023 | | | | | 12376 ■ | 12476 | – |
| | .035 | | | | | 12396 | – | – |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12816* | – | – |
| 6" | .014 | 5/8"-11 UNC | 1-5/8" | 6,000 | 1 | 12846 | – | – |
| | .023 | | | | | 12856 | 12886 | – |
| | .035 | | | | | 12866 | – | – |

* With internal nut ❖ Cable Twist

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**DID YOU KNOW?** Most Weiler wire brushes are 100% recyclable.



Removing slag from a flame-cut steel plate.



13016



13156



12276

# Knot Wire Cup Brushes



Cleaning a weld joint and removing surrounding spatter with a banded knot cup brush.



36244



13301



12556



12676



35406

## Vortec Pro® Knot Wire Cup Brushes - Single Row - Provide an aggressive brushing action for general-purpose surface cleaning applications.

| Dia. | Wire Size | Wire Type | Arbor Hole | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|
| 3" | .020" Coarse | Carbon | 5/8"-11 | 14,000 | 36038 | 36238 |
| | | Stainless | 5/8"-11 | | 36039 | 36239 |
| | | Carbon | M10 x 1.25 | | 36041 | 36241 |
| | | Carbon | M10 x 1.50 | | 36042 | 36242 |
| | | Carbon | M14 x 2.0 | | 36043 | 36243 |
| 3-1/2" | .020" Coarse | Carbon | 5/8"-11 | 13,000 | 36066 | – |
| 4" | .025" Coarse | Carbon | 5/8"-11 | 10,200 | 36044 | 36244 |
| 5" | .023" Coarse | Carbon | 5/8"-11 | 7,000 | 36070 | – |
| 6" | .025" Coarse | Carbon | 5/8"-11 | 6,600 | 36045 | 36245 |

## Knot Wire Cup Brushes - Banded - Single Row - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring at operating speed to provide a very aggressive, controlled brushing action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4" | .014 | 5/8"-11 UNC | 5/8" | 12,500 | 1 | 13300 | – |
| | .020 | | | | | 13301 | 13302 |
| 4" | .023 | 5/8"-11 UNC | 7/8" | 10,200 | 1 | 12301 | – |
| 5" | .023 | 5/8"-11 UNC | 7/8" | 6,600 | 1 | 12120 | – |

## Knot Wire Cup Brush - 1-1/2 Rows - Features an internal nut for use on dedicated equipment such as line traveling machines that clean and prep OD of pipe prior to coating.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number - Steel |
|---|---|---|---|---|---|---|
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 7,000 | 1 | 94012 |

## Knot Wire Cup Brushes - Double Row - Provide very aggressive brushing while still maintaining some flexibility; ideal for severe cleaning applications.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 4" | .014 | 5/8"-11 UNC | 1-1/4" | 9,000 | 1 | 12756 | – |
| | .020 | | | | | 12766 | 12726 |
| 6" | .014 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12536 | – |
| | .023 | | | | | 12556 | 12636 |
| | .035 | | | | | 12576 | – |
| 6" | .014 | 5/8"-11 UNC | 1-1/2" | 6,000 | 1 | 12906 | – |
| | .023 | | | | | 12916 | – |
| | .035 | | | | | 12926 | – |

## Knot Wire Cup Brushes - Banded - Double Row - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring to provide an extremely aggressive, controlled brushing action for the most severe applications.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number - Steel |
|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 7/8" | 9,000 | 1 | 12796 |
| 6" | .023 | 5/8"-11 UNC | 7/8" | 6,600 | 1 | 12676 |
| | .035 | | | | | 12686 |

## Polyflex™ Encapsulated Crimped Wire Cup Brushes - Feature fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications on flat surfaces that require maximum aggression but no flexibility in the brushing action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number - Steel |
|---|---|---|---|---|---|---|
| 3-1/2" | .014 | 5/8"-11 UNC | 7/8" | 12,000 | 1 | 35406 |
| 4" | .020 | 5/8"-11 UNC | 1-1/8" | 9,000 | 1 | 35186 |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35006 |
| Orange Elastomer* - Heavy-Duty | | | | | | |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35530 |
| Black Elastomer* - Extra Heavy-Duty | | | | | | |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35760 |

* See Elastomer Color Code Chart on page 18 for more information.

# Crimped Wire Cup Brushes

**Crimped Wire Cup Brushes -** Very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; feature a threaded nut for use on angle grinders.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|
| 3" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13240 ■▲ | – |
| | | M10 x 1.50 | | | | 13241 | – |
| | | M14 x 2.0 | | | | 13242 | – |
| | | 3/8"-24 UNF | | | | 13243 | – |
| | | 1/2"-13 UNC | | | | 13244 | – |
| | | 5/8"-11 UNC | | | | 13245 ■ | – |
| 3-1/2" | .014 | M10 x 1.25 | 7/8" | 12,000 | 1 | 13175 | 13182 |
| | | M10 x 1.50 | | | | 13176 | 13183 |
| | | M14 x 2.0 | | | | 13177 | 13184 |
| | | 3/8"-24 UNF | | | | 13178 | 13185 |
| | | 1/2"-13 UNC | | | | – | 13187 |
| | | 5/8"-11 UNC | | | | 13181 | 13188 |
| 4" | .0118 | 5/8"-11 UNC | 1-3/8" | 10,200 | 1 | 14016 | – |
| | .014 | | | | | 14026 | – |
| | .020 | | | | | 14036 ■▲ | 14126 |
| 5" | .014 | 5/8"-11 UNC | 1-1/4" | 9,000 | 1 | 14206 ▲ | – |
| | .020 | | | | | 14216 | 14256 |
| 6" | .014 | 5/8"-11 UNC | 1-1/4" | 6,600 | 1 | 14066 ▲* | – |
| | .020 | | | | | 14076 ■* | 14166* |

* With internal nut ▲ Available in non-sparking brass & bronze wire, see page 57 for details.

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

**Vortec Pro® Crimped Wire Cup Brushes -** Provide flexible brushing action and cost-effective performance in general purpose cleaning applications.

| Dia. | Wire Size | Wire Type | Arbor Hole | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|
| 3" | .014" Coarse | Carbon | 5/8"-11 | 14,000 | 36031 | 36231 |
| | | | 1/2"-13 | | 36032 | 36232 |
| | | | M10 x 1.25 | | 36033 | 36233 |
| | | | M10 x 1.50 | | 36034 | 36234 |
| | | | M14 x 2.0 | | 36035 | 36235 |
| 3-1/2" | .014" Coarse | Carbon | 5/8"-11 | 12,000 | 36068 | – |
| 4" | .020" Coarse | Carbon | 5/8"-11 | 9,000 | 36036 | 36236 |
| 5" | .020" Coarse | Carbon | 5/8"-11 | 9,000 | 36061 | 36261 |
| 6" | .020" Coarse | Carbon | 5/8"-11 | 6,600 | 36037 | 36237 |

**Cup Brushes with Stem -** Designed primarily for use on high speed die grinders, cup brushes with permanently attached stems can also be used on drills.

**Utility Crimped Wire Cup Brushes -** Smaller diameter cup brushes which provide flexible brushing action and consistent performance for more demanding light-duty cleaning applications; featuring a 1/4" stem for use on air tools.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless | Item Number Brass |
|---|---|---|---|---|---|---|---|
| 1-3/4" | .006 | 3/4" | 13,000 | 10 | 14300 | 14303 | 14310 |
| | .0118 | | | | 14301 | 14304 | 14314 |
| 2" | .008 | 5/8" | 13,000 | 10 | 14313 | 14318 | – |
| | .0118 | | | | 14306 | 14319 | – |
| 2-1/2" | .008 | 7/8" | 13,000 | 10 | 14315 | 14320 | – |
| | .014 | | | | 14317 | 14321 | – |
| 2-3/4" | .0118 | 7/8" | 6,000 | 1 | 14302 | – | 14311 |

**Vortec Pro® Utility Crimped Wire Cup Brushes -** Designed to be a flexible and economic small diameter brushing tool for a broad range of general purpose applications using air tools or drills. 1/4" Stem.

| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item # | Boxed Qty. Item # |
|---|---|---|---|---|---|---|
| 2" | .008" Fine | Carbon | 5/8" | 13,000 | 36060 | 36260 |
| | .014" Coarse | Carbon | | | 36029 | 36229 |
| 3" | .014" Coarse | Carbon | 7/8" | 13,000 | 36030 | 36230 |



Removing paint from a steel surface with a crimped wire cup brush.



13245



14301



36230

# Small Angle Grinder Brushes



Cleaning a weld with a stringer bead wheel brush.

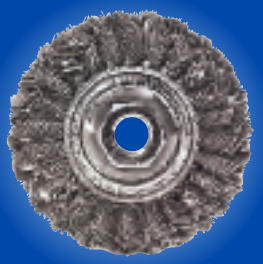
**Small Angle Grinder Brushes -** These industrial grade brushes are specifically designed to provide the smoothest, most efficient brushing action on 4" and 4-1/2" mini-grinders. Featuring Weiler's individual knot hole and solid ring product construction, these perfectly balanced brushes produce minimal vibration in use, reducing operator fatigue and providing longer life.

Weiler's wide selection of thread sizes and assortment of threaded adapters permit these high performance brushes to be used on all popular brands of mini-grinders. See the Small Angle Grinder Reference Chart on page 44 for help in selecting the right product for use on your specific grinder.

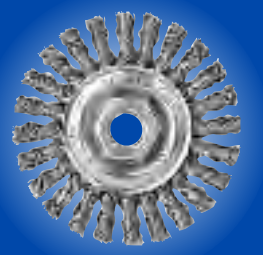
## Applications

- Removing paint and coatings
- Cleaning rust, scale and corrosion
- Light deburring
- Weld prep and cleaning
- Removal of slag from the edges of plasma-cut or flame-cut plates

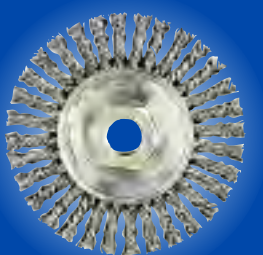
**CHECK OUT THE VIDEO**



13106



13266



13138

### Knot Wire Wheels - Standard Twist - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on somewhat irregular surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Steel | Stainless |
| 3" | .014 | 3/8"-24 UNF | 20 | 3/8" | 5/8" | 7/16" | 25,000 | 5 | 13201 | 13208 |
| 4" | .014 | M10 x 1.25 | 24 | 1/2" | 7/8" | 7/16" | 20,000 | 5 | 13100 | 13107 |
| | | M10 x 1.50 | | | | | | | 13101 | 13108 |
| | | M14 x 2.0 | | | | | | | 13102 | 13109 |
| | | 3/8"-24 UNF | | | | | | | 13103 | 13110 |
| | | 1/2"-13 UNC | | | | | | | 13105 | – |
| | | 5/8"-11 UNC | | | | | | | 13106 ■ | 13113 ■ |
| 4" | .020 | M10 x 1.25 | 24 | 1/2" | 7/8" | 7/16" | 20,000 | 5 | 13114 | – |
| | | M10 x 1.50 | | | | | | | 13115 | – |
| | | M14 x 2.0 | | | | | | | 13116 | – |
| | | 3/8"-24 UNF | | | | | | | 13117 | – |
| | | 1/2"-13 UNC | | | | | | | 13119 | – |
| | | 5/8"-11 UNC | | | | | | | 13120 | – |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

### Knot Wire Wheels - Cable Twist - Provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and coating removal applications on relatively smooth surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Steel | Stainless |
| 4" | .020 | M10 x 1.25 | 24 | 1/4" | 7/8" | 7/16" | 20,000 | 5 | 13261 | – |
| | | M10 x 1.50 | | | | | | | – | 13272 |
| | | 5/8"-11 UNC | | | | | | | 13266 ■ | 13276 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

### Knot Wire Wheels - Stringer Bead Twist - Provide maximum impact action for fast removal of slag, spatter, and oxidation. The 4" Mini Roughneck and the 4-1/2" Roughneck Jr. feature a narrow face width suitable for cleaning welds and reaching into corners

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Steel | Stainless |
| 4" | .020 | 1/2"-3/8" | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 13124 | 08954* |
| | | M10 x 1.25 | | | | | | | 13125 ■ | 13132 |
| | | M10 x 1.50 | | | | | | | 13126 | 13133 |
| | | M14 x 2.0 | | | | | | | 13127 | 13134 |
| | | 3/8"-24 UNF | | | | | | | 13128 | 13135 |
| | | 1/2"-13 UNC | | | | | | | 13130 | 13137 |
| | | 5/8"-11 UNC | | | | | | | 13131 ■ | 13138 ■ |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 12,500 | 5 | 13232 | 13238 |
| | | M14 x 2.0 | | | | | | | 13233 | 13239 |
| | | 7/8" | | | | | | | 13234 | 13249 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

*Standard Pack 10

# Small Angle Grinder Brushes

## Polyflex™ Encapsulated Knot Wire Wheels - Stringer Bead Twist. Black Elastomer* -

**Feature a heat-stabilized encapsulation that gradually wears away to keep only the wire tips exposed for maximum aggression; suitable for cleaning hot welds.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 35800 |

* See Elastomer Color Code Chart on page 18 for more information.

## Crimped Wire Wheels - Provide flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .014 | M10 x 1.50 | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 13076 | – |
| | | M14 x 2.0 | | | | | | 13077 | – |
| | | 3/8"-24 UNF | | | | | | 13078 | – |
| | | 5/8"-11 UNC | | | | | | 13081 | 13085 |

## Polyflex™ Encapsulated Crimped Wire Wheel - Burgundy Elastomer* - Feature fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications that require maximum aggression but no flexibility to the brushing action.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plate | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 4" | .014 | 5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 35416 |

*See Elastomer Color Code Chart on page 18 for more information.

## Knot Wire Bevel Brushes - Saucer-shaped radial wheels which provide a heavy-duty brushing action with some flexibility; ideal for cleaning fillet welds and into corners.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .014 | M10 x 1.25 | 20 | 3/8" | 3/4" | 12,500 | 1 | 13401 | – |
| | | M10 x 1.50 | | | | | | 13402 | 13412 |
| | | 5/8"-11 UNC | | | | | | 13406 | 13416 |
| 4" | .020 | M14 x 2.0 | 20 | 3/8" | 3/4" | 12,500 | 1 | 13423 | – |
| | | 5/8"-11 UNC | | | | | | 13426 | 13436 |
| 4-1/2" | .014 | 5/8"-11 UNC | 20 | 3/8" | 1" | 12,500 | 1 | 13456 | 13466 |
| | .020 | | | | | | | 13476 | 13486 |

## Crimped Wire Bevel Brushes - Saucer-shaped radial wheels which provide a more flexible brushing action for cleaning fillet welds and into corners.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|
| 3-3/8" | .0118 | M10 x 1.25 | 1/2" | 1/2" | 12,500 | 1 | 13091 |
| | | 5/8"-11 UNC | | | | | 13095 |

## Threaded Adapters - For mounting brushes with a 5/8"-11 UNC nut to other threaded spindles.

| Fixed Thread Size | Adapted Thread Size | Standard Pack | Item Number |
|---|---|---|---|
| 5/8" - 11 UNC | M10 x 1.25 | 10 | 07771 ■ |
| 5/8" - 11 UNC | M10 x 1.50 | 10 | 07772 ■ |
| 5/8" - 11 UNC | 3/8" - 16 UNC | 10 | 07769 |
| 5/8" - 11 UNC | 3/8" - 24 UNF | 10 | 07746 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.



Prepping the bevel end of a stainless pipe for welding.



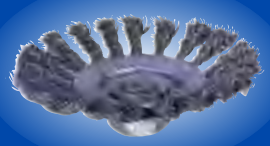
35800



13085



35416



13456



13095



07771

Small Angle Grinder Brushes

# Small Angle Grinder Brushes



Removing paint from a metal surface with a crimped wire cup brush.



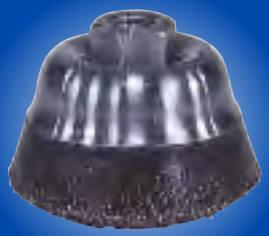
13016



13711



13245



35406

## Knot Wire Cup Brushes - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13015 | – |
| | | M10 x 1.50 | | | | 13016 | – |
| | | M14 x 2.0 | | | | 13020 | – |
| | | 3/8"-24 UNF | | | | 13021 | – |
| | | 5/8"-11 UNC | | | | 13025 ■ | – |
| 2-3/4" | .020 | M10 x 1.25 | 1" | 14,000 | 1 | 13281 ■ | 13253 |
| | | M10 x 1.50 | | | | 13282 | 13254 |
| | | M14 x 2.0 | | | | 13283 | 13255 |
| | | 3/8"-24 UNF | | | | 13284 | 13256 |
| | | 1/2"-13 UNC | | | | 13285 | 13257 |
| | | 5/8"-11 UNC | | | | 13286 ■ | 13258 |
| 3-1/2" | .023 | M10 x 1.25 | 7/8" | 13,000 | 1 | 13150 | – |
| | | M10 x 1.50 | | | | 13151 | – |
| | | M14 x 2.0 | | | | 13152 | 13159 |
| | | 3/8"-24 UNF | | | | 13153 | 13160 |
| | | 1/2"-13 UNC | | | | 13155 | – |
| | | 5/8"-11 UNC | | | | 13156 ■ | 13163 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

## Knot Wire Cup Brushes - Hurricane Twist - Provide very smooth brushing action and extended life with reduced cleaning action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4" | .014 | M10 x 1.25 | 3/4" | 14,000 | 1 | 13715 | – |
| | | M10 x 1.50 | | | | 13716 | – |
| | | M14 x 2.0 | | | | 13717 | – |
| | | 5/8"-11 UNC | | | | 13718 | – |
| 2-3/4" | .020 | M10 x 1.25 | 3/4" | 14,000 | 1 | 13709 | 13719 |
| | | M10 x 1.50 | | | | 13710 | 13720 |
| | | M14 x 2.0 | | | | 13711 | 13721 |
| | | 5/8"-11 UNC | | | | 13712 | 13722 |

## Crimped Wire Cup Brushes - Provide very flexible brushing action and the most consistent performance for lighter-duty cleaning applications on somewhat irregular surfaces.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 3" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13240 ■ | – |
| | | M10 x 1.50 | | | | 13241 | – |
| | | M14 x 2.0 | | | | 13242 | – |
| | | 3/8"-24 UNF | | | | 13243 | – |
| | | 1/2"-13 UNC | | | | 13244 | – |
| | | 5/8"-11 UNC | | | | 13245 ■ | – |
| 3-1/2" | .014 | M10 x 1.25 | 7/8" | 12,000 | 1 | 13175 | 13182 |
| | | M10 x 1.50 | | | | 13176 | 13183 |
| | | M14 x 2.0 | | | | 13177 | 13184 |
| | | 3/8"-24 UNF | | | | 13178 | 13185 |
| | | 1/2"-13 UNC | | | | – | 13187 |
| | | 5/8"-11 UNC | | | | 13181 | 13188 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

## Polyflex® Encapsulated Crimped Wire Cup Brush - Burgundy Elastomer* - Features fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications on flat surfaces that require maximum aggression but no flexibility to the brushing action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| | | | | | | Steel |
| 3-1/2" | .014 | 5/8"-11 UNC | 7/8" | 12,000 | 1 | 35406 |

*See Elastomer Color Code Chart on page 18 for more information.

# Small Angle Grinder Brushes

**Small Angle Grinder Reference Chart -** Lists the thread size of popular mini-grinders to help you select the appropriate Weiler brush for your tool.

| Manufacturer | Model Numbers | Male Thread Size | Grinder Size | Max. RPM |
|---|---|---|---|---|
| AEG | WS601 | 5/8-11 | 4-1/2" | 10,000 |
| Black & Decker | 6246 | M10 x 1.50 | 4" | 10,000 |
| | 2750/2750G | 5/8-11 | 4-1/2" | 10,000 |
| | 4252 | 5/8-11 | 5" | 10,000 |
| | 7750 | 5/8-11 | 4-1/2" | 10,000 |
| | G750/G850 | 5/8-11 | 4-1/2" | 10,000 |
| | FS6500AG | 5/8-11 | 4-1/2" | 10,000 |
| | G950 | 5/8-11 | 4-1/2" | 10,000 |
| Bosch | 1347A | 5/8-11 | 4-1/2" | 11,000 |
| | 1375/1375A | 5/8-11 | 4-1/2" | 11,000 |
| | 1700/1710D | 5/8-11 | 4-1/2" | 11,000 |
| | 1800/1810PS | 5/8-11 | 4-1/2" | 11,000 |
| | 1701/1711D | 5/8-11 | 5" | 11,000 |
| | 1703EVS | 5/8-11 | 5" | 11,000 |
| | 1711/1801 | 5/8-11 | 5" | 11,000 |
| | 1811PS | 5/8-11 | 5" | 11,000 |
| | 1803EVS | 5/8-11 | 5" | 11,000 |
| | 1347 | M14 x 2.0 | 4-1/2" | 11,000 |
| | 1348/1348E | M14 x 2.0 | 5" | 11,000 |
| | 1347A/1348AE | 5/8-11 | 5" | 11,000 |
| | 7352-111 Air | M14 x 2.0 | 5" | 12,000 |
| DeWalt | DW831 | 5/8-11 | 5" | 10,000 |
| | DW802G | 5/8-11 | 4-1/2" | 10,000 |
| | D28110 | 5/8-11 | 4-1/2" | 11,000 |
| | D28402/D28112 | 5/8-11 | 4-1/2" | 11,000 |
| | D28114 | 5/8-11 | 4-1/2" / 5" | 11,000 |
| | D28131 | 5/8-11 | 4-1/2 / 5" | 11,000 |
| | DW402/DW400 | 5/8-11 | 4-1/2" | 10,000 |
| Hilti | AG 125-SE | M14 | 5" | 11,000 |
| | AG 125-S | M14 | 5" | 11,000 |
| | DEG 500-D | 5/8-11 | 5" | 11,000 |
| | HG 500-D | 5/8-11 | 5" | 11,000 |
| | DC 500-S | 5/8-11 | 5" | 11,000 |
| | DAG 450-S | 5/8-11 | 4-1/2" | 11,000 |
| | DAG 451-S | 5/8-11 | 4-1/2" | 11,000 |
| | HG450 | 5/8-11 | 4-1/2" | 11,000 |
| | HG500/DC500 | 5/8-11 | 5" | 11,000 |
| Hitachi | G10SR2 | M10 X 1.25 | 4" | 11,000 |
| | G12SA3/G12SE2 | 5/8-11 | 4-1/2" | 10,000 |
| | G12SR2 | M10 X 1.25 | 4-1/2" | 11,000 |
| | G13SC2 | 5/8-11 | 5" | 10,000 |
| | G10SD1 | M10 x 1.50 | 4" | 11,000 |
| | G12SA | 5/8-11 | 4-1/2" | 10,000 |
| | G12S1 | 5/8-11 | 4-1/2" | 11,000 |
| | G13SC | 5/8-11 | 5" | 11,000 |
| Ingersoll-Rand | AG230P64 | 3/8-24 | 4" | 12,000 |
| | AG230P1045 | 5/8-11 | 4-1/2" | 12,000 |
| | AG230P105 | 5/8-11 | 5" | 12,000 |
| | 3445 | 5/8-11 | 4-1/2" | 12,000 |
| | TA120RP64 | 3/8-24 | 4" | 12,000 |
| | HA120RP64 | 3/8-24 | 4" | 12,000 |
| | HA120RP1045 | 5/8-11 | 4-1/2" | 12,000 |
| | IR344 | 3/8 - 24 | 4" | 13,500 |
| Jepson | 4601 | M10 X 1.25 | 4" | 11,000 |
| | 4205 | 5/8-11 | 5" | 10,000 |
| | 4105N | M14 | 5" | 10,000 |
| | 4045 | 5/8-11 | 4-1/2" | 11,000 |
| | 4050 | M14 | 5" | 11,000 |
| Jet | JSM-619 | 3/8-24 | 4" | 11,000 |
| | JSM-6195B | 5/8-11 | 5" | 11,000 |
| | JEG-400HD | 3/8-16 | 4" | 11,500 |
| | JEG-450 | 5/8-11 | 4-1/2" | 11,500 |
| | JEG-500 | 5/8-11 | 5" | 9,800 |

| Manufacturer | Model Numbers | Male Thread Size | Grinder Size | Max. RPM |
|---|---|---|---|---|
| Makita | 9553NB | M10 X 1.25 | 4" | 11,000 |
| | 9564 | 5/8-11 | 4-1/2" | 10,500 |
| | 9527PB/9557PB | 5/8-11 | 4-1/2" | 10,000 |
| | 9557NB | 5/8-11 | 4-1/2" | 11,000 |
| | 9554NB | 5/8-11 | 4-1/2" | 10,000 |
| | 9558NB | 5/8-11 | 5" | 11,000 |
| | 9565 | 5/8-11 | 5" | 10,500 |
| | 9015A/9558PB | 5/8-11 | 5" | 10,000 |
| | 9005B | 5/8-11 | 5" | 10,000 |
| | 9514B | M10 x 1.25 | 4" | 11,000 |
| | 9501BZ | M10 x 1.25 | 4" | 10,000 |
| | 9501BKW | M10 x 1.25 | 4" | 10,000 |
| | 9526PB | M10 x 1.50 | 4" | 10,000 |
| | 9503BHZ | 5/8-11 | 4-1/2" | 10,000 |
| | 9527PB | 5/8-11 | 4-1/2" | 10,000 |
| | 9505BHZ/9528PB | 5/8-11 | 5" | 10,000 |
| Metabo | W 7-115 | 5/8-11 | 4-1/2" | 10,000 |
| | W 7-125 | 5/8-11 | 5" | 9,000 |
| | WE 9-125 | 5/8-11 | 5" | 10,000 |
| | W 10-125 | 5/8-11 | 5" | 10,000 |
| | WE 14-125 | 5/8-11 | 5" | 10,500 |
| | W14-125 | 5/8-11 | 5" | 10,000 |
| | 7010 | M14 x 2.0 | 4-1/2" | 10,000 |
| | 6014/7015 | 5/8-11 | 4-1/2" | 10,000 |
| | EWE9125S | 5/8-11 | 4-1/2" | 1,750-8,000 |
| | 11025 | 5/8-11 | 4-1/2"/5" | 10,000 |
| | 7026/10125 | 5/8-11 | 5" | 8,500 |
| | 9023 | 5/8-11 | 5" | 10,000 |
| | 9025 | 5/8-11 | 5" | 10,000 |
| | 11050 | 5/8-11 | 6" | 8,500 |
| | 7016 | 5/8-11 | 4-1/2" | 1,700-8,500 |
| Milwaukee Electric Tool | 6140-6 | 5/8-11 | 4-1/2" | 10,000 |
| | 6145 | 1/2-13 | 4-1/2" | 10,000 |
| | 6148-6 | 5/8-11 | 4-1/2" | 10,000 |
| | 6141 | 5/8-11 | 5" | 10,000 |
| | 6149-20 | 5/8-11 | 5" | 10,000 |
| | 6151 | 5/8-11 | 4-1/2" | 10,000 |
| | 6153-20 | 5/8-11 | 4-1/2" | 11,000 |
| | 6154-20 | 5/8-11 | 4-1/2" | 11,000 |
| | 6155-20 | 5/8-11 | 5" | 11,000 |
| | 6156-20 | 5/8-11 | 5" | 11,000 |
| | 6140/6142 | 5/8-11 | 4-1/2" | 10,000 |
| | 6145 | 1/2-13 | 4-1/2" | 10,000 |
| | 6146 | 1/2-13 | 5" | 10,000 |
| Porter Cable | 749/8749 | M14 x 2.0 | 4-1/2" | 12,000 |
| | 7406 | 5/8-11 | 4-1/2" | 10,000 |
| | 7405 | 5/8-11 | 5" | 10,000 |
| Ryobi | AG401 | 5/8-11 | 4" | 11,000 |
| | AG450 | 5/8-11 | 4-1/2" | 11,000 |
| | SG-1000K | 3/8-16 | 4" | 11,000 |
| | G -1155-C | 5/8-11 | 4-1/2" | 11,000 |
| | G -1125-C | 5/8-11 | 5" | 10,000 |
| Sioux | 1240 | M10 x 1.50 | 4-1/2" | 11,000 |
| | 1240A | M10 x 1.25 | 4-1/2" | 11,000 |
| | 1245 | 5/8-11 | 5" | 10,000 |
| Skil | 9290-01 | 5/8-11 | 4-1/2" | 11,500 |
| | 9330-01 | 5/8-11 | 4-1/2" | 11,000 |
| | 9325-01 | 5/8-11 | 4-1/2" | 11,000 |
| | 9410/(9410:02) | M10 x 1.50 | 4-1/2" | 12,000 |
| | 9310/9415 | 5/8-11 | 4-1/2" | 11,000 |
| | 9611/(9611:02) | 5/8-11 | 4-1/2" | 12,000 |
| | HD9611 | 5/8-11 | 4-1/2" | 12,000 |

# Knot Wire End Brushes



Cleaning hard-to-reach fillet welds on a gusseted base plate.

**Stem-Mounted End Brushes -** Wire end brushes are intended primarily for use on high-speed portable power tools for addressing smaller surfaces and recessed areas. End brushes feature an integral 1/4" steel stem for safe operation at high speed and quick mounting into the collet or chuck of either electric or pneumatic die grinders.

End brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of applications, and they are manufactured with the highest quality construction for smooth, efficient performance and long life. Weiler's end brushes are available in heat-treated steel, Type 302 stainless steel, and bronze or brass wire.

## Applications

- Cleaning ID's, internal passages and recessed areas
- Deburring internal edges and crosshole intersections
- Removal of die flash and excess molded material
- Spot facing



10026



36251



11141



**Knot Wire End Brushes - Feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.**



| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless | Item Number Bronze |
|---|---|---|---|---|---|---|---|
| 1/2" | .006 | 1-1/8" | 20,000 | 10 | – | 10215 | – |
| | .0104 | | | | 10208 | 10216 | – |
| | .014 | | | | 10217 | 10218 | – |
| 3/4" | .006 | 1-1/8" | 20,000 | 10 | – | 10220 | – |
| | .0104 | | | | 10210 | 10211 | – |
| | .014 | 7/8" | 22,000 | | 10025 ■ | 10029 | – |
| | .014 | | | | – | 10387 ◆ | – |
| | .020 | | | | 10026 ■ | 10030 | – |
| | .020 | | | | – | 10388 ◆ | – |
| 1-1/8" | .006 | 1" | 20,000 | 10 | 10141 | 10142• | – |
| | .0104 | 1-1/8" | | | 10212 | 10213 | – |
| | .0118 | | | | 10187 | – | – |
| | .014 | 7/8" | 22,000 | | 10027 ■ | 10031 | – |
| | .014 | | | | – | 10392 ◆ | – |
| | .020 | | | | 10028 ■ | 10032 | 10067 |
| | .020 | | | | – | 10393 ◆ | – |

◆ Nickel-plated Cup compliant with DOD MIL STD 2041D(SH) • Coated Cup

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**Vortec Pro® Knot Wire End Brushes - Feature similar hollow-end construction and heavy-duty brushing action, but they have been engineered to provide cost-effective use for less demanding applications.**



| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|
| 3/4" | .014" Fine | Carbon | 7/8" | 22,000 | – | 36286 |
| | .014" Fine | Stainless | | | – | 36287 |
| | .020" Coarse | Carbon | | | 36050 | 36250 |
| 1" | .014" Fine | Carbon | 7/8" | 22,000 | – | 36288 |
| | .014" Fine | Stainless | | | – | 36289 |
| | .020" Coarse | Carbon | | | 36051 | 36251 |

**Knot Wire End Brushes - Banded - Feature a pair of bands around the fill to reduce the exposed trim length and limit brush flaring at operating speed to provide a very aggressive, controlled brushing action.**



| Dia. | Wire Size | Trim * Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|
| 1-1/8" | .014 | 3/8" | 18,000 | 10 | 11140 |
| | .020 | | | | 11141 |

* Trim length from bands




**Mount End Brushes Safely -** When mounting end brushes, the amount of overhang from the tool should be minimized by clamping on as much of the straight portion of the stem as possible. However, the collet or chuck should NOT clamp on the radius at the base of the stem to insure a secure hold before use. See photo on left for the correct brush orientation.

# Crimped Wire End Brushes

**Crimped Wire End Brushes -** Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Brass | Stainless |
|---|---|---|---|---|---|---|---|
| 3/8" | .006 | 7/8" | 20,000 | 10 | 10186 | – | – |
| | .0118 | | | | 10188 | – | – |
| 1/2" | .005 | 7/8" | 25,000 | 10 | – | 10158 | – |
| | .006 | | | | 10001 | – | 10013 |
| | .006 | | | | 11000• | – | 11010• |
| | .006 | | | | – | – | 10370◆ |
| | .0104 | | | | 10002 | – | 10014 |
| | .0104 | | | | 11001• | – | 11011• |
| | .0104 | | | | – | – | 10371◆ |
| | .014 | | | | 10003 | – | 10015 |
| | .014 | | | | – | – | 10372◆ |
| | .020 | | | | 10004 | – | 10016 |
| | .020 | | | | – | – | 10373◆ |
| 3/4" | .006 | 7/8" | 22,000 | 10 | 10005 | – | 10017 |
| | .006 | | | | 11003• | – | 11013• |
| | .006 | | | | – | – | 10374◆ |
| | .0104 | | | | 10006 | – | 10018 |
| | .0104 | | | | 11004• | – | 11014• |
| | .0104 | | | | – | – | 10375◆ |
| | .014 | | | | 10007 | – | 10019 |
| | .014 | | | | – | – | 10376◆ |
| | .020 | | | | 10008 | – | 10020 |
| | .020 | | | | – | – | 10377◆ |
| 1" | .005 | 7/8" | 20,000 | 10 | – | 10128 | – |
| | .006 | 1" | 22,000 | | 10009 | – | 10021 |
| | .006 | 7/8" | 22,000 | | 11006• | – | 11016• |
| | .006 | 1" | | | – | – | 10378◆ |
| | .0104 | | | | 10010 | – | 10022 |
| | .0104 | | | | 11007• | – | 11017• |
| | .0104 | | | | – | – | 10379◆ |
| | .0118 | 7/8" | 20,000 | | – | 10091 | – |
| | .014 | 1" | 22,000 | | 10011 | – | 10023 |
| | .014 | | | | – | – | 10380◆ |
| | .020 | 1-1/8" | | | 10012■ | – | 10024 |
| | .020 | | | | – | – | 10381◆ |

◆ Nickel-plated Cup compliant with DOD MIL STD 2041D(SH) • Coated Cup

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**Vortec Pro® Crimped Wire End Brushes -** Feature similar solid end construction and flexible brushing action, but they have been engineered to provide cost-effective use for less demanding applications.

| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item # | Boxed Qty. Item # |
|---|---|---|---|---|---|---|
| 1/2" | .006" Fine | Carbon | 7/8" | 25,000 | – | 36280 |
| | .006" Fine | Stainless | | | – | 36281 |
| | .0104" Medium | Carbon | | | – | 36282 |
| 3/4" | .006" Fine | Stainless | 7/8" | 22,000 | – | 36283 |
| | .0104" Medium | Carbon | | | 36047 | 36247 |
| | .014" Coarse | Carbon | | | 36046 | 36246 |
| 1" | .006" Fine | Carbon | 7/8" | 22,000 | – | 36284 |
| | .006" Fine | Stainless | | | – | 36285 |
| | .0104" Medium | Carbon | | | 36049 | 36249 |
| | .014" Coarse | Carbon | | | 36048 | 36248 |



Cleaning the exhaust port of a gasoline engine.



11013



10009



36247

Tech Note



1. Insert Brush



2. Apply Power



3. Shut-Off Power



4. Remove Brush

When brushing a recessed area or the inside diameter of a tube, use an End Brush in the following manner: Insert the brush, start the brush rotating. Turn off the power before removing the brush. This will prevent the brush from flaring out and enable it to fit into the recessed area again.

# Crimped Wire End Brushes



Cleaning a fillet weld on aluminum using a controlled flare end brush.



11112



10310



10059



35350

## Crimped Wire End Brushes - Banded - Feature a pair of bands around the fill to reduce the exposed trim length and limit brush flaring at operating speed to provide an aggressive, controlled brushing action.



| Dia. | Wire Size | Trim * Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless | Aluminum |
| 1/2" | .006<br>.0104 | 9/16" | 20,000<br>25,000 | 10 | 11100<br>11101 | 11110<br>– | –<br>– |
| 3/4" | .006<br>.0104 | 7/16"<br>3/8" | 20,000 | 10 | 11102<br>11103 | 11112<br>11113 | –<br>– |
| 1" | .006<br>.0104 | 3/8" | 10,000 | 10 | –<br>11105 | 11114<br>11115 | –<br>– |
| 1" | .008 | 3/4" | 20,000 | 10 | – | – | 10160 |

* Trim length from bands

## *Controlled Flare End Brushes - Feature uniquely trimmed crimped wire fill for more effective brushing action and greatly enhanced durability when cleaning corners and fillet welds.



| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2" | .0104<br>.014<br>.020 | 7/8" | 25,000 | 10 | 10301<br>10302<br>10303 | 10313<br>10314<br>10315 |
| 3/4" | .0104<br>.014<br>.020 | 7/8" | 22,000 | 10 | 10305<br>10306<br>10307 | 10317<br>–<br>10319 |
| 1" | .0104<br>.014<br>.020 | 1"<br><br>1-1/8" | 22,000 | 10 | 10309<br>10310<br>10311 | 10321<br>10322<br>10323 |

*Patent #8,186,000 B2

The unique trim of a controlled flare end brush is designed specifically to address hard-to-reach areas, reducing filament fatigue and breakage typically associated with a standard end brush when cleaning corners and fillet welds.



Standard Crimped Wire End Brush



Controlled Flare End Brush

## Pilot Bonding Brushes - Banded to expose a short 3/8" trim length of crimped stainless wire and feature a pilot in the center of their solid end. They were originally designed to clean around rivet holes in aluminum aircraft panels but may be used in other similar applications.



| Dia. | Wire Size | Pilot Dia. | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Stainless |
| 1/2" | .005 | 3/32"<br>1/8"<br>5/32"<br>3/16" | 20,000 | 10 | 10056<br>10057<br>10058<br>10059 |

## Polyflex® Encapsulated Crimped Wire End Brushes - Burgundy Elastomer* - Feature fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications such as spot facing which may require maximum aggression and no flaring.



| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2" | .0104 | 7/8" | 18,000 | 10 | 35340 | 35500 |
| 3/4" | .0104 | 7/8" | 16,000 | 10 | 35345 | 35505 |
| 1" | .0104 | 7/8" | 14,000 | 10 | 35350 | – |
| Orange Elastomer* - Heavy-Duty | | | | | | |
| 1/2" | .0104 | 7/8" | 18,000 | 10 | 35535 | – |
| 3/4" | .0104 | 7/8" | 16,000 | 10 | 35540 | – |
| 1" | .0104 | 7/8" | 14,000 | 10 | 35545 | – |

* See Elastomer Color Code Chart on page 18 for more information.

# Crimped Wire End & Square Brushes

**Circular Flared End Brushes -** Feature crimped wire fill which has been "pre-flared" to match the working angle of the brush at operating speed; suited for addressing broad and slightly contoured surfaces.

| Dia. | Wire Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Steel | Stainless |
| 1" | .006 | 25,000 | 1 | 10033 | 10042 |
| | .008 | | | 10034 | 10043 |
| | .020 | | | 10099 | – |
| 1-1/4" | .006 | 20,000 | 1 | 10076 | – |
| | .008 | | | 10035 | – |
| 1-1/2" | .006 | 20,000 | 1 | 10044 | 10045 |
| | .008 | | | 10037 | 10046 |
| | .020 | | | 10038 | 10047 |
| 2" | .014 | 25,000 | 2 | 11142 | – |
| 2-3/4" | .008 | 16,000 | 2 | 10039 | 10048 |
| | .020 | | | 10040 | – |
| 3" | .006 | 16,000 | 2 | 10150 | 10151 |
| | .008 | | | 10041 | 10050 |
| | .014 | | | 10134 | – |
| | .020 | | | 10073 | 10074 |
| 4" | .008 | 15,000 | 1 | – | 96705 |

**Polyflex® Encapsulated Circular Flared End Brushes - Black Elastomer* -** Crimped wire fill that has been encapsulated in a heavy-duty elastomer which gradually wears away to keep only the wire tips exposed. Their saucer-shape, narrow face, and aggressive brushing action make them suitable for addressing edges, corners, and confined areas.

| O.D. Dia. | Wire Size | Cup Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1-3/4" | .006 | 3/4" | 25,000 | 2 | 35222 | – |
| | .0104 | | | | 35223 | 35226 |
| | .020 | | | | 35224 | – |
| 2" | .0104 | 3/4" | 20,000 | 2 | 35233 | – |
| | .020 | | | | 35234 | – |
| 2-3/4" | .006 | 1" | 16,000 | 2 | 35296 | – |
| | .0104 | | | | 35297 | 35299 |
| | .020 | | | | 35298 | – |

* See Elastomer Color Code Chart on page 18 for more information.

**Pencil End Brushes -** Contains straight wire fill material retained in a small diameter steel tube. They provide a light-duty brushing actions suitable for very small recessed areas.

| Tube Dia. | Wire Size | Trim Length | Overall Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 1/4" | .0104 | 3/4" | 3-3/4" | 8,000 | 10 | 99825 | 99823 |

**Square Brushes -** Wire-filled square brushes are designed to simultaneously clean the side and bottom of blind bores or circular recesses. Square brushes feature an integral 1/4" steel stem for safe operation and quick mounting into the chuck of a drill or drill press.

## Applications

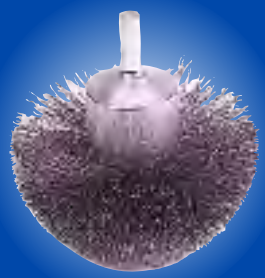
- Removing light rust and carbon build-up from ID's
- Deburring internal edges and crosshole intersections

**Square Brushes -** Feature crimped wire construction for a very flexible brushing action for light-duty cleaning and deburring of ID's and passages.

| Sq. Dia. | Wire Size | Overall Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Steel |
| 1" | .006 | 3-5/8" | 4,500 | 10 | 33000 |
| 1-1/16" | .006 | 3-11/16" | 4,500 | 10 | 33002 |
| 1-1/2" | .006 | 3-7/8" | 4,500 | 10 | 33005 |
| 1-7/8" | .006 | 4-1/16" | 4,500 | 10 | 33009 |



Cleaning the sides and bottom of a deep drawn part using a square brush.



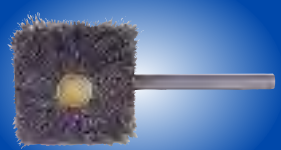
10041



35297



99825



33009

# Crosshole Deburring Brushes



Deburring intersecting oil passages in an engine block.

## Bore-Rx™ Brushes -

Weiler's crimped wire Bore-Rx brushes are designed for automated use in CNC machining centers and dedicated equipment. They are densely filled for high aggression and long tool life and feature a 3/8" diameter steel stem with a flat for use in a collet or end-mill holder.

Bore-Rx brushes are ideal tools for removing burrs from internal edges. Since they can eliminate manual deburring operations, these internal brushing tools help to improve part-to-part consistency and reduce direct labor costs. Bore-Rx brushes are available in sizes ranging from 3/4" to 4" in diameter, and they are designed to be interpolated within bore sizes that are larger than the brush diameter.



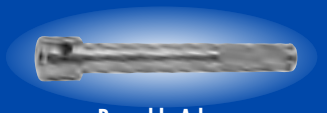
17205



17218



Replacement Head



Reusable Arbor

### Bore-Rx Brushing Tools - Wire Fill - Feature dense crimped wire fill for aggressive deburring action on ductile metals and other hard-to-deburr materials.

| Dia. | Wire Size | Face Width | Overall Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/4" | .005 | 3/8"<br>3/4" | 4-3/8"<br>4-3/4" | 8,000 | 1 | 17202<br>17203 |
| 7/8" | .006 | 3/4" | 4-3/4" | 8,000 | 1 | 17205 |
| 1" | .006 | 3/4" | 5" | 8,000 | 1 | 17207 |
| 1-1/4" | .006 | 3/4" | 4-3/4" | 8,000 | 1 | 17209 |
| 1-1/2" | .006 | 1" | 5" | 8,000 | 1 | 17211 |
| 2" | .006 | 1" | 4-1/4" | 6,000 | 1 | 17214 |
| 2-1/2" | .008 | 1" | 4-3/4" | 6,000 | 1 | 17216 |
| 3" | .008 | 1" | 5-1/4" | 6,000 | 1 | 17218 |
| 4" | .0118 | 1" | 6-1/4" | 6,000 | 1 | 17219 |

* Stainless Steel fill is available by special order.

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets. Bore-Rx extension holder is available. Contact Application Engineering at 888-299-APPS (2777).

## Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-to-order in diameters ranging from 3/4" to 1-1/2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. Contact Application Engineering at 888-299-APPS (2777) for more information.




## Operating Parameters For Wire Bore-Rx Brushes

| Brush Diameter | Recommended RPM | Recommended Feed Rate |
|---|---|---|
| 5/8" - 7/8" | 8,000 | 20"/min |
| 1" - 1-1/2" | 8,000 | 20"/min |
| 2" - 2-1/2" | 6,000 | 20"/min |
| 3" - 4" | 3,000 | 20"/min |

### Tool Paths for Crosshole Deburring

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

■ Diameter of Interpolation = Hole Diameter - Brush Diameter

# Power and Hand Tube Brushes

**Power and Hand Tube Brushes -** Weiler offers a comprehensive line of power and hand tube brushes for internal cleaning and deburring applications in tubing, pipe, drilled-and-tapped holes, and machined bores and passages. Due to their twisted-in-wire construction, the use of power tube brushes is limited to low-speed power tools such drills and drill presses and to CNC and manual machine tools in which the RPM can be precisely programmed or set. In addition, they should not be used in reverse rotation to prevent unraveling of the stem wire. Available in a wide variety of brush configurations and fill materials, Weiler can supply a tube brush for any application. If you do not see what you need in this catalog, see the Special Tube Brush Design Specification Sheet on page 54, or call our toll-free Application Engineering Hotline at 888-299-APPS(2777) for assistance.

## Applications

- Deburring and cleaning drilled-and-tapped holes and other internal threads
- Cleaning and finishing the ID of tubing and pipe
- Crosshole deburring
- Removing burrs and chips from internal keyways, slots, and grooves
- Removing paint, coatings, and build-up other foreign material from the surfaces of bores and passages

**Double Stem, Double Spiral - Feature four stem wires and a double spiral of straight wire fill material to provide aggressive cleaning and deburring action.**

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 3/8" | .003<br>.006 | 1-1/2"<br>2-1/8" | 1/8" | 4"<br>6" | 10 | 21342<br>21232 | –<br>– | –<br>– |
| 1/2" | .004<br>.006<br>.0104 | 2" | 5/32" | 5" | 10 | 21106<br>21107<br>21252 | 21116<br>21117<br>– | –<br>21178<br>– |
| 5/8" | .005<br>.008<br>.0104 | 2" | 7/32" | 5" | 10 | 21108<br>21109<br>21184 | 21118<br>21119<br>– | –<br>21219<br>– |
| 3/4" | .006<br>.008<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21110<br>21247<br>21111 | 21120<br>–<br>21121 | 21179<br>–<br>– |
| 7/8" | .006<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21112<br>21113 | 21122<br>21123 | –<br>– |
| 1" | .006<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21114<br>21115 | 21124<br>21125 | 21218<br>– |
| 1-1/4" | .006<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21164<br>21167 | 21245<br>21236 | –<br>– |
| 1-1/2" | .014 | 2-1/2" | 1/4" | 5-1/2" | 10 | – | 21413 | – |

### Tube Brush Operating Recommendations




The stems in power tube brushes are not as strong as the stems in most other brushes. Therefore, it is very important to avoid any load conditions and brush speeds that can cause excessive stem deflections and destructive bending.

A suggested guideline to avoid this unsafe condition is minimizing the overhang of the stem to under an inch, and running the brush at speeds below 2,000 RPM.

Increasing overhang could decrease the safe speed at which the brush can operate. To reach into deeper holes, use drill extension rods instead of increasing stem overhang.

### Before Starting the Brush:

- Secure brush in chuck
- Ensure clockwise brush rotation (running the brush counter-clockwise could cause the brush to fall apart.)
- Clamp work securely.
- Position all guards in place.
- Align brush with the work so the brush rotates on its true centerline to prevent any stem deflections.
- Guide the brush into the hole before starting the brush rotation.
- Always wear eye protection.



Removing zinc coating from holes in a brake bracket.

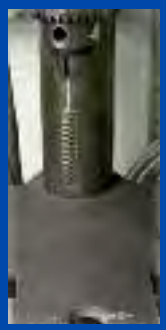


21178

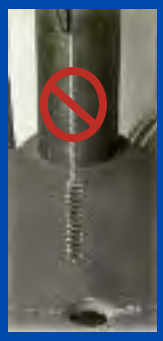


21110

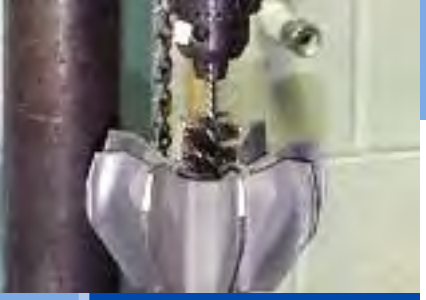
Correct Mounting in Chuck



Incorrect Mounting in Chuck



# Power and Hand Tube Brushes



Cleaning the threads on the I.D. of a mortar shell.



35825



21074



21152

## Polyflex® Encapsulated Double Stem, Double Spiral - Burgundy Elastomer*-

**Encapsulated with an elastomer that leaves only the sharp wire tips exposed for maximum aggression and a very rigid brushing action.**



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 1/2" | .006 | 2" | 5/32" | 5" | 10 | 35821 |
| 5/8" | .0104 | 2" | 7/32" | 5" | 10 | 35822 |
| 3/4" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 35823 |
| 1" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 35825 |

* See Elastomer Color Chart on page 20 for more information.

## Round -

**Feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; for use on smooth or threaded blind holes.**



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Steel | Stainless | Brass |
|---|---|---|---|---|---|---|---|---|
| 1/4" | .004 | 1" | 1/8" | 3-1/2" | 10 | 21072 | 21081 | 21332 |
| 5/16" | .005 | 1" | 1/8" | 3-1/2" | 10 | 21175 | – | – |
| 3/8" | .004<br>.006<br>.008 | 1" | 1/8" | 3-1/2" | 10 | 21073<br>21282<br>21264 | 21082<br>–<br>21240 | –<br>–<br>– |
| 7/16" | .005 | 1" | 1/8" | 3-1/2" | 10 | 21142 | 21181 | – |
| 1/2" | .005 | 1" | 3/16" | 3-1/2" | 10 | 21074 | 21083 | 21182 |
| 9/16" | .005<br>.0104 | 1" | 3/16" | 3-1/2" | 10 | 21143<br>– | –<br>21404 | –<br>– |
| 5/8" | .005<br>.008 | 1" | 3/16" | 3-1/2" | 10 | 21075<br>21265 | 21084<br>– | –<br>– |
| 11/16" | .005 | 1" | 3/16" | 3-1/2" | 10 | 21144 | – | – |
| 3/4" | .006<br>.008 | 1" | 7/32" | 3-1/2" | 10 | 21076<br>21266 | 21085<br>– | –<br>– |
| 13/16" | .005 | 1" | 7/32" | 3-1/2" | 10 | 21146 | – | – |
| 7/8" | .006<br>.008 | 1" | 7/32" | 3-1/2" | 10 | 21077<br>21267 | 21086<br>– | –<br>– |
| 15/16" | .005 | 1" | 7/32" | 3-1/2" | 10 | 21148 | – | – |
| 1" | .005<br>.008 | 1" | 1/4" | 3-1/2" | 10 | 21149<br>21078 | 21340<br>21087 | –<br>– |
| 1-1/8" | .005<br>.008 | 1" | 1/4" | 3-1/2" | 10 | 21150<br>21079 | –<br>21088 | –<br>– |
| 1-1/4" | .008 | 1" | 1/4" | 3-1/2" | 10 | 21080 | 21089 | – |
| 1-1/2" | .008<br>.0104 | 1" | 1/4" | 3-1/2" | 10 | 21203<br>21269 | –<br>– | 21152<br>– |
| 2-1/4" | .008 | 1" | 1/4" | 3-1/2" | 10 | 21322 | – | – |




## Power and Hand Tube Brush Selection Tips

- A flat burrite style tube brush is most effectively used with a holder on blind, threaded holes.



- A round tube brush is most effectively used fully chucked on smooth or threaded blind holes.



- A single stem, single spiral tube brush is most effectively used for manual or hand cleaning applications.



- A double stem, double spiral tube brush is most effectively used with power tools for heavy-duty cleaning and deburring.



- A polyflex encapsulated double stem, double spiral tube brush is most effectively used on power tools for very aggressive cleaning and deburring applications.



**DID YOU KNOW?**

Weiler manufactures more "special" power & hand tube brushes than the standard products in this catalog.

# Power and Hand Tube Brushes

**Burrite Type -** Feature a single continuous length of stainless steel stem wire and filled with a tuft of crimped wire to provide an aggressive flat side action; ideal for cleaning and deburring internal threads.

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 1/4" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21000 | – |
| | .005 | | | | | 21001 | 21050 |
| 5/16" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21004 | – |
| | .005 | | | | | 21005 | – |
| 3/8" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21008 | – |
| | .005 | | | | | 21009 | 21051 |
| | .005 | | 1/8" | | | 21023 | – |
| 7/16" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21014 | – |
| | .005 | | | | | 21015 | – |
| 1/2" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21020 | – |
| | .005 | | | | | 21021 | 21053 |
| | .005 | | 1/8" | | | 21025 | – |
| 9/16" | .003 | 5/8" | 1/8" | 2-1/4" | 10 | 21027 | – |
| | .005 | | | | | 21028 | – |
| 5/8" | .003 | 5/8" | 1/8" | 2-1/4" | 10 | 21030 | – |
| | .005 | | | | | 21031 | 21055 |
| 3/4" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21034 | 21056 |
| | .008 | | | | | 21035 | – |
| 7/8" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21036 | 21057 |
| 1" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21040 | 21058 |
| | .008 | | | | | 21041 | – |
| 1-1/8" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21044 | – |

**Burrite Type Holders -** Feature a 1/4" stem for convenient mounting into the chuck of a drill or the collet of a machine tool and allow the brush to be used in either direction of rotation. They allow the brush to be used in a standard tapping cycle for deburring threaded holes in CNC machining centers.

| For Brush Stem Dia. | Holder Dia. | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 3/32" | 1/4" | 3-1/8" | 5 | 95202 |
| 1/8" | 3/8" | 3-3/8" | 5 | 95203 |

**Single Stem, Single Spiral -** Feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 1/8" | .003 | 1" | 3/32" | 6" | 10 | 21246 | 21249 | – |
| 3/16" | .003 | 1-1/2" | 3/32" | 7" | 10 | 21090 | 21098 | 21221 |
| | .005 | | | | | 21091 | 21099 | – |
| 1/4" | .003 | 1-1/2" | 3/32" | 7" | 10 | 21092 | 21100 | 21270 |
| | .005 | | | | | 21093 | 21101 | 21139 |
| | .006 | | | | | 21161 | – | – |
| 3/8" | .004 | 2" | 1/8" | 8" | 10 | 21094 | 21414 | 21191 |
| | .006 | | | | | 21095 | 21103 | – |
| 1/2" | .004 | 2" | 1/8" | 8" | 10 | 21096 | 21104 | 21165 |
| | .006 | | | | | 21097 | 21105 | – |
| | .008 | | | | | 21162 | – | – |
| 9/16" | .005 | 2-1/2" | 5/32" | 9" | 10 | 21233 | – | – |



Deburring the threads of a tapped hole using a burrite brush in a holder.



21014



21040



95203



21095

# Power and Hand Tube Brushes



Removing flash from the I.D. of an aluminum casting.



44113



44316



95567



95301



99714

**Nylon Hand Tube Brushes -** Feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight nylon fill allows for easy manual insertion and scratch-free cleaning of the ID.

| Dia. | Fill Dia. | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Nylon |
|---|---|---|---|---|---|---|
| 1/4" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44110 |
| 3/8" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44213 |
| 1/2" | .010 | 3" | 1/8" | 8-1/2" | 36 | 44111 |
| 3/4" | .012 | 3" | 1/8" | 8-1/2" | 36 | 44112 |
| 1" | .014 | 4" | 5/32" | 12-1/4" | 36 | 44113 |
| 1-1/4" | .014 | 4" | 5/32" | 13" | 36 | 44114 |
| 2" | .014 | 5" | 3/16" | 16-3/4" | 36 | 44115 |

**Percolator Brush -** Features single stem, single spiral construction with an eye loop and straight white nylon fill. Intended for cleaning the internal passages in coffee percolators, this brush can be also be used in other similar manual cleaning applications.

| Dia. | Fill Dia. | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Nylon |
|---|---|---|---|---|---|---|
| 7/16" | .010 | 3-1/2" | 5/32" | 11-1/2" | 10 | 44316 |

**Valve Guide Brushes -** Are made with single stem, single spiral construction and have a permanently-attached long steel handle for convenient hand use or for mounting into a chuck. Intended for removing heavy deposits from valve guides in gas and diesel engines, these brushes can also be used in a range of other similar applications.



| Dia. | Fill Dia./ Material | Brush Part | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1/4"<br>5/16"<br>11/32"<br>3/8"<br>7/16"<br>1/2" | .0104 Steel | 2" | 10" | 10 | 95563<br>95027<br>95566<br>95028<br>95665<br>95029 |
| 11/32"<br>3/8" | .008 Nylon<br>.012 Nylon | 2-1/2" | 10" | 10 | 95660<br>95567 |

**Gun Cleaning Brushes -** Rifle Brushes

Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 8-32 male coupling.

| Caliber | Brush Part | Overall Length | Coupling Size | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|
| 22 | 2-1/4" | 3-1/4" | 8-32 | 10 | 95301 |
| 30 | 2-1/4" | 3-1/4" | 8-32 | 10 | 99786 |
| 35 | 2-1/4" | 3-1/4" | 8-32 | 10 | 99788 |
| 45 | 2-1/4" | 3-1/4" | 8-32 | 10 | 99791 |

**Gun Cleaning Brushes -** Shotgun Brushes

Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 5/16"-27 male coupling.

| Gauge | Brush Part | Overall Length | Coupling Size | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|
| 12 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 99714 |
| 16 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 99694 |
| 20 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 95084 |
| 410 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 95129 |

**Special Brush Designs -** Design a power tube brush for your specific application.

**Special Tube Brush Specification Sheet:**
**(Use the illustration on this page as a guide)**

1. Brush diameter _____
2. Length of brush part _____
3. Overall brush length _____
4. Special stem diameter (if required) _____
5. Stem material:
   ❑ Galvanized Steel ❑ Stainless ❑ Other
6. Application _____
   _____
7. Brush fill material:
   ❑ Steel wire ❑ Stainless wire
   ❑ Nylon Abrasive Filament (Nylox®)
   ❑ Brass wire ❑ Other_____
8. Fill material diameter _____
9. Special tip style (if required) _____
10. ❑ Single stem ❑ Double stem
11. Order Quantity _____

**** Special tube brushes are not returnable, as they are manufactured to order.***

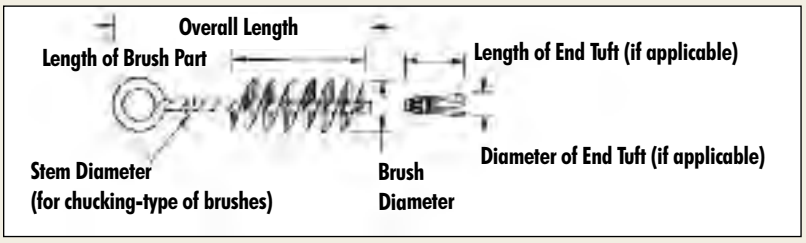
Name: _____
Company Name: _____
Address:_____
Phone: (_____)_____
Fax: (_____)_____
E-mail: _____

End-User Name: _____
City: _____
State: _____ Zip: _____

**For additional information call:**
Weiler's Application Engineering
Hotline toll free at:
**888-299-APPS (2777)**

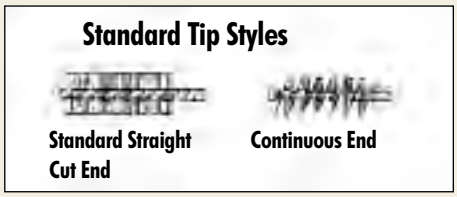
**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

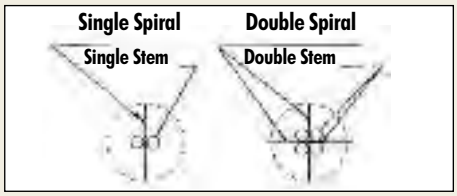
**Or visit our website at:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**









# Miniature Brushes



Removing galled spots from a metal forming die.

**Miniature Brushes -** The Weiler family began producing miniature brushes for the jewelry industry in 1898, and their tradition of providing the highest quality, most cost-effective products continues to this day.

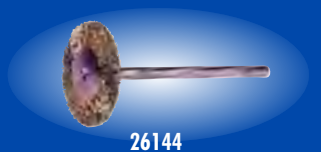
Weiler's line of miniature brushes are designed for precision cleaning, light deburring, and finishing applications in variety of crafts, trades, and industries. In addition to use in jewelry production and in dental and optical labs, miniature brushes have many applications in modern industries such as electronics and instrumentation production, aerospace and aircraft manufacture, and precision tool and die shops. They are permanently mounted on 1/8" or 3/32" stems for quick mounting and efficient use on high-speed electric rotary tools and air-powered pencil die grinders.



99554

## Applications

- Decorative finishing
- Light deburring and edge blending
- Buffing and polishing of small parts
- Light-duty cleaning



26144

### Wire Wheel Brushes -

**Fine crimped wire fill for light-duty cleaning and deburring.**



| Dia. | Wire Size | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 5/8" | .005 | 1/8" | 1/8" | 37,000 | 144 | – | 99554 | – |
| 3/4" | .003<br>.005 | 3/16" | 1/8" | 37,000 | 144 | 26000<br>26003 | –<br>26005 | 26001<br>26004 |
| 3/4" | .003<br>.005 | 3/16" | 3/32" | 37,000 | 144 | 26140<br>26143 | –<br>– | 26141<br>26144 |
| 1" | .003<br>.005<br>.005 | 5/16"<br><br>5/16" | 1/8"<br><br>3/32" | 37,000 | 144 | 26012<br>26015<br>26155 | 26014<br>26017<br>– | –<br>26016<br>– |
| 1-1/4" | .005 | 3/8" | 1/8" | 37,000 | 144 | 26021 | – | – |
| 1-1/2" | .005 | 1/2" | 1/8" | 25,000 | 144 | 26296 | 26294 | – |



26041

### Bristle Wheel Brushes -

**Natural hair fill for scratch-free cleaning of small parts or for buffing and polishing of features such as slots and grooves using abrasive compounds.**



| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/4" | Stiff Hair<br>Soft Hair<br>Stiff Hair*<br>Stiff Hair | 3/16" | 3/32"<br><br><br>1/8" | 37,000 | 144 | 26041<br>26042<br>26043<br>26059 |

* Double thick



26074

### Wire Cup Brushes -

**Fine crimped wire fill for light-duty cleaning or deburring in confined areas.**



| Dia. | Wire Size | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 5/8" | .003<br>.005 | 1/4" | 1/8" | 37,000 | 144 | 26071<br>26074 | –<br>26076 | 26072<br>26075 |



26095

### Bristle Cup Brushes -

**Natural hair fill for scratch-free cleaning of confined areas or for buffing and polishing of small recessed surfaces using abrasive compounds.**



| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/2" | Stiff Hair | 7/32" | 3/32" | 37,000 | 144 | 26091 |
| 9/16" | Stiff Hair<br>Soft Hair | 1/4" | 1/8" | 37,000 | 144 | 26093<br>26094 |
| 1" | Stiff Hair<br>Soft Hair | 7/16" | 1/8" | 25,000 | 144 | 26095<br>26096 |

# Miniature Brushes



Deburring the I.D. of a small machined part.

## Wire End Brushes - Fine crimped wire fill for light-duty cleaning or deburring in very small recessed areas or ID's.

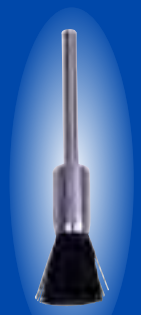
| Dia. | Wire Size | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 3/16" | .003 | 1/4" | 1/8" | 37,000 | 144 | – | – | 26097 |
| | | | | | | 26098 | 26099 | – |
| | | | 3/32" | | | 26101 | – | – |
| 1/4" | .005 | 7/16" | 1/8" | 37,000 | 144 | – | – | 26106 |
| | | | | | | 26107 | 26108 | – |
| 5/16" | .005 | 9/16" | 1/8" | 25,000 | 144 | 26113 | 26114 | – |

## Bristle End Brushes - Natural hair fill for scratch-free cleaning or for buffing and polishing of very small recesses using abrasive compounds.

| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/16" | Stiff Hair | 1/4" | 1/8" | 37,000 | 144 | 26115 |
| | Soft Hair | | | | | 26122 |
| | Stiff Hair | | 3/32" | | | 26116 |
| 1/4" | Stiff Hair | 3/8" | 1/8" | 37,000 | 144 | 26119 |
| 5/16" | Stiff Hair | 9/16" | 1/8" | 25,000 | 144 | 26121 |



26114



26121

## Bristle End Brushes - Plastic Ferrule

Feature a plastic ferrule or cup to protect internal surfaces during use.

| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/16" | Stiff Hair | 1/4" | 1/8" | 37,000 | 144 | 26128 |
| 1/4" | Stiff Hair | 3/8" | 1/8" | 37,000 | 144 | 26131 |
| 5/16" | Stiff Hair | 9/16" | 1/8" | 25,000 | 144 | 26133 |



26133

## Abrasive Nylon End Brushes - Plastic Ferrule

Nylox® abrasive nylon fill for buffing and polishing without compounds. They can also be used in automated applications for precision deburring and finishing of small part features.

| Dia. | Filament Dia./Grit | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/16" | .018/500 | 1/4" | 1/8" | 37,000 | 144 | 26136 |
| 1/4" | .018/500 | 3/8" | 1/8" | 37,000 | 144 | 26138 |
| 5/16" | .018/500 | 9/16" | 1/8" | 25,000 | 144 | 26146 |



26136

**DID YOU KNOW?** Weiler Corporation is the largest manufacturer of miniature brushes in the world.

# Non-Sparking Brushes



Creating an antique finish on a brass plate.

**Non-Sparking Brushes -** Weiler offers an assortment of wire power brushes featuring high-quality bronze or brass wire which offer a very soft brushing action in comparison to steel and stainless steel and which will not generate a spark when used on metal surfaces. They are frequently used for cleaning molds and dies in the injection-molding and extrusion of plastics, and in maintenance activities in areas where flammable or potentially explosive materials are present, such as refineries and petrochemical plants.

Non-sparking brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and they are manufactured with individual knot hole and solid ring construction for high performance and long life. Weiler's non-sparking power brushes are available with plain arbor holes, nuts, and permanently-attached stems for use on a variety of tools.

## Applications

- Light to medium duty cleaning of surfaces, recesses, and ID's
- Deburring component parts machined from soft, non-ferrous metals



13121



01475



29078



17641



13299

### Standard Twist Wheels - Provide a heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications.



| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Bronze |
|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .020 | 1/2"- 3/8" | 20 | 3/8" | 5/8" | 1/2" | 7/16" | 25,000 | 10 | 08271 |
| 4" | .020 | 5/8" - 11 | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 5 | 13121 |

### Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications.



| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item No. Brass |
|---|---|---|---|---|---|---|---|---|---|
| 6" | .005<br>.0118 | 5/8"-1/2" | 1/2" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 2 | 01415<br>01475 |

For other available arbor holes, see Arbor Hole Table pg 20.

### Small Diameter Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.



| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number Brass |
|---|---|---|---|---|---|---|---|
| 1-1/2" | .005 | 3/8" | 1/4" | 7/16" | 20,000 | 10 | 29178 |
| 2" | .005<br>.0118 | 1/2" | 3/8" | 1/2" | 20,000 | 10 | 29059<br>29086 |
| 3" | .014 | 1/2" | 5/8" | 1" | 20,000 | 10 | 29078 |

### Conflex Brush - Small diameter copper-center wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.



| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 3" | .0118 | 1/2" | 1" | 20,000 | 10 | 17641 |

### Knot Wire Cup Brushes - Provide heavy-duty brushing action with some flexibility for more demanding cleaning applications on relatively flat surfaces.



| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|---|
| 2-3/4" | .020 | 5/8"-11 UNC | 1" | 14,000 | 1 | 13299 |
| 4" | .020 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12776 |

# Non-Sparking Brushes

**Crimped Wire Cup Brushes -** Provide a very flexible brushing action for light-duty cleaning applications on somewhat irregular surfaces.



| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Bronze | Item Number Brass |
|---|---|---|---|---|---|---|---|
| 3" | .020 | 5/8"-11 UNC | 7/8" | 14,000 | 1 | 13231 | – |
| 4" | .020 | 5/8"-11 UNC | 1-3/8" | 10,200 | 1 | 14616 | – |
| 5" | .014 | 5/8"-11 UNC | 1-1/4" | 8,000 | 1 | – | 14606 |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,600 | 1 | 14316* | – |

* With internal nut

**Utility Crimped Wire Cup Brushes -** Smaller diameter cup brushes which provide a flexible brushing action for light-duty cleaning applications.



| Dia. | Wire Size | Trim Length | Stem Diameter | Max. RPM | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1-3/4" | .006<br>.0118 | 3/4" | 1/4" | 13,000 | 10 | 14310<br>14314 |
| 2-3/4" | .0118 | 7/8" | 1/4" | 6,000 | 1 | 14311 |

**Knot Wire End Brushes -** Feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.



| Dia. | Wire Size | Trim Length | Stem Diameter | Max. RPM | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|---|
| 1-1/8" | .020 | 7/8" | 1/4" | 22,000 | 10 | 10067 |

**Crimped Wire End Brushes -** Feature a solid end and very flexible brushing action ideal for light-duty cleaning applications in corners and hard-to-reach areas.



| Dia. | Wire Size | Trim Length | Stem Diameter | Max. RPM | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1/2" | .005 | 7/8" | 1/4" | 25,000 | 10 | 10158 |
| 1" | .005 | 7/8" | 1/4" | 20,000 | 10 | 10128 |
| 1" | .0118 | 1" | 1/4" | 22,000 | 10 | 10091 |

**Double Stem, Double Spiral Power Tube Brushes -** Constructed with four stem wires and a double spiral of straight wire fill material to provide a more aggressive internal cleaning action.



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1/2" | .006 | 2" | 5/32" | 5" | 10 | 21178 |
| 5/8" | .008 | 2" | 7/32" | 5" | 10 | 21219 |
| 3/4" | .006 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21179 |
| 1" | .006 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21218 |

**Round Power Tube Brushes -** Feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; suitable for use on smooth or threaded blind holes.



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1/4" | .004 | 1" | 1/8" | 3-1/2" | 10 | 21332 |
| 1/2" | .005 | 1" | 3/16" | 3-1/2" | 10 | 21182 |
| 1-1/2" | .008 | 1" | 1/4" | 3-1/2" | 10 | 21152 |

**Single Stem, Single Spiral Hand Tube Brushes -** Constructed using a single continuous length of galvanized steel stem wire and feature a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 3/16" | .003 | 1-1/2" | 3/32" | 7" | 10 | 21221 |
| 1/4" | .003<br>.005 | 1-1/2" | 3/32" | 7" | 10 | 21270<br>21139 |
| 3/8" | .004 | 2" | 1/8" | 8" | 10 | 21191 |
| 1/2" | .004 | 2" | 1/8" | 8" | 10 | 21165 |



Removing labels from a compressed-gas storage cylinder.



14316



14314



10067



10158



21178



21332



21191

Non-Sparking Brushes

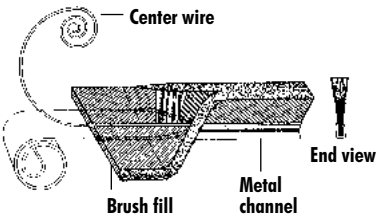
# Strip Brushes



Straight strip brush used as a guard to prevent chips from flying.

**Metal Channel Strip Brushes -** Consist of natural, synthetic or wire bristles, held securely in place by a U-shaped metal channel and center wire, as illustrated. All Weiler brushes are first manufactured into a straight strip brush. The strip can then be coiled into cylinder brushes, or other shapes such as discs and cups.

There is a variety of brush fill and virtually an infinite number of brush specifications within each metal channel size. All strip brushes are manufactured to our customers' individual requirements. This provides the proper filament stiffness, and allows for customers' unique modification of length and trim, enabling us to provide the ideal brush for the application.




## Applications

- Spreading powdered materials
- Dusting tires, tile, paper, etc.
- Splash guard on grinders and machine tools
- Conveyor belt cleaning - assembled on hubs to form rotary brushes
- Lag brushes
- Eliminating static electricity
- Curtains to prevent chips from flying

**DID YOU KNOW?**

Weiler Strip Brushes are used to apply wax to apples.



## General Fiber Characteristics

| | 6.6 Nylon | 6.12 Nylon | Polypropylene | Horse Hair | Tampico |
|---|---|---|---|---|---|
| Heat Distortion (˚F) | 300 | 250 | 225 | 370 | 283 |
| Melting Point | 500 | 405 | 330 | – | – |
| Bend Recovery (%) | 90 | 90 | 70-80 | excellent | poor |
| Shelf Life | excellent | excellent | good | poor | fair |
| Abrasion Resistance | excellent | excellent | good | good | poor |
| Specific Gravity (G/CC) | 1.13-4 | 1.04-5 | .90-1 | 1.3 | .6 |
| Tensile Strength (PSI) | 60-70M | 50-60M | 50-80M | – | – |

## Chemical and Environmental Resistance

| | 6.6 Nylon | 6.12 Nylon | Polypropylene | Horse Hair | Tampico |
|---|---|---|---|---|---|
| Dilute Alkalis | excellent | excellent | excellent | poor | good |
| Dilute Acids | good | good | excellent | poor | good |
| Strong Acids | fair | good | good | good-poor | good-poor |
| Alcohols | good | good | excellent | poor | good |
| Petroleum Distillates | excellent | excellent | good | poor | good |
| Hot Water | good | good | fair | poor | good |
| Alcohols, Vegetable Oils | good | good | excellent | poor | good |

# Strip Brushes – Straight

## Strip Brushes - Straight

Can be mounted on metal or wood back-up plates or on rotary hubs with machine or wood screws.

### Fill Materials

- Hair (horse, goat, etc.)
- Carbon steel
- Type 302 stainless steel
- Non-ferrous metals (brass, bronze, etc.)
- Nylon abrasive filament (Nylox®)
- Natural fibers (tampico)
- Synthetics (nylon, polypropylene)



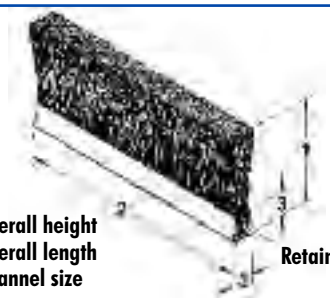
### Strip Brushes - Straight

| Metal Channel Size | Before Forming | After Forming (width x height) | Channel Materials | | | Max. OAH | Max. Bristle Dia. (nylon) | Max. Bristle Dia. (wire) |
|---|---|---|---|---|---|---|---|---|
| | | | Galv. Steel | Stainless Steel 400 Series | Stainless Steel 300 Series | | | |
| #2.5 | 5/16" x .025 | 1/8 (.125) x 1/8" (.125) | XXX | XXX | – | 1-1/2" | .012 | .006* |
| #3 | 3/8" x .025 | 5/32" (.156) x 5/32" (.156) | XXX | XXX | – | 3-1/2"** | .014 | .006* |
| #4 | 1/2" x .030 | 3/16" (.187) x 3/16" (.187) | XXX | XXX | XXX | 4" | .025 | .010 |
| #5 | 5/8" X .040 | 7/32" (.218) X 1/4" (.250) | XXX | XXX | – | 4-1/2" | .030 | .014 |
| #7 | 7/8" X .040 | 5/16" (.312) X 5/16" (.312) | XXX | XXX | XXX | 6" | .050 | .020 |
| #10 | 1-1/4" X .050 | 7/16" (.437) X 7/16" (.437) | XXX | XXX | – | 6" | .060 | .020 |

* Available in brass or bronze only.
** Max. wire OAH 1-1/2".

### Straight Strip Brushes Specification Sheet - Use illustration as guide

1. Overall brush height _____
2. Overall brush length _____
3. Channel size:
   ❑ #2.5 ❑ #3 ❑ #4
   ❑ #5 ❑ #7 ❑ #10
4. Channel material:
   ❑ Galvanized Steel ❑ Stainless Steel
5. Brush fill material:
   ❑ Horsehair ❑ Nylon
   ❑ Carbon Steel ❑ Bronze
   ❑ Polypropylene ❑ Brass
   ❑ 302 Stainless ❑ Tampico
   ❑ Nylon Abrasive Filament (Nylox)
   ❑ Other _____
6. Fill material:
   ❑ Crimped ❑ Straight
   Diameter _____
   Color (if applicable) _____
7. Application: ❑ Wet ❑ Dry
   Operating Temp. _____°F
8. Quantity required _____




1. Overall height
2. Overall length
3. Channel size

Retaining wire

**** Straight strip brushes are not returnable, as they are manufactured to order.***

Name: _____

Company Name: _____

Address: _____

_____

_____

Phone: (_____) _____

Fax: (_____) _____

E-mail: _____

End-User Name: _____

_____

City _____ State _____

Zip _____

**For additional information call:**
Weiler's Application Engineering Hotline
toll free at: **888-299-APPS (2777)**

**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**

# Strip Brushes – Discs, Cups & Holders

**Strip Brushes - Coil Wound -** Can be supplied as an unmounted refill coil, mounted on disposable tubing or wound on a customer's shaft.



### Fill Materials

- Hair (horse, goat, etc.)
- Carbon steel
- Type 302 stainless steel
- Non-ferrous metals (brass, bronze, etc.)
- Nylon abrasive filament (Nylox®)
- Natural fibers (tampico)
- Synthetics (nylon, polypropylene)

**Alligator Clips -** Use on #7 channel only. Coil Wound Strip Brushes can be supplied with Alligator Clips that have tabs at each end to be attached to customers' mandrel.



L.H. Tang | Straight Tang | R.H. Tang

### Strip Brushes - Coil Wound

| Metal Channel Size | Before Forming | After Forming (width x height) | Channel Materials: Galv. Steel | Channel Materials: Stainless Steel 400 Series | Channel Materials: Stainless Steel 300 Series | Min. I.D. | Max. O.D. | Max. Bristle Dia. (nylon) | Max. Bristle Dia. (wire) |
|---|---|---|---|---|---|---|---|---|---|
| #2.5 | 5/16" x .025 | 1/8 (.125) x 1/8" (.125) | XXX | XXX | – | 3/8" | 3-3/8" | .012 | .006* |
| #3 | 3/8" x .025 | 5/32" (.156) x 5/32" (.156) | XXX | XXX | – | 3/8" | 7" | .014 | .006* |
| #4 | 1/2" x .030 | 3/16" (.187) x 3/16" (.187) | XXX | XXX | XXX | 1/2" | 7" | .025 | .008 |
| #7 | 7/8" X .040 | 5/16" (.312) X 5/16" (.312) | XXX | XXX | XXX | 1" | 11" | .050 | .020 |

* Available in brass or bronze only.

### Coil Wound Strip Brushes Specification Sheet - Use illustrations as guide

1. Outside diameter size _____
2. Inside diameter size _____
3. Brush face _____
4. Channel size:
   ❑ #2.5 ❑ #3 ❑ #4 ❑ #7
5. Channel material:
   ❑ Galvanized Steel
   ❑ Stainless Steel
6. Brush fill material:
   ❑ Horsehair ❑ Nylon
   ❑ Carbon Steel ❑ Bronze
   ❑ Polypropylene ❑ 302 Stainless
   ❑ Tampico ❑ Brass
   ❑ Nylon Abrasive Filament (Nylox)
   ❑ Other _____
7. Fill material: ❑ Crimped ❑ Straight
   Diameter _____
   Color (if applicable) _____
8. ❑ Close wound ❑ Open wound
   Specify pitch between spirals_____
9. Mounting Clips: ❑ Yes ❑ No
10. Application: ❑ Wet ❑ Dry
    Operating Temperature _____°F
11. Quantity required _____

**** Coil wound strip brushes are not returnable, as they are manufactured to order.***

Name: _____

Company Name: _____

Address: _____

_____

Phone: (_____) _____

Fax: (_____) _____

E-mail: _____

End-User Name: _____

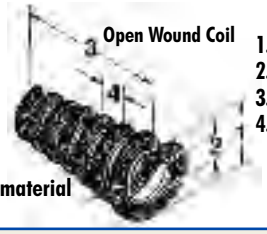
City: _____ State: _____

Zip: _____

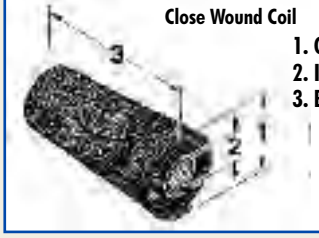
**For additional information call:**
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**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**




1. Outside Diameter
2. Inside Diameter
3. Brush Face
4. Pitch between spirals




1. Outside Diameter
2. Inside Diameter
3. Brush Face

# Strip Brushes – Discs, Cups & Holders



## Strip Brushes - Disc Brushes

**Outside Disc:** A circular single loop brush with the bristles facing OUTWARD, and the metal channel on the inside.

**Inside Disc:** A circular single loop brush with the bristles facing INWARD, and the metal channel on the outside.

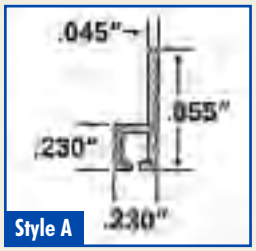


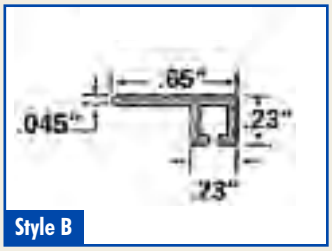
## Strip Brushes - Formed Cups

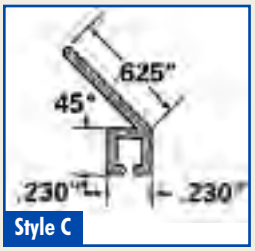
These strip brushes are formed into a circle with the bristles facing down, commonly found in vacuum cleaning applications.



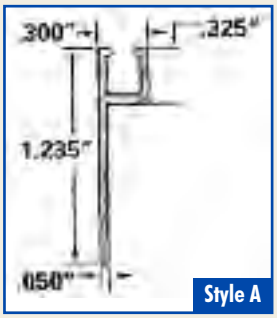
## Holders for Metal Channel Size #2.5 - Max. length 12'

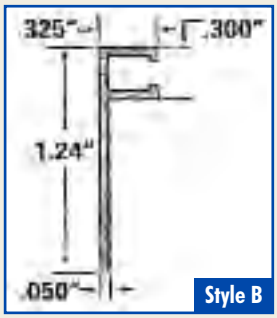


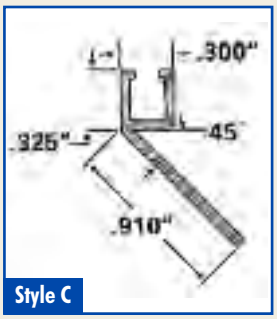



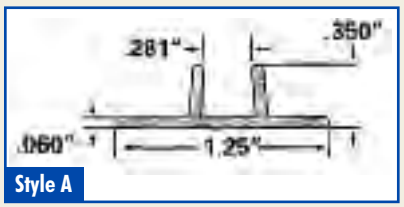

## Holders for Metal Channel Size #4 - Max. length 12'

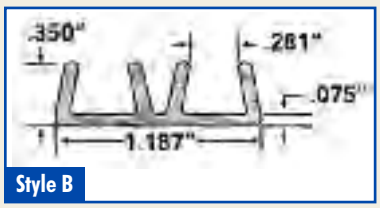


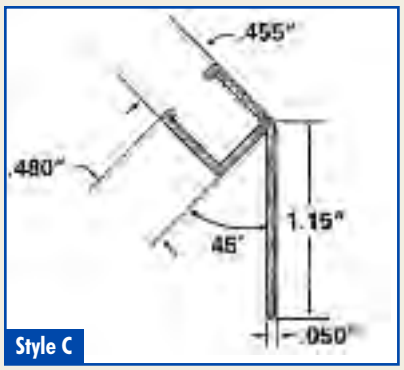



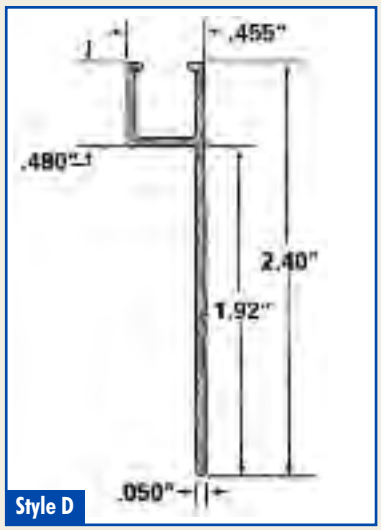



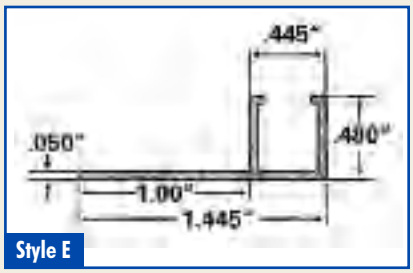

## Holders for Metal Channel Size #7 - Max. length 12'



# Wide Face Brushes



Removing light corrosion and mill scale from coiled steel.

**Wide Face Brushes -** Cylindrical brush assemblies have proven to be reliable and economical tools for a wide variety of industrial surface conditioning applications. In addition to gang-mounting a series of individual wheel brushes onto a shaft or reusable arbor, one-piece wide face brush units can be manufactured to cover broad surfaces or provide maximum brushing action in a minimum amount of space.

Cylindrical brushes can be manufactured using several different styles of construction, and the characteristics of each style of construction can significantly affect brush performance. Weiler will custom-design a wide face brush in the most appropriate type of construction for your specific application. Please call our Application Engineering Team at 888-299-APPS (2777) to discuss your requirements.

## Applications

- Scrubbing debris from the surface of material during processing
- Removing corrosion, surface contamination, mill scale, or heat discoloration
- Roughening surfaces to promote adhesion or bonding
- Removing applied finishes and coatings
- Producing decorative surface finishes
- Deburring or finishing cylindrical parts
- Deburring the cut ends of tubing and extrusions



**Need Help**

Call our Application Engineering Hotline at 888-299-APPS (2777). If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or your facility. Either way, Weiler will provide the most cost-effective solution for your specific application.

**Disposable Brush Assemblies -** Wide face assemblies for brushing flat surfaces can be manufactured as disposable units with a variety of available fill materials depending on the specific application. Available fills include; metallic filaments such as steel, stainless steel, or brass crimped wire; Nylox® nylon abrasive filaments; synthetic filaments such as nylon or heat-stabilized polypropylene; or natural fibers such as tampico.

Disposable mountings can be constructed of carbon steel or stainless steel components, and "flow-through" mountings which allow coolant to be circulated through the core and out the face of the brush are available for wet applications.



**Refillable Brush Assemblies -** Wide face assemblies for brushing flat surfaces can also be manufactured as a replaceable brush unit wound onto a permanent and reusable arbor. Depending on the specific application and production environment, the refilling of reusable arbors may be a more economical option than using disposable units. Reusable mountings can be designed by Weiler or supplied by the customer.

In addition to the secondary operations such as nibbling and grinding of the brush face and dynamic balancing of the completed unit, Weiler also offers maintenance services on mounting hardware like collars and bearings.

# Wide Face Brushes

**Tube End Deburring Brushes -** Cylindrical rotary brushes are an ideal media for production applications involving the batch deburring of the ends of tubing that has been cut-to-length. Automated brushing systems are readily available and considerably less expensive to purchase and operate than chamfering machines.

Brush deburring machines can be integrated with cut-off operations to eliminate work-in-process and increase throughput, and they are flexible enough to be quickly adjusted for various shapes, sizes, and lengths of tubing. Unlike chamfering operations, brush deburring does not leave secondary burrs, brushing equipment is more tolerant of slight variations in machine set-up and tube length, and quality brushes last much longer than cutting inserts on double-end finishers.

Tube end deburring brushes are most commonly manufactured as disposable assemblies which are then mounted onto keyed shafts. High-tensile steel, hard-drawn steel, and Type 302 stainless steel wire are the most common fill materials used in tube end deburring brushes. Weiler offers high quality brushes with wire sizes from .006 to .020 and four available levels of fill density so that the brushing performance can be tailored to the material, burr condition, and budget of the end-user.



Deburring steel tubing on an automated machine.

**Replacement Tube End Deburring Brushes - The brushes in the chart below are a few of the popular Weiler replacement brushes that are available for the most common tube end deburring machines.**

| Dia. | Face Width | Arbor Hole | Wire Size | Brush Density | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|
| 10" | 18" | 3-1/4" | .014 | General Purpose<br>High Performance | 1 | 07340<br>07341 |
| 12" | 18" | 3-1/4" | .014 | General Purpose<br>High Performance | 1 | 07286<br>07342 |
| 12" | 18" | 3-1/4" | .020 | General Purpose<br>High Performance | 1 | 07343<br>07344 |

* The most common arbor hole sizes are 3-1/4" and 2" with 1/2" x 1/4" keyways.
Other arbor holes are available upon request.

Contact your Weiler Sales Rep. or our Customer Service Department for price and availability.

**DID YOU KNOW?**

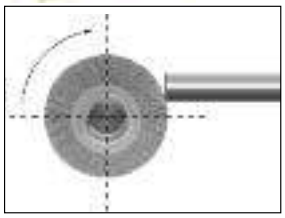
The largest wide face brush we manufacture weighs 152 pounds.

**Custom Tube End Deburring Brushes -** Please use the appropriate specification sheet on the next page when requesting a quotation on a custom tube end deburring brush.

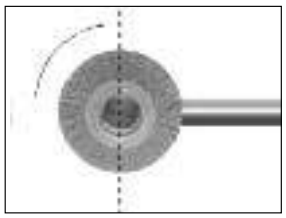
Tech Note

## Brush-Tube Orientation

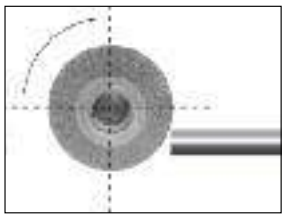
Brush-tube orientation determines which edges of the tube are deburred. The illustrations below show three orientations and the target edge.



Deburring Tube I.D.



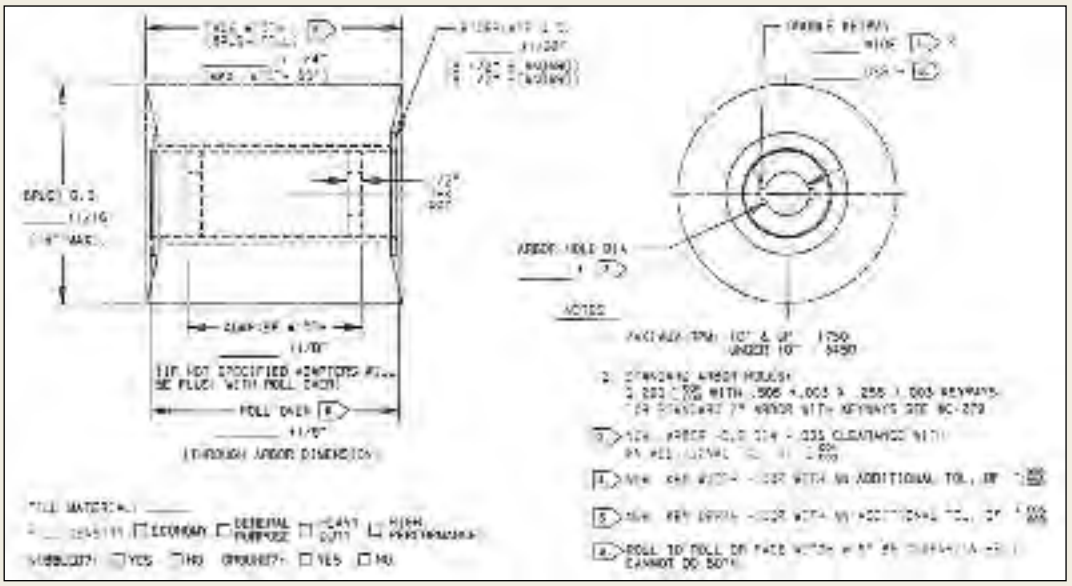
Deburring Tube I.D. and O.D.



Deburring Tube O.D.

# Wide Face Brushes

## Wide Face Brush Specification Sheet - For 8" to 16" brushes



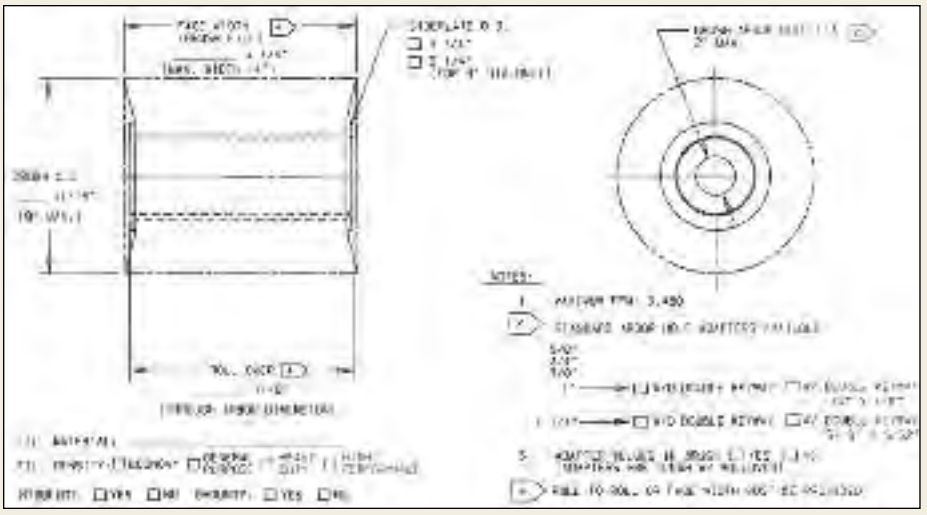
**Name:** _____
**Company Name:** _____
**Address:** _____
_____
**Phone:** (____)_____ **Fax:** (___)_____
**E-mail:** _____
**End-user Name:** _____
**City** _____ **State** _____ **Zip** _____

**For additional information call:**
Weiler's Application Engineering Hotline
toll free at: **888-299-APPS (2777)**

**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**

## Wide Face Brush Specification Sheet (2" I.D.) - For 6" & 8" brushes with a 2" I.D.



**Name:** _____
**Company Name:** _____
**Address:** _____
_____
**Phone:** (____)_____ **Fax:** (___)_____
**E-mail:** _____
**End-user Name:** _____
**City** _____ **State** _____ **Zip** _____

**For additional information call:**
Weiler's Application Engineering Hotline
toll free at: **888-299-APPS (2777)**

**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**

# Display Packaged Product

**Display Packaged Product -** In order to generate impulse purchases, a variety of our most popular Weiler industrial grade items are available in highly visible display packaging to stimulate impulse sales. Customers can easily view the product and assess its high quality. Package labeling includes key technical information and UPC barcodes. A multi-lingual safety slip is included with all products, providing comprehensive information on the safe use of the product.

## Standard Twist Wheels - Provide heavy-duty brushing action with some flexibility; Ideal for demanding cleaning applications on somewhat irregular surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .014 | 1/2"-3/8" | 20 | 3/8" | 5/8" | 1/2" | 7/16" | 25,000 | 1 | 08014P | – |
| 4" | .014 | 1/2"-3/8" | 24 | 1/2" | 7/8" | 1/2" | 7/16" | 20,000 | 1 | 08044P | – |
| 4" | .014 | 5/8"-11 | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 1 | 13106P | 13113P |
| 6" | .014 | 5/8"-1/2" | 24 | 1/2" | 1-3/8" | 1-1/4" | 9/16" | 9,000 | 1 | 08085P | – |


13106P

## Cable Twist Wheel - Maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface prep applications on relatively smooth surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 | 24 | 1/4" | 7/8" | 1/2" | 7/16" | 20,000 | 1 | 13266P |


13266P

## Roughneck® Stringer Bead Wheels - Maximum impact action for fast removal of slag, spatter, oxidation as well as other surface prep and cleaning applications.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | M10 x 1.25<br>5/8"-11 | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 1 | 13125P<br>13131P | –<br>13138P |
| 6" | .020<br>.023 | 5/8"-11 | 56<br>24 | 3/16"<br>1/2" | 1-1/8"<br>1-3/8" | 7/16"<br>9/16" | 12,500 | 1 | 09400P<br>08776P | –<br>– |
| 6-7/8" | .020 | 5/8"-11 | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 1 | 09000P | – |


13131P

## Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 6" | .014 | 5/8"-1/2" | 3/4" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 1 | 01075P |
| 6" | .014 | 5/8"-1/2" | 5/8" | 1-1/16" | – | 1/2" | 6,000 | 1 | 02325P |
| 6" | .014 | 5/8"-1/2" | 7/8" | 1-1/8" | – | 7/8" | 6,000 | 1 | 06645P |
| 7" | .014 | 5/8"-1/2" | 3/4" | 1-9/16" | – | 1/2" | 6,000 | 1 | 02335P |
| 8" | .014 | 5/8" | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 1 | 01175P |


01075P

## Conflex Brushes - Small diameter copper center wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 3" | .008<br>.014 | 1/2" | 1" | 20,000 | 1 | 17615P<br>17617P |


17617P

## Threaded Adapters - For mounting brushes with a 5/8"-11UNC nut to other threaded spindles.

| Fixed Thread Size | Adapted Thread Size | Standard Pack | Item No. |
|---|---|---|---|
| 5/8" - 11 UNC | M10 x 1.25 | 1 | 07771P |
| 5/8" - 11 UNC | M10 x 1.50 | 1 | 07772P |


07771P



12316P

## Knot Wire Cup Brushes - Single Row - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 2-3/4" | .014 | 5/8"-11 UNC | 1" | 14,000 | 1 | 13025P |
| 2-3/4" | .020 | M10 x 1.25<br>5/8"-11 UNC | 1" | 14,000 | 1 | 13281P<br>13286P |
| 3-1/2" | .023 | 5/8"-11 UNC | 7/8" | 13,000 | 1 | 13156P |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316P |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 7,000 | 1 | 12276P* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376P |

* With internal nut



13245P

## Crimped Wire Cup Brushes - Very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; featuring a threaded nut for use on angle grinders.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 3" | .014 | M10 x 1.25<br>5/8"-11 UNC | 1" | 14,000 | 1 | 13240P<br>13245P |
| 4" | .020 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 14036P |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,600 | 1 | 14076P* |

* With internal nut



10012P



10028P

## Knot Wire End Brushes - Feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|
| 3/4" | .014<br>.020 | 1-1/8" | 22,000 | 1 | 10025P<br>10026P |
| 1-1/8" | .014<br>.020 | 7/8" | 22,000 | 1 | 10027P<br>10028P |

## Crimped Wire End Brush - Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|
| 1" | .020 | 1-1/8" | 20,000 | 1 | 10012P |



13001

## Mini-Grinder Kit - For use on small right angle grinders. All products have a 5/8"-11 Arbor Hole

| Kit Contains | Item No. |
|---|---|
| 4-1/2" Abrasive Flap Disc (Zirconium Grain, 60 Grit); Item #50519:<br>For grinding and finishing in one step. | 13001 |
| 2-3/4" Knot Wire Cup Brush (.020 Steel Wire); Item #13286:<br>For cleaning large surface areas. | |
| 4" Stringer Bead Knot Wire Wheel (.020 Steel Wire); Item #13131<br>For weld cleaning, deburring and surface preparation. | |



13002

## Air Tool/Drill Accessory Kit -

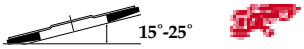
All products have a 1/4" Stem and are ideal for general purpose cleaning and deburring in recessed or confined areas.

| Kit Contains | Item No. |
|---|---|
| 3" Crimped Wire Wheel (.0118 Steel Wire); Item #17616 | 13002 |
| 1-3/4" Crimped Wire Cup Brush (.0118 Steel Wire); Item #14301 | |
| 3/4" Crimped Wire End Brush (.020 Steel Wire); Item #10008 | |
| 3" Abrasive Flap Wheel (Aluminum Oxide Grain, 80 Grit); Item #52028 | |

# Display Packaged Product

## Vortec Pro® - Display Packaged Flap Discs- Angled Style (Type 29)

**Convenient hang-card makes increasing point-of-purchase sales easy!**




| Diameter | Grit Size | Max. RPM | Phenolic Back - Zirconium | | | Aluminum Back - Zirconium | | |
|---|---|---|---|---|---|---|---|---|
| | | | Arbor Hole | Standard Pack | Item Number | Arbor Hole | Standard Pack | Item Number |
| 4" | 36 | 15,000 | 5/8" | 6 | 30822 | 5/8"-11 | 6 | 30821 |
| | 60 | | | | 30825 | | | 30823 |
| | 80 | | | | 30826 | | | 30824 |
| 4-1/2" | 36 | 13,000 | 7/8" | 6 | 30828 | 5/8"-11 | 6 | 30827 |
| | 60 | | | | 30831 | | | 30829 |
| | 80 | | | | 30832 | | | 30830 |



30828

## Multi-Purpose Brush Countertop Display -

**Economical brushes provide lasting, efficient service at minimal cost.**

| Display Contains | Item No. |
|---|---|
| (20) 2" Multi-Purpose Brushes, White Bristle - Wood Handle; Item #40068<br>(10) 3" Multi-Purpose Brushes, White Bristle - Wood Handle; Item #40070 | 61011 |



61011

## Stainless Steel Scratch Brush Countertop Display -

**Ideal for removing rust, scale and paint from metal surfaces.**

| Display Contains | Item No. |
|---|---|
| (36) Stainless Steel Small Hand Scratch Brushes,<br>7-1/2" x 1/2" Block Wood Handle; Item #44167 | 61012 |



61012

**FREE Sweeping Center Rack And Header with Qualifying Order - Rack #44901 and Header #44902**

Contact Customer Service at 800-835-9999 for details on how to receive a FREE rack and header to use when displaying Weiler maintenance products.
**A Qualifying Order is required.** Below is an example of a Qualifying Order.

### Recommended List of Product for Sweeping Center Display

| | Description | Item No. |
|---|---|---|
| 6 each: | 24" Contractor Broom, Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center, 3" Trim | 44581 |
| | 24" Contractor Broom, Palmyra, 4" Trim | 44584 |
| | 24" Contractor Broom, Medium Maroon Polypropylene, 3-1/4" Trim | 44587 |
| | 24" Contractor Broom, Stiff Blue Polypropylene, 3-1/4" Trim | 44590 |
| 12 each: | 57" Light Industrial Corn Broom, 17" Trim | 44548 |
| 24 each: | 5' x 1-1/8" Contractor Broom Handle with Free Brace | 44635 |

Item #s 44901 & 44902 must appear on purchase order.



42300

**FREE Pro-Flex™ Display Box with Qualifying Order - Display Box #44625**

Contact Customer Service at 800-835-9999 for details on how to receive your FREE display box to use when displaying Weiler Pro-Flex products.
**A Qualifying Order is required.** Below is an example of a Qualifying Order.

### Recommended List of Product for Pro-Flex™ Display Box

| | Description | Item No. |
|---|---|---|
| 3 each: | 24" Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center, 3" Trim | 44600 |
| | 24" Palmyra, 4" Trim | 44601 |
| | 24" Medium Maroon Polypropylene, 3-1/4" Trim | 44604 |
| | 24" Stiff Blue Polypropylene, 3-1/4" Trim | 44606 |

Each sweep comes with handle attached and ready to display.

Item #44625 must appear on purchase order.



44625

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| 86156 | 84 |
| 86159 | 93 |
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| 86167 | 85 |
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| 99346 | 37 |
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| 99791 | 53 |
| 99801 | 168 |
| 99805 | 168 |
| 99806 | 168 |
| 99823 | 48 |
| 99825 | 48 |

# Weiler® Products For The Rail Axle Industry












- Cleaning and Reconditioning Products
- Grease Application Products
- Maintenance Products

**High Performance Consumables For Axle Reconditioning, Repair & Maintenance**

# Railcar Axle Reconditioning Products



Knot cup brush cleaning an axle body.

**Power Brushes** are ideal tools for the removal of accumulated grease, road dirt and rail dust from axles either prior to or after the disassembly of the wheel set. Wire-filled brushes do not remove base metal, and they cut through caked-on surface contaminants much more quickly and efficiently than abrasive products.

## Large Diameter Knot Wire Wheels -

**For automated cleaning of axles; high aggression provides rapid removal of accumulations from axle bodies.**



09020

| Dia. | Wire Size | Arbor Hole | Number of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 12" | .020<br>.020<br>.023 | 2"◆ | 56<br>66<br>66 | 5/8"<br>3/4"<br>3/4" | 2-3/4"<br>2-1/4"<br>2-1/4" | 13/16" | 4,500<br>5,000<br>5,000 | 2 | 09710-14+<br>09950+<br>09870 |
| 14" | .0118<br>.014<br>.020 | 2" | 80 | 3/4" | 2-1/2" | 5/8" | 5,000 | 2 | 08300<br>08310<br>08330 |
| 14" | .014<br>.016<br>.020 | 2"◆ | 90 | 3/4" | 1-1/2" | 5/8" | 5,000 | 2 | 09020*<br>09030+<br>09040* |
| 15" | .0118<br>.014<br>.020 | 2" | 80 | 3/4" | 3" | 5/8" | 5,000 | 2 | 09960<br>09980<br>09990 |
| 15" | .014<br>.016<br>.020 | 2"◆ | 90 | 3/4" | 2" | 5/8" | 5,000 | 2 | 09060+<br>09070+<br>09080* |

◆ 1/2" x 1/4" Double Keyway
* Economy

+ Special order item. Contact Customer Service for details. Other arbor hole sizes are available for above items, contact Customer Service for details.

## Large Diameter Crimped Wire Wheels - For automated cleaning of axles; flexible brushing action allows greater conformability for thorough cleaning of wheel seats, dust guards and journal filets.



03200

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|
| 10" | .0118<br>.014<br>.020 | 2" | 2" | 1-7/8" | 1-5/8" | 4,000 | 1 | 03190<br>03200<br>03210 |

## Knot Wire Cup Brushes - For manual axle cleaning operations and touch-up work; high aggression for efficient cleaning action on right angle grinders.



12376

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 3-1/2" | .023 | M14 x 2.0<br>5/8"-11 UNC | 7/8" | 13,000 | 1 | 13152<br>13156 |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316 |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12276* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376 |

* Internal Nut

## Power Tube Brushes - For manual cleaning of internal threads for axle end-cap retaining bolts; double stem, double spiral construction provides rapid cleaning on drills.



21115

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 1" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21115 |
| 1-1/8" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21168+ |
| 1-1/4" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21167 |

+ Special order item. Contact Customer Service for details.

**Coated and Non-Woven Abrasives** are ideal tools for surface reconditioning and final finishing of wheel seats, bearing journals and bearing-journal filets. Coated abrasives cut more quickly and are typically used for blending and initial finishing work. Non-Woven abrasives produce finer final finishes and are very efficient polishing tools.



A surface conditioning disc polishing an axle journal.

### Tiger Disc - Angled Style (Type 29) - Phenolic Backing - Zirconium Grain

**Maximum aggression and long life; for blending and finishing journals.**




| Diameter | Grit Size | Standard Pack | Max. RPM | Item Number 7/8" Arbor | Item Number 5/8"-11 Arbor |
|---|---|---|---|---|---|
| 4-1/2" | 40 | 10 | 13,000 | 50603 | 50608* |
| | 60 | | | 50604 | 50609* |
| | 80 | | | 50605 | 50610* |
| | 120 | | | 50606 | – |
| 7" | 40 | 10 | 8,600 | 50623 | 50643* |
| | 60 | | | 50624 | 50644* |
| | 80 | | | 50625 | 50645* |
| | 120 | | | 50626 | 50646* |

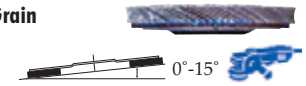
* Patent # 6,945,863



50603

### Big Cat® - High Density Flat Style (Type 27) - Phenolic Backing - Zirconium Grain

**Increased conformability and maximum life; ideal for blending and finishing journal filets and dust guards.**




| Diameter | Grit Size | Standard Pack | Max. RPM | Item Number 7/8" Arbor | Item Number 5/8"-11 Arbor |
|---|---|---|---|---|---|
| 4-1/2" | 40 | 10 | 12,000 | 50803 | 50808* |
| | 60 | | | 50804 | 50809* |
| | 80 | | | 50805 | 50810* |
| | 120 | | | 50806 | – |
| 7" | 40 | 10 | 8,600 | 50823 | 50843* |
| | 60 | | | 50824 | 50844* |
| | 80 | | | 50825 | 50845* |
| | 120 | | | 50826 | 50846* |

* Patent # 6,945,863



52027

### Tiger® Mounted Flap Wheels - 1/4" Stem - Aluminum Oxide.

**For touch-up work on sealing and bearing surfaces.**



| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3" | 1" | 60 | 23,000 | 10 | 52027 |
| | | 80 | | | 52028 |
| | | 120 | | | 52029 |



51522

### Hook & Loop Style Surface Conditioning Discs - For polishing and final finishing.



| Diameter | Grade | Standard Pack | Item Number |
|---|---|---|---|
| 7" | Medium (Maroon) | 10 | 51522 |
| 8" | Medium (Maroon) | 10 | 51525 |

### Back-up Pads - For Grinders with 5/8"-11 Spindles.

| Diameter | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|
| 7" | 6,000 | 1 | 51578 |
| 8" | 4,500 | 1 | 51579 |

Do not exceed maximum RPM of back-up pad.



51579

### Hand Pads - Aluminum Oxide - For touch-up work on sealing and bearing surfaces.

| Size | Grade Type | Grade | Description | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 9" | Industrial | Medium | Economy General Purpose (Maroon) | 60 | 51460 |
| 6" x 9" | Commercial | Fine | Economy (Green) | 400 | 51456 |



51456

# Repair & Maintenance Products



Applying grease with a paint roller.



56464



40185



44663



49061



49020



25242

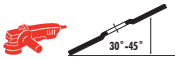
Please note that this brochure features only a small assortment of the surface conditioning products offered by Weiler. The featured items have been selected specifically based upon their popularity in the rail axle market.

For the full offering of Weiler power brushes, abrasives, and maintenance products, please refer to our Solutions Resource Guide, visit our website or call our Applications Hotline at 888-299-2777 to discuss your requirements with a product specialist.

**Bonded Abrasive & Maintenance Products** are cost-effective tools for general purpose grinding and cutting, applying lubricants such as wheel mounting compound and bearing grease, and the clean up of chips and debris produced by the machining of wheels and axles.

## Vortec Pro® Type 27 Grinding Wheels -

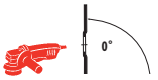
**For general purpose grinding and reworking of part features.**




| Diameter | Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item No. |
|---|---|---|---|---|---|---|
| Aluminum Oxide - For General Purpose Steel Applications | | | | | | |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 13,300 | 10<br>25 | 56454<br>56464 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24N - Metal | 13,300 | 10<br>25 | 56455<br>56457 |
| 7" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 8,500 | 10<br>20 | 56468<br>56467 |
| 9" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 6,600 | 10<br>20 | 56470<br>56442 |

## Vortec Pro® Small Type 1 Reinforced Cut-Off Wheel -

**For general purpose cutting and repair work.**




| Diameter | Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item No. |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | WA60T - Metal | 13,500 | 50 | 56281* |

*Contaminant-free.

## Vortec Pro® Economy Chip and Oil Brush - White Bristle - Wood Handle

**For light duty application of grease and wheel mounting compound.**

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" | 3/8" | 1-3/4" | 12 | 40185 |

## Utility Scrub Brush - For application of grease and oil.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 20" | White Tampico | 2" | Foam | 12 | 44663 |

## Industrial Grade Roller - Poly blend with PVC core - For application of grease and oil.

| Size | Nap | Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 9" | 5mm | Smooth | 12 | 49061 |

### Roller Frame - Vortec Pro® Standard-duty

| Size | Description | Standard Pack | Item Number |
|---|---|---|---|
| 9" | 1/4" dia. frame with 4 wire cage | 24 | 49020 |

## Vortec Pro® Garage Brushes & Handle - Lacquered Hardwood Block

**Reliable and efficient brushes at a value price. For heavy sweeping of shop debris.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 24" | Palmyra | 4" | 1 | 25242 |
| 24" | Maroon Polypropylene | 3-1/4" | 1 | 25239 |
| 60" Hardwood handle with heavy-duty threaded metal tip | | | 12 | 44300 |

## Upright Brooms - Ideal for sweeping shop floors, reaching into corners, etc.

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item No. |
|---|---|---|---|---|---|
| Light Industrial Brooms - Better Quality | | | | | |
| 5 sews - 7/8" handle | Corn & Fiber | 17" | 57" | 12 | 44548 |
| Warehouse Broom - Heavy-Duty | | | | | |
| 4 sews - 1-1/8" handle<br>Wire banded | Corn & Fiber | 18" | 57" | 12 | 44008 |


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# Products for Aluminum, Stainless and Other Hard-to-Grind Metals

## Saber Tooth™ Ceramic Abrasive Products













**Ceramic Abrasive Products:**

- Flap Discs
- Blending Discs
- Resin Fiber Discs
- Belts

**Fast-cutting, ceramic abrasives for superior performance on stainless, aluminum and other hard-to-grind metals.**



Weiler TIGER® DISC

# Saber Tooth™ Your "Hard-to-Grind" Metals Solution!

**Weiler's Saber Tooth Ceramic Abrasives provide cool, fast-cutting action on Aluminum, Stainless Steel and other hard-to-grind metals, resulting in *lower grinding and finishing costs.***

- **Fast cut and long life** due to the aggressive self-sharpening ceramic grain.
- **Specially formulated grinding aid** prevents dulling and glazing of grain and allows for "cool-cutting" protecting high value parts from heat discoloration.
- **Designed to work with heat sensitive materials** such as Aluminum, Stainless Steel, Inconel, Titanium and other hard-to-grind metals.

- Weld Blending
- Grinding
- Deburring
- Deflashing
- Surface Finishing
- Edge Chamfering




50109




- Weiler's Ceramic Flap Discs are contaminant free, which means Iron, Sulfur and Chlorine is ≤ 0.1%.
- Bright red grinding aid provides cool, fast cutting.

56494



56495

## Flap Discs

**Saber Tooth Ceramic Flap Discs -** Grind and finish aluminum, stainless steel and other hard-to-grind metals in ONE step, resulting in fewer changeovers and increased productivity – and that means instant value.




**Saber Tooth Ceramic Flap Discs - Phenolic Backing, Angled Style (Type 29)**

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Package | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 50100<br>50101<br>50102<br>50103 |
| 4 1/2" | 5/8"-11 | 36<br>40<br>60<br>80 | 13,000 | 10 | 50104<br>50105<br>50106<br>50107 |
| 7" | 7/8" | 36<br>40<br>60<br>80 | 8,600 | 10 | 50108<br>50109<br>50110<br>50111 |
| 7" | 5/8"-11 | 36<br>40<br>60<br>80 | 8,600 | 10 | 50112<br>50113<br>50114<br>50115 |

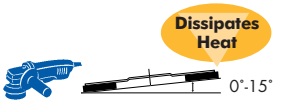
### Adapting Nuts and Spanner Wrench

| Description | Thread Size | Use With | Standard Package | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 5/8"-11 | Discs with 7/8" Arbor | 1 Pair | 56494 |
| Spanner Wrench | – | Adapting Nuts | 1 | 56495 |

**Saber Tooth High Density Ceramic Flap Discs -** A thicker disc with larger flaps which conforms to curved and irregular surfaces while producing a consistent finish. Provides increased conformability and maximum life when grinding aluminum, stainless steel and other hard-to-grind metals.




### Saber Tooth High Density Ceramic Flap Discs -
**Phenolic Backing, Flat Style (Type 27)**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Package | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50130<br>50131<br>50132 |
| 4 1/2" | 5/8"-11 | 40<br>60<br>80 | 13,000 | 10 | 50133<br>50134<br>50135 |
| 7" | 7/8" | 40<br>60<br>80 | 8,600 | 10 | 50136<br>50137<br>50138 |
| 7" | 5/8"-11 | 40<br>60<br>80 | 8,600 | 10 | 50139<br>50140<br>50141 |



50131

**Exclusive!**
**Saber Tooth Trimmable Ceramic Flap Discs**
This is the first line of ceramic flap discs in the marketplace that includes a trimmable backed disc, providing these additional benefits:

- **Trimmable backing for extended disc life.**
- **High flexibility** which enables you to access hard-to-reach areas such as right angles and irregular shapes, and grind on-edge without changing tools, increasing productivity.
- **Performance-engineered** with a non-marking backing that will not damage the work-piece, resulting in less re-work and scrap.



The backing can be trimmed up to 3/8" from the original diameter, dramatically extending the life of the disc.




50117

### Saber Tooth Ceramic Flap Discs - Trimmable Backing, Angled Style (Type 29)



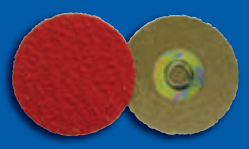

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Package | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50117<br>50118<br>50119 |
| 4 1/2" | 5/8"-11 | 40<br>60<br>80 | 13,000 | 10 | 50121<br>50122<br>50123 |



**NOTE**

**All applicable Weiler Abrasives comply with the Safety Standards of the American National Standards Institute: ANSI B7.1 "Safety Requirements – For the Use, Care and Protection of Abrasive Wheels".**

# Blending Discs & Resin Fiber Discs


60150


60170


51552


60508


59557


59601


59604


59603

**Saber Tooth Ceramic Blending Discs -** These cloth backed, coated abrasive discs are ideal for a wide range of light fabrication, repair and maintenance applications on aluminum, stainless steel or other hard-to-grind metals.

### Saber Tooth Ceramic Blending Discs

Compatible with Norton Speed-Lok® TS back-up pads.

Compatible with 3M Roloc™ back-up pads.

| Diameter | Grit Size | Std. Pkg. | Metal Hub Item No. | Plastic Button Item No. |
|---|---|---|---|---|
| 2" | 36 | 100 | 60150 | 60170 |
| | 60 | | 60151 | 60171 |
| | 80 | | 60152 | 60172 |
| 3" | 36 | 50 | 60155 | 60175 |
| | 60 | | 60156 | 60176 |
| | 80 | | 60157 | 60177 |

Dissipates Heat

### Accessories for Blending Discs

| Description | Size | Max. RPM | Std. Pkg. | Item No. |
|---|---|---|---|---|
| Metal Hub Style Back-up Pad | 2" | 25,000 | 1 | 60508 |
| Metal Hub Style Back-up Pad | 3" | 20,000 | 1 | 60509 |
| Plastic Button Style Back-up Pad | 2" | 25,000 | 1 | 51551 |
| Plastic Button Style Back-up Pad | 3" | 20,000 | 1 | 51552 |

Do not exceed maximum RPM of back-up pad.

**Saber Tooth Ceramic Resin Fiber Discs -** These fiber backed, coated abrasive discs are designed for all purpose weld blending, grinding, surface preparation and finishing on Aluminum, Stainless Steel and other hard-to-grind metals.

### Saber Tooth Ceramic Resin Fiber Discs - Unique bright red color.

Dissipates Heat

| Diameter | Arbor Hole | Grit Size | Std. Pkg. | Item No. |
|---|---|---|---|---|
| 4-1/2" | 7/8" | 24 | 25 | 59550 |
| | | 36 | | 59551 |
| | | 50 | | 59552 |
| | | 60 | | 59553 |
| | | 80 | | 59554 |
| 5" | 7/8" | 24 | 25 | 59557 |
| | | 36 | | 59558 |
| | | 50 | | 59559 |
| | | 60 | | 59560 |
| | | 80 | | 59561 |
| 7" | 7/8" | 24 | 25 | 59564 |
| | | 36 | | 59565 |
| | | 50 | | 59566 |
| | | 60 | | 59567 |
| | | 80 | | 59568 |

### Accessories for Resin Fiber Discs

| Description | Thread Size | Max. RPM | Std. Pkg. | Item No. |
|---|---|---|---|---|
| 4-1/2" Back-up Pad | 5/8"-11 | 11,000 | 1 | 59611 |
| 5" Back-up Pad | 5/8"-11 | 10,000 | 1 | 59600 |
| 7" Back-up Pad | 5/8"-11 | 8,500 | 1 | 59601 |
| Spanner Wrench | – | – | 1 | 59603 |
| Disc Nut | 5/8"-11 | – | 1 | 59604 |



**Ceramic Belts also available!**
Contact Customer Service at 800-835-9999 for available sizes and grits.

Distributed By:


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Form Reorder No.: WC615 Rev 8-13 • 8135LP

# TIGER PAW






## CUTTING-EDGE ABRASIVE FLAP DISCS FOR STEEL AND STAINLESS STEEL METALWORKING APPLICATIONS

# TIGER PAW™. GET THE EDGE.

**GRINDS BETTER. LASTS LONGER. DOES MORE.** For steel and stainless steel metalworking applications, you need more than just another abrasive flap disc. You need maximum aggression for sustained stock removal. You need superior edge grinding. And you need a contaminant-free, long-life solution. **You need Weiler Tiger Paw discs.**

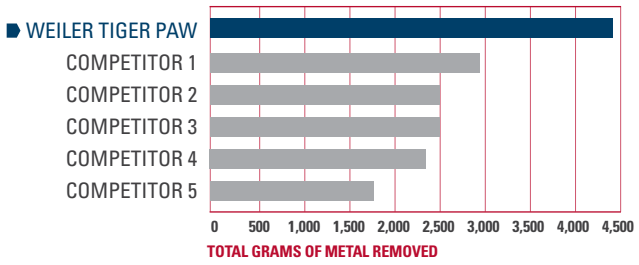


- **100% High-Performance Zirconia Alumina Grain** – Hardworking and long lasting. Engineered coating density is perfect for demanding applications like edge grinding.
- **Superior Grain Retention** – Lasts longer to maintain a perfect cutting angle. Sustained stock removal when grinding on-edge.
- **Engineered Poly/Cotton Cloth** – Eliminates premature shedding to maximize disc life.
- **Contaminant-Free** – Perfect for worry-free use on stainless steel and other higher-priced materials.
- **Grind and Finish in One Step** – One disc does it all. Saves time and money.
- **American Made** – Highest quality and quick availability.

**TESTED. PROVEN. TIGER PAW GRINDS MORE, LASTS LONGER.**
In a standardized test, Weiler Tiger Paw discs removed more material and lost less cloth than any other tested competitor — your assurance of higher productivity and lower costs.

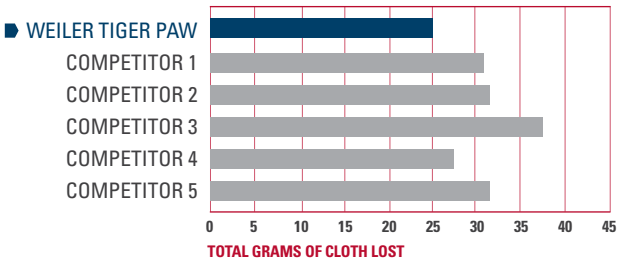
## TIGER PAW REMOVES MORE MATERIAL

**TOTAL GRAMS OF METAL REMOVED FROM WORKPIECE OVER LIFE OF FLAP DISC**




## TIGER PAW LASTS LONGER

**TOTAL GRAMS OF CLOTH LOST OVER LIFE OF FLAP DISC**




***Test Procedure:*** *Weiler Tiger Paw 4-1/2" Type 29 standard density flap disc vs. similar competing flap discs. Test grinder mounted at 15° angle against 1/8" workpiece with 15 pounds of pressure. Bi-directional 8" travel. Discs and workpiece weighed after each minute of operation. Tiger Paw usable life: 17 minutes. Competitors' usable life: 8 – 10 minutes.*

## PICK YOUR PERFORMANCE




**1** **Premium – Original Tiger®**

- Weld blending
- Ideal for flat and contoured surfaces
- Superior life
- Industrial grade
- Broadest offering
- Most cloth




**2** **High Performance – Tiger Paw™**

- Edge grinding
- Extended life
- Heavy duty
- Excellent grain retention
- 100% zirconia alumina grain




**3** **Fast Cut – Vortec Pro®**

- Weld blending at a value price
- Good life
- Standard duty

# TIGER PAW ANGLED AND FLAT STYLE FLAP DISCS

Designed for high performance and long life when used on steel and stainless steel. Perfect for demanding applications like edge grinding.
**Typical applications:** weld blending, deburring, deflashing, stock removal, surface finishing, edge chamfering, etc.



## Angled Style (Type 29)








51118



51147

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4" | 5/8" | 40 | 15,000 | 10 | 51104 |
| | | 60 | | | 51105 |
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51118 |
| | | 40 | | | 51119 |
| | | 60 | | | 51120 |
| | | 80 | | | 51121 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51123* |
| | | 40 | | | 51124* |
| | | 60 | | | 51125* |
| | | 80 | | | 51126* |
| 5" | 7/8" | 40 | 12,000 | 10 | 51129 |
| | | 60 | | | 51130 |
| 5" | 5/8"-11 Nut | 36 | 12,000 | 10 | 51153* |
| | | 40 | | | 51132* |
| | | 60 | | | 51133* |
| | | 80 | | | 51154* |
| 7" | 7/8" | 40 | 8,600 | 10 | 51145 |
| | | 60 | | | 51150 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51149* |
| | | 40 | | | 51146* |
| | | 60 | | | 51147* |
| | | 80 | | | 51148* |



## Flat Style (Type 27)








51115

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4" | 5/8" | 40 | 15,000 | 10 | 51101 |
| | | 60 | | | 51102 |
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51107 |
| | | 40 | | | 51108 |
| | | 60 | | | 51109 |
| | | 80 | | | 51110 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51112* |
| | | 40 | | | 51113* |
| | | 60 | | | 51114* |
| | | 80 | | | 51115* |
| 5" | 7/8" | 40 | 12,000 | 10 | 51134 |
| | | 60 | | | 51135 |
| 5" | 5/8"-11 Nut | 36 | 12,000 | 10 | 51155* |
| | | 40 | | | 51156* |
| | | 60 | | | 51157* |
| | | 80 | | | 51158* |
| 7" | 7/8" | 40 | 8,600 | 10 | 51137 |
| | | 60 | | | 51138 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51139* |
| | | 40 | | | 51140* |
| | | 60 | | | 51142* |
| | | 80 | | | 51143* |

# TIGER PAW XHD SUPER HIGH DENSITY FLAP DISCS

Super high density abrasive delivers 40% more life and conformability than a standard flap disc — ideal for exceptionally demanding steel and stainless steel applications. Thicker and larger flaps conform to curved and irregular shapes to produce a consistent finish.

**Typical applications:** weld blending, deburring, deflashing, stock removal, surface finishing, edge chamfering, etc.



## Flat Style (Type 27)








51165



51168

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 12,000 | 10 | 51160 |
| | | 40 | | | 51161 |
| | | 60 | | | 51162 |
| | | 80 | | | 51163 |
| 4-1/2" | 5/8"-11 Nut | 36 | 12,000 | 10 | 51164* |
| | | 40 | | | 51165* |
| | | 60 | | | 51166* |
| | | 80 | | | 51167* |
| 7" | 7/8" | 40 | 8,600 | 10 | 51170 |
| | | 60 | | | 51171 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51168* |
| | | 40 | | | 51169* |

# ADAPTING NUTS AND SPANNER WRENCH



56494



56495

| Description | Thread Size | For Use With | Std. Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 3/8"-24 | 4" Flap Discs with 5/8" Arbors (Can be used with an adjustable or combination wrench) | 1 | 56484 |
| Adapting Nuts | 5/8"-11 Nut | 4-1/2" & 7" Flap Discs with 7/8" Arbors | 1 | 56494 |
| Spanner Wrench | – | Item No. 56494 only | 1 | 56495 |

## Mounting Flap Discs with 5/8" & 7/8" Arbors




** Patent # 6,945,863*



For the full offering of Weiler power brushes, abrasives and maintenance products, please refer to our Solutions Resource Guide or visit our website. To discuss specific requirements with a product specialist, call our Applications Hotline at 888.299.2777.

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# TIGER X







TIGER® X

**FASTER GRINDING AND LONGER LIFE FOR STEEL AND STAINLESS STEEL METALWORKING.**

# UNLEASH TIGER X

**Tiger X flap disc raises the bar** for those who are driven to get the job done right and done fast. Tiger X holds nothing back with its industry-first X3 technology that combines an advanced anchoring system, dual flap design and engineered backing. The combination delivers fast grinding AND long disc life for increased productivity.



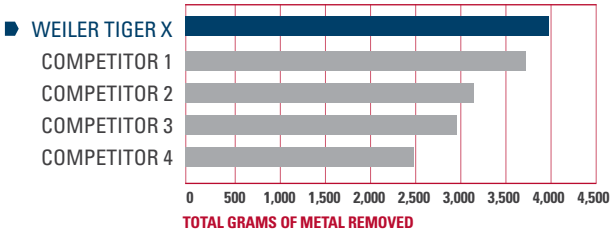
Tiger X delivers the ultimate productivity enhancing X-Factors so you can do more in less time while lowering your consumable costs.

- **Increased Productivity** – The combination of aggressive grinding and long disc life deliver the ultimate X factor, a disc that gets more done in less time.
- **Lower Consumable Costs** – The combination of extreme aggressive grinding and long disc life means you get more for your money.
- **Enhanced Worker Safety** – Increased aggression lets professionals use less force to get equal or better results. This means less stress and reduced fatigue.
- **Greater Versatility** – X3 technology allows for greater versatility, reducing the need to switch discs when changing applications.

**TESTED. PROVEN. TIGER X WORKS FASTER, LONGER.**

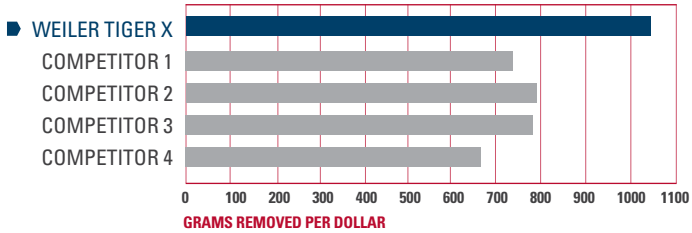
## TIGER X REMOVES UP TO 40% MORE MATERIAL

**TOTAL GRAMS OF METAL REMOVED FROM WORKPIECE OVER LIFE OF FLAP DISC**




## GET UP TO 40% MORE FOR YOUR MONEY

**TOTAL GRAMS OF METAL REMOVED FOR EVERY DOLLAR YOU SPEND**




***Test Procedure:*** *Weiler Tiger X 4-1/2" Type 29 standard density flap disc vs. similar competing flap discs. Test grinder mounted at 15° angle against 1/2" workpiece with 15 pounds of pressure. Bi-directional 8" travel. Discs and workpiece weighed after 5 minutes of operation for life of product. Tiger X usable life: 100 minutes. Competitors' usable life: 65 – 90 minutes.*

TIGER®



## THE ULTIMATE PERFORMANCE LINE

Weiler's Tiger discs are engineered to maximize productivity and minimize operating costs for professionals who demand more. Get the right flap disc for your application and **get more done with Tiger.**

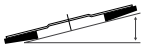
# TIGER X ANGLED AND FLAT STYLE FLAP DISCS

MADE IN USA

**Typical applications:** weld blending, flat surface grinding / finishing, heavy stock removal, light pressure blending / deburring, etc.



## Angled Style (Type 29)








51205





51216

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51200 |
| | | 40 | | | 51201 |
| | | 60 | | | 51202 |
| | | 80 | | | 51203 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51204 |
| | | 40 | | | 51205 |
| | | 60 | | | 51206 |
| | | 80 | | | 51207 |
| 5" | 7/8" | 36 | 12,000 | 10 | 51208 |
| | | 40 | | | 51209 |
| | | 60 | | | 51210 |
| | | 80 | | | 51211 |
| 5" | 5/8"-11 Nut | 40 | 12,000 | 10 | 51212 |
| | | 60 | | | 51213 |
| | | 80 | | | 51214 |
| 7" | 7/8" | 36 | 8,600 | 10 | 51215 |
| | | 40 | | | 51216 |
| | | 60 | | | 51217 |
| | | 80 | | | 51218 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51219 |
| | | 40 | | | 51220 |
| | | 60 | | | 51221 |
| | | 80 | | | 51222 |



## Flat Style (Type 27)








51232

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40 | 13,000 | 10 | 51223 |
| | | 60 | | | 51224 |
| | | 80 | | | 51225 |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 51226 |
| | | 60 | | | 51227 |
| | | 80 | | | 51228 |
| 7" | 7/8" | 40 | 8,600 | 10 | 51229 |
| | | 60 | | | 51230 |
| | | 80 | | | 51231 |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 51232 |
| | | 60 | | | 51233 |
| | | 60 | | | 51234 |

Ceramic Alumina and Zirconia Alumina grain mix

**Grinds Faster and Lasts Longer.**



# ADAPTING NUTS AND SPANNER WRENCH



56494



56495

| Description | Thread Size | For Use With | Std. Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 5/8"-11 Nut | 4-1/2" & 7" Flap Discs with 7/8" Arbors | 1 | 56494 |
| Spanner Wrench | – | Item No. 56494 | 1 | 56495 |

## Mounting Flap Discs with 7/8" Arbors




** Patent # 6,945,863*

**Industry First**

**X3**

**Technology**

grain anchoring system, dual flap design, & engineered backing.



For the full offering of Weiler power brushes, abrasives and maintenance products, please refer to our Full Line Catalog or visit our website. To discuss specific requirements with a product specialist, call our Applications Hotline at 888.299.2777.

Weiler Corporation
One Weiler Drive
Cresco, PA 18326
USA

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VENDING




# VENDING MADE EASY

## HIGH PERFORMANCE VENDING-READY PRODUCTS


WHAT YOU NEED.
WHEN YOU NEED IT.

# WEILER PRODUCTS FIT
# INTO YOUR VENDING PROGRAM

We understand that a successful vending program requires products that fit into a machine without hassle and dispense properly, every time. Weiler now offers single pack quantities of vending-ready products. Our packaging eliminates the need to re-pack products, which can be both expensive and time consuming.

In addition to single packs, Weiler's products are also available in small intermediate pack quantities for easy refill. This minimizes the handling from your storage location all the way to the end-user. Our products come the way you need them, ready to load into vending machines.

## WEILER VENDING-READY PRODUCTS ARE:

### QUALITY:
The same high performance Weiler products you know and trust now available for vending.

### PROVEN:
Our Weiler vending products are guaranteed to work within all Helix-coil vending machines.

### CONVENIENT:
We package and ship in easily refillable quantities, reducing your costs.

### RELIABLE:
All vending products guaranteed in-stock for quick, reliable shipping anywhere at any time.



Our vending program drives cost out of the supply chain for our business partners by simplifying the vending process.

# END BRUSHES

**STEM-MOUNTED END BRUSHES** are intended primarily for use on high-speed portable power tools for addressing smaller surfaces and recessed areas. End brushes feature an internal 1/4" steel stem for safe operation at high speed and quick mounting into the collet or chuck of electric or pneumatic die grinders.





10041V

**CIRCULAR FLARED END BRUSHES** – Steel – Suited for broad and slightly contoured surfaces.



| Diameter | Wire Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|
| 3″ | .008 | 16,000 | 1 | 10041V |



10026V

**KNOT WIRE END BRUSHES** – Provides heavy-duty brushing action in recessed areas.



| Diameter | Wire Size | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 3/4″ | .020 | 7/8″ | 22,000 | 3 | 10026V | – |
| 3/4″ | .014 | 7/8″ | 22,000 | 3 | – | 10029V |
| 1-1/8″ | .014 | 7/8″ | 22,000 | 3 | 10027V | 10031V |
| 1-1/8″ | .020 | 7/8″ | 22,000 | 3 | 10028V | – |
| 1-1/8″ | .006 | 1″ | 20,000 | 3 | 10141V | – |



14301V

**UTILITY CRIMPED WIRE CUP BRUSHES** – Small diameter cup brushes for use on air tools.



| Diameter | Wire Size | Trim Length | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Steel |
| 1-3/4″ | .0118 | 3/4″ | 13,000 | 1 | 14301V |
| 2-3/4″ | .0118 | 7/8″ | 6,000 | 1 | 14302 |



10009V

**CRIMPED WIRE END BRUSHES** – Solid end construction for cleaning hard-to-reach areas.



| Diameter | Wire Size | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2″ | .006 | 7/8″ | 25,000 | 3 | 10001V | 10013V |
| 3/4″ | .006 | 7/8″ | 22,000 | 3 | 10005V | 10017V |
| 3/4″ | .020 | 7/8″ | 22,000 | 3 | 10008V | – |
| 1″ | .006 | 1″ | 22,000 | 3 | 10009V | 10021V |
| 1″ | .0104 | 1″ | 22,000 | 3 | 10010V | 10022V |
| 1″ | .020 | 1-1/8″ | 22,000 | 3 | 10012V | – |



**MOUNT END BRUSHES SAFELY** - When mounting end brushes, the amount of overhang from the tool should be minimized by clamping on as much of the straight portion of the stem as possible. However, the collet or chuck should NOT clamp on the radius at the base of the stem to insure a secure hold before use. See photo on left for the correct brush orientation.

# TUBE BRUSHES

**STEM-MOUNTED TUBE BRUSHES** are intended for internal cleaning and deburring applications in tubing, pipe, drilled-and tapped holes, and machined bores and passages.





**CONFLEX BRUSHES** – Copper center wheels mounted onto a 1/4" stem to provide very flexible brushing.

| Diameter | Wire Size | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 2" | .0118 | 3/8" | 1/2" | 20,000 | 1 | 17610V | 17611V | – |
| 3" | .008 | 1/2" | 1" | 20,000 | 1 | 17615V | – | – |
| 3" | .0118 | 1/2" | 1" | 20,000 | 1 | 17616V | – | 17641V |
| 3" | .014 | 1/2" | 1" | 20,000 | 1 | – | 17618V | – |



17616V



**ROUND TUBE BRUSHES** – Crimped wire fill provides flexible brushing action.

| Diameter | Wire Size | Brush Part | Stem Diameter | Overall Length | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 1/4" | .004 | 1" | 1/8" | 3-1/2" | 3 | – | 21081V |
| 3/8" | .004 | 1" | 1/8" | 3-1/2" | 3 | 21073V | – |
| 1/2" | .005 | 1" | 3/16" | 3-1/2" | 3 | 21074V | – |
| 5/8" | .005 | 1" | 3/16" | 3-1/2" | 3 | 21075V | – |
| 7/8" | .006 | 1" | 7/32" | 3-1/2" | 3 | 21077V | – |
| 1" | .008 | 1" | 1/4" | 3-1/2" | 3 | 21078V | – |
| Double Stem, Double Spiral | | | | | | | |
| 1/2" | .006 | 2" | 5/32" | 5" | 6 | 21107V | – |
| 5/8" | .005 | 2" | 7/32" | 5" | 6 | 21108V | – |
| 3/4" | .006 | 2-1/2" | 1/4" | 5-1/2" | 6 | 21110V | – |
| 1" | .006 | 2-1/2" | 1/4" | 5-1/2" | 6 | 21114V | – |



21077V



21110V

**TUBE BRUSH OPERATING RECOMMENDATIONS** - The stems in power tube brushes are not as strong as the stem in most other brushes. It is very important to avoid any load conditions and brush speeds that can cause excessive stem deflections and destructive bending.

A suggested guideline to avoid this unsafe condition is minimizing the overhang of the stem to under an inch, and running the brush at speeds below 2,000 RPM.

Increasing overhang could decrease the safe speed at which the brush can operate. To reach into deeper holes, use drill extension rods instead of increasing stem overhang.

**Correct Mounting**



**Incorrect Mounting**





17681V

**STEM MOUNTED KNOT WHEELS** – Mounted on a 1/4″ stem; ideal for somewhat irregular surfaces.



| Diameter | Wire Size | No. of Knots | Face Width | Trim Length | Max. RPM | Int Pack | Item Number |
|---|---|---|---|---|---|---|---|
| | | | | | | | Steel |
| 3-1/4″ | .014 | 20 | 3/8″ | 5/8″ | 25,000 | 1 | 17681V |
| 4″ | .014 | 24 | 1/2″ | 7/8″ | 20,000 | 5 | 17687V |



13106V

**STANDARD TWIST WHEELS** – Provide heavy-duty brushing action on somewhat irregular surfaces.



| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 3″ | .014 | 1/2″-3/8″ | 20 | 3/8″ | 5/8″ | 25,000 | 5 | 08014V | 08264V |
| 4″ | .014 | 5/8″-11 UNC | 24 | 1/2″ | 7/8″ | 20,000 | 5 | 13106V | 13113V |
| 4″ | .020 | 5/8″-11 UNC | 24 | 1/2″ | 7/8″ | 20,000 | 5 | 13120V | – |



13266V

**CABLE TWIST WHEELS** – Provide heavy-duty brushing action on relatively smooth surfaces.



| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel |
| 4″ | .020 | 5/8″-11 UNC | 24 | 1/4″ | 7/8″ | 20,000 | 5 | 13266V |
| 4″ | .020 | 1/2″-3/8″ | 24 | 1/4″ | 7/8″ | 20,000 | 5 | 08534V |
| 6″ | .023 | 5/8″-1/2″ | 24 | 3/8″ | 1-3/8″ | 9,000 | 5 | 08565V |



13131V



08776V

**ROUGHNECK® STRINGER BEAD WHEELS** – The go to for high-performance weld cleaning.



| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| Root Pass Brushes | | | | | | | | | |
| 4″ | .020 | 5/8″-11 UNC | 32 | 3/16″ | 7/8″ | 20,000 | 5 | 13131V | 13138V |
| 4-1/2″ | .020 | 5/8″-11 UNC | 38 | 3/16″ | 13/16″ | 12,500 | 5 | 13232V | – |
| 5″ | .020 | 5/8″-11 UNC | 38 | 3/16″ | 7/8″ | 12,500 | 5 | 08756V | 08806V |
| 6″ | .020 | 5/8″-11 UNC | 48 | 3/16″ | 1-1/8″ | 12,500 | 1 | 08766V | – |
| 6″ | .020 | 5/8″-11 UNC | 56 | 3/16″ | 1-1/8″ | 12,500 | 1 | 09400V | – |
| 6-7/8″ | .020 | 5/8″-11 UNC | 56 | 3/16″ | 1-1/8″ | 9,000 | 1 | 09000V | – |
| Filler Pass Brushes | | | | | | | | | |
| 6″ | .023 | 5/8″-11 UNC | 24 | 1/2″ | 1-3/8″ | 12,500 | 1 | 08776V | – |

# KNOT WIRE WHEELS



# CUP BRUSHES

**CUP BRUSHES** featuring a threaded nut are designed for smooth, efficient operation on angle grinders to make quick work of large jobs. Available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and manufactured with individual knot hole and solid ring construction for high performance and long life.





13245

**CRIMPED CUP BRUSHES** – Provides consistent performance on light-duty cleaning applications.

| Diameter | Wire Size | Arbor Hole | Trim Length | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|---|
| | | | | | | Steel |
| 3″ | .014 | 5/8″-11 UNC | 1″ | 14,000 | 1 | 13245 |
| 3-1/2″ | .014 | 5/8″-11 UNC | 7/8″ | 12,000 | 1 | 13181 |
| 4″ | .014 | 5/8″-11 UNC | 1-3/8″ | 10,200 | 1 | 14026 |
| 5″ | .014 | 5/8″-11 UNC | 1-1/4″ | 9,000 | 1 | 14206 |
| 6″ | .014 | 5/8″-11 UNC | 1-1/4″ | 6,600 | 1 | 14066 |



13156



12376

**KNOT WIRE CUP BRUSHES** – Provides heavy-duty brushing action on relatively flat surfaces.

| Diameter | Wire Size | Arbor Hole | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4″ | .014 | 5/8″-11 UNC | 1″ | 14,000 | 1 | 13025 | – |
| 2-3/4″ | .020 | 5/8″-11 UNC | 1″ | 14,000 | 1 | 13286 | 13258 |
| 3-1/2″ | .023 | 5/8″-11 UNC | 7/8″ | 13,000 | 1 | 13156 | 13163 |
| 4″ | .023 | 5/8″-11 UNC | 1-1/4″ | 10,200 | 1 | 12316 | – |
| 5″ | .023 | 5/8″-11 UNC | 1-3/8″ | 9,000 | 1 | 12276 | – |
| 6″ | .014 | 5/8″-11 UNC | 1-3/8″ | 6,600 | 1 | 12356 | – |
| 6″ | .023 | 5/8″-11 UNC | 1-3/8″ | 6,600 | 1 | 12376 | – |

# HAND BRUSHES

**HAND BRUSHES** include many block and handle types and sizes. The wide variety of fill materials available assures the right brush for the right job. Common applications are cleaning dirt, rust, scale, chips and paint; plating and welding operations.



**SCRATCH BRUSHES** – Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | No. of Rows | Trim Length | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 14″ x 7/8″ | 5-1/2″ | 3 x 19 | 1-3/16″ | 1 | 44053 |
| 14″ x 7/8″ | 5-1/2″ | 3 x 19 | 1-3/16″ | 1 | 44054 |
| 10″ x 1-1/8″ | 5″ | 4 x 16 | 1-3/16″ | 1 | 44063 |
| 10″ x 1-1/8″ | 5″ | 4 x 16 | 1-3/16″ | 1 | 44064 |



44063

**INTERNAL TUBE FITTING BRUSHES** – Wire Fill - For internal cleaning and deburring of copper tube fittings.

| Tube Diameter | Actual Diameter | Brush Length | Overall Length | Handle Length | Int. Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/8″ | 1/2″ | 1″ | 6-1/2″ | 3-1/4″ | 6 | 44080V |



44080V

**ACID BRUSHES** – Horsehair - Tin ferrule (unit packs of 4)

| Width | Trim Length | Overall Length | Int. Pack | Item Number |
|---|---|---|---|---|
| 5/16″ | 3/4″ | 5-3/4″ | 6 | 44088V |
| 3/8″ | 3/4″ | 5-3/4″ | 6 | 44089V |
| 1/2″ | 3/4″ | 5-3/4″ | 6 | 44090V |



44089V

**SMALL SCRATCH BRUSHES** – Ideal for cleaning and prepping surfaces. (unit packs of 3)

| Block Size | Block | No. of Rows | Wire Size | Trim Length | Int. Pack | Item Number |
|---|---|---|---|---|---|---|
| Stainless Steel Wire | | | | | | |
| 7-1/2″ x 1/2″ | Plastic | 3 x 7 | .006 | 1/2″ | 5 | 44075V |
| 7-1/2″ x 1/2″ | Wood | 3 x 7 | .006 | 1/2″ | 5 | 44167V |
| Straight Brass Wire | | | | | | |
| 7-1/2″ x 1/2″ | Wood | 3 x 7 | .006 | 1/2″ | 5 | 44189V |
| Straight Black Nylon | | | | | | |
| 7-1/2″ x 1/2″ | Wood | 3 x 7 | .012 | 1/2″ | 5 | 44637V |



44167V



44189V



44637V



30726V

**VORTEC PRO® MOUNTED FLAP WHEELS** – 1/4" Stem – Provide fast action at a value price.



| Diameter | Width | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60 | 30,000 | 3 | 30720V |
| 1" | 1" | 80 | 30,000 | 3 | 30721V |
| 2" | 1" | 60 | 25,000 | 1 | 30723V |
| 2" | 1" | 80 | 25,000 | 1 | 30724V |
| 3" | 1" | 60 | 23,000 | 1 | 30726V |
| 3" | 1" | 80 | 23,000 | 1 | 30727V |



50007V

**TRIMMABLE TIGER® FLAP DISC** – (Type 29) – Trimmable backing for extended disc life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50006V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50007V |



51120V

**TIGER PAW™ FLAP DISC** – (Type 29) – 100% Zirconia Alumina grain for performance & long life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40 | 13,000 | 5 | 51119V |
| 4-1/2" | 7/8" | 60 | 13,000 | 5 | 51120V |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 51124V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 51125V |



50518V



50603V

**TIGER® FLAP DISC** – (Type 29) – Maximum aggression & long life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| Zirconia Alumina Grain, Aluminum Backing | | | | | |
| 4-1/2" | 7/8" | 40 | 13,000 | 5 | 50513V |
| 4-1/2" | 7/8" | 60 | 13,000 | 5 | 50514V |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50518V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50519V |
| Zirconia Alumina Grain, Phenolic Backing | | | | | |
| 4-1/2" | 7/8" | 40 | 13,000 | 5 | 50603V |
| 4-1/2" | 7/8" | 60 | 13,000 | 5 | 50604V |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50608V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50609V |



50804V

**BIG CAT® FLAP DISC** – High Density (Type 27) – Increased conformability and maximum life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| Zirconia Alumina Grain, Phenolic Backing | | | | | |
| 4-1/2" | 7/8" | 40 | 12,000 | 5 | 50803V |
| 4-1/2" | 7/8" | 60 | 12,000 | 5 | 50804V |
| 4-1/2" | 5/8"-11 Nut | 40 | 12,000 | 5 | 50808V |
| 4-1/2" | 5/8"-11 Nut | 60 | 12,000 | 5 | 50809V |



50105V

**SABER TOOTH™ FLAP DISC** – (Type 29) – Cool, fast cutting.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| Ceramic Alumina Grain, Phenolic Backing | | | | | |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50105V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50106V |

# ABRASIVE FLAP WHEELS & FLAP DISCS





Every day, all over the world, businesses find clearer paths to success using Weiler solutions. Together, we can evaluate your operation, identify opportunities for improvement... and find *your* clear path to success.

**Weiler. Your partner in success.**

Weiler Corporation
One Weiler Drive
Cresco, PA 18326
USA

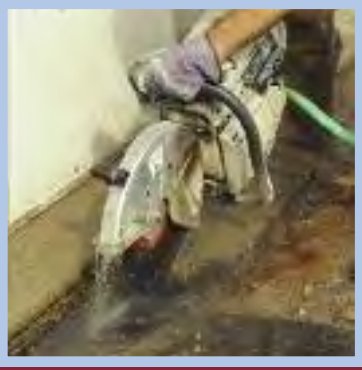


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# Weiler® Abrasives

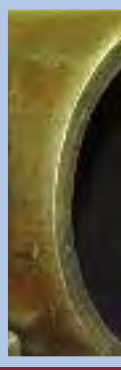


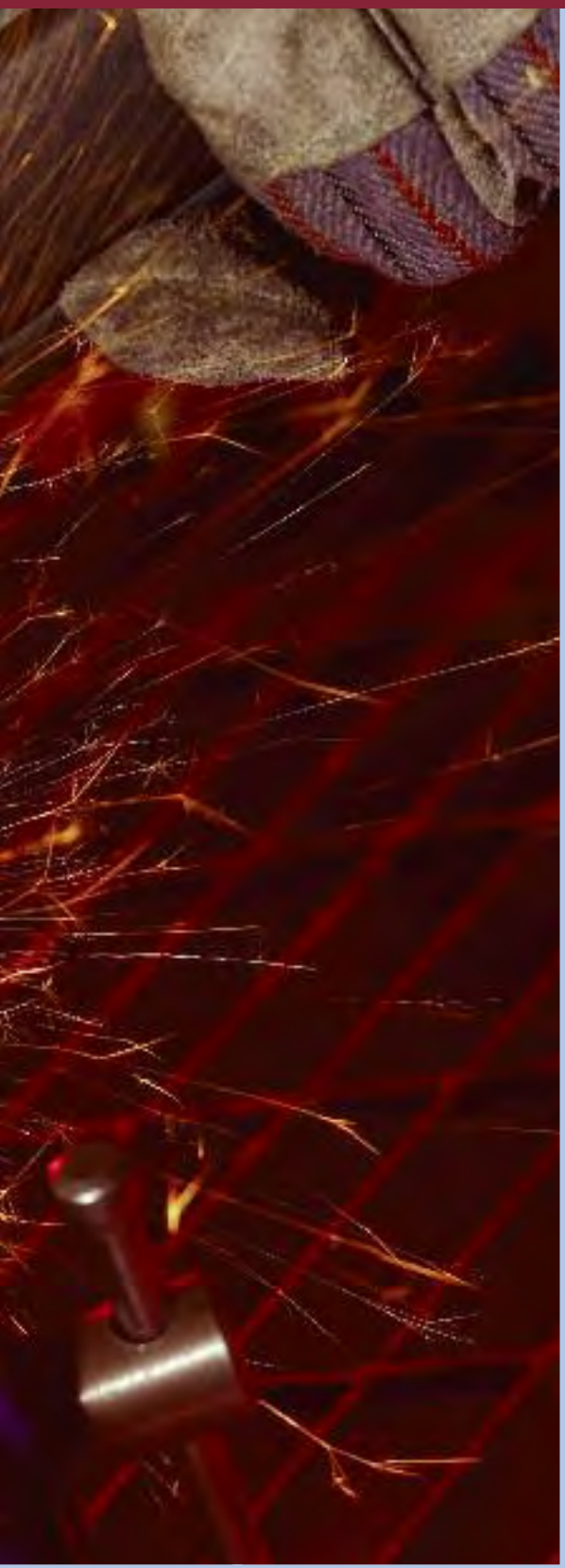












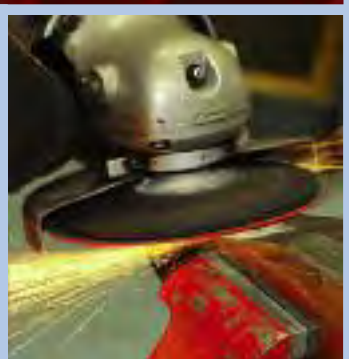
- Flap Discs
  *Market Leader!*
- Resin Fiber Discs
- AL-tra CUT™ Discs
  *Best for Aluminum*
- Blending Discs
- TRIM-KUT® Discs
- Flap Wheels
- Belts
- Shop Rolls
- New! Grinding & Cutting Wheels
  *New Vortec Pro® General Purpose Bonded Program*
- Unitized Wheels
- Convolute Wheels
- Surface Conditioning Discs
- Hand Pads
- Interleaf Flapwheels

Knowledgeable and Responsive Customer Service Team:
800-835-9999

Application Engineering Support:
888-299-APPS (2777)

Interactive Website:
www.weilercorp.com









## Steel Piping

**Problem:** A clean bevel end free of any surface imperfections is critical to a strong joint when welding heavy-wall piping. Unfortunately, lengths of steel pipe can sit in yards for significant periods of time, and pitting of the bevel ends is usually the result.

**Solution:** Coated abrasive flap discs like Weiler's original Tiger Disc are ideal tools for quickly removing heavy corrosion and blending pitting from bevel ends. The chatter-free, compliant grinding action and smooth, consistent finish produced by these discs make them the preferred choice for this application.






## Steel Channel

**Problem:** Burrs produced by cut-off operations are dangerous and can prevent parts from fitting together properly which can cause potential structural weak points.

**Solution:** Weiler's coated abrasive flap wheels are flexible grinding products which are ideal for light stock removal applications. A 60 grit wheel can be used to remove a large burr and produce a smooth blended edge.





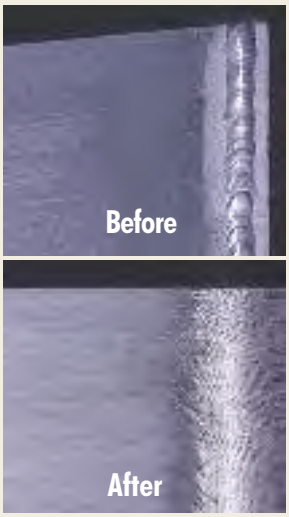

Photos courtesy of On-Line Services.

## Aluminum Frames

**Problem:** Aluminum welds are particularly difficult to blend due to the tendency of the chips to become welded to the abrasive media. This causes the cut rate of the abrasive to fall rapidly and generates an expensive grinding operation.

**Solution:** Weiler's AL-tra Cut™ discs are specially formulated to prevent loading by lowering the grinding temperature. A 60 grit AL-tra Cut disc can blend an aluminum weld bead much faster than a conventional disc without loading.





# Solutions Showcase

## Snow Plow Blade









**Problem:** Grinding fillet welds is a difficult, time-consuming process that is often expensive to perform.

**Solution:** Weiler's Trimmable Tiger® flap disc offers the ability to create a flexible grinding media that can easily blend fillet welds. The disc's trimmable design also extends the life of the disc, resulting in lower grinding and finishing costs.

## Steel Handle









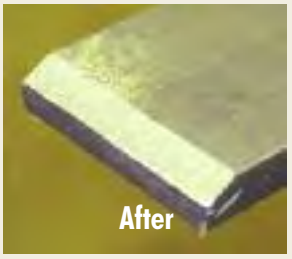
**Problem:** The removal of parting lines is a common application in the foundry business.

**Solution:** Weiler's selection of coated abrasive belts includes high performance and value products that help users control their production costs. Belts with 36 and 40 grit are commonly used for parting line removal.

## Steel Rack Braces






**Problem:** To prevent weldments used in the construction of offshore oil platforms from "racking" under load, lengths of steel bar stock are added as braces during the fabrication of these structural members. Beveling or chamfering the ends of the bars increases weld penetration and strengthens the joint.

**Solution:** The requirement for fast stock removal and long wheel life makes this an ideal application for a good quality Type 27 grinding wheel like those in Weiler's Vortec Pro® line of general-purpose bonded abrasives.

# Coated Abrasive Flap Disc Technical Information

## PREMIUM PERFORMANCE



### Saber Tooth™
**Use:** Cool, fast cutting on SS, AL & hard-to-grind metals
**Cloth Type:** Top coated ceramic alumina poly-backed
**Styles:** Type 27 HD or type 29 standard
**Backing:** Phenolic
PAGE 102

### Big Cat®
**Use:** Conformable with superior life; industrial applications on steel and stainless
**Cloth Type:** Premium zirconia alumina or aluminum oxide
**Style:** Type 27 high density
**Backing:** Phenolic
PAGE 103

### Trimmable
**Use:** Trimmable and flexibile; for extended life and fillet welds on steel and stainless
**Cloth Type:** Premium zirconia alumina or top coated ceramic alumina poly-backed
**Style:** Type 29 standard
**Backing:** Non-marking composite
PAGE 104

### Original Tiger®
**Use:** Premium performance; industrial applications on steel and stainless
**Cloth Type:** Premium zirconia alumina or aluminum oxide
**Styles:** Type 29 or 27 standard
**Backings:** Phenolic or aluminum
PAGE 105-106



### BobCat™ Mini Flap Discs
**Use:** Fast grinding in tight areas on steel and stainless
**Cloth Type:** Premium zirconia alumina
**Mounting:** Threaded arbor, drive mandrel or Norton Speed-Lok®
**Styles:** Type 29 or 27 standard
**Backing:** Non-marking composite
PAGE 111

## Flap Disc Product Tiers

### Weiler Tiger®
**Premium Industrial Grade Products -**
Engineered and manufactured to maximize performance and minimize operating costs in all surface grinding applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver consistent performance and the lowest cost-of-use.

- **Saber Tooth™ Ceramic Alumina Flap Discs**
- **Big Cat® High Density Flap Discs**
- **Original Tiger® Abrasive Flap Discs**
- **Trimmable Tiger® Flap Discs**
- **BobCat™ Mini Flap Discs**

## HIGH PERFORMANCE



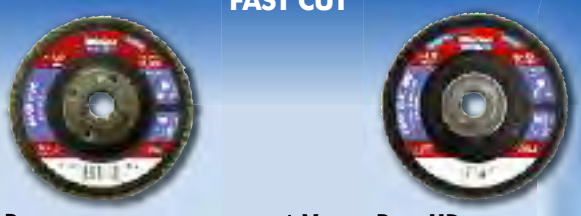

### Tiger Paw™
**Use:** Aggressive performance and long life; heavy-duty edge-grinding applications on steel and stainless
**Cloth Type:** 100% zirconia alumina poly cotton-backed
**Styles:** Type 29 or 27 standard
**Backing:** Phenolic
PAGE 107

### Tiger Paw™ Super HD
**Use:** Conformable with extended life; heavy-duty edge-grinding applications on steel and stainless
**Cloth Type:** 100% zirconia alumina poly cotton-backed
**Style:** Type 27 high density
**Backing:** Phenolic
PAGE 108

### Weiler Tiger Paw™
**High Performance Industrial Grade Products -**
Engineered and manufactured to maximize performance on heavy-duty edge grinding applications such as pipe beveling and breaking the edge on plasma torch cut materials. The combination of 100% Zirconia Alumina grain, poly-cotton cloth and superior grain retention ensures long life and a consistent material removal rate over the life of the disc, increasing production throughput and lowering overall grinding costs.

- **Tiger Paw™ Abrasive Flap Discs**
- **Tiger Paw™ Super High Density Flap Discs**

## FAST CUT



### Vortec Pro®
**Use:** Standard performance on steel and stainless
**Cloth Type:** Zirconia alumina cotton-backed
**Styles:** Type 29 or 27 standard
**Backing:** Phenolic or aluminum
PAGE 109

### Vortec Pro® HD
**Use:** Conformable with long life; applications on steel and stainless
**Cloth Type:** Zirconia alumina cotton-backed
**Style:** Type 27 high density
**Backing:** Phenolic
PAGE 110

### Weiler Vortec Pro®
**Fast Cut Professional Grade Products -**
Manufactured using similar product construction and to the same exacting standards as other Weiler flap discs, but engineered to provide cost-effective use. Vortec Pro Abrasives are an economical choice for the construction trades, low volume production shops and the professional contractor.

- **Vortec Pro® Abrasive Flap Discs**
- **Vortec Pro® High Density Flap Discs**

# Coated Abrasive Flap Disc Technical Information

## Flap Disc Product Construction

**Grind and Finish in One Step!** Weiler's Coated Abrasive Flap Discs save you time and money. There's no need to switch from a Type 27 Grinding Wheel to a Resin Fiber Disc because flap discs grind and finish in one step. This results in fewer changeovers and increased productivity.

### Flap Disc Construction Styles:



**Angled Style - Type 29**
- Maximum aggression
- Long life
- Ideal working angle of 15-35˚



**Flat Style - Type 27**
- Smooth grinding action
- Long life
- Ideal working angle of less than 15˚



**High Density Style - Type 27**
- Thicker disc with longer flaps
- Conforms to curved & irregular surfaces
- Maximum life
- Ideal working angle of less than 15˚

## Why Choose Flap Discs?

Flap discs replace grinding wheels and resin fiber discs by grinding and finishing in ONE step!

### Flap Discs vs. Grinding Wheels:





- Rapid stock removal
- Smooth finish without gouging
- Cool cutting and less glazing
- Lightweight
- Less vibration reduces operator fatigue
- Reduced noise

### Flap Discs vs. Resin Fiber Discs:





- Last 20 times longer
- Fewer changeovers reduce overall grinding and finishing costs
- Consistent finish
- No back-up pad needed
- Easy to store, no curling
- Reduced loading

## Grain Selection

| Grain Type | Grain Features | Application |
|---|---|---|
| Ceramic Alumina | • Numerous crystals<br>• Cut rate constant for 75% of grinding life<br>• Self-sharpening grain - consistent sharp edge<br>• Long life - dissipates heat | High cut rate and long life on stainless, aluminum and other hard-to-grind metals. |
| Zirconia Alumina | • Multi-Crystal<br>• Fast cut rate<br>• Self-sharpening<br>• Stands up to heavy pressure & high temps. | High rate of stock removal and long life in demanding applications. |
| Aluminum Oxide | • Single Crystal<br>• Cut rate declines at start of grinding<br>• Fracturing - dulling | General purpose metalworking applications. |

## Grit Size Selection

**Coarser Grits: 24, 36, 40**
Maximum material removal.

**Finer Grits: 60, 80, 120**
Achieve desired finishes.

**For Best Results:**
Use 1 grit size coarser than resin fiber disc. 36 grit, use same size.




Weiler's Ceramic Alumina and Zirconia Alumina Flap Discs are contaminant-free, which means Iron, Sulfur and Chlorine are ≤ 0.1%.

## Backing Selection

### Aluminum:



Rigid support for maximum aggression; recyclable.

### Composite*:



Trimmable, non-marking backing; allows access to hard-to-reach angles.

*BobCat Discs are not trimmable.

### Phenolic:



Prevents backing from scratching the workpiece.

# Coated Abrasive Flap Disc Technical Information

## Flap Disc Product Features



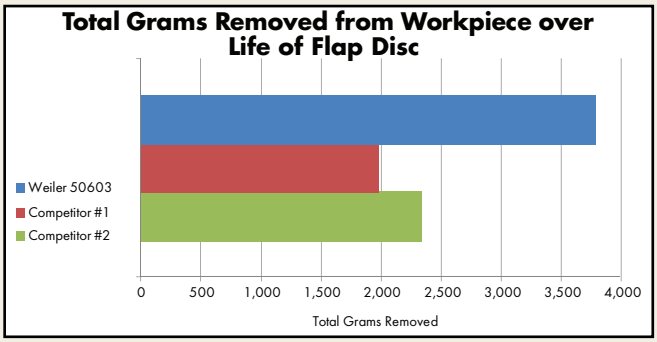

- Product Diameter
- Product is Contaminant-free
- Performance Level, Application and Material
- Visit Our Website
- Bar Code, Item Number and Grit Size
- Grain Type
- Max. RPM Rating
- Wear Eye Protection
- Wear Respiratory Protection
- Wear Hand Protection
- Read Safety Information
- Wear Hearing Protection
- Wear Protective Clothing
- Keep All Guards In Place
- Made in U.S.A. Product

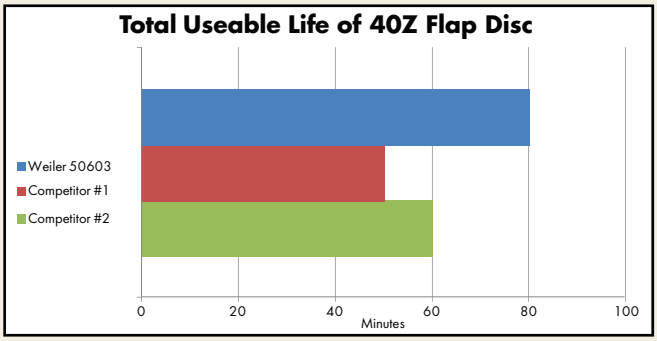
## Lab Testing Results

### Item(s) Tested: 4-1/2" x 7/8" Flap Discs - 40 Grit Zirconia Alumina

The following are the results of an automated test comparing the Weiler Tiger 4-1/2" Type 29 standard Flap Disc vs. two major manufacturers of flap discs products. The test involved grinding for up to 80 minutes (only the Tiger made it that long) on mild steel bar stock.

**Reciprocating Flap Disc Machine -** The angle grinder is mounted at a 15˚ angle and applies 15 pounds of weight to the 1/8" thick workpiece. The grinder moves back & forth over an 8" path and the flap disc and workpiece weights are taken every minute.




**The 50603 flap disc outperformed the competition in both material removal and life. More work and fewer changeovers increases productivity and reduces overall grinding & finishing costs.**

## Important Safety Information

**Read and comply with the Safety Standards of the American National Standards Institute - ANSI B7.1 "Safety Requirements - For the Use, Care and Protection of Abrasive Wheels".**

Observe all speed restrictions indicated on products, containers, labels or printed in literature. NEVER exceed the Maximum RPM!

Safety goggles and face shields worn over safety glasses with side shields MUST BE WORN BY ALL OPERATORS AND OTHERS IN AREA OF ABRASIVE OPERATIONS. Comply with the requirements of ANSI Z87.1 "Occupational Eye and Face Protection".

Appropriate clothing must be used where there is a possibility of injury that can be prevented.

Hearing protection must be worn where required.

Wear respiratory protection against dust and fumes (see ANSI Z88.2).

Safety gloves must be worn.

Keep all guards in place.

# Saber Tooth™ Ceramic Alumina Flap Discs

## Saber Tooth™ Ceramic Alumina Flap Discs

provide cool, fast cutting action on hard-to-grind metals, resulting in lower grinding and finishing costs.

- Fast cut and long life due to the aggressive self-sharpening ceramic alumina grain.
- Specially formulated grinding aid prevents dulling and glazing of grain and allows for "cool-cutting" protecting high value parts from heat discoloration.
- Designed to work with heat sensitive materials such as Aluminum, Stainless Steel, Inconel, Titanium and other hard-to-grind metals.

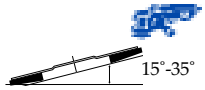
Bright Red Grinding Aid Dissipates Heat



CHECK OUT THE VIDEO

### Saber Tooth™ Flap Disc - Angled Style (Type 29) -

**Cool, fast cutting on hard-to-grind metals.**

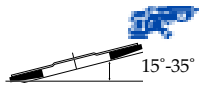



| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 50100<br>50101<br>50102<br>50103 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 13,000 | 10 | 50104*<br>50105*<br>50106*<br>50107* |
| 7" | 7/8" | 36<br>40<br>60<br>80 | 8,600 | 10 | 50108<br>50109<br>50110<br>50111 |
| 7" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 8,600 | 10 | 50112*<br>50113*<br>50114*<br>50115* |

*Patent # 6,945,863

### Trimmable Back Saber Tooth™ - Angled Style (Type 29) -

**Cool, fast cutting on hard-to-grind metals. High stock removal, long life and flexibility.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50117<br>50118<br>50119 |
| 4 1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 13,000 | 10 | 50121*<br>50122*<br>50123* |

*Patent # 6,945,863

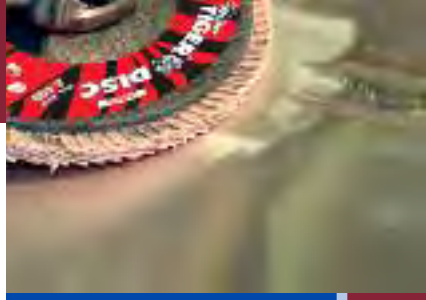
### Saber Tooth™ Phenolic Back - High Density - Flat Style (Type 27) -

**Cool, fast cutting on hard-to-grind metals. Increased conformability and 30-40% longer life than standard flap discs.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50130<br>50131<br>50132 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 13,000 | 10 | 50133*<br>50134*<br>50135* |
| 7" | 7/8" | 40<br>60<br>80 | 8,600 | 10 | 50136<br>50137<br>50138 |
| 7" | 5/8"-11 Nut | 40<br>60<br>80 | 8,600 | 10 | 50139*<br>50140*<br>50141* |

*Patent # 6,945,863



Weld blending on stainless steel with a Saber Tooth Abrasive Flap Disc.





50109



Weiler Innovation!

Weiler's Ceramic Alumina Flap Discs were the first line in the marketplace to include a trimmable backed disc, providing:

- Extended disc life.
- High flexibility which enables access to hard-to-reach areas such as right angles and irregular shapes.
- Non-marking backing will not damage the workpiece, resulting in less rework and scrap.

# High Density Abrasive Flap Discs



Blending and finishing edges of a flame-cut steel part.

**High Density Flap Discs -** Due to their thickness and larger flaps, Weiler's made in the U.S.A., high density flap discs conform to curved and irregular surfaces while producing a consistent finish and a 30-40% longer life than standard flap discs.

**22% MORE CLOTH than competitors' high density flap discs!**

## Applications

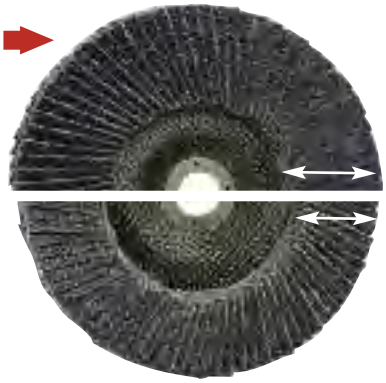
Provides increased conformability and long life when:

- Grinding and finishing in one step
- Weld blending
- Deburring
- Deflashing
- Edge chamfering
- Stock removal



**Weiler Big Cat Flap Disc**

Larger flaps ensure more contact with the work surface, providing smoother grinding action and longer life.



**Competitor High Density Flap Disc**

## Features And Benefits

- **Enhanced conformability** helps reduce gouging and undercutting.
- **Thicker phenolic back** (more layers of fiberglass) than competitors, provides more stability for thicker cloth configuration.
- **Most flap area in the industry** – unique combination of flap count, height and width.
- **Longest lasting high density disc** – as much as 20% over top competitors discs.
- **Big Cat is well known in the industry** – ask for it by name for increased productivity, reduced operating costs and maximum disc life.
- **Weiler's 20 years of experience** producing flap discs has yielded our proprietary cloth which has a unique combination of grain, grain placement, size, make coats and woven backing material.
- **Made in the U.S.A.** – satisfaction guaranteed!



50804



50765

NOTE

See adapters on page 106.

**Big Cat® - High Density Flat Style (Type 27)**
**Increased conformability and maximum life.**






| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing | |
|---|---|---|---|---|---|---|
| | | | | | Zirconia Alumina | Aluminum Oxide |
| 4-1/2" | 7/8" | 40<br>60<br>80<br>120 | 12,000 | 10 | 50803<br>50804<br>50805<br>50806 | 50763<br>50764<br>50765<br>50766 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 12,000 | 10 | 50808*<br>50809*<br>50810* | 50768*<br>50769*<br>50770* |
| 7" | 7/8" | 40<br>60<br>80<br>120 | 8,600 | 10 | 50823<br>50824<br>50825<br>50826 | 50783<br>50784<br>50785<br>50786 |
| 7" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 8,600 | 10 | 50843*<br>50844*<br>50845*<br>50846* | 50833*<br>50834*<br>50835*<br>50836* |

*Patent # 6,945,863

# Trimmable Abrasive Flap Discs

**Trimmable Tiger® Flap Discs -** Durable and efficient, Weiler's made in the U.S.A., Trimmable Tiger is designed for hard-to-reach angles and increased life!

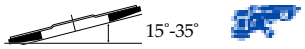
- The unique composite backing can be trimmed, exposing more abrasive material and extending disc life, resulting in lower grinding and finishing costs.
- The trimmable backing also allows for high flexibility, enabling the operator to access hard-to-reach areas such as right angles and irregular shapes, and grind on-edge without changing tools, increasing productivity.
- The non-marking backing will not damage the workpiece, resulting in less re-work and scrap.
- Like all Tiger Discs, the Trimmable Tiger aggressively removes stock while providing excellent finish consistency - all in one step.

## Applications

- Grinding and finishing in one step
- Deburring
- Deflashing
- Edge chamfering
- Stock removal
- Weld blending

### Trimmable Tiger Disc - Angled Style (Type 29)

**High stock removal, long life and flexibility.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40<br>60<br>80<br>120 | 13,000 | 10 | 50002<br>50003<br>50004<br>50005 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 13,000 | 10 | 50006*<br>50007*<br>50008*<br>50009* |
| 5" | 7/8" | 40<br>60<br>80<br>120 | 12,000 | 10 | 50010<br>50011<br>50012<br>50013 |
| 5" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 12,000 | 10 | 50014<br>50015<br>50016<br>50017 |

*Patent # 6,945,863

**Weiler Innovation!**

**1st in the market to offer trimmable backed flap discs with Metal 5/8"-11 Nuts!**
(Eliminates the possibility of cross-threading or nut sticking to spindle after use.)

Tech Note

## Trimmable Backing For Extended Disc Life.

The Trimmable Tiger Disc's innovative design enables the operator to reduce the diameter of the backing to extend disc life. To trim backing, run against a sharp metal edge until desired backing diameter is achieved as shown at right.





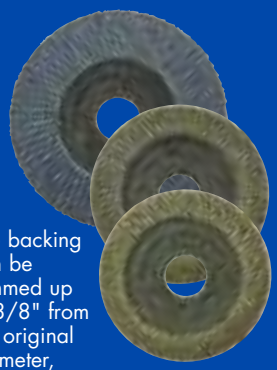
Trimmable Tigers are packaged in a convenient display box with a window and perforated sides for quick, easy opening and display.

**DID YOU KNOW?**

Trimmable Flap Discs are used in the construction and fabrication of the "Up-Armored" Humvees used by the United States Military.



Grinding in corners just got easier with the flexibility of the Trimmable Tiger Disc!



The backing can be trimmed up to 3/8" from the original diameter, dramatically extending the life of the disc.





50002

NOTE

**Visit www.weilercorp.com to see a video demonstrating applications and advantages of our Trimmable Tiger Disc.**

# Tiger® Disc Abrasive Flap Discs



Removing rust, corrosion and pitting from the bevel end of pipe.

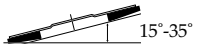
**Original Tiger® Disc -** Weiler's "made in U.S.A." Tiger Discs are the benchmark of the industry. They are designed for the serious industrial user who values both a high cut rate and long life.

#1 Seller

## Applications

- Grinding and finishing in one step
- Weld blending
- Deburring
- Deflashing
- Edge chamfering
- Stock removal

**Tiger Disc - Angled Style (Type 29). Maximum aggression and long life.**








50603



50513



50543

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number: Phenolic Backing, Zirconia Alumina | Item Number: Phenolic Backing, Alum. Oxide | Item Number: Aluminum Backing, Zirconia Alumina |
|---|---|---|---|---|---|---|---|
| 4" | 5/8" | 36 | 15,000 | 10 | 50592 | 50552 | 50502 |
| | | 40 | | | 50593 | 50553 | 50503 |
| | | 60 | | | 50594 | 50554 | 50504 |
| | | 80 | | | 50595 | 50555 | 50505 |
| | | 120 | | | 50596 | 50556 | 50506 |
| 4-1/2" | 7/8" | ★24 | 13,000 | 10 | 50601 | 50561 | 50511 |
| | | 36 | | | 50602 | 50562 | 50512 |
| | | 40 | | | 50603 | 50563 | 50513 |
| | | 60 | | | 50604 | 50564 | 50514 |
| | | 80 | | | 50605 | 50565 | 50515 |
| | | 120 | | | 50606 | 50566 | 50516 |
| 4-1/2" | 5/8"-11 Nut | ★24 | 13,000 | 10 | – | – | 50510* |
| | | 36 | | | – | – | 50517* |
| | | 40 | | | 50608* | – | 50518* |
| | | 60 | | | 50609* | – | 50519* |
| | | 80 | | | 50610* | – | 50520* |
| | | 120 | | | – | – | 50509* |
| 5" | 7/8" | ★24 | 12,000 | 10 | 50611 | 50571 | 50521 |
| | | 36 | | | 50612 | 50572 | 50522 |
| | | 40 | | | 50613 | 50573 | 50523 |
| | | 60 | | | 50614 | 50574 | 50524 |
| | | 80 | | | 50615 | 50575 | 50525 |
| | | 120 | | | 50616 | 50576 | 50526 |
| 6" | 7/8" | 40 | 10,200 | 10 | 50649 | – | – |
| | | 60 | | | 50650 | – | – |
| | | 80 | | | 50651 | – | – |
| 6" | 5/8"-11 Nut | 40 | 10,200 | 10 | 50659 | – | – |
| | | 60 | | | 50660 | – | – |
| | | 80 | | | 50661 | – | – |
| 7" | 7/8" | ★24 | 8,600 | 10 | 50621 | 50581 | 50531 |
| | | 36 | | | 50622 | 50582 | 50532 |
| | | 40 | | | 50623 | 50583 | 50533 |
| | | 60 | | | 50624 | 50584 | 50534 |
| | | 80 | | | 50625 | 50585 | 50535 |
| | | 120 | | | 50626 | 50586 | 50536 |
| 7" | 5/8"-11 Nut | ★24 | 8,600 | 10 | 50641* | 50631* | 50541* |
| | | 36 | | | 50642* | 50632* | 50542* |
| | | 40 | | | 50643* | 50633* | 50543* |
| | | 60 | | | 50644* | 50634* | 50544* |
| | | 80 | | | 50645* | 50635* | 50545* |
| | | 120 | | | 50646* | 50636* | 50546* |

*Patent # 6,945,863

★ When grinding steel and other ferrous materials, a 36 grit Tiger Disc is more productive than a 24 grit. 24 grit Tiger Discs are most productive when used on aluminum and other soft materials.

Weiler Innovation!

1st in the market to offer aluminum backed flap discs! (Strongest in the industry)

NOTE

See adapters on page 106.

Tech Note

## Grit Size Selection

**For Best Results:**
Use 1 grit size coarser than resin fiber disc.

**Exception:**
36 grit, use same size.

# Tiger® Disc Abrasive Flap Discs

**Tiger Disc -** Flat Style (Type 27). Smooth grinding action and long life.




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing | |
|---|---|---|---|---|---|---|
| | | | | | Zirconia Alumina | Aluminum Oxide |
| 4" | 5/8" | 40<br>60<br>80<br>120 | 15,000 | 10 | 50693<br>50694<br>50695<br>50696 | 50653<br>50654<br>50655<br>50656 |
| 4-1/2" | 7/8" | 40<br>60<br>80<br>120 | 13,000 | 10 | 50703<br>50704<br>50705<br>50706 | 50663<br>50664<br>50665<br>50666 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 13,000 | 10 | 50708*<br>50709*<br>50710*<br>50699* | 50668*<br>50669*<br>50670*<br>50671* |
| 5" | 7/8" | 40<br>60<br>80<br>120 | 12,000 | 10 | 50713<br>50714<br>50715<br>50716 | 50673<br>50674<br>50675<br>50676 |
| 7" | 7/8" | 40<br>60<br>80<br>120 | 8,600 | 10 | 50723<br>50724<br>50725<br>50726 | 50683<br>50684<br>50685<br>50686 |
| 7" | 5/8"-11 Nut | 40<br>60<br>80<br>120 | 8,600 | 10 | 50743*<br>50744*<br>50745*<br>50746* | 50733*<br>50734*<br>50735*<br>50736* |

*Patent # 6,945,863

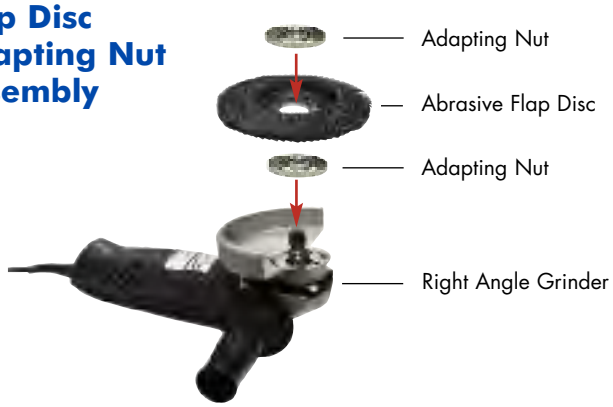
**Adapting Nuts & Spanner Wrench -** For use with Tiger, Vortec Pro and High Density Flap Discs.

| Description | Thread Size | For Use With | Standard Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 3/8" - 24 | 4" Flap Disc with 5/8" arbor hole (Can be used with an adjustable or combination wrench.) | 1 | 56484 |
| Adapting Nuts | 5/8"-11 | 4-1/2", 5" & 7" Flap Discs with 7/8" arbor hole | 1 | 56494 |
| Spanner Wrench | – | Item No. 56494 only | 1 | 56495 |

When mounting, adapters must be nested, see illustration below.




## Flap Disc Adapting Nut Assembly






Removing heavy weld spatter while prepping surface for painting.





50664



50708

56494



56495

Tiger® Disc Abrasive Flap Discs

# Tiger Paw™ Abrasive Flap Discs



Beveling a pipe edge with a Tiger Paw Flap Disc.

**Tiger Paw™ Flap Discs** are designed for the user looking for aggressive performance and long life in heavy-duty applications like edge grinding.

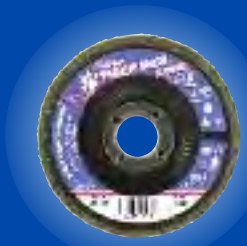
**CHECK OUT THE VIDEO**

Get The EDGE

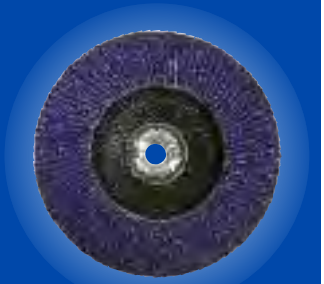
New!

- **100% zirconia alumina grain** is fast cutting with long life, resulting in fewer changeovers and increased productivity.
- **Superior grain retention** - lasts longer and maintains perfect cutting angle to provide excellent performance and sustained stock removal when grinding on-edge.
- **Engineered poly/cotton cloth** features excellent grain retention for maximum disc life.





51118



51147



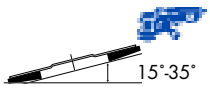


51115

NOTE

See adapters on page 106.

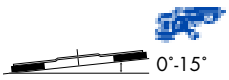
**Tiger Paw - Phenolic Back - Angled Style (Type 29) - Aggressive action and long life; for heavy-duty applications on steel and stainless.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|
| 4" | 5/8" | 40<br>60 | 15,000 | 10 | 51104<br>51105 |
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 51118<br>51119<br>51120<br>51121 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 13,000 | 10 | 51123*<br>51124*<br>51125*<br>51126* |
| 5" | 7/8" | 40<br>60 | 12,000 | 10 | 51129<br>51130 |
| 5" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 12,000 | 10 | 51153*<br>51132*<br>51133*<br>51154* |
| 7" | 7/8" | 40<br>60 | 8,600 | 10 | 51145<br>51150 |
| 7" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 8,600 | 10 | 51149*<br>51146*<br>51147*<br>51148* |

*Patent # 6,945,863

**Tiger Paw - Phenolic Back - Flat Style (Type 27) - Smooth action and long life; for heavy-duty applications on steel and stainless.**




| Diameter | Arbor Hole | Zirconia Alumina Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" | 5/8" | 40<br>60 | 15,000 | 10 | 51101<br>51102 |
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 51107<br>51108<br>51109<br>51110 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 13,000 | 10 | 51112*<br>51113*<br>51114*<br>51115* |
| 5" | 7/8" | 40<br>60 | 12,000 | 10 | 51134<br>51135 |
| 5" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 12,000 | 10 | 51155*<br>51156*<br>51157*<br>51158* |
| 7" | 7/8" | 40<br>60 | 8,600 | 10 | 51137<br>51138 |
| 7" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 8,600 | 10 | 51139*<br>51140*<br>51142*<br>51143* |

*Patent # 6,945,863

# Tiger Paw™ Abrasive Flap Discs

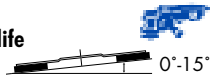


Weld blending on the corner of a security gate with a Tiger Paw XHD.

**Tiger Paw™ Super High Density Flap Discs** feature thicker and larger flaps that conform to curved and irregular shapes while producing a consistent finish. These high density flap discs are designed for the user looking for extended life and conformability in heavy-duty applications.

- **40% more abrasive cloth** than a standard flap disc.
- **100% zirconia alumina grain** provides superior edge grinding.
- **Engineered poly/cotton cloth** features excellent grain retention for maximum disc life.

**Tiger Paw XHD - Super High Density - Phenolic Back - Flat Style (Type 27) - Extended life and conformability; for heavy-duty applications on steel and stainless steel.**



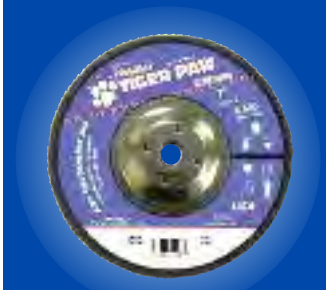

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36<br>40<br>60<br>80 | 12,000 | 10 | 51160<br>51161<br>51162<br>51163 |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60<br>80 | 12,000 | 10 | 51164*<br>51165*<br>51166*<br>51167* |
| 7" | 7/8" | 40<br>60 | 8,600 | 10 | 51170<br>51171 |
| 7" | 5/8"-11 Nut | 40<br>60 | 8,600 | 10 | 51168*<br>51169* |

*Patent # 6,945,863



51165



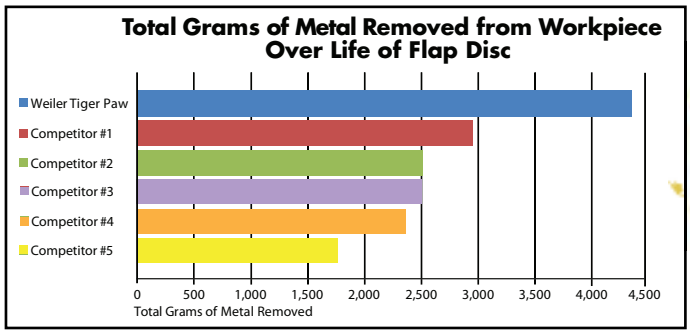


51168

## When Performance Counts, Count On Weiler!

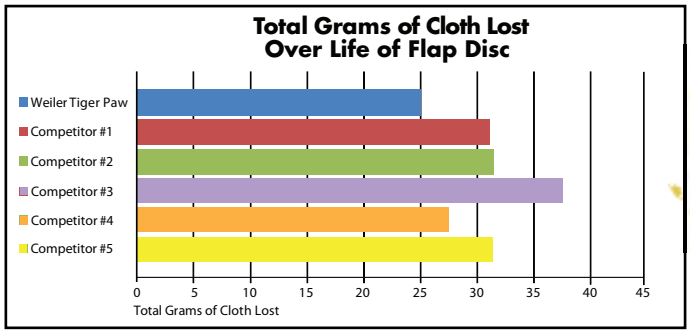
The following are the results of automated testing comparing the Weiler Tiger Paw 4-1/2" Type 29 standard density Flap Disc vs. five major manufacturers of flap disc products.

**Reciprocating Flap Disc Machine -** The angle grinder is mounted at a 15° angle and applies 15 pounds of weight to the 1/8" thick workpiece. The grinder moves back & forth over an 8" path and the flap disc and workpiece weights are taken every minute.













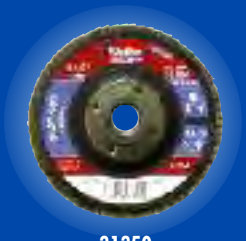
**The Weiler Tiger Paw flap disc outperformed the competition in both material removal and life. More work and fewer changeovers increases productivity and reduces overall grinding and finishing costs.**

# Vortec Pro® Abrasive Flap Discs

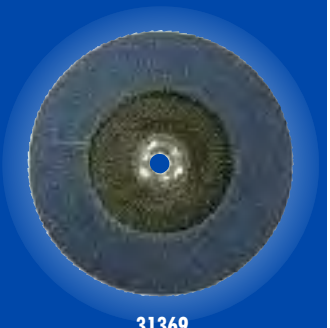


Grinding welds on a fabricated steel part.

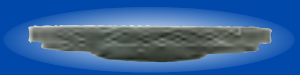


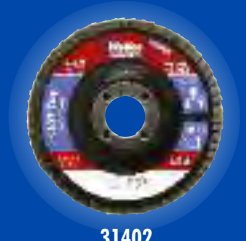


31350



31369



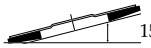


31402




See adapters on page 106.

**Vortec Pro® Flap Discs -** Made in the U.S.A., these flap discs are designed for the user looking for a high cut rate at a value price (maintains similar cut rate as original Tiger® Discs).

**Vortec Pro® - Angled Style (Type 29) - High cut rate at a value price.**  15°-35°

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing Zirconia Alumina | Item Number Aluminum Backing Zirconia Alumina |
|---|---|---|---|---|---|---|
| 4" | 5/8" | 36 | 15,000 | 10 | 31337 ■ | 31301 ■ |
| | | 40 | | | 31338 | 31302 |
| | | 60 | | | 31339 ■ | 31303 ■ |
| | | 80 | | | 31340 ■ | 31304 ■ |
| | | 120 | | | 31341 | 31305 |
| 4-1/2" | 7/8" | ★24 | 13,000 | 10 | 31342 | 31306 |
| | | 36 | | | 31343 ■ | 31307 ■ |
| | | 40 | | | 31344 | 31308 |
| | | 60 | | | 31345 ■ | 31309 ■ |
| | | 80 | | | 31346 ■ | 31310 ■ |
| | | 120 | | | 31347 | 31311 |
| 4-1/2" | 5/8"-11 Nut | ★24 | 13,000 | 10 | 31348* | 31312* |
| | | 36 | | | 31349* | 31313* |
| | | 40 | | | 31350* | 31314* |
| | | 60 | | | 31351* | 31315* |
| | | 80 | | | 31352* | 31316* |
| | | 120 | | | 31353* | 31317* |
| 5" | 7/8" | ★24 | 12,000 | 10 | 31354 | 31318 |
| | | 36 | | | 31355 | 31319 |
| | | 40 | | | 31356 | 31320 |
| | | 60 | | | 31357 | 31321 |
| | | 80 | | | 31358 | 31322 |
| | | 120 | | | 31359 | 31323 |
| 7" | 7/8" | ★24 | 8,600 | 10 | 31360 | 31324 |
| | | 36 | | | 31361 ■ | 31325 ■ |
| | | 40 | | | 31362 | 31326 |
| | | 60 | | | 31363 ■ | 31327 ■ |
| | | 80 | | | 31364 ■ | 31328 ■ |
| | | 120 | | | 31365 | 31329 |
| 7" | 5/8"-11 Nut | ★24 | 8,600 | 10 | 31366* | 31330* |
| | | 36 | | | 31367* | 31331* |
| | | 40 | | | 31368* | 31332* |
| | | 60 | | | 31369* | 31333* |
| | | 80 | | | 31370* | 31334* |
| | | 120 | | | 31371* | 31335* |

*Patent # 6,945,863

★ When grinding steel and other ferrous materials, a 36 grit Vortec Pro flap disc is more productive than a 24 grit. 24 grit Vortec Pro flap discs are most productive when used on aluminum and other soft materials.

■ Available in display pack. See page 172 for details.

**Vortec Pro® - Flat Style (Type 27) - Smooth grinding action at a value price.**  0°-15°

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 31401 |
| | | 40 | | | 31402 |
| | | 60 | | | 31403 |
| | | 80 | | | 31404 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 31407* |
| | | 40 | | | 31408* |
| | | 60 | | | 31409* |
| | | 80 | | | 31410* |
| 7" | 7/8" | 36 | 8,600 | 10 | 31413 |
| | | 40 | | | 31414 |
| | | 60 | | | 31415 |
| | | 80 | | | 31416 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 31419* |
| | | 40 | | | 31420* |
| | | 60 | | | 31421* |
| | | 80 | | | 31422* |

*Patent # 6,945,863

# High Density Abrasive Flap Discs



Blending and finishing edges of a flame-cut steel part.

## Vortec Pro® - High Density Flat Style (Type 27)

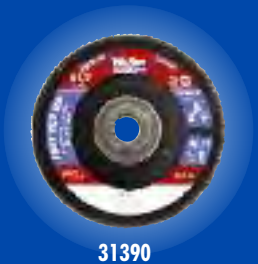
**Increased conformability at a value price.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number Phenolic Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40<br>60<br>80 | 12,000 | 10 | 31387<br>31388<br>31389 |
| 4-1/2" | 5/8"-11 Nut | 40<br>60<br>80 | 12,000 | 10 | 31390*<br>31391*<br>31392* |

*Patent # 6,945,863

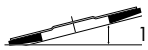




31390

## Vortec Pro® - Display Packaged - Angled Style (Type 29) -

**Standard performance on steel and stainless.**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Item Number Phenolic Backing Zirconia Alumina | Item Number Aluminum Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4" | 5/8" | 36<br>40<br>60 | 15,000 | 30822<br>30825<br>30826 | –<br>–<br>– |
| 4" | 5/8"-11 Nut | 36<br>60<br>80 | 15,000 | –<br>–<br>– | 30821<br>30823<br>30824 |
| 4-1/2" | 7/8" | 36<br>60<br>80 | 13,000 | 30828<br>30831<br>30832 | –<br>–<br>– |
| 4-1/2" | 5/8"-11 Nut | 36<br>40<br>60 | 13,000 | –<br>–<br>– | 30827<br>30829<br>30830 |




30831

**DID YOU KNOW?** Weiler was the first manufacturer of Abrasive Flap Discs in the U.S.A.

# BobCat™ Mini Flap Discs



Surface blending with a BobCat disc in a tight area.

**BobCat™ Mini Flap Discs -** Weiler's made in the U.S.A. BobCats are designed for use on right angle die grinders, providing smooth grinding and enhanced conformability in tight areas.

## Applications

- Grinding and finishing in one step
- Grinding, deburring and blending on steel, stainless steel and other metals
- Jobs requiring high aggression and rapid stock removal
- Metal fabrication requiring light weld blending or edge chamfering



Type 29



Type 27

Outlasts Blending Discs 19 to 1!

**BobCat Mini Flap Discs - Zirconia Alumina Grain - Plastic Backing**
**Ideal for tight spaces and in heavy-duty appplications where blending discs do not hold up.**




| Diameter | Grit Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Type 29 | Type 27 |
| 2" | 36 | 30,000 | 10 | 50922 | 50932 |
| | 40 | | | 50923 | 50933 |
| | 60 | | | 50924 | 50934 |
| | 80 | | | 50925 | 50935 |
| | 120 | | | 50926 | 50936 |
| 3" | 36 | 20,000 | 10 | 50902 | 50912 |
| | 40 | | | 50903 | 50913 |
| | 60 | | | 50904 | 50914 |
| | 80 | | | 50905 | 50915 |
| | 120 | | | 50906 | 50916 |

Patent #5,951,389



50914

**BobCat Drive Mandrel - For mounting BobCat Discs without a backing pad.**

| Description | Standard Pack | Item Number |
|---|---|---|
| For mounting 2" & 3" BobCats on tools with 1/4" collets | 1 | 07766 |



07766

3" BobCats can also be mounted on Norton Speed-Lok® TS back-up pads and Weiler metal hub pad #60509. Speed-Lok® TS is a registered trademark of Norton Co.

**DID YOU KNOW?** Our website features a Distributor Locator to make it easy to find Weiler products in your area.

# Resin Fiber Discs

**Resin Fiber Discs -** These fiber backed, coated abrasive discs are for use on right angle grinders. Weiler's line of premium resin fiber discs are suitable for light grinding, blending, surface preparation and finishing on a variety of materials.

## Applications

- Saber Tooth™ Ceramic Alumina: Cool, fast cutting action on aluminum, stainless steel and other hard-to-grind metals.
- Zirconia Alumina: High performance grinding of stainless steel, tool steel and hard-to-grind materials.
- Aluminum Oxide: All purpose weld blending, grinding, surface preparation and finishing of metals, plastic, wood and fiberglass.



Blending welds on the corner of a steel furniture frame.

### Saber Tooth Resin Fiber Discs - Ideal for aluminum and stainless steel.

Dissipates Heat

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item No. - Ceramic Alumina |
|---|---|---|---|---|
| 4-1/2" | 7/8" | 24 | 25 | 59550 |
| | | 36 | | 59551 |
| | | 50 | | 59552 |
| | | 60 | | 59553 |
| | | 80 | | 59554 |
| 5" | 7/8" | 24 | 25 | 59557 |
| | | 36 | | 59558 |
| | | 50 | | 59559 |
| | | 60 | | 59560 |
| | | 80 | | 59561 |
| 7" | 7/8" | 24 | 25 | 59564 |
| | | 36 | | 59565 |
| | | 50 | | 59566 |
| | | 60 | | 59567 |
| | | 80 | | 59568 |



59557

### Resin Fiber Discs - Ideal for blending, finishing and surface preparation.

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Zirconia Alumina | Aluminum Oxide |
| 4" | 5/8" | 24 | 25 | – | 59491 |
| | | 36 | | – | 59492 |
| | | 50 | | – | 59493 |
| | | 60 | | – | 59494 |
| | | 80 | | – | 59495 |
| | | 120 | | – | 59497 |
| 4-1/2" | 7/8" | 24 | 25 | 59731 | 59571 |
| | | 36 | | 59732 | 59573 |
| | | 50 | | 59733 | 59575 |
| | | 60 | | – | 59576 |
| | | 80 | | 59735 | 59577 |
| | | 100 | | – | 59578 |
| | | 120 | | – | 59579 |
| 5" | 7/8" | 16 | 25 | – | 59500 |
| | | 24 | | 59701 | 59501 |
| | | 36 | | 59702 | 59503 |
| | | 50 | | 59703 | 59505 |
| | | 60 | | – | 59506 |
| | | 80 | | 59705 | 59507 |
| | | 100 | | – | 59508 |
| | | 120 | | – | 59509 |
| 7" | 7/8" | 16 | 25 | 59710 | 59520 |
| | | 24 | | 59711 | 59521 |
| | | 36 | | 59712 | 59523 |
| | | 50 | | 59713 | 59525 |
| | | 60 | | 59714 | 59526 |
| | | 80 | | 59715 | 59527 |
| | | 100 | | – | 59528 |
| | | 120 | | – | 59529 |
| 9" | 7/8" | 16 | 25 | – | 59540 |
| | | 24 | | – | 59541 |
| | | 36 | | 59722 | 59543 |
| | | 50 | | – | 59545 |
| | | 60 | | – | 59546 |



59732



59503

Do not exceed maximum RPM of back-up pad.

NOTE

See back-up pads on page 113.

# AL-tra CUT™ Discs – For Grinding Aluminum



Blending welds and saw marks on a mounting bracket.

**AL-tra CUT™ Discs –** Specially formulated for superior grinding performance on aluminum, **AL-tra CUTs improve grinding on aluminum 400-800%!** These revolutionary discs resist loading, ensure higher cut rates, prolong disc life and achieve a superior finish compared to conventional sanding/grinding discs in the market. AL-tra CUT Discs replace conventional resin fiber discs 5 to 1 or more.

## Applications

For aluminum applications such as:

- Weld blending
- Grinding
- Deburring
- Finishing

## AL-tra CUT Performance



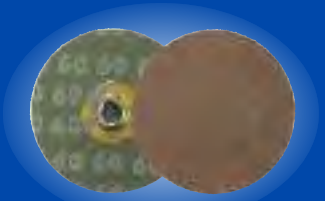
**Weiler's exclusive AL-tra CUT Discs resist loading when grinding aluminum, ensuring constant grain contact with the work surface.**



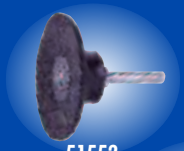
**Conventional resin fiber discs load when grinding aluminum. This prevents the abrasive grain from contacting the work surface and dramatically decreases performance.**



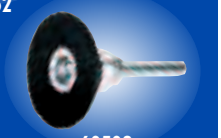
59806



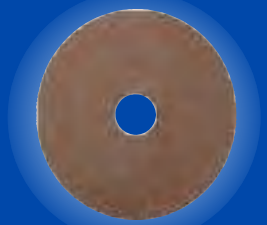
59875



51552



60508



59821



59601



59604



59603

### 2" & 3" AL-tra CUT Discs - Aluminum Oxide

| Diameter | Grit Size | Standard Pack | Item Number: Plastic Button* | Item Number: Metal Hub+ |
|---|---|---|---|---|
| 2" | 36 | 50 | 59806 | 59869 |
| | 60 | | 59807 | 59870 |
| | 80 | | 59808 | 59871 |
| | 120 | | 59809 | 59872 |
| 3" | 36 | 25 | 59811 | 59874 |
| | 60 | | 59812 | 59875 |
| | 80 | | 59813 | 59876 |
| | 120 | | 59814 | 59877 |

### 2" & 3" Back-up Pads - 1/4" stem

| Diameter | Max. RPM | Std. Pack | Plastic Button | Metal Hub |
|---|---|---|---|---|
| 2" | 25,000 | 1 | 51551 | 60508 |
| 3" | 20,000 | 1 | 51552 | 60509 |

Do not exceed maximum RPM of back-up pad.

Do not store AL-tra CUT Discs above 120° F.

* Compatible with 3M Roloc™ back-up pads. (Roloc™ is a trademark of 3M.)

\+ Compatible with Norton Speed-Lok® TS back-up pads. (Speed-Lok® TS is a registered trademark of Norton Co.)

### 4-1/2" & 7" AL-tra CUT Discs - Aluminum Oxide

| Diameter | Arbor Hole | Grit Size | Standard Pack | Item Number |
|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 25 | 59821 |
| | | 60 | | 59823 |
| | | 80 | | 59824 |
| | | 120 | | 59826 |
| 7" | 7/8" | 36 | 25 | 59862 |
| | | 60 | | 59864 |
| | | 80 | | 59865 |
| | | 120 | | 59867 |

Do not exceed maximum RPM of back-up pad.

Do not store AL-tra CUT Discs above 120° F.

### Accessories for Resin Fiber & AL-tra CUT Discs

| Description | Thread Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" Back-up Pad | 5/8"-11* | 12,000 | 1 | 59605 |
| 4-1/2" Back-up Pad | 5/8"-11* | 11,000 | 1 | 59611 |
| 5" Back-up Pad | 5/8"-11* | 10,000 | 1 | 59600 |
| 7" Back-up Pad | 5/8"-11 | 8,500 | 1 | 59601 |
| 9" Back-up Pad | 5/8"-11 | 6,500 | 1 | 59602 |
| Spanner Wrench | – | – | 1 | 59603 |
| Disc Nut | 5/8"-11 | – | 1 | 59604 |

*Other thread sizes available on special orders.

# Blending Discs

**Blending Discs -** These cloth backed, coated abrasive discs are for use on right angle air tools. Available with either a metal hub or a plastic button fastening system, the flexible back-up pads give the discs a great deal of conformability. Weiler's blending discs are suitable for a wide range of light fabrication, repair and maintenance applications.

## Applications

- Saber Tooth™ Ceramic Alumina: Cool, fast cutting action on aluminum, stainless steel and other hard-to-grind metals.
- Zirconia Alumina: High performance blending of stainless steel, tool steel and hard-to-grind materials.
- Aluminum Oxide: All purpose blending or finishing metal surfaces, light weld removal, removing handling marks, surface imperfections and mill marks.

### Saber Tooth™ Ceramic Alumina Blending Discs -

**For aluminum, stainless and other hard-to-grind metal applications.**


Compatible with Norton Speed-Lok® TS back-up pads.


Compatible with 3M Roloc™ back-up pads.

Dissipates Heat



| Diameter | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Metal Hub | Plastic Button |
| 2" | 36 | 100 | 60150 | 60170 |
| | 60 | | 60151 | 60171 |
| | 80 | | 60152 | 60172 |
| 3" | 36 | 50 | 60155 | 60175 |
| | 60 | | 60156 | 60176 |
| | 80 | | 60157 | 60177 |

### Blending Discs - Metal Hub Style - Compatible with Norton Speed-Lok® TS back-up pads.



| Diameter | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 2" | 36 | 100 | 60378 | 60040 |
| | 60 | | 60381 | 60043 |
| | 80 | | 60382 | 60044 |
| | 120 | | 60384 | 60046 |
| 3" | 36 | 50 | 60391 | 60053 |
| | 60 | | 60394 | 60056 |
| | 80 | | 60395 | 60057 |
| | 120 | | 60397 | 60059 |

### Blending Discs - Plastic Button Style - Compatible with 3M Roloc™ back-up pads.



| Diameter | Grit Size | Standard Pack | Item Number |
|---|---|---|---|
| | | | Aluminum Oxide |
| 2" | 36 | 100 | 60118 |
| | 60 | | 60121 |
| | 80 | | 60122 |
| | 120 | | 60124 |
| 3" | 36 | 50 | 60131 |
| | 60 | | 60134 |
| | 80 | | 60135 |
| | 120 | | 60137 |

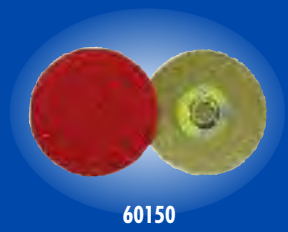
### Back-up Pads - 1/4" Stem

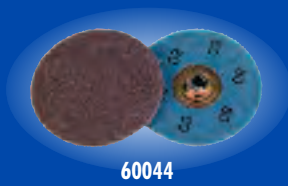
| Diameter | Max. RPM | Standard Pack | Metal Hub Style | Plastic Button Style |
|---|---|---|---|---|
| 2" | 25,000 | 1 | 60508 | 51551 |
| 3" | 20,000 | 1 | 60509 | 51552 |

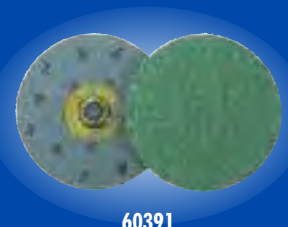
Do not exceed maximum RPM of back-up pad.
(Speed-Lok® TS is a registered trademark of Norton Co.) (Roloc™ is a trademark of 3M.)

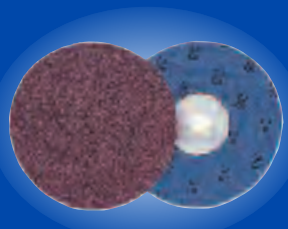


Blending surface imperfections prior to painting.

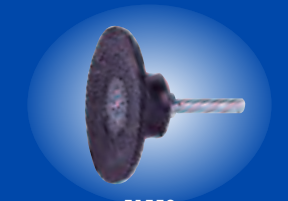

60150


60044


60391


60131


60508


51552

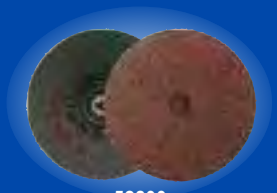


Deburring and chamfering a section of pipe after cutting.

**TRIM-KUT® Discs -** Trim-Kuts are abrasive discs designed for light grinding and blending applications on a variety of materials. The abrasive grains are fused directly onto a wearable polymer backing, resulting in a disc that requires no back-up pad. The polymer backing trims during use to expose new grains to the work surface. 3" discs are designed for use on right angle air die grinders, and 4-1/2" discs are for use on right angle grinders.

## Applications

- Edge blending
- Preparation for painting and surface finishing
- Light weld and stock removal
- Deburring



59300



59403



59327



59326

56485



56496

### TRIM-KUT Discs - Aluminum Oxide

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3" | 5/16" - 18 | 36<br>60<br>120 | 21,000 | 25 | 59300<br>59305<br>59315 |

Do not use TRIM-KUT discs in temperatures lower than 48° fahrenheit. Store at 50% relative humidity.

### TRIM-KUT Discs - Aluminum Oxide

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36<br>60<br>120 | 13,000 | 25 | 59403<br>59404<br>59405 |

Do not use TRIM-KUT discs in temperatures lower than 48° fahrenheit. Store at 50% relative humidity.

### TRIM-KUT Adapters

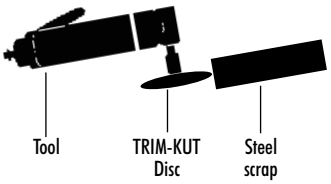
| Description | For Use With | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" Mandrel | 3" TRIM-KUT Discs | 25 | 59327 |
| 3/8"-24 UNF Adapter | 3" TRIM-KUT Discs | 25 | 59326 |
| Adapting Nuts | 4-1/2" TRIM-KUT Discs | 1 | 56485 |
| Spanner Wrench | Item No. 56485 only | 1 | 56496 |

NOTE

**If you are using a blending disc or TRIM-KUT Disc, ask our Application Engineering Department if Weiler's BobCat Abrasive Flap Discs can enhance your productivity. BobCats dramatically outperform blending and TRIM-KUT Discs by reducing changeovers and providing consistently high cut rates and extended life. See page 107 for more information.**

Tech Note

**Extend disc life 2-3 times.**
**Renew TRIM-KUT's sharp cutting edge by running the edge against a clamped piece of steel scrap.**



# Coated Abrasive Flap Wheels

**Flap Wheels** are designed with a solid hub construction that:

- Enables flap wheels to be rated at higher RPM's, providing more aggressive cutting action and increased productivity.
- Provides perfect balance leading to smooth, chatter-free finishing.

## Applications

- Final finishing metal surfaces
- Deburring and mis-match removal on machined parts
- Blending and finishing dies, molds, tools, tubing, and channels
- Smoothing metal, plastics and wood
- Finish prior to painting or plating
- Cleaning
- Edge blending

### Tiger® Mounted Flap Wheels - 1/4" Stem - Aluminum Oxide. A premium line designed to provide long life. Ideal for medium to high production environments.

| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60<br>80<br>120 | 30,000 | 10 | 52003<br>52004<br>52005 |
| 1-1/2" | 1/2" | 60<br>80<br>120 | 25,000 | 10 | 52226<br>52227<br>52229 |
| 1-1/2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 52009<br>52010<br>52011 |
| 2" | 1/2" | 60<br>80<br>120 | 25,000 | 10 | 52366<br>52367<br>52369 |
| 2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 52015<br>52016<br>52017 |
| 2-1/2" | 1" | 60<br>80<br>120 | 23,000 | 10 | 52486<br>52487<br>52489 |
| 3" | 1/2" | 60<br>80<br>120 | 23,000 | 10 | 52024<br>52025<br>52026 |
| 3" | 1" | 60<br>80<br>120 | 23,000 | 10 | 52027<br>52028<br>52029 |

### Tiger® Mounted Flap Wheels - 1/4"-20 Threaded Stem - Aluminum Oxide

| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60<br>80<br>120 | 30,000 | 10 | 52601<br>52603<br>52605 |
| 2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 52611<br>52613<br>52615 |
| 3" | 1" | 60<br>80<br>120 | 20,000 | 10 | 52621<br>52623<br>52625 |

### Drive Arbor - For 1/4"-20 Mounted Flap Wheels

| Thread Size | Adapted Size | Standard Pack | Item Number |
|---|---|---|---|
| 1/4"-20 | 1/4" | 5 | 07756 |



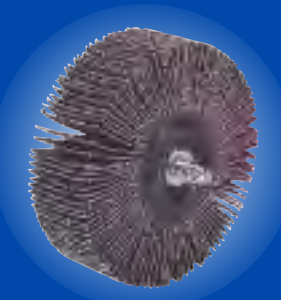
Deburring perforated steel channel after saw-cut.



52010



52027



52621



07756

NOTE

- Drive arbor is used individually and must be ordered individually.
- Drive arbor is to be used with Weiler flap wheels only.
- Stems must be fully chucked before using and should not be run above the maximum RPM listed.

# Coated Abrasive Flap Wheels



Removing burrs from the inside diameter of a cut tube.

## Vortec Pro® Mounted Flap Wheels - 1/4" Stem - Aluminum Oxide

**Provide fast cutting action at a value price. Ideal for low to medium production environments.**

| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60<br>80<br>120 | 30,000 | 10 | 30720<br>30721<br>30722 |
| 2" | 1" | 60<br>80<br>120 | 25,000 | 10 | 30723<br>30724<br>30725 |
| 3" | 1" | 60<br>80<br>120 | 23,000 | 10 | 30726<br>30727<br>30728 |



30726

## Tiger® Unmounted Flap Wheels - Aluminum Oxide

| Diameter | Width | Arbor Hole | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | 1" | 5/8" | 60<br>80<br>120 | 9,000 | 10 | 53166<br>53167<br>53169 |
| 6" | 1" | 1" | 50<br>60<br>80<br>120 | 6,000 | 5 | 53285<br>53286<br>53287<br>53289 |
| 6" | 1-1/2" | 1" | 50<br>60<br>80<br>120 | 5,700 | 4 | 53305<br>53306<br>53307<br>53309 |
| 6" | 2" | 1" | 50<br>60<br>80<br>120 | 5,700 | 3 | 53325<br>53326<br>53327<br>53329 |



53166



53286

## Metal Adapters - For Unmounted Flap Wheels. Used in pairs and priced per pair.

| Wheel Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 1/2"<br>5/8"<br>3/4" | 1 | 03833<br>03834<br>03835 |



03834

**DID YOU KNOW?** Weiler products were used in the construction of the 'Oasis of the Sea', the world's largest ocean liner.

# Coated Abrasive Belts

**Coated Abrasive Belts -** Enhance productivity and lower operating costs with our wide assortment of coated abrasive belts in sizes ranging from 1/4" x 18" to 6" x 132". We also have the ability to provide custom made belts in sizes, backings and grains for specialized applications.

## Portable File Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 1/4" x 18" | 80 | 10 | 68524 | 67023 |
| 1/4" x 24" | 60 | 10 | 68541 | 67040 |
| | 80 | | 68542* | 67041 |
| | 120 | | – | 67043 |
| 3/4" x 18" | 40 | 10 | 68575 | 67074 |
| | 60 | | 68577 | 67076 |
| | 80 | | 68578 | 67077 |
| | 120 | | – | 67079 |
| 1/2" x 24" | 36 | 10 | 68592 | 67091 |
| | 40 | | 68593 | 67092 |
| | 50 | | 68594 | 67093 |
| | 60 | | 68595 | 67094 |
| | 80 | | 68596 | 67095 |
| | 100 | | – | 67096 |
| | 120 | | – | 67097 |
| 3/4"x 20-1/2" | 40 | 10 | 68629 | 67128 |
| | 50 | | 68630 | 67129 |
| | 60 | | 68631 | 67130 |
| | 80 | | 68632 | 67131 |
| | 100 | | – | 67132 |
| | 120 | | – | 67133 |
| 1" x 12" | 60 | 10 | 68649 | 67148 |
| | 80 | | 68650 | 67149 |
| | 120 | | – | 67151 |
| 1" x 30" | 60 | 10 | 68667 | 67166 |
| | 80 | | 68668 | 67167 |
| | 120 | | – | 67169 |

## Portable Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 3" x 18" | 60 | 10 | – | 67488 |
| | 80 | | – | 67489 |
| | 120 | | – | 67491 |
| 3" x 21" | 40 | 10 | 69005 | 67504 |
| | 50 | | 69006 | 67505 |
| | 60 | | 69007 | 67506 |
| | 80 | | 69008 | 67507 |
| | 100 | | – | 67508 |
| | 120 | | – | 67509 |
| 3" x 24" | 36 | 10 | 69040 | 67539 |
| | 40 | | 69041 | 67540 |
| | 50 | | 69042 | 67541 |
| | 60 | | 69043 | 67542 |
| | 80 | | 69044 | 67543 |
| | 100 | | – | 67544 |
| | 120 | | – | 67545 |
| 3-1/2"x15-1/2" | 60 | 10 | – | 67614 |
| | 80 | | – | 67615 |
| | 120 | | – | 67617 |
| 4" x 21-3/4" | 60 | 10 | – | 67632 |
| | 80 | | – | 67633 |
| | 100 | | – | 67634 |
| | 120 | | – | 67635 |
| 4" x 24" | 36 | 10 | 69148 | 67647 |
| | 40 | | 69149 | 67648 |
| | 50 | | 69150 | 67649 |
| | 60 | | 69151 | 67650 |
| | 80 | | 69152 | 67651 |
| | 100 | | – | 67652 |
| | 120 | | – | 67653 |

*Standard Pack 50



Blending a weld using a portable file belt.



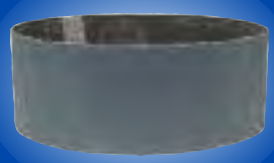
68524



67091



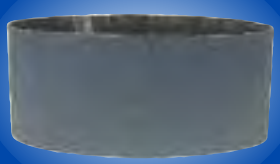
68650



69008



67614



69152

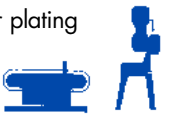
# Coated Abrasive Belts



Blending parting lines on a grey iron casting.

## Applications

- Decorative finishing of metal surfaces
- Grinding, deburring and flash removal on saw-cut parts
- Edge blending
- Smoothing metal, plastic & wood
- Removing tool marks & forging scale
- Finishing prior to painting or plating
- Grinding gates off castings



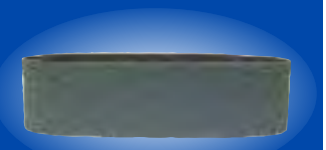
## Benchstand/Backstand Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 1" x 42" | 40 | 10 | 68683 | 67182 |
| | 60 | | 68685 | 67184 |
| | 80 | | 68686 | 67185 |
| | 100 | | – | 67186 |
| | 120 | | – | 67187 |
| 1" x 132" | 36 | 10 | 68718 | 67217 |
| | 40 | | 68719 | 67218 |
| | 60 | | 68721 | 67220 |
| | 80 | | 68722 | 67221 |
| | 100 | | – | 67222 |
| 2" x 60" | 60 | 10 | 68828 | 67327 |
| | 80 | | 68829 | 67328 |
| | 120 | | – | 67330 |
| 2" x 118" | 40 | 10 | 68879 | 67378 |
| | 60 | | 68881 | 67380 |
| 2" x 132" | 24 | 10 | 68895 | 67394 |
| | 36 | | 68896 | 67395 |
| | 40 | | 68897 | 67396 |
| | 50 | | 68898 | 67397 |
| | 60 | | 68899 | 67398 |
| | 80 | | 68900 | 67399 |
| | 100 | | – | 67400 |
| | 120 | | – | 67401 |
| 2-1/2" x 60" | 36 | 10 | 68950 | 67449 |
| | 40 | | 68951 | 67450 |
| | 50 | | 68952 | 67451 |
| | 60 | | 68953 | 67452 |
| | 80 | | 68954 | 67453 |
| | 100 | | – | 67454 |
| | 120 | | – | 67455 |
| 3" x 132" | 24 | 10 | 69075 | 67574 |
| | 36 | | 69076 | 67575 |
| | 40 | | 69077 | 67576 |
| | 50 | | 69078 | 67577 |
| | 60 | | 69079 | 67578 |
| | 80 | | 69080 | 67579 |
| | 100 | | – | 67580 |
| | 120 | | – | 67581 |
| | 150 | | – | 67582 |
| | 180 | | – | 67583 |
| | 220 | | – | 67584 |
| | 240 | | – | 67585 |
| | 320 | | – | 67586 |
| 4" x 36" | 36 | 10 | 69166 | 67665 |
| | 40 | | 69167 | 67666 |
| | 50 | | 69168 | 67667 |
| | 60 | | 69169 | 67668 |
| | 80 | | 69170 | 67669 |
| | 100 | | – | 67670 |
| | 120 | | – | 67671 |
| 4" x 132" | 24 | 10 | 69291 | 67790 |
| | 36 | | 69292 | 67791 |
| | 40 | | 69293 | 67792 |
| | 50 | | 69294 | 67793 |
| | 60 | | 69295 | 67794 |
| | 80 | | 69296 | 67795 |
| | 100 | | – | 67796 |
| | 120 | | – | 67797 |

Note: Other belt sizes available by special order.



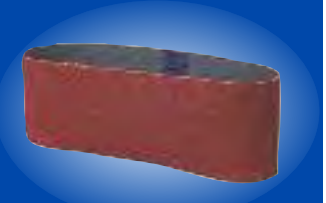
68828



69166

NOTE

**Saber Tooth™ Ceramic Belts also available! Contact Customer Service at 800-835-9999 for available sizes and grits.**



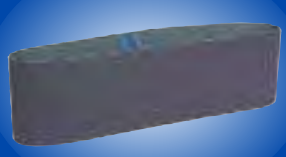
# Coated Abrasive Belts & Shop Rolls



Polishing the O.D. of a part turning in a lathe.

## Benchstand/Backstand Belts

| Size (Width x Length) | Grit Size | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | Zirconia Alumina | Aluminum Oxide |
| 6" x 48" | 36 | 10 | 69346 | 67845 |
| | 40 | | 69347 | 67846 |
| | 50 | | 69348 | 67847 |
| | 60 | | 69349 | 67848 |
| | 80 | | 69350 | 67849 |
| | 100 | | – | 67850 |
| | 120 | | – | 67851 |
| | 150 | | – | 67852 |
| | 180 | | – | 67853 |
| 6" x 60" | 36 | 10 | 69382 | 67881 |
| | 40 | | 69383 | 67882 |
| | 50 | | 69384 | 67883 |
| | 60 | | 69385 | 67884 |
| | 80 | | 69386 | 67885 |
| 6" x 132" | 36 | 10 | 69400 | 67899 |
| | 40 | | 69401 | 67900 |
| | 50 | | 69402 | 67901 |
| | 60 | | 69403 | 67902 |
| | 80 | | 69404 | 67903 |
| | 120 | | – | 67905 |



67845

**Shop Rolls -** Weiler's Shop Rolls are resin over resin bonded - providing a stronger, heat and moisture resistant bond that better utilizes the abrasive grains. The cotton cloth provides a tougher, durable backing for longer life. J-flex cloth provides a higher degree of flexibility to conform to contoured parts.

### Applications

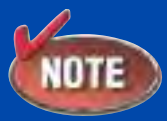
- Off-hand polishing of metal surfaces
- Off-hand deburring
- General purpose machine shop use
- Cleaning stock that is being turned in a lathe



65204

## Shop Rolls - Aluminum Oxide - 50 Yards. One roll per box.

| Roll Width | Grit Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 50 | 1 | 65204 |
| | 60 | | 65205 |
| | 80 | | 65206 |
| | 100 | | 65207 |
| | 120 | | 65208 |
| | 150 | | 65209 |
| | 180 | | 65210 |
| | 240 | | 65212 |
| | 320 | | 65213 |
| 1-1/2" | 50 | 1 | 65217 |
| | 60 | | 65218 |
| | 80 | | 65219 |
| | 100 | | 65220 |
| | 120 | | 65221 |
| | 150 | | 65222 |
| | 180 | | 65223 |
| | 240 | | 65225 |
| | 320 | | 65226 |
| 2" | 50 | 1 | 65230 |
| | 60 | | 65231 |
| | 80 | | 65232 |
| | 100 | | 65233 |
| | 120 | | 65234 |
| | 150 | | 65235 |
| | 180 | | 65236 |
| | 240 | | 65238 |
| | 320 | | 65239 |




**Use light machine oil with shop rolls as a lubricant for finer finishes and quicker cut.**

# Bonded Abrasive Technical Information

**Vortec Pro® Bonded Abrasives -** Specifically designed for general purpose grinding & cutting applications requiring heavy material removal such as rough grinding, weld removal, snagging, cutting and parting. All product is resin bond formulated for aggressive stock removal and fast cutting and are reinforced with fiberglass webbing for stability.




## Grinding

### Type 27 Products:

These products range from 4" to 9" diameter and are available in 1/4" thick for grinding and 1/8" thick for light grinding. Type 27 Wheels are offered in aluminum oxide, silicon carbide or zirconia alumina grain with a 5/8"-11 hub option.



## Cutting

### Type 27 Products:

Type 27 Wheels are offered in .045", .060", 3/32" and 1/8" wheel thicknesses. Diameters range from 4" to 9" and are available in aluminum oxide, silicon carbide or zirconia alumina grain, with an option of a 5/8"-11 hub.



### Type 1 Products:

This product category includes wheels ranging from 2" to 14" diameter in various thicknesses and grit sizes in aluminum oxide, silicon carbide or zirconia alumina grain. Type 1 Wheels are for use on right angle grinders, electric or air die grinders, tool room grinders, circular saws, stationary saws, chop saws and high speed portable gas and electric saws and walk-behind machines.



## Safety



Abrasive users and others in area must wear goggles or face shields over safety glasses. Safety guards must be used. Do not exceed maximum RPM.

## Bonded Abrasives Safety Guide - *For complete and detailed safety information see ANSI safety code B7.1.*

### — DO —

1. ALWAYS handle and store wheels in a careful manner.
2. ALWAYS visually inspect all wheels before mounting for possible damage.
3. ALWAYS make sure operation speed established for machine does not exceed wheel speed.
4. ALWAYS check mounting flanges for equal and correct diameter.
5. ALWAYS use mounting blotters when supplied with wheels.
6. ALWAYS keep grinder work rest properly adjusted within 1/8" of wheel face.
7. ALWAYS wear safety glasses or some type of eye protection equipment.
8. ALWAYS use a safety guard covering at least one-half of the wheel diameter.
9. ALWAYS allow newly mounted wheels to run at operation speed, with guard in place, for at least one minute before applying to workpiece.

### — DON'T —

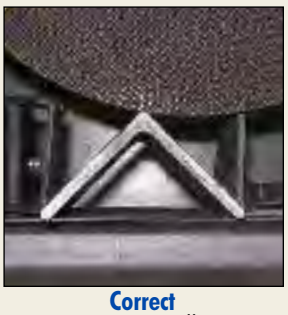
1. DON'T use a wheel that has been dropped.
2. DON'T force a wheel onto the spindle or alter the hole size of the wheel.
3. DON'T use a wheel that fits the arbor too loosely.
4. DON'T exceed maximum operation speed established for the wheel.
5. DON'T use dirty, nicked, warped or sprung mounting flanges.
6. DON'T tighten the mounting nut excessively.
7. DON'T grind on the side of the wheel unless the wheel is specifically designed for that purpose.
8. DON'T start machine without safety guard in place.
9. DON'T jam work into the wheel.
10. DON'T stand directly in front of a grinding wheel whenever a grinder is started.
11. DON'T grind or cut material for which the wheel is not designed.
12. DON'T grind or cut without proper ventilation.

## Bonded Wheel General Operating Recommendations

**Fixture the work-piece**
to minimize wheel contact area for a faster, cooler cut.

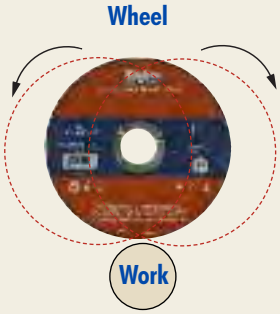


**Incorrect**
(Wide contact point)



**Correct**
(Two small contact points)

**Use an oscillating head**
when cutting thicker cross sections (over 3"). This reduces arc of contact and permits larger sections to be cut with a given diameter wheel.




**Counter rotation of the work-piece**
is recommended for cutting large cross sections (over 8") and when cutting tubular stock.




**Tech Note**

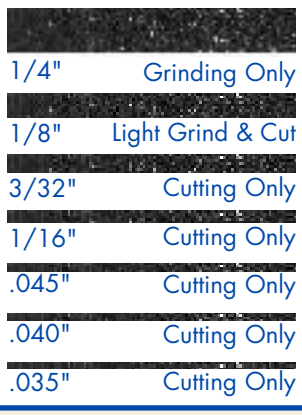
- To maximize performance, run at or close to the Maximum Safe Free Speed or RPM. NEVER EXCEED the MSFS or RPM.
- For maximum wheel life, select the coarsest, hardest wheel that will perform the cut.
- How to determine proper wheel wear:
  - Convex wheel wear is a sign of proper wheel usage.
  - Pointed wheel wear is a sign of improper usage. Wheel is too hard for application or feed rate is too slow for application.

## Bonded Wheel Product Selection

### Grain/Grit/Grade Guide

| | | |
|---|---|---|
| Grain | WA | White Aluminum Oxide: Longer wheel life on all metals except titanium & ductile iron |
| | A | Aluminum Oxide: for use on all metals except titanium and ductile iron |
| | C | Silicon Carbide: for use on non-metallics, titanium, ductile iron & stone |
| | Z | Zirconia Alumina: for higher cut rates in high pressure applications (Type 27 only) |
| Grit | 16 | Extra Coarse: for fast, aggressive cutting and maximum wheel life |
| | 24 | Coarse: for fast, aggressive cutting and maximum wheel life |
| | 30 | Medium/Coarse: for fast cutting and long wheel life |
| | 36 | Medium/Coarse: excellent for general purpose cutting |
| | 46 | Fine/Medium: for a smoother finish and reduced burr |
| | 60 | Fine: for a burr-free cut |
| Grade | S-V | Hard: for maximum wheel life |
| | R | Medium/Hard: for cutting large cross sections; improved stock removal rate |
| | N | Soft: for maximum cut rate |

### Thickness Guide




### Application Guide

| | |
|---|---|
| A24N | Aluminum Oxide - Fast Cut - Ideal for use on hard welds and steel, stainless steel, and in low pressure, large contact grinding where the harder wheel grade (R) dulls or glazes. |
| A24R | Aluminum Oxide - Long Life - Offers longer life than the softer wheel grade (N). Ideal for all general purpose grinding on structural steel, or in foundries or heavy fabrication applications. |
| Z24T | High Performance Zirconia Alumina - Offers improved cut rate in high pressure applications. Ideal when grinding or cutting stainless steel, high carbon steel, cast iron and other metals. |
| C24R | High Performance Silicon Carbide - Offers an excellent cut rate on concrete, stone and non-ferrous metals. |

## Application Solutions Guide

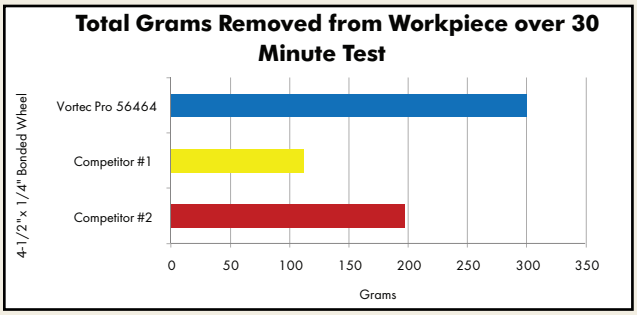
There are many variables in using Cut-Off Wheels. If the product you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's **Application Engineering Hotline at 888-299-2777.**

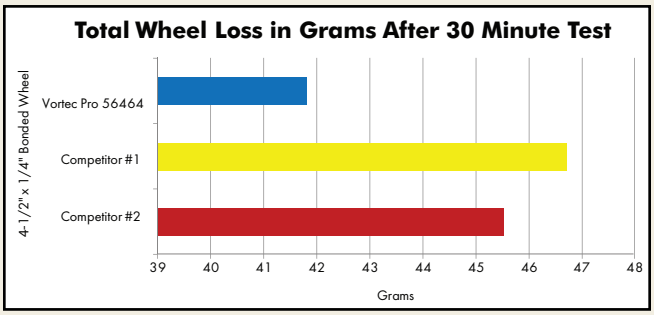
| Problem | Possible Cause | Recommended Solution |
|---|---|---|
| Slow cut rate | • Insufficient power being used | • Increase feed rate; run machine at full power |
| | • Contact area too large | • Reduce contact area |
| | • Side run out | • Check for spindle run out |
| | • Wheel binding | • Provide relief under part |
| Workpiece burn | • Insufficient feed rate | • Increase feed rate |
| | • Wheel speed too slow | • Check for wheel slippage |
| | • Wheel too coarse | • Use finer grit or increase power |
| Non-square cuts | • Work not properly fixtured | • Support both sides and fixture properly |
| | • Worn spindle bearings | • Check spindle |
| Too much burr | • Improper fixturing | • Check part fixturing |
| | • Grit too coarse | • Use a finer grit |

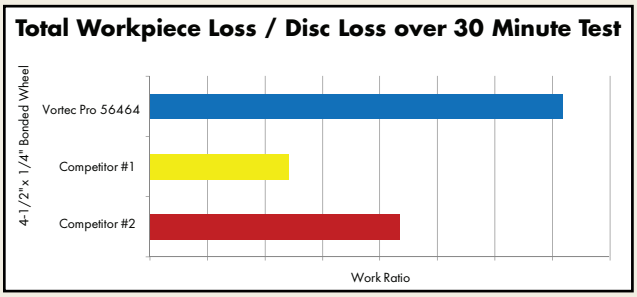
## Lab Testing Results

**Item(s) Tested: 4-1/2" x 1/4" x 7/8" Bonded Grinding/Cutting Wheels in A24R**

The following are the results of an automated test comparing the Weiler Vortec Pro Type 27 4-1/2 X 1/4" general purpose grinding wheel vs. two major manufacturers of general purpose bonded products. The test involved grinding for 30 minutes on mild steel bar stock.




As you can see from this data, the Vortec Pro #56464 Grinding Wheel removed more total material from the workpiece while losing less gram mass than the competition. Combining the higher workpiece removal with the least disc loss makes the Vortec Pro product the obvious choice for your bonded abrasive applications.

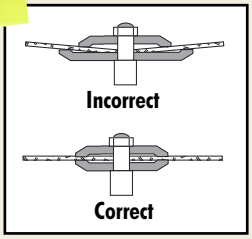






### Storage and Handling:

- Handle bonded product in a manner to prevent dropping or bumping.
- Do not roll wheels
- Use trucks or other appropriate conveyances to provide support and protection in transporting all bonded products that cannot be carried by hand.
- Store in suitable racks, bins or drawers.
- Store in a dry area not subject to extreme temperature changes. Some bonded product may be affected by excessive humidity and temperature changes.
- Locate racks as near as practical to the grinding location, but never where there is damage from passing trucks, crane handling equipment or excessive vibration.




Flanges should be of equal diameter, recessed and at least one-third the diameter of the wheel.

# Vortec Pro® Bonded Abrasives

**Cutting & Grinding Wheels -** The Vortec Pro® bonded abrasive line is specifically designed for general purpose cutting and grinding applications on steel, iron, and other ferrous metals. All product is resin-bond formulated for aggressive stock removal and fast cutting, and are reinforced with fiberglass webbing for stability.

## Applications

- Weld removal
- Cutting and parting
- Rough Grinding
- Notching



Cutting a piece of steel tubing to length.

### Vortec Pro® Small Type 1 Reinforced Cut-Off Wheels -

**General purpose cutting applications in toolrooms and machine shops.**




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2" | .035" | 1/4" | WA60T - Metal | 30,000 | 100 | 56013* |
| | 1/16" | 1/4" | A36T - Metal | | 50 | 56015 |
| | 1/4" | 3/8" | A36T - Metal | | 25 | 56131 |
| 3" | .035" | 1/4" | WA60T - Metal | 25,000 | 100 | 56061* |
| | .035" | 3/8" | WA60T - Metal | | 100 | 56062* |
| | 1/16" | 1/4" | A36T - Metal | | 100 | 56065 |
| | 1/16" | 3/8" | A36T - Metal | | 100 | 56068 |
| | 1/16" | 1/4" | A60T - Metal | | 100 | 56067 |
| | 1/16" | 3/8" | A60T - Metal | | 100 | 56070 |
| | 1/8" | 3/8" | A36T - Metal | | 50 | 56076 |
| | 1/8" | 1/4" | A36T - Metal | | 50 | 56270 |
| | 1/4" | 3/8" | A36T - Metal | 23,000 | 25 | 56147 |
| 4" | .035" | 5/8" | WA60T - Metal | 19,000 | 50 | 56271* |
| | .035" | 1/4" | WA60T - Metal | | 50 | 56079* |
| | .035" | 3/8" | WA60T - Metal | | 50 | 56080* |
| | 1/16" | 1/4" | A36T - Metal | | 50 | 56083 |
| | 1/16" | 3/8" | A36T - Metal | | 50 | 56086 |
| | 1/16" | 1/4" | A60T - Metal | | 50 | 56085 |
| | 1/16" | 3/8" | A60T - Metal | | 50 | 56088 |
| | 1/16" | 5/8" | A60T - Metal | | 50 | 56272 |
| | 1/4" | 3/8" | A36T - Metal | | 25 | 56163 |
| | 1/8" | 3/8" | A36T - Metal | | 50 | 56099 |
| 4-1/2" | .045" | 7/8" | WA60T - Metal | 13,500 | 50 | 56281* |
| | 1/16" | 7/8" | A60T - Metal | | 50 | 56103 |
| 5" | .035" | 3/8" | WA60T - Metal | 12,200 | 100 | 56106* |
| | .035" | 5/8" | WA60T - Metal | | 100 | 56108* |
| | 1/16" | 5/8" | A36T - Metal | | 25 | 56115 |
| | 1/16" | 5/8" | A60T - Metal | | 25 | 56117 |
| | 1/16" | 7/8" | A36T - Metal | | 100 | 56118 |

*Contaminant-free.




### Vortec Pro® Type 1 Reinforced Cut-Off Wheels -

**General purpose metal applications in toolrooms and machine shops.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 6" | .035" | 1/2" | WA60T - Metal | 10,200 | 25 | 56170* |
| | .035" | 5/8" | WA60T - Metal | | | 56171* |
| | .040" | 7/8" | WA60T - Metal | | | 56282* |
| | .045" | 7/8" | WA60T - Metal | | | 56273* |
| | 1/16" | 5/8" | A60T - Metal | | | 56274 |
| 7" | .035" | 5/8" | WA60T - Metal | 8,740 | 25 | 56183* |
| | .045" | 7/8" | WA60T - Metal | | | 56275* |
| | 1/16" | 5/8" | A36T - Metal | | | 56188 |
| | 1/16" | 1-1/4" | A60T - Metal | | | 56193 |
| 7" | 1/8" | 5/8"/DIA. | A24T - Metal | 8,740 | 15 | 56208 |
| | | | C24T - Concrete | | | 56209 |

*Contaminant-free.

DIA. = 5/8" arbor with diamond knockout adapter for circular saws.

### Mounting Mandrels - 1/4" Stem. For Type 1 Wheels only

| Arbor Size | Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | .035" to 1/4" | 10 | 56489 |
| 3/8" | .035" to 1/4" | 10 | 56490 |
| 1/4", 3/8" * | .035" to 1/4" | 10 | 56491* |
| 1/4", 3/8"+ | .035" to 1/4" | 1 | 36512+ |

*Combination pack +Display packaged



56013



56103




**All Weiler grinding and cutting wheels are resin bonded and contain at least 2-layers of fiberglass reinforcement.**



56282



56489

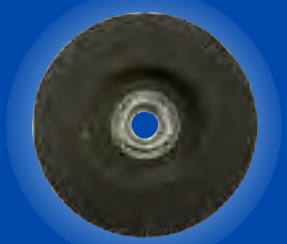
# Vortec Pro® Bonded Abrasives



Notching a steel bar prior to welding.



56283



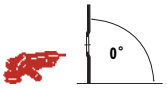
56385



56430

## Vortec Pro® Type 27 Thin Cutting Wheels - Aluminum Oxide

**For general purpose, burr-free cutting with less resistance on various metals.**

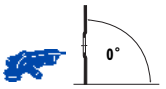



| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | WA60S - Metal | 13,300 | 25 | 56393* |
| 5" | .045" | 7/8" | WA60S - Metal | 12,200 | 100 | 56392* |
| 6" | .045" | 7/8" | WA60S - Metal | 10,200 | 25 | 56283* |
| 7" | .060" | 7/8" | WA60S - Metal | 8,500 | 25 | 56391* |

*Contaminate-free.

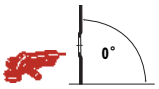
## Type 27 Thin Cutting Wheels - Zirconia Alumina

**For fast, burr-free cutting with longer life and less resistance on various metals.**




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | Z46T - Metal | 13,300 | 25 | 56389 |
| 5" | .045" | 7/8" | Z46T - Metal | 12,200 | 50 | 56388 |
| 7" | .060" | 7/8" | Z36T - Metal | 8,500 | 25 | 56387 |

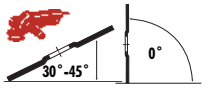
## Vortec Pro® Type 27 Cutting Wheels - For general purpose cutting on ferrous metals.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | 3/32" | 5/8" | A24T - Metal | 15,200 | 25 | 56474 |
| 4-1/2" | 3/32" | 5/8"-11<br>7/8" | A24T - Metal | 13,300 | 10<br>25 | 56385<br>56475 |
| 5" | 3/32" | 5/8"-11<br>7/8" | A24T - Metal | 12,200 | 10<br>25 | 56384<br>56476 |
| 6" | 3/32" | 5/8"-11<br>7/8" | A24R - Metal | 10,200 | 10<br>25 | 56278<br>56277 |
| 7" | 3/32" | 5/8"-11<br>7/8" | A24R - Metal | 8,500 | 10<br>25 | 56477<br>56383 |

## Vortec Pro® Type 27 - Pipeline Cutting & Light Grinding Wheels -

**General purpose light grinding and cutting. For root pass cutting and light grinding.**



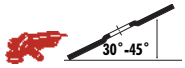

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | 1/8" | 5/8" | A24R - Metal | 15,200 | 25 | 56431 |
| 4-1/2" | 1/8" | 5/8"-11<br>7/8" | A24R - Metal | 13,300 | 10<br>25 | 56429<br>56430 |
| 5" | 1/8" | 5/8"-11<br>7/8" | A24T - Metal | 12,200 | 10<br>25 | 56427<br>56428 |
| 7" | 1/8" | 5/8"-11<br>7/8" | A24T - Metal | 8,500 | 10<br>25 | 56425<br>56426 |
| 9" | 1/8" | 5/8"-11<br>7/8" | A24T - Metal | 6,600 | 10<br>20 | 56423<br>56424 |




- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) contain White AO for a longer life vs the standard brown AO other manufactures use to save cost.**
- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) are contaminant free, which means Iron, Sulfur and Chlorine is ≤ 0.1% - they will not rust stainless steel.**

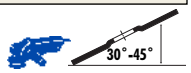
# Vortec Pro® Bonded Abrasives

## Vortec Pro® Type 27 Grinding Wheels - For general purpose, rough grinding.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Silicon Carbide - For Stone/Concrete Applications** | | | | | | |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | C24R<br>Stone/Concrete | 13,300 | 10<br>25 | 56482<br>56483 |
| 7" | 1/4" | 5/8"-11<br>7/8" | C24R<br>Stone/Concrete | 8,500 | 10<br>20 | 56486<br>56487 |
| 9" | 1/4" | 5/8"-11<br>7/8" | C24R<br>Stone/Concrete | 6,600 | 10<br>20 | 56492<br>56493 |
| **Aluminum Oxide - For General Purpose Steel Applications** | | | | | | |
| 4" | 1/4" | 5/8" | A24R - Metal | 15,200 | 25 | 56473 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 13,300 | 10<br>25 | 56454<br>56464 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24N - Metal | 13,300 | 10<br>25 | 56455<br>56457 |
| 5" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 12,200 | 10<br>25 | 56449<br>56466 |
| 6" | 1/4" | 5/8"-11"<br>7/8" | A24R - Metal | 10,200 | 10<br>25 | 56279<br>56280 |
| 7" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 8,500 | 10<br>20 | 56468<br>56467 |
| 9" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 6,600 | 10<br>20 | 56470<br>56442 |

## Type 27 Grinding Wheels - For general purpose, rough grinding.




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Zirconia Alumina - High Performance Grain That Cuts Faster with Long Life** | | | | | | |
| 4-1/2" | 1/8" | 5/8"-11<br>7/8" | Z24T - Metal | 13,300 | 10<br>25 | 56420<br>56421 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | Z24T - Metal | 13,300 | 10<br>10 | 56453<br>56456 |
| 7" | 1/8" | 5/8"-11<br>7/8" | Z24T - Metal | 8,500 | 10<br>20 | 56416<br>56417 |
| 7" | 1/4" | 5/8"-11<br>7/8" | Z24T - Metal | 8,500 | 10<br>10 | 56444<br>56446 |

## Vortec Pro® Type 1 Vitrified Grinding Wheels -

**For general purpose rough grinding and heavy stock removal.**




| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 6" | 3/4" | 1" | 36AO - Metal<br>60AO - Metal | 4,100 | 5 | 36459<br>36460 |
| 8" | 1" | 1" | 36AO - Metal<br>60AO - Metal | 3,600 | 5 | 33052<br>33053 |

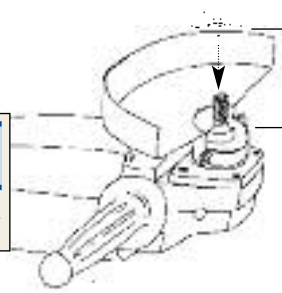


56494

## Adapting Nuts - For 4-1/2" & 5" Angle Grinders.

| Adapts To | Min. Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 7/8" to 5/8"-11 | 1/16" | 1 | 56494 |
| 5/8" to 3/8"-24 | 1/16" | 1 | 56484 |

When mounting, adapters must be nested, see illustration at right.





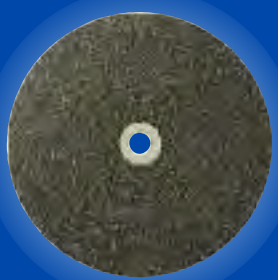

Grinding out weld defects for repair.



56464



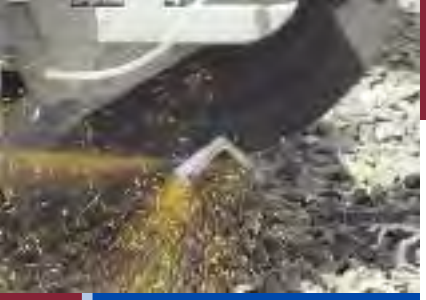
56468



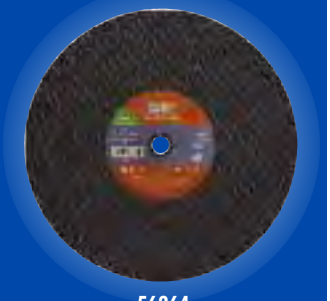
33052

**Tech Note**

# Vortec Pro® Bonded Abrasives



Cutting angle iron with a chopsaw.



56264



56238



04455

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For stationary machines.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 12" | 1/8" | 1" | C24T - Stone/Concrete | 5,100 | 10 | 56234 |
| 14" | 1/8" | 1" | A30R - Metal | 4,400 | 10 | 56230 |
| 14" | 1/8" | 1" | C20R - Stone/Concrete | 4,400 | 10 | 56246 |

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For portable gas or electric saws.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 12" | 1/8" | 1" | A24T - Metal | 6,300 | 10 | 56241 |
| 12" | 1/8" | 1" | C24T - Stone/Concrete | 6,300 | 10 | 56242 |
| 12" | 1/8" | 20mm | A24T - Metal | 6,300 | 10 | 56254 |
| 12" | 1/8" | 20mm | C24T - Stone/Concrete | 6,300 | 10 | 56255 |
| 14" | 1/8" | 1" | A24T - Metal | 5,400 | 10 | 56250 |
| 14" | 1/8" | 1" | C24T - Stone/Concrete | 5,400 | 10 | 56251 |
| 14" | 1/8" | 20mm | A24T - Metal | 5,460 | 10 | 56263 |
| 14" | 1/8" | 20mm | C24T - Stone/Concrete | 5,460 | 10 | 56264 |

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For low horsepower chop saws.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 12" | 3/32" | 1" | A46T - Metal | 5,100 | 10 | 56239 |
| 12" | 3/32" | 1" | A46S - Metal | 5,100 | 10 | 56238 |
| 14" | 3/32" | 1" | A46T - Metal | 4,400 | 10 | 56240 |
| 14" | 3/32" | 1" | A46S - Metal | 4,400 | 10 | 56244 |

## Vortec Pro® Large Type 1 Reinforced Cut-Off Wheels -

**General purpose - For walk behind machines.**

| Diameter | Wheel Thickness | Arbor Hole | Type | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 14" | 3/16" | 1" | C16T - Stone/Concrete<br>C16R - Stone/Concrete | 4,400 | 10 | 56268<br>56267 |

## Plastic Adapters - Allows Type 1 wheels to work on machines with a 20mm arbor hole.

| Wheel Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 20mm | 10 | 04455 |

Tech Note

**The following factors can cause wheel breakage:**

- Excessive speed
- Excessive wheel feed rate
- Improper mounting
- Improper machine conditions
- Work improperly clamped
- Misuse

**DID YOU KNOW?**

All Weiler Vortec Pro Cutting Wheels have a metal reinforcement ring around the arbor hole.

# Non-Woven Unitized Wheels

## Non-Woven Abrasives Technical Information

Non-woven abrasive products can be used in a broad range of surface-conditioning applications from cleaning and finishing to deburring and light blending. Unlike bonded and coated abrasives, they cannot be used for applications requiring heavy stock removal such as grinding and weld blending.

All non-woven products are fabricated from base materials that are composed of a random "web" of nylon fibers that have been bonded together with synthetic resins and impregnated with abrasive grains. Although these materials vary in fiber density, their three dimensional nature results in specialty abrasive products that are pliable, conformable to the work surface, and limited in their ability to remove base stock.

Non-woven products resist loading and perform consistently as new, fresh abrasive grains are exposed as the nylon fibers wear away from the product during use. Non-woven abrasives can be used either wet or dry on a range of materials including ferrous and non-ferrous metals, ceramics, plastics, composites, and wood. Non-woven products are designed for use where stock removal is not required. Non-wovens begin where coated abrasives leave off.



A unitized wheel deburring a ring gear.

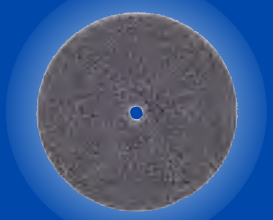
**Unitized Wheels -** Designed for use on die grinders and are ideal for a variety of cleaning, finishing, deburring and edge blending applications.

### Applications

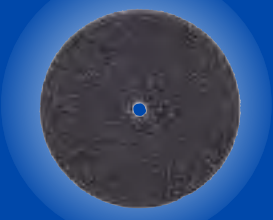
- Deburring machined surfaces
- Removing heat discoloration, rust and oxidation
- Blending saw and machine marks

### Unitized Wheels

| Diameter | Face Width | Arbor Hole | Grain | Grade | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| **Series 2 - Cleaning & Finishing - Hardness: Soft** | | | | | | | |
| 2" | 1/4" | 1/4" | Silicon Carbide | Fine | 18,000 | 10 | 55511 |
| 3" | 1/4" | 1/4" | Aluminum Oxide | Fine | 12,000 | 10 | 55512 |
| | 1/4" | | Silicon Carbide | Fine | | | 55513 |
| **Series 4 - General Purpose - Hardness: Medium** | | | | | | | |
| 2" | 1/4" | 1/4" | Aluminum Oxide | Fine | 18,000 | 10 | 55520 |
| | 1/2" | | Aluminum Oxide | Fine | | | 55481 |
| 3" | 1/4" | 1/4" | Aluminum Oxide | Fine | 12,000 | 10 | 55522 |
| | 1/2" | | Aluminum Oxide | Fine | | | 55487 |
| **Series 6 - Deburring - Hardness: Medium/Hard** | | | | | | | |
| 1" | 1" | 3/16" | Aluminum Oxide | Fine | 30,000 | 10 | 55531 |
| 2" | 1/4" | 1/4" | Aluminum Oxide | Fine | 22,000 | 10 | 54488 |
| 3" | 1/4" | 1/4" | Aluminum Oxide | Fine | 18,000 | | 54492 |
| | 1/2" | | Aluminum Oxide | Fine | | | 55530 |
| **Series 8 - HD Deburring & Polishing - Hardness: Hard (Heavy-Duty)** | | | | | | | |
| 1" | 1" | 3/16" | Aluminum Oxide | Medium | 30,000 | 10 | 55543 |
| 2" | 1/8" | 1/4" | Aluminum Oxide | Coarse | 22,000 | 10 | 55545 |
| | 1/4" | | Aluminum Oxide | Medium | | | 55540 |
| 3" | 1/8" | 1/4" | Aluminum Oxide | Coarse | 18,000 | 10 | 55546 |
| | 1/4" | | Aluminum Oxide | Medium | | | 55541 |
| | 1/2" | | Aluminum Oxide | Medium | | | 55542 |



55512



55541



56489

### Mandrels

| Stem Diameter | For Wheel Diameter | For Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/4" | 2" - 3" | 1/2" | 1 | 07761 |
| | 1" | 1" | 1 | 07764 |
| | 2" - 3" | 1/8" - 1/4" | 10 | 56489 |

# Non-Woven Convolute Wheels



Polishing a stainless steel door handle.

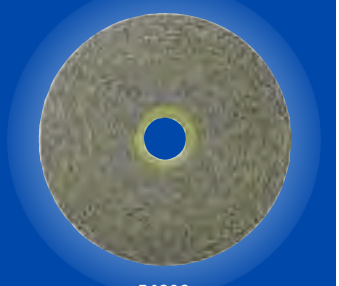
**Convolute Wheels -** Weiler's Convolute Wheels are designed for a wide variety of cleaning, finishing, deburring and edge blending needs on straight shaft tools and bench/pedestal grinders.

## Applications

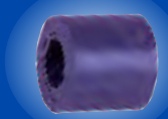
- Cleaning and polishing metal surfaces
- Deburring stamped metal parts
- Blending edges
- Polishing and finishing machined parts
- Removing parting lines
- Removing coated abrasive grind lines



54455



54303



04440



03804

NOTE

Lubricut™ Lubricant is available for use on Convolute Wheels. See page 73 for usage recommendations.

## Convolute Wheels

| Dia. | Face Width | Arbor Hole | Grain | Grade | Density | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| **MRO/General Purpose - For general cleaning and finishing** | | | | | | | | |
| 6" | 1/2" | 1" | Silicon Carbide | Fine | 7 | 6,000 | 4 | 54450 |
| | 1" | | Silicon Carbide | Fine | 7 | | 3 | 54455 |
| | 1" | | Silicon Carbide | Medium | 8 | | 3 | 54456 |
| 8" | 1" | 3" | Silicon Carbide | Fine | 7 | 4,500 | 3 | 54460 |
| | | | Silicon Carbide | Medium | 7 | | ? | 54461 |
| **Deburring Wheels - For deburring and edge blending** | | | | | | | | |
| 6" | 1/2" | 1" | Silicon Carbide | Fine | 8 | 6,000 | 4 | 54300 |
| | 1/2" | | Silicon Carbide | Fine | 9 | | 4 | 54301 |
| | 1/2" | | Silicon Carbide | Medium | 9 | | 4 | 54401 |
| | 1" | | Silicon Carbide | Fine | 8 | | 3 | 54303 |
| | 1" | | Silicon Carbide | Fine | 9 | | 3 | 54304 |
| | 1" | | Silicon Carbide | Medium | 8 | | 3 | 54050 |
| | 2" | | Silicon Carbide | Fine | 9 | | 2 | 54307 |
| 8" | 1" | 3" | Silicon Carbide | Fine | 8 | 4,500 | 3 | 54309 |
| | | | Silicon Carbide | Fine | 9 | | 3 | 54310 |
| | | | Silicon Carbide | Medium | 8 | | 3 | 54052 |

## Adapters

| Wheel Inside Diameter | Arbor Hole | Standard Pack | Item Number |
|---|---|---|---|
| **Telescoping Plastic Adapter** | | | |
| 1" | 3/4" - 5/8" - 1/2" | 1 | 04440 |
| **Metal Adapters** | | | |
| 3" | 1/2" | 1 | 03804 |
| | 5/8" | | 03805 |
| | 3/4" | | 03806 |
| | 1" | | 03807 |
| | 1-1/4" | | 03808 |

Tech Note

## Suggested Wheel Dressing Method

**The initial dressing is most important to achieve maximum cutting and face uniformity. This process takes less than one minute.**

**Step 1:** Mount a 36 grit abrasive cloth strip to a solid backing (plywood).

**Step 2:** Run the wheel at a high RPM (not to exceed Maximum Safe Free Speed). Apply the abrasive strip to the wheel face using light, uniform pressure.

**Step 3:** Move the abrasive strip across the wheel face until the wheel face is uniform.

**Step 4:** Use a piece of hardwood to burn away the excess nylon fiber. Hold the wood against the face until the wheel cuts the wood, exposing fresh grain and eliminating excess nylon.



Wheel that needs to be dressed.



Illustration of Step 2.

# Non-Woven Surface Conditioning Discs



**Surface Conditioning Discs -** Have an open construction, scrim reinforcement and a superior resin system. These features minimize loading, heat build-up, fraying of disc edges, grain shedding and extend disc life, providing superior performance.

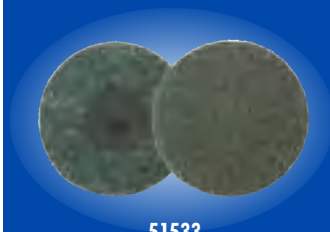
## Applications

- Light deburring
- Surface preparation
- Blending light scratches
- Removing rust and corrosion
- Removing rust and oxidation
- Cleaning and removing stains from stainless steel
- Producing satin finishes on aluminum and stainless steel

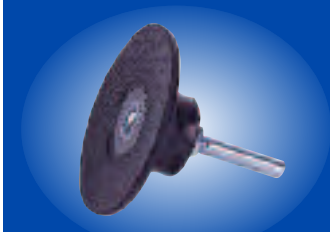
Finishing the surface for a stainless steel part for the food service industry.



51532



51533



51552

## Plastic Button Style Discs - Compatible with 3M Roloc™ back-up pads.

| Diameter | Grade | Standard Pack | Item Number | |
|---|---|---|---|---|
| | | | General Purpose | High Performance |
| 1-1/2" | Very Fine (Blue) | 50 | 51527 | - |
| | Medium (Maroon) | | 51528 | - |
| | Coarse (Brown) | | 51529 | - |
| 2" | Very Fine (Blue) | 50 | 51530 | 57324 |
| | Medium (Maroon) | | 51531 | 57323 |
| | Coarse (Brown) | | 51532 | 57322 |
| 3" | Very Fine (Blue) | 25 | 51533 | 57327 |
| | Medium (Maroon) | | 51534 | 57326 |
| | Coarse (Brown) | | 51535 | 57325 |
| 4" | Very Fine (Blue) | 10 | 51536 | - |
| | Medium (Maroon) | | 51537 | - |
| | Coarse (Brown) | | 51538 | - |

Roloc™ is a trademark of 3M.

## Plastic Button Style Back-up Pads - 1/4" Stem

| Diameter | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|
| 1-1/2" | 30,000 | 1 | 51550 |
| 2" | 30,000 | 1 | 51551 |
| 3" | 20,000 | 1 | 51552 |
| 4" | 12,000 | 1 | 51553 |

Do not exceed maximum RPM of back-up pad.




- **The flexible, open style construction of non-wovens makes them conformable, non-loading and ideal for finishing non-ferrous metals such as aluminum and brass.**
- **Unlike steel wool, the non-metallic construction of non-wovens will not contaminate metals and cause surface rust.**

# Non-Woven Surface Conditioning Discs



Putting a decorative satin finish on a stainless steel door.



51508



51561

## Hook & Loop Style Discs

| Diameter | Grade | Standard Pack | Item Number |
|---|---|---|---|
| 2" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 50 | 51503<br>51504<br>51505 |
| 3" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 25 | 51506<br>51507<br>51508 |
| 4" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51509<br>51510<br>51511 |
| 4-1/2" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51512<br>51513<br>51514 |
| 5" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51515<br>51516<br>51517 |
| 6" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51518<br>51519<br>51520 |
| 7" | Very Fine (Blue)<br>Medium (Maroon)<br>Coarse (Brown) | 10 | 51521<br>51522<br>51523 |
| 8" | Medium (Maroon)<br>Coarse (Brown) | 10 | 51525<br>51526 |

## Hook & Loop Style Back-up Pads

| Diameter | Arbor Hole or Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|
| 2" | 1/4" Stem | 16,000 | 1 | 51561 |
| 3" | 1/4" Stem | 18,000 | 1 | 51562 |
| 4" | 1/4" Stem | 16,000 | 1 | 51563 |
| 4-1/2" | 5/8" -11 Arbor | 13,000 | 1 | 51569 |
| 5" | 5/8" -11 Arbor | 10,000 | 1 | 51575 |
| 6" | 5/8" -11 Arbor | 8,000 | 1 | 51577 |
| 7" | 5/8" -11 Arbor | 6,000 | 1 | 51578 |
| 8" | 5/8" -11 Arbor | 4,500 | 1 | 51579 |

Do not exceed maximum RPM of back-up pad.

**DID YOU KNOW?** Weiler operates 6 warehouses in the U.S.A., Canada & Mexico.

# Non-Woven Hand Pads

**Hand Pads -** For cleaning and conditioning surfaces by hand. Unlike steel wool, hand pads are non-metallic, and do not produce "after-rust" on work surfaces. Hand pads can be used in wet applications.



Cleaning a restaurant sink with a commercial hand pad.

## Applications

Industrial Grade:

- Producing satin finishes on aluminum and stainless steel
- Light deburring
- Surface preparation
- Blending light scratches

Commercial Grade:

- Cleaning and removing stains from stainless steel
- Removing rust, corrosion and oxidation

### Hand Pads - Industrial Grade

| Size | Grain | Grade | Description | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 9" | Silicon Carbide | Ultra Fine | Finishing (Grey) | 60 | 51434 |
| 6" x 9" | Aluminum Oxide | Medium | Economy General Purpose (Maroon) | 60 | 51460 |
| 6" x 9" | Aluminum Oxide | Med/ Coarse | General Purpose (Maroon) | 60 | 51444 |
| 6" x 9" | Aluminum Oxide | Heavy-Duty | Heavy-Duty (Tan) | 40 | 51454 |



51460

### Hand Pads - Commercial Grade

| Size | Grain | Grade | Description | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 9" | Aluminum Oxide | Fine | Economy (Green) | 400 | 51456 |
| 6" x 9" | Aluminum Oxide | Medium | Standard-Duty (Green) | 60 | 51457 |
| 6" x 9" | Aluminum Oxide | Heavy-Duty | Heavy-Duty (Green) 20% thicker than Standard Duty | 60 | 51458 |



51457

### Hand Pad Holder

| Description | Standard Pack | Item Number |
|---|---|---|
| For 3" x 6" Pad | 1 | 59616 |



59616




Although denser non-woven abrasive products are suitable for applications requiring light stock removal such as removing large, well-attached burrs and blending minor tool marks and imperfections, the strength of these products is producing decorative finishes ranging from satin to near-mirror polish. The various grades of non-woven products produce scratch patterns which can be compared to those produced by coated abrasive products. However, their pliable nature results in a softer, less pronounced scratch-line pattern.

| Grade | Grit Range |
|---|---|
| Ultra Fine | 600 |
| Very Fine | 240-360 |
| Fine | 180-220 |
| Medium | 100-150 |
| Coarse | 50-80 |

# Non-Woven Interleaf Flap Wheels



Deburring the I.D. of a steel pipe with an interleaf flap wheel.

**Interleaf Flap Wheels -** Provide a combination of non-woven and coated abrasive material to produce a very conformable product compared to a standard coated abrasive flap wheel. They are designed to be a finishing and surface blending tool as compared to a material-removing coated abrasive flap wheel. They are ideal for producing satin or decorative finishes on irregular or contoured surfaces.

## Applications

- General decorative finishing
- Applying satin finishes
- Producing antique finishes
- Final sandings
- Soft metal finishing
- Removing oxides from precious metals
- Fine burr removal



54500



54510

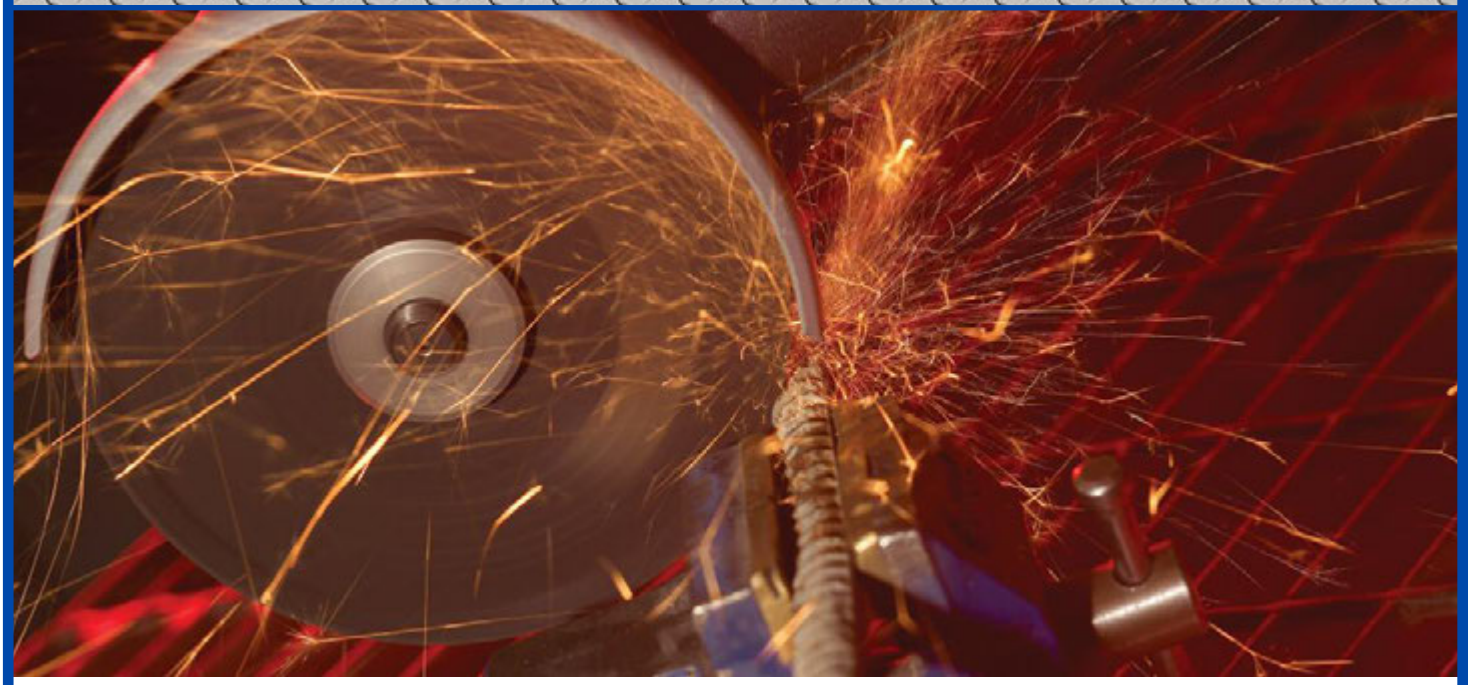
### Stem-Mounted Interleaf Flap Wheels - Aluminum Oxide

| Diameter | Face Width | Grit Size | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2" | 1" | 120<br>180<br>320 | 1/4" | 13,700 | 10 | 54500<br>54501<br>54502 |
| 3" | 1" | 120<br>180<br>320 | 1/4" | 8,600 | 5 | 54506<br>54507<br>54508 |
| 3" | 2" | 120<br>180<br>320 | 1/4" | 8,600 | 5 | 54509<br>54510<br>54511 |

**DID YOU KNOW?**

Defuzzing coconuts, finishing casket hardware and cleaning blades used for lasik surgery are all applications in which Weiler products are used.

# Weiler® Bonded Abrasives For General Purpose Applications



## Cutting & Grinding Wheels

The Vortec Pro® bonded abrasive line is specifically designed for general purpose grinding and cutting applications. Offering includes products for use on steel, iron, and other ferrous metals or stone, concrete & ductile iron. All product is resin-bond formulated for aggressive stock removal and fast cutting, and are reinforced with fiberglass webbing for stability.

## Grinding

### Type 27 Products:



These products range from 4" to 9" diameter and are available in 1/4" thick for grinding. Type 27 Wheels are offered in aluminum oxide and silicon carbide grain with a 5/8"-11 hub option.

## Cutting

### Type 27 Products:



Type 27 Wheels are offered in .045", .060", 3/32" and 1/8" wheel thicknesses. Diameters range from 4" to 9" and are available in aluminum oxide, with an option of a 5/8"-11 hub.

### Type 1 Products:



This product category includes wheels ranging from 2" to 14" diameter in various thicknesses and grit sizes in aluminum oxide and silicon carbide grain. Type 1 Wheels are for use on right angle grinders, electric or air die grinders, tool room grinders, circular saws, stationary saws, chop saws, high speed portable gas and electric saws and walk-behind machines.

**Tech Note**

- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) contain White AO for a longer life vs the standard brown AO other manufactures use to save cost.**
- **All Weiler Vortec Pro bonded Thin Cutting wheels (.060 and thinner) are contaminant free, which means Iron, Sulfur and Chlorine is ≤ 0.1% - they will not rust stainless steel.**

## Wheel Selection Guide

**Grain**

| | |
|---|---|
| **WA** | White Aluminum Oxide: Longer wheel life on all metals except titanium & ductile iron |
| **A** | Aluminum Oxide: for use on all metals except titanium and ductile iron |
| **C** | Silicon Carbide: for use on non-metallics, titanium, ductile iron & stone |

**Grit**

| | |
|---|---|
| **16** | Extra Coarse: for fast, aggressive cutting and maximum wheel life |
| **24** | Coarse: for fast, aggressive cutting and maximum wheel life |
| **30** | Medium/Coarse: for fast cutting and long wheel life |
| **36** | Medium/Coarse: excellent for general purpose cutting |
| **46** | Fine/Medium: for a smoother finish and reduced burr |
| **60** | Fine: for a burr-free cut |

**Grade**

| | |
|---|---|
| **N** | Soft/Medium: for maximum cut rate |
| **R** | Medium/Hard: for cutting large cross sections; improved stock removal rate |
| **S-V** | Hard: for maximum wheel life |

## Warning!

**The following factors can cause wheel breakage and personal injury:**

- **Excessive speed**
- **Improper mounting**
- **Work improperly clamped**
- **Excessive wheel feed rate**
- **Improper machine conditions**
- **Misuse**

# Cutting Wheels



Notching a steel bar prior to welding.



56013



56076



56273

## Small Type 1 Reinforced Cut-Off Wheels - General purpose cutting applications in toolrooms and machine shops.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 2" x .035" x 1/4" | 30,000 | WA60T | Metal Applications | 100 | 56013* |
| 2" x 1/16" x 1/4" | | A36T | | 50 | 56015 |
| 2" x 1/4" x 3/8" | | A36T | | 25 | 56131 |
| 3" x .035" x 1/4" | 25,000 | WA60T | | 100 | 56061* |
| 3" x .035" x 3/8" | | WA60T | | 100 | 56062* |
| 3" x 1/16" x 1/4" | | A36T | | 100 | 56065 |
| 3" x 1/16" x 1/4" | | A60T | | 100 | 56067 |
| 3" x 1/16" x 3/8" | | A36T | | 100 | 56068 |
| 3" x 1/16" x 3/8" | | A60T | | 100 | 56070 |
| 3" x 1/8" x 1/4" | | A36T | | 50 | 56270 |
| 3" x 1/8" x 3/8" | | A36T | | 50 | 56076 |
| 3" x 1/4" x 3/8" | 23,000 | A36T | | 25 | 56147 |
| 4" x .035" x 1/4" | 19,000 | WA60T | | 50 | 56079* |
| 4" x .035" x 3/8" | | WA60T | | 50 | 56080* |
| 4" x .035" x 5/8" | | WA60T | | 50 | 56271* |
| 4" x 1/16" x 1/4" | | A36T | | 50 | 56083 |
| 4" x 1/16" x 1/4" | | A60T | | 50 | 56085 |
| 4" x 1/16" x 3/8" | | A36T | | 50 | 56086 |
| 4" x 1/16" x 3/8" | | A60T | | 50 | 56088 |
| 4" x 1/8" x 3/8" | | A36T | | 50 | 56099 |
| 4" x 1/16" x 5/8" | | A60T | | 50 | 56272 |
| 4" x 1/4" x 3/8" | | A36T | | 25 | 56163 |
| 4-1/2 x .045" x 7/8" | 13,500 | WA60T | | 50 | 56281* |
| 4-1/2 x 1/16" x 7/8" | | A60T | | 50 | 56103 |
| 5" x .035" x 3/8" | 12,200 | WA60T | | 100 | 56106* |
| 5" x .035" x 5/8" | | WA60T | | 100 | 56108* |
| 5" x 1/16" x 5/8" | | A36T | | 25 | 56115 |
| 5" x 1/16" x 5/8" | | A60T | | 25 | 56117 |
| 5" x 1/16" x 7/8" | | A36T | | 100 | 56118 |

*Contaminant-free.

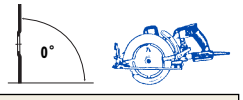
## Type 1 Reinforced Cut-Off Wheels - General purpose toolroom and machine shop use.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x .035" x 1/2" | 10,200 | WA60T | Metal Applications | 25 | 56170* |
| 6" x .035" x 5/8" | | WA60T | | | 56171* |
| 6" x .040" x 7/8" | | WA60T | | | 56282* |
| 6" x .045" x 7/8" | | WA60T | | | 56273* |
| 6" x 1/16" x 5/8" | | A60T | | | 56274 |
| 7" x .035" x 5/8" | 8,740 | WA60T | | 25 | 56183* |
| 7" x .045" x 7/8" | | WA60T | | | 56275* |
| 7" x 1/16" x 5/8" | | A36T | | | 56188 |
| 7" x 1/16" x 1-1/4" | | A60T | | | 56193 |

*Contaminant-free.

## Type 1 Reinforced Cut-Off Wheels - General purpose - With diamond arbor for circular saws.

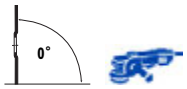



| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7" x 1/8" x DIA. | 8,740 | A24T | Metal Applications | 15 | 56208 |
| 7" x 1/8" x DIA. | 8,740 | C24T | Stone/Concrete | 15 | 56209 |

DIA. = 5/8" arbor with diamond knockout adapter.

## Type 27 Thin Cutting Wheels - General purpose

**For fast, burr-free cutting with less resistance.**




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" x .045" x 7/8" | 13,300 | WA60S | Metal Applications | 25 | 56393* |
| 5" x .045" x 7/8" | 12,200 | WA60S | | 100 | 56392* |
| 6" x .045" x 7/8" | 10,200 | WA60S | | 100 | 56283* |
| 7" x .060" x 7/8" | 8,500 | WA60S | | 25 | 56391* |

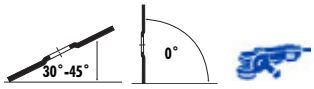
*Contaminant-free.

## Type 27 Cutting Wheels - For general purpose cutting on ferrous metals.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" x 3/32" x 5/8" | 15,200 | A24T | Metal Applications | 25 | 56474 |
| 4-1/2" x 3/32" x 7/8" | 13,300 | A24T | | 25 | 56475 |
| 4-1/2" x 3/32" x 5/8"-11 | | A24T | | 10 | 56385 |
| 5" x 3/32" x 7/8" | 12,200 | A24T | | 25 | 56476 |
| 5" x 3/32" x 5/8"-11 | | A24T | | 10 | 56384 |
| 6" x 3/32" x 7/8" | 10,200 | A24R | | 25 | 56277 |
| 6" x 3/32" x 5/8"-11 | | A24R | | 10 | 56278 |
| 7" x 3/32" x 7/8" | 8,500 | A24R | | 25 | 56383 |
| 7" x 3/32" x 5/8"-11 | | A24R | | 10 | 56477 |

## Type 27 Cutting Wheels - For root pass cutting and light grinding. General purpose light grinding and cutting.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" x 1/8" x 5/8" | 15,200 | A24R | Metal Applications | 25 | 56431 |
| 4-1/2" x 1/8" x 7/8" | 13,300 | A24R | | 25 | 56430 |
| 4-1/2" x 1/8" x 5/8"-11 | | | | 10 | 56429 |
| 5" x 1/8" x 7/8" | 12,200 | A24T | | 25 | 56428 |
| 5" x 1/8" x 5/8"-11 | | | | 10 | 56427 |
| 7" x 1/8" x 7/8" | 8,500 | A24T | | 25 | 56426 |
| 7" x 1/8" x 5/8"-11 | | | | 10 | 56425 |
| 9" x 1/8" x 7/8" | 6,600 | A24T | | 20 | 56424 |
| 9" x 1/8" x 5/8"-11 | | | | 10 | 56423 |

## Type 27 Grinding Wheels - For general purpose rough grinding.




| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" x 1/4" x 5/8" | 15,200 | A24R | Metal Applications | 25 | 56473 |
| 4-1/2" x 1/4" x 7/8" | 13,300 | A24N | | 25 | 56457 |
| 4-1/2" x 1/4" x 5/8"-11 | | | | 10 | 56455 |
| 4-1/2" x 1/4" x 7/8" | 13,300 | A24R | | 25 | 56464 |
| 4-1/2" x 1/4" x 5/8"-11 | | | | 10 | 56454 |
| 4-1/2" x 1/4" x 7/8" | 13,300 | C24R | Stone/Concrete | 10 | 56483 |
| 4-1/2" x 1/4" x 5/8"-11 | | | | 10 | 56482 |
| 5" x 1/4" x 7/8" | 12,200 | A24R | Metal Applications | 25 | 56466 |
| 5" x 1/4" x 5/8"-11 | | | | 10 | 56449 |
| 6" x 1/4" x 5/8"-11 | 10,200 | A24R | | 10 | 56279 |
| 6" x 1/4" x 7/8" | | | | 25 | 56280 |
| 7" x 1/4" x 7/8" | 8,500 | A24R | | 20 | 56467 |
| 7" x 1/4" x 5/8"-11 | | | | 10 | 56468 |
| 7" x 1/4" x 7/8" | 8,500 | C24R | Stone/Concrete | 10 | 56487 |
| 7" x 1/4" x 5/8"-11 | | | | 10 | 56486 |
| 9" x 1/4" x 7/8" | 6,600 | A24R | Metal Applications | 20 | 56442 |
| 9" x 1/4" x 5/8"-11 | | | | 10 | 56470 |
| 9" x 1/4" x 7/8" | 6,600 | C24R | Stone/Concrete | 20 | 56493 |
| 9" x 1/4" x 5/8"-11 | | | | 10 | 56492 |



Cutting angle iron with a chopsaw.




56283



56430



56464



56468

# Large Type 1 Cutting Wheels & Accessories



56264



56491

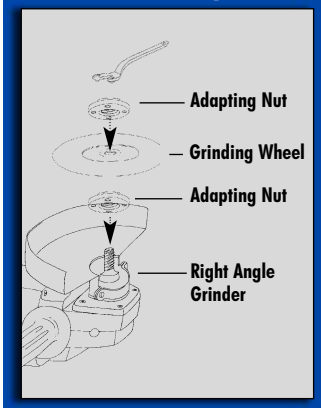


56494



04455

**Right Angle Grinder Adapting Nut Assembly**




## Large Type 1 Reinforced Wheels - General purpose - For stationary machines

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 12" x 1/8" x 1" | 5,100 | C24T | Stone/Concrete | 10 | 56234 |
| 14" x 1/8" x 1" | 4,400 | A30R | Metal Applications | 10 | 56230 |
| 14" x 1/8" x 1" | 4,400 | C20R | Stone/Concrete | 10 | 56246 |

## Large Type 1 Reinforced Wheels - General purpose - For portable gas or electric saws

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 12" x 1/8" x 1" | 6,300 | A24T | Metal Applications | 10 | 56241 |
| 12" x 1/8" x 1" | 6,300 | C24T | Stone/Concrete | 10 | 56242 |
| 12" x 1/8" x 20mm | 6,300 | A24T | Metal Applications | 10 | 56254 |
| 12" x 1/8" x 20mm | 6,300 | C24T | Stone/Concrete | 10 | 56255 |
| 14" x 1/8" x 1" | 5,400 | A24T | Metal Applications | 10 | 56250 |
| 14" x 1/8" x 1" | 5,400 | C24T | Stone/Concrete | 10 | 56251 |
| 14" x 1/8" x 20mm | 5,460 | A24T | Metal Applications | 10 | 56263 |
| 14" x 1/8" x 20mm | 5,460 | C24T | Stone/Concrete | 10 | 56264 |

## Large Type 1 Reinforced Wheels - General purpose - For low horsepower chop saws

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 12" x 3/32" x 1" | 5,100 | A46T | Metal Applications | 10 | 56239 |
| 12" x 3/32" x 1" | 5,100 | A46S | | 10 | 56238 |
| 14" x 3/32" x 1" | 4,400 | A46T | | 10 | 56240 |
| 14" x 3/32" x 1" | 4,400 | A46S | | 10 | 56244 |

## Large Type 1 Reinforced Wheels - General purpose - For walk behind machines

| Diameter x Thickness x Arbor | Max. RPM | Grain/ Grit/Grade | For Use On | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 14" x 3/16" x 1" | 4,400 | C16T<br>C16R | Stone/Concrete | 10 | 56268<br>56267 |

## Mounting Mandrels - 1/4" Stem. For 1"-3" Type 1 Wheels only

| Arbor Size | Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | .035" to 1/4" | 10 | 56489 |
| 3/8" | .035" to 1/4" | 10 | 56490 |
| 1/4", 3/8"* | .035" to 1/4" | 10 | 56491 |

*Combination pack

## Adapting Nuts - For 4-1/2" & 5" Angle Grinders. Use with Item Numbers 56103 & 56118

| Adapts To | Minimum Wheel Thickness | Standard Pack | Item Number |
|---|---|---|---|
| 7/8" to 5/8"-11<br>5/8" to 3/8"-24 | 1/16" | 1 | 56494<br>56484 |

When mounting, adapters must be nested, see illustration on left.

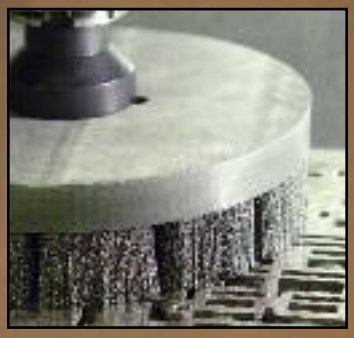
## Plastic Adapters - For Cut-Off Wheels with 1" arbor holes.

| Wheel Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 20mm | 10 | 04455 |


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Form Reorder No.: WC660 Rev. 5-14

# Weiler® Burr-Rx® Brushes

## The Original Ceramic Grain NAF Deburring Tool!



Brush mounts directly onto Shell Mill Holder!

PERFORMANCE COUNTS • USA COMPANY • SATISFACTION GUARANTEED™

**Black Ceramic Filament Cuts 400% Faster!**

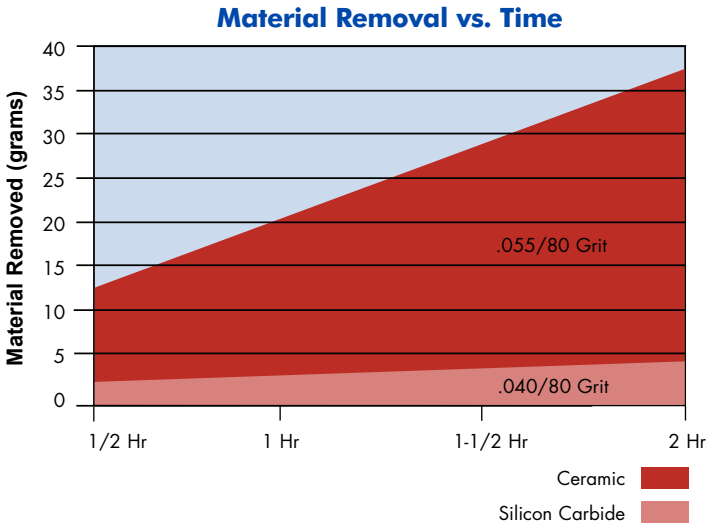
MADE IN U.S.A.

# New Filament Technology

## Black Ceramic Filament Cuts 400% Faster!

The Burr-Rx® brush is the ultimate high aggression, compliant deburring tool. The latest addition to Weiler's Nylox® abrasive filament product line, **Burr-Rx brushes utilize advanced filament technology, resulting in maximum aggression.** The black nylon filaments are co-extruded with high aggression ceramic grains providing cut rates never seen before with abrasive filament brushes!

*As the chart to the right illustrates, the ceramic filament cuts 400% faster than conventional filaments with silicon carbide grain.*




## High Aggression Means Minimum Cycle Time

The extreme aggression of Burr-Rx brushes reduces processing time by allowing the use of high feed rates and short dwell times, resulting in increased throughput and lower deburring costs. In addition, Burr-Rx brushes can remove burrs which were previously impossible to remove with conventional nylon abrasive filament brushes.

The pictures below show Weiler's burr classification system which qualitatively describes burr types produced by common metalworking processes. Burr-Rx brushes are especially well-suited for applications involving Class 3 and Class 4 burrs.

**Class 1**



Microburrs can only be observed using magnification. To the unaided eye, they appear as sharp edges. Grinding operations are a common source of this type of burr.

**Class 2**



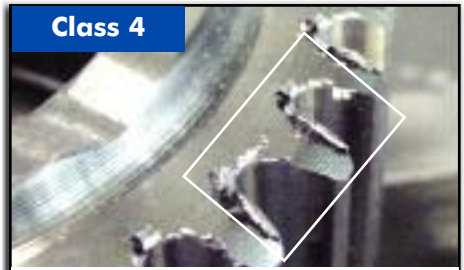
Feather burrs are readily visible without magnification and are characterized by extremely thin roots. They can be removed with a tip of a pencil.

**Class 3**



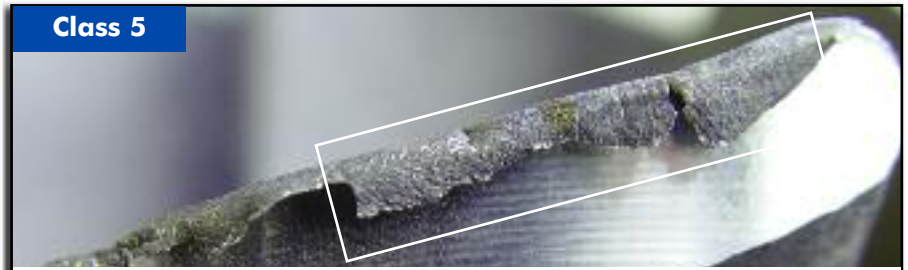
Burrs in this group are well-attached, but relatively small in size. Despite their size, significant mechanical energy must be applied to remove them.

**Class 4**



Like Class 3 burrs, the burrs in this class are well-attached. The primary difference is size and root thickness.

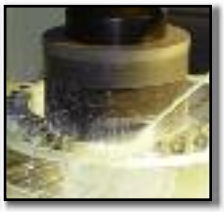
**Class 5**



Class 5 burrs are very large with thick, rigid roots. Burrs in this class are different than conventional burrs because they are comprised of displaced base material which is still fully-attached to the parent part. Brushes can sometimes remove Class 5 burrs, but often a stock removal operation such as grinding or machining is required for complete removal.

## General Operating Guidelines





**Ceramic Cut Rate -** Burr-Rx® brushes are especially well-suited for deburring materials such as inconel, stainless steel and titanium due to the unique cutting characteristics of the ceramic grain. Because they contain this ceramic abrasive, Burr-Rx brushes can also be used in the medical and aerospace industries where conventional silicon carbide brushes are often prohibited.

**Operating Speed -** Burr-Rx abrasive brushes work with a wiping and filing action. They are like a collection of flexible files and work best when operated at speeds that allow fairly deep penetration of the workpiece into the tips of the brush filaments. **The maximum RPM marked on the brush is not the optimum working speed.** Faster speeds do not work as well as slower speeds because the filaments do not maintain contact with an edge. A good rule of thumb is to stay under 3,000 SFPM.

**Coolants -** Burr-Rx brushes can be run dry, without coolants. However, certain deburring conditions, such as high speeds and depths of penetration can create excessive heat buildup, causing the filaments to transfer nylon to the workpiece. If the speed or depth of penetration cannot be changed, coolants are recommended to overcome nylon transfer. The use of coolants will also improve surface finish.

## Wear Compensation for Automated Systems



On dedicated equipment, it is possible to automate wear compensation by using electronic controls to monitor the load on drive motors and adjust the position of the brushing tool to maintain a relatively consistent amount of interference or pressure. Since this is typically not possible with standard CNC machine tools and robots, automatic indexing, probing and manual adjustment are three other possible methods of compensating for tool wear.

**Automatic Indexing -** Most CNC controllers allow tool wear compensation to be accomplished by programming a "macro" - routine to periodically adjust the position of the tool based upon the number of parts produced. Some experimentation may be required to determine the frequency and the amount of adjustment that will result in the most consistent performance and maximum brush life.

**Probing -** If the machining center has the capability to probe the face of the brush, this feature can be used to gauge the true position of the filament tips. Adjustments to the brush position can then be made to maintain a consistent amount of interference between the tool and the part.

**Manual -** If the other methods cannot possibly be used, machine operators can adjust the brush position based on either statistical process control data or visual inspection of completed parts.

## Wheel Brush Operating Parameters

### Wheel Brush Penetration

When using nylon abrasive wheel brushes, optimum aggression is obtained and wheel life maximized when the workpiece penetrates into the face of the brush approximately 10% of the trim length. The sides of the Burr-Rx® filament do the work. To achieve a maximum edge radius and complete burr removal, parts should be penetrated into the brush face at a low RPM following the recommendations listed below.



Low density/long trim wheel brushes are best suited for operations requiring a high degree of conformability.



High density/short trim wheel brushes are ideal for users who need minimum cycle times and maximum brush life.

### Parameter Recommendations

| Brush Diameter | Wheel Brush Spindle Speed (RPM) | *Wheel Brush Depth of Penetration |
|---|---|---|
| 2" | 3,450 - 5,000 | 10% of trim length |
| 3" - 4" | 1,750 - 3,450 | 10% of trim length |
| 6" | 1,350 - 1,750 | 10% of trim length |
| 8" | 1,150 - 1,350 | 10% of trim length |
| 10" | 950 - 1,150 | 10% of trim length |
| 12" | 750 - 950 | 10% of trim length |
| 14" | 650 - 850 | 10% of trim length |

*Call Weiler's Application Hotline at 888-299-2777 if this depth of penetration is not aggressive enough.

| Material | Feed Rate |
|---|---|
| Non-Ferrous | 80 in./min. |
| Cast Iron | 60 in./min. |
| Mild Steel & Ductile Iron | 50 in./min. |
| Alloy & Stainless Steels | 30 in./min. |
| Titanium & High Nickel Alloys | 30 in./min. |

## Filament Density vs. Trim Length



Proper selection of brush density and trim length is critical in optimizing the output of brush operation. High density/short trim brushes offer better cycle times and longer brush life, but are not effective in operations requiring a high degree of brush conformability. The picture above highlights the brush density differences.



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### Burr-Rx Crimped Filament Wheels - Composite Metal Hub* - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness At Face Plates | Max. RPM | Item Number |
|---|---|---|---|---|---|---|---|
| 6" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2" | 3/4" | 1" | 15/16" | 4,500 | 86123<br>86181<br>86124<br>86120 |
| 8" | .026/120<br>.043/120<br>.055/80 | 2" | 7/8" | 2" | 15/16" | 4,500 | 86126<br>86127<br>86128 |
| 10" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1-1/8" | 2" | 7/8" | 1,800 | 86129<br>86182<br>86130<br>86131 |
| 12" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 86132<br>86133<br>86134 |
| 14" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1" | 1-3/4" | 3/4" | 1,800 | 86135<br>86108<br>86136<br>86137 |
| 14" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 4" | 7/8" | 1,800 | 86138<br>86139<br>86140 |

*Patent Pending
★ 1/2" x 1/4" Double Keyway

Arbor hole adapters are available, contact Customer Service.

### Burr-Rx Crimped Filament Wheels - Composite Hub - Round Black Ceramic Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Item Number |
|---|---|---|---|---|---|---|
| 8" x 3-1/4" | .043/120 | 1" | 1-5/16" | 13/16" | 1,800 | 83394 |
| 14" x 7-1/4" | .026/120<br>.043/120<br>.035/80<br>.055/80 | 1" | 2-3/4" | 15/16" | 1,800 | 84926<br>84941<br>84925<br>83405 |

### Burr-Rx Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Item Number |
|---|---|---|---|---|---|---|---|
| 3" | .026/120<br>.035/80<br>.043/120 | 1/2"-3/8" | 3/8" | 1/2" | 7/16" | 6,000 | 86164<br>31102<br>31101 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 9/16" | 1/2" | 7/16" | 6,000 | 31240*<br>31241*<br>31242*<br>31246* |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2"-3/8" | 1/2" | 7/8" | 7/16" | 6,000 | 86165<br>31103<br>31100<br>31105 |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 5/8" | 1" | 7/16" | 6,000 | 31110*<br>31270*<br>31280*<br>31290* |
| 6" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 5/8" | 7/8" | 11/16" | 4,500 | 31134<br>31135<br>31136<br>31137 |

*Heavy-Duty

## Burr-Rx Small Diameter Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Max. RPM | Item Number |
|---|---|---|---|---|---|---|
| 1-1/4" | .026/120 | 1/4" | 5/16" | 5/16" | 10,000 | 17551 |
| 1-1/2" | .026/120 | 1/2" | 3/8" | 1/4" | 10,000 | 17541 |
| 2" | .026/120<br>.035/80<br>.055/80 | 1/2" | 3/8" | 1/2" | 10,000 | 17548<br>17555<br>17542 |
| 2-1/2" | .026/120<br>.035/80 | 5/8" | 1/2" | 11/16" | 10,000 | 17556<br>17557 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2" | 1/2" | 1" | 10,000 | 17565<br>17567<br>17568<br>16000 |

Other diameters and grit sizes available upon request.



Robotic deburring applications using Burr-Rx brushes take advantage of the aggression and compliance of the product.

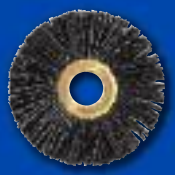
## Bore-Rx™ Radial Brushing Tools

Designed for automated applications in CNC machining centers and dedicated machines, these brushes can be used to easily remove burrs from external features as well as internal edges and crosshole intersections on larger parts. Since these wheels eliminate off-hand deburring, they improve part-to-part consistency and reduce direct labor content.

| Diameter | Filament Dia./Grit | Face Width | Stem Diameter | Overall Length | Max. RPM | Item Number |
|---|---|---|---|---|---|---|
| 7/8" | .026"/120 | 3/4" | 3/8" | 4-3/4" | 8,000 | 17206 |
| 1" | .026"/120 | 3/4" | 3/8" | 4-3/4" | 8,000 | 17208 |
| 1-1/4" | .026"/120 | 3/4" | 3/8" | 4-3/4" | 8,000 | 17210 |
| 1-1/2" | .026"/120 | 1" | 3/8" | 5" | 8,000 | 17212 |
| 2" | .026"/120 | 1" | 3/8" | 4-1/4" | 6,000 | 17215 |
| 2-1/2" | .055"/80 | 1" | 3/8" | 4-3/4" | 6,000 | 17217 |
| 3" | .026/120<br>.043/120<br>.055/80 | 1" | 3/8" | 5-1/4" | 6,000 | 86150<br>86151<br>86152 |
| 4" | .026/120<br>.043/120<br>.055/80 | 1" | 3/8" | 6-1/4" | 6,000 | 86154<br>86155<br>86156 |

Stems feature a 2" long flat for use in end mill holders or 3/8" collets.

**NOTE:** See our *Solutions Resource Guide* WC670 or call our Application Hotline at 888-299-APPS (2777) for recommended operating parameters.



16000



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## Burr-Rx Tube Brushes - 1/4" Cadmium Plated Stems - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Length of Brush Part | Stem Diameter | Overall Length | Item Number |
|---|---|---|---|---|---|
| 3/8" | .026/120 | 1" | 1/4" | 3-1/2" | 21758 |
| 1/2" | .026/120 | 1" | 1/4" | 3-1/2" | 21759 |
| 5/8" | .026/120 | 1" | 1/4" | 3-1/2" | 21761 |
| 3/4" | .026/120 | 1" | 1/4" | 3-1/2" | 21762 |
| 7/8" | .026/120 | 1" | 1/4" | 3-1/2" | 21763 |
| 1" | .026/120 | 1" | 1/4" | 3-1/2" | 21764 |
| 1-1/4" | .026/120 | 1" | 1/4" | 3-1/2" | 21765 |

**NOTE:** See our *Solutions Resource Guide* WC670 or call our Application Hotline at 888-299-APPS (2777) for recommended operating parameters.



21759

# Deburring Flat Parts and Milled Surfaces With Burr-Rx® Disc Brushes

## New Product Features

### No Drive Arbor Required

Weiler's 4" diameter and larger Burr-Rx® high aggression disc brushes can be mounted in CNC machines without a separate drive arbor. All of the brushes are designed with a 1-1/4" arbor hole and 1/2" wide keyways which should be compatible with most 3" diameter shell mill holders.





### Precision Brush Face

All of the Burr-Rx disc brushes are manufactured using a new process which results in a very consistent, flat brush face in comparison to traditional construction which utilizes a molded backing. The high dimensional precision of these new tools means that the brushes are suitable for the most critical applications and perform more consistently from first part to last.

## Operating Parameters



### Disc Brush Penetration

When using Burr-Rx disc brushes, a good starting point for a depth of penetration between the brush face and work surface is 0.075". This depth of interference produces the best compromise between aggression and brush life.

### Feed Rate

Feed rate is determined by the amount of deburring, edge radiusing or surface finishing required, and the type of material that is being processed. It is generally application specific. The feed rate starting point of Burr-Rx disc brushes on various materials is listed below. This feed rate should be adjusted to achieve optimum operating conditions. On soft materials and parts with small burrs, much higher feed rates can be achieved. Slower feeds result in a more aggressive brushing action.

## Parameter Recommendations

| Brush Diameter | Disc Brush Spindle Speed (RPM) | **Disc Brush Depth of Penetration |
|---|---|---|
| 2" | 1750 - 2000 | .050" - .125" |
| 3" - 4" | 1500 - 1750 | .050" - .125" |
| 6" | 1250 - 1500 | .050" - .125" |
| 8" | 800 - 1000 | .050" - .125" |
| 10" | 700 - 800 | .050" - .125" |
| 12" | N/A | .050" - .125" |
| 14" | N/A | .050" - .125" |

| Material | Feed Rate |
|---|---|
| Non-Ferrous | 80 in./min. |
| Cast Iron | 60 in./min. |
| Mild Steel & Ductile Iron | 50 in./min. |
| Alloy & Stainless Steels | 30 in./min. |
| Titanium & High Nickel Alloys | 30 in./min. |

Call Weiler's Application Hotline at 888-299-2777 if the 0.125" depth of penetration is not aggressive enough.

**Set depth of penetration when the brush is rotating at the operational speed. Use 0.075" depth of penetration as a starting point for all disc brush applications.

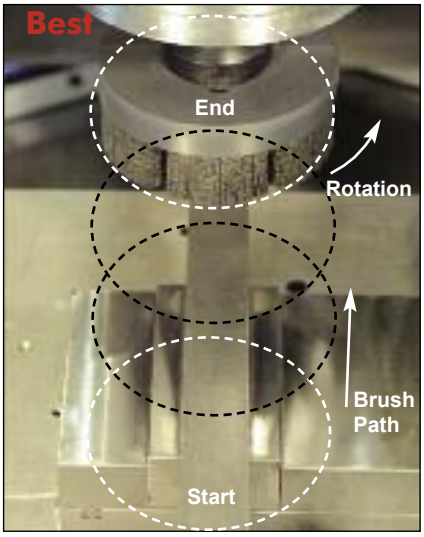
## Operating Parameters

### Tool Path

The ideal tool path for a Burr-Rx® Disc brush is very similar to the path of the face mill that produced the burr. However, three differences exist:

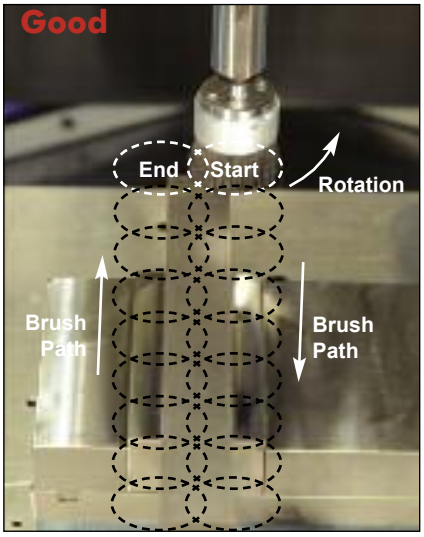
- The rotational direction of the brush should be opposite of the cutting tool that created the burr.
- The length of the path must be longer than the part. Unlike a cutter path that can stop when the leading edge of the cutter reaches the end of the part, the tool path of a brush should continue until the trailing edge of the brush reaches the end of the part.
- The centerline of the brush may need to be off-set from the center of the part in order to maximize the number of filaments that strike the part at a perpendicular angle. This is especially important when the diameter of the brush is similar to the width of the part.

**A** The part is deburred in the shortest cycle time with the lowest consumable cost-per-part.



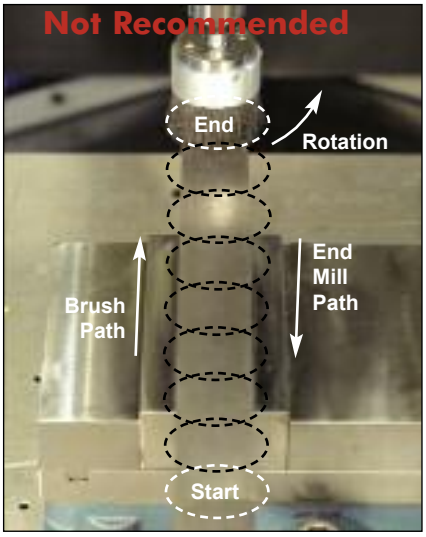

If a large diameter brush can be used, the centerline of the brush should be positioned on the center of the part. Ideally, the brush should be 3-4" wider than the part.

**B** The part is deburred, but requires a longer cycle time. When a large brush will not fit in the tool changer, this method is recommended.




If a small diameter brush must be used, the centerline of the brush should be positioned on the edge of the part. This maximizes aggression by increasing the amount of perpendicular contact between the brush filaments and the burred edge.

**C** Produces less deburring than A & B.




Positioning a small diameter brush with its centerline on the center of the part is not recommended. This configuration will not allow perpendicular contact of the filaments against the burred edge.



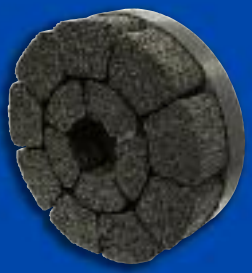
### Programming Warning

Unlike conventional nylon abrasive filament brushes, **Burr-Rx brushes can change part dimensions if they are allowed to dwell in one area for an excessive time period.** To prevent this, the depth of penetration and feed rate guidelines in this brochure should be carefully followed. In addition, test runs using low-aggression operating parameters are recommended.

# Burr-Rx® Disc and End Brushes



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86104

## Burr-Rx Shell Mill Holder Disc Brushes - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Arbor Hole | Trim Length | Max. RPM | Item Number |
|---|---|---|---|---|---|
| **Round Filament** | | | | | |
| 4" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86112<br>86113<br>86114* |
| 6" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86115<br>86116<br>86117* |
| 8" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86141<br>86142<br>86143* |
| 10" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 86125<br>86121<br>86122* |
| **Rectangular Filament** | | | | | |
| 4" | 80 | 1-1/4" | 1-1/2" | 1,800 | 86167* |
| 6" | 80 | 1-1/4" | 1-1/2" | 1,800 | 86198* |
| 8" | 80 | 1-1/4" | 1-1/2" | 1,800 | 86199* |

* Maximum Density

## Burr-Rx Mini Disc Brushes - Maximum Density - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Trim Length | Max. RPM | Item Number |
|---|---|---|---|---|
| **Round Filament** | | | | |
| 2" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 86106<br>85738<br>86107<br>85733 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 86109<br>86013<br>86110<br>86111 |
| **Rectangular Filament** | | | | |
| 2" | 80 | 1-1/4" | 4,500 | 85736 |
| 3" | 80 | 1-1/4" | 4,500 | 86014 |

## Mini Disc Brush Drive Arbors - Supplied with set screw and wrench for mounting

| Stem Diameter | Stem Length | Max. RPM | Item Number |
|---|---|---|---|
| 1/2" | 1-3/4" | 6,000 | 89029 |
| 1/2" | 1-3/4" | 6,000 | 89033* |

*Recommended for operations in which brush rotation alternates between forward and reverse.

## End Brushes (Banded)

| Diameter | Filament Diameter/Grit | Trim Length (From Bands) | Stem Size | Max. RPM | Item Number |
|---|---|---|---|---|---|
| 3/8" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86098<br>86099 |
| 1/2" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86100<br>86101 |
| 3/4" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86102<br>86103 |
| 1" | .026/120<br>.043/120 | 1/4" | 1/4" | 10,000 | 86104<br>86105 |

**For Application Assistance Call 888-299-APPS (2777)**


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# Weiler® In-Machine CNC Deburring of Flat Surfaces









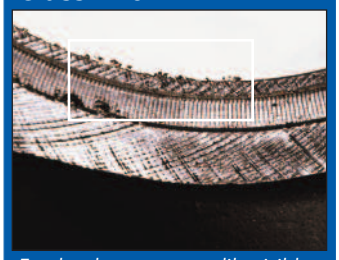
- Direct Labor Reduction
- Improved Part Quality and Consistency
- Part Dimensions and Machined Finishes Remain Unchanged
- Made in the U.S.A

PERFORMANCE COUNTS • USA COMPANY • SATISFACTION GUARANTEED ™

**Reduce Direct Labor While Improving Quality with Nylox® Disc Brushes!**

## Burr Classification

### Class Two



*Feather burrs are readily visible without magnification and are characterized by extremely thin roots. They can be removed with a tip of a pencil.*

### Class Three



*Burrs in this group are well-attached, but relatively small in size. Despite their size, significant mechanical energy must be applied to remove them.*

### Class Four



*Like Class Three burrs, the burrs in this class are well-attached. The primary difference is size and root thickness.*

MADE IN U.S.A.

## Introduction

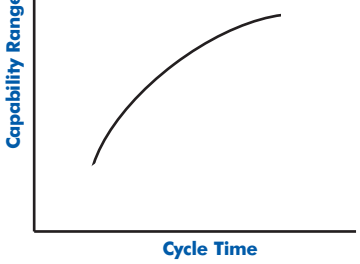
After milling, burrs must frequently be removed from part edges in order to ensure proper part functionality. Among the various means of deburring flat parts, Nylox® Disc brushes are one of the most attractive. Disc brushes are easily adapted to automated equipment such as CNC machining centers and facilitate operational improvements including direct labor reduction and improved part quality/consistency. Additionally, they will not change part dimensions or deteriorate machined finishes. They are especially well-suited for deburring complicated parts on which all of the burrs lie in a single plane.

The most critical part of creating a consistent automated deburring operation is burr size control and minimization. Since burr size varies with cutting tool life, it is imperative that a worst case burr condition be defined and that the deburring process be established to address this condition. The photos on the left illustrate common burr conditions that are produced by milling and can be removed with Nylox disc brushes.

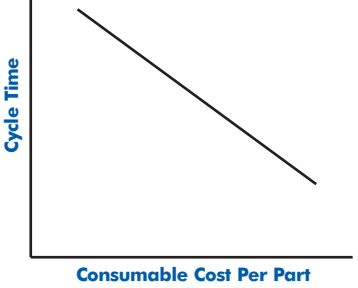
## Determining Operational Priorities

What is the most important attribute of your deburring operation: Shortest cycle time? Minimum consumable cost per part? Greatest production stability? In a perfect world, it would be possible to have all of these things. In reality, there are tradeoffs between them. As a result, the design of the deburring process should be based on a clear ranking of priorities. The following graphs illustrate the tradeoffs between cycle time, consumable cost, and capability range (the range of burr sizes which can be removed by a specific brush and operating parameters).

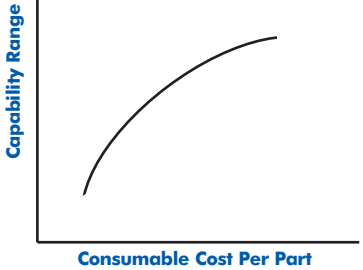
**A** *Capability Range can be expanded by extending cycle time. Reducing the feed rate of the brush will generate this result.*




**B** *Cycle time can be reduced by increasing Consumable Cost Per Part. This tradeoff can be accomplished by simultaneously increasing the depth of interference and the feed rate.*

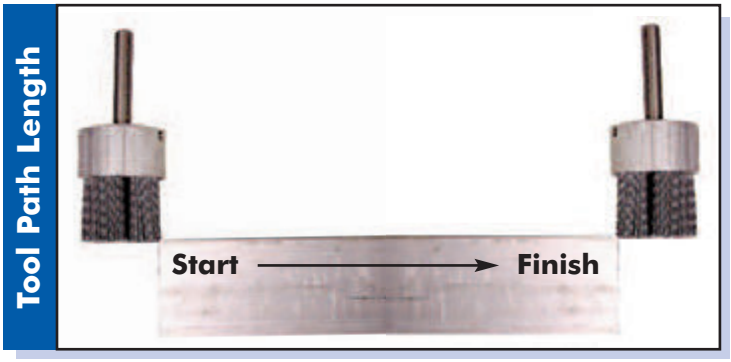



**C** *Capability Range can be expanded by increasing Consumable Cost Per Part. This can be achieved by increasing depth of interference and holding the feed rate constant.*



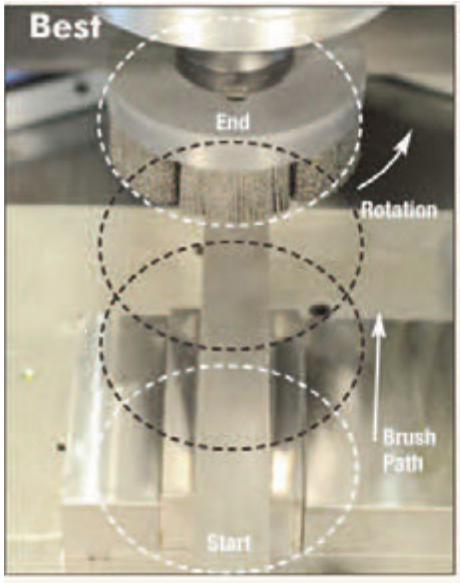
## Tool Path Selection

**The ideal tool path for a Nylox Disc brush is very similar to the path of the face mill which produced the burr. However three significant differences exist:**



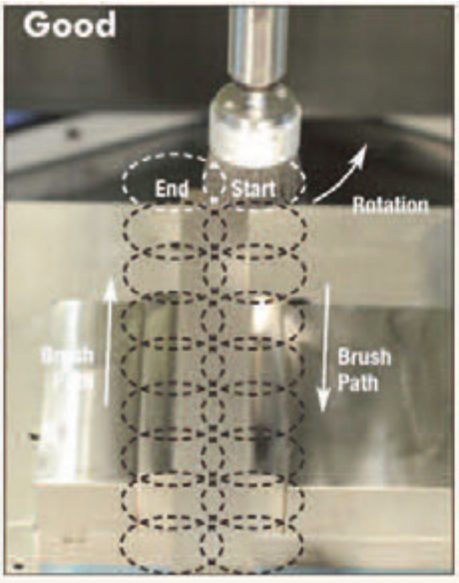

- The rotation direction of the brush should be opposite of the cutting tool that created the burr.
- The length of the path must be longer than the part. Unlike a cutter path that can stop when the leading edge of the cutter reaches the end of the part, the tool path of a brush should continue until the trailing edge of the brush reaches the end of the part. This concept is illustrated in the picture to the right.
- The centerline of the brush may need to be off-set from the center of the part in order to maximize the number of filaments that strike the part at a perpendicular angle. This is especially important when the diameter of the brush is similar to the width of the part. This important point is illustrated by the pictures below.

**A The part is deburred in the shortest cycle time with the lowest consumable cost per part.**



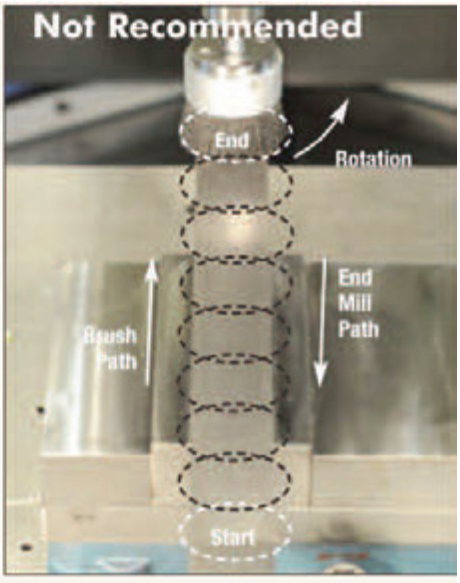

*If a large diameter brush can be used, the centerline of the brush should be positioned on the center of the part. Ideally, the brush should be 3-4" wider than the part.*

**B The part is deburred, but requires a longer cycle time. When a large brush will not fit in the tool changer, this method is recommended.**




*If a small diameter brush must be used, the centerline of the brush should be positioned on the edge of the part. This maximizes aggression by increasing the amount of perpendicular contact between the brush filaments and the burred edge.*

**C Produces less deburring than A & B.**




*Positioning a small diameter brush with its centerline on the center of the part is not recommended. This configuration will not allow perpendicular contact of the filaments against the burred edge.*

# Technical Information

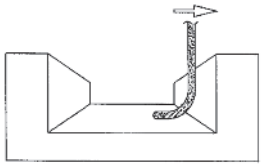
## Wear Compensation - Three techniques are widely used to compensate for brush wear.

### Automatic Indexing
Depending on the capability of the machining center, it may be possible to index the brush in the z-direction after a predetermined number of parts. When available, this simple technique maximizes consistency.

### Probing
If the machining center has the capability to probe the face of the brush, this feature can be used to maintain a constant depth of interference.

### Manual
If the other two methods are not possible, operators can adjust depth of interference based on statistical process control data.

## Operating Guidelines - The filaments in Nylox Disc brushes work like flexible files. They work best when operated at spindle speeds that allow fairly deep penetration of the work-piece into the brush filaments. This means higher spindle speeds do not usually work as well as lower spindle speeds. Surface speeds should always be kept below 3500 surface feet per minute.



The following table contains recommended starting points for disc brushes.

**NOTE:**
**For a detailed product offering, request our Solutions Resource Guide #WC670**

| Brush Diameter | Disc Brush Spindle Speed (RPM) | * Disc Brush Depth of Penetration | ** Steel/Harder Metals Feed Rate | **Aluminum Feed Rate |
|---|---|---|---|---|
| 1-3/4" - 2" | 1750 - 2000 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 3" - 4" | 1500 - 1750 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 5" - 6" | 1250 - 1500 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 8" | 800 - 1000 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 10" | 700 - 800 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 12" | 600 - 700 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |
| 14" | 500 - 600 | .040" - .150" | 18"/minute (8mm/second) | 35"/minute (15mm/second) |

* *Set depth of penetration when the brush is rotating at the operational speed. Use 0.100" depth of penetration as a starting point for all disc brush applications.*

** *Feed rate is determined by the amount of deburring, edge radiusing or surface finishing required, and the type of material that is being processed. It is generally application specific. Slower feeds result in a more aggressive brushing action.*

### Need More Aggression?

**Increasing spindle speed does not result in a more aggressive action. If more aggression is required, the following steps can be used to achieve the desired results:**

- **Reduce RPM and increase depth of penetration**
- **Use rectangular filaments**
- **Use a brush with a shorter trim length**
- **Increase brush diameter**
- **Reduce the feed rate**
- **Increase the filament diameter and the grit size**
- **Use a Burr-Rx® Disc Brush featured in Catalog #WC670**

### Coolants:

**When available, the use of coolant is recommended. By reducing heat build-up and improving surface finish, coolants enhance the performance of Nylox brushes.**

Weiler® Performance Counts

**For Application Assistance Call: (888) 299-APPS (2777)**
**or complete our online Application Assistance form at: www.weilercorp.com**


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People who take work *seriously* partner with Weiler. Today — and for more than a century. Weiler works collaboratively to help solve our customers' challenges. **Because it isn't enough to meet your expectations — we're driven to exceed them.**

To develop the products you need, we develop an understanding of your needs. Weiler products help you work better. Faster. Safer. Because that's how Weiler products work, too.

Weiler shares your goals of growth and profitability. For both, you need the right tools for the job. We don't just supply those products — we work with you to create solutions. Because that's what you deserve from a partner.

**Weiler. Your partner in success.**










*"In our shop, people have a choice of brushes. Everyone just reaches for Weiler's first."*








## WELDING & FABRICATION

Time is money. The more time spent building a product, the more it costs. And every step adds time. Grinding. Cutting. Cleaning. Finishing.

You want solutions to get the job *done*. Done right — but done *fast*.

**Weiler hears you.**

Before, during and after the weld, we have you covered. Superior performance means maximum aggression and long life. Saving more time. For more productivity. And more profit. **That's the Weiler difference.**






***"They've earned their good reputation in the oil and gas industry."***









***"Adding Nylox® brushes to our CNC mill has saved tons of time in deburring — and also provides a superior-looking finished product."***

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There may be hundreds of differences between your industrial production operation and a competitor's. The ones that matter to you are far fewer.

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Weiler helps sharpen your competitive edge. Like every production operation is different, so is every production challenge. One solution does not fit all. Weiler experts can examine your specific deburring and cleaning challenges and recommend customized solutions—solutions designed to optimize your operation.

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# WHEN YOU NEED IT.

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*"The support team and distributors are fantastic. I'm always able to get whatever I need in a timely fashion."*



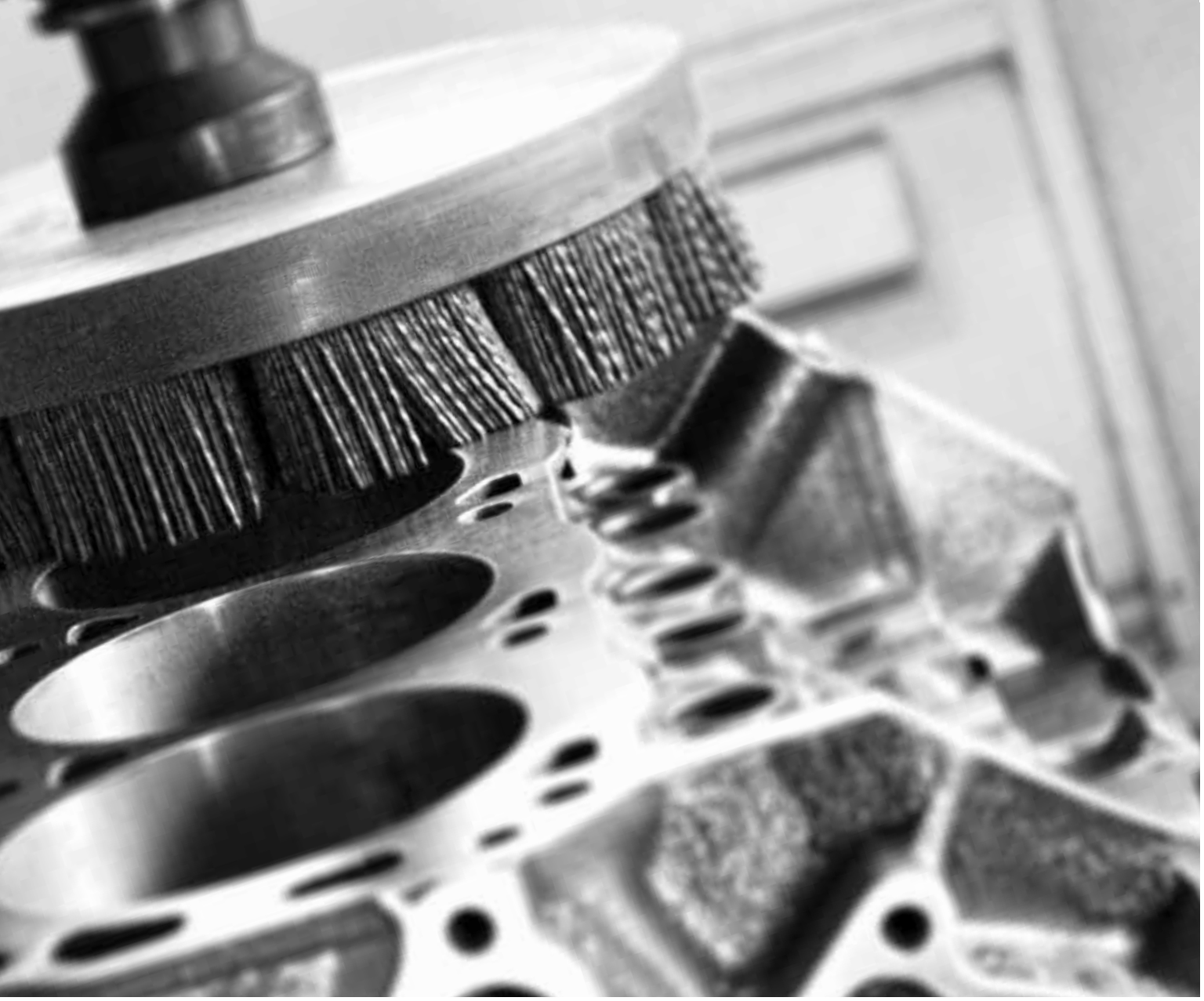
## MAINTENANCE, REPAIR & OPERATIONS

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Weiler has you covered. We know that when certain products are out of stock, certain activities come to a stop. You aren't going to let that happen on your watch — and neither are we.

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# FLAP DISC FIELD SELECTION GUIDE

MADE IN USA

## Grind & Finish in one step.

There's no need to switch from a grinding wheel to a resin fiber disc, **saving time and money.**

**Select the right flap disc in 3 easy steps.**




## STEP 1 — APPLICATION & MATERIAL

PREMIUM LINE ◀ ▶ VALUE LINE

| | SABER TOOTH (CA) | BIG CAT (ZA) | TIGER X (CA & ZA) | TIGER ALUMINUM BACK (ZA) | TRIMMABLE (ZA) | BOBCAT (ZA) | TIGER PAW (ZA) | VORTEC PRO (ZA) |
|---|---|---|---|---|---|---|---|---|
| **APPLICATION** | | | | | | | | |
| Flat Surface Grinding | ★★★ | | ★★★ | | | | | ★ |
| Light Pressure / Blending | ★★★ | ★★★ HD | ★★★ | | ★★ | | ★★ | ★ |
| Weld Grinding / Blending | ★★★ | ★★★ HD | ★★★ | | ★★ | | ★★★ | ★ |
| Heavy Stock Removal | ★★★ | | ★★ | | | | ★★★ | ★ |
| Edge Grinding | ★★ | | | | | | ★★★ | |
| Pipeline | | | | ★★★ | | | | |
| Fillet Grinding | ★★★ TRIM | | | | ★★★ | | | |
| Irregular Surface | ★★★ HD | ★★★ HD | | | | | ★★ HD | ★ HD |
| Hard To Reach | | | | | | ★★★ | | |
| **MATERIAL** | | | | | | | | |
| Carbon Steel | ★★ | ★★★ | ★★★ | ★★★ | ★★★ | ★★★ | ★★★ | ★★ |
| Stainless Steel | ★★★ | | ★★ | | | ★★ | ★★ | ★ |
| Aluminum / Non-Ferrous | ★★★ | | | | | | | |
| Armored Steel / Titanium / Exotic | ★★★ | | | | | | | |
| Cast Iron | ★★★ | | ★★ | | | | ★★ | |

## STEP 2 — STYLE

### Angled Style (Type 29)




Maximum aggression for fast stock removal.
Used on both flat surface and edge work.
The angle provides greater surface contact for stock removal on flat surfaces.

### Flat Style (Type 27)



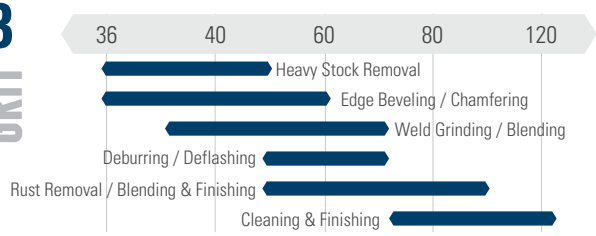

Smooth grinding, blending and finishing.
Used primarily on flat surfaces and slight contours.

### High Density (Type 27)



Maximum conformability and life.
Provides smooth grinding, blending and finishing on flat and irregular surfaces.
Larger flaps ensure more contact and extend life.

## STEP 3 — GRIT



# FLAP DISC FIELD SELECTION GUIDE

MADE IN USA

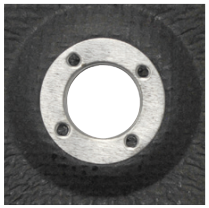
## DISC SIZE

| | 2" | 3" | 4" | 4.5" | 5" | 6" | 7" |
|---|---|---|---|---|---|---|---|
| SABER TOOTH | | | | ✔ | | | ✔ |
| BIG CAT | | | | ✔ | | | ✔ |
| TIGER X | | | | ✔ | ✔ | | ✔ |
| TIGER | | | ✔ | | | ✔ | |
| TIGER ALUMINUM BACK | | | ✔ | ✔ | ✔ | | ✔ |
| TIGER TRIMMABLE | | | | ✔ | ✔ | | |
| BOBCAT | ✔ | ✔ | | | | | |
| TIGER PAW | | | ✔ | ✔ | ✔ | | ✔ |
| VORTEC PRO | | | ✔ | ✔ | ✔ | | ✔ |

KEY: PREMIUM LINE  VALUE LINE

## BACKING

### Phenolic



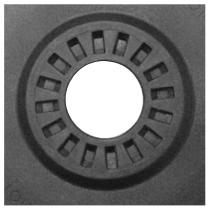
Prevents backing from scratching the workpiece.

### Aluminum



Rigid support for maximum aggression; recyclable.

### Composite*



Trimmable, non-marking backing; allows access to hard-to-reach areas.

*BobCat™ Discs are not Trimmable.

## GRAIN

### Aluminum Oxide (AO)



- Single crystal
- Durable for short term grinding
- Hard
- Inexpensive

### Zirconia Alumina (ZA)



- Self-sharpening multi crystals
- Holds up under extreme pressure
- Self-sharpening
- Sharper, faster cut

### Ceramic Alumina (CA)



- Self-sharpening multi crystals with predetermined fracture points
- Self-sharpening
- Maintains cut-rate for 75% of life

### X3 Technology

- Proprietary mix of Ceramic and Zirconia Alumina
- Triple split grain anchoring system
- Dual flap design
- Grinds faster AND lasts longer

## ARBORS

### 5/8" & 7/8" Arbor

- Cost-effective
- Requires adapting nuts



Mounting Flap Discs with 5/8" & 7/8" Arbors







### 5/8" - 11 Nut

- Quick change over
- Eliminates cross-threading experienced with plastic backs
- Metal nut eliminates the disc from sticking to the grinder due to heat build up






WEILER

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# Weiler® Maintenance

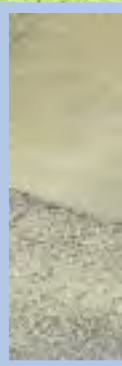














New! Green Works™ Maintenance Products
*Environmentally-friendly!*

New! Pro-Flex™ Sweeps
*Ships complete with handle, ready to assemble - no tools!*

- Floor, Garage and Street Brushes
- Handles
- Upright and Whisk Brooms
- Dusters and Dust Pans
- Squeegees & Window Brushes
- Vehicle Care Products
- Scrub & Utility Brushes
- Mops & Accessories
- Masonry & Applicator Brushes
- Scratch Brushes
- Flue Brushes
- Tube Fitting Brushes
- Paint Brushes, Rollers & Accessories

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**Application Engineering Support:**
**888-299-APPS (2777)**

**Interactive Website:**
**www.weilercorp.com**









# Maintenance Product Technical Information

## Maintenance Brush Terminology and Features

**Block:** Fill material is set into this part of the sweep.

**Synthetic Foam Block:**
- Made with a synthetic cellular core surrounded by a solid skin.
- Will not crack, split, warp or house contaminating bacteria.
- Water, solvent and mild acid resistant
- Lighter weight than hardwood blocks

**Lacquered Hardwood Block:**
- Made of natural, kiln-dried hardwood
- Resists moisture
- Helps prevent cracking, increasing brush life.

**Dense Fill:**
- Set into the block and serves as the actual working part of the brush.
- More efficient sweeping
- Longer brush life

**Reorder Number:**
- Shown on block

**Two Handle Holes:**
- Allows user to change sweeping direction to prevent the fill material from setting in one direction. Periodically changing sweeping direction increases the life of the brush.

**Staggered Hole Pattern:**
- Prevents gaps in the fill material so brush sweeps up all the dirt in its path.



**Flagged Tips:**
- Each synthetic filament end is mechanically split, forming multiple tips which "pick up" fine dust and dirt particles.
- Horsehair has naturally tapered or flagged tips.

**Solid Brush Face with Flared Ends:**
- The tufts of fill material on each end of a contractor, floor, garage or street brush are flared outward.
- Flared ends allow the brushing material to get into corners without marking or scraping the wall with the block.
- Prevents a gap in the middle of the brush.

**Center / Border Fill**



**Center**
Loosens and moves heavy dirt

**Border (Casing)**
Moves fine dust and dirt

## Care of Floor Brushes

**Storage -** Floor brushes should be hung when not in use so no weight is against the fill material. This will help keep the shape and prolong the life of the brush.

**Handles -** The handle should be periodically re-positioned from one staff hole to the other to prevent fill material from setting in one position. The use of a brace will help prevent handle breakage. Perma-Flex™ (#44301) handles are guaranteed to outlast the life of the brush.

**Blocks -** Avoid knocking a wood block against the floor to remove imbedded material, as this will damage the end of the block.

**Cleaning -** Synthetic filled brushes can be cleaned with detergent and water. Fiber filled brushes should be combed to remove dirt and other foreign material. Dip coarse natural fiber brushes in water to help prevent breakage due to dry fiber.

## Product Selection

### Floor Brush Selection Guide

| Surface Type | Debris | Recommended Brush |
|---|---|---|
| Tile, linoleum, highly polished | Fine dust | #42001 black horsehair |
| Smooth wood | Fine to medium dirt | #42041 flagged silver polystyrene |
| Smooth concrete | Fine to medium dirt | #42035 black polypropylene |
| Uneven or rough floors, heavy traffic areas | Medium to heavy dirt and debris | #42007 black tampico |
| Rough concrete, asphalt | Heavy, caked dirt, grease, litter | #42134 black tampico - inner row of steel wire<br>#42023 palmyra |

# Maintenance Product Technical Information

**Weiler Industrial Grade Products -** Engineered and manufactured to maximize performance and minimize operating costs in all cleaning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost of use and most consistent performance available in a maintenance product.

**Weiler Vortec Pro® Professional Grade Products -** Manufactured using similar product construction and to the same exacting standards as other Weiler Maintenance products, but engineered to provide cost-effective use specifically designed for the professional, providing a cost effective price. Vortec Pro Maintenance products are an economical choice for the construction trades, low volume production shops and the professional contractor.

## Fill Materials Used In Maintenance Brushes

### Animal

| Type | Advantages | Applications | Notes |
|---|---|---|---|
| Horsehair  | • Very durable and resilient<br>• Naturally flagged tips<br>• Resistant to high temperatures (to 370˚F)<br>• Can be blended with other materials<br>• Fine texture | • Fine particles<br>• Ideal for polished and smooth surfaces<br>• Scratch-free sweeping | • Not for use on oily or wet surfaces |

### Natural

| Type | Advantages | Applications | Notes |
|---|---|---|---|
| Tampico  | • Material holds water very well<br>• Heat, alkali and acid resistant (to 283˚F)<br>• Soft to medium texture<br>• Good durability | • Polishing, buffing and cleaning<br>• Scrubbing and washing<br>• Ideal for wet and dry applications | • Natural color is off white<br>• Can be dyed or bleached |
| Palmyra  | • Softer and finer texture than Bassine<br>• More economical than Bassine<br>• Medium to coarse texture<br>• Good durability | • Used in garage, scrub, deck and patio brushes<br>• Ideal for wet and dry applications | • Brown in color |
| Bassine  | • Coarse, tough fibers<br>• Excellent durability | • Heavy scrubbing and cleaning<br>• Tasks requiring a tough, long lasting natural fiber | • Dark brown in color |
| Bass  | • Good flexibility<br>• Very coarse, tough fibers<br>• Excellent durability | • Heavy-duty cleaning applications<br>• Use on rough surfaces | • Dark brown in color |

### Synthetic

| Type | Advantages | Applications | Notes |
|---|---|---|---|
| Nylon  | • Excellent durability<br>• Resistant to most acids & alkalis<br>• High water absorbency<br>• Resistant to high temperatures (to 350˚F)<br>• Best man-made fiber to resist fatigue | • Heavy-duty industrial<br>• Scrubbing and cleaning<br>• Wet and dry applications | • May be level or crimped |
| Polypropylene  | • Very durable<br>• Acid, oil, bacteria and fungus resistant<br>• Versatile<br>• Resistant to high temperatures (to 225˚F)<br>• Will not absorb moisture | • Variety of medium to coarse industrial applications<br>• Wet and dry applications | • May be level or crimped |
| Polystyrene  | • Extremely durable<br>• Liquid and oil resistant<br>• Resistant to temperatures (to 180˚F)<br>• Ends can be flagged | • Used in vehicle care brushes<br>• Used in fruit and vegetable wash brushes<br>• Wet and dry applications | • May be level or crimped<br>• Not for use with sweeping compounds |
| Recycled PET  | • Environmentally-friendly<br>• Less landfill waste | • Fine, Medium & Coarse for a variety of applications | • Fill made from recycled water bottles |

# Green Works™ Maintenance Products

**Green Works™ Maintenance Products -** Sustainable, recyclable, environmentally-friendly, ***Green*** - all of these come to mind with the new Green Works line from Weiler. Made from recycled or sustainable raw materials, the Green Works line is manufactured in a LEED (Leadership in Energy & Environmental Design) approved facility to insure that even the production environment is environmentally-friendly. All of this, plus the same great performance! Every product is made to the quality levels you expect when you hear the name Weiler.

## Green Works Product Construction

- Fill material is made out of recycled water bottles, giving a second life to these waste products and helping to clean up the environment.
- Rubberwood blocks are made from the wood of rubber trees that have ended their life cycle in the rubber production industry. We are putting the waste product of that industry to good use.
- Foam blocks are made from recycled plastics.
- Handles are made from bamboo - a very strong and durable natural resource that replenishes at a very rapid rate in the environment.



42352



42357



42360



42365

### Floor Sweeps -
**Choose from flagged tips that pick-up fine dust and dirt to durable fibers that sweep heavy, caked dirt and debris.**

| Block Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Fine Sweeping - For fine dust and dirt on smooth surfaces** | | | | | |
| 24" | Recycled Black Foam | Recycled Grey Fill | 3" | 12 | 42352 |
| 24" | Renewable Rubberwood | Recycled Grey Fill | 3" | 12 | 42355 |
| **Medium Sweeping - For general purpose sweeping on semi-smooth surfaces** | | | | | |
| 24" | Recycled Black Foam | Recycled Blue Fill | 3" | 12 | 42353 |
| 24" | Renewable Rubberwood | Recycled Blue Fill | 3" | 12 | 42356 |
| **Coarse Sweeping - For heavy dirt and debris on very rough surfaces** | | | | | |
| 24" | Recycled Black Foam | Recycled Maroon Fill | 3" | 12 | 42354 |
| 24" | Renewable Rubberwood | Recycled Maroon Fill | 3" | 12 | 42357 |

Handle #42380 or #42381 are recommended for use with these sweeps. See page 136 for details.

### Street Broom - Ideal for wet or dry sweeping on streets, parking lots, loading docks and driveways.

| Block Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 16" | Renewable Rubberwood | Recycled Black Fill | 6" | 6 | 42360 |

Handle #42382 is recommended for use with this broom. See page 136 for details.

### Duo Sweep - Heavy-duty upright with two handle holes - one straight and one angled.

| Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 9" | Recycled Black Foam | Recycled Yellow Fill | 7" | 12 | 42365 |

Handle #42383 is recommended for use with this sweep. See page 143 for details.

# Green Works™ Maintenance Products

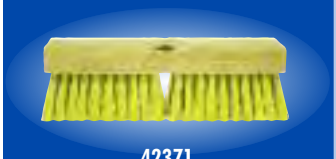





36 billion water bottles end up in landfills every year. Help us make a difference!



42368



42371



42375



42380

**Counter Duster -** Ideal for quick clean-ups. Features a comfortable grip handle.

| Block Size | Block Type | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Recycled Black Foam | Recycled Grey Fill | 2-1/2" | 12 | 42368 |

**Scrub Brushes -** Designed to provide the most effective brushing and cleaning action.

| Block Size | Type | Block Type | Fill Material | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Utility | Recycled Black Foam | Recycled Yellow Fill | 12 | 42375 |
| 9" | Pointed Deck | Renewable Rubberwood | Recycled Yellow Fill | 12 | 42373 |
| 10" | Deck | Renewable Rubberwood | Recycled Yellow Fill | 12 | 42371 |
| 10" | Bi-Level | Recycled Black Foam | Recycled Yellow Fill | 12 | 42372 |
| 20" | Utility | Recycled Black Foam | Recycled Yellow Fill | 12 | 42376 |

Handle #42380 or #42381 are recommended for use with these scrub brushes.

**Solid Bamboo Handles -** Very strong, abundant source material.

| Length | Diameter | Tip Type | Std. Pack | Item Number |
|---|---|---|---|---|
| 5' | 7/8" | Threaded Wood | 12 | 42380 |
| 5' | 7/8" | Threaded Metal | 12 | 42381 |
| 5' | 1-1/8" | Tapered Wood | 12 | 42382 |

**DID YOU KNOW?**

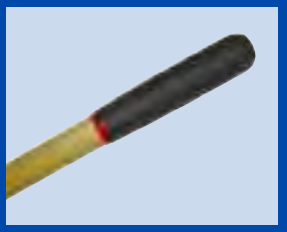
Weiler's 76,000 sq. ft. distribution center was specifically designed with energy conservation in mind.



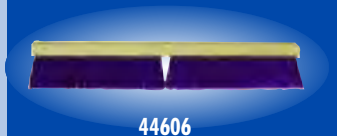
The Pro-Flex Sweep's indestructible design will make it the last sweep you will ever buy!



Flexible connection makes these sweeps the strongest on the market!



Foam grip handle is strategically placed for users' comfort during long periods of sweeping.



44606

## Weiler Pro-Flex™ Sweep Quick Assembly & Unbreakable!



- Easy-to-Assemble: The convenient and easy-to-assemble T-knob construction of the Pro-Flex Sweep ***takes less than 1 minute to assemble.*** The handle connects easily and securely to the broom head, and there's no need for a brace!
- Unbreakable: Utilizing an advanced polymer technology, the Pro-Flex Sweep's unique handle/sweep connector flexes on impact, providing unbelievable shock absorbency...and it's unbreakable! Ideal for the most demanding applications on a construction site.
- More Maneuverable: Without the need for a brace, the Pro-Flex Sweep is lighter, easy to maneuver and eliminates potential damage to low surface areas.
- The Pro-Flex Sweep... the strongest sweep on the market AND the easiest to assemble!

**DID YOU KNOW?** This is how the Pro-Flex Sweep looks straight out of the box, ready to display.

**Pro-Flex™ Sweeps - Hardwood Block**
**Includes comfort grip Pro-Flex handle and scraper for removal of heavy, caked dirt and debris.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Convenient scraper attaches handle to sweep head for display and shipping purposes | | | | |
| 24" | Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center | 3" | 1 | 44600 |
| 24" | Palmyra | 4" | 1 | 44601 |
| 24" | Medium Maroon Polypropylene | 3-1/4" | 1 | 44604 |
| 24" | Stiff Blue Polypropylene | 3-1/4" | 1 | 44606 |




## Pro-Flex Sweep Assembly - No Tools Required!



Remove nuts from broom assembly



Flip scraper and place over bolts



Place handle connector over bolts and tighten nuts securely

# Specialty Floor Brushes



Sweeping leaves from a garage floor.

**Contractor Brooms -** Designed to withstand rugged, every day use. The 1-1/8" bolt-on handle design combined with a lacquered hardwood block and 12-gauge steel brace makes the Contractor Broom the most durable sweep in our product line.

**Contractor Brooms - Hardwood Block - Heavy-duty brace included with all brooms. Ideal for construction sites and other heavy use environments.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Fine Sweeping - For fine dust and dirt on smooth surfaces** | | | | |
| 24" | Flagged Silver Polystyrene | 3" | 1 | 44553 |
| **Medium Sweeping - For general purpose sweeping on semi-smooth surfaces** | | | | |
| 18"<br>24"<br>30" | Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center | 3" | 1 | 44580<br>44581<br>44582 |
| **Coarse Sweeping - For heavy dirt and debris on very rough surfaces** | | | | |
| 24" | Palmyra | 4" | 1 | 44584 |
| 24" | Medium Maroon Polypropylene | 3-1/4" | 1 | 44587 |
| 24"<br>30" | Stiff Blue Polypropylene | 3-1/4" | 1 | 44590<br>44591 |




- For Contractor Brooms, use Handle No. 44635 (1-1/8" x 60").
- Handle not included in price - order handle separately. See page 147.
- Bolt to assemble broom is included with the broom, not with the handle.

**Perma-Sweep™ Floor Brushes -** Weiler offers color-coded floor sweeps to make product selection and identification easier. Constructed with foam blocks and synthetic filaments, these materials are durable, resist acid and bacteria and can be used in wet or dry sweeping applications.

**Perma-Sweep™ - Synthetic Foam Block - Made of durable materials designed to resist acid and bacteria.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Fine Sweeping - For fine dust and dirt on smooth surfaces** | | | | |
| 18"<br>24" | Flagged Green Polystyrene | 3" | 1 | 42163<br>42164 |
| **Medium Sweeping - For general purpose sweeping on semi-smooth surfaces** | | | | |
| 18"<br>24" | Yellow Polypropylene | 3" | 1 | 42165<br>42166 |
| **Coarse Sweeping - For heavy dirt and debris on very rough surfaces** | | | | |
| 18"<br>24" | Maroon Polypropylene | 3" | 1 | 42167<br>42168 |




- For Perma-Sweep Floor Brushes, use Perma-Flex Handle No. 44301 (15/16" x 60") Guaranteed for the life of the brush!
- Handle not included in price - order handle separately. See page 147.



44553



44584



44590



42164



42165



42167

# Floor Brushes



Sweeping saw dust on a smooth surface.

**Floor Brushes -** Weiler offers a broad array of floor brushes in various sizes and fill materials for fine, medium and coarse sweeping applications. Choose from flagged tips that pick up fine dust and dirt to durable fibers that sweep heavy-caked dirt and debris. The lacquered hardwood blocks resist moisture and help prevent cracking, thereby increasing brush life.



42001



42042



77013



42007



25234



Sweeping Center available. See page 176.

## Fine Sweeps - Lacquered Hardwood Block

**For dust and fine dirt on smooth surfaces: Tile, Wood, Linoleum, Marble, Ceramic Tile and Smooth Concrete.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Black Horsehair | 3" | 1 | 42001 | 44855 |
| 24" | | | | 42002 | 44856 |
| 18" | Black Horsehair and Black Polypropylene Blend | 3" | 1 | 42013 | – |
| 24" | | | | 42014 | – |
| 10" | Flagged Silver Polystyrene | 3" | 1 | 70312 | – |
| 18" | | | | 42041 | 44857 |
| 24" | | | | 42042 | 44858 |
| 36" | | | | 42098✳ | – |

✳ Brace included ★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

## Vortec Pro® Fine Sweeps - Lacquered Hardwood Block

**Reliable and efficient sweeps at a value price.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 18" | Flagged Grey Polystyrene | 3" | 12 | 77013 |
| 24" | | | | 77014 |

## Medium Sweeps - Lacquered Hardwood Block

**General purpose sweeping on semi-smooth surfaces: Wood, Smooth Concrete, Asphalt and Factory/Shop Floors.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 12" | Black Tampico | 3" | 1 | 70112 | – |
| 14" | | | | 42114 | – |
| 16" | | | | 42006 | – |
| 18" | | | | 42007 | 44859 |
| 24" | | | | 42008 | 44860 |
| 36" | | | | 42047✳ | – |
| 24" | Horsehair Border with Black Tampico Center | 3" | 1 | 42017 | – |
| 36" | | | | 42049✳ | – |
| 18" | Horsehair and Polystyrene Border with Black Polypropylene Center | 3" | 1 | 70067 | – |
| 24" | | | | 70068 | – |
| 18" | Black Polypropylene | 3" | 1 | 42035 | 44861 |
| 24" | | | | 42037 | 44862 |
| 36" | | | | 42095✳ | – |

✳ Brace included ★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

## Vortec Pro® Medium Sweeps - Lacquered Hardwood Block

**Reliable and efficient sweeps at a value price.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Dark Grey Polystyrene Border with Black Polypropylene Center | 3" | 1 | 25234 | 44851 |
| 24" | | | | 25235 | 44852 |
| 18" | Black Tampico | 3" | 1 | 25231 | 44853 |
| 24" | | | | 25232 | 44819 |

★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).




- **Handle No. 44300 (15/16" x 60") recommended for use with all Floor Brushes.**
- **Handle not included in price - order handle separately. See pages 147-148 for additional options.**

# Floor Brushes



Sweeping cinders from the surface of a parking lot.

## Coarse Sweeps - Lacquered Hardwood Block

**For heavy dirt and debris on rough surfaces: Wood, Concrete, Asphalt and Brick.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18"<br>24" | Black Tampico with 1 row Tempered Steel Wire in Center | 3" | 1 | 42134<br>42135 | 44871<br>44872 |

★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).




- Handle No. 44300 (15/16" x 60") recommended for use with all Floor Brushes.
- Handle not included in price - order handle separately. See pages 147-148 for additional options.



42134



42135

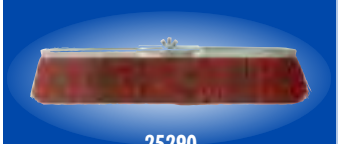
## Strip Brooms - The corrosion-resistant frame is lightweight, resulting in less user fatigue! Efficient and economical, Strip Brooms make quick work of dirt and debris on all types of surfaces.

## Vortec Pro® Strip Brooms - Economy brushes provide lasting, efficient service at minimal cost.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Fine Sweeping - For smooth surfaces** | | | | |
| 24" | Green Polypropylene | 3" | 12 | 25299 |
| **Medium Sweeping - For semi-rough surfaces** | | | | |
| 18"<br>24" | Red Polypropylene | 3" | 12 | 25290<br>25291 |
| **Coarse Sweeping - For rough surfaces** | | | | |
| 18"<br>24" | Brown Polypropylene | 3" | 12 | 25294<br>25295 |



25299



25290



25294




- For Strip Brooms, use Handle No. 25297 (15/16" x 60").
- Handle not included in price - order handle separately. See page 147.

**DID YOU KNOW?**

Weiler scrubs, handles and sweeps were used in the BP oil spill clean-up.

# Garage Brushes



Sweeping metal shavings from a shop floor.

## Garage Brushes - Palmyra Fill - Lacquered Hardwood Block

**For sweeping heavy, caked dirt and debris on rough surfaces: Concrete, Garage/Factory Floors, Rough Wood, Sidewalks, Barns and Brick Surfaces.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 16" | Wet or dry sweeping | 4" | 1 | 42021 | – |
| 18" | | | | 42022 | 44867 |
| 24" | | | | 42023 | 44868 |
| 36" | | | | 42138✳ | – |

✳ Brace included ★ Combo Packs include 12 brushes per pack and 12 #44300 handles (not assembled).



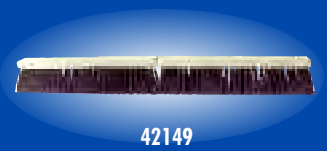
42023

## Garage Brushes - Maroon Polypropylene Fill - Lacquered Hardwood Block

**For sweeping heavy, caked dirt and debris on rough surfaces: Concrete, Garage/Factory Floors, Rough Wood, Sidewalks, Barns and Brick Surfaces.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Wet or dry sweeping Solvent, oil, chemical & liquid resistant | 3-1/4" | 1 | 42025 | 44869 |
| 24" | | | | 42026 | 44870 |
| 36" | | | | 42149✳ | – |

✳ Brace included ★ Combo Packs include 12 brushes per pack and 12 #44300 handles (not assembled).



42149

## Vortec Pro® Garage Brushes - Lacquered Hardwood Block

**Reliable and efficient brushes at a value price.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 18" | Palmyra | 4" | 1 | 25241 | 44865 |
| 24" | | | | 25242 | 44866 |
| 18" | Maroon Polypropylene | 3-1/4" | 1 | 25238 | 44863 |
| 24" | | | | 25239 | 44864 |

★ Combo Packs include 12 brushes per pack and 12 #44300 handles (not assembled).



25241

## Driveway Coaters - For applying blacktop driveway and parking lot dressings; asphalt, sealers or roof coatings.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 10" | Black Tampico | 2-5/8" | 12 | 73180 | – |
| 18" | Palmyra | 2" | 12 | 73182✳ | 44885 |

✳ With squeegee ★ Combo Packs include 12 brushes per pack and 12 #75527 handles (not assembled).



73180



73182




- Handle No. 44019 (1-1/8" x 60") recommended for use with all Garage Brushes.
- Handle No. 75527 (7/8" x 48") recommended for Driveway Coaters.
- Handle not included in price - order handle separately. See pages 147-148 for additional options.

# Street and Wire Brooms

**Street Brooms - Hardwood Block - Wide flared ends for sweeping close to curbs and walls. For heavy-duty wet or dry sweeping: Streets, Sidewalks, Loading Docks, Parking Lots, Driveways and all Asphalt Surfaces.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 16" | Natural Palmyra | 6-1/4" | 6 | 70208 | – |
| 16" | Dyed Palmyra | 6-1/4" | 6 | 70209 | – |
| 16"<br>16" | Bass & Palmyra Blend | 6-1/4"<br>7-1/4" | 6 | 42032<br>42099 | 44873<br>– |
| 16"<br>18"<br>24" | Brown Polypropylene | 5-1/4" | 6 | 42033<br>42173<br>42174 | 44874<br>–<br>– |
| 16"<br>18"<br>24" | Orange Polypropylene | 5-1/4" | 6 | 70212<br>42054<br>42055 | –<br>–<br>– |
| 14"<br>16" | White Polypropylene Fill<br>Orange Block | 4" | 6 | 70210<br>70211 | –<br>– |

★ Combo Packs include 12 brooms per pack and 12 #44020 handles (not assembled).

**Wire Brooms - Hardwood Block**

**For sweeping or scrubbing concrete or stone floors, driveways, etc. Ideal for sweeping heavy chips and debris.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 16" | Round Wire | 3-3/4" | 6 | 70215 |
| 14" | Flat Wire | 5" | 1 | 42030 |




- All sweeps on this page require a tapered tip handle.
- Handle No. 44020 (1-1/8" x 60") recommended for use with all Street & Wire Brooms.
- Use Spring-Loc Adapter to keep tapered wood handle securely fastened to the block.
- Handle not included in price - order handle separately. See pages 147-148 for adapter and handle.

**DID YOU KNOW?** Weiler now has a line of environmentally-friendly maintenance products. See pages 139-140 for details.



Sweeping debris in a parking lot.



70209



42032



42033



42054



70210



42030

# Handles



The Perma-Flex tip is guaranteed not to break when used with a Perma-Sweep.

**Handles -** Weiler's wood and metal handles are constructed for long life. Handles are available in a large variety of styles and tips to fit a wide selection of block types. The following charts provide recommended uses for each style handle.


44018


44020

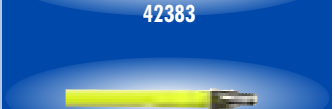

44300


44301


25297


44635


42383


44577


44578


75555

## Wood Handles - Quality hardwood handles.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 48" | 7/8" | Threaded Wood | Use with floor and garage brushes. | 12 | 75527 |
| 48" | 15/16" | | | | 44571 |
| 54" | 15/16" | | | | 44572 |
| 60" | 15/16" | | | | 44018 |
| 60" | 1-1/8" | | | | 44019 |
| 72" | 15/16" | | | | 44303 |
| 11" | 3/4" | Tapered Wood | Use with masonry and roof brushes, street brooms, floor and deck scrubs and squeegees. | 36 | 75528 |
| 48" | 7/8" | | | 12 | 44574 |
| 54" | 1-1/8" | | | 12 | 44573 |
| 60" | 1-1/8" | | | 12 | 44020 |
| 72" | 1-1/8" | | | 12 | 44306 |
| 48" | 15/16" | Threaded Metal | Heavy-duty metal tip provides additional strength. | 12 | 75525 |
| 60" | 15/16" | | | | 44300 |
| 60" | 1-1/8" | | | | 44435 |
| 72" | 15/16" | | | | 44302 |
| 48" | 15/16" | Perma-Flex™ | Durable threaded plastic tip guaranteed not to break when used with Perma-Sweep™ Floor Brushes. | 12 | 75516 |
| 60" | 15/16" | | | | 44301 |
| 60" | 15/16" | – | Use with Strip Brooms. | 12 | 25297 |
| 60" | 1-1/8" | – | Use with Contractor Brooms. | 12 | 44635 |

## Metal Handles - Reinforced, heavy-duty metal handles are available in two colors and optional foam cover.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 48" | 3/4" | Threaded Plastic | Black metal with plastic hang cap. | 12 | 42383 |
| 60" | 15/16" | Threaded Metal | Yellow plastic coat with plastic hang cap. | 12 | 44577 |
| 60" | 15/16" | Threaded Metal | Black plastic coat with black foam cover and plastic hang cap. | 12 | 44578 |

## Vortec Pro® Metal Handles - Reliable and efficient handles at a value price.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 60" | 15/16" | Threaded Plastic | Black plastic coat with convenient hang-up cap. | 12 | 75555 |

# Handles, Braces and Tips



Heavy-duty steel brace (Item #44290) provides extra support.

**Metal Telescoping and Fountain Tube Handles -** Use telescoping handles to shorten or extend the reach of the handle. Use fountain tube handles when a continuous flow of water is needed, i.e. car/truck washing.

| Length | Diameter | Type | Use | Standard Pack | Item No. |
|---|---|---|---|---|---|
| 6' extends to 12' | – | Telescoping | Window, wall and Vehicle wash brushes | 6 | 44499 |
| 5' | 7/8" | Fountain Tube | Vehicle wash brushes | 12 | 44319 |



44499



44319

**Fiberglass Handles -** Fiberglass handles are stronger than wood or metal. Virtually indestructible.

| Length | Diameter | Tip | Description | Std. Pack | Item No. |
|---|---|---|---|---|---|
| 60" | 1" | Tapered/Threaded | Hollow handle | 12 | 44561* |
| 60" | 1" | Threaded | Honeycomb core | 12 | 44562 |
| 60" | 1" | Threaded | All white | 12 | 44563+ |

* For use with both tapered and threaded holes
\+ Approved for the food service industry



44561

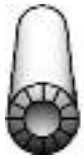


44562



44563



Fiberglass with polyethylene reinforced honeycomb core



Fiberglass hollow handle.

**Handle Accessories**

| Description | Use | Std. Pack | Item No. |
|---|---|---|---|
| Steel brace. Fits all handle sizes. | Reinforces & locks handle to block. (Standard with sweeps 30" and larger) | 12 | 44021 |
| Heavy-duty steel brace attaches to block with wood screws and wraps around handle. Fits all handle sizes. | Increases life of the brush by providing extra support for handle and block. | 12 | 44290 |
| Replacement handle thread. Made of heavy-duty fiberglass. For any 15/16" diameter handle. | Cut off damaged threads and slip this tip in place for a new handle. | 12 | 44317 |
| Tapered Adapter to tapered ends. | Converts threaded handle ends | 12 | 75505 |
| Spring Loc Adapter for any 1-1/8" diameter tapered wood handle for street brooms and window brushes. | Keeps tapered wood handles from separating from the block. | 6 | 44624 |




**DID YOU KNOW?** Weiler handles are sanded to avoid splinters.

# Upright and Whisk Brooms



Sweeping plastic and metal chips in a tool room

**Upright & Whisk Brooms -** Made of fine quality broom corn, fiber or synthetic material, Weiler's upright brooms and whisks are durable enough to meet all industrial and commercial applications.

**Upright Brooms - Ideal for sweeping floors, reaching into corners, cleaning ceilings, etc.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Household Broom - Good Quality** | | | | | |
| 4 sews - 7/8" handle | Corn & Fiber | 15" | 54" | 12 | 44547 |
| **Light Industrial Brooms - Better Quality** | | | | | |
| 5 sews - 7/8" handle | Corn & Fiber | 17" | 57" | 12 | 44548 |
| 5 sews - 7/8" handle | 100% Corn | 15" | 56" | 12 | 44009 |
| 6 sews - 1-1/8" handle | 100% Black Corn | 16" | 56" | 12 | 70304 |
| **Janitor's Broom - Best Quality** | | | | | |
| 5 sews - 1-1/8" handle Wire banded | Corn & Fiber | 17" | 57" | 12 | 70308 |
| **Warehouse Broom - Heavy-Duty** | | | | | |
| 4 sews - 1-1/8" handle Wire banded | Corn & Fiber | 18" | 57" | 12 | 44008 |



44009

**Angle Broom - Angled trim allows access to corners, under low cabinets and other hard-to-reach areas.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Large Plastic - 12" sweep face | Flagged Plastic | 7-1/2"–6" | 54" | 12 | 44305 |



44305

**Vortec Pro® Angle Broom - Reliable and efficient broom at a value price.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Small Plastic - 8" sweep face | Flagged Plastic | 3-3/4"–5" | 54" | 6 | 75160 |



70325

**Cap Brooms - Metal top for added durability. Ideal for wet or dry applications.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Metal Cap - Wire banded 12" sweep face | Palmyra | 10" | 55" | 6 | 44007 |
| Metal Cap - Wire banded 12" sweep face | Brown Poly | 10" | 55" | 6 | 70325 |
| Track & Switch - Steel chisel point on handle end | Palmyra | 8" | 55" | 6 | 70324 |

**Lobby Broom - For light-duty spot sweeping.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Lobby Broom - 3 sews | Black Synthetic | 10" | 38" | 12 | 70327 |

**Vortec Pro® Lobby Brooms - Reliable and efficient brooms at a value price.**

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Plastic Cap - 8" sweep face | Flagged Plastic | 5" | 36" | 12 | 44546 |
| Toy/Lobby - 3 sews, 7/8" handle | Corn & Fiber | 11" | 40" | 12 | 70300 |



70300

**Whisk Brooms - For fast, efficient clean-up.**

| Use | Number of Sews | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| General purpose - all applications | 3 | Corn & Fiber | 10" | 12 | 44266 |
| Sweeping coarse & heavy material | 2 | Palmetto | 7" | 12 | 44099 |
| Coarse sweeping of hot chips | - | Bassine | 5-1/4" | 12 | 44103 |



44266

# Dusters and Dust Pans



Cleaning up oil absorbent from a shop floor.

**Dusters & Dust Pans -** Whether cleaning fine particles or heavy debris, Weiler has a Counter Duster to do the job. These brushes are available in a wide selection of fill materials and have comfortably shaped blocks in wood or foam. Also choose from an array of Dust Pans to meet the application requirements.

## Counter Dusters - For clean up in hard-to-reach areas.

| Fill Material | Trim Length | Brush Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Horsehair** | | | | | |
| Horsehair | 2-1/4"<br>2-1/4" | 8"<br>9" | Wood | 12 | 44003<br>44351 |
| Black Horsehair and Fiber Mix | 2-1/2" | 8" | Wood | 12 | 71019 |
| **Synthetic** | | | | | |
| Flagged Silver Polystyrene | 2-1/2" | 8" | Wood | 12 | 44354 |
| Black Polystyrene | 2-1/2" | 8" | Wood | 12 | 25252 |
| Orange Polystyrene | 2" | 9" | Foam | 12 | 42213 |
| **Natural Fiber** | | | | | |
| Black Tampico | 2-1/2" | 8" | Wood | 12 | 25251 |
| Tri-colored Tampico | 2-1/2" | 8" | Wood | 12 | 44004 |



44003



42213



44004

## Dust Pans - Durable, industrial grade - For quick clean-ups.

| Description | Height | Width | Depth | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Heavy-duty 20 gauge steel Black enamel finish | – | 12" | 13-1/2" | 12 | 71078 |
| Extra wide - Heavy-duty 20 gauge steel Black enamel finish | – | 16" | 15" | 12 | 71079 |
| Lobby Dust Pan Black enamel metal hopper Aluminum handle | 39-1/2" | 12" | 9" | 6 | 71081 |



71078

71077

71080

## Vortec Pro® Dust Pans - Reliable and efficient pans at a value price.

| Description | Height | Width | Depth | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Molded plastic | – | 12-1/4" | 12" | 12 | 71077 |
| Lobby Dust Pan Molded plastic hopper Aluminum handle | 39-1/2" | 12" | 11" | 6 | 71080 |

## Radiator Brushes - 24" Overall Length. Ideal for cleaning radiators and narrow, hard-to-reach places.

| Fill Material | Type | Brush Part | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Black Horsehair | Foam Handle | 9-1/2" | 2-1/2" | 12 | 73050 |
| Black Horsehair | Twisted-in-Wire Handle | 7-1/2" | 2-1/2" | 12 | 73055 |



73050



73055

## Wall Dusting Brush - For dusting ceilings, valances, high moldings and other hard-to-reach places. Twisted-in-wire construction with plastic handle.

| Fill Material | Overall Length | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Horsehair | 12" x 5" | 2-3/4" | 2 | 71076 |



71076

# Squeegees & Window Brushes



Cleaning a window with a window squeegee.

**Squeegees -** For fast, efficient cleaning, Weiler provides a variety of non-scratching floor and window squeegees and window brushes. Designed for high durability.



45507



45510



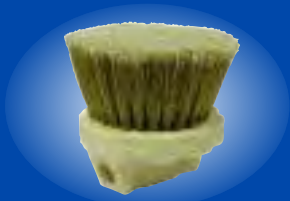
75242



45500



45503



25271

## Floor Squeegees - Heavy-duty construction, iron handle socket.

| Description | Length | Type | Standard Pack | Item Number | Standard Pack | Refill Blade Item No. |
|---|---|---|---|---|---|---|
| Black rubber blade for rough, heavy use | 18" | Straight | 6 | 45506 | 12 | 45508 |
| | 24" | | | 45507 | | 45512 |
| | 30" | | | 45534 | | 45536 |
| | 36" | | | 75202 | | 45513 |
| Black rubber blade for rough, heavy use | 18" | Curved | 12 | 75206 | 12 | 75225 |
| | 24" | | 6 | 45510 | | 45512 |
| | 30" | | 6 | 45535 | | 45536 |
| | 36" | | 6 | 45511 | | 45513 |
| Stainless steel scraper | 8" | – | 12 | 75242 | – | – |

## Window Squeegees - Rust-proof handle socket and frame.

| Description | Length | Standard Pack | Item Number | Standard Pack | Refill Blade Item No. |
|---|---|---|---|---|---|
| One piece frame with hard rubber section joined with a soft, red rubber blade. | 6" | 12 | 45537 | 12 | 75233 |
| | 12" | | 45500 | 24 | 45503 |
| | 14" | | 45538 | 24 | 75228 |
| | 16" | | 45501 | 24 | 45504 |
| | 18" | | 45502 | 24 | 45505 |




- All squeegees require a tapered tip handle.
- Handle No. 44020 (1-1/8" x 60") recommended for use with all Squeegees.
- Use Spring-Loc Adapter to keep tapered wood handle securely fastened to the block.
- Handle not included in price - order handle separately. See pages 147-148 for adapter and handle.

## Window Brushes - Two threaded handle holes

**High quality, non-scratching brushes used for industrial window washing.**

| Description | Block Size | Block | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| Round Style | | | | | |
| Flagged Gold Polystyrene | 4-1/2" | Plastic | 2-1/2" | 12 | 25271 |
| Stiff Black Horsehair and Polypropylene Mix | 4-1/2" | Plastic | 2-3/4" | 12 | 73003 |




- Handle No. 44019 (1-1/8" x 60") recommended for use with #25271 & #73003 Window Brushes.
- Handle not included in price - order handle separately. See page 147 for handle.

# Vehicle Care Products

**Vehicle Care Brushes -** Weiler's line of vehicle care brushes meets the cleaning needs of car and truck fleets. Brushes are also popular in the marine industry. All products are designed to provide professional results.

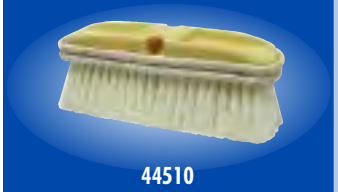


Washing a car with a vehicle wash brush and fountain tube handle.

### Vehicle Wash Brushes - Protective bumper - Foam block with two handle holes. Can be used with flow-through handle #44319 on page 148.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|
| 9-1/2" x 2-3/4" | Grey Fiber | 2-1/2" | 12 | 44318* | – |
| 9-1/2" x 2-3/4" | Flagged White Polystyrene | 2-1/2" | 12 | 44510 | 44875 |
| 9-1/2" x 2-3/4" | Flagged Orange Polystyrene | 2-1/2" | 12 | 42210 | – |
| 9-1/2" x 2-3/4" | Flagged Green Polystyrene | 2-1/2" | 12 | 73146 | – |

*May scratch smooth or high gloss surfaces, use polystyrene filled products for these surfaces.
★ Combo Packs include 12 brushes per pack and 12 #44319 handles (not assembled).



44510

### School Bus Brush - Easily sweeps between school bus seats. Lacquered hardwood block with one threaded handle hole. Use handle #44571 on page 147.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 10" x 2-1/2" | Flagged Silver-grey Polystyrene | 3" | 12 | 70312 |



70312

### Bi-Level Scrub Brushes - Foam Block - The bi-level design allows the brush to stay in contact with the surface at various working angles. Can be used with flow-through handle #44319 on page 148.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 10" | Flagged White Polystyrene | 2-3/4" | 6 | 44699 |
| 10" | Fine Green Nylex | 2-3/4" | 12 | 44693 |



44699

### Upholstery/Spotting Brush - Wet & dry cleaning, prespotting, carpet touch-up, etc. Shaped plastic handle.

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8-1/2" x 2-9/16" | .016 Crimped Polypropylene | 5/8" | 8 x 9 | 12 | 44307 |



44307

### Spoke Brushes - Ideal for cleaning spokes or confined spaces.

| Length of Brush Part | Fill Material | Brush Part | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" | Polypropylene | 2" tapered to 3/4" | 11" | 12 | 44482 |
| 10" | White Tampico | 2-7/8" tapered to 1-1/4" | 15" | 12 | 44315 |



44315

### Tire Cleaning Brushes - Foam block - Used for cleaning sidewalls of tires.

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8-1/2" x 2-9/16" | .008 Brass | 5/8" | 8 x 9 | 12 | 99593 |
| 7" x 1-9/16" | .008 Brass | 5/8" | 6 x 8 | 12 | 73156 |



99593

# Scrub Brushes



Scrubbing a stainless steel sink.

**Scrub & Utility Brushes -** A broad range of high quality scrub and utility brushes are available from Weiler. From quick cleaning to heavy-duty scrubbing, Weiler's brushes are designed to provide the most effective brushing and cleaning action.

## Hand Scrub Brushes - Heavily filled for heavy-duty scrubbing.

| Block Size | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7-1/2" | Light Blue Polypropylene | 1" | Contoured Plastic w/Rubber Insert | 24 | 43999 |
| 6" | White Polypropylene | 1-1/8" | Iron Style - Plastic | 12 | 44395 |
| 7-1/4" | Palmyra | 1" | Square - Wood | 24 | 72034 |
| 8" | White Tampico<br>White Tampico<br>Palmyra | 1-1/8"<br>1"<br>1-1/8" | Square - Wood | 12 | 44024<br>72058*<br>44025 |
| 8-1/4" | White Tampico | 1-1/8" | Square - Wood | 12 | 73111 |
| 9" | White Tampico | 1-1/8" | Pointed - Wood | 12 | 44023 |

* Threaded handle hole



43999



44395



44024



44023

## Deck Scrub Brushes - Excellent for scrubbing decks or floors. One threaded and one tapered handle hole. Can be used with threaded handle #44018 or tapered handle #44020 on page 147.

| Block Size | Fill Material | Trim Length | Number of Rows | Block Type | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|---|
| 9" | Palmyra<br>Tampico | 2" | 5 x 14 | Wood | 12 | 44428<br>44429 | –<br>– |
| 10" | Palmyra<br>Tampico<br>Polypropylene | 2″ | 6 x 18 | Wood | 12 | 44026<br>44028<br>44434 | 44876<br>44877<br>44878 |
| 10" | Polypropylene | 2" | 5 x 14 | Foam | 12 | 44728* | – |
| 12" | Palmyra<br>Tampico<br>Polypropylene | 2" | 6 x 20 | Wood | 12 | 44027<br>44029<br>44438 | –<br>–<br>– |

* Threaded handle hole ★ Combo Packs include 12 scrubs per pack and 12 #44018 handles (not assembled).



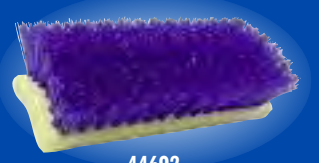
44026



44434

## Bi-Level Scrub Brushes - The bi-level design allows the brush to stay in contact with the surface. Can be used with flow-through handle #44319 on page 148 or the Perma-Flex handle #44301 on page 147.

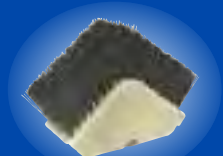
| Block Size | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 10" | Stiff Crimped Blue Polypropylene | 1-3/4" | Foam | 6 | 44692 |
| 10" | Flagged White Polystyrene | 2-3/4" | Foam | 6 | 44699 |
| 10" | Fine Green Nylex | 2-3/4" | Foam | 12 | 44693 |



44692

## Baseboard Brush - Can be used with threaded handle #44018 on page 147.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 5-1/2" x 2-7/8" | Black Polypropylene | 1-3/4" | 12 | 73075 |



73075

## Vortec Pro® Boot Brush - Reliable and efficient brush at a value price.

| Size | Description | Item Number |
|---|---|---|
| 9" x 6" | Boot Cleaning Brush - Metal Frame - Wood Block - Black Nylon Fill | 44391 |



44391

# Scrub Brushes & Utility Brushes

**Utility Scrub Brushes -** Wood Block. For general scrubbing in factories, kitchens, institutions, etc.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Wood | 12 | 72086<br>44013<br>44014 |
| 20" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Wood | 12 | 72101<br>44016<br>44017 |

**Utility Scrub Brushes -** Foam Block. Chemical and water resistant, will not warp or crack.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Foam | 12 | 79101<br>79120<br>79100 |
| 20" | Palmyra<br>Yellow Polypropylene<br>White Tampico | 2" | Foam | 12 | 79107<br>79109<br>44663 |

**Utility Scrub Brushes -** Plastic Block. Designed for high temperature cleaning, ideal for food service.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | White Nylon | 2" | Plastic | 12 | 44416 |
| 20" | White Nylon | 2" | Plastic | 12 | 44418 |

**Vortec Pro® Utility Scrub Brushes -** Ideal for general purpose cleaning.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8" | Tampico | 2" | Foam | 12 | 25262 |
| 20" | Tampico | 2" | Foam | 12 | 25263 |

**Vortec Pro® Dish/Sink Brush -** Plastic Block - Reliable and efficient brush at a value price.

| Overall Length | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 8-3/4" | White Plastic with Blue Polypropylene Border | 1" | 12 | 75002 |

**Grout Detail Brush -** Use for removing stubborn dirt, grime and mildew from tiled surfaces.

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 8-1/2" | Stiff Black Nylon | 7/8" | 24 | 73233 |

**Bowl Brushes -** 2" Trim Length - For thorough, efficient cleaning.

| Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3-1/2" x 3-3/4" | White Plastic | Plastic | 14-1/2" | 12 | 75001 |
| 4-1/2" x 4" | White Plastic | Plastic | 16" | 12 | 75070 |
| 5-3/4" x 4-3/4" | Black Nylon | Plastic | 21" | 12 | 75068 |
| 6-1/2" x 4" | Black Saran | Wood | 21" | 12 | 75071 |



Removing stubborn dirt, grime and mildew from a tiled surface with a grout detail brush.


44014


44016


79120


79107


44418


25262


75002


73233


75071

# Utility Brushes



Cleaning a toilet with a Weiler Bowl Brush.



44001



75000



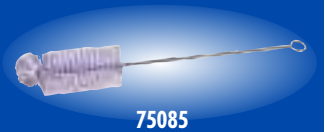
44314



75003



99594



75085



44111



44115



44316



75570

## Professional Bowl Brushes - Hardwood handle and natural fiber - For thorough cleaning.

| Brush Part | Fill Material | Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 5" | White Tampico | 2" | 20" | 12 | 44001* |
| 6-1/2" | Tampico | 3-1/4" | 23" | 12 | 75060 |
| 7-1/4" x 6" | Marble Union Fiber | 2-1/2" | 22" | 12 | 75072 |

* Foam handle

## Vortec Pro® Bowl Brush Set - 2" Trim Length - Reliable and efficient brushes at a value price.

| Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3-1/2" x 3-3/4" | White Plastic | Plastic | 14-1/2" | 6 | 75000 |

## Vortec Pro® Nail Brushes - Great for use in shop or industrial settings.

| Brush Part | Fill Material | Block Type | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-3/4" x 1-1/2" | Plastic | Wood | 3/4" | 4 x 15 | 36 | 44314 |
| 3-1/2" x 1-1/4" | Poly-propylene | Plastic | 3/8" | 6 x 18 • 4 x 17 (double-sided) | 24 | 75003 |
| 4-3/4" x 1-1/2" | White Tampico | Wood | 11/16" | 4 x 15 | 12 | 75021 |

## Bottle Washing Brush - Brush shape enables access to hard-to-reach areas when cleaning.

| Length of Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" | Black Horsehair | Wood | 16" | 12 | 99594 |

## Vortec Pro® Bottle Washing Brush - Reliable and efficient brush at a value price.

| Length of Brush Part | Fill Material | Handle | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 5-1/2" x 2-3/8" | White Nylon | Twisted-in-wire | 17" | 24 | 75085 |

## Nylon Tube Brushes - Loop handle, Straight black nylon fill.

| Diameter | Fill Diameter | Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/4" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44110 |
| 3/8" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44213 |
| 1/2" | .010 | 3" | 1/8" | 8-1/2" | 36 | 44111 |
| 3/4" | .012 | 3" | 1/8" | 8-1/2" | 36 | 44112 |
| 1" | .014 | 4" | 5/32" | 12-1/4" | 36 | 44113 |
| 1-1/4" | .014 | 4" | 5/32" | 13" | 36 | 44114 |
| 2" | .014 | 5" | 3/16" | 16-3/4" | 36 | 44115 |

## Percolator Brush - Straight white nylon fill

Ideal for internal cleaning in industrial, laboratory and food service.

| Diameter | Fill Diameter | Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7/16" | .010 | 3-1/2" | 5/32" | 11-1/2" | 10 | 44316 |

## Vat Brush - For valves, outlets, small tanks, beverage dispensers & coffee urns.

Can be used with the Perma-Flex handle #44301 on page 147.

| Fill Material | Block Type | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| White Nylon | White Nylon | 8" | 1 | 75570 |

# Mops & Accessories

**Industrial Grade Mops -** Our wet and dry mops are made with industrial grade cotton and can be laundered. They will not scratch floors or unravel.



Cleaning a corner with a dust mop.

### Wet Mop Heads - Durable, ideal for all-purpose cleaning. Can be laundered.

| Weight | Material | Standard Pack | Item Number |
|---|---|---|---|
| **Cut End** | | | |
| 12 oz.<br>16 oz.<br>20 oz.<br>24 oz.<br>32 oz. | 8-ply tight twist cotton | 12 | 75100<br>75102<br>75103<br>75104<br>75105 |
| Small<br>Medium<br>Large<br>X-Large | 4-ply high bulk cotton economy | 12 | 75170<br>75171<br>75172<br>75173 |
| **Loop End** | | | |
| Small<br>Medium<br>Large<br>X-Large | 4-ply tight twist cotton | 12 | 75180<br>75181<br>75182<br>75183 |
| Small<br>Medium<br>Large<br>X-Large | 4-ply tight twist rayon finishing candy striped | 12 | 75190<br>75191<br>75192<br>75193 |



75102



75171



75190

### Wet Mop Handles - Industrial Grade. Hardwood handle with plated metal heads.

| Description | Size | Standard Pack | Item Number |
|---|---|---|---|
| Quick-Change Plastic Head | 54" x 15/16" | 12 | 75140 |
| Screw Type | 54" x 1-1/8" | 12 | 75131 |
| Spring Type | 54" x 1-1/8" | 12 | 75132 |
| Jaw Type | 54" x 1-1/8" | 12 | 75130 |



75140

### Professional Dust Mops - Tie-on style, 4-ply cotton. Can be laundered.

| Mop Size | Frame Size | Standard Pack | Item Number |
|---|---|---|---|
| 18" | 5" x 18" | 12 | 75116 |
| 24" | 5" x 24" | 12 | 75117 |
| 36" | 5" x 36" | 12 | 75118 |



75131

### Professional Dust Mop Frames - Heavy-duty full swivel frame.

| Mop Size | Frame Size | Standard Pack | Item Number |
|---|---|---|---|
| 18" | 5" x 18" | 12 | 75136 |
| 24" | 5" x 24" | 12 | 75137 |
| 36" | 5" x 36" | 12 | 75138 |



75116



75136

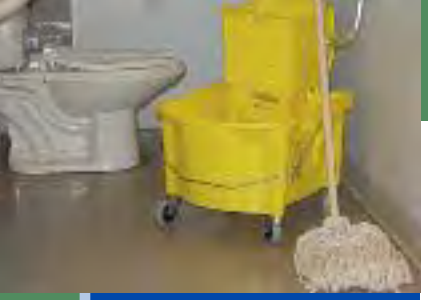
### Professional Dust Mop Handle - Heavy-duty clamp-on style.

| Length | Diameter | Standard Pack | Item Number |
|---|---|---|---|
| 60" | 15/16" | 12 | 75133 |



75133

# Mops & Accessories



Use the Combo Bucket with 12 to 32 oz. mop heads

## Wedge-Style Dust Mop - Tie-on style, 4-ply cotton

**Durable, ideal for all-purpose cleaning. Can be laundered.**

| Size | Frame Size | Standard Pack | Item Number |
|---|---|---|---|
| 8" wedge | 5" x 8" | 12 | 75127 |



75127

## Wedge-Style Frame and Handle

| Length | Diameter | Standard Pack | Item Number |
|---|---|---|---|
| 60" | 15/16" | 12 | 75126 |



75126

## One-Piece Cotton Deck Mops - Industrial grade. Mop head securely tied to handle.

| Description | Weight | Standard Pack | Item Number |
|---|---|---|---|
| #10 | 10 oz. | 12 | 75096 |
| #12 | 12 oz. | 12 | 75097 |
| #16 | 16 oz. | 12 | 75109 |
| #20 | 20 oz. | 12 | 75098 |
| #24 | 24 oz. | 12 | 75110 |



36666

## Vortec Pro® Combo Bucket - One-piece construction that will not rust, fade, crack, peel, chip, dent or warp.

**Wringer fits all sizes of plastic or metal buckets.**

| Bucket Size | Wringer | Standard Pack | Item Number |
|---|---|---|---|
| 36 qt. | 12-32 oz. | 1 | 36666 |

## Wax Applicators - 100% lambswool. Washes easily and dries quickly. Pads are easily changed.

**Can be used with threaded handle #44018 on page 147.**

| Block and Pad Size | Pad Refill Number | Standard Pack | Item Number |
|---|---|---|---|
| 6" x 10" | 75155 | 1 | 75150 |
| 6" x 12" | 75156 | 12 | 75151 |
| 6" x 14" | 75157 | 12 | 75152 |
| 6" x 16" | 75158 | 12 | 75153 |
| 6" x 18" | 75159 | 12 | 75154 |



75150

# Masonry & Applicator Brushes

**Masonry & Applicator Brushes -** Weiler's full line of Masonry & Applicator Brushes covers everything from the ground up - cement finishing and stippling brushes for texturing and applying cement and asphalt; whitewashing and masonry brushes for applying cement, water paints and liquid waterproofing materials on concrete block and masonry walls; smoothing brushes for applying wallpaper; and roof brushes for spreading roofing tar and coatings.



Applying waterproofing material with a masonry brush.

**Knot-Type Roof Brushes - For application of roof coatings.**
**Can be used with tapered handle #44574 on page 147.**

| Block Size | Fill Material | Trim Length | Number of Knots | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|
| 6-1/4" | Tampico | 3-1/4" | 3 | 12 | 44010 | 44883 |
| 8-3/4" | Tampico | 3-1/4" | 4 | 12 | 73177 | – |

★ Combo Packs include 12 brushes per pack and 12 #44574 handles (not assembled).



44010

**Block-Type Roof Brushes - For application of roof coatings.**
**Can be used with tapered handle #44574 or threaded handle #75527 on page 147.**

| Block Size | Fill Material | Trim Length | Number of Knots | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|
| 7" | White Tampico<br>One tapered handle hole | 2" | 5 | 12 | 44011 | 44884 |
| 7" | Cream Colored Polypropylene<br>One tapered handle hole | 2" | 5 | 12 | 73171 | – |
| 7" | White Tampico<br>One threaded handle hole | 2" | 5 | 12 | 73195 | – |

★ Combo Packs include 12 brushes per pack and 12 #44574 handles (not assembled).



44011



44031

**Masonry Brushes - Useful tools for applying cement, waterpaints and liquid waterproofing materials on masonry walls. Handle attached.**

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7" | White Tampico | 3-1/4" | 2 | 12 | 44032 |
| 6" | Solvent Resistant Polypropylene | 3-1/4" | 3 | 12 | 74020 |
| 4" | White Tampico | 3" | 4 | 12 | 74004 |
| 6-1/2" | White Tampico | 3-1/2" | 4 | | 44031 |
| 6" | White Tampico | 3" | 5 | 12 | 74002 |
| 6-1/2" | White Tampico | 4" | 5 | | 44448 |



44448

**Whitewash Brushes - Two tapered handle holes allow user to choose the correct brush angle needed.**
**Can be used with tapered handle #75528 on page 147.**

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" | White Tampico | 2-5/8" | 2 | 12 | 74048 |
| 7" | White Tampico | 2-5/8" | 2 | 12 | 44034<br>74053* |

* Includes a 12" tapered wood handle.



44034

# Masonry & Applicator Brushes



Creating texture on newly poured concrete.

## Acid Brush - Detachable handle.

**For the application of Kalsomine, cold water, acid and water repellents to concrete and other rough surfaces.**

| Block Size | Fill Material | Trim Length | Number of Rows | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 7" | White Tampico | 3-1/2" | 3 | 12 | 74015 |



74015

## Acid Scrub Brush - Hardwood block- Tapered handle hole

**Recommended for applying sealcoating, cement slurry, water-proofing, etc.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 8-1/4" x 2-3/4" | White Tampico | 1-1/8" | 12 | 73111 |

NOTE: Handle not included - can be used with tapered handle #44574 on page 147.

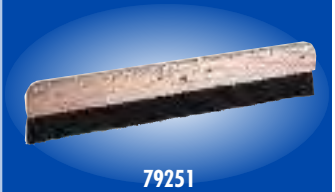


73111

## Cement Finishing Brushes - Hardwood block. Ideal for creating texture to newly poured cement and for applying coatings on asphalt or concrete. Use handle #44303 on page 147.

| Block Length | Fill Material | Trim Length | No. of Rows | Standard Pack | Item Number | ★ Combo Qty. Item Number |
|---|---|---|---|---|---|---|
| 24" | Black Polypropylene | 2-1/4" | 3 | 6 | 79251 | – |
| 24" | Black Polypropylene | 3-1/4" | 3 | 6 | 79252 | 44879 |
| 36" | Black Polypropylene | 3-1/4" | 3 | 6 | 79253 | 44880 |
| 24" | Horsehair | 2-1/2" | 3 | 6 | 79255 | 44881 |
| 36" | Horsehair | 2-1/2" | 3 | 6 | 79256 | 44882 |

★ Combo Packs include 12 brushes per pack and 12 #44303 handles (not assembled).



79251

## Smoothing Brush - Hardwood block. For smoothing wallpaper.

| Block Length | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 12" | White Tampico | 2" | 12 | 74078 |



74078

**DID YOU KNOW?** Weiler scrubs and sweeps were used to help with the clean-up after Hurricane Katrina.

# Scratch Brushes



**Scratch Brushes -** Weiler's extensive Scratch Brush offering includes many block and handle types and sizes. The wide variety of fill materials available assures the right brush for the right job. Common applications are cleaning dirt, rust, scale, chips and paint; plating and welding operations.

## Curved Handle Scratch Brushes - Hardwood block - Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 13-3/4" x 1-1/8" | 5-1/4" | 3 x 14 | 1-1/4" | 12 | 44594* |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44053 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44056 |
| .012 Steel Wire with Scraper | | | | | |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44055 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44058 |
| .012 Stainless Steel Wire | | | | | |
| 13-3/4" x 1-1/8" | 5-1/4" | 3 x 14 | 1-1/4" | 12 | 44432* |
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44054 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1-3/16" | 12 | 44057 |

* V-Groove

## Vortec Pro® Curved Handle Scratch Brushes - Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25150 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1" | 12 | 25201 |
| .012 Stainless Steel Wire | | | | | |
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25154 |
| 14" x 1-1/8" | 6" | 4 x 18 | 1" | 12 | 25202 |

## Shoe Handle Scratch Brushes - Hardwood blocks - Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 10" x 3/8" | 5" | 1 x 17 | 1-1/16" | 12 | 44100 |
| 10" x 5/8" | 5" | 2 x 17 | 1-3/16" | 12 | 44061 |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44063 |
| 11" | 5" | 4 x 16 | 1-3/16" | 12 | 73217• |
| .012 Steel Wire with Scraper | | | | | |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44065 |
| .012 Stainless Steel Wire | | | | | |
| 10" x 3/8" | 5" | 1 x 17 | 1-1/16" | 12 | 44101 |
| 10" x 3/8" | 5" | 1 x 17 | 3/4" | 12 | 44235 |
| 10" x 5/8" | 5" | 2 x 17 | 1-3/16" | 12 | 44062 |
| 10" x 1-1/8" | 5" | 4 x 16 | 1-3/16" | 12 | 44064 |
| 11" | 5" | 4 x 16 | 1-3/16" | 12 | 44299• |
| .012 Brass Wire | | | | | |
| 11" | 5" | 4 x 16 | 1-1/4" | 12 | 73218• |

• Plastic block

## Vortec Pro® Shoe Handle Scratch Brushes - Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| .012 Steel Wire | | | | | |
| 10" x 1" | 5" | 4 x 16 | 1" | 12 | 25100 |
| .012 Stainless Steel Wire | | | | | |
| 10" x 1" | 5" | 4 x 16 | 1" | 12 | 25104 |

Removing excess concrete from the surface of a steel support plate.



44594 Top View



44053



44055



25150



44063



44065



73218



25100



Removing dirt and oil from a lathe.



44069



44076



44116



44119



44075



44551



44189



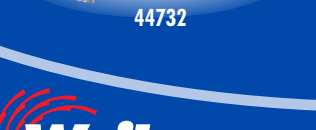
44619



95151



99383



44732

## Heavy-Duty Scratch Brush with Scraper - .012 Steel Wire - Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 11-1/2" x 1-1/2" | 5-1/2" | 4 x 11 | 1-1/2" | 12 | 44069 |

## Vortec Pro® Heavy-Duty Scratch Brush with Scraper -

.012 Steel Wire - Reliable and efficient brushes at a value price.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 11-1/2" x 1-1/2" | 5" | 4 x 11 | 1-5/8" | 12 | 25211 |

## Plater's Brushes - Hardwood block. For general cleaning in the plating, metal finishing, aircraft and missile industries. Also used with inert arc aluminum welding.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Tampico** | | | | | |
| 13" x 1-1/4" | 5-1/4" | 4 x 18 | 1" | 12 | 44076 |
| **Nylon** | | | | | |
| 13" x 1-1/8" | 5-1/4" | 4 x 19 | 1" | 12 | 44077 |
| **.006 Steel Wire** | | | | | |
| 10" x 1-1/8" | 5" | 4 x 16 | 1" | 12 | 44117 |
| 13" x 7/8" | 5-1/2" | 3 x 19 | 1" | 12 | 44116 |
| **.006 Stainless Steel Wire** | | | | | |
| 10" x 1-1/8" | 5" | 4 x 18 | 1" | 12 | 44240 |
| 13" x 7/8" | 5-1/2" | 3 x 19 | 1" | 12 | 44660 |
| 13" x 1-1/8" | 5-1/2" | 4 x 19 | 1" | 12 | 44232 |
| **.006 Brass Wire** | | | | | |
| 10" x 1-1/8" | 5" | 4 x 18 | 1" | 12 | 44119 |
| 13" x 7/8" | 5-1/2" | 3 x 19 | 1" | 12 | 44118 |

## Small Hand Scratch Brushes - Ideal for cleaning and prepping surfaces.

| Block Size | Block | No. of Rows | Wire Size | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Stainless Steel Wire** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006 | 1/2" | 36 | 44075 |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44167+ |
| 7-3/4" x 3/8" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44551* |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .006 | 5/8" | 36 | 95013 |
| **Straight Brass Wire** | | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44189 |
| **Crimped Brass Wire** | | | | | | |
| 6" x 1/2" | Wood | 3 x 10 | .005 | 5/8" | 72 | 44619 |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .008 | 5/8" | 36 | 95014 |
| **Crimped Aluminum** | | | | | | |
| 6-3/4" x 1-5/8" | Wood | 6 x 9 | .008 | 5/8" | 12 | 95151 |
| 8-3/4" x 1/2" | Wood | 2 x 9 | .008 | 5/8" | 36 | 44251 |
| **Straight Black Nylon** | | | | | | |
| 6-1/2" x 1/2" | Plastic | 4 x 15 | .010 | 1/2" | 24 | 99383 |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .012 | 1/2" | 36 | 44637 |
| **White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .016 | 1/2" | 36 | 44609 |
| **Double-Sided Brass/White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44731 |
| **Double-Sided Brass/Stainless Steel** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44732 |
| **Double-Sided Stainless Steel/White Nylon** | | | | | | |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006/.016 | 1/2" | 24 | 44733 |

+ Countertop display available. See page 176.
*Wire drawn

# Scratch Brushes



Removing chips from the slots of a milling machine.

## Vortec Pro® Small Hand Scratch Brushes - Reliable and efficient brushes at a value price.

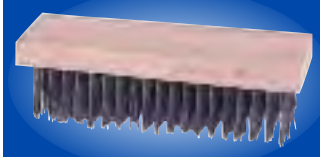
| Block Size | Handle | No. of Rows | Wire Size | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Stainless Steel Wire** | | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44805 |
| 7-1/2" x 1/2" | Plastic | 3 x 7 | .006 | 1/2" | 36 | 44806 |
| **Straight Brass Wire** | | | | | | |
| 7-1/2" x 1/2" | Wood | 3 x 7 | .006 | 1/2" | 36 | 44810 |



44806

## Block Type Scratch Brushes - For rugged cleaning on bricks, stone and similar large flat areas.

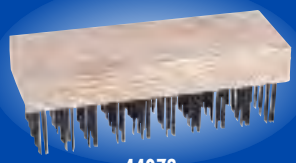
| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7-1/4" x 2-5/8" | .012 Round Wire Curved Face | 7" | 9 x 21 | 1-3/16" | 12 | 44066 |
| 7-1/4" x 2-1/4" | .014 Round Wire Flat Face | 7" | 6 x 19 | 1-5/8" | 12 | 44067 |



44067

## Vortec Pro® Block Type Scratch Brush - Reliable and efficient brushes at a value price.

| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7-1/4" x 2-1/4" | .012 Steel | 7" | 6 x 19 | 1-5/8" | 12 | 25212 |



44073

## Butcher Block Brush - For cleaning concrete forms and green concrete after forms have been removed.

| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7-1/2" x 2-3/4" | .017 x .110 Flat Wire | 7" | 5 x 10 | 1-1/4" | 12 | 44073 |



44070

## Chipping Hammer Refill - A refill brush for most chipping hammers. Used for weld cleaning.

| Block Size | Fill Material | Brush Part | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-5/8" x 7/8" | .012 Steel | 4-1/2" | 3 x 15 | 1-1/8" | 12 | 44070 |



44451

## Wire Duster - For cleaning chips, borings, solder, rust, dirt & corrosion from castings.

| Block Size | Fill Material | Handle Length | No. of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3" x 1-1/8" | .012 Steel | 5-3/4" | 4 x 8 | 2-1/2" | 12 | 44451 |

## File Card Brush - Waxed hardwood block. Use for file cleaning or to roughen and prepare surface material prior to sweating and soldering.

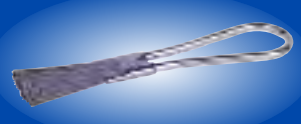
| Overall Length | Fill Material | Brush Part | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 8-1/4" | .012 Steel | 1-5/8" x 4" | 1/4" | 12 | 44260 |



44260

## Metal Chip Brush - Small stiff wire brush for brushing hot metal. Can be exposed to flames without burning.

| Overall Length | Fill Material | Trim Length | Face Width | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 5-1/2" | .012 Steel | 1-1/2" | 1-1/4" | 12 | 44074 |



44074

# Flue Brushes



Cleaning boiler pipes with a flue brush.

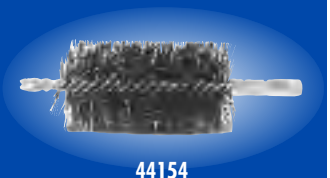
**Flue Brushes -** Designed and engineered from black oil-tempered wire. Flue brushes are available in single spiral and double spiral construction. Other fill materials and sizes available by special order. Contact Customer Service for details.

## Applications

- Pipe cleaning
- Flue cleaning
- Boiler tube cleaning



44131



44154



95925

**Flue Brushes - Filled with .012 round wire and fitted with 1/4" x 2" NPT pipe nipple. For internal cleaning of pipes and flues.**

| Brush Diameter | Brush Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Single Spiral** | | | | |
| 7/8" | 4-1/2" | 7-1/2" | 1 | 44124 |
| 1" | 4-1/2" | 7-1/2" | 1 | 44125 |
| 1-1/4" | 4-1/2" | 7-1/2" | 1 | 44047 |
| 1-1/2" | 4-1/2" | 7-1/2" | 1 | 44128 |
| 1-3/4" | 4-1/2" | 7-1/2" | 1 | 44048 |
| 2" | 4-1/2" | 7-1/2" | 1 | 44131 |
| 2-1/2" | 4-1/2" | 7-1/2" | 1 | 44133 |
| 3" | 4-1/2" | 7-1/2" | 1 | 44135 |
| 3-1/2" | 4-1/2" | 7-1/2" | 1 | 44137 |
| 4" | 4-1/2" | 7-1/2" | 1 | 44139 |
| **Double Spiral** | | | | |
| 1" | 4-1/2" | 7-1/2" | 1 | 44149 |
| 1-1/4" | 4-1/2" | 7-1/2" | 1 | 44035 |
| 1-1/2" | 4-1/2" | 7-1/2" | 1 | 44150 |
| 1-3/4" | 4-1/2" | 7-1/2" | 1 | 44036 |
| 2" | 4-1/2" | 7-1/2" | 1 | 44152 |
| 2-1/4" | 4-1/2" | 7-1/2" | 1 | 44037 |
| 2-1/2" | 4-1/2" | 7-1/2" | 1 | 44154 |
| 2-3/4" | 4-1/2" | 7-1/2" | 1 | 44038 |
| 3" | 4-1/2" | 7-1/2" | 1 | 44156 |
| 4" | 4-1/2" | 7-1/2" | 1 | 44169 |
| 4-7/8" | 4-1/2" | 7-1/2" | 1 | 44159 |

**Flue Brush Extension Rod - One 1/4" male pipe nipple and one 1/4" female pipe coupling allows user to extend flue brush.**

| Description | Standard Pack | Item Number |
|---|---|---|
| 36" Fiberglass Extension Rod | 1 | 95925 |

NOTE

"Pipeline" Flue Brushes By Special Order Only.
- Heavy-duty. Exact size diameter. Rugged double stem, single spiral.
- Fitted with 1/4" pipe nipple. Available in diameters of 1-5/8" - 15".

DID YOU KNOW?

Flue Brushes are available in additional sizes and fill materials.

# Tube Fitting Brushes

**Tube Fitting Brushes -** Several configurations and sizes of Tube Fitting Brushes are available for cleaning and deburring copper, internal and external tube fittings. The handy 4-in-1 tube fitting brush cleans both outside and inside diameters of multiple tube sizes.



Cleaning the inside of a copper fitting prior to soldering.

**Internal Tube Fitting Brushes - Wire Fill - For internal cleaning and deburring of copper tube fittings. Also used in trucking and marine industries as a light socket cleaning brush.**

| Tube Diameter | Actual Diameter | Brush Length | Overall Length | Handle Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/8" | 1/4" | 1" | 6-1/2" | 3-1/4" | 12 | 44078 |
| 1/4" | 3/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44079 |
| 3/8" | 1/2" | 1" | 6-1/2" | 3-1/4" | 12 | 44080 |
| 1/2" | 5/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44081 |
| 5/8" | 3/4" | 1" | 6-1/2" | 3-1/4" | 12 | 44082 |
| 3/4" | 7/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44083 |
| 7/8" | 1" | 1" | 6-1/2" | 3-1/4" | 12 | 44084 |
| 1" | 1-1/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44085 |
| 1-1/4" | 1-3/8" | 1" | 6-1/2" | 3-1/4" | 12 | 44086 |
| 1-1/2" | 1-5/8" | 1-1/2" | 6-1/2" | 3-1/4" | 6 | 44087 |



44079

**External Tube Fitting Brushes - 1/4" Stem**
**Ideal for cleaning tube ends. Mount to a hand drill for fast results.**

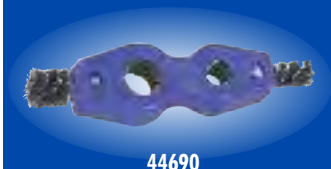
| Outside Diam. | Standard Pack | Item Number |
|---|---|---|
| 3/8" | 40 | 44734 |
| 1/2" | 40 | 44735 |
| 5/8" | 40 | 44736 |
| 3/4" | 40 | 44737 |
| 7/8" | 40 | 44738 |
| 1" | 40 | 44739 |



44734

**4-in-1 Tube Fitting Brush**
**One Brush Replaces Four! - Steel Wire**
**Cleans the outside and inside diameters of 1/2" and 3/4" tubes and fittings.**
**Use for soldering prep, deburring, drill hole cleaning and cleaning battery terminals.**

| Tube Inside Diameter | Tube Outside Diameter | Standard Pack | Item Number |
|---|---|---|---|
| 3/4" and 1/2" | 7/8" and 5/8" | 1 | 44690 |



44690

**Turbo Tube™ Brushing Tool -** The Turbo Tube Brushing Tool is two brushes in one, so fittings and copper tubing can be easily cleaned without changing tools!

## Applications

- Fitting brush cleans outside diameter
- Tube brush cleans inside diameter
- Ideal for plumbing and HVAC projects

**Vortec Pro® Turbo Tube Brushes - Clean I.D. and O.D. with the same tool.**
**Rust-proof stainless steel bristles. Reliable and efficient brushes at a value price.**



| I.D. Size | O.D. Size | Wire Type | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 5/8" | Stainless | 1 | 36303 |
| 3/4" | 7/8" | Stainless | 1 | 36304 |
| 1" | 1-1/8" | Stainless | 1 | 36305 |



36303

# Paint & Varnish Brush Technical Information

## General Information

### Brush Types:

Weiler brushes are designed for industrial use. These quality brushes are made with the finest materials, yet priced to give the lowest cost-per-use.

- Wall Paint
- Varnish
- Flat Sash
- Angular Sash
- Oval Sash
- Chip & Oil
- Acid
- Glue
- Stencil
- Parts Cleaning
- Marking
- Round Sash

## Paint Brush Terminology

**Fill Material:** The part of the brush that actually does the work. Weiler brushes are filled with Natural China Bristle or Tapered Polyester. Various sizes of fill material are blended together to create the proper taper.

**Ferrule:** The metal band that holds the fill material and handle together. All Weiler paint and varnish brushes are made with plated metal ferrules which will not rust or corrode.

**Flagged Ends:** A split at the end of each tapered fiber of fill material. Bristle is naturally tapered with a flagged tip. Polyester fibers are made tapered and then mechanically processed to form a flagged tip. Flagging allows each tip to pick up more paint and spread it more evenly.



**Handle:** Weiler handles are made of quality wood or synthetics. Wood handles are sanded and lacquered. Synthetic handles are not affected by paints, varnishes or solvents. All handles provide a comfortable grip for hours of fatigue-free use.

**Thickness:** The thickness of the brush, measured at the ferrule, will determine the quality level of the brush. The thicker the brush, the more paint pick-up and release.

**Trim Length:** The length of the fill material extending from the ferrule. The longer the trim, the more paint is picked up and released for a quicker, easier job.

## Paint & Varnish Brush Selection Guide

**The chart below provides information on paint brush fill types to allow you to recommend the correct brush for the job.**

| Brush Fill | Recommended For | Benefits |
|---|---|---|
| China Bristle | All oil based and alkyd paints, stains, varnish urethane & shellac | • Softest tip for fewest brush marks<br>• Natural fibers hold paint better than synthetics |
| Polyester/Nylon blend | All paints and coatings | • Most durable material<br>• Precise tipping<br>• Cleans up easily |
| Polyester | All paints and coatings | • Low cost<br>• Does not absorb water |

## Paint & Varnish Brush Care

| Brushes Used In | Clean With |
|---|---|
| • Oil base paint | • Turpentine or mineral spirits |
| • Latex paint | • Warm soapy water |
| • Water base paint | • Warm soapy water |
| • Varnish | • Turpentine or mineral spirits |
| • Shellac | • Alcohol |

Note: After cleaning, shake out, comb bristles and hang by handle.

## Special Paint Brushes

The brushes listed in this catalog will cover the major requirements of industry. However, if an application requires another type, size or style of brush, contact your nearest Weiler distributor or Weiler's Customer Service Team.

# Professional Paint, Varnish & Sash Brushes

**Professional Wall, Varnish and Sash Brushes -** These high quality brushes are available in a wide variety of sizes and materials to fill all applications. The Profesional Wall Brushes have a sanded wooden handle, the preferred standard among professional users. The Professional Varnish and Sash Brushes are color coded - Blue for Bristle and Red for Polyester/Nylon Blend, and feature painted foam handles in the "beaver tail" style. These handles are attractive and easier to grip, reducing user fatigue.



Applying paint to clap board siding.

### Wall Paint Brushes - For interior/exterior painting of large flat surfaces.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Sanded Wood Handle | | | | |
| 3" | 7/8" | 3-1/4" | 6 | 40022 |
| 4" | 7/8" | 3-3/4" | 6 | 40023 |
| Poly/Nylon - Sanded Wood Handle | | | | |
| 3" | 7/8" | 3" | 6 | 40061 |
| 4" | 7/8" | 3" | 6 | 40062 |

### Varnish Brushes - Comfortable foam grip handle; smooth paint flow.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Blue Foam Handle | | | | |
| 1" | 7/16" | 2" | 12 | 40000 |
| 1-1/2" | 1/2" | 2-1/4" | 12 | 40001 |
| 2" | 9/16" | 3" | 12 | 40002 |
| 2-1/2" | 5/8" | 3" | 12 | 40003 |
| 3" | 11/16" | 3" | 12 | 40004 |
| 4" | 11/16" | 3" | 12 | 40010 |
| Poly/Nylon - Red Foam Handle | | | | |
| 1" | 7/16" | 2-1/4" | 12 | 40058 |
| 2" | 3/4" | 2-3/4" | 12 | 40059 |
| 3" | 7/8" | 3" | 12 | 40060 |
| 4" | 7/8" | 3" | 6 | 40106 |

### Angled Sash Brushes - For trim or cut work like window sills, door frames, etc.

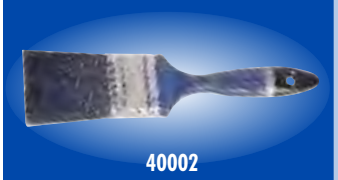
| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Blue Foam Handle | | | | |
| 1-1/2" | 7/16" | 2-1/4" | 12 | 40041 |
| 2" | 1/2" | 2-1/4" | 12 | 40008 |
| Poly/Nylon - Red Foam Handle | | | | |
| 1-1/2" | 7/16" | 2-1/2" | 12 | 40011 |
| 2" | 1/2" | 2-1/2" | 12 | 40040 |

### Flat Sash Brushes - For trim or cut work like window sills, door frames, or other narrow, flat surfaces.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Blue Foam Handle | | | | |
| 1" | 3/8" | 2" | 12 | 40113 |
| 1-1/2" | 7/16" | 2-1/4" | 12 | 40114 |
| 2" | 9/16" | 3" | 12 | 40115 |
| Poly/Nylon - Red Foam Handle | | | | |
| 1" | 3/8" | 2-1/4" | 12 | 40014 |
| 1-1/2" | 7/16" | 2-1/4" | 12 | 40017 |
| 2" | 9/16" | 2-1/2" | 12 | 40018 |


40022


40061


40002


40059


40041


40040


40115


40017

# Professional Sash & Parts Cleaning Brushes



Cleaning an oil pan with a parts cleaning brush.



40056



40121



40035



25222

## Oval Sash Brushes - Ideal for cleaning parts, crevices and painting hard-to-reach areas.

| Size | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Black China Bristle - Plain Foam Handle - Chisel Trim | | | | |
| #2 | 7/16" | 1-3/4" | 24 | 40116 |
| #4 | 11/16" | 1-3/4" | 12 | 40019 |
| #6 | 13/16" | 1-3/4" | 12 | 40056 |
| #8 | 15/16" | 3" | 12 | 40020 |
| #10 | 1-1/16" | 3" | 12 | 40021 |
| #12 | 1-3/16" | 3" | 12 | 40057 |

## Round Sash Brushes - Ideal for cleaning parts, crevices and painting hard-to-reach areas.

| Size | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Grey Bristle - Plain Foam Handle - Flat Trim | | | | |
| #2 | 7/16" | 1-3/4" | 24 | 40118 |
| #4 | 11/16" | 2" | 12 | 40119 |
| #6 | 13/16" | 2" | 12 | 40120 |
| #8 | 15/16" | 2-1/4" | 12 | 40121 |
| #10 | 1-1/16" | 2-1/4" | 12 | 40122 |
| #12 | 1-3/16" | 2-1/4" | 12 | 40123 |

## Parts Cleaning Brushes - Ideal for applications such as cleaning carburetors, transmission components, applying adhesives and lubricants.

## Parts Cleaning Brushes - Stainless steel ferrule - Heavily filled.

| Thickness | Fill Material | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Plain Foam Handle - Chisel Trim | | | | |
| 1" | Synthetic | 2-1/2" | 12 | 40035 |
| 1" | Tampico | 2-3/4" | 12 | 40036 |

## Vortec Pro® Parts Cleaning Brushes - Reliable and efficient brushes at a value price.

| Thickness | Fill Material | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| Plain Foam Handle - Chisel Trim | | | | |
| 15/16" | Nylon | 2-1/2" | 12 | 25221 |
| 1" | Tampico | 2-3/4" | 12 | 25222 |

# Industrial Paint Brushes

**Industrial Paint Brushes -** The Industrial line features color coded plastic handles to provide quality paint brushes at competitive prices.



Painting inside the fins of a radiator with a Radiator brush.

### Industrial Varnish Brushes - Heavily-filled brush with comfortable handle in a variety of sizes.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **Black Bristle - Black Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40088* |
| 1" | 3/8" | 1-3/4" | 36 | 40089 |
| 1-1/2" | 7/16" | 2" | 24 | 40101 |
| 2" | 7/16" | 1-3/4" | 12 | 40074 |
| 2-1/2" | 1/2" | 2-1/4" | 12 | 40102 |
| 3" | 1/2" | 2" | 12 | 40103 |
| 4" | 5/8" | 2-3/4" | 12 | 40104 |
| **Black Polyester - Red Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40112 |
| 1" | 3/8" | 2" | 36 | 40107 |
| 1-1/2" | 7/16" | 2" | 24 | 40108 |
| 2" | 7/16" | 2" | 12 | 40109 |
| 3" | 1/2" | 2" | 12 | 40110 |
| 4" | 11/16" | 2-3/4" | 12 | 40111 |

*Grey Bristle



40074



40109

### Bent Radiator Brush - Black Bristle - Wood Handle

**Ideal for painting radiators and other hard-to-reach areas.**

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 2" | 9/16" | 2-1/4" | 12 | 95502 |



95502

### Detail Brushes - Grey Bristle - Plastic Handle

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1-1/2" | 5/16" | 5/8" | 24 | 40012 |
| 1-1/2" | 5/16" | 1" | 24 | 40013 |

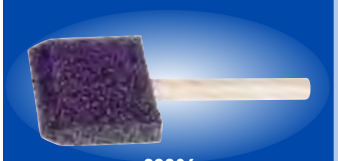


40013

### Vortec Pro® Foam Applicator Brushes - Wood Handle

**Reliable and efficient brushes at a value price. Not recommended for use with lacquer, shellac or solvents.**

| Width | Thickness | Foam Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1" | 5/8" | 2-5/8" | 50 | 99801 |
| 2" | 5/8" | 2-5/8" | 50 | 99805 |
| 3" | 7/16" | 2-5/8" | 40 | 99806 |
| 4" | 7/16" | 2-5/8" | 30 | 40199 |



99806

**DID YOU KNOW?** Flagged tips on synthetic and bristle style brushes help them carry more paint to the work surface.

# Chip and Oil Brushes



Removing chips from the ways of a lathe.

**Chip And Oil Brushes -** Chip and Oil brushes are inexpensive, multi-purpose brushes for use in applications requiring disposable brushes.

## Chip and Oil Brushes - White Bristle - Wood Handle

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 5/16" | 1-1/2" | 30 | 40065 |
| 1" | 5/16" | 1-1/2" | 30 | 40066 |
| 1-1/2" | 5/16" | 1-1/2" | 30 | 40067 |
| 2" | 5/16" | 1-1/2" | 20 | 40068+ |
| 2-1/2" | 3/8" | 1-1/2" | 20 | 40069 |
| 3" | 3/8" | 1-1/2" | 10 | 40070+ |
| 4" | 5/8"<br>3/8" | 1-5/8"<br>2" | 10 | 40071<br>40076 |

+ Countertop display available. See page 176.



40068

## Vortec Pro® Chip and Oil Brushes - Reliable and efficient brushes at a value price.

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| **White Bristle - Wood Handle** | | | | |
| 1/2" | 5/16" | 1-1/2" | 36 | 40177 |
| 1" | 5/16" | 1-1/2" | 36 | 40179 |
| 1-1/2" | 5/16" | 1-1/2" | 24 | 40180 |
| 2" | 5/16" | 1-1/2" | 24 | 40181 |
| 2-1/2" | 3/8" | 1-1/2" | 12 | 40182 |
| 3" | 3/8" | 1-1/2" | 12 | 40183 |
| 4" | 5/8"<br>3/8" | 1-3/4" | 12 | 40184<br>40185 |
| **Black Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-5/8" | 30 | 40160 |
| 1" | 5/16" | 1-5/8" | 30 | 40161 |
| 1-1/2" | 5/16" | 1-5/8" | 30 | 40162 |
| 2" | 5/16" | 1-5/8" | 20 | 40163 |
| 2-1/2" | 3/8" | 1-3/4" | 20 | 40164 |
| 3" | 3/8" | 1-3/4" | 10 | 40165 |
| 4" | 11/16" | 2" | 10 | 40166 |
| **Grey China Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-1/2" | 48 | 40026 |
| 1" | 5/16" | 1-1/2" | 36 | 40027 |
| 1-1/2" | 5/16" | 1-1/2" | 24 | 40028 |
| 2" | 3/8" | 1-1/2" | 24 | 40029 |
| 2-1/2" | 1/2" | 1-1/2" | 12 | 40030 |
| 3" | 1/2" | 1-1/2" | 12 | 40031 |
| 4" | 11/16" | 1-1/2" | 12 | 40032 |
| **Grey China Bristle - Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40129 |
| 1" | 5/16" | 1-3/4" | 36 | 40130 |
| 1-1/2" | 5/16" | 1-3/4" | 24 | 40131 |
| 2" | 3/8" | 1-3/4" | 24 | 40132 |
| 2-1/2" | 1/2" | 1-3/4" | 12 | 40133 |
| 3" | 1/2" | 1-3/4" | 12 | 40134 |
| 4" | 11/16" | 1-3/4" | 12 | 40135 |
| **Black Synthetic - Red Plastic Handle** | | | | |
| 1/2" | 1/4" | 1-3/4" | 48 | 40136 |
| 1" | 5/16" | 1-3/4" | 36 | 40137 |
| 1-1/2" | 5/16" | 1-3/4" | 24 | 40138 |
| 2" | 3/8" | 1-3/4" | 24 | 40139 |
| 3" | 1/2" | 1-3/4" | 12 | 40140 |
| 4" | 11/16" | 2-3/4" | 12 | 40141 |



40181



40161



40029



40141

# Marking Brushes

**Marking Brushes -** Weiler's high quality Marking Brushes come in a variety of animal, natural and synthetic bristles in numerous handle styles for many applications such as fine artwork, pin striping and sign painting.



Painting a tight area on a steel door with a Marking Brush.

### Red Sable Watercolor Brushes - Seamless ferrule. Pointed tip - Round black handle

| Size | Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 3/0 | 3/64" | 1/4" | 12 | 41000 |
| 0 | 1/16" | 5/16" | 12 | 41001 |
| 2 | 3/32" | 7/16" | 12 | 41002 |
| 4 | 1/8" | 5/8" | 12 | 41003 |



41003

### Black Bristle Marking Brushes - Long, lacquered handle

| Size | Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1 | 1/8" | 3/4" | 12 | 41004 |
| 2 | 5/32" | 15/16" | 12 | 41005 |
| 4 | 7/32" | 1-1/8" | 12 | 41007 |
| 5 | 1/4" | 1-1/4" | 12 | 41008 |
| 6 | 9/32" | 1-3/8" | 12 | 41009 |



41009

### Flat Marking Brushes - Ox hair - Single stroke - Round black handle

| Width | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | 7/8" | 12 | 41018 |
| 1/2" | 1" | 12 | 41019 |
| 3/4" | 1-1/4" | 12 | 41020 |
| 1" | 1-3/8" | 12 | 41021 |



41021

### Sign Brushes - Ox hair - Flat red handle

| Width | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | 3/4" | 12 | 41014 |
| 1/2" | 1" | 12 | 41015 |
| 3/4" | 1-1/8" | 12 | 41016 |
| 1" | 1-1/4" | 12 | 41017 |



41015

### Fitch Brushes - Black china bristle - Chiseled edge - Clear lacquered handle

| Width | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 1/4" | 13/16" | 12 | 41022 |
| 1/2" | 1-1/16" | 12 | 41023 |
| 3/4" | 1-5/16" | 12 | 41024 |
| 1" | 1-9/16" | 12 | 41025 |



41024

### Lacquering Brushes - Seamless aluminum ferrule. Camel hair - Round black handle

| Size | Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1 | 5/32" | 11/16" | 12 | 41010 |
| 3 | 7/32" | 13/16" | 12 | 41011 |
| 5 | 1/4" | 1-1/8" | 12 | 41012 |
| 6 | 5/16" | 1-3/16" | 12 | 41013 |



41011

# Glue and Acid Brushes



Applying flux to a copper tube prior to soldering.

**Glue And Acid Brushes -** Weiler's Glue and Acid Brushes come in multiple sizes, ferrule types, handles and fill materials for a wide variety of cleaning and coating applications.



40078



44089



44097



40082



44262



44259

## Bridled Glue Brushes - Grey china bristle - Steel ferrule - Long foam handle

| Diameter | Trim Length | Standard Pack | Item Number |
|---|---|---|---|
| 7/16" | 1-1/4" | 36 | 40077 |
| 13/16" | 1-3/4" | 24 | 40078 |
| 15/16" | 1-3/4" | 24 | 40079 |

## Acid/Flux Brushes - Horsehair - Tin ferrule

| Width | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 5/16" | 3/4" | 5-3/4" | 144 | 44088 |
| 3/8" | 3/4" | 5-3/4" | 144 | 44089 |
| 1/2" | 3/4" | 5-3/4" | 144 | 44090 |

## Stylus Brush - Stiff grey horsehair. Aluminum tube with cork to hold cleaning fluid. For cleaning electrical contact points.

| Width | Trim Length | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 3/8" | 5" | 100 | 44097 |

## Stencil Brushes - China bristle - Seamless steel ferrule - Lacquered wood handle

| Diameter | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 1-3/8" | 12 | 40080 |
| 1-1/2" | 1-5/8" | 12 | 40081 |
| 2" | 1-3/4" | 12 | 40082 |

## Dope Brushes - With hanger for coating applications in drilling operations.

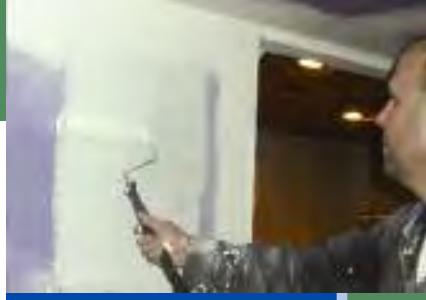
| Brush Part | Fill Material | Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" | Mixed Tampico | 2"<br>2-1/2"<br>3" | 16" | 12 | 44261<br>44262<br>44263 |

## Dauber Brush - For applying dope to the thread ends of drill pipe.

| Brush Size | Fill Material | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" | White Tampico | 16" | 12 | 44259 |

# Paint Rollers and Accessories

**Paint Rollers And Accessories -** Paint Rollers can be used almost anywhere including walls, ceilings, floors, decks, fences, metal surfaces, concrete, and brick walls. Weiler carries a wide variety of rollers for the professional painter, industrial use and those weekend DIY projects. Accessories include roller frames, paint trays, bucket grids and painter's mitts.



Applying primer to new drywall.

## Paint Roller Selection Guide

| Work Surface | Coating | Recommended Nap |
|---|---|---|
| Metal, Smooth Wood, Smooth Concrete | Enamels, Epoxies Adhesives, Paint | 3/16", 3/8" (Low nap) |
| Rough Wood, Drywall, Cement Block | All Paint | 1/2", 3/4" (Medium nap) |
| Stucco, Brick, Concrete | All Paint | 1" (High nap) |

### Professional Grade Rollers - Poly blend with phenolic core.

| Size | Nap | Painting Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 9" | 3/16"<br>1/2"<br>3/4" | Smooth<br>Semi-smooth<br>Rough | 12 | 49050<br>49051<br>49052 |

### Industrial Grade Rollers - Poly blend with PVC core.

| Size | Nap | Painting Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 3" | 3/8" | Semi-smooth | 24 | 49046 |
| 4" | 3/8"<br>3/4" | Semi-smooth<br>Rough | 12 | 49044<br>49045 |
| 9" | 3/16"<br>1/2"<br>3/4"<br>1" | Smooth<br>Semi-smooth<br>Rough<br>Extra Rough | 12 | 49061<br>49062<br>49063<br>49053 |
| 18" | 3/8"<br>3/4" | Smooth<br>Rough | 1 | 49082<br>49086 |

### Vortec Pro® Rollers - Poly blend with PVC core. Reliable and efficient rollers at a value price.

| Size | Nap | Painting Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 9" | 3/8"<br>1/2" | Semi-smooth<br>Semi-smooth | 12 | 49070<br>49071 |

### Specialty Rollers - Can be used with all paints. Ideal for trim and touch-up.

| Description | Standard Pack | Item Number |
|---|---|---|
| 3" Roller with 3/8" nap. Standard duty frame | 24 | 49016 |
| 3" Roller with 3/8" nap. Wire frame with two tin end caps. Bent wire handle | 12 | 49015 |
| 4" Micro Perlon Roller Reach | 24 | 49025 |
| 4" Micro Perlon Twin Pack Cover | 24 | 49066 |



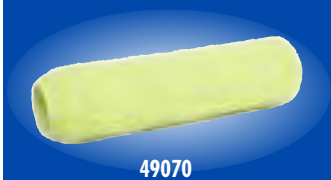
49050



49045



49063



49070



49016



49015



49025



# Paint Rollers and Accessories

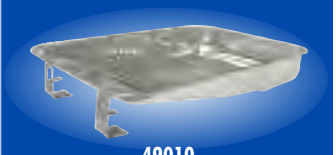
The bucket grid is a must for every painting project!



49021



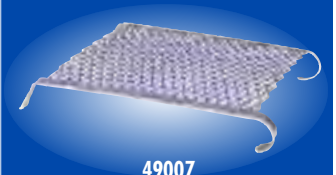
49020



49010



49011



49007

**Frames -** All metal with two plastic caps. Solid plastic handle with threaded grip. Can be used with threaded handle #44300 on page 147.

| Size | Description | Standard Pack | Item Number |
|---|---|---|---|
| 3" | Standard-duty 1/4" dia. frame with 4 wire cage | 24 | 49019 |
| 4" | Standard-duty 1/4" dia. frame with 4 wire cage | 24 | 49018 |
| 9" | Heavy-duty 5/16" dia. frame with 5 wire cage | 12 | 49022 |
| 12"-18" | Adjustable frame fits 12"-18" rollers | 1 | 49021 |

**Vortec Pro® Frame -** Reliable and efficient frame at a value price.

| Size | Description | Standard Pack | Item Number |
|---|---|---|---|
| 9" | Standard-duty 1/4" dia. frame with 4 wire cage | 24 | 49020 |

**Paint Trays -** A variety of trays available to meet users' specific needs.

| Description | Paint Capacity | Standard Pack | Item Number |
|---|---|---|---|
| 4" Plastic tray | 1 Quart | 24 | 49008 |
| 9" Galvanized steel tray; Rust resistant | 1 Quart | 24 | 49010 |
| 9" Deluxe plastic tray; Rust proof | 1 Quart | 20 | 49012 |
| 9" Paint tray liner | 1 Quart | 24 | 96702 |

**Vortec Pro® Paint Tray -** Reliable and efficient tray at a value price.

| Description | Paint Capacity | Standard Pack | Item Number |
|---|---|---|---|
| 9" Economy plastic tray; Rust proof | 1 Quart | 20 | 49011 |

**Bucket Grid -** Permits use of paint roller directly from a 5-gallon pail.

| Description | Standard Pack | Item Number |
|---|---|---|
| Heavy steel - 5 gallon size | 12 | 49007 |

# Weiler® Nylox® Brushes

Nylox® Brushes









- Engineered Products & Equipment

New! - **Wheel Brushes**
*Including an Expanded Offering of Burr-Rx® Ceramic Filament Brushes!*

New! - **Disc Brushes**
*Featuring Burr-Rx® Shell Mill Holder Brushes - No Drive Arbor Required!*

- **Cup Brushes**

- **End Brushes**

New! - **Crosshole Deburring Brushes**
*Now with Advanced Burr-Rx® Ceramic Filament Technology!*

New! - **Tube Brushes**
*Including Burr-Rx® Ceramic Filament Power Tube Brushes!*

New! - **FME Area Product Solutions**

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**Knowledgeable and Responsive Customer Service Team:**
**800-835-9999**

**Application Engineering Support:**
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**Nylox® Brushes**









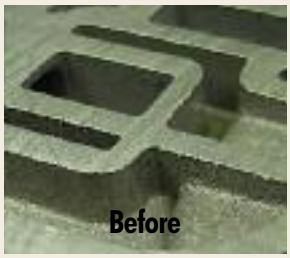
# Solutions Showcase

## Transmission Valve Body

**Problem:** Burrs on transmission components can break away from parent components during use and cause transmission wear and eventual failure. Therefore, fluid passages must be completely burr-free.

**Solution:** A 10" Nylox® disc brush operating at 825 RPM in a vertical CNC machining center is an ideal solution for deburring this component. Since all of the burrs are on a single plane, the non-directional nature of a Nylox disc brush produces a part on which all edges have been uniformly deburred.





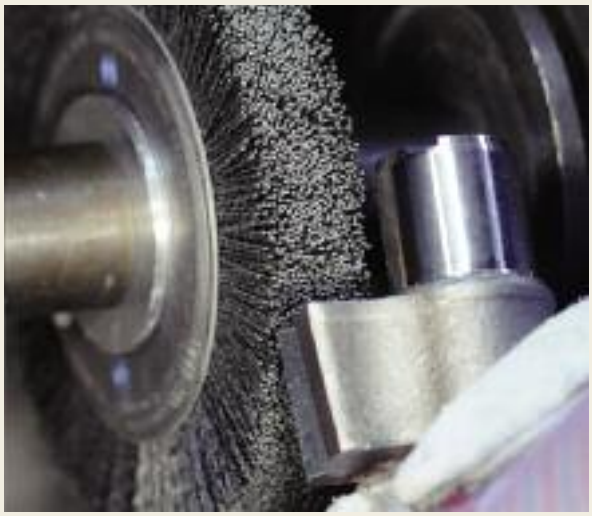




## Steering Component

**Problem:** Manual deburring can be costly in many respects. Hard deburring tools and aggressive abrasive wheels do not allow much margin for operator error and the result is often high scrap rates.

**Solution:** Nylox brushes produce a flexible filing action which concentrates all of the abrasive cutting action on sharp edges, giving them the ability to remove burrs without altering overall part dimensions. For example, a 6" Burr-Rx wheel mounted onto a 1,725 RPM pedestal buffer is capable of deburring this steering component just as quickly as a convolute wheel but without the fear of over-radiusing the edges of the teeth or producing flat spots.









## Aluminum Wheel

**Problem:** Sharp burrs cause safety concerns due to handling issues. In the production of aluminum wheels, burrs and sharp edges can also contribute to problems with painting and powder coating.

**Solution:** Weiler designs Nylox disc brushes that are tailored to match the specific geometric features of each aluminum wheel. The customized design and use of next-generation filament technology ensures wheels that are thoroughly deburred at the minimal cost-per-part.

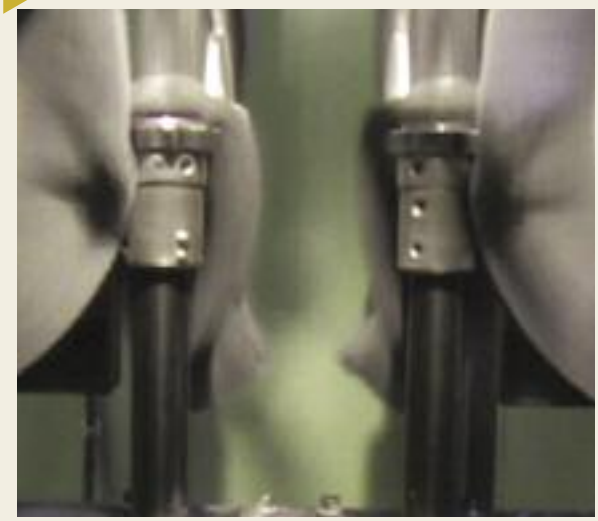







# Solutions Showcase

## Pump Gear









**Problem:** Pumps are extremely susceptible to failure due to burrs. Due to the tight fit between components, all edges must be deburred and radiused to ensure proper function. Proper deburring of rotating pump gears is especially important.

**Solution:** A dedicated machine running 14" Nylox wheel brushes at 900 RPM was a low-cost solution for deburring these gears. By using dedicated equipment, cycle time was minimized and an acceptable edge condition was achieved.

## Cast Aluminum Housing









**Problem:** Although deburring the face-milled surfaces of castings is a very straight forward application for Nylox disc brushes, the limited availability of valuable machine time can be a perceived obstacle that prevents users from reaping the many benefits of implementing in-machine deburring operations.

**Solution:** The advanced ceramic grain technology of Weiler's Burr-Rx tools offer a deburring action that is up to 400% greater than traditional abrasive nylon brushes which contain silicon carbide or aluminum oxide filaments. This allows Burr-Rx deburring tools to be used at feed rates which dramatically reduce the amount of additional machine time required to perform a brushing operation.

## Turbine Blade

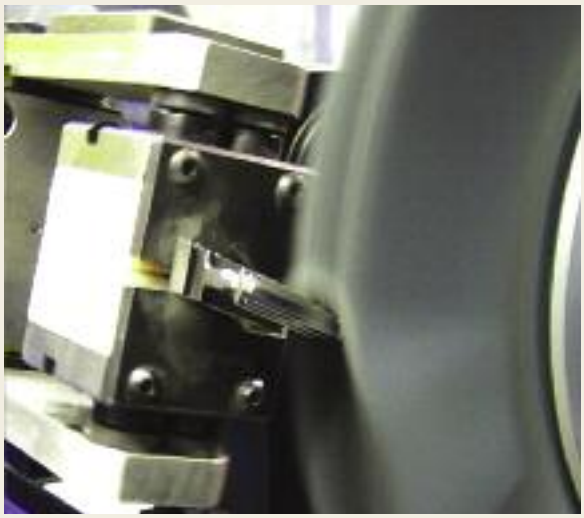








Photo courtesy of ACME Manufacturing.

**Problem:** Protecting turbine engine components against high-temperature fatigue is critical to ensure safe, reliable engine operation. Component edges must be burr-free and generally require an edge radius in the range of 0.005" to 0.060".

**Solution:** Robots are extremely well-suited for this application because they can manipulate the component in many orientations in relation to the brush. Weiler works closely with users and robot integrators to develop products and process programs which maximize brush life while generating exceptional part quality and consistency.

# Nylox® Technical Information

## Operational Advantages of Nylox® Brushes

### Aggressive Yet Compliant



Nylon filaments co-extruded with an abrasive grain act like flexible files precisely deburring and radiusing edges as they wipe across them. Because the cutting pressure with which the abrasive grains are applied against a broad surface is limited by the compliant nature of the filaments, Nylox brushes tend not to alter the overall dimensions or geometry of a part. This high degree of compliance allows them to conform to complex part shapes and reduces the need for ultra-precise programming and fixturing that is typically required with other deburring and finishing tools.

### Enhanced Surface Finishes



The compliant cutting action of Nylox brushes not only limits their ability to alter part dimensions, but it makes them an effective tool for refining surface texture characteristics without removing significant amounts of base material. Although they contain the same abrasive grain sizes, Nylox brushes will **not** generate the same prominent scratch pattern as a comparable coated abrasive product. Their limited aggression and flexible filing action also make them suitable for deburring a wider range of materials in comparison to wire filled power brushes.

### Ideal For Automation



Because the abrasive grain is evenly distributed throughout the durable nylon filament, Nylox brushes offer extremely consistent performance throughout their product life. Coupled with their extremely compliant nature, this makes them an ideal media for use in automated deburring and finishing processes involving either dedicated production equipment or flexible solutions such as robotic cells. Their use can also be directly integrated into the cycle of CNC machining centers to improve part quality and consistency while reducing direct labor costs.

## Construction Advantages of Weiler Nylox Brushes

### Metal Hub Construction

- Metal hub components are assembled under high pressure, potentially damaging the filaments and causing premature breakage.
- Retaining ring displaces filament material creating a void in the center of the brush face.
- Lower fill density can result in shorter life and less consistent performance.



### Weiler's Composite Hub Construction

- Molded hub construction eliminates filament breakage.
- Uniform distribution of fill material and superior balance.
- Higher fill density provides more aggressive brushing and longer life.
- Consistent performance as the brush wears.

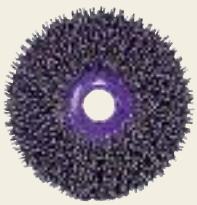


### Weiler's Composite Metal Hub Construction

- Filaments retained using the latest polymer technology to prevent filament breakage.
- Metal components add impact resistance and dimensional stability.
- The highest filament density in the market ensures lowest cost-per-part.



### Monofilament Construction



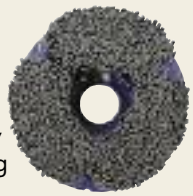
This construction is less aggressive due to lack of filament density. This hinders processing of severe burrs or generating larger edge radii in shorter cycle times. The short trim length results in less conformability and decreased brush life, resulting in fewer parts-per-brush.

### Weiler's Tufted Construction



Weiler's construction offers increased aggression due to added filament density. This enables processing of severe burrs or generating larger edge radii in shorter cycle times. Our longer trim length allows for greater conformability and longer tool life.

### Weiler's Maximum Density Construction

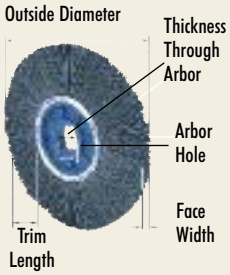


Maximum density brushes are uniquely suited for demanding applications characterized by large burrs and rapid feed rates.

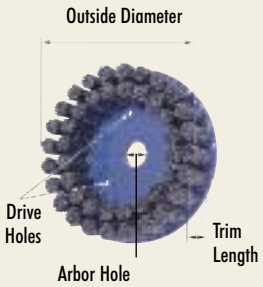
## Product Attributes

### Brush Terminology

**Wheel Brushes**




**Disc Brushes**



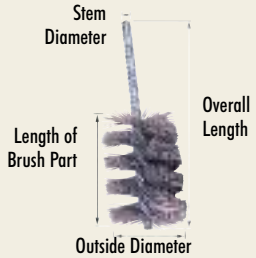

**Cup Brushes**




**End Brushes**



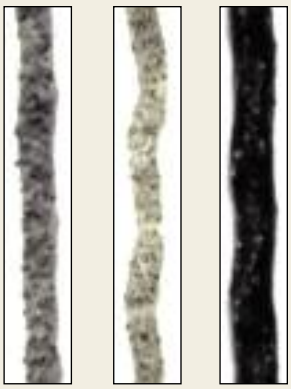

**Tube Brushes**



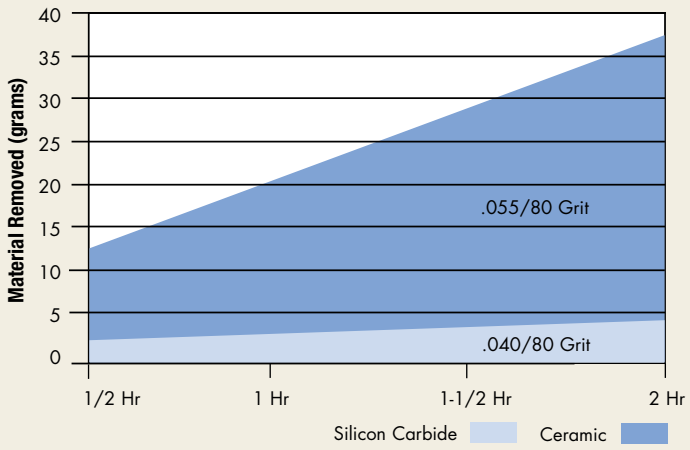

### Nylox Filaments

Abrasive brush filaments are manufactured by extruding a mixture of liquefied polymer and abrasive grain. Unlike the filaments used in DIY grade abrasive brushes, industrial grade products like Weiler's Nylox and Burr-Rx brushes feature the highest grade of abrasive filament manufactured using a Type 6.12 nylon polymer. Industrial grade filaments also feature the highest quality abrasive materials which have been sifted and sorted to insure that the grains are consistent in size. These grains may be one of three different types of abrasive:

- **Silicon Carbide (SiC) -** Is a sharp-edged grain which produces an effective cutting action. It is the most common grain used in industrial grade brushes.
- **Aluminum Oxide (AO) -** Is a duller, less aggressive grain typically used in finishing applications requiring a less pronounced scratch line pattern or deburring applications on materials where the use of SiC may be prohibited
- **Burr-Rx Ceramic (CG) -** An engineered abrasive grain that produces a superior cutting action and is compatible with the widest range of materials. It is the most effective grain available today!




### Material Removal vs. Time



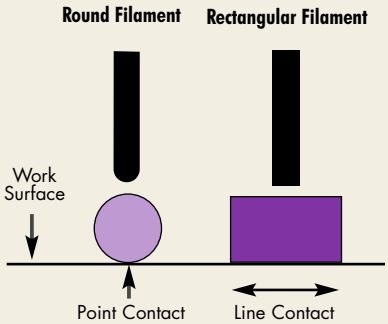

Nylox brushes containing the Burr-Rx black ceramic filament are the most cost-effective choice for a brush deburring tool because the engineered abrasive grain produces a cutting action up to 400% greater than equivalent SiC and AO filaments. This not only allows Burr-Rx brushes to remove burrs that traditional nylon abrasive filament products cannot, but it also minimizes cycle times by allowing the use of much higher feed rates and much shorter dwell times.

Burr-Rx brushes are especially well-suited for use on hard-to-deburr metals such as inconel, stainless steel and titanium, but with proper selection of the product and operating parameters, they can be used on virtually any material.

**Round Filaments -** Due to their cross-sectional shape and the reduced contact with the work surface or part edges that result, round filaments provide a more compliant brushing action for less aggression and enhanced conformability.

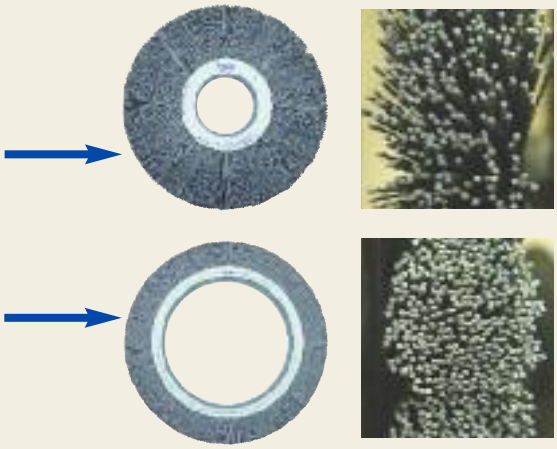
**Rectangular Filaments -** Due to their shape, larger cross-sectional area and increased contact with the work, rectangular filaments provide a less compliant brushing action for much greater aggression and reduced conformability.

Crimping either type of filament along its length enhances conformability, allowing greater penetration of part edges into the brush face, often increases aggression. Crimped filaments are especially beneficial in maximum density disc brush designs.



## Product Selection

### Trim Length and Fill Density



**Longer Trim, lower density brushes** offer a greater degree of flexibility that is ideal for applications requiring a high degree of brush conformability. However, the lower fill density can result in shorter brush life and less consistent performance.

**Shorter Trim, higher density brushes** work with a faster action and less engagement with the brush face. This produces shorter cycle times, more consistent performance and longer life in applications that do not require a high degree of brush conformability.

**To maximize brush life and reduce costs,** always use the shortest trim, highest density brush that will adequately conform to the surface or part edges.

### Nylox® Brush Selection Chart

| | Surface Finishing (Functional, Aesthetic, Decorative, Satin) | Deburring & Edge Blending | Automated Equipment Applications |
|---|---|---|---|
| Wheel | ● ● ● | ● ● ● | ● |
| Disc | ● | ● | ● |
| Cup | ● | ● | ● |
| Stem-Mounted | ● | ● | ● |
| Tube | | | |

### Product & Application Key

- ● Right Angle Grinder *
- ● Straight Grinder *
- ● Hand Drill/Drill Press
- ● Bench/Pedestal Grinder *
- ● CNC's, Milling & Automatic Machines

* Due to the low recommended operating speeds of Nylox products, they typically cannot be used on standard power tools. However, they are suitable for use on low or variable-speed tools.



## Lubricut™ Lubricant

**Prevents Smearing. Improves the Finish. Lowers Costs.**

Lubricut™ is a lubricant that can be used with Nylox wheels operating above the recommended surface speed. Directing a light spray of Lubricut into the face of the wheel permits the wheel to be operated at higher surface speeds and up to twice the normal load **without smearing** - while improving the finish.



1. Turn off machine.



2. Slowly rotate wheel by hand.



3. While rotating, direct a light spray of Lubricut into the wheel face.

## Nylox® Brush Operating Information

### Operating Speed

Nylox® abrasive brushes work with a wiping and filing action. Think of them as flexible files. They work best when operated at speeds that allow fairly deep penetration of the work-piece into the brush filaments. Usually, faster speeds do not work as well as slower speeds. The maximum RPM marked on the brush is not the optimum working speed. A good rule of thumb is to stay under 2,500 SFPM in dry applications and 3,500 SFPM in wet applications.

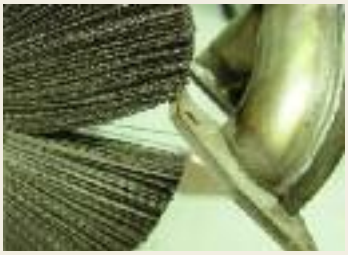
### Operating Speeds - Wheel Brushes

| Diameter | RPM |
|---|---|
| 2" | 3,450 - 5,000 |
| 3" | 2,500 - 3,450 |
| 4" | 1,750 - 2,500 |
| 6" | 1,350 - 1,750 |
| 8" | 1,150 - 1,350 |
| 10" | 950 - 1,150 |
| 12" | 750 - 950 |
| 14" | 650 - 850 |

### Operating Speeds - Disc Brushes

| Diameter | RPM |
|---|---|
| 1-3/4" & 2" | 1,750 - 2,000 |
| 3"-4" | 1,500 - 1,750 |
| 5" - 6" | 1,250 - 1,500 |
| 8" | 800 - 1,000 |
| 10" | 700 - 800 |
| 12" | 600 - 700 |
| 14" | 500 - 600 |

### Wheel Brush Penetration



When using nylon abrasive wheel brushes, optimum aggression is obtained and wheel life maximized when the work-piece penetrates into the face of the brush approximately 10% of the trim length. The sides of the Nylox filament actually do the work. To achieve a maximum edge radius and complete burr removal, parts should be buried into a slow running brush face.

### Disc Brush Penetration



When using nylon abrasive disc brushes, a good starting point for a depth of penetration between the brush face and work surface is 0.075"-0.100". This depth of interference produces the best compromise between aggression and brush life.

### Feed Rate Recommendations

Feed rate is determined by the amount of deburring, edge radiusing or surface finishing required, and the type of material that is being processed. It is generally application specific. Slower feeds result in a more aggressive brushing action. Based on the brushing action desired for a specific application, the feed rate can be increased or decreased.

| Material | SiC and AO Grain Feed Rate | Burr-Rx Grain Feed Rate |
|---|---|---|
| Non-Ferrous | 50 in./min. | 80 in./min. |
| Cast Iron | 30 in./min. | 60 in./min. |
| Mild Steel and Ductile Iron | 25 in./min. | 50 in./min. |
| Stainless and Alloy Steels | 15 in./min. | 30 in./min. |
| Titanium and High Nickel Alloys | 10 in./min. | 30 in./min. |

## Nylox Brush Operating Information

### Tool Path

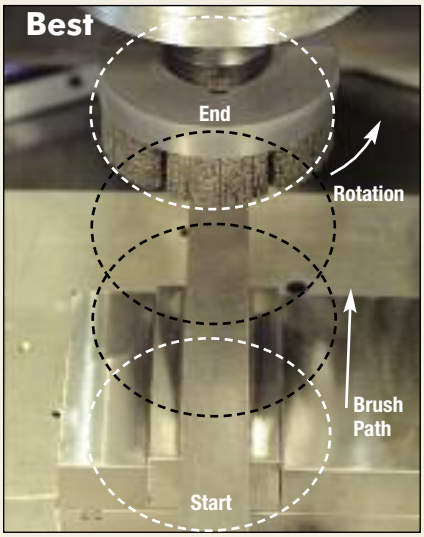
The ideal tool path for a Nylox® Disc brush is very similar to the path of the face mill that produced the burr. However, three differences exist:

- The rotation direction of the brush should be opposite of the cutting tool that created the burr.
- The length of the path must be longer than the part. Unlike a cutter path that can stop when the leading edge of the cutter reaches the end of the part, the tool path of a brush should continue until the trailing edge of the brush reaches the end of the part.
- The centerline of the brush may need to be off-set from the center of the part in order to maximize the number of filaments that strike the part at a perpendicular angle. This is especially important when the diameter of the brush is similar to the width of the part.

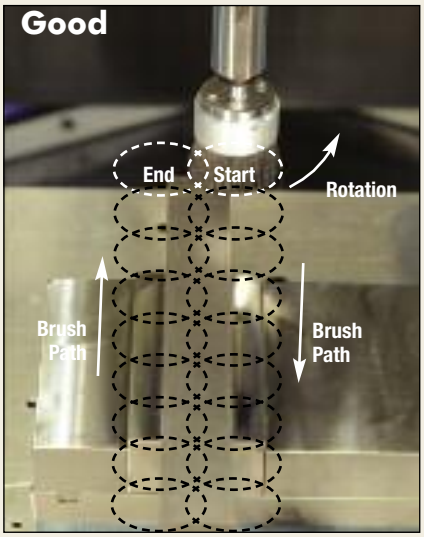
**A** The part is deburred in the shortest cycletime with the lowest consumable cost-per-part.

**B** The part is deburred, but requires a longer cycle time. When a large brush will not fit in the tool changer, this method is recommended.

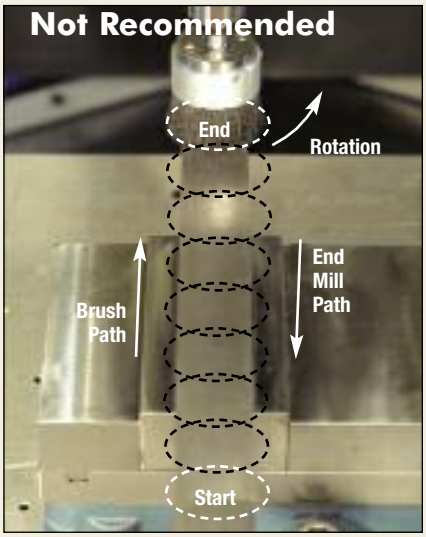
**C** Produces less deburring than A & B.




If a large diameter brush can be used, the centerline of the brush should be positioned on the center of the part. Ideally, the brush should be 3-4" wider than the part.




If a small diameter brush must be used, the centerline of the brush should be positioned on the edge of the part. This maximizes aggression by increasing the amount of perpendicular contact between the brush filaments and the burred edge.




Positioning a small diameter brush with its centerline on the center of the part is not recommended. This configuration will not allow perpendicular contact of the filaments against the burred edge.

### Coolants

Nylox® brushes can be run dry, without coolants. However, certain deburring conditions, such as higher speeds, material properties and greater depth of penetration can create excessive heat buildup, causing the nylon filaments to melt and smear on the work surface. If the speed or depth of penetration cannot be changed, coolants are recommended to overcome heat smear. Coolants will also help produce finer finishes.

### Wear Compensation

On dedicated equipment, it is possible to automate wear compensation by using electronic controls to monitor the load on drive motors and adjust the position of the brushing tool to maintain a relatively consistent amount of interference or pressure. Since this is typically not possible with standard CNC machine tools, there are three other possible methods of compensating for tool wear for "in-machine" implementations of Nylox brushes.

**Automatic Indexing:**
Most CNC controllers allow tool wear compensation to be accomplished by programming a "macro" - routine to periodically adjust the position of the tool based upon the number of parts produced. Some experimentation may be required to determine the frequency and the amount of adjustment that will result in the most consistent performance and maximum brush life.

**Probing:**
If the machining center has the capability to probe the face of the brush, this feature can be used to gauge the true position of the filament tips. Adjustments to the brush position can then be made to maintain a consistent amount of interference between the tool and the part.

**Manual:**
If the other methods cannot possibly be used, machine operators can adjust the brush position based on either statistical process control data or visual inspection of completed parts.

## Nylox Brush Operating Information

**Spindle Diameter Requirements:** The minimum Spindle Diameter standards of ANSI B165.1 for Power Brushes should also be used for Nylox Brushes. See pg. 20 for more information.

### Recommended Motor Sizes

| Brush Diameter | Motor Size | RPM* |
|---|---|---|
| 8"-4" | 1/4 HP | 3,450 |
| 6" | 1/2 HP | 1,725 |
| 8" | 3/4 HP | 1,725 |
| 10" | 1 HP | 1,140 |
| 12" | 1 HP | 1,140 |
| 14" | 1-1/2 HP | 900 |

Note: This chart is based on 1" brush face.

* A variable-speed motor control may be required to achieve optimum operating RPM; see charts on page 74.

## Nylox Brush Troubleshooting Guide

There are many variables in Nylox applications. If the Nylox brush you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's Application Engineering Hotline at 888-299-2777.

| Problem | Recommended Solutions |
|---|---|
| Brush not aggressive enough | • Increase filament diameter and/or grit size<br>• Increase filament density by using round straight rather than round crimped<br>• Increase surface contact by using rectangular rather than round<br>• Increase pressure/depth of interference<br>• Increase surface speed by increasing spindle RPM<br>• Use a larger diameter brush<br>• Reduce trim length or feed rate |
| Brush too aggressive | • Reduce filament diameter and/or grit size<br>• Reduce filament density by using round crimped rather than round straight<br>• Reduce surface contact by using round rather than rectangular<br>• Reduce pressure/depth of interference<br>• Reduce surface speed by reducing spindle RPM<br>• Use a smaller diameter brush<br>• Increase trim length or feed rate |
| Brush not conformable enough | • Increase trim length<br>• Reduce filament diameter<br>• Reduce filament density by using round crimped rather than round straight or rectangular<br>• Reduce surface speed by reducing spindle RPM<br>• Reduce feed rate |
| Finer final finish required | • Increase surface speed by increasing spindle RPM<br>• Decrease grit size<br>• Use brush with a coolant |
| Coarser final finish required | • Reduce surface speed by reducing spindle RPM<br>• Increase grit size<br>• Use brush without a coolant |
| Filaments melt/smear on workpiece | • Reduce surface speed by reducing spindle RPM<br>• Use a smaller diameter brush<br>• Use brush with a coolant |
| Short brush life | • Increase filament density<br>• Reduce pressure/depth of interference |

# Nylox® Engineered Products & Solutions



Two members of our Application Engineering Team discuss the results after testing an engineered product.

**Nylox® Engineered Products -** In order to provide you with the most cost-effective media for your particular surface conditioning application, it is sometimes necessary to design and manufacture a unique, custom tailored product to meet your requirements. Although Weiler offers such engineered solutions in all of our product lines, the innovative construction and value-added nature of the Nylox line of nylon abrasive filament brushes showcases the creativity and expertise of our Application Engineering Team in designing products that have been tailored to the needs of the customer.



Custom-engineered Nylox brushes can be designed and manufactured as variations on standard product configurations such as wheel, disc, cup, end, or tube brushes. In addition, Weiler's exclusive Burr-Rx® and Bore-Rx™ brushing tools can be engineered to meet the demands of a specific application.

Wide face brush assemblies for applications such as finishing flat surfaces or deburring cylindrical parts can also be designed and manufactured using Nylox nylon abrasive filaments. For more information on Weiler's wide face brushes, see pages 63 and 64.

For solutions to difficult applications, call our Application Engineering Hotline at 888-299-APPS.

If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or the user's facility.

## Application Engineering Solutions

Weiler Corporation is *the* source for surface conditioning solutions. Our goal is to provide solutions that will help you lower costs by increasing productivity. By combining our broad product offering with the support of our Application Engineering Team, you can count on Weiler to provide solutions to your specific application.

## Have An Application Problem?

### Option 1 - Application Hotline:

Call our Application Engineering Hotline at 888-299-APPS (2777) with all your deburring, cleaning and finishing challenges. If your question cannot be answereed on the phone...

### Option 2 - In-House Part Evaluation:

Send your component parts to our in-house lab for evaluation and product recommendation. This enables Weiler to evaluate and process parts in a controlled environment without interrupting your production schedule. We will address issues such as cycle time, finish required and product life, providing the most cost-effective solution. Weiler's in-house lab is also equipped with a Hurco VSX-40 vertical machining center, giving us the capability to perform technical viability analysis on your parts. The availability of the Hurco permits recommendations concerning speeds, feeds and tool paths to be extremely precise. This virtually eliminates technical uncertainty for customers interested in implementing in-machine deburring.

### Option 3 - On-Site Evaluation:

If it is determined that an on-site visit is required, a Weiler Application Engineer will visit your facility to review the current production process. Weiler will determine the best product and process to meet your specific application requirements.



**When Performance Counts, Turn to Weiler for assitance with product selection and application solutions!**

# Nylox® Wheel Brushes



Deburring a vane section for a jet engine.

## Nylox® Composite Metal Hub and Composite Hub Wheels -

Weiler's Nylox abrasive nylon wheel brushes featuring composite metal hub and composite hub construction are manufactured using a molded polymer material to retain the filaments. In comparison to traditional metal hub construction which folds the fill material around an internal retaining ring or wrap wire, these techniques result in a significant increase in fill density and the elimination of filament breakage offering the lowest cost-of-use and greatest consistency of performance in production applications.

Weiler's composite metal hub wheels marry the high density and superior filament retention of composite hub wheels with the dimensional stability and shock resistance of metal hub construction, and they feature 2" arbor holes which allows for convenient mounting on many pieces of equipment.

Burr-Rx wheels feature Weiler's advanced black ceramic grain filament which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action to minimize cycle times and maximize media life.

### Applications

- Precision deburring of component parts after machining or grinding
- Improving texture characteristics on machined or ground surfaces
- Honing cutting tools and generating specific edge profiles and radii
- Light duty cleaning and finishing of metals; Light sanding of woods and composites



86123



86131



86135

### Burr-Rx® Crimped Filament Wheels - Composite Metal Hub* - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness At Face Plates | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 6" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2" | 3/4" | 1" | 15/16" | 4,000 | 1 | 86123<br>86181<br>86124<br>86120 |
| 8" | .026/120<br>.043/120<br>.055/80 | 2" | 7/8" | 2" | 15/16" | 4,000 | 1 | 86126<br>86127<br>86128 |
| 10" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1-1/8" | 2" | 7/8" | 1,800 | 2 | 86129<br>86182<br>86130<br>86131 |
| 12" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 86132<br>86133<br>86134 |
| 14" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 2"★ | 1" | 1-3/4" | 3/4" | 1,800 | 2 | 86135<br>86108<br>86136<br>86137 |
| 14" | .026/120<br>.043/120<br>.055/80 | 2"★ | 1-1/4" | 4" | 7/8" | 1,800 | 2 | 86138<br>86139<br>86140 |

*Patent Pending

★ 1/2" x 1/4" Double Keyway

### Burr-Rx® Crimped Filament Wheels - Composite Hub - Round Black Ceramic Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 8" x 3-1/4" | .043/120 | 1" | 1-5/16" | 13/16" | 1,800 | 2 | 83394 |
| 14" x 7-1/4" | .026/120<br>.043/120<br>.035/80<br>.055/80 | 1" | 2-3/4" | 15/16" | 1,800 | 2 | 84926<br>84941<br>84925<br>83405 |

NOTE

See adapters on page 90.

# Nylox® Wheel Brushes



Removing burrs from an aluminum heat sink.

## Crimped Filament Wheels - Composite Metal Hub* - Round Silicon Carbide Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 6" | .018/500<br>.022/320<br>.022/120<br>.035/180<br>.040/120<br>.040/80<br>.060/46 | 2" | 1" | 1-1/4" | 1-1/16" | 3,600 | 1 | 83000<br>83010<br>83011<br>83030<br>83040<br>83050<br>83070 |
| 8" | .018/500<br>.022/320<br>.022/120<br>.035/180<br>.040/120<br>.040/80 | 2" | 1" | 2-1/4" | 3/4" | 3,600 | 2 | 83100<br>83110<br>83111<br>83130<br>83140<br>83150 |
| 10" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 2"★ | 1-1/8" | 2" | 7/8" | 1,800 | 2 | 83513<br>83514<br>83515<br>83516 |
| 12" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 83715<br>83716<br>83717<br>83718 |
| 12" | .050/80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 83719• |

*Patent Pending
★ 1/2" x 1/4" Double Keyway
• High Aggression



83075



83516



85014

## Rectangular Filament Wheel - Composite Metal Hub* - Straight Silicon Carbide Filament

| Dia. | Grit Size | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 12" | 80 | 2"★ | 1-1/4" | 3" | 7/8" | 1,800 | 2 | 85014 |

*Patent Pending
★ 1/2" x 1/4" Double Keyway

**DID YOU KNOW?**

The largest special order Nylox composite hub wheel that we have manufactured was over 40" in diameter.

**Lubricut™ Lubricant**

**Prevents Smearing.
Improves the Finish.
Lowers Costs.**

Lubricut™ is a lubricant that can be used with Nylox® wheels operating above the recommended surface speed. Directing a light spray of Lubricut into the face of the wheel permits the wheel to be operated at higher surface speeds and up to twice the normal load **without smearing** - while improving the finish. ***See page 73 for recommended usage.***



83999

# Nylox® Wheel Brushes

## Crimped Filament Wheels - Composite Hub - Round Silicon Carbide Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 6" x 2" | .040/80 | 1/2" | 1-1/4" | 9/16" | 3,600 | 1 | 83116 |
| 8" x 2"* | .040/120<br>.040/80 | 7/8" | 2-1/8" | 13/16" | 3,600 | 2 | 83190<br>83180 |
| 8" x 3-1/4" | .040/80 | 1" | 1-5/16" | 13/16" | 1,800 | 2 | 83393 |
| 10" x 2" | .018/500<br>.022/320<br>.035/180<br>.040/120<br>.040/80 | 1" | 3" | 1-1/16" | 3,600 | 2 | 83300<br>83310<br>83330<br>83340<br>83350 |
| 10" x 3-1/4" | .035/180<br>.040/120<br>.040/80 | 1" | 2-5/16" | 13/16" | 1,800 | 2 | 83430<br>83440<br>83450 |
| 10" x 5-1/4" | .040/80 | 1" | 1-5/8" | 15/16" | 1,800 | 2 | 83550 |
| 12" x 3-1/4" | .035/180<br>.040/120 | 1-1/8" | 3-5/16" | 13/16" | 1,800 | 2 | 83630<br>83640 |
| 12" x 4-1/4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 1" | 3-1/8" | 15/16" | 1,800 | 2 | 84710<br>84730<br>84740<br>84750 |
| 12" x 5-1/4" | .040/120<br>.040/80 | 1-1/8" | 2-3/4" | 15/16" | 1,800 | 2 | 83740<br>83750 |
| 12" x 5-1/4"-2"* | .022/320 | 1-1/8" | 2-3/4" | 1-1/16" | 1,800 | 2 | 85156• |
| 14" x 5-1/4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 1-1/8" | 3-3/4" | 15/16" | 1,800 | 2 | 83910<br>83930<br>83940<br>83950 |
| 14" x 5-1/4"-2"* | .022/320<br>.040/80 | 1-1/8" | 3-3/4" | 1-1/16" | 1,800 | 2 | 85150•<br>85153• |
| 20" x 12" | .035/180 | 1-1/4" | 3-1/4" | 1-1/16" | 1,000 | 1 | 85440 |

• Same density as our standard 5-1/4" I.D. brushes, but requires no adapters for mounting on a 2" diameter shaft.
* 1/2" x 1/4" Double Keyway

## Rectangular Filament Wheel - Composite Hub - Straight Silicon Carbide Filament

| O.D. x I.D. | Grit Size | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 14" x 5-1/4" | 120 | 1-1/8" | 3-3/4" | 1-1/16" | 1,800 | 2 | 84640 |

Other diameters and grit sizes available upon request.

## Nylox® Metal Hub Basic Sections - Weiler also offers abrasive nylon wheels featuring traditional metal hub construction for light duty deburring and finishing in non-production applications.

### Applications

- Low volume manual deburring
- General use in a tool room or shop

## Crimped Filament Basic Sections - Metal Hub - Round Silicon Carbide Filament

| O.D. x I.D. | Filament Dia./Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 6" x 2" | .022/320<br>.035/180<br>.040/120 | 5/8" | 1-1/2" | 9/16" | 6,000 | 2 | 20600<br>20610<br>20620 |
| 8" x 2" | .022/320<br>.040/120 | 5/8" | 2-1/2" | 9/16" | 5,000 | 2 | 20630<br>20650 |
| 10" x 3-1/4" | .035/180 | 9/16" | 2-7/8" | 17/32" | 4,500 | 2 | 20661 |
| 14" x 5-1/4" | .035/180 | 9/16" | 3-7/8" | 9/16" | 3,000 | 2 | 20730 |



Deburring the tip of a turbine blade.



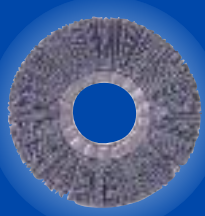
83190



85150



84640



20620

NOTE

See adapters on page 90.

Nylox® Wheel Brushes

# Nylox® Wheel Brushes



Deburring threads on a CNC lathe with live tooling.

**Nylox® Narrow Face Wheels -** Featuring a high density metal hub construction, Weiler's narrow face wheels are designed and manufactured to be the most cost-effective tool for applications requiring a 3" or 4" radial brush.



31110



86165



31255



31124

## Burr-Rx® Heavy-Duty Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 9/16" | 1/2" | 7/16" | 6,000 | 2 | 31240<br>31241<br>31242<br>31246 |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 5/8"-1/2" | 5/8" | 1" | 7/16" | 6,000 | 2 | 31110<br>31270<br>31280<br>31290 |

## Burr-Rx® Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .026/120<br>.035/80<br>.043/120 | 1/2"-3/8" | 3/8" | 1/2" | 7/16" | 6,000 | 2 | 86164<br>31102<br>31101 |
| 4" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2"-3/8" | 1/2" | 7/8" | 7/16" | 6,000 | 2 | 86165<br>31103<br>31100<br>31105 |
| 6" | .026/120<br>.043/120<br>.035/80<br>.055/80 | 5/8"-1/2" | 5/8" | 7/8" | 11/16" | 4,500 | 2 | 31134<br>31135<br>31136<br>31137 |

## Heavy-Duty Narrow Face Wheels - Metal Hub - Crimped Round Silicon Carbide Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .040/80 | 5/8"-1/2" | 9/16" | 1/2" | 7/16" | 6,000 | 2 | 31245 |
| 4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 5/8"-1/2" | 5/8" | 1" | 7/16" | 6,000 | 2 | 31255<br>31265<br>31275<br>31285 |

## Narrow Face Wheels - Metal Hub - Crimped Round Silicon Carbide Filament

| Dia. | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3" | .022/320<br>.035/180<br>.040/120 | 1/2"-3/8" | 3/8" | 1/2" | 7/16" | 6,000 | 2 | 31074<br>31084<br>31094 |
| 4" | .022/320<br>.035/180<br>.040/120 | 1/2"-3/8" | 1/2" | 7/8" | 7/16" | 6,000 | 2 | 31104<br>31114<br>31124 |
| 6" | .022/320<br>.035/180<br>.040/120 | 5/8"-1/2" | 5/8" | 7/8" | 11/16" | 4,500 | 1 | 31121<br>31122<br>31123 |

# Nylox® Wheel Brushes

**Nylox® Small Diameter Wheels -** Weiler offers the widest assortment of small diameter radial wheels for addressing recesses and internal features, or delivering a targeted brushing action to a specific area on a part.

Small diameter Burr-Rx® wheels feature Weiler's advanced black ceramic grain filament which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action for minimum cycle times and maximum media life.



Deburring the edges of a machined aluminum component.

## Applications

- Deburring keyways, slots and crosshole intersections
- Honing and finishing of cylindrical bores

### Burr-Rx® Small Diameter Wheels - Metal Hub - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 1-1/4" | .026/120 | 1/4" | 5/16" | 5/16" | 10,000 | 10 | 17551 |
| 1-1/2" | .026/120 | 1/2" | 3/8" | 1/4" | 10,000 | 10 | 17541 |
| 2" | .026/120<br>.035/80<br>.055/80 | 1/2" | 3/8" | 1/2" | 10,000 | 10 | 17548<br>17555<br>17542 |
| 2-1/2" | .026/120<br>.035/80 | 5/8" | 1/2" | 11/16" | 10,000 | 10 | 17556<br>17557 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1/2" | 1/2" | 1" | 10,000 | 10 | 17565<br>17567<br>17568<br>16000 |

Other diameters and grit sizes available upon request.



16000

### Small Diameter Wheels - Metal Hub - Crimped Round Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 1-1/8" | .022/120 | 1/4" | 5/16" | 1/4" | 10,000 | 10 | 17532 |
| 1-1/4" | .022/120 | 1/4" | 5/16" | 5/16" | 10,000 | 10 | 17535 |
| 1-3/8" | .018/500 ▲ | 1/4" | 5/16" | 3/8" | 10,000 | 10 | 16310 |
| 1-1/2" | .022/120<br>.035/180 | 1/2" | 3/8" | 1/4" | 10,000 | 10 | 17628<br>29353 |
| 2" | .018/500<br>.022/320<br>.040/120 | 1/2" | 3/8" | 1/2" | 10,000 | 10 | 17533<br>17543<br>17633 |
| 2" | .022/120 | 5/8" | 7/16" | 7/16" | 10,000 | 10 | 17629 |
| 2-1/2" | .022/320<br>.022/120<br>.035/180 | 5/8" | 1/2" | 11/16" | 10,000 | 10 | 29356<br>29123<br>29280 |
| 3" | .035/180<br>.022/320<br>.022/120<br>.040/120 | 1/2" | 1/2" | 1" | 10,000 | 10 | 29088<br>17563<br>16315<br>16263 |

▲ Aluminum Oxide
Other diameters and grit sizes available upon request.



17533

NOTE

See adapters on page 90.

DID YOU KNOW?

Weiler's Application Engineering Team is available to recommend the best product and process to meet your specific application requirements.

# Nylox® Wheel Brushes



A diamond abrasive disc brush creates a small radius on a ceramic part.



83005

**Diamond Filament Wheel Brushes -** Weiler's diamond filament wheels utilize composite hub construction for high performance in precision applications. Our wheel brushes are made-to-order in a wide range of diameters and thicknesses. Additional configurations are available such as; tube brushes, composite hub disc brushes and end brushes. Common wheel configurations are listed below. Other sizes and pricing are available on request. Additional product configurations are available. Please contact Customer Service at 800-835-9999.

## Applications

Ideal for producing edge radii on hard materials:

- Diamond
- CBN
- Ceramic
- Glass

### Diamond Filament Wheels - Composite Hub - Round Diamond Filament

| O.D. x I.D. | Filament Diam. /Grit | Face Width | Trim Length | Thickness Through Arbor | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 6" x 2" | .024/200<br>.014/600<br>.012/1000 | 5/16" | 1-1/4" | 1/4" | 3,600 | 1 | 83002<br>83003<br>83004 |
| 8" x 2" | .024/200<br>.014/600<br>.012/1000 | 5/16" | 2-1/4" | 1/4" | 3,600 | 1 | 83005<br>83006<br>83007 |




**Operating Speeds - Wheels -** Nylox® abrasive brushes work with a wiping and filing action. Think of them as flexible files. They work best when operated at speeds that allow penetration of the work-piece into the brush filaments. The maximum RPM marked on the brush is not the optimum working speed. A good rule of thumb is to stay under 2,500 SFPM in dry applications and 3,500 SFPM in wet applications.

| Diameter | RPM |
|---|---|
| 2" | 3,450 - 5,000 |
| 3" | 2,500 - 3,450 |
| 4" | 1,750 - 2,500 |
| 6" | 1,350 - 1,750 |
| 8" | 1,150 - 1,350 |
| 10" | 950 - 1,150 |
| 12" | 750 - 950 |
| 14" | 650 - 850 |

Note: See parameter summary on page 74 for additional information.




See adapters on page 90.

DID YOU KNOW?

Weiler was the first manufacturer of Composite Hub Nylox® Brushes.

# Nylox® Crosshole Deburring Brushes

**Bore-Rx™ Brushes -** These brushes are designed for automated applications in CNC machining centers and dedicated machines. They are ideal for removing burrs from internal edges and finishing bores. Since they eliminate off-hand deburring, they improve part-to-part consistency and reduce direct labor content. Bore-Rx brushes are available in sizes ranging from 7/8" to 4" and can be readily adapted into a machining center's tool changer using an end-mill holder or 3/8" collet.

### Bore-Rx Brushes - 3/8" stems - Crimped Round Black Ceramic Filament

| Diameter | Filament Dia./Grit | Face Width | Overall Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 7/8" | .026"/120 | 3/4" | 4-3/4" | 8,000 | 1 | 17206 |
| 1" | .026"/120 | 3/4" | 4-3/4" | 8,000 | 1 | 17208 |
| 1-1/4" | .026"/120 | 3/4" | 4-3/4" | 8,000 | 1 | 17210 |
| 1-1/2" | .026"/120 | 1" | 5" | 8,000 | 1 | 17212 |
| 2" | .026"/120 | 1" | 3-1/4" | 6,000 | 1 | 17215 |
| 2-1/2" | .055"/80 | 1" | 3-1/4" | 6,000 | 1 | 17217 |
| 3" | .026/120<br>.043/120<br>.055/80 | 1" | 3-1/4" | 6,000 | 1 | 86150<br>86151<br>86152 |
| 4" | .026/120<br>.043/120<br>.055/80 | 1" | 3-1/4" | 6,000 | 1 | 86154<br>86155<br>86156 |

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets.

## Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-to-order in diameters ranging from 7/8" to 1-1/2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. Contact Application Engineering at 888-299-APPS (2777) for more information.




## Operating Parameters For Bore-Rx Brushes

| Brush Diameter | Recommended RPM | Recommended Feed Rate |
|---|---|---|
| 5/8" - 7/8" | 3000 | 20"/min |
| 1" - 1-1/2" | 3000 | 20"/min |
| 2" - 2-1/2" | 2000 | 20"/min |
| 3" - 4" | 1500 | 20"/min |

### Tool Paths for Crosshole Deburring

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

■ Diameter of Interpolation = Hole Dia. - 0.975 x Brush Dia.

### Tool Paths for Bore Finishing

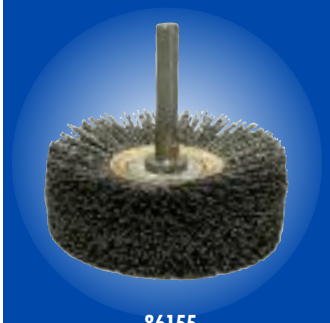
Nylox brushes can be used to improve the surface finish of bores. The best tool path normally involves helically interpolating the bore. The above recommendations for speed, feed and diameter of interpolation are also valid for bore finishing. The use of coolant is highly recommended in order to achieve maximum surface finish improvement.



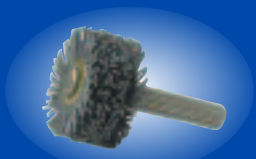
Deburring the internal bores of an air-cooled cylinder head.



17208



86155



Replacement Head



Reusable Arbor



Deburring a bearing cage in a CNC machining center.



86112



86143

**NOTE**

**See page 72 for more information about applying Nylox disc brushes in CNC applications.**

## Nylox® Disc Brushes - Weiler's Nylox disc brushes are manufactured using a tufted filament configuration and longer trim length for increased aggression, greater conformability and longer product life in comparison to monofilament disc brushes which feature a distribution of short individual bristles.

Burr-Rx® disc brushes feature Weiler's advanced black ceramic grain filament which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action for minimum cycle times and maximum media life.

All of our Burr-Rx disc brushes are manufactured using a new process which results in a very consistent, flat brush face in comparison to traditional construction which utilizes a molded backing. The high dimensional precision of these tools means that the brushes are suitable for the most critical applications and perform more consistently from first part to last. In addition, the machined polymer backings are designed to mount directly onto a standard shell mill holder for convenient use in CNC machining centers.

### Applications

- Deburring flat surfaces on machined components
- Improving texture characteristics on machined or ground surfaces
- Deburring face-milled castings or forgings
- Blending tool marks after machining or grinding

### Burr-Rx® Shell Mill Holder Disc Brushes - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Round Filament** | | | | | | |
| 4" | .026/120<br>.043/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86112<br>86113<br>86204*<br>86114* |
| 6" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86115<br>86116<br>86117* |
| 8" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86141<br>86142<br>86143* |
| 10" | .026/120<br>.043/120<br>.055/80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86125<br>86121<br>86122* |
| **Rectangular Filament** | | | | | | |
| 4" | 80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86167* |
| 6" | 80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86198* |
| 8" | 80 | 1-1/4" | 1-1/2" | 1,800 | 1 | 86199* |

* Maximum Density

Tech Note

Note: See parameter summary on page 74 for additional information.

## Operating Speeds - Discs - Nylox® abrasive brushes work with a wiping and filing action. Think of them as flexible files. They work best when operated at speeds that allow penetration of the work-piece into the brush filaments. The maximum RPM marked on the brush is not the optimum working speed. A good rule of thumb is to stay under 2,500 SFPM in dry applications and 3,500 SFPM in wet applications.

| Diameter | RPM |
|---|---|
| 1-3/4" | 1,750 - 2,000 |
| 3"-4" | 1,500 - 1,750 |
| 5" - 6" | 1,250 - 1,500 |
| 8" | 800 - 1,000 |
| 10" | 700 - 800 |
| 12" | 600 - 700 |
| 14" | 500 - 600 |

# Nylox® Disc Brushes

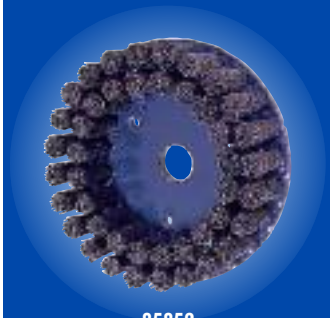
## Composite Hub Disc Brushes - Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| **Crimped Round Filament** | | | | | | |
| 3" | .035/180<br>.040/120 | 7/8" | 1-1/2" | 2,500 | 1 | 85776<br>85778 |
| 3-1/2" | .022/320<br>.035/180<br>.040/80 | 7/8" | 1-1/2" | 2,500 | 1 | 85792<br>85794<br>85798 |
| 4" | .022/320<br>.035/180<br>.040/120<br>.040/80 | 7/8" | 1-1/2" | 2,500 | 1 | 85812<br>85814<br>85816<br>85818 |
| 5" | .035/180<br>.040/80 | 7/8" | 1-1/2" | 2,500 | 1 | 85832<br>85836 |
| 6" | .035/180<br>.040/120<br>.040/80 | 7/8" | 1-1/2" | 2,000 | 1 | 85850<br>85852<br>85854 |
| 8" | .035/180<br>.040/120<br>.040/80 | 7/8" | 1-1/2" | 2,000 | 1 | 85908<br>85912<br>85914 |
| 10" | .040/120<br>.040/80 | 7/8" | 1-1/2" | 1,750 | 1 | 85930<br>85932 |
| 12" | .035/180<br>.040/120 | 7/8" | 1-1/2" | 1,750 | 1 | 85946<br>85948 |
| **Rectangular Filament** | | | | | | |
| 3" | 120<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85786<br>85788 |
| 3-1/2" | 320<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85800<br>85806 |
| 4" | 180<br>120<br>80<br>80<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85822<br>85824<br>85826<br>85995•<br>85900*• |
| 5" | 120<br>80<br>80 | 7/8" | 1-1/2" | 2,500 | 1 | 85842<br>85844<br>85978• |
| 6" | 120<br>80<br>80<br>80 | 7/8" | 1-1/2" | 2,000 | 1 | 85860<br>85862<br>85996•<br>85901*• |
| 8" | 120<br>80 | 7/8" | 1-1/2" | 2,000 | 1 | 85920<br>85922 |
| 9" | 80 | 7/8" | 1-1/2" | 2,000 | 1 | 85997• |
| 10" | 120<br>80 | 7/8" | 1-1/2" | 1,750 | 1 | 85938<br>85940 |

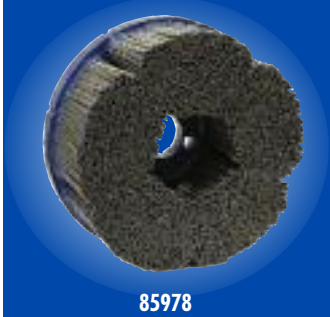
* Banded for extra aggression • Maximum density



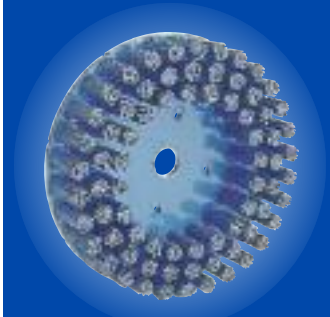
Deburring the edges of an aluminum engine cover.



85852



85978



85920

Tech Note

## Arbor & Drive Hole Specifications for Composite Hub Disc Brushes

| Brush Diameter | Arbor Hole Diameter | Drive Holes |
|---|---|---|
| 3"-5", 6" Max. Density | 7/8" | (2) 1/4" dia. on a 1-1/4" dia. bolt circle |
| 6" | 7/8" | (3) 1/4" dia. on a 3" dia. bolt circle |
| 8" | 7/8" | (4) 1/4" dia. on a 3" dia. bolt circle |
| 10" | 7/8" | (4) 1/4" dia. on a 1.625" dia. bolt circle |
| 12" | 7/8" | (4) 1/4" dia. on a 1.625" dia. bolt circle |
| 14" | 5" | N.A. |

NOTE

See adapters & drive arbors on pages 90-91.

# Nylox® Disc and Cup Brushes



Removing burrs and breaking sharp edges on a transmission component.



85733



85753



85752



85981



14413

NOTE

See adapters & drive arbors on pages 90-91.

## Nylox Mini-Disc Brushes -

Featuring a precision machined aluminum cup, Weiler's mini-disc brushes are designed to be the most cost-effective media for applications requiring a smaller brushing tool.

### Applications

- Deburring flat surfaces on machined components
- Improving texture characteristics on machined or ground surfaces
- Deburring face-milled castings or forgings
- Blending tool marks after machining or grinding

### Burr-Rx® Mini Disc Brushes - Maximum Density - Crimped Black Ceramic Filament

| Diameter | Filament Diameter/Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Round Filament** | | | | | |
| 2" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 1 | 86106<br>85738<br>86107<br>85733 |
| 3" | .026/120<br>.035/80<br>.043/120<br>.055/80 | 1-1/4" | 4,500 | 1 | 86109<br>86013<br>86110<br>86111 |
| **Rectangular Filament** | | | | | |
| 2" | 80 | 1-1/4" | 4,500 | 1 | 85736 |
| 3" | 80 | 1-1/4" | 4,500 | 1 | 86014 |

### Mini Disc Brushes - Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| **Round Filament** | | | | | |
| 1-3/4" | .035/180<br>.022/120<br>.040/80 | 1-1/4" | 6,000 | 2 | 85753<br>85751<br>85750 |
| **Rectangular Filament** | | | | | |
| 1-3/4" | 80 | 1-1/4" | 6,000 | 2 | 85752 |
| 2" | 80 | 1-1/4" | 4,500 | 2 | 85773* |
| 3" | 80 | 1-1/4" | 4,500 | 1 | 85981* |

* Maximum Density

## Nylox Cup Brushes -

Weiler also offers an assortment of Nylox tools featuring traditional cup brush construction for deburring and finishing use in lighter duty applications. These brushing tools can be used on dedicated machines in automated processes or on low speed/high torque handheld tools for manual applications.

### Applications

- Deburring and finishing complex or contoured parts



### Cup Brushes - Crimped Round Silicon Carbide Filament

| Diameter | Filament Dia./Grit | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2-3/4" | .022/320<br>.035/180<br>.040/120 | 1/4" Stem | 1-1/4" | 6,000 | 1 | 14401<br>14403<br>14404 |
| 3-1/2" | .035/180<br>.040/120 | 5/8"-11 | 1-1/2" | 12,000 | 1 | 14413<br>14414 |
| 5" | .040/120 | 5/8"-11 | 1-1/4" | 8,000 | 1 | 14576 |
| 6" | .040/120<br>.040/80 | 5/8"-11 | 1-1/4" | 6,600 | 1 | 14516*<br>14506* |

* With internal nut

# Nylox® End Brushes

**Nylox® End Brushes and Miniature End Brushes -** Featuring an integral stem for convenient mounting into a toolholder or collet, Nylox end brushes and miniature end brushes are suitable for addressing recesses and internal features, or delivering a targeted brushing action to a specific area on a part.

## Applications

- Deburring small recessed areas and internal part features
- Finishing slots and recessed surfaces on machined parts



Blending tool marks on a hydraulic component.

### Burr-Rx® End Brushes - Banded - Crimped Round Black Ceramic Filament - Mounted on 1/4" Stems

| Diameter | Filament Diameter/Grit | Trim Length* | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3/8" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86098<br>86099 |
| 1/2" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86100<br>86101 |
| 3/4" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86102<br>86103 |
| 1" | .026/120<br>.043/120 | 1/4" | 10,000 | 10 | 86104<br>86105 |

* Trim length from bands



86104

### End Brushes - Banded - Crimped Round Silicon Carbide Filament - Mounted on 1/4" Stems

| Diameter | Filament Dia./Grit | Trim Length* | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1/2" | .022/320<br>.035/180<br>.040/120 | 3/8" | 10,000 | 10 | 11160<br>11161<br>11162 |
| 3/4" | .035/180<br>.040/120 | 3/8" | 10,000 | 10 | 11165<br>11166 |
| 1" | .022/320<br>.035/180<br>.040/120 | 3/8" | 10,000 | 10 | 11168<br>11169<br>11170 |

* Trim length from bands



11166

### End Brushes - Crimped Round Silicon Carbide Filament - Mounted on 1/4" Stems

| Diameter | Filament Dia./Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1/2" | .022/320<br>.035/180<br>.040/120 | 7/8" | 10,000 | 10 | 10172<br>10173<br>10174 |
| 3/4" | .022/320<br>.035/180<br>.040/120 | 7/8" | 10,000 | 10 | 10152<br>10153<br>10154 |
| 1" | .022/320<br>.035/180<br>.040/120 | 7/8" | 10,000 | 10 | 10155<br>10156<br>10157 |



10154

### Miniature End Brushes - Crimped Round Silicon Carbide Filament
**Plastic Ferrule - Mounted on 1/8" stems**

| Diameter | Filament Dia./Grit | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3/16" | .018/500 | 1/4" | 37,000 | 144 | 26136 |
| 1/4" | .018/500 | 3/8" | 37,000 | 144 | 26138 |
| 5/16" | .018/500 | 9/16" | 25,000 | 144 | 26146 |



26136



Crosshole deburring an aluminum manifold.



21759



21128



21138



21473



26904



26908



26915

**Nylox® Power Tube Brushes -** Weiler offers a comprehensive line of Nylox power tube brushes for internal deburring and finishing applications in tubular component parts, drilled and tapered holes, and machined bores and passages. Power tube brushes are suitable for use in drill presses and manual and CNC machine tools. See pages 50-51 for operating guidelines.

### Burr-Rx® Tube Brushes - Crimped Black Ceramic Filament - 1/4" Cadmium Plated Stems

| Diameter | Filament Dia./Grit | Length of Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/8" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21758 |
| 1/2" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21759 |
| 5/8" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21761 |
| 3/4" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21762 |
| 7/8" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21763 |
| 1" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21764 |
| 1-1/4" | .026/120 | 1" | 1/4" | 3-1/2" | 10 | 21765 |

### Tube Brushes - Crimped Round Silicon Carbide Filament - Double Stem, Single Spiral

| Diameter | Filament Dia./Grit | Length of Brush Part | Stem Diameter | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/4" | .022/320 | 2" | 5/32" | 5" | 10 | 21126 |
| 3/8" | .022/320 | 2" | 5/32" | 5" | 10 | 21128 |
| 1/2" | .022/320<br>.040/80 | 2" | 3/16" | 5" | 10 | 21130<br>21325 |
| 5/8" | .022/320<br>.040/80 | 2" | 7/32" | 5" | 10 | 21132<br>21326 |
| 11/16" | .022/320 | 2" | 7/32" | 5" | 10 | 21133 |
| 3/4" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21134<br>21327 |
| 7/8" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21136<br>21976 |
| 1" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21138<br>21328 |
| 1-1/4" | .022/320<br>.022/120<br>.035/180<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21306<br>21304<br>21305<br>21329 |
| 1-1/2" | .022/320<br>.035/180<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21309<br>21308<br>21330 |
| 1-3/4" | .040/80<br>.035/180 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21311<br>21312 |
| 2" | .022/320<br>.040/80 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21473<br>21345 |

### Tube Brushes - Micro Abrasive - For ultra-fine deburring and finishing of small internal holes.

| Diameter | Length of Brush Part | Stem Diameter | FOR HOLE DIAMETERS Decimal | FOR HOLE DIAMETERS Fraction | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| **Silicate Filament** | | | | | | | |
| .030" | 1/2" | .015 | .031" | 1/32" | 4" | 10 | 26900 |
| .050" | 1/2" | .022 | .047" | 3/64" | 4" | | 26901 |
| .075" | 3/4" | .033 | .063" | 1/16" | 4" | | 26902 |
| .090" | 3/4" | .041 | .078" | 5/64" | 4" | | 26903 |
| .105" | 1" | .041 | .094" | 3/32" | 4" | | 26904 |
| .125" | 1" | .064 | .109" | 7/64" | 4" | | 26905 |
| .135" | 1" | .075 | .125" | 1/8" | 4" | | 26906 |
| **600 Grit Aluminum Oxide Filament** | | | | | | | |
| .165" | 1" | .087 | .156" | 5/32" | 5" | 10 | 26907 |
| .190" | 1" | .087 | .188" | 3/16" | 5" | | 26908 |
| .260" | 1" | .115 | .250" | 1/4" | 5" | | 26909 |
| .325" | 1" | .115 | .313" | 5/16" | 5" | | 26910 |
| .385" | 1" | .147 | .375" | 3/8" | 5" | | 26911 |
| .515" | 1" | .194 | .500" | 1/2" | 5" | | 26912 |
| .640" | 1" | .194 | .625" | 5/8" | 5" | | 26913 |
| .765" | 1" | .212 | .750" | 3/4" | 5" | | 26914 |
| .890" | 1" | .212 | .875" | 7/8" | 5" | | 26915 |

# Nylox® Adapters and Drive Arbors

## Metal Adapters - Reusable - Used in pairs and priced per pair.

| Diameter | Arbor Hole Size | Used With | Standard Pack | Item Number |
|---|---|---|---|---|
| 2" | 1/2"<br>5/8"<br>3/4"<br>7/8"<br>1"<br>1-1/4"<br>1-1/2" | All 2" I.D. Wheels | 1 | 03809<br>03810<br>03811<br>03824<br>03812<br>03813<br>03814 |
| 3-1/4" | 3/4"<br>7/8"<br>1"<br>1-1/4"<br>2" | 3-1/4" I.D. Wheels (When mounting only one wheel) | 1 | 03910<br>03911<br>03912<br>03913<br>03915 |
| 5-1/4" | 3/4"<br>7/8"<br>1"<br>1-1/4"<br>2" | 5-1/4" I.D. Wheels (When mounting only one wheel) | 1 | 03920<br>03921<br>03922<br>03923<br>03925 |



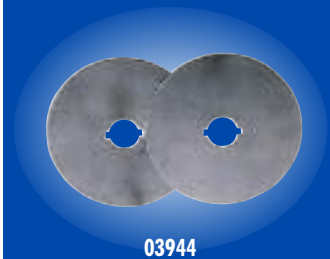
03809



03923

## Steel Flanges - Reusable - Used on the ends of a gang mount. Used in pairs and priced per pair.
Must be used in conjunction with Pressboard Adapters in chart below.

| Flange O.D. | Arbor Hole Size | Used With | Standard Pack | Item Number |
|---|---|---|---|---|
| 5-5/8" | 3/4"<br>1"<br>1-1/4"<br>2" | 3-1/4" & 4-1/4" I.D. Wheels | 1 | 03931<br>03933<br>03934<br>03936 |
| 6-1/2" | 1-1/4"<br>1-1/2"<br>2" | 5-1/4" I.D. Wheels | 1 | 03944<br>03945<br>03946 |
| 8-3/4" | 1-1/4"<br>1-1/2"<br>2" | 7-1/4" I.D. Wheels | 1 | 03954<br>03955<br>03956 |



03944

## Pressboard Adapters - Used for centering 10", 12" and 14" Nylox® Wheels when gang mounting.
Must be used in conjunction with Steel Flanges in chart above.

| Brush I.D. | Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 3-1/4" | 3/4"<br>1"<br>1-1/4"<br>2" | 1 | 03890<br>03892<br>03893<br>03895 |
| 4-1/4" | 3/4"<br>1-1/4"<br>2" | 1 | 03960<br>03963<br>03965 |
| 5-1/4" | 1-1/4"<br>1-1/2"<br>2" | 1 | 03403<br>03404<br>03405 |
| 7-1/4" | 1-1/4"<br>1-1/2"<br>2" | 1 | 03973<br>03974<br>03975 |



03403

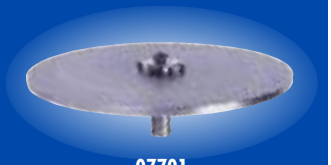

04401


04402


89029


89033


07700


07701


07718

## Plastic Adapters

| Fixed Arbor Hole Size | Adapted Arbor Hole Size | Used With | Standard Pack | Item Number |
|---|---|---|---|---|
| 1/2" | 1/4" | Small Dia. Wheels | 10 | 04400 |
| 1/2" | 3/8" | Small Dia. Wheels | 10 | 04401 |
| 5/8" | 1/2" | Small Dia. Wheels | 10 | 04402 |

## Miniature & Burr-Rx™ Disc Brush Drive Arbors - Includes drive arbor, set screw and hex key.

| For Brush Diameter | Stem Diameter | Stem Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1-3/4"-3" | 1/4" | 1-3/4" | 6,000 | 1 | 89023* |
| 1-3/4"-3" | 3/8" | 1-3/4" | 6,000 | 1 | 89024* |
| 1-3/4"-3" | 1/2" | 1-3/4" | 6,000 | 1 | 89029* |

* For use with Burr-Rx Mini Disc brushes on page 87 only. Products supplied with set screw and wrench.

## Miniature & Burr-Rx™ Disc Brush Drive Arbors - Includes drive arbor, set screw and hex key. Recommended for operations in which brush rotation alternates between forward and reverse.

| For Brush Diameter | Stem Diameter | Stem Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 2"-3" | 1/2" | 1-3/4" | 6,000 | 1 | 89033* |

* For use with Burr-Rx Mini Disc brushes on page 87 only. Products supplied with set screw and wrench.

## Disc Brush Drive Arbors - Mounts Weiler disc brushes to any type of milling machine or CNC machine.

| Fits | Arbor Hole | Drive Studs | Bolt Circle | Plate O.D. | Shaft Dia. | Stem Length | Std. Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| 3", 4" and 5" Disc Brushes | 7/8" | 2 | 1-1/4" | 2-7/8" | 3/4" | 2-3/4" | 1 | 07700* |
| 6" Std. Tuft Disc Brushes NOT Max. Density | 7/8" | 3 | 3" | 5-7/8" | 3/4" | 2-1/2" | 1 | 07701* |
| 6" Max. Density Disc Brushes, also 5" Std. Tuft | 7/8" | 2 | 1-1/4" | 4-7/8" | 3/4" | 2-1/2" | 1 | 07715* |
| 8" and 9" Disc Brushes | 7/8" | 4 | 3" | 7-7/8" | 3/4" | 2-1/2" | 1 | 07702* |
| 10" and 12" Disc Brushes | 7/8" | 4 | 1-5/8" | 9-7/8" | 3/4" | 2-1/2" | 1 | 07703* |
| **Replacement kit includes:** (1) 1/2"-13 locking flow-through bolt and (1) Belleville spring washer | – | – | – | – | – | – | 1 | 07718* |

* Flow-through drive arbor.




- The adapters and drive arbors listed on this page are for use with small diameter wheel brushes only; do not attempt to use them with cutting or grinding wheels, buffing wheels, or any type of abrasive wheel or disc.
- Do not adapt a wheel brush for use on a shaft diameter less than that specified by ANSI B165.1 (see page 20) or exceed the maximum wheel diameter specified for a drive arbor.
- Never mount a drive arbor onto a tool which operates above the maximum RPM rating of either the arbor or the brush (whichever may be lower) and be sure that the stem of the arbor is properly secured in the collet or chuck before use.

**DID YOU KNOW?**

Weiler's Black Ceramic Nylon Abrasive Filament Brushes are being used on key parts of the United States Navy's newest warships.

# Nylox® FME Area Product Solutions



Removing gasket material from a pipe flange.

In nuclear power plants, Foreign Material Exclusion (FME) programs may limit or even exclude the use of wire brushes in some areas during the performance of routine maintenance, repair or shut-down activities. Weiler has developed a FME-compliant tooling system to address the needs of plant operators and maintenance contractors working in these facilities as well as other industries where the potential introduction of broken wire filaments may be of concern.

**Weiler's FME Solutions program is a complete system consisting of non-wire brushing tools designed to perform a broad range of surface cleaning and preparation applications as well as the power tools required to drive them.** For cleaning hot welds in FME-controlled areas, Weiler offers the HFR stringer bead wire wheel (see page 28) which can be used on a standard right angle grinder.

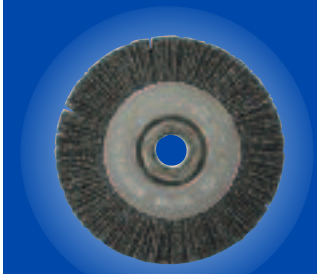
## Black Nylox Ceramic Brushes -

The engineered ceramic grain in Weiler's Black Nylox filament is up to 400% more aggressive than the silicon carbide and aluminum oxide grain in other abrasive filaments, making it much more effective in surface cleaning applications. The efficient cutting action of the Black Nylox filament also generates less heat and makes it much more resistant to "smearing" than traditional nylon abrasive filaments.

### Narrow Face Wheels - Crimped Ceramic Filament

**Used on edge for weld prep and cold weld cleaning.**

| Diameter | Filment Dia./Grit Size | Face Width | Arbor Hole | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | .055/80 | 1/2" | 5/8"-11 Nut | 4,800 | 5 | 31112 |
| 4" | .043/120 | 1/2" | 5/8"-11 Nut | 4,800 | 5 | 31111 |

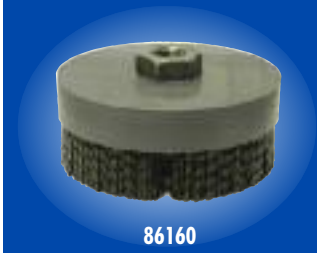


31112

### Cup Brush - Rectangular Ceramic Filament

**Used on its face for heavy-duty cleaning of broad surfaces.**

| Diameter | Filment Dia./Grit Size | Arbor Hole | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 4" | .049 x .098 - 80 Grit | 5/8"-11 Nut | 4,800 | 1 | 86160 |



86160

### Bevel Brush - Rectangular Ceramic Filament

**For aggressive cleaning in corners and confined areas.**

| Diameter | Filment Dia./Grit Size | Face Width | Arbor Hole | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 4" | .049 x .098 - 80 Grit | 3/4" | 5/8"-11 Nut | 4,800 | 1 | 31113 |



31113

**Tech Note**

**Nylon abrasive filament brushes require a lower operating RPM than most other power tool accessories and they cannot be used effectively on standard grinders.**

## Weiler Grinders By Metabo® -

Engineered by Metabo exclusively for Weiler, these grinders operate at the optimum speed required to make the most effective use of the Black Nylox brushes. The critical mechanisms of these industrial grade electric grinders are sealed to protect them from the accumulation of dust and swarf. In addition, the housing and case of these virtually indestructible power tools are designed to insure optimum air flow over the motors for reliable performance and long service life. Grinders feature an extended-slide "Deadman" switch design which insures that the tool shuts off if dropped.



### Model 60012 4-1/2" Right Angle Grinder

### Features:

- Double insulation
- 4,800 RPM
- Deadman switch
- Current interruption protection
- Spindle lock
- Tool-free guard adjustment
- 2-position side handle
- 12.2 Amp
- 5/8"-11 Spindle
- Spanner wrench included

# Nylox® FME Area Product Solutions



Cleaning internal threads inside a valve.



86148



86159



86171



44144



95016

## End Brush - Crimped Ceramic Filament - 1/4" Stem

**For spot-facing or cleaning in tight areas.**

| Diameter | Filment Dia./Grit Size | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | .055/80 | 3/4" | 4,800 | 10 | 86148 |

## Controlled Flare End Brush - Crimped Ceramic Filament - 1/4" Stem

**For cleaning corners and tight areas.**

| Diameter | Filment Dia./Grit Size | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1" | .035/80 | 1-1/8" | 4,800 | 10 | 86159 |

## Conflex Brushes - Crimped Ceramic Filament - 1/4" Stem

**For O.D. and I.D. cleaning in confined areas.**

| Diameter | Filment Dia./Grit Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item No. |
|---|---|---|---|---|---|---|
| 3" | .043/120 | 1" | 15/16" | 4,800 | 10 | 86171 |
| 3" | .055/80 | 1" | 15/16" | 4,800 | 10 | 86172 |




**Nylon abrasive filament brushes require a lower operating RPM than most other power tool accessories and they cannot be used effectively on standard grinders.**

## Model 60006 Die Grinder



### Features:

- Double insulation
- 4,800 RPM
- Deadman switch
- Spindle lock
- Side handle included
- 7.5 Amp
- 1/4" Collet
- Extended spindle for working in confined areas

## Hand Scratch Brushes - Crimped Ceramic Filament - For general purpose, light-duty cleaning.

| Overall Length | Block Type | Brush Part | Grit Size | Trim Length | Standard Pack | Item No. |
|---|---|---|---|---|---|---|
| 10" | Wood | 5" | 80 | 3/4" | 12 | 44144 |
| 8-3/4" | Wood | 2 x 9 Rows | 120 | 5/8" | 36 | 95016 |

**DID YOU KNOW?**

Weiler's Nylox and Burr-Rx brushes are used by all three of the major jet engine manufacturers to deburr critical component parts.

# PIPELINE




## HIGH PERFORMANCE PIPELINE PRODUCTS FOR THE MOST DEMANDING CIRCUMSTANCES

# WELD CLEANING PRODUCTS





79802



79804

**Made in the U.S.A.,** the performance engineered construction of Weiler's stringer bead wheels makes them the most effective weld cleaning tools for the most demanding circumstances. Our line of premium weld cleaning brushes are designed and manufactured to the most stringent quality standards in the industry.

Utilizing the highest quality heat-treated steel wire available, they are the most aggressive weld cleaning brushes on the market. Their design virtually eliminates knot movement resulting in the greatest cleaning action, smoothest operation, and longest wheel life. From root pass to cap pass, they excel in the removal of slag, spatter, and oxidation without damaging the filler material.

## DUALLY® STRINGER BEAD WHEELS feature a dual-hex nut design that simplifies periodic flipping of the wheel for maximum cleaning action, long life, and safer use.

| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **ROOT PASS BRUSHES** | | | | | | | | | |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 15,000 | 5 | 79801 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 79802 |
| 6" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 5 | 79805 |
| 7" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 5 | 79800 |
| **FILLER PASS BRUSHES** | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 79803 |
| 6" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 5 | 79804 |



13131



08916

## ROUGHNECK® STRINGER BEAD WHEELS are the standard for high-performance weld cleaning brushes. Narrow face brushes are suitable for cleaning root and hot passes and reaching into corners; wider face wheels can be used for cleaning filler and cap passes as well as for other surface prep and cleaning applications.

| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max.RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **ROOT PASS BRUSHES** | | | | | | | | | |
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 13131 |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 15,000 | 5 | 13232 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 08756 |
| 6" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 10 | 09400 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 09000 |
| | | | 76 | | | | | | 09100 |
| **FILLER PASS BRUSHES** | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 09856 |
| 6" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 10 | 08916 |



35216

## POLYFLEX® ENCAPSULATED STRINGER BEAD WHEELS - Black Elastomer

Feature a heat-stabilized encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life; suitable for cleaning hot welds.

| Diameter | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 6" | .014 | 5/8"-11 UNC | 3/16" | 1-7/16" | 3/8" | 9,000 | 5 | 35206 ▲ |
| 7" | .014 | 5/8"-11 UNC | 3/16" | 1-15/16" | 3/8" | 9,000 | 5 | 35216 ▲ |

▲ Crimped wire

**Weiler Knot Wire Cup Brushes,** like our high-performance weld cleaning brushes, are designed and manufactured right here in the U.S.A. to the most stringent quality standards in the industry. Constructed with the highest quality heat-treated steel wire available, our cup brushes provide maximum performance and durability. They are the ideal tools for removing surface rust and light corrosion from bevel ends prior to welding.



13286

## KNOT WIRE CUP BRUSHES - Single Row

Smooth operation and efficient removal of surface rust and light corrosion.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item # Steel |
|---|---|---|---|---|---|---|
| 2-3/4" | .020 | 5/8"-11 UNC | 1" | 14,000 | 1 | 13286 |
| 3-1/2" | .023 | 5/8"-11 UNC | 7/8" | 13,000 | 1 | 13156 |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316 |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12276* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376 |

*Internal Nut



12376

## POLYFLEX® ENCAPSULATED CUP BRUSH - Black Elastomer - Extra Heavy-Duty

Heat-stabilized elastomer gradually wears away to expose a consistent short trim for higher aggression and longer life.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item # Steel |
|---|---|---|---|---|---|---|
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35760 |



35760

**Tiger Disc Abrasive Flap Discs** are the recognized performance benchmark for flap discs on the pipeline. Weiler designs and manufactures Tiger Discs to the most stringent quality standards right here in the U.S.A. Providing a high cut rate and long life, Tiger Discs are the ideal tools for removing heavy pitting from bevel ends prior to welding.

## TIGER® DISC - Angled Style (Type 29)

Rigid aluminum backing for quick removal of heavy corrosion and pitting.




| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number Aluminum Backing Zirconia Alumina |
|---|---|---|---|---|---|
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 50518* |
| | | 60 | | | 50519* |
| | | 80 | | | 50520* |
| 5" | 5/8"-11 Nut | 40 | 12,000 | 10 | 50527* |
| | | 60 | | | 50528* |
| | | 80 | | | 50529* |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 50543* |
| | | 60 | | | 50544* |
| | | 80 | | | 50545* |

*Patent # 6,945,863




50543

# MAINTENANCE & REPAIR PRODUCTS



56283

**Cutting Wheels -** Vortec Pro® bonded abrasives are specifically designed for general purpose grinding and cutting applications on steel, iron and other ferrous metals. All products are resin-bond formulated for aggressive stock removal and fast cutting, and reinforced with fiberglass webbing for stability. Thin cutting wheels are ideal for use in yard work or field repairs.

## VORTEC PRO® TYPE 27 THIN CUTTING WHEELS - Aluminum Oxide

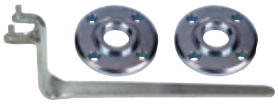



For general purpose, burr-free cutting with less resistance on various metals.

| Dia. | Wheel Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | WA60S - Metal | 13,300 | 25 | 56393* |
| 5" | .045" | 7/8" | WA60S - Metal | 12,200 | 100 | 56392* |
| 6" | .045" | 7/8" | WA60S - Metal | 10,200 | 25 | 56283* |
| 7" | .060" | 7/8" | WA60S - Metal | 8,500 | 25 | 56391* |

*Contaminant-free.

56494



56495

## ADAPTING NUTS & SPANNER WRENCH - For use with Tiger, Vortec Pro and High Density Flap Discs.

| Description | Thread Size | For Use With | Std. Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 5/8" -11 | 4-1/2", 5" & 7" Flap Discs with 7/8" arbor hole | 1 | 56494 |
| Spanner Wrench | — | Item No. 56494 only | 1 | 56495 |

**Scratch Brushes** are versatile hand tools for performing a variety of cleaning applications such as removing dirt, flaking paint, loose scale, and light rust.



44053

## CURVED HANDLE SCRATCH BRUSH - Hardwood Block - .012 Steel Wire - Made in U.S.A.

High-quality construction for more effective brushing action and longer life.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44053 |



25150

## VORTEC PRO® CURVED HANDLE SCRATCH BRUSH - Hardwood Block - Steel Wire

Provides lasting, efficient service at a minimal cost. Imported.

| Block Size | Brush Length | Number of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25150 |



40185

**Chip and Oil Brushes** are inexpensive, multipurpose tools for use in applications requiring a disposable applicator or utility brush. They are ideal brushes for applying pipe coatings in the field.

## VORTEC PRO® CHIP AND OIL BRUSHES - White Bristle - Wood Handle

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" | 5/8" | 1-3/4" | 12 | 40184 |
| | 3/8" | | | 40185 |

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# Maintenance Products



Applying pipe coating with a chip and oil brush.



44053



40183

Please note that this brochure features only a small assortment of the surface conditioning products offered by Weiler. The featured items have been selected specifically based upon their popularity in the pipeline market.

For the full offering of Weiler power brushes, abrasives, and maintenance products, please refer to our Solutions Resource Guide, visit our website or call our Applications Hotline at 888-299-2777 to discuss your requirements with a product specialist.

**Scratch Brushes** are versatile hand tools for performing a variety of cleaning applications such as removing dirt, flaking paint, loose scale, and light rust.

### Curved Handle Scratch Brush - Hardwood Block - .012 Steel Wire

**High-quality construction for more effective brushing action and longer life. Made in USA.**

| Block Size | Brush Length | # of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 14" x 7/8" | 5-1/2" | 3 x 19 | 1-3/16" | 12 | 44053 |

### Vortec Pro® Economy Curved Handle Scratch Brush - Hardwood Block - Steel Wire

**Provides lasting, efficient service at a minimal cost. Imported.**

| Block Size | Brush Length | # of Rows | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 13-1/2" x 1" | 6" | 3 x 19 | 1" | 12 | 25150 |

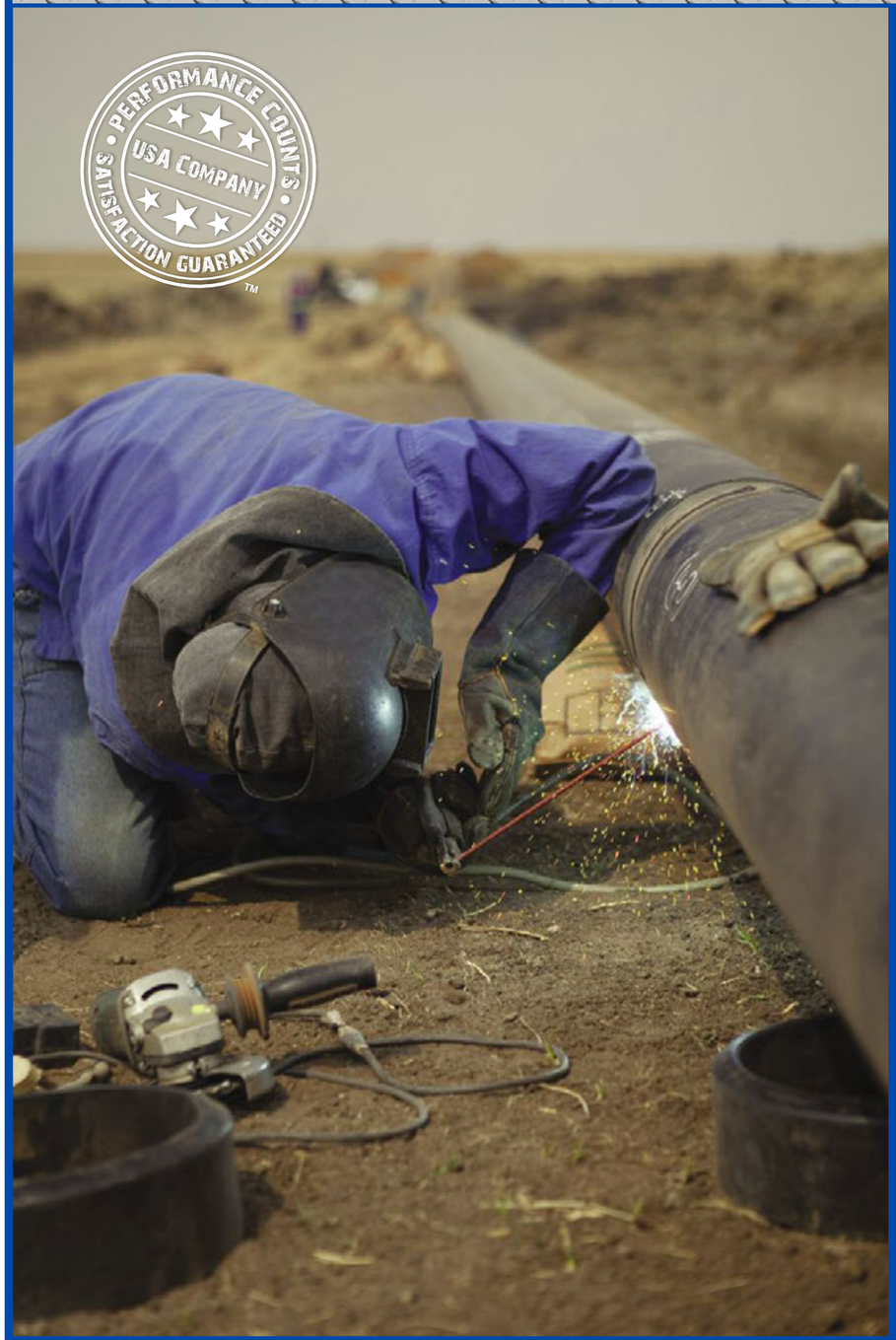
**Chip And Oil Brushes** are inexpensive, multipurpose tools for use in applications requiring a disposable applicator or utility brush. They are ideal brushes for applying pipe coatings in the field.

### Vortec Pro® Economy Chip and Oil Brushes

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| White Bristle - Wood Handle | | | | |
| 3" | 3/8" | 1-1/2" | 12 | 40183 |
| 4" | 5/8"<br>3/8" | 1-3/4" | 12 | 40184<br>40185 |
| Grey China Bristle - Plastic Handle | | | | |
| 4" | 11/16" | 1-7/8" | 12 | 40032 |

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# Weiler Products For The Oil Sands Region












- Weld Cleaning Products
- Weld Prep Products
- Maintenance Products

## High Performance Consumables For Piping Construction



Removing slag and spatter before the cap pass.



79802





09000



08916

MADE IN U.S.A.

**Weiler Stringer Bead Wheels** are the most effective weld cleaning tools for the most demanding users. Identifiable by their gold nuts, our premium weld cleaning brushes are manufactured to the most stringent quality standards in the industry using the highest quality heat-treated steel wire that is available.

We have performance-engineered our stringer bead wheels to virtually eliminate knot movement and produce the fastest, most aggressive cleaning action, smoothest operation, and longest life of any weld cleaning brush on the market. Our Dually® and Roughneck® series brushes feature:

- Individual knot holes for better balance and reduced wire fatigue. The knot plates of our 6-7/8" wheels also feature a unique "sprocket" design to lock the knots in place (see inset).
- Tumbled side plates which are projection-welded to the knot plate. This increases the torsional rigidity of the brush assembly, preventing distortion, knot movement and wire breakage.
- Trimmed knots leave sharpened wire tips on the working edge of the wheel. Other manufacturers use a "Rosette" wire twist which is less expensive to manufacture but produces a brush with a dull, less effective cleaning action.



From root pass to cap pass, Weiler stringer bead wheels excel at quickly removing slag, splatter, and oxidation from the weld zone without damaging the filler material!

New!

**Dually® Stringer Bead Twist Wheels - Dual-hex nut design simplifies periodic flipping of the wheel for maximum cutting action, long life, and safer use.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | |
| 4-7/8" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 79802 |
| 5-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 5 | 79805 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 5 | 79800 |
| **Filler Pass Brushes** | | | | | | | | | |
| 4-7/8" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 79803 |
| 5-7/8" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 5 | 79804 |

**Roughneck® Stringer Bead Twist Wheels - The original standard for inter-pass welding applications, they insure consistent weld quality and reduce cleaning costs.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | |
| 4-7/8" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 08756 |
| 5-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 10 | 09400 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56<br>76 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 09000<br>09100 |
| **Filler Pass Brushes** | | | | | | | | | |
| 4-7/8" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 09856 |
| 5-7/8" | .023 | 5/8"-11 UNC | 24<br>30 | 1/2" | 1-3/8"<br>1-1/4" | 9/16"<br>5/8" | 12,500 | 10 | 08776<br>08916 |





**Weiler Knot Wire Cup Brushes,** like our high-performance weld cleaning brushes, are manufactured to the most stringent quality standards in the industry using the highest quality heat-treated steel wire. They are designed and built for the fastest, most efficient cleaning and longest life and are the ideal tools for removing surface rust and light corrosion from bevel ends prior to welding.

**Knot Wire Cup Brushes - Single Row**
**Smooth operation and efficient removal of surface rust and light corrosion.**

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 2-3/4" | .020 | M10 x 1.25<br>3/8"-24 UNF<br>5/8"-11 UNC | 1" | 14,000 | 1 | 13281<br>13284<br>13286 |
| 3-1/2" | .023 | M14 x 2.0<br>5/8"-11 UNC | 7/8" | 13,000 | 1 | 13152<br>13156 |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316 |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12276* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376 |

* Internal Nut

**Tiger® Disc Abrasive Flap Discs** are the recognized performance benchmark for flap discs in the pipeline construction and process piping industries. Weiler designs and manufactures Tiger Discs to the most stringent quality standard, and they are performance-engineered to provide a fast, efficient cut rate and long life. Tiger Discs are the ideal tools for removing heavy pitting from bevel ends prior to welding.

**Tiger Disc - Angled Style (Type 29) - Aluminum Backing - Zirconium Grain**
**For maximum aggression and long life.**

15°-25°

| Diameter | Grit Size | Max. RPM | Standard Pack | Item Number 5/8"-11 Arbor | Item Number 22mm Arbor |
|---|---|---|---|---|---|
| 4-1/2" | 40<br>60<br>80 | 13,000 | 10 | 50518*<br>50519*<br>50520* | 50513<br>50514<br>50515 |
| 5" | 40<br>60<br>80 | 12,000 | 10 | 50527*<br>50528*<br>50529* | 50523<br>50524<br>50525 |
| 7" | 40<br>60<br>80 | 8,600 | 10 | 50543*<br>50544*<br>50545* | 50533<br>50534<br>50535 |

* Patent # 6,945,863

**Trimmable Tiger Disc - Angled Style (Type 29) - Trimmable Backing - Zirconium Grain**
**High stock removal, long life and flexibility.**

15°-35°

| Diameter | Grit Size | Max. RPM | Standard Pack | Item Number 5/8"-11 Arbor | Item Number 22mm Arbor |
|---|---|---|---|---|---|
| 5" | 40<br>60<br>80 | 12,000 | 10 | 50014<br>50015<br>50016 | 50010<br>50011<br>50012 |



Removing rust and pitting from a pipe bevel.



12376



50519





50015

MADE IN U.S.A.

# Weiler® Power Brushes

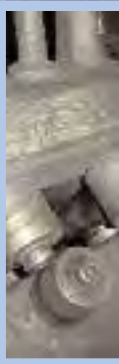














- Knot Wire Wheels
- New! Weld Cleaning Brushes
  *Dually® Line of Flip 'N Fast Wheels!*
- Crimped Wire Wheels
- Nylon and Tampico Wheels
- Cup Brushes
- New! Small Angle Grinder Brushes
  *Roughneck® Jr. 4-1/2" Stringer Bead & 2-3/4" Hurricane Twist Cups!*
- End Brushes
- Miniature Brushes
- Crosshole Deburring Brushes
  *Exclusive Bore-Rx™ Internal Deburring Tools for Automated Use!*
- Power and Hand Tube Brushes
- Non-Sparking Brushes
- Strip Brushes
- Wide Face Brushes

**Knowledgeable and Responsive Customer Service Team:**
**800-835-9999**

**Application Engineering Support:**
**888-299-APPS (2777)**

**Interactive Website: www.weilercorp.com**









# Solutions Showcase

## Tube End Deburring

**Problem:** Structural tubing is fabricated into an abundance of different forms. In order to facilitate safer handling and proper fit, the ends of the tubing must frequently be deburred.

**Solution:** Wide face crimped wire wheel brushes are an extremely effective solution for tube end deburring. Brushes can deburr the OD and ID of tubing at an extremely high rate and produce a media-cost-per-part of considerably less than $0.01 per part.

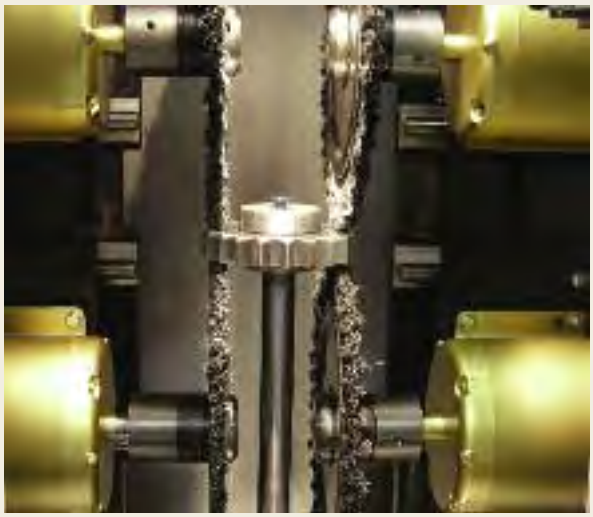





## Gear Deburring

**Problem:** Power transmission components like gears cannot function properly when burrs prevent correct engagement. Further, burrs which become detached from gears can become lodged in critical transmission components causing premature wear and potential failure.

**Solution:** Knot wire wheel brushes with surface speed in excess of 6000 SFPM are an excellent solution for deburring gears prior to heat treatment. The high energy filament tips are able to separate burrs from base material and produce a uniform edge break, which protects the edge of the gear.






Photos courtesy of On-Line Services.

## Removal of Mill Scale

**Problem:** Mill processing of steel often involves heat treating and oil quenching operations that produce an adherent scale which must be removed prior to joining or finishing operations.

**Solution:** Wire brushes are capable of quickly cleaning material to white metal and producing varying degrees of surface roughening to promote adhesion. Brushing operations are often preferred over blasting and chemical processes which generate an expensive waste stream and can be costly to operate and maintain.





# Solutions Showcase

## Inter-Pass Pipeline Weld Cleaning









**Problem:** To prevent voids and inclusions when welding multi-pass joints, the surface of each bead must be completely cleaned of slag and other residuals. Performing inter-pass weld cleaning as quickly and as thoroughly as possible is critical to avoiding costly repair work and delays.

**Solution:** Weiler's Roughneck® and Dually® stringer bead wheels have been engineered to maximize efficiency and minimize costs and are the preferred choice of welders' helpers on the pipeline. From hot pass to cap pass, these premium weld cleaning brushes excel at quickly and thoroughly removing slag, spatter, and oxidation without damaging the filler material.

## Cleaning Threaded Connections









**Problem:** The box ends of drill string and other oilfield tubular goods are examples of connections that must be periodically cleaned without altering the geometry of the threads. Abrasive products all remove base material to some extent, and are capable of damaging threads, resulting in unreliable connections and the risk of potential failures.

**Solution:** The conformability and impact action of small diameter crimped wire wheels make them ideal tools for cleaning threads without fear of damage. When used on a high-speed die grinder, these radial wheel brushes quickly remove residual dope as well as rust, corrosion and scale from male or female thread ends.

## Removal of Excess Molded Rubber









**Problem:** Mechanical rubber components such as motor mounts are produced through a process that commonly leaves flash and excess rubber on critical surfaces. In order for the component to function properly, this unwanted material must be removed.

**Solution:** The non-loading nature of wire brushes makes them the best available solution in the marketplace for removal of rubber from targeted surfaces. This solution can be implemented off-hand or using automated equipment.

# Power Brush Technical Information

## Operational Advantages of Power Brushes

### Power Brushes Do Not Remove Base Material

Unlike bonded and coated abrasive products, power brushes have the ability to clean hard surfaces without removing base material. The impact action of the sharp, hardened wire tips of a rotating brush behave in the same manner as the media in a blasting operation and they have the same ability to separate surface contaminants without damaging the substrate.

Grinding Wheel



Wire Wheel



Due to its compliant nature, a power brush focuses more of this mechanical energy on edges. This makes it an ideal tool for removing burrs and blending sharp edges without changing overall part dimensions after sawing, cutting, grinding and machining operations.

### Power Brushes Do Not Load

Unlike bonded, coated and non-woven abrasive products, power brushes will not load when used on softer materials or when removing paint or similar coatings from a harder surface. Because a power brush consists of a collection of individual wire filaments, there is no place for debris to accumulate and prevent the sharp wire tips from striking the work.

Resin Fiber Disc



Cup Brush



As a power brush is used, the wire tips will naturally tend to wear to a point due to contact with the working surface. It is possible to take advantage of this self-sharpening action by periodically switching the mounting position of wheel brushes to maintain their speed and effectiveness.

## Construction Advantages of Weiler Power Brushes





### Weiler's Solid Ring Construction

Our crimped wire brushes are constructed using solid rings to retain the fill material and our manufacturing process results in an even, consistent distribution of wire strands around the entire brush diameter. This ensures that our crimped wire products run smoother and last longer than the competition – even in the toughest applications.

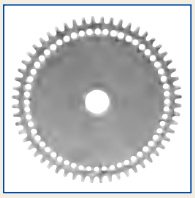




### Weiler's Individual Knot Hole Construction

Weiler's knot wheels are constructed with an internal steel plate that has equally spaced individual holes around the perimeter. Wire is inserted through each hole and twisted into a knot. Each hole has precisely the same wire count, thereby assuring perfect balance. This eliminates vibration, reduces operator fatigue and increases brush life.





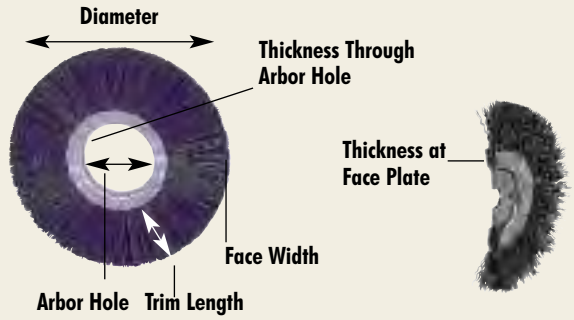
### Weiler's Roughneck® Weld Cleaning Brushes Construction

Each knot is twisted through its own hole and locked into an individual sprocket tooth. This prevents the knots from moving, providing a stronger striking action on the work surface, longer brush life and less operator fatigue. This results in the most aggressive weld cleaning in the market with the lowest cost-per-piece brushed.

# Power Brush Technical Information

## Product Attributes

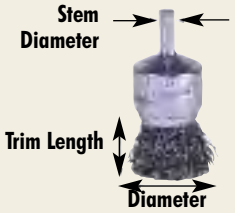
### Wheel Brush



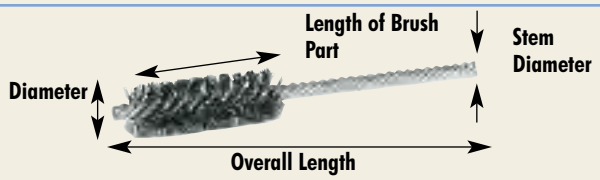

### Cup Brush




### Stem-Mounted End Brush




### Tube Brush




## Fill Materials

**Steel Wire -** Carbon steel wire is typically the most durable power brush fill material for metalworking and heavy-duty cleaning applications. **Weiler industrial grade brushes** utilize heat treated, high tensile steel wire that has been drawn to the most exacting industry standards for superior fatigue resistance and aggressive brushing action. **Vortec Pro® professional grade brushes** utilize more cost-effective grades of steel wire to deliver reliable performance in less demanding applications.

**Stainless Steel Wire -** Stainless steel wire is only recommended when brushing corrosion-resistant or non-ferrous metals such as stainless or aluminum or when the brush is being used in a wet environment. Stainless steel wire is not any more durable or aggressive than the highest grades of steel wire. All Weiler stainless steel brushes are manufactured with Type 302 stainless wire, but select items are also available with Type 316 wire by special order.

**Non-Ferrous Wire -** Brass, bronze and aluminum wire are available in assorted Weiler industrial grade power brush items. These non-ferrous materials will not generate a spark in use, but they lack the durability of carbon steel and stainless steel wire. Due to their soft brushing action, these materials may also be used in special applications such as decorative finishing.

**Animal Hair -** Natural hair bristle is used primarily in miniature power brushes for scratch-free cleaning and polishing. Depending on the animal species and type of hair, this fill material can range from relatively stiff to relatively soft, making it suitable for a variety of applications from removing dust from optical lenses to buffing precious metals using abrasive compounds.

**Vegetable Fiber -** Tampico, a natural fiber produced from the Mexican agave plant, is a common natural fill material used in wet scrubbing and cleaning applications as well as buffing and polishing metals. It is heat, alkali and acid resistant. Its natural color is off-white but it may be dyed or bleached.

**Synthetic -** Nylon is typically the most durable synthetic bristle material for use in power brushes and can be used in a variety of applications due to its flexibility, high fatigue strength and resistance to abrasion, heat, acids and alkalis. Polypropylene is less durable and used primarily in strip brushes.

## Special Information On Stainless Steel Brushes

As noted above, Weiler's complete offering of stainless steel wire brushes is manufactured using wire drawn from Type 302 stainless steel. Although 302 stainless is typically a non-magnetic material, it is important to remember that the amount of cold-working that it experiences during the wire-drawing process causes it to become magnetic. For this reason, proper storage and handling of stainless steel brushes is critical to prevent cross-contamination and "after rust" issues.

Type 302 is widely used in the manufacture of power brushes for its relative durability and aggressive action as well as for its austenitic properties which insure the corrosion resistance of the materials on which it is applied. The use of a different grade of stainless steel wire is typically required in critical weld preparation and cleaning applications, but it will not address "after rust" and other cross-contamination issues. To insure the corrosion resistance of any stainless steel surface after brushing, passivating it with a 10-20% solution of nitric acid is recommended.

## Weiler Industrial Grade Products

Engineered and manufactured to maximize performance and minimize operating costs in the most demanding surface conditioning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost-of-use and most consistent performance in heavy production environments.

## Weiler Vortec Pro® Professional Grade Products

Manufactured using similar product construction and to the same exacting standards as other Weiler power brushes, but engineered to provide cost-effective use in less demanding environments. Vortec Pro brushes are an economical choice for the construction trades, low volume production shops and light duty industrial MRO use.

### Crimped vs. Knot Wire Brushes

**Crimped Wire Brushes:**

- Made with wire that is crimped to allow individual filaments to support each other.
- Provide flexibility for light to medium duty brushing action.
- Use on parts that could be damaged by the impact of a knot brush.
- Use for a broad range of applications.

**Knot Wire Brushes:**

- Made with straight wire filaments that are twisted as a single unit like a piece of cable or wire rope.
- Provide less flexibility and more aggressive brushing action in heavy-duty applications.
- Use on parts requiring high-impact action.
- Use to remove large burrs and heavy contamination, such as multiple layers of rust, scale, paint or oxides.

### Trim Length and Fill Density

**Longer trim, lower density brushes** offer a greater degree of flexibility that is ideal for applications such as cleaning surfaces which are somewhat irregular. However, the lower fill density can result in shorter brush life and less consistent performance in production environments.



**Shorter trim, higher density brushes** are less flexible and work with a faster action which requires less applied pressure or engagement with the brush face. This produces more consistent performance and longer life in applications such as edge deburring.

**To maximize brush life and reduce costs,** always use the shortest trim, highest density brush that will adequately conform to the surface or part edges.



### Knot Configurations



**Standard Twist:** A slight tuft at the end of the wire knot provides some flexibility for use on irregular surfaces.





**Cable Twist:**
The wire is tightly twisted to the end of the knot, providing very aggressive brushing action.





**Stringer Bead Twist:**
The wire is very tightly twisted to the end of the knot, creating a narrow face with high-impact action, primarily used for weld cleaning.





**Hurricane Twist:**
A flattened, dull knot end allows the brush to last longer and provide smoother operation but sacrifices much of the cutting action of the other knot types.



# Power Brush Technical Information

## Wire Size

| Wire | Coarse | | Medium to Coarse | | Medium | | Fine | | Very Fine | |
|---|---|---|---|---|---|---|---|---|---|---|
| Gauge # | 20 | 24 | 25 | 30 | 33 | 34 | 35 | 38 | 43 | 47 |
| Dia. in Inches | .035 | .023 | .020 | .014 | .0118 | .0104 | .0095 | .008 | .006 | .005 |
| Dia. in Millimeters | 0,89 | 0,58 | 0,51 | 0,36 | 0,30 | 0,26 | 0,24 | 0,20 | 0,15 | 0,13 |

Wire sizes in decimals of an inch are shown in all tables throughout this catalog. American Steel Wire Equivalent Gauge (Formerly Washburn & Moen)

**Larger diameter wire** produces a more aggressive brushing action due to its stiffness, but it also fatigues and breaks much more quickly.

**Smaller diameter wire** can resist fatigue and breakage longer, but it produces a less aggressive and more flexible brushing action.

**To maximize brush life and reduce costs,** always use the finest wire that will accomplish the job without requiring excessive applied pressure or engagement with the brush face.

**Polyflex® Encapsulated Brushes** are suitable for extremely demanding applications which do not require a high degree of conformability. They are especially well-suited for users with the following types of requirements:

- **Extreme brushing pressure -** Encapsulation protects wires from over-flexing and extends brush life relative to conventional knot and crimped wire brushes.
- **Severe cleaning operations -** Encapsulation holds the wire tips rigidly in place and creates the most aggressive brushing action that can be achieved with a wire brush.

In order to optimize the performance of encapsulated brushes, selection of the correct elastomer is critical. The following is a description of the three types of elastomers and their performance attributes.

**Burgundy (Standard)**
General purpose elastomer; suitable for most manufacturing applications.



**Orange (Heavy-Duty)**
A more heavy-duty elastomer than burgundy; used for more demanding applications.



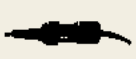
**Black (Extra Heavy-Duty)**
A heat stabilized elastomer that does not wear easily; used primarily for cleaning welds.



## Product Selection Chart:

| | Cleaning Surface Prep Roughening Weld Cleaning Remove Oxides & Rust | Surface Finishing (Functional, Aesthetic, Decorative, Satin) | Heavy Deburring | Light Deburring & Edge Blending | Deflashing |
|---|---|---|---|---|---|
| Crimped Wheels | ● ● ● | ● ● | | ● ● ● | |
| Knot Wheels | ● ● ● | | ● ● ● | | ● ● ● |
| Crimped Cups | ● | ● | | ● | |
| Knot Cups | ● | | ● | | |
| Crimped Stem-Mounted | ● ● | | | ● ● | |
| Knot Stem-Mounted | ● ● | | ● ● | | ● ● |
| Encapsulated | ● ● ● ● ● | | ● ● ● ● ● | | ● ● ● ● ● |
| Power & Hand Tube | ● | ● | | ● | |
| Miniature | ● | ● | | ● | |

## Product & Application Key

- Right Angle Grinder 
- Bench/Pedestal Grinder 
- Die Grinder 
- High Speed Pencil Grinder 
- Straight Grinder 
- Right Angle Die Grinder 
- Hand Drill/Drill Press 

# Power Brush Technical Information

## Power Brush Operating Information

### Brushing Speeds

• Power brushes, like cutting tools, operate most effectively when the speed and pressure of the operation are properly matched to the demands of the application. In most operations, the highest speed and lightest pressure will ensure the fastest brushing action and longest brush life.

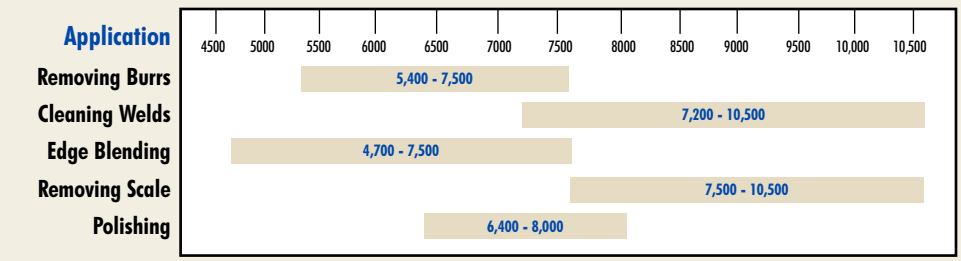
• Increasing brush speed increases the face hardness and brushing action; therefore, a fine wire brush rotating at a higher speed will often produce the same results as a coarser wire brush rotating at a slower speed. Finer wire operating at a higher speed is generally preferred and will provide a longer brush life.

• MSFS - Maximum Safe Free Speed (RPM) is the maximum speed at which the brushes may be used safely but is not necessarily the optimum speed for a given application. Operating speed should be determined by the application. When running a wire brush, a rule of thumb is to run it a "mile a minute" or a minimum of 5,000 Surface Feet Per Minute (SFPM). However, never exceed the Maximum Safe Free Speed of the brush.

• Make sure spindle size and motor of machine are large enough to accommodate the diameter of brush to be used (see table on pg. 20).

### Recommended Surface Speeds For Brushing Applications

$$SFPM = \frac{\pi \text{ Dia. (Inches)} \times RPM}{12}$$




### Table of Surface Speeds (Peripheral Speed in Ft./Min.)

| RPM | Diameter (Inches) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 15 |
| 1000 | 525 | 785 | 1,050 | 1,575 | 2,100 | 2,625 | 3,150 | 3,925 |
| 1500 | 785 | 1,175 | 1,575 | 2,350 | 3,150 | 3,925 | 4,725 | 5,900 |
| 1750 | 915 | 1,375 | 1,850 | 2,750 | 3,650 | 4,550 | 5,500 | 6,800 |
| 2500 | 1,300 | 1,950 | 2,625 | 3,925 | 5,250 | 6,550 | 7,850 | 9,825 |
| 3000 | 1,575 | 2,350 | 3,125 | 4,725 | 6,275 | 7,850 | 9,425 | 11,775 |
| 3450 | 1,800 | 2,700 | 3,600 | 5,400 | 7,200 | 9,000 | 11,000 | 13,500 |
| 4000 | 2,100 | 3,150 | 4,175 | 6,275 | 8,375 | 10,475 | – | – |
| 6000 | 3,125 | 4,700 | 6,275 | 9,425 | – | – | – | – |
| 10,000 | 5,250 | 7,850 | 10,500 | – | – | – | – | – |
| 15,000 | 7,850 | 11,775 | 15,750 | – | – | – | – | – |
| 20,000 | 10,450 | 15,700 | 20,950 | – | – | – | – | – |

**Example:** A 6" diameter wheel running at 3,450 RPM has a surface speed of 5,400 SFPM.

### Brushing Pressure

Avoid excessive pressure when using a wire brush. Excessive pressure causes over-bending of the filaments and heat build-up resulting in filament breakage, rapid dulling and reduced brush life.

Instead of greater pressure, try the following:

1. A brush with more aggressive action (increase filament diameter, decrease trim length, different brush type, i.e., knot type instead of crimped type)

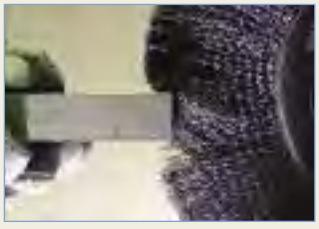
2. Higher surface speed (increase RPM or brush diameter)

Important Note: Never exceed the recommended Maximum Safe Free Speed or RPM rating of the brush.

**Correct**
**Wire Tips Doing the Work**



**Incorrect**
**Excessive Pressure Causes Wire Breakage**



## Power Brush Operating Information

### Minimum Recommended Spindle Diameter
**(from ANSI Standard B165.1)**

| Outside Dia. of Wheel Brush | Maximum Face Width of Wheel Brush | Minimum Outside Dia. of Spindle (Shaft) |
|---|---|---|
| 2" | 1/4" | 1/4" |
| 3" | 3/4" | 1/4" |
| 3" (heavy-duty) | 1" | 3/8" |
| 4" | 1" | 3/8" |
| 6" | 1-1/4" | 1/2" |
| 8" | 1-1/4" | 5/8" |
| 10" | 2" | 3/4" |
| 12" | 3" | 1" |
| 14" | 3" | 1-1/4" |
| 15" | 3" | 1-1/4" |
| 16" | 3" | 2" |

Note: These diameters are based on the wheel brush being mounted next to the supported end of the shaft rather than the unsupported end in order to minimize overhang.

### Recommended Motor Sizes

| Brush Diameter | Motor Size | RPM |
|---|---|---|
| 4" | 1/4 HP | 3,450 |
| 6" | 1/2 HP | 3,450 |
| 8" | 3/4 HP | 3,450 |
| 10" | 1 HP | 1,750 |
| 12" | 1 HP | 1,750 |
| 15" | 1-1/2 HP | 1,750 |

Note: This chart is based on 1" brush face.

### Arbor Hole Variation Table - For Weiler Industrial Grade Wheels
**If an arbor hole size other than the size listed in the product table is required, change the last digit of the Item Number as indicated in the Table.**

| Arbor Hole Diameter | Change Last Digit of Item Number to: | Arbor Hole Features |
|---|---|---|
| 1/2"-3/8" | 4 | Plastic Snap-Out Adapter |
| 5/8"-1/2" | 5 | Plastic Snap-Out Adapter |
| 5/8"-11 UNC | 6 | Threaded Nut (6", 7" & 8" Wheels Only) |
| 5/8" | 7 | 3", 4" & 6" Wheels Only |
| 3/4" | 8 | — |
| 7/8" | 0 - 11 | — |
| 1" | 0 - 12 | 1/4"*x 1/8"+ double keyway |
| 1-1/4" | 9 | 5/16"*x 5/32"+ double keyway |
| 1-1/2" | 0 - 13 | 3/8"*x 3/16"+ double keyway |
| 1-3/4" | 0 - 16 | 3/8"*x 3/16"+ double keyway |
| 2" | 0 - 14 | 1/2"*x 1/4"+ double keyway |
| 2-1/4" | 0 - 17 | 3/4"*x 3/8"+ double keyway |
| 2-1/2" | 0 - 15 | 1/2"*x 1/4"+ double keyway |

* Width of keyway + Depth of keyway

**Example:** Item Number 01228 has a listed, standard size arbor hole of 3/4". If an 1-1/4" arbor hole is desired, drop the 8 from 01228 and add 9. The Item Number becomes 01229. If a 2" arbor hole is desired, drop the 8 from 01228 and add 0-14. The Item Number becomes 01220-14.

### Self-Sharpening of Wire Wheel Brushes

When using wire wheel brushes without nuts, periodically reverse the direction of rotation to take advantage of the self-sharpening action that will result. Remove the brush from the spindle, flip the wire brush 180° and remount the brush securely.


Remove


Flip 180°


Remount Securely

## Power Brush Troubleshooting Guide

There are many variables in power brush applications. If the power brush you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's **Application Engineering Hotline at 888-299-2777.**

| Problem | Recommended Solutions |
|---|---|
| Brush works too fast | • Select a brush with longer filaments and/or lower fill density<br>• Select a brush with a smaller diameter wire<br>• Select a brush with a narrower face and/or lower fill density<br>• Select a brush with a smaller outside diameter<br>• Operate the brush at a slower RPM |
| Brush works too slowly | • Select a brush with shorter filaments and/or higher fill density<br>• Select a brush with a larger diameter wire<br>• Select a brush with a wider face and/or higher fill density<br>• Select a brush with a larger outside diameter<br>• Operate the brush at a faster RPM |
| Brushing action rolls or peens the burr over instead of removing burr | • Select a brush with a larger diameter wire<br>• Select a brush with shorter filaments and/or higher fill density<br>• Operate the brush at a faster RPM<br>• Replace the crimped wire brush with a knot wire brush |
| Finer final finish required | • Select a brush with longer filaments<br>• Select a brush with a smaller diameter wire<br>• Operate the brush at a higher RPM<br>• Replace the wire brush with a nylon abrasive brush (Nylox®) |
| Coarser final finish required | • Select a brush with shorter filaments<br>• Select a brush with a larger diameter wire<br>• Operate the brush at a slower RPM |
| Non-uniform brushing action | • Select a brush with longer filaments<br>• Select a brush with a larger diameter wire<br>• Automate the operation to reduce human variables |
| Filaments break off | • Reduce applied pressure or engagement<br>• Select a brush with a smaller diameter wire<br>• Select a brush with a lower fill density |
| Short brush life | • Reduce applied pressure or engagement<br>• Select a brush with a smaller diameter wire<br>• Select a brush with a higher fill density |




Call our Application Engineering Hotline at 888-299-APPS (2777). If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or your facility. Either way, Weiler will provide the most cost-effective solution for your specific application.

# Knot Wire Wheels with Arbor Hole

**Knot Wire Wheels with Arbor Hole -** Knot wire wheels with an arbor hole are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and bronze wire for use in a wide variety of applications.

## Applications

- Removing rust, scale and heavy corrosion
- Surface roughening and preparation
- Coating removal
- Removing excess molded rubber or plastic
- Heavy deburring

**Standard Twist Wheels - Provide heavy-duty brushing action with some flexibility; Ideal for demanding cleaning applications on somewhat irregular surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .0118<br>.014<br>.020 | 1/2"-3/8" | 20 | 3/8" | 5/8" | 1/2" | 7/16" | 25,000 | 10 | 08004<br>08014 ■<br>08024* | 08254<br>08264<br>08274 |
| 4" | .0118<br>.014<br>.020 | 1/2"-3/8" | 24 | 1/2" | 7/8" | 1/2" | 7/16" | 20,000 | 10 | 08034<br>08044 ■<br>08064 | 08284<br>08294<br>08314 |
| 4" | .014 | 5/8"-1/2" | 24 | 1/2" | 7/8" | 7/8" | 7/16" | 20,000 | 10 | 08045 | – |
| 6" | .0118<br>.014<br>.016<br>.023 | 5/8"-1/2" | 24 | 1/2" | 1-3/8" | 1-1/4" | 9/16" | 9,000 | 10 | 08075<br>08085 ■<br>08095<br>08105 | 08325<br>–<br>08345<br>– |
| 6" | .016 | 5/8"-1/2" | 30 | 5/8" | 1-1/4" | 1-1/4" | 5/8" | 9,000 | 5 | 08975 | – |
| 7" | .014 | 5/8" | 24 | 5/8" | 1-7/8" | 1-1/4" | 9/16" | 9,000 | 2 | 08835 | – |
| 8" | .0118<br>.014<br>.016<br>.023 | 5/8" | 38 | 5/8" | 1-5/8" | 2" | 1/2" | 6,000 | 2 | 08125<br>08135<br>08145<br>08155 | 08375<br>–<br>08395<br>– |
| 8" | .014 | 3/4" | 38 | 5/8" | 1-5/8" | 2" | 1/2" | 6,000 | 2 | 08138 | – |
| 10" | .014 | 3/4" | 52 | 3/4" | 1-3/4" | 2-1/2" | 3/4" | 4,500 | 2 | 08178 | – |
| 10" | .0118<br>.014<br>.016 | 1-1/4"★ | 52 | 3/4" | 1-3/4" | 2-1/2" | 3/4" | 4,500 | 2 | 08169<br>08179<br>08189 | –<br>–<br>– |
| 12" | .0118<br>.014<br>.016 | 1-1/4"★ | 52 | 3/4" | 2-3/4" | 2-1/2" | 11/16" | 3,600 | 1 | 08199<br>08209<br>08219 | –<br>–<br>– |
| 12" | .014 | 2"◆ | 52 | 3/4" | 2-3/4" | 2-1/2" | 11/16" | 3,600 | 1 | 08200-14 | – |
| 12" | .020 | 1-1/4"★ | 56 | 5/8" | 2-3/4" | 3" | 13/16" | 4,500 | 2 | 09719 | |
| 12" | .023 | 2"◆ | 66 | 3/4" | 2-1/4" | 3" | 13/16" | 5,000 | 2 | 09870 | – |
| 15" | .016 | 1-1/4"★ | 52 | 7/8" | 4-1/4" | 2-1/2" | 3/4" | 3,600 | 2 | 08249 | – |

★ 5/16" x 5/32" Double Keyway ◆ 1/2" x 1/4" Double Keyway
*Available in non-sparking bronze wire, see page 57 for details.
■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.

**Vortec Pro® Standard Twist Wheels - Provide an aggressive brushing action for general-purpose surface cleaning applications.**

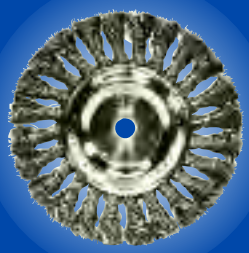
| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 3" | .014" Fine<br>.014" Fine | Carbon<br>Stainless | 1/2"-3/8" | Wide | 25,000 | –<br>– | 36290<br>36291 |
| 4" | .014" Fine<br>.014" Fine<br>.020" Coarse | Carbon<br>Stainless<br>Carbon | 1/2"-3/8" | Wide | 20,000 | 36026<br>–<br>– | 36226<br>36293<br>36294 |
| 6" | .014" Fine<br>.023" Coarse | Carbon | 5/8"-1/2" | Wide | 9,000 | 36027<br>– | 36227<br>36278 |
| 8" | .014" Fine<br>.023" Coarse | Carbon | 5/8" | Wide | 6,000 | 36028<br>– | 36228<br>36279 |



Removing rubber coating from a hydraulic hose.



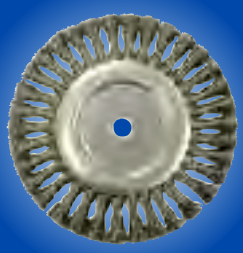
08014



08085



08189

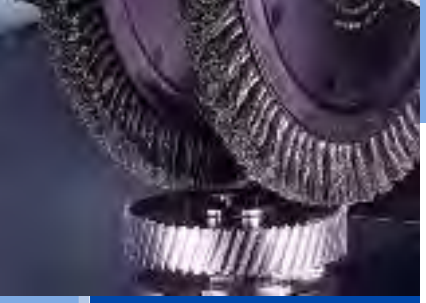


36228

NOTE

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 20.

# Knot Wire Wheels with Arbor Hole



Automotive gear deburring using heavy-duty knot wheel brushes.



08339



09020



09480



94000

## Standard Twist Wheels - High Density & Extra High Density - Engineered for maximum performance in production applications; for use on automated equipment such as dedicated gear deburring machines.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|
| **80 Knots** | | | | | | | | |
| 14" | .0118 | 1-1/4"★ | 3/4" | 2-1/2" | 5/8" | 5,000 | 2 | 08309 |
| | .0118 | 2"◆ | | | | | | 08300 |
| | .014 | 1-1/4"★ | | | | | | 08319 |
| | .014 | 2"◆ | | | | | | 08310 |
| | .020 | 1-1/4"★ | | | | | | 08339 |
| | .020 | 2"◆ | | | | | | 08330 |
| 15" | .0118 | 1-1/4"★ | 3/4" | 3" | 5/8" | 5,000 | 2 | 09969 |
| | .0118 | 2"◆ | | | | | | 09960 |
| | .014 | 1-1/4"★ | | | | | | 09989 |
| | .014 | 2"◆ | | | | | | 09980 |
| | .020 | 1-1/4"★ | | | | | | 09999 |
| | .020 | 2"◆ | | | | | | 09990 |
| **90 Knots** | | | | | | | | |
| 14" | .014 | 2"◆ | 3/4" | 1-1/2" | 5/8" | 5,000 | 2 | 09020* |
| | .014 | 1-1/4"★ | | | | | | 09029* |
| | .016 | 2"◆ | | | | | | 09790 |
| | .016 | 1-1/4"★ | | | | | | 09799 |
| | .020 | 2"◆ | | | | | | 09800 |
| | .020 | 1-1/4"★ | | | | | | 09809 |
| | .020 | 2"◆ | | | | | | 09040* |
| | .020 | 1-1/4"★ | | | | | | 09049* |
| 15" | .020 | 2"◆ | 3/4" | 2" | 5/8" | 5,000 | 2 | 09840 |
| | .020 | 2"◆ | | | | | | 09080* |
| | .020 | 1-1/4"★ | | | | | | 09089* |

★ 5/16" x 5/32" Double Keyway
◆ 1/2" x 1/4" Double Keyway
* Economy

## Standard Twist Wheels - Two Section - Provide heavy-duty brushing action with some flexibility; feature a double row of knotted wire for a wider brush face.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|---|
| 3" | .0118 | 1/2"-3/8" | 40 | 3/4" | 5/8" | 3/4" | 22,000 | 5 | 09104 |
| 4" | .0118 | 1/2"-3/8" | 48 | 3/4" | 7/8" | 3/4" | 20,000 | 5 | 09134 |
| 6" | .0118 | 2" | 60 | 7/8" | 1-3/8" | 7/8" | 8,000 | 5 | 09160 |
| | .016 | | | | | | | | 09180 |
| 8" | .0118 | 2" | 76 | 1" | 1-5/8" | 1" | 6,000 | 1 | 09410 |
| | .016 | | | | | | | | 09430 |
| | .023 | | | | | | | | 09440 |
| 10" | .0118 | 2" | 104 | 1-1/4" | 1-3/4" | 1-1/4" | 4,500 | 1 | 09460 |
| | .016 | | | | | | | | 09480 |
| | .023 | | | | | | | | 09490 |
| 12" | .0118 | 2" | 104 | 1-1/4" | 2-3/4" | 1-1/4" | 3,600 | 1 | 09510 |
| | .016 | | | | | | | | 09530 |
| | .023 | | | | | | | | 09540 |

See Metal Adapters on page 31 for brushes with 2" arbor holes.

## Standard Twist Wheels - Four Section - Featuring four rows of knotted wire; for use in automated cleaning processes such as removing light mill scale from metal rod and wire.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 12" | .0118 | 2" | 208 | 2" | 2-3/4" | 1-3/4" | 3,600 | 4 | 94098 |
| | .014 | | | | | | | | 94000 |

See Metal Adapters on page 31 for brushes with 2" arbor holes.

# Knot Wire Wheels with Arbor Hole

**Cable Twist Wheels - Provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and coating removal applications on relatively smooth surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 1/2"-3/8" | 24 | 1/4" | 7/8" | 1/2" | 7/16" | 20,000 | 10 | 08534 | – |
| 6" | .023 | 5/8"-1/2" | 24 | 3/8" | 1-3/8" | 1-1/4" | 9/16" | 9,000 | 10 | 08565 | 08695* |
| 8" | .023 | 5/8" | 38 | 1/2" | 1-5/8" | 2" | 1/2" | 6,000 | 2 | 08615 | – |
| 10" | .023 | 3/4"<br>1-1/4"★ | 52 | 1/2" | 1-3/4" | 2-1/2" | 3/4" | 4,500 | 2 | 08878<br>08879 | –<br>– |
| 12" | .023 | 1-1/4"★ | 52 | 7/16" | 2-3/4" | 3" | 3/4" | 3,600 | 2 | 09379 | – |

If a different arbor hole is required (than listed) refer to the Arbor Hole Table on page 20.
★ 5/16" x 5/32" Double Keyway *Standard Pack 2

**Joint & Crack Cleaning Wheels - Featuring heavy-duty construction and an extra long trim length for cleaning expansion joints and cracks in concrete and asphalt; for use on walk-behind machines.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 10" | .035 | 1" with two drive holes* | 38 | 3/8" | 2-5/8" | 1/2" | 5,000 | 2 | 94199 |
| 12" | .035 | 1" with two drive holes* | 38 | 3/8" | 3-5/8" | 1/2" | 5,000 | 2 | 94224 |
| 12" | .035 | 1" with two drive holes* | 52 | 3/8" | 2-3/4" | 3/4" | 5,000 | 2 | 94026 |

* Drive holes are 3/8" diameter with 1/4" x 1/8" double keyway.

**Adapter - For mounting Joint & Crack Cleaning Wheels onto a 20mm arbor.**

| For Brush Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1" | 20mm | 10 | 04455 |

**Cable Twist Wheel - Four Section - Featuring four rows of tightly knotted wire; for use in demanding automated applications such as cleaning the OD of drill pipe and other oilfield tubular goods.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|---|
| 10" | .023 | 2" | 208 | 1-3/4" | 1-3/4" | 2" | 1-7/8" | 4,500 | 1 | 94008 |

**DID YOU KNOW?**

In addition to the products featured in this catalog, Weiler can custom-design brushes to meet your specific needs.



Cleaning a crack on an airport runway prior to filling.



08534



94224



04455



94008

# Knot Wire Wheels with Nut



Prepping a machine guard for on-site welding and repair.

**Knot Wire Wheels with Nut -** Knot wire wheels with a threaded nut are intended for use primarily on small and large right angle grinders. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and bronze wire for use in a wide variety of applications.

## Applications

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting

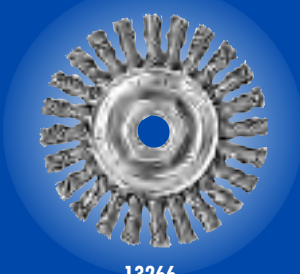


13106

**Standard Twist Wheels - Provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .014 | M10 x 1.25 | 20 | 3/8" | 5/8" | – | 7/16" | 25,000 | 5 | 13201 | 13208 |
| 4" | .014 | M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>1/2"-13 UNC<br>5/8"-11 UNC | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 5 | 13100<br>13101<br>13102<br>13103<br>13105<br>13106 ■ | 13107<br>13108<br>13109<br>13110<br>–<br>13113 ■ |
| 4" | .020 | M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>1/2"-13 UNC<br>5/8"-11 UNC | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 5 | 13114<br>13115<br>13116<br>13117<br>13119<br>13120* | –<br>–<br>–<br>–<br>–<br>– |
| 6" | .016<br>.023 | 5/8"-11 UNC | 24 | 1/2" | 1-3/8" | – | 9/16" | 9,000 | 2<br>5 | –<br>08106 | 08346<br>– |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.
* Available in non-sparking bronze wire, see page 57 for details.



13266

**Vortec Pro® Standard Twist Wheels - Provide an aggressive brushing action for general purpose deburring, cleaning, and surface preparation applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .014" Coarse | Carbon<br>Stainless<br>Carbon<br>Carbon<br>Carbon | 5/8"-11<br>5/8"-11<br>M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0 | Wide | 20,000 | 36012<br>36013<br>36015<br>36016<br>36017 | 36212<br>36213<br>36215<br>36216<br>36217 |
| 6" | .025" Extra Coarse | Carbon | 5/8"-11 | Wide | 11,000 | 36024 | 36224 |

**Cable Twist Wheels - Provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface preparation applications on relatively smooth surfaces.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | M10 x 1.25<br>M10 x 1.50<br>5/8"-11 UNC | 24 | 1/4" | 7/8" | 1/2" | 7/16" | 20,000 | 5 | 13261<br>–<br>13266 ■ | –<br>13272<br>13276 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.



36055

**Vortec Pro® Cable Twist Wheels - Provide the most aggressive brushing action for general purpose cleaning and surface preparation applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .020" Coarse | Carbon | 5/8"-11<br>M10 x 1.50<br>M10 x 1.25 | Medium | 20,000 | 36055<br>36057<br>36058 | 36255<br>36257<br>36258 |

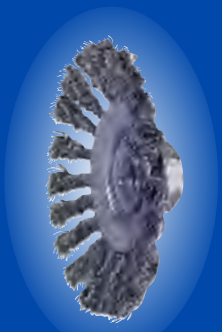
# Knot Wire Wheels with Nut or Stem

**Standard Twist Bevel Brushes - Saucer-shaped radial wheels which provide a heavy-duty brushing action with some flexibility; ideal for cleaning fillet welds and into corners.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 4" | .014 | M10 x 1.25<br>M10 x 1.50<br>5/8"-11 UNC | 20 | 3/8" | 3/4" | 12,500 | 1 | 13401<br>13402<br>13406 | –<br>13412<br>13416 |
| 4" | .020 | M14 x 2.0<br>5/8"-11 UNC | 20 | 3/8" | 3/4" | 12,500 | 1 | 13423<br>13426 | –<br>13436 |
| 4-1/2" | .014 | 5/8"-11 UNC | 20 | 3/8" | 1" | 12,500 | 1 | 13456 | 13466 |
| 4-1/2" | .020 | 5/8"-11 UNC | 20 | 3/8" | 1" | 12,500 | 1 | 13476 | 13486 |



Cleaning a corner weld with a bevel brush.



13456

**Knot Wire Wheels with Stem -** Knot wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on high-speed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's individual knot hole construction, these radial wheels are available in heat-treated steel and Type 302 stainless steel wire.

## Applications

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting

**Standard Twist Wheels - Permanently mounted on a 1/4" stem to provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.**

| Dia. | Wire Size | No. of Knots | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Steel | Stainless |
| 3-1/4" | .0118<br>.014<br>.020 | 20 | 3/8" | 5/8" | 25,000 | 5 | 17680<br>17681<br>17682 | –<br>17684<br>– |
| 4" | .0118<br>.014<br>.020 | 24 | 1/2" | 7/8" | 20,000 | 5 | 17686<br>17687<br>17689 | –<br>17691<br>– |



17681

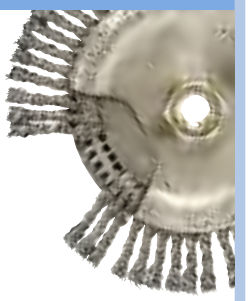
**DID YOU KNOW?**

In a year, we use 240,000 miles of our most popular wire sizes. The circumference of the Earth is 24,901 miles, so you can circle the Earth 9.6 times. Or, you can go to the moon but not make it back. The distance to the moon is 238,857 miles.

# Weld Cleaning Brushes



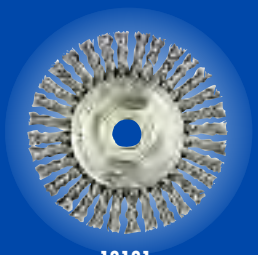
Removing weld slag before the next weld pass.



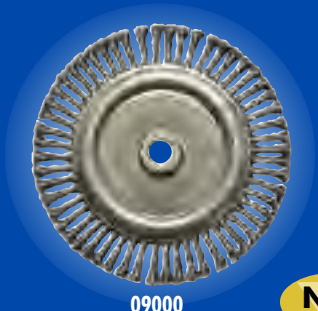
**Made in the U.S.A.,** the performance-engineered construction of Weiler's stringer bead wheels makes them the most effective weld cleaning tools for the most demanding users.

Identifiable by their gold nuts, our premium weld cleaning brushes are designed and manufactured to the most stringent quality standards in the industry. Weiler stringer bead wheels utilize the highest quality wire available and feature a twist that puts all of the sharp tips at the very end of the knots, making them the fastest, most aggressive weld cleaning tools on the market.

For example, the construction of Weiler's original Roughneck® brush virtually eliminates knot movement resulting in the most effective cleaning action, smoothest operation, and longest wheel life. Offered in a variety of widths for efficient use in inter-pass weld cleaning operations, our entire line of cleaning brushes excel at removing slag, spatter, and oxidation without damaging the filler material. They are engineered to maximize your efficiency and minimize your costs.

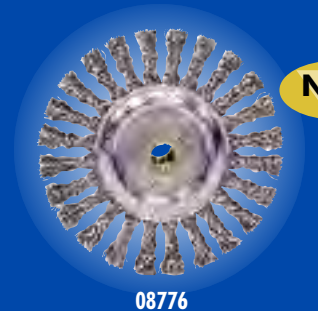


13131



09000

New!



08776

New!



35800

## Roughneck® Stringer Bead Wheels - The standard for high-performance weld cleaning brushes. Narrow face brushes are suitable for cleaning root and hot passes and reaching into corners; wider face wheels can be used for cleaning filler and cap passes as well as for other surface prep and cleaning applications.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | | |
| 4" | .020 | 1/2"-3/8"<br>M10 x 1.25<br>M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>1/2"-13 UNC<br>5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 13124<br>13125 ■<br>13126<br>13127<br>13128<br>13130<br>13131 ■ | 08954*<br>13132<br>13133<br>13134<br>13135<br>13137<br>13138 ■ |
| 4-1/2" | .020 | 5/8"-11 UNC<br>M14 x 2.0<br>7/8" | 38 | 3/16" | 13/16" | 3/8" | 12,500 | 5 | 13232<br>13233<br>13234 | 13238<br>13239<br>13249 |
| 5" | .020<br>.020 | 5/8"-11 UNC<br>7/8" | 38<br>38 | 3/16"<br>3/16" | 7/8" | 3/8" | 12,500 | 5 | 08756<br>08750 | 08806<br>– |
| 6" | .020<br>.020<br>.020 | 5/8"-11 UNC<br>5/8"-11 UNC<br>5/8"-11 UNC | 48<br>38<br>56 | 3/16"<br>3/16"<br>3/16" | 1-1/8"<br>1-3/8"<br>1-1/8" | 3/8"<br>3/8"<br>7/16" | 12,500 | 10 | 08766†<br>–<br>09400 ■ | –<br>08786†•<br>09500 |
| 6-7/8" | .020 | 5/8"-11 UNC | 56<br>76 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 09000 ■<br>09100 | 09200<br>– |
| **Filler Pass Brushes** | | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 09856 | 09866 |
| 6" | .023<br>.023<br>.023<br>.023 | 5/8"-1/2"<br>5/8"-11 UNC<br>5/8"-11 UNC<br>5/8"-11 UNC | 24<br>24<br>30<br>30 | 1/2"<br>1/2"<br>1/2"<br>5/16" | 1-3/8"<br>1-3/8"<br>1-1/4"<br>1-3/8" | 9/16"<br>9/16"<br>5/8"<br>1/2" | 12,500<br>12,500<br>12,500<br>12,500 | 10<br>10<br>10<br>10 | 08775<br>08776 ■<br>08916<br>09386 | –<br>08796•<br>08926•<br>09396• |

† Light Duty • Standard Pack 5 * Standard Pack 10

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page170 for details.

## Polyflex™ Encapsulated Stringer Bead Wheels - Black Elastomer* - Feature a heat-stabilized encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life; suitable for cleaning hot welds.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 35800 |
| 6" | .014 | 5/8"-11 UNC | - | 3/16" | 1-7/16" | 3/8" | 9,000 | 5 | 35206 ▲ |
| 6-7/8" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 10 | 35600 |
| 7" | .014 | 5/8"-11 UNC | - | 3/16" | 1-15/16" | 3/8" | 9,000 | 5 | 35216 ▲ |

* See Elastomer Color Code Chart on page 18 for more information.

▲ Crimped wire

# Weld Cleaning Brushes

**Featuring a new patent-pending design,** the Dually line of cleaning brushes is the choice for the most demanding inter-pass welding applications such as pipeline construction, boiler and pressure vessel fabrication, and shipbuilding.

Welders' assistants on the pipeline were among the first to realize the value in periodically switching the mounting position of a wheel in order to maintain cleaning speed and effectiveness. The Dually utilizes a nut design that features a hex on each side of the wheel which is high enough to insure adequate tool clearance in either mounting position. Now all users can realize the benefits of the "Flip" without compromising safety by removing the guard from their grinder.




CHECK OUT THE VIDEO

**New!** **Dually® Stringer Bead Wheels - Feature a dual-hex nut design* that simplifies periodic flipping of the wheel for maximum cleaning action, long life, and safer use.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| **Root Pass Brushes** | | | | | | | | | | |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 12,500 | 5 | 79801 | 79811 |
| 5" | .020 | 5/8"-11 UNC | 38 | 3/16" | 7/8" | 3/8" | 12,500 | 5 | 79802 | 79812 |
| 6" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 12,500 | 5 | 79805 | 79815 |
| 7" | .020 | 5/8"-11 UNC | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 5 | 79800 | 79810 |
| **Filler Pass Brushes** | | | | | | | | | | |
| 5" | .023 | 5/8"-11 UNC | 24 | 1/2" | 7/8" | 3/8" | 12,500 | 5 | 79803 | 79813 |
| 6" | .023 | 5/8"-11 UNC | 30 | 1/2" | 1-1/4" | 5/8" | 12,500 | 5 | 79804 | 79814 |

**New!** **HFR™ Stringer Bead Wheels - Feature a patent-pending film coating to minimize wire loss when used within recommended operating guidelines for hot-pass weld cleaning in FME areas of nuclear power plants. Weiler HFR Brushes have been engineered and tested to meet the requirements for a High Filament Retention power brush as defined by the Electrical Power Research Institute.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 13,500 | 1 | 13381 | 13388 |

**Vortec Pro® Stringer Bead Wheels - Manufactured using similar product construction and to the same exacting standards as other Weiler weld cleaning brushes; they have been engineered for cost-effective use in less demanding applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 20,000 | 36018 | 36218 |
| | | Carbon | 5/8"-11 | | | – | 36308* |
| | | Stainless | 5/8"-11 | | | 36019 | 36219 |
| | | Carbon | M10 x 1.25 | | | 36021 | 36221 |
| | | Carbon | M10 x 1.50 | | | 36022 | 36222 |
| | | Carbon | M14 x 2.0 | | | 36023 | 36223 |
| 5" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 12,500 | – | 36295 |
| | | Stainless | | | | – | 36296 |
| 6" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 12,500 | 36025 | 36225 |
| | | Carbon | | | | – | 36307* |
| 6-7/8" | .020" Coarse | Carbon | 5/8"-11 | Narrow | 9,000 | – | 36297 |
| | | Stainless | | | | – | 36298 |

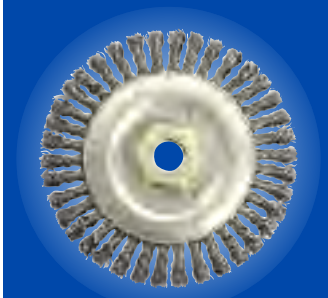
*Light Duty

**DID YOU KNOW?** Weiler's Cable Twist Wheels were used by NASA on its booster rockets.

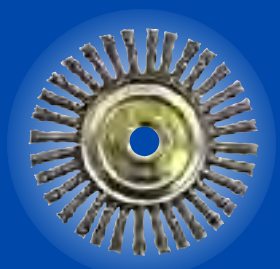


Removing slag and spatter before the cap pass.

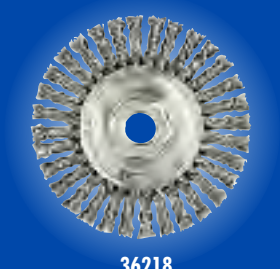




79802



13381



36218

# Crimped Wire Wheels with Arbor Hole



Removing heat discoloration from a stainless steel canister.

**Crimped Wire Wheels with Arbor Hole -** Are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and brass wire for use in a wide variety of applications.

## Applications

- Removing rust and light corrosion
- Paint removal and surface cleaning
- Decorative finishing
- Removing heat discoloration
- Light deburring

**Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.**



00184



01238

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .006 | 1/2"-3/8" | 7/16" | 1/2" | 3/4" | 7/16" | 12,500 | 2 | 00204 | 00244 |
| | .008 | | | | | | | | 00214 | – |
| | .0118 | | | | | | | | 00234 | 00264 |
| | .014 | | | | | | | | 00274 | – |
| 4" | .006 | 1/2"-3/8" | 1/2" | 7/8" | 3/4" | 7/16" | 12,500 | 2 | 00104 | 00154 |
| | .006 | 5/8"-1/2" | | | | | | | 00105 | – |
| | .008 | 1/2"-3/8" | | | | | | | 00114 | – |
| | .0095 | | | | | | | | 00124 | – |
| | .0118 | | | | | | | | 00134 | 00184 |
| | .0118 | 5/8"-1/2" | | | | | | | 00135 | – |
| | .014 | 1/2"-3/8" | | | | | | | 00144 | – |
| 6" | .006 | 5/8"-1/2" | 3/4" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 10 | 01035 ▲ | 01675* |
| | .008 | | | | | | | | 01045 | – |
| | .008 | 1-1/4"★ | | | | | | | 01049 | – |
| | .0104 | 5/8"-1/2" | | | | | | | 01055 | 01695* |
| | .0118 | | | | | | | | 01065 ▲ | 01705* |
| | .014 | | | | | | | | 01075 ■ | – |
| 6" | .0118 | 3/4" | 3/4" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 10 | 01068 | – |
| 8" | .006 | 5/8" | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 2 | 01135 | 01775 |
| | .008 | | | | | | | | 01145 | – |
| | .0104 | | | | | | | | 01155 | 01795 |
| | .0118 | | | | | | | | 01165 | 01805 |
| | .014 | | | | | | | | 01175 ■ | – |
| 8" | .006 | 3/4" | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 2 | 01138 | – |
| | .008 | | | | | | | | 01148 | – |
| | .0104 | | | | | | | | 01158 | – |
| | .0118 | | | | | | | | 01168 | – |
| | .014 | | | | | | | | 01178 | – |
| 8" | .0118 | 1-1/4"★ | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 2 | – | 01809 |
| | .014 | | | | | | | | 01179 | |
| 10" | .006 | 3/4" | 3/4" | 2-1/2" | 2" | 5/8" | 4,000 | 2 | 01228 | – |
| | .0104 | | | | | | | | 01238 | – |
| | .0118 | | | | | | | | 01248 | – |
| | .014 | | | | | | | | 01258 | 01898 |
| | .014 | 1" • | | | | | | | 01250-12 | – |
| 10" | .014 | 1-1/4"★ | 3/4" | 2-1/2" | 2" | 5/8" | 4,000 | 2 | 01259 | – |
| 12" | .006 | 1-1/4"★ | 3/4" | 2-15/16" | 2-1/2" | 1/2" | 3,000 | 2 | 01299 | 01939 |
| | .0104 | | | | | | | | 01309 | 01949 |
| | .0118 | | | | | | | | 01319 | – |
| | .014 | | | | | | | | 01329 | – |
| 12" | .014 | 2"◆ | 3/4" | 2-15/16" | 2-1/2" | 1/2" | 3,000 | 2 | 01320-14 | – |
| 15" | .0118 | 1-1/4"★ | 3/4" | 4-7/16" | 2-1/2" | 1/2" | 3,000 | 2 | 01339 | – |
| | .014 | | | | | | | | 01349 | – |

◆ 1/2" x 1/4" Double Keyway ★5/16" x 5/32" Double Keyway • 1/4" x 1/8" Double Keyway

▲ Available in non-sparking bronze wire, see page 57 for details. * Standard Pack 2

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

NOTE

**If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 20.**

DID YOU KNOW?

Crimped wire narrow face wheels can be made with nylon or abrasive nylon fill, up to 20" in diameter.

# Crimped Wire Wheels with Arbor Hole

**Vortec Pro® Crimped Wire Wheels -** Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications.

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .014" Coarse | Carbon | 1/2"-3/8" | Narrow | 6,000 | 36062 | 36262 |
| 6" | .008" Fine | Carbon | 5/8"-1/2" | Narrow | 6,000 | 36002 | 36202 |
| | .014" Coarse | Carbon | | Narrow | | 36000 | 36200 |
| | .014" Coarse | Stainless | | Narrow | | 36001 | 36201 |
| 8" | .014" Coarse | Carbon | 5/8" | Narrow | 6,000 | 36005 | 36205 |

**Polyflex™ Encapsulated Crimped Wire Wheels -** Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .0095 | 1/2"-3/8" | 3/8" | 7/8" | 3/4" | 7/16" | 6,000 | 2 | 35084 |
| 6" | .0104 | 5/8"-1/2" | 1/2" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 2 | 35105 |
| | .014 | | | | | | | | 35117 |
| 8" | .014 | 5/8" | 1/2" | 2-1/16" | 1-1/2" | 1/2" | 6,000 | 2 | 35135 |
| Orange Elastomer* - Heavy-Duty | | | | | | | | | |
| 6" | .0104 | 5/8"-1/2" | 1/2" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 2 | 35520 |

* See Elastomer Color Code chart on page 18 for more information.

**Bench Grinder Wheels -** Feature a shorter trim length, narrower face width, and the same durable construction as other Weiler crimped wire wheels; designed specifically for use on small bench grinders for reduced flaring and long life in a broad range of applications.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 6" | .006 | 5/8"-1/2" | 1/2" | 1-1/16" | 1-1/4" | 7/16" | 6,000 | 10 | 01085 |
| | .008 | | | | | | | | 01095 |
| | .0118 | | | | | | | | 01115 |
| | .014 | | | | | | | | 01125 |

**Crimped Wire Wheels - High Density -** Feature an increased fill density for greater brushing action, more consistent performance, and longer life in the most demanding applications requiring the flexibility of a crimped wire wheel.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-1/4" | .0118 | 5/8"-1/2" | 3/4" | 5/8" | 3/4" | 9/16" | 6,000 | 1 | 01501 | – |
| | .014 | | | | | | | | 01502 | |
| 6" | .008 | 5/8"-1/2" | 3/4" | 1-1/8" | 1" | 9/16" | 6,000 | 1 | 01503 | – |
| | .0118 | | | | | | | | 01504 | 01508 |
| | .014 | | | | | | | | 01505 | 01509 |
| | .020 | | | | | | | | 01506 | – |
| 7" | .014 | 5/8" | 7/8" | 1-5/8" | 1" | 9/16" | 6,000 | 1 | 01511 | – |
| 8" | .006 | 5/8" | 7/8" | 1-1/2" | 1-1/4" | 11/16" | 4,500 | 1 | 01512 | – |
| | .0104 | | | | | | | | 01513 | – |
| | .0118 | | | | | | | | 01514 | – |
| | .014 | | | | | | | | 01515 | – |
| 10" | .0118 | 3/4" | 1" | 2-1/2" | 1-1/4" | 11/16" | 4,500 | 2 | 01517 | – |
| | .014 | | | | | | | | 01518 | – |
| 12" | .014 | 1-1/4"★ | 1-1/8" | 3-1/8" | 2" | 3/4" | 3,000 | 1 | 01521 | – |

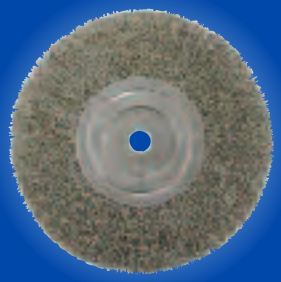
★5/16" x 5/32" Double Keyway

NOTE

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 20.



Removing heavy break-off burrs from saw-cut tube.



36205



35105



01115



01515

# Crimped Wire Wheels with Arbor Hole



Cleaning an exhaust manifold for a small gasoline engine.

## Crimped Wire Wheels - Medium Face - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 4-1/2" | .0118 | 2" | 15/16" | 3/4" | 7/8" | 6,000 | 1 | 06020 | – |
| 6" | .006 | 2" | 1" | 1-1/8" | 15/16" | 6,000 | 1 | 06040 | – |
| | .008 | | | | | | | 06050 | – |
| | .0104 | | | | | | | 06060 | 06440 |
| | .0118 | | | | | | | 06070 | 06450 |
| | .014 | | | | | | | 06080 | – |
| 8" | .006 | 2" | 1" | 1-3/8" | 1" | 4,500 | 1 | 06090 | – |
| | .0104 | | | | | | | 06100 | – |
| | .0118 | | | | | | | 06110 | 06490 |
| | .014 | | | | | | | 06120 | – |
| | .020 | | | | | | | 06620 | – |
| 10" | .0118 | 2"◆ | 1-1/8" | 2" | 1" | 3,600 | 1 | 06150 | 06530 |
| | .014 | | | | | | | 06160 | – |
| | .020 | | | | | | | 06170 | – |
| 12" | .0118 | 2"◆ | 1-1/4" | 3" | 1" | 3,600 | 1 | 06180 | – |
| | .014 | | | | | | | 06190 | – |
| | .020 | | | | | | | 06200 | – |

◆ 1/2" x 1/4" Double Keyway

For arbor hole reducing adapters, see Metal Adapter Table below.



06080



06150

## Vortec Pro® Crimped Wire Wheels - Medium Face - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications; feature a wider face width to cover more area.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|---|
| 6" | .014 Coarse | 5/8"-1/2" | 5/8" | 1-1/16" | 1/2" | 6,000 | – | 02325 |
| | | | 3/4" | 1-7/16" | 7/16" | | 36003 | 36203 |
| 7" | .014 Coarse | 5/8" | 3/4" | 1-9/16" | 1/2" | 6,000 | – | 02335 |



02325

## Metal Adapters - For Medium & Wide Face Brushes. Used in pairs & priced per pair.

| For Brush Arbor Hole Size | Adapted Arbor Hole Size | Item Number |
|---|---|---|
| 2" | 1/2" | 03809 |
| | 5/8" | 03810 |
| | 3/4" | 03811 |
| | 7/8" | 03824 |
| | 1" | 03812 |
| | 1-1/4" | 03813 |
| | 1-1/2" | 03814 |



03809

# Crimped Wire Wheels with Arbor Hole

**Crimped Wire Wheels - Wide Face - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|
| 4-1/2" | .006 | 2" | 1-1/4" | 3/4" | 7/8" | 6,000 | 1 | 03000 | – |
| | .0118 | | | | | | | 03010 | – |
| | .014 | | | | | | | 03020 | – |
| 6" | .006 | 2" | 1-1/4" | 1-1/8" | 1" | 6,000 | 1 | 03030 | 03480 |
| | .008 | | | | | | | 03040 | – |
| | .0104 | | | | | | | 03050 | – |
| | .0118 | | | | | | | 03060 | 03510 |
| | .014 | | | | | | | 03070 | 03520 |
| 7" | .0118 | 2" | 1-1/4" | 1-5/8" | 1" | 6,000 | 1 | 03090 | – |
| | .014 | | | | | | | 03100 | – |
| 8" | .006 | 2" | 1-1/2" | 1-3/8" | 1-3/8" | 4,500 | 1 | 03110 | – |
| | .0095 | | | | | | | 03130 | – |
| | .0118 | | | | | | | 03140 | 03590 |
| | .014 | | | | | | | 03150 | – |
| | .020 | | | | | | | 03160 | – |
| 10" | .0104 | 2" | 2" | 1-7/8" | 1-5/8" | 4,000 | 1 | 03180 | – |
| | .0118 | | | | | | | 03190 | – |
| | .014 | | | | | | | 03200 | – |
| | .020 | | | | | | | 03210 | – |
| 12" | .0118 | 2" | 2" | 2-7/8" | 1-9/16" | 3,000 | 1 | 03220 | – |
| | .014 | | | | | | | 03230 | 03680 |
| | .020 | | | | 1-11/16" | | | 03240 | – |

For arbor hole reducing adapters, see Metal Adapter Table on page 31.

**Vortec Pro® Crimped Wire Wheels - Wide Face - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications; feature a wider face width to cover more area.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|---|
| 6" | .014" Coarse | 5/8"-1/2" | 7/8" | 1-1/8" | 7/8" | 6,000 | – | 06645 |
| | | | | | | | 36004 | 36204 |
| 7" | .014" Coarse | 5/8" | 7/8" | 1-5/8" | 7/8" | 6,000 | – | 06655 |
| 8" | .014" Coarse | 5/8" | 1" | 1-3/8" | 1" | 4,000 | 36006 | 36206 |
| 10" | .014" Coarse | 3/4" | 1-1/8" | 2" | 1" | 3,600 | 36065 | 36265 |

**Polyflex™ Encapsulated Crimped Wire Wheel - Wide Face - Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life. Wider face width covers more area.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 6" | .0118 | 2" | 1" | 1-1/8" | 1" | 6,000 | 1 | 35160 |

* See Elastomer Color Code Chart on page 18 for more information.

For arbor hole reducing adapters, see Metal Adapter Table on page 31.

**Crimped Wire Wheels - Extra High Density - Engineered for maximum performance in production processes requiring the flexibility of a crimped wire wheel; for use on automated equipment for applications such as gear deburring, flash removal, and rubber buffing.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 12" | .006 | 2"◆ | 1-1/8" | 1-5/8" | 3/4" | 3,000 | 1 | 01531 |
| | .0118 | | | | | | | 01532 |

◆ 1/2" x 1/4" Double Keyway



Removing carbon build-up from an automotive valve.



03110



06655



35160



01533

# Crimped Wire Wheels with Arbor Hole

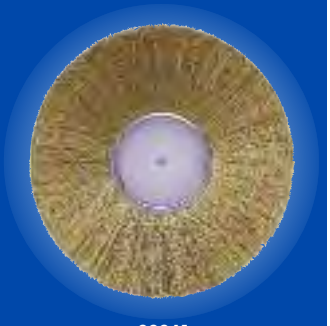


Producing an antique finish on a brass door knob rose.

**Plater's Wire Wheels - Feature a longer trim length and very small diameter fill material for producing fine satin and antique finishes on non-ferrous and precious metals.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Number of Rows | Max. RPM | Std. Pack | Item Number Brass* |
|---|---|---|---|---|---|---|---|---|
| 3" | .003 | 1/4" | 1/2" | 1" | 2 | 6,000 | 12 | 22021 |
| 4" | .004 | 1/4" | 1" | 1-1/4" | 4 | 4,000 | 5 | 22061 |
| 6" | .005 | 1/4" | 1" | 1-7/8" | 4 | 3,600 | 1 | 22241 |

* Also available in carbon steel, stainless steel and nickel silver wire.



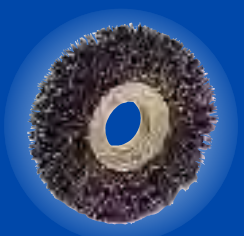
22241

## Small Diameter Crimped Wire Wheels -

Identifiable by their copper center, Weiler's small diameter crimped wire wheels feature a plain arbor hole for use on a variety of portable tools and stationary machines. Featuring Weiler's solid ring construction for high-speed use, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and brass wire.

### Applications

- Cleaning threads
- Removing rust and light corrosion
- Cleaning and finishing ID's and recessed areas
- Wire stripping
- Light deburring
- Cleaning boiler tubes and internal passages
- Removing carbon build-up and deposits



15433

**Small Diameter Wheels - Provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|
| 1" | .003 | 1/4" | 3/16" | 1/4" | 20,000 | 10 | – | 16461 |
| | .005 | | | | | | – | 16471 |
| | .006 | | | | | | 15071 | – |
| 1-1/4" | .003 | 1/4" | 1/4" | 3/8" | 20,000 | 10 | 15101 | – |
| | .006 | | | | | | 15111 | 16511 |
| | .008 | | | | | | – | 16521 |
| | .008 | 3/8" | | 5/16" | | | 15732 | – |
| 1-3/8" | .006 | 1/4" | 1/4" | 3/8" | 20,000 | 10 | 15131 | – |
| | .008 | 1/4" | | | | | 15141 | – |
| | .008 | 3/8" | | | | | 15272 | – |
| | .0104 | 1/4" | | | | | 15151 | – |
| 1-1/2" | .006 | 3/8" | 1/4" | 7/16" | 20,000 | 10 | 15302 ▲ | 16702 |
| | .008 | 3/8" | | 7/16" | | | 15312 | 16712 |
| | .008 | 1/2" | | 1/4" | | | 15753 | – |
| | .0104 | 3/8" | | 7/16" | | | 15322 | – |
| | .0118 | 3/8" | | 7/16" | | | 15332 | – |
| | .014 | 3/8" | | 7/16" | | | 15762 | – |
| 2" | .003 | 1/4" | 3/8" | 3/4" | 20,000 | 10 | 99307 | – |
| | .003 | 1/2" | | 1/2" | | | 15863 | 15973 |
| | .005 | 1/2" | | | | | – | 16833 |
| | .006 | 1/2" | | | | | 15433 ▲ | – |
| | .008 | 1/2" | | | | | 15443 | 16843 |
| | .0104 | 1/2" | | | | | 15453 | 16853 |
| | .0118 | 1/2"-3/8" | | | | | 15463 ▲ | 16863 |
| | .0118 | 9/16" | | | | | 15770 | – |
| | .014 | 1/2"-3/8" | | | | | 15473 | 16873 |
| 2-1/2" | .0118 | 1/2"-3/8" | 1/2" | 3/4" | 20,000 | 10 | 15513 | 16913 |
| | .014 | | | | | | 15523 | – |
| 3" | .003 | 1/2" | 5/8" | 1" | 20,000 | 10 | 99551 | – |
| | .006 | 1/2"-3/8" | | 1" | | | 15533 | 16933 |
| | .006 | 5/8" | | 15/16" | | | 15637 | – |
| | .008 | 1/2"-3/8" | | 1" | | | 15543 | 16943 |
| | .008 | 5/8" | | 15/16" | | | 15647 | – |
| | .0104 | 1/2" | | 1" | | | 15553 | – |
| | .0118 | 1/2"-3/8" | | 1" | | | 15563 | 16963 |
| | .0118 | 5/8" | | 15/16" | | | 15667 | – |
| | .014 | 1/2"-3/8" | | 1" | | | 15573 ▲ | 16973 |
| | .014 | 5/8" | | 15/16" | | | 15677 | 17077 |
| 4" | .006 | 1/2" | 1/2" | 1-1/2" | 20,000 | 10 | 99553 | – |

▲ Available in non-sparking brass wire, see page 57 for details.



15563

# Crimped Wire Wheels with Arbor Hole

## Polyflex™ Encapsulated Small Diameter Wheels - Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|
| 1-1/4" | .008<br>.014 | 3/8" | 3/16" | 5/16" | 20,000 | 10 | 35293<br>35294 |
| 2" | .0104<br>.014 | 1/2" | 1/4" | 1/2" | 20,000 | 10 | 35240<br>35070 |
| 3" | .008<br>.0118<br>.014 | 1/2" | 1/4" | 1" | 20,000 | 10 | 35808<br>35250<br>35260 |

* See Elastomer Color Code chart on page 18 for more information.

## Wire Stripping Brushes

Used for removing insulation from electrical wire. These brushes are made to order according to the specifications needed for the specific application.

When ordering, please specify:

- Brush diameter
- Arbor hole size
- Brush face width
- Wire size

For application assistance, call our Application Engineering Hotline toll-free at: 888-299-APPS (2777)



**Tech Note**

- **The adapters and drive arbors listed on this page are for use with small diameter wheel brushes only; do not attempt to use them with cutting or grinding wheels, buffing wheels, or any type of abrasive wheel or disc.**
- **Do not adapt a wheel brush for use on a shaft diameter less than that specified by ANSI B165.1 (see page 20) or exceed the maximum wheel diameter specified for a drive arbor.**
- **Never mount a drive arbor onto a tool which operates above the maximum RPM rating of either the arbor or the brush (whichever may be lower) and be sure that the stem of the arbor is properly secured in the collet or chuck before use.**

## Drive Arbors - For mounting small diameter wheels into a collet or chuck.

| Arbor Dia. | Stem Dia. | Stem Length | Length of Shaft | For Brushes with Max. Dia. of | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| **Unthreaded Shaft** | | | | | | | |
| 1/4" | 1/4" | 1-1/8" | 3/16" | 2" | 20,000 | 5 | 07723 |
| 3/8" | 1/4" | 1-1/8" | 3/16" | 4" | 20,000 | 5 | 07722 |
| **Threaded Shaft** | | | | | | | |
| 1/2" | 1/4" | 3/4" | 3/4" | 3" | 25,000 | 5 | 07724 |
| 3/8" | 1/4" | 3/4" | 3/4" | 3" | 25,000 | 5 | 07727 |
| 5/8" | 1/4" | 3/4" | 3/4" | 3" | 25,000 | 5 | 07729 |
| 1/2" | 1/4" | 7/8" | 3/4" | 3" | 20,000 | 5 | 07721 |
| 1/4" | 1/4" | 1-1/16" | 1-1/8" | 2" | 20,000 | 5 | 07725 |
| 3/8" | 1/4" | 1" | 1-1/8" | 3" | 20,000 | 5 | 07726 |

## Plastic Adapters - For mounting small diameter wheels onto various arbor sizes.

| Fixed Arbor Hole Size | Adapted Arbor Hole Size | Standard Pack | Item Number |
|---|---|---|---|
| 1/2" | 1/4" | 10 | 04400 |
| 1/2" | 3/8" | 10 | 04401 |
| 5/8" | 1/2" | 10 | 04402 |
| 3/8" | 1/4" | 10 | 04403 |



Removing casting flash from ductile-iron housing with an encapsulated brush.



35070

**DID YOU KNOW?**

Small diameter wheels can be manufactured with different diameters than what appears in this catalog.



# Crimped Wire Wheels with Nut or Stem



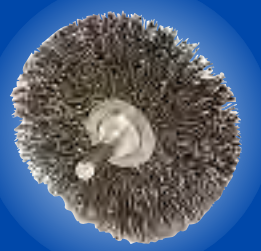
Removing flash from a sand-cast iron engine block.



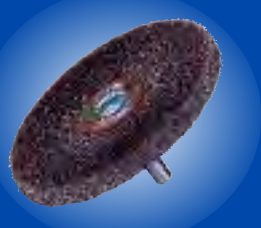
13085



13095



17616



35310

## Crimped Wire Wheels with Nut - 

Crimped wire wheels with a threaded nut are intended for use primarily on small angle grinders. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel and Type 302 stainless steel wire.

### Applications

- Removing rust and light corrosion
- Surface prep prior to welding
- Removing heat discoloration and welding residuals

**Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 4" | .006 | 5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | – | 00156 |
| 4" | .014 | M10 x 1.50<br>M14 x 2.0<br>3/8"-24 UNF<br>5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 13076<br>13077<br>13078<br>13081 | –<br>–<br>–<br>13085 |
| 4" | .014 | 5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 35416* | – |

* Polyflex™ encapsulated - Burgundy elastomer. See Elastomer Color Code Chart on page 18 for more information.

**Vortec Pro® Crimped Wire Wheel Brushes - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications.**

| Dia. | Wire Size | Wire Type | Arbor Hole | Face Width | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|---|
| 4" | .014" Coarse | Carbon | 5/8"-11 | Narrow | 14,000 | 36007 | 36207 |

**Crimped Wire Bevel Brushes - Saucer-shaped radial wheels which provide a flexible brushing action for cleaning fillet welds and into corners.**

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| | | | | | | | Steel |
| 3-3/8" | .0118 | M10 x 1.25<br>5/8"-11 UNC | 1/2" | 1/2" | 12,500 | 1 | 13091<br>13095 |

## Crimped Wire Wheels with Stem - 

Crimped wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on high-speed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's solid ring construction, these radial wheels are available in heat-treated steel, Type 302 stainless steel, and brass wire.

### Applications

- Cleaning threads
- Cleaning and finishing ID's and recessed areas
- Paint removal and surface cleaning
- Light deburring

**Conflex Brushes - Small diameter copper center wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.**

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 2" | .006<br>.0118 | 3/8" | 1/2" | 20,000 | 10 | 17609<br>17610 | –<br>17611 | –<br>– |
| 2-1/2" | .006<br>.014 | 3/8" | 3/4" | 20,000 | 10 | 17612<br>17614 | –<br>– | –<br>– |
| 3" | .008<br>.0118<br>.014 | 1/2" | 1" | 20,000 | 10 | 17615 ■<br>17616<br>17617 ■ | –<br>–<br>17618 | –<br>17641<br>– |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**Polyflex® Encapsulated Conflex Brushes - Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life. 1/4" Stem.**

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| | | | | | | Steel |
| 2" | .0118 | 1/4" | 1/2" | 20,000 | 10 | 35305 |
| 3" | .008<br>.0118 | 1/4" | 1" | 20,000 | 10 | 35310<br>35315 |

* See Elastomer Color Code Chart on page 18 for more information.

# Crimped Wire Wheels with Stem

**Conflex Brushes - Wide Face -** Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area. 1/4" Stem.

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|
| 1-1/4" | .006 | 1/2" | 3/8" | 20,000 | 10 | 17600 | – |
| | .008 | | | | | 17601 | – |
| 1-1/2" | .006 | 1/2" | 1/2" | 20,000 | 10 | 17602 | – |
| | .008 | | | | | 17603 | – |
| | .0118 | | | | | 17604 | – |
| 1-3/4" | .006 | 1/2" | 5/8" | 20,000 | 10 | 17605 | – |
| | .008 | | | | | – | 17608 |
| 2" | .0118 | 3/4" | 7/16" | 20,000 | 10 | 17619 | – |
| 2-1/2" | .014 | 3/4" | 11/16" | 20,000 | 10 | 17620 | – |
| 3" | .008 | 1" | 15/16" | 20,000 | 10 | 17621 | 17637 |
| | .0118 | | | | | 17622 | – |
| | .014 | | | | | 17623 | – |

**Crimped Wire Radial Wheels -** Feature side plates for a shorter trim length and more controlled brushing action in a stem-mounted crimped wire wheel. 1/4" Stem

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|
| 1-1/2" | .006 | 3/8" | 20,000 | 10 | 17950 | 17971 |
| | .008 | | | | 17951 | 17972 |
| | .0118 | | | | 17952 | 17973 |
| | .014 | | | | 17953 | – |
| 2" | .006 | 7/16" | 20,000 | 10 | 17954 | – |
| | .008 | | | | 17955 | 17974 |
| | .0118 | | | | 17956 | – |
| | .014 | | | | 17957 | 17975 |
| | .020 | | | | 17958 | – |
| 2-1/2" | .008 | 9/16" | 20,000 | 10 | 17959 | 17976 |
| | .0118 | | | | 17961 | – |
| | .014 | | | | 17962 | 17977 |
| | .020 | | | | 17963 | – |
| 3" | .008 | 13/16" | 20,000 | 10 | 17964 | 17978 |
| | .0118 | | | | 17965 | – |
| | .014 | | | | 17966 | 17979 |
| | .020 | | | | 17967 | – |
| 4" | .008 | 1-5/16" | 15,000 | 10 | 17968 | 17981 |
| | .014 | | | | 17969 | 17982 |

**Vortec Pro® Crimped Wire Radial Wheels -** Designed to be a flexible and economic small diameter brushing tool for a broad range of general purpose applications. 1/4" Stem.

| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item # | Boxed Qty. Item # |
|---|---|---|---|---|---|---|
| 1-1/2" | .0118" Coarse | Carbon | 3/8" | 20,000 | 36008 | 36208 |
| 2" | .014" Coarse | Carbon | 7/16" | 20,000 | 36009 | 36209 |
| 3" | .008" Fine | Carbon | 13/16" | 20,000 | 36059 | 36259 |
| | .014 Coarse | Carbon | | | 36011 | 36211 |

**Concave Brushes -** Saucer-shaped radial wheels permanently mounted on a 1/4" stem to provide flexible brushing action for addressing corners and hard-to-reach areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|
| 1-1/2" | .006 | 3/8" | 20,000 | 10 | 17901 | 17930 |
| | .008 | | | | 17902 | – |
| | .0118 | | | | 17903 | 17931 |
| 2" | .008 | 1/2" | 20,000 | 10 | 17906 | – |
| | .014 | | | | 17907 | 17933 |
| 2-1/2" | .006 | 5/8" | 20,000 | 10 | 17909 | – |
| | .014 | | | | 17912 | 17935 |
| 3" | .006 | 15/16" | 20,000 | 10 | 17914 | 17936 |
| | .008 | | | | 17915 | – |
| | .014 | | | | 17917 | 17937 |
| 4" | .008 | 1-1/4" | 20,000 | 10 | 17922 | – |
| | .014 | | | | 17923 | – |



Removing carbon build-up from an engine.



17603



17971



36211



17907

Crimped Wire Wheels with Stem

# Nylon and Tampico Wheels



Deburring a plastic part using a nylon brush.



17233



20490



17453



20180



03809

## Nylon Wheels -

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Synthetic filaments such as nylon are durable and provide a very flexible brushing action in applications requiring less aggression than a wire brush. The softer fill material allows them to be used on materials that a wire brush would scratch or gouge.

### Applications

- Wet or dry cleaning and scrubbing
- Removing burrs and die flash from plastic parts
- Sweeping loose chips and debris

**Nylon Wheels - Feature a chemical-resistant synthetic fill material with excellent bend recovery for use in applications requiring a soft, durable fill material.**



| Dia. | Fill Dia. | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|---|
| 1-1/2" | .010 | 3/8" | 1/4" | 7/16" | 20,000 | 10 | 29025 |
| 2" | .010<br>.014 | 1/2" | 3/8" | 1/2" | 20,000 | 10 | 17223<br>17233 |
| 2-1/2" | .022 | 5/8" | 3/8" | 11/16" | 20,000 | 10 | 99346 |
| 3" | .010<br>.016 | 1/2" | 3/8" | 1" | 20,000 | 10 | 29070<br>17263 |
| 6" | .016 | 2" | 3/4" | 1-1/2" | 6,000 | 2 | 20490 |
| 8" | .020 | 2" | 3/4" | 2-1/2" | 5,000 | 2 | 20510 |

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 34.

## Tampico Wheels -

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Natural vegetable fibers such as Tampico hold abrasive compounds well and can be used for deburring, edge blending, and polishing applications.

### Applications

- Wet or dry cleaning and scrubbing
- Buffing and polishing non-ferrous and precious metals
- Removing burrs and blending edges with abrasive compounds

**Tampico Wheels - Feature a durable vegetable fiber fill material that is chemical and heat resistant and also holds abrasive compounds well.**



| Dia. | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 2-1/2" | 1/2" | 1/2" | 3/4" | 20,000 | 10 | 17443 |
| 3" | 1/2" | 1/2" | 1" | 20,000 | 10 | 17453 |
| 6" | 2" | 5/8" | 1-1/2" | 6,000 | 10 | 20180 |
| 8" | 2" | 5/8" | 2-1/2" | 5,000 | 5 | 20190 |

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 34.

## Metal Adapters - For 6" & 8" Brushes. Used in pairs & priced per pair.

| For Brush Arbor Hole Size | Adapted Arbor Hole Size | Item Number |
|---|---|---|
| 2" | 1/2" | 03809 |
| | 5/8" | 03810 |
| | 3/4" | 03811 |
| | 7/8" | 03824 |
| | 1" | 03812 |
| | 1-1/4" | 03813 |
| | 1-1/2" | 03814 |

# Knot Wire Cup Brushes

**Wire Cup Brushes -** Wire cup brushes are intended primarily for use on portable power tools for addressing larger surface areas more efficiently than a wheel brush. Cup brushes featuring a threaded nut are designed for smooth, efficient operation on angle grinders to make quick work of large jobs. Utility cup brushes featuring a permanently-attached 1/4" stem are more suitable for smaller jobs and are recommended for use on high-speed air tools for the most effective brushing action and longest life.

Cup brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and they are manufactured with individual knot hole and solid ring construction for high performance and long life. Weiler's cup brushes are available in heat-treated steel, Type 302 stainless steel, and bronze or brass wire.

## Applications

- Removing paint and coatings
- Cleaning rust, scale, and corrosion
- Deburring
- Weld prep and cleaning
- Removal of slag from the edges of plasma-cut or flame-cut plates

**Knot Wire Cup Brushes - Single Row - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.**

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Bronze |
| 2-3/4" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13015 | – | – |
| | | M10 x 1.50 | | | | 13016 | – | – |
| | | M14 x 2.0 | | | | 13020 | – | – |
| | | 3/8"-24 UNF | | | | 13021 | – | – |
| | | 5/8"-11 UNC | | | | 13025 ■ | – | – |
| 2-3/4" | .020 | M10 x 1.25 | 1" | 14,000 | 1 | 13281 ■ | 13253 | – |
| | | M10 x 1.50 | | | | 13282 | 13254 | – |
| | | M14 x 2.0 | | | | 13283 | 13255 | – |
| | | 3/8"-24 UNF | | | | 13284 | 13256 | – |
| | | 1/2"-13 UNC | | | | 13285 | 13257 | – |
| | | 5/8"-11 UNC | | | | 13286 ■ | 13258 | 13299 |
| 3-1/2" | .023 | M10 x 1.25 | 7/8" | 13,000 | 1 | 13150 | – | – |
| | | M10 x 1.50 | | | | 13151 | – | – |
| | | M14 x 2.0 | | | | 13152 | 13159 | – |
| | | 3/8"-24 UNF | | | | 13153 | 13160 | – |
| | | 1/2"-13 UNC | | | | 13155 | – | – |
| | | 5/8"-11 UNC | | | | 13156 ■ | 13163 | – |
| 3-1/2" | .014 | 5/8"-11 UNC | 1-1/4" | 9,000 | 1 | 12736 | – | – |
| | .020 | | | | | 12746 | – | – |
| 4" | .014 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12306 | 12406 | – |
| | .020 | | | | | – | – | 12776 |
| | .023 | | | | | 12316 ■ | 12416 | – |
| | .035 | | | | | 12326 | – | – |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12206❖ | – | – |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12826* | – | – |
| 5" | .014 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12256* | – | – |
| | .023 | | | | | 12276 ■* | – | – |
| 6" | .014 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12356 | 12456 | – |
| | .023 | | | | | 12376 ■ | 12476 | – |
| | .035 | | | | | 12396 | – | – |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12816* | – | – |
| 6" | .014 | 5/8"-11 UNC | 1-5/8" | 6,000 | 1 | 12846 | – | – |
| | .023 | | | | | 12856 | 12886 | – |
| | .035 | | | | | 12866 | – | – |

* With internal nut ❖ Cable Twist

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**DID YOU KNOW?** Most Weiler wire brushes are 100% recyclable.



Removing slag from a flame-cut steel plate.



13016



13156



12276

# Knot Wire Cup Brushes



Cleaning a weld joint and removing surrounding spatter with a banded knot cup brush.



36244



13301



12556



12676



35406

## Vortec Pro® Knot Wire Cup Brushes - Single Row - Provide an aggressive brushing action for general-purpose surface cleaning applications.

| Dia. | Wire Size | Wire Type | Arbor Hole | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|
| 3" | .020" Coarse | Carbon | 5/8"-11 | 14,000 | 36038 | 36238 |
| | | Stainless | 5/8"-11 | | 36039 | 36239 |
| | | Carbon | M10 x 1.25 | | 36041 | 36241 |
| | | Carbon | M10 x 1.50 | | 36042 | 36242 |
| | | Carbon | M14 x 2.0 | | 36043 | 36243 |
| 3-1/2" | .020" Coarse | Carbon | 5/8"-11 | 13,000 | 36066 | – |
| 4" | .025" Coarse | Carbon | 5/8"-11 | 10,200 | 36044 | 36244 |
| 5" | .023" Coarse | Carbon | 5/8"-11 | 7,000 | 36070 | – |
| 6" | .025" Coarse | Carbon | 5/8"-11 | 6,600 | 36045 | 36245 |

## Knot Wire Cup Brushes - Banded - Single Row - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring at operating speed to provide a very aggressive, controlled brushing action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4" | .014 | 5/8"-11 UNC | 5/8" | 12,500 | 1 | 13300 | – |
| | .020 | | | | | 13301 | 13302 |
| 4" | .023 | 5/8"-11 UNC | 7/8" | 10,200 | 1 | 12301 | – |
| 5" | .023 | 5/8"-11 UNC | 7/8" | 6,600 | 1 | 12120 | – |

## Knot Wire Cup Brush - 1-1/2 Rows - Features an internal nut for use on dedicated equipment such as line traveling machines that clean and prep OD of pipe prior to coating.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number - Steel |
|---|---|---|---|---|---|---|
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 7,000 | 1 | 94012 |

## Knot Wire Cup Brushes - Double Row - Provide very aggressive brushing while still maintaining some flexibility; ideal for severe cleaning applications.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 4" | .014 | 5/8"-11 UNC | 1-1/4" | 9,000 | 1 | 12756 | – |
| | .020 | | | | | 12766 | 12726 |
| 6" | .014 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12536 | – |
| | .023 | | | | | 12556 | 12636 |
| | .035 | | | | | 12576 | – |
| 6" | .014 | 5/8"-11 UNC | 1-1/2" | 6,000 | 1 | 12906 | – |
| | .023 | | | | | 12916 | – |
| | .035 | | | | | 12926 | – |

## Knot Wire Cup Brushes - Banded - Double Row - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring to provide an extremely aggressive, controlled brushing action for the most severe applications.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number - Steel |
|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 7/8" | 9,000 | 1 | 12796 |
| 6" | .023 | 5/8"-11 UNC | 7/8" | 6,600 | 1 | 12676 |
| | .035 | | | | | 12686 |

## Polyflex™ Encapsulated Crimped Wire Cup Brushes - Feature fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications on flat surfaces that require maximum aggression but no flexibility in the brushing action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number - Steel |
|---|---|---|---|---|---|---|
| 3-1/2" | .014 | 5/8"-11 UNC | 7/8" | 12,000 | 1 | 35406 |
| 4" | .020 | 5/8"-11 UNC | 1-1/8" | 9,000 | 1 | 35186 |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35006 |
| Orange Elastomer* - Heavy-Duty | | | | | | |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35530 |
| Black Elastomer* - Extra Heavy-Duty | | | | | | |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,000 | 1 | 35760 |

* See Elastomer Color Code Chart on page 18 for more information.

# Crimped Wire Cup Brushes

**Crimped Wire Cup Brushes -** Very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; feature a threaded nut for use on angle grinders.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|
| 3" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13240 ■▲ | – |
| | | M10 x 1.50 | | | | 13241 | – |
| | | M14 x 2.0 | | | | 13242 | – |
| | | 3/8"-24 UNF | | | | 13243 | – |
| | | 1/2"-13 UNC | | | | 13244 | – |
| | | 5/8"-11 UNC | | | | 13245 ■ | – |
| 3-1/2" | .014 | M10 x 1.25 | 7/8" | 12,000 | 1 | 13175 | 13182 |
| | | M10 x 1.50 | | | | 13176 | 13183 |
| | | M14 x 2.0 | | | | 13177 | 13184 |
| | | 3/8"-24 UNF | | | | 13178 | 13185 |
| | | 1/2"-13 UNC | | | | – | 13187 |
| | | 5/8"-11 UNC | | | | 13181 | 13188 |
| 4" | .0118 | 5/8"-11 UNC | 1-3/8" | 10,200 | 1 | 14016 | – |
| | .014 | | | | | 14026 | – |
| | .020 | | | | | 14036 ■▲ | 14126 |
| 5" | .014 | 5/8"-11 UNC | 1-1/4" | 9,000 | 1 | 14206 ▲ | – |
| | .020 | | | | | 14216 | 14256 |
| 6" | .014 | 5/8"-11 UNC | 1-1/4" | 6,600 | 1 | 14066 ▲* | – |
| | .020 | | | | | 14076 ■* | 14166* |

* With internal nut ▲ Available in non-sparking brass & bronze wire, see page 57 for details.

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

**Vortec Pro® Crimped Wire Cup Brushes -** Provide flexible brushing action and cost-effective performance in general purpose cleaning applications.

| Dia. | Wire Size | Wire Type | Arbor Hole | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|
| 3" | .014" Coarse | Carbon | 5/8"-11 | 14,000 | 36031 | 36231 |
| | | | 1/2"-13 | | 36032 | 36232 |
| | | | M10 x 1.25 | | 36033 | 36233 |
| | | | M10 x 1.50 | | 36034 | 36234 |
| | | | M14 x 2.0 | | 36035 | 36235 |
| 3-1/2" | .014" Coarse | Carbon | 5/8"-11 | 12,000 | 36068 | – |
| 4" | .020" Coarse | Carbon | 5/8"-11 | 9,000 | 36036 | 36236 |
| 5" | .020" Coarse | Carbon | 5/8"-11 | 9,000 | 36061 | 36261 |
| 6" | .020" Coarse | Carbon | 5/8"-11 | 6,600 | 36037 | 36237 |

**Cup Brushes with Stem -** Designed primarily for use on high speed die grinders, cup brushes with permanently attached stems can also be used on drills.

**Utility Crimped Wire Cup Brushes -** Smaller diameter cup brushes which provide flexible brushing action and consistent performance for more demanding light-duty cleaning applications; featuring a 1/4" stem for use on air tools.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless | Item Number Brass |
|---|---|---|---|---|---|---|---|
| 1-3/4" | .006 | 3/4" | 13,000 | 10 | 14300 | 14303 | 14310 |
| | .0118 | | | | 14301 | 14304 | 14314 |
| 2" | .008 | 5/8" | 13,000 | 10 | 14313 | 14318 | – |
| | .0118 | | | | 14306 | 14319 | – |
| 2-1/2" | .008 | 7/8" | 13,000 | 10 | 14315 | 14320 | – |
| | .014 | | | | 14317 | 14321 | – |
| 2-3/4" | .0118 | 7/8" | 6,000 | 1 | 14302 | – | 14311 |

**Vortec Pro® Utility Crimped Wire Cup Brushes -** Designed to be a flexible and economic small diameter brushing tool for a broad range of general purpose applications using air tools or drills. 1/4" Stem.

| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item # | Boxed Qty. Item # |
|---|---|---|---|---|---|---|
| 2" | .008" Fine | Carbon | 5/8" | 13,000 | 36060 | 36260 |
| | .014" Coarse | Carbon | | | 36029 | 36229 |
| 3" | .014" Coarse | Carbon | 7/8" | 13,000 | 36030 | 36230 |



Removing paint from a steel surface with a crimped wire cup brush.



13245



14301



36230

# Small Angle Grinder Brushes



Cleaning a weld with a stringer bead wheel brush.

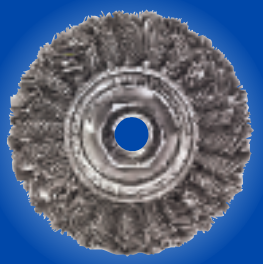
**Small Angle Grinder Brushes -** These industrial grade brushes are specifically designed to provide the smoothest, most efficient brushing action on 4" and 4-1/2" mini-grinders. Featuring Weiler's individual knot hole and solid ring product construction, these perfectly balanced brushes produce minimal vibration in use, reducing operator fatigue and providing longer life.

Weiler's wide selection of thread sizes and assortment of threaded adapters permit these high performance brushes to be used on all popular brands of mini-grinders. See the Small Angle Grinder Reference Chart on page 44 for help in selecting the right product for use on your specific grinder.

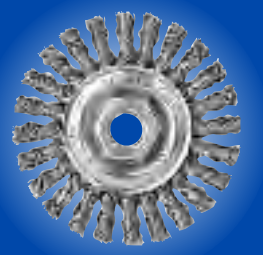
## Applications

- Removing paint and coatings
- Cleaning rust, scale and corrosion
- Light deburring
- Weld prep and cleaning
- Removal of slag from the edges of plasma-cut or flame-cut plates

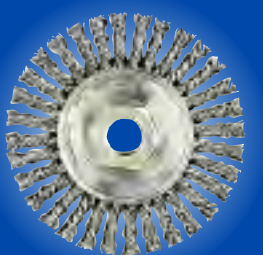
**CHECK OUT THE VIDEO**



13106



13266



13138

### Knot Wire Wheels - Standard Twist - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on somewhat irregular surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Steel | Stainless |
| 3" | .014 | 3/8"-24 UNF | 20 | 3/8" | 5/8" | 7/16" | 25,000 | 5 | 13201 | 13208 |
| 4" | .014 | M10 x 1.25 | 24 | 1/2" | 7/8" | 7/16" | 20,000 | 5 | 13100 | 13107 |
| | | M10 x 1.50 | | | | | | | 13101 | 13108 |
| | | M14 x 2.0 | | | | | | | 13102 | 13109 |
| | | 3/8"-24 UNF | | | | | | | 13103 | 13110 |
| | | 1/2"-13 UNC | | | | | | | 13105 | – |
| | | 5/8"-11 UNC | | | | | | | 13106 ■ | 13113 ■ |
| 4" | .020 | M10 x 1.25 | 24 | 1/2" | 7/8" | 7/16" | 20,000 | 5 | 13114 | – |
| | | M10 x 1.50 | | | | | | | 13115 | – |
| | | M14 x 2.0 | | | | | | | 13116 | – |
| | | 3/8"-24 UNF | | | | | | | 13117 | – |
| | | 1/2"-13 UNC | | | | | | | 13119 | – |
| | | 5/8"-11 UNC | | | | | | | 13120 | – |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

### Knot Wire Wheels - Cable Twist - Provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and coating removal applications on relatively smooth surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Steel | Stainless |
| 4" | .020 | M10 x 1.25 | 24 | 1/4" | 7/8" | 7/16" | 20,000 | 5 | 13261 | – |
| | | M10 x 1.50 | | | | | | | – | 13272 |
| | | 5/8"-11 UNC | | | | | | | 13266 ■ | 13276 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

### Knot Wire Wheels - Stringer Bead Twist - Provide maximum impact action for fast removal of slag, spatter, and oxidation. The 4" Mini Roughneck and the 4-1/2" Roughneck Jr. feature a narrow face width suitable for cleaning welds and reaching into corners

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Steel | Stainless |
| 4" | .020 | 1/2"-3/8" | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 13124 | 08954* |
| | | M10 x 1.25 | | | | | | | 13125 ■ | 13132 |
| | | M10 x 1.50 | | | | | | | 13126 | 13133 |
| | | M14 x 2.0 | | | | | | | 13127 | 13134 |
| | | 3/8"-24 UNF | | | | | | | 13128 | 13135 |
| | | 1/2"-13 UNC | | | | | | | 13130 | 13137 |
| | | 5/8"-11 UNC | | | | | | | 13131 ■ | 13138 ■ |
| 4-1/2" | .020 | 5/8"-11 UNC | 38 | 3/16" | 13/16" | 3/8" | 12,500 | 5 | 13232 | 13238 |
| | | M14 x 2.0 | | | | | | | 13233 | 13239 |
| | | 7/8" | | | | | | | 13234 | 13249 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

*Standard Pack 10

# Small Angle Grinder Brushes

## Polyflex™ Encapsulated Knot Wire Wheels - Stringer Bead Twist. Black Elastomer* -

**Feature a heat-stabilized encapsulation that gradually wears away to keep only the wire tips exposed for maximum aggression; suitable for cleaning hot welds.**

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 UNC | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 5 | 35800 |

* See Elastomer Color Code Chart on page 18 for more information.

## Crimped Wire Wheels - Provide flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .014 | M10 x 1.50 | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 13076 | – |
| | | M14 x 2.0 | | | | | | 13077 | – |
| | | 3/8"-24 UNF | | | | | | 13078 | – |
| | | 5/8"-11 UNC | | | | | | 13081 | 13085 |

## Polyflex™ Encapsulated Crimped Wire Wheel - Burgundy Elastomer* - Feature fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications that require maximum aggression but no flexibility to the brushing action.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plate | Max. RPM | Std. Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|
| 4" | .014 | 5/8"-11 UNC | 1/2" | 7/8" | 7/16" | 14,000 | 5 | 35416 |

*See Elastomer Color Code Chart on page 18 for more information.

## Knot Wire Bevel Brushes - Saucer-shaped radial wheels which provide a heavy-duty brushing action with some flexibility; ideal for cleaning fillet welds and into corners.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|
| 4" | .014 | M10 x 1.25 | 20 | 3/8" | 3/4" | 12,500 | 1 | 13401 | – |
| | | M10 x 1.50 | | | | | | 13402 | 13412 |
| | | 5/8"-11 UNC | | | | | | 13406 | 13416 |
| 4" | .020 | M14 x 2.0 | 20 | 3/8" | 3/4" | 12,500 | 1 | 13423 | – |
| | | 5/8"-11 UNC | | | | | | 13426 | 13436 |
| 4-1/2" | .014 | 5/8"-11 UNC | 20 | 3/8" | 1" | 12,500 | 1 | 13456 | 13466 |
| | .020 | | | | | | | 13476 | 13486 |

## Crimped Wire Bevel Brushes - Saucer-shaped radial wheels which provide a more flexible brushing action for cleaning fillet welds and into corners.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|
| 3-3/8" | .0118 | M10 x 1.25 | 1/2" | 1/2" | 12,500 | 1 | 13091 |
| | | 5/8"-11 UNC | | | | | 13095 |

## Threaded Adapters - For mounting brushes with a 5/8"-11 UNC nut to other threaded spindles.

| Fixed Thread Size | Adapted Thread Size | Standard Pack | Item Number |
|---|---|---|---|
| 5/8" - 11 UNC | M10 x 1.25 | 10 | 07771 ■ |
| 5/8" - 11 UNC | M10 x 1.50 | 10 | 07772 ■ |
| 5/8" - 11 UNC | 3/8" - 16 UNC | 10 | 07769 |
| 5/8" - 11 UNC | 3/8" - 24 UNF | 10 | 07746 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.



Prepping the bevel end of a stainless pipe for welding.



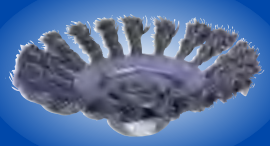
35800



13085



35416



13456



13095



07771

Small Angle Grinder Brushes

# Small Angle Grinder Brushes



Removing paint from a metal surface with a crimped wire cup brush.



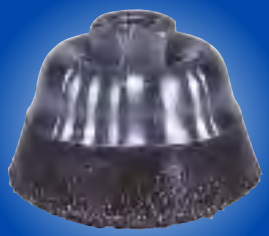
13016



13711



13245



35406

## Knot Wire Cup Brushes - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13015 | – |
| | | M10 x 1.50 | | | | 13016 | – |
| | | M14 x 2.0 | | | | 13020 | – |
| | | 3/8"-24 UNF | | | | 13021 | – |
| | | 5/8"-11 UNC | | | | 13025 ■ | – |
| 2-3/4" | .020 | M10 x 1.25 | 1" | 14,000 | 1 | 13281 ■ | 13253 |
| | | M10 x 1.50 | | | | 13282 | 13254 |
| | | M14 x 2.0 | | | | 13283 | 13255 |
| | | 3/8"-24 UNF | | | | 13284 | 13256 |
| | | 1/2"-13 UNC | | | | 13285 | 13257 |
| | | 5/8"-11 UNC | | | | 13286 ■ | 13258 |
| 3-1/2" | .023 | M10 x 1.25 | 7/8" | 13,000 | 1 | 13150 | – |
| | | M10 x 1.50 | | | | 13151 | – |
| | | M14 x 2.0 | | | | 13152 | 13159 |
| | | 3/8"-24 UNF | | | | 13153 | 13160 |
| | | 1/2"-13 UNC | | | | 13155 | – |
| | | 5/8"-11 UNC | | | | 13156 ■ | 13163 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

## Knot Wire Cup Brushes - Hurricane Twist - Provide very smooth brushing action and extended life with reduced cleaning action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4" | .014 | M10 x 1.25 | 3/4" | 14,000 | 1 | 13715 | – |
| | | M10 x 1.50 | | | | 13716 | – |
| | | M14 x 2.0 | | | | 13717 | – |
| | | 5/8"-11 UNC | | | | 13718 | – |
| 2-3/4" | .020 | M10 x 1.25 | 3/4" | 14,000 | 1 | 13709 | 13719 |
| | | M10 x 1.50 | | | | 13710 | 13720 |
| | | M14 x 2.0 | | | | 13711 | 13721 |
| | | 5/8"-11 UNC | | | | 13712 | 13722 |

## Crimped Wire Cup Brushes - Provide very flexible brushing action and the most consistent performance for lighter-duty cleaning applications on somewhat irregular surfaces.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Std. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 3" | .014 | M10 x 1.25 | 1" | 14,000 | 1 | 13240 ■ | – |
| | | M10 x 1.50 | | | | 13241 | – |
| | | M14 x 2.0 | | | | 13242 | – |
| | | 3/8"-24 UNF | | | | 13243 | – |
| | | 1/2"-13 UNC | | | | 13244 | – |
| | | 5/8"-11 UNC | | | | 13245 ■ | – |
| 3-1/2" | .014 | M10 x 1.25 | 7/8" | 12,000 | 1 | 13175 | 13182 |
| | | M10 x 1.50 | | | | 13176 | 13183 |
| | | M14 x 2.0 | | | | 13177 | 13184 |
| | | 3/8"-24 UNF | | | | 13178 | 13185 |
| | | 1/2"-13 UNC | | | | – | 13187 |
| | | 5/8"-11 UNC | | | | 13181 | 13188 |

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 170 for details.

## Polyflex® Encapsulated Crimped Wire Cup Brush - Burgundy Elastomer* - Features fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications on flat surfaces that require maximum aggression but no flexibility to the brushing action.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| | | | | | | Steel |
| 3-1/2" | .014 | 5/8"-11 UNC | 7/8" | 12,000 | 1 | 35406 |

*See Elastomer Color Code Chart on page 18 for more information.

# Small Angle Grinder Brushes

**Small Angle Grinder Reference Chart -** Lists the thread size of popular mini-grinders to help you select the appropriate Weiler brush for your tool.

| Manufacturer | Model Numbers | Male Thread Size | Grinder Size | Max. RPM |
|---|---|---|---|---|
| AEG | WS601 | 5/8-11 | 4-1/2" | 10,000 |
| Black & Decker | 6246 | M10 x 1.50 | 4" | 10,000 |
| | 2750/2750G | 5/8-11 | 4-1/2" | 10,000 |
| | 4252 | 5/8-11 | 5" | 10,000 |
| | 7750 | 5/8-11 | 4-1/2" | 10,000 |
| | G750/G850 | 5/8-11 | 4-1/2" | 10,000 |
| | FS6500AG | 5/8-11 | 4-1/2" | 10,000 |
| | G950 | 5/8-11 | 4-1/2" | 10,000 |
| Bosch | 1347A | 5/8-11 | 4-1/2" | 11,000 |
| | 1375/1375A | 5/8-11 | 4-1/2" | 11,000 |
| | 1700/1710D | 5/8-11 | 4-1/2" | 11,000 |
| | 1800/1810PS | 5/8-11 | 4-1/2" | 11,000 |
| | 1701/1711D | 5/8-11 | 5" | 11,000 |
| | 1703EVS | 5/8-11 | 5" | 11,000 |
| | 1711/1801 | 5/8-11 | 5" | 11,000 |
| | 1811PS | 5/8-11 | 5" | 11,000 |
| | 1803EVS | 5/8-11 | 5" | 11,000 |
| | 1347 | M14 x 2.0 | 4-1/2" | 11,000 |
| | 1348/1348E | M14 x 2.0 | 5" | 11,000 |
| | 1347A/1348AE | 5/8-11 | 5" | 11,000 |
| | 7352-111 Air | M14 x 2.0 | 5" | 12,000 |
| DeWalt | DW831 | 5/8-11 | 5" | 10,000 |
| | DW802G | 5/8-11 | 4-1/2" | 10,000 |
| | D28110 | 5/8-11 | 4-1/2" | 11,000 |
| | D28402/D28112 | 5/8-11 | 4-1/2" | 11,000 |
| | D28114 | 5/8-11 | 4-1/2" / 5" | 11,000 |
| | D28131 | 5/8-11 | 4-1/2 / 5" | 11,000 |
| | DW402/DW400 | 5/8-11 | 4-1/2" | 10,000 |
| Hilti | AG 125-SE | M14 | 5" | 11,000 |
| | AG 125-S | M14 | 5" | 11,000 |
| | DEG 500-D | 5/8-11 | 5" | 11,000 |
| | HG 500-D | 5/8-11 | 5" | 11,000 |
| | DC 500-S | 5/8-11 | 5" | 11,000 |
| | DAG 450-S | 5/8-11 | 4-1/2" | 11,000 |
| | DAG 451-S | 5/8-11 | 4-1/2" | 11,000 |
| | HG450 | 5/8-11 | 4-1/2" | 11,000 |
| | HG500/DC500 | 5/8-11 | 5" | 11,000 |
| Hitachi | G10SR2 | M10 X 1.25 | 4" | 11,000 |
| | G12SA3/G12SE2 | 5/8-11 | 4-1/2" | 10,000 |
| | G12SR2 | M10 X 1.25 | 4-1/2" | 11,000 |
| | G13SC2 | 5/8-11 | 5" | 10,000 |
| | G10SD1 | M10 x 1.50 | 4" | 11,000 |
| | G12SA | 5/8-11 | 4-1/2" | 10,000 |
| | G12S1 | 5/8-11 | 4-1/2" | 11,000 |
| | G13SC | 5/8-11 | 5" | 11,000 |
| Ingersoll-Rand | AG230P64 | 3/8-24 | 4" | 12,000 |
| | AG230P1045 | 5/8-11 | 4-1/2" | 12,000 |
| | AG230P105 | 5/8-11 | 5" | 12,000 |
| | 3445 | 5/8-11 | 4-1/2" | 12,000 |
| | TA120RP64 | 3/8-24 | 4" | 12,000 |
| | HA120RP64 | 3/8-24 | 4" | 12,000 |
| | HA120RP1045 | 5/8-11 | 4-1/2" | 12,000 |
| | IR344 | 3/8 - 24 | 4" | 13,500 |
| Jepson | 4601 | M10 X 1.25 | 4" | 11,000 |
| | 4205 | 5/8-11 | 5" | 10,000 |
| | 4105N | M14 | 5" | 10,000 |
| | 4045 | 5/8-11 | 4-1/2" | 11,000 |
| | 4050 | M14 | 5" | 11,000 |
| Jet | JSM-619 | 3/8-24 | 4" | 11,000 |
| | JSM-6195B | 5/8-11 | 5" | 11,000 |
| | JEG-400HD | 3/8-16 | 4" | 11,500 |
| | JEG-450 | 5/8-11 | 4-1/2" | 11,500 |
| | JEG-500 | 5/8-11 | 5" | 9,800 |

| Manufacturer | Model Numbers | Male Thread Size | Grinder Size | Max. RPM |
|---|---|---|---|---|
| Makita | 9553NB | M10 X 1.25 | 4" | 11,000 |
| | 9564 | 5/8-11 | 4-1/2" | 10,500 |
| | 9527PB/9557PB | 5/8-11 | 4-1/2" | 10,000 |
| | 9557NB | 5/8-11 | 4-1/2" | 11,000 |
| | 9554NB | 5/8-11 | 4-1/2" | 10,000 |
| | 9558NB | 5/8-11 | 5" | 11,000 |
| | 9565 | 5/8-11 | 5" | 10,500 |
| | 9015A/9558PB | 5/8-11 | 5" | 10,000 |
| | 9005B | 5/8-11 | 5" | 10,000 |
| | 9514B | M10 x 1.25 | 4" | 11,000 |
| | 9501BZ | M10 x 1.25 | 4" | 10,000 |
| | 9501BKW | M10 x 1.25 | 4" | 10,000 |
| | 9526PB | M10 x 1.50 | 4" | 10,000 |
| | 9503BHZ | 5/8-11 | 4-1/2" | 10,000 |
| | 9527PB | 5/8-11 | 4-1/2" | 10,000 |
| | 9505BHZ/9528PB | 5/8-11 | 5" | 10,000 |
| Metabo | W 7-115 | 5/8-11 | 4-1/2" | 10,000 |
| | W 7-125 | 5/8-11 | 5" | 9,000 |
| | WE 9-125 | 5/8-11 | 5" | 10,000 |
| | W 10-125 | 5/8-11 | 5" | 10,000 |
| | WE 14-125 | 5/8-11 | 5" | 10,500 |
| | W14-125 | 5/8-11 | 5" | 10,000 |
| | 7010 | M14 x 2.0 | 4-1/2" | 10,000 |
| | 6014/7015 | 5/8-11 | 4-1/2" | 10,000 |
| | EWE9125S | 5/8-11 | 4-1/2" | 1,750-8,000 |
| | 11025 | 5/8-11 | 4-1/2"/5" | 10,000 |
| | 7026/10125 | 5/8-11 | 5" | 8,500 |
| | 9023 | 5/8-11 | 5" | 10,000 |
| | 9025 | 5/8-11 | 5" | 10,000 |
| | 11050 | 5/8-11 | 6" | 8,500 |
| | 7016 | 5/8-11 | 4-1/2" | 1,700-8,500 |
| Milwaukee Electric Tool | 6140-6 | 5/8-11 | 4-1/2" | 10,000 |
| | 6145 | 1/2-13 | 4-1/2" | 10,000 |
| | 6148-6 | 5/8-11 | 4-1/2" | 10,000 |
| | 6141 | 5/8-11 | 5" | 10,000 |
| | 6149-20 | 5/8-11 | 5" | 10,000 |
| | 6151 | 5/8-11 | 4-1/2" | 10,000 |
| | 6153-20 | 5/8-11 | 4-1/2" | 11,000 |
| | 6154-20 | 5/8-11 | 4-1/2" | 11,000 |
| | 6155-20 | 5/8-11 | 5" | 11,000 |
| | 6156-20 | 5/8-11 | 5" | 11,000 |
| | 6140/6142 | 5/8-11 | 4-1/2" | 10,000 |
| | 6145 | 1/2-13 | 4-1/2" | 10,000 |
| | 6146 | 1/2-13 | 5" | 10,000 |
| Porter Cable | 749/8749 | M14 x 2.0 | 4-1/2" | 12,000 |
| | 7406 | 5/8-11 | 4-1/2" | 10,000 |
| | 7405 | 5/8-11 | 5" | 10,000 |
| Ryobi | AG401 | 5/8-11 | 4" | 11,000 |
| | AG450 | 5/8-11 | 4-1/2" | 11,000 |
| | SG-1000K | 3/8-16 | 4" | 11,000 |
| | G -1155-C | 5/8-11 | 4-1/2" | 11,000 |
| | G -1125-C | 5/8-11 | 5" | 10,000 |
| Sioux | 1240 | M10 x 1.50 | 4-1/2" | 11,000 |
| | 1240A | M10 x 1.25 | 4-1/2" | 11,000 |
| | 1245 | 5/8-11 | 5" | 10,000 |
| Skil | 9290-01 | 5/8-11 | 4-1/2" | 11,500 |
| | 9330-01 | 5/8-11 | 4-1/2" | 11,000 |
| | 9325-01 | 5/8-11 | 4-1/2" | 11,000 |
| | 9410/(9410:02) | M10 x 1.50 | 4-1/2" | 12,000 |
| | 9310/9415 | 5/8-11 | 4-1/2" | 11,000 |
| | 9611/(9611:02) | 5/8-11 | 4-1/2" | 12,000 |
| | HD9611 | 5/8-11 | 4-1/2" | 12,000 |

# Knot Wire End Brushes



Cleaning hard-to-reach fillet welds on a gusseted base plate.

**Stem-Mounted End Brushes -** Wire end brushes are intended primarily for use on high-speed portable power tools for addressing smaller surfaces and recessed areas. End brushes feature an integral 1/4" steel stem for safe operation at high speed and quick mounting into the collet or chuck of either electric or pneumatic die grinders.

End brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of applications, and they are manufactured with the highest quality construction for smooth, efficient performance and long life. Weiler's end brushes are available in heat-treated steel, Type 302 stainless steel, and bronze or brass wire.

## Applications

- Cleaning ID's, internal passages and recessed areas
- Deburring internal edges and crosshole intersections
- Removal of die flash and excess molded material
- Spot facing



10026



36251



11141



**Knot Wire End Brushes - Feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.**



| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless | Item Number Bronze |
|---|---|---|---|---|---|---|---|
| 1/2" | .006 | 1-1/8" | 20,000 | 10 | – | 10215 | – |
| | .0104 | | | | 10208 | 10216 | – |
| | .014 | | | | 10217 | 10218 | – |
| 3/4" | .006 | 1-1/8" | 20,000 | 10 | – | 10220 | – |
| | .0104 | | | | 10210 | 10211 | – |
| | .014 | 7/8" | 22,000 | | 10025 ■ | 10029 | – |
| | .014 | | | | – | 10387 ◆ | – |
| | .020 | | | | 10026 ■ | 10030 | – |
| | .020 | | | | – | 10388 ◆ | – |
| 1-1/8" | .006 | 1" | 20,000 | 10 | 10141 | 10142• | – |
| | .0104 | 1-1/8" | | | 10212 | 10213 | – |
| | .0118 | | | | 10187 | – | – |
| | .014 | 7/8" | 22,000 | | 10027 ■ | 10031 | – |
| | .014 | | | | – | 10392 ◆ | – |
| | .020 | | | | 10028 ■ | 10032 | 10067 |
| | .020 | | | | – | 10393 ◆ | – |

◆ Nickel-plated Cup compliant with DOD MIL STD 2041D(SH) • Coated Cup

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**Vortec Pro® Knot Wire End Brushes - Feature similar hollow-end construction and heavy-duty brushing action, but they have been engineered to provide cost-effective use for less demanding applications.**



| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item No. | Boxed Qty. Item No. |
|---|---|---|---|---|---|---|
| 3/4" | .014" Fine | Carbon | 7/8" | 22,000 | – | 36286 |
| | .014" Fine | Stainless | | | – | 36287 |
| | .020" Coarse | Carbon | | | 36050 | 36250 |
| 1" | .014" Fine | Carbon | 7/8" | 22,000 | – | 36288 |
| | .014" Fine | Stainless | | | – | 36289 |
| | .020" Coarse | Carbon | | | 36051 | 36251 |

**Knot Wire End Brushes - Banded - Feature a pair of bands around the fill to reduce the exposed trim length and limit brush flaring at operating speed to provide a very aggressive, controlled brushing action.**



| Dia. | Wire Size | Trim * Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|
| 1-1/8" | .014 | 3/8" | 18,000 | 10 | 11140 |
| | .020 | | | | 11141 |

* Trim length from bands




**Mount End Brushes Safely -** When mounting end brushes, the amount of overhang from the tool should be minimized by clamping on as much of the straight portion of the stem as possible. However, the collet or chuck should NOT clamp on the radius at the base of the stem to insure a secure hold before use. See photo on left for the correct brush orientation.

# Crimped Wire End Brushes

**Crimped Wire End Brushes -** Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel | Brass | Stainless |
|---|---|---|---|---|---|---|---|
| 3/8" | .006 | 7/8" | 20,000 | 10 | 10186 | – | – |
| | .0118 | | | | 10188 | – | – |
| 1/2" | .005 | 7/8" | 25,000 | 10 | – | 10158 | – |
| | .006 | | | | 10001 | – | 10013 |
| | .006 | | | | 11000• | – | 11010• |
| | .006 | | | | – | – | 10370◆ |
| | .0104 | | | | 10002 | – | 10014 |
| | .0104 | | | | 11001• | – | 11011• |
| | .0104 | | | | – | – | 10371◆ |
| | .014 | | | | 10003 | – | 10015 |
| | .014 | | | | – | – | 10372◆ |
| | .020 | | | | 10004 | – | 10016 |
| | .020 | | | | – | – | 10373◆ |
| 3/4" | .006 | 7/8" | 22,000 | 10 | 10005 | – | 10017 |
| | .006 | | | | 11003• | – | 11013• |
| | .006 | | | | – | – | 10374◆ |
| | .0104 | | | | 10006 | – | 10018 |
| | .0104 | | | | 11004• | – | 11014• |
| | .0104 | | | | – | – | 10375◆ |
| | .014 | | | | 10007 | – | 10019 |
| | .014 | | | | – | – | 10376◆ |
| | .020 | | | | 10008 | – | 10020 |
| | .020 | | | | – | – | 10377◆ |
| 1" | .005 | 7/8" | 20,000 | 10 | – | 10128 | – |
| | .006 | 1" | 22,000 | | 10009 | – | 10021 |
| | .006 | 7/8" | 22,000 | | 11006• | – | 11016• |
| | .006 | 1" | | | – | – | 10378◆ |
| | .0104 | | | | 10010 | – | 10022 |
| | .0104 | | | | 11007• | – | 11017• |
| | .0104 | | | | – | – | 10379◆ |
| | .0118 | 7/8" | 20,000 | | – | 10091 | – |
| | .014 | 1" | 22,000 | | 10011 | – | 10023 |
| | .014 | | | | – | – | 10380◆ |
| | .020 | 1-1/8" | | | 10012■ | – | 10024 |
| | .020 | | | | – | – | 10381◆ |

◆ Nickel-plated Cup compliant with DOD MIL STD 2041D(SH) • Coated Cup

■ Available in Display Packaging. Add "P" to end of Item Number when placing order. See page 171 for details.

**Vortec Pro® Crimped Wire End Brushes -** Feature similar solid end construction and flexible brushing action, but they have been engineered to provide cost-effective use for less demanding applications.

| Dia. | Wire Size | Wire Type | Trim Length | Max. RPM | Display Pack Item # | Boxed Qty. Item # |
|---|---|---|---|---|---|---|
| 1/2" | .006" Fine | Carbon | 7/8" | 25,000 | – | 36280 |
| | .006" Fine | Stainless | | | – | 36281 |
| | .0104" Medium | Carbon | | | – | 36282 |
| 3/4" | .006" Fine | Stainless | 7/8" | 22,000 | – | 36283 |
| | .0104" Medium | Carbon | | | 36047 | 36247 |
| | .014" Coarse | Carbon | | | 36046 | 36246 |
| 1" | .006" Fine | Carbon | 7/8" | 22,000 | – | 36284 |
| | .006" Fine | Stainless | | | – | 36285 |
| | .0104" Medium | Carbon | | | 36049 | 36249 |
| | .014" Coarse | Carbon | | | 36048 | 36248 |



Cleaning the exhaust port of a gasoline engine.



11013



10009



36247

Tech Note



1. Insert Brush



2. Apply Power



3. Shut-Off Power



4. Remove Brush

When brushing a recessed area or the inside diameter of a tube, use an End Brush in the following manner: Insert the brush, start the brush rotating. Turn off the power before removing the brush. This will prevent the brush from flaring out and enable it to fit into the recessed area again.

# Crimped Wire End Brushes



Cleaning a fillet weld on aluminum using a controlled flare end brush.



11112



10310



10059



35350

## Crimped Wire End Brushes - Banded - Feature a pair of bands around the fill to reduce the exposed trim length and limit brush flaring at operating speed to provide an aggressive, controlled brushing action.



| Dia. | Wire Size | Trim * Length | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless | Aluminum |
| 1/2" | .006<br>.0104 | 9/16" | 20,000<br>25,000 | 10 | 11100<br>11101 | 11110<br>– | –<br>– |
| 3/4" | .006<br>.0104 | 7/16"<br>3/8" | 20,000 | 10 | 11102<br>11103 | 11112<br>11113 | –<br>– |
| 1" | .006<br>.0104 | 3/8" | 10,000 | 10 | –<br>11105 | 11114<br>11115 | –<br>– |
| 1" | .008 | 3/4" | 20,000 | 10 | – | – | 10160 |

* Trim length from bands

## *Controlled Flare End Brushes - Feature uniquely trimmed crimped wire fill for more effective brushing action and greatly enhanced durability when cleaning corners and fillet welds.



| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2" | .0104<br>.014<br>.020 | 7/8" | 25,000 | 10 | 10301<br>10302<br>10303 | 10313<br>10314<br>10315 |
| 3/4" | .0104<br>.014<br>.020 | 7/8" | 22,000 | 10 | 10305<br>10306<br>10307 | 10317<br>–<br>10319 |
| 1" | .0104<br>.014<br>.020 | 1"<br><br>1-1/8" | 22,000 | 10 | 10309<br>10310<br>10311 | 10321<br>10322<br>10323 |

*Patent #8,186,000 B2

The unique trim of a controlled flare end brush is designed specifically to address hard-to-reach areas, reducing filament fatigue and breakage typically associated with a standard end brush when cleaning corners and fillet welds.



Standard Crimped Wire End Brush



Controlled Flare End Brush

## Pilot Bonding Brushes - Banded to expose a short 3/8" trim length of crimped stainless wire and feature a pilot in the center of their solid end. They were originally designed to clean around rivet holes in aluminum aircraft panels but may be used in other similar applications.



| Dia. | Wire Size | Pilot Dia. | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Stainless |
| 1/2" | .005 | 3/32"<br>1/8"<br>5/32"<br>3/16" | 20,000 | 10 | 10056<br>10057<br>10058<br>10059 |

## Polyflex® Encapsulated Crimped Wire End Brushes - Burgundy Elastomer* - Feature fill material that has been encapsulated in an elastomer which gradually wears away to keep only the wire tips exposed; ideal for applications such as spot facing which may require maximum aggression and no flaring.



| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2" | .0104 | 7/8" | 18,000 | 10 | 35340 | 35500 |
| 3/4" | .0104 | 7/8" | 16,000 | 10 | 35345 | 35505 |
| 1" | .0104 | 7/8" | 14,000 | 10 | 35350 | – |
| Orange Elastomer* - Heavy-Duty | | | | | | |
| 1/2" | .0104 | 7/8" | 18,000 | 10 | 35535 | – |
| 3/4" | .0104 | 7/8" | 16,000 | 10 | 35540 | – |
| 1" | .0104 | 7/8" | 14,000 | 10 | 35545 | – |

* See Elastomer Color Code Chart on page 18 for more information.

# Crimped Wire End & Square Brushes

**Circular Flared End Brushes -** Feature crimped wire fill which has been "pre-flared" to match the working angle of the brush at operating speed; suited for addressing broad and slightly contoured surfaces.

| Dia. | Wire Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|
| | | | | Steel | Stainless |
| 1" | .006 | 25,000 | 1 | 10033 | 10042 |
| | .008 | | | 10034 | 10043 |
| | .020 | | | 10099 | – |
| 1-1/4" | .006 | 20,000 | 1 | 10076 | – |
| | .008 | | | 10035 | – |
| 1-1/2" | .006 | 20,000 | 1 | 10044 | 10045 |
| | .008 | | | 10037 | 10046 |
| | .020 | | | 10038 | 10047 |
| 2" | .014 | 25,000 | 2 | 11142 | – |
| 2-3/4" | .008 | 16,000 | 2 | 10039 | 10048 |
| | .020 | | | 10040 | – |
| 3" | .006 | 16,000 | 2 | 10150 | 10151 |
| | .008 | | | 10041 | 10050 |
| | .014 | | | 10134 | – |
| | .020 | | | 10073 | 10074 |
| 4" | .008 | 15,000 | 1 | – | 96705 |

**Polyflex® Encapsulated Circular Flared End Brushes - Black Elastomer* -** Crimped wire fill that has been encapsulated in a heavy-duty elastomer which gradually wears away to keep only the wire tips exposed. Their saucer-shape, narrow face, and aggressive brushing action make them suitable for addressing edges, corners, and confined areas.

| O.D. Dia. | Wire Size | Cup Size | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1-3/4" | .006 | 3/4" | 25,000 | 2 | 35222 | – |
| | .0104 | | | | 35223 | 35226 |
| | .020 | | | | 35224 | – |
| 2" | .0104 | 3/4" | 20,000 | 2 | 35233 | – |
| | .020 | | | | 35234 | – |
| 2-3/4" | .006 | 1" | 16,000 | 2 | 35296 | – |
| | .0104 | | | | 35297 | 35299 |
| | .020 | | | | 35298 | – |

* See Elastomer Color Code Chart on page 18 for more information.

**Pencil End Brushes -** Contains straight wire fill material retained in a small diameter steel tube. They provide a light-duty brushing actions suitable for very small recessed areas.

| Tube Dia. | Wire Size | Trim Length | Overall Length | Max. RPM | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 1/4" | .0104 | 3/4" | 3-3/4" | 8,000 | 10 | 99825 | 99823 |

**Square Brushes -** Wire-filled square brushes are designed to simultaneously clean the side and bottom of blind bores or circular recesses. Square brushes feature an integral 1/4" steel stem for safe operation and quick mounting into the chuck of a drill or drill press.

## Applications

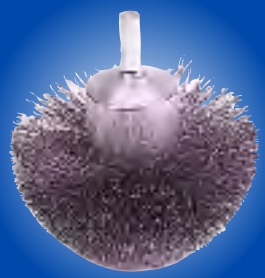
- Removing light rust and carbon build-up from ID's
- Deburring internal edges and crosshole intersections

**Square Brushes -** Feature crimped wire construction for a very flexible brushing action for light-duty cleaning and deburring of ID's and passages.

| Sq. Dia. | Wire Size | Overall Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Steel |
| 1" | .006 | 3-5/8" | 4,500 | 10 | 33000 |
| 1-1/16" | .006 | 3-11/16" | 4,500 | 10 | 33002 |
| 1-1/2" | .006 | 3-7/8" | 4,500 | 10 | 33005 |
| 1-7/8" | .006 | 4-1/16" | 4,500 | 10 | 33009 |



Cleaning the sides and bottom of a deep drawn part using a square brush.



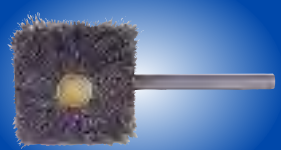
10041



35297



99825



33009

# Crosshole Deburring Brushes



Deburring intersecting oil passages in an engine block.

## Bore-Rx™ Brushes -

Weiler's crimped wire Bore-Rx brushes are designed for automated use in CNC machining centers and dedicated equipment. They are densely filled for high aggression and long tool life and feature a 3/8" diameter steel stem with a flat for use in a collet or end-mill holder.

Bore-Rx brushes are ideal tools for removing burrs from internal edges. Since they can eliminate manual deburring operations, these internal brushing tools help to improve part-to-part consistency and reduce direct labor costs. Bore-Rx brushes are available in sizes ranging from 3/4" to 4" in diameter, and they are designed to be interpolated within bore sizes that are larger than the brush diameter.



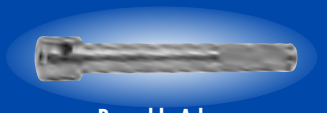
17205



17218



Replacement Head



Reusable Arbor

### Bore-Rx Brushing Tools - Wire Fill - Feature dense crimped wire fill for aggressive deburring action on ductile metals and other hard-to-deburr materials.

| Dia. | Wire Size | Face Width | Overall Length | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/4" | .005 | 3/8"<br>3/4" | 4-3/8"<br>4-3/4" | 8,000 | 1 | 17202<br>17203 |
| 7/8" | .006 | 3/4" | 4-3/4" | 8,000 | 1 | 17205 |
| 1" | .006 | 3/4" | 5" | 8,000 | 1 | 17207 |
| 1-1/4" | .006 | 3/4" | 4-3/4" | 8,000 | 1 | 17209 |
| 1-1/2" | .006 | 1" | 5" | 8,000 | 1 | 17211 |
| 2" | .006 | 1" | 4-1/4" | 6,000 | 1 | 17214 |
| 2-1/2" | .008 | 1" | 4-3/4" | 6,000 | 1 | 17216 |
| 3" | .008 | 1" | 5-1/4" | 6,000 | 1 | 17218 |
| 4" | .0118 | 1" | 6-1/4" | 6,000 | 1 | 17219 |

* Stainless Steel fill is available by special order.

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets. Bore-Rx extension holder is available. Contact Application Engineering at 888-299-APPS (2777).

## Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-to-order in diameters ranging from 3/4" to 1-1/2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. Contact Application Engineering at 888-299-APPS (2777) for more information.




## Operating Parameters For Wire Bore-Rx Brushes

| Brush Diameter | Recommended RPM | Recommended Feed Rate |
|---|---|---|
| 5/8" - 7/8" | 8,000 | 20"/min |
| 1" - 1-1/2" | 8,000 | 20"/min |
| 2" - 2-1/2" | 6,000 | 20"/min |
| 3" - 4" | 3,000 | 20"/min |

### Tool Paths for Crosshole Deburring

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

■ Diameter of Interpolation = Hole Diameter - Brush Diameter

# Power and Hand Tube Brushes

**Power and Hand Tube Brushes -** Weiler offers a comprehensive line of power and hand tube brushes for internal cleaning and deburring applications in tubing, pipe, drilled-and-tapped holes, and machined bores and passages. Due to their twisted-in-wire construction, the use of power tube brushes is limited to low-speed power tools such drills and drill presses and to CNC and manual machine tools in which the RPM can be precisely programmed or set. In addition, they should not be used in reverse rotation to prevent unraveling of the stem wire. Available in a wide variety of brush configurations and fill materials, Weiler can supply a tube brush for any application. If you do not see what you need in this catalog, see the Special Tube Brush Design Specification Sheet on page 54, or call our toll-free Application Engineering Hotline at 888-299-APPS(2777) for assistance.

## Applications

- Deburring and cleaning drilled-and-tapped holes and other internal threads
- Cleaning and finishing the ID of tubing and pipe
- Crosshole deburring
- Removing burrs and chips from internal keyways, slots, and grooves
- Removing paint, coatings, and build-up other foreign material from the surfaces of bores and passages

**Double Stem, Double Spiral - Feature four stem wires and a double spiral of straight wire fill material to provide aggressive cleaning and deburring action.**

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 3/8" | .003<br>.006 | 1-1/2"<br>2-1/8" | 1/8" | 4"<br>6" | 10 | 21342<br>21232 | –<br>– | –<br>– |
| 1/2" | .004<br>.006<br>.0104 | 2" | 5/32" | 5" | 10 | 21106<br>21107<br>21252 | 21116<br>21117<br>– | –<br>21178<br>– |
| 5/8" | .005<br>.008<br>.0104 | 2" | 7/32" | 5" | 10 | 21108<br>21109<br>21184 | 21118<br>21119<br>– | –<br>21219<br>– |
| 3/4" | .006<br>.008<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21110<br>21247<br>21111 | 21120<br>–<br>21121 | 21179<br>–<br>– |
| 7/8" | .006<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21112<br>21113 | 21122<br>21123 | –<br>– |
| 1" | .006<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21114<br>21115 | 21124<br>21125 | 21218<br>– |
| 1-1/4" | .006<br>.0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21164<br>21167 | 21245<br>21236 | –<br>– |
| 1-1/2" | .014 | 2-1/2" | 1/4" | 5-1/2" | 10 | – | 21413 | – |

### Tube Brush Operating Recommendations




The stems in power tube brushes are not as strong as the stems in most other brushes. Therefore, it is very important to avoid any load conditions and brush speeds that can cause excessive stem deflections and destructive bending.

A suggested guideline to avoid this unsafe condition is minimizing the overhang of the stem to under an inch, and running the brush at speeds below 2,000 RPM.

Increasing overhang could decrease the safe speed at which the brush can operate. To reach into deeper holes, use drill extension rods instead of increasing stem overhang.

### Before Starting the Brush:

- Secure brush in chuck
- Ensure clockwise brush rotation (running the brush counter-clockwise could cause the brush to fall apart.)
- Clamp work securely.
- Position all guards in place.
- Align brush with the work so the brush rotates on its true centerline to prevent any stem deflections.
- Guide the brush into the hole before starting the brush rotation.
- Always wear eye protection.



Removing zinc coating from holes in a brake bracket.

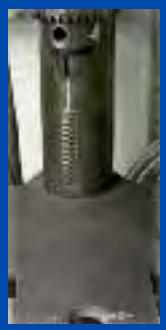


21178

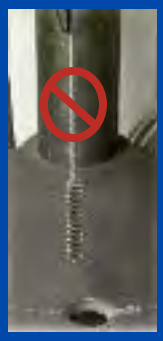


21110

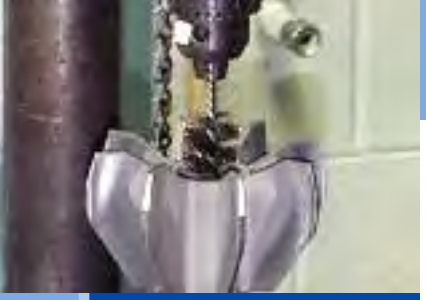
Correct Mounting in Chuck



Incorrect Mounting in Chuck



# Power and Hand Tube Brushes



Cleaning the threads on the I.D. of a mortar shell.



35825



21074



21152

## Polyflex® Encapsulated Double Stem, Double Spiral - Burgundy Elastomer*-

**Encapsulated with an elastomer that leaves only the sharp wire tips exposed for maximum aggression and a very rigid brushing action.**



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 1/2" | .006 | 2" | 5/32" | 5" | 10 | 35821 |
| 5/8" | .0104 | 2" | 7/32" | 5" | 10 | 35822 |
| 3/4" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 35823 |
| 1" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 35825 |

* See Elastomer Color Chart on page 20 for more information.

## Round -

**Feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; for use on smooth or threaded blind holes.**



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Steel | Stainless | Brass |
|---|---|---|---|---|---|---|---|---|
| 1/4" | .004 | 1" | 1/8" | 3-1/2" | 10 | 21072 | 21081 | 21332 |
| 5/16" | .005 | 1" | 1/8" | 3-1/2" | 10 | 21175 | – | – |
| 3/8" | .004<br>.006<br>.008 | 1" | 1/8" | 3-1/2" | 10 | 21073<br>21282<br>21264 | 21082<br>–<br>21240 | –<br>–<br>– |
| 7/16" | .005 | 1" | 1/8" | 3-1/2" | 10 | 21142 | 21181 | – |
| 1/2" | .005 | 1" | 3/16" | 3-1/2" | 10 | 21074 | 21083 | 21182 |
| 9/16" | .005<br>.0104 | 1" | 3/16" | 3-1/2" | 10 | 21143<br>– | –<br>21404 | –<br>– |
| 5/8" | .005<br>.008 | 1" | 3/16" | 3-1/2" | 10 | 21075<br>21265 | 21084<br>– | –<br>– |
| 11/16" | .005 | 1" | 3/16" | 3-1/2" | 10 | 21144 | – | – |
| 3/4" | .006<br>.008 | 1" | 7/32" | 3-1/2" | 10 | 21076<br>21266 | 21085<br>– | –<br>– |
| 13/16" | .005 | 1" | 7/32" | 3-1/2" | 10 | 21146 | – | – |
| 7/8" | .006<br>.008 | 1" | 7/32" | 3-1/2" | 10 | 21077<br>21267 | 21086<br>– | –<br>– |
| 15/16" | .005 | 1" | 7/32" | 3-1/2" | 10 | 21148 | – | – |
| 1" | .005<br>.008 | 1" | 1/4" | 3-1/2" | 10 | 21149<br>21078 | 21340<br>21087 | –<br>– |
| 1-1/8" | .005<br>.008 | 1" | 1/4" | 3-1/2" | 10 | 21150<br>21079 | –<br>21088 | –<br>– |
| 1-1/4" | .008 | 1" | 1/4" | 3-1/2" | 10 | 21080 | 21089 | – |
| 1-1/2" | .008<br>.0104 | 1" | 1/4" | 3-1/2" | 10 | 21203<br>21269 | –<br>– | 21152<br>– |
| 2-1/4" | .008 | 1" | 1/4" | 3-1/2" | 10 | 21322 | – | – |




## Power and Hand Tube Brush Selection Tips

- A flat burrite style tube brush is most effectively used with a holder on blind, threaded holes.



- A round tube brush is most effectively used fully chucked on smooth or threaded blind holes.



- A single stem, single spiral tube brush is most effectively used for manual or hand cleaning applications.



- A double stem, double spiral tube brush is most effectively used with power tools for heavy-duty cleaning and deburring.



- A polyflex encapsulated double stem, double spiral tube brush is most effectively used on power tools for very aggressive cleaning and deburring applications.



**DID YOU KNOW?**

Weiler manufactures more "special" power & hand tube brushes than the standard products in this catalog.

# Power and Hand Tube Brushes

**Burrite Type -** Feature a single continuous length of stainless steel stem wire and filled with a tuft of crimped wire to provide an aggressive flat side action; ideal for cleaning and deburring internal threads.

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 1/4" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21000 | – |
| | .005 | | | | | 21001 | 21050 |
| 5/16" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21004 | – |
| | .005 | | | | | 21005 | – |
| 3/8" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21008 | – |
| | .005 | | | | | 21009 | 21051 |
| | .005 | | 1/8" | | | 21023 | – |
| 7/16" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21014 | – |
| | .005 | | | | | 21015 | – |
| 1/2" | .003 | 9/16" | 3/32" | 2-1/8" | 10 | 21020 | – |
| | .005 | | | | | 21021 | 21053 |
| | .005 | | 1/8" | | | 21025 | – |
| 9/16" | .003 | 5/8" | 1/8" | 2-1/4" | 10 | 21027 | – |
| | .005 | | | | | 21028 | – |
| 5/8" | .003 | 5/8" | 1/8" | 2-1/4" | 10 | 21030 | – |
| | .005 | | | | | 21031 | 21055 |
| 3/4" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21034 | 21056 |
| | .008 | | | | | 21035 | – |
| 7/8" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21036 | 21057 |
| 1" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21040 | 21058 |
| | .008 | | | | | 21041 | – |
| 1-1/8" | .005 | 5/8" | 1/8" | 2-1/4" | 10 | 21044 | – |

**Burrite Type Holders -** Feature a 1/4" stem for convenient mounting into the chuck of a drill or the collet of a machine tool and allow the brush to be used in either direction of rotation. They allow the brush to be used in a standard tapping cycle for deburring threaded holes in CNC machining centers.

| For Brush Stem Dia. | Holder Dia. | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 3/32" | 1/4" | 3-1/8" | 5 | 95202 |
| 1/8" | 3/8" | 3-3/8" | 5 | 95203 |

**Single Stem, Single Spiral -** Feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 1/8" | .003 | 1" | 3/32" | 6" | 10 | 21246 | 21249 | – |
| 3/16" | .003 | 1-1/2" | 3/32" | 7" | 10 | 21090 | 21098 | 21221 |
| | .005 | | | | | 21091 | 21099 | – |
| 1/4" | .003 | 1-1/2" | 3/32" | 7" | 10 | 21092 | 21100 | 21270 |
| | .005 | | | | | 21093 | 21101 | 21139 |
| | .006 | | | | | 21161 | – | – |
| 3/8" | .004 | 2" | 1/8" | 8" | 10 | 21094 | 21414 | 21191 |
| | .006 | | | | | 21095 | 21103 | – |
| 1/2" | .004 | 2" | 1/8" | 8" | 10 | 21096 | 21104 | 21165 |
| | .006 | | | | | 21097 | 21105 | – |
| | .008 | | | | | 21162 | – | – |
| 9/16" | .005 | 2-1/2" | 5/32" | 9" | 10 | 21233 | – | – |



Deburring the threads of a tapped hole using a burrite brush in a holder.



21014



21040



95203



21095

# Power and Hand Tube Brushes



Removing flash from the I.D. of an aluminum casting.



44113



44316



95567



95301



99714

**Nylon Hand Tube Brushes -** Feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight nylon fill allows for easy manual insertion and scratch-free cleaning of the ID.

| Dia. | Fill Dia. | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Nylon |
|---|---|---|---|---|---|---|
| 1/4" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44110 |
| 3/8" | .005 | 2" | 3/32" | 6-1/4" | 36 | 44213 |
| 1/2" | .010 | 3" | 1/8" | 8-1/2" | 36 | 44111 |
| 3/4" | .012 | 3" | 1/8" | 8-1/2" | 36 | 44112 |
| 1" | .014 | 4" | 5/32" | 12-1/4" | 36 | 44113 |
| 1-1/4" | .014 | 4" | 5/32" | 13" | 36 | 44114 |
| 2" | .014 | 5" | 3/16" | 16-3/4" | 36 | 44115 |

**Percolator Brush -** Features single stem, single spiral construction with an eye loop and straight white nylon fill. Intended for cleaning the internal passages in coffee percolators, this brush can be also be used in other similar manual cleaning applications.

| Dia. | Fill Dia. | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Nylon |
|---|---|---|---|---|---|---|
| 7/16" | .010 | 3-1/2" | 5/32" | 11-1/2" | 10 | 44316 |

**Valve Guide Brushes -** Are made with single stem, single spiral construction and have a permanently-attached long steel handle for convenient hand use or for mounting into a chuck. Intended for removing heavy deposits from valve guides in gas and diesel engines, these brushes can also be used in a range of other similar applications.



| Dia. | Fill Dia./ Material | Brush Part | Overall Length | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 1/4"<br>5/16"<br>11/32"<br>3/8"<br>7/16"<br>1/2" | .0104 Steel | 2" | 10" | 10 | 95563<br>95027<br>95566<br>95028<br>95665<br>95029 |
| 11/32"<br>3/8" | .008 Nylon<br>.012 Nylon | 2-1/2" | 10" | 10 | 95660<br>95567 |

**Gun Cleaning Brushes -** Rifle Brushes

Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 8-32 male coupling.

| Caliber | Brush Part | Overall Length | Coupling Size | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|
| 22 | 2-1/4" | 3-1/4" | 8-32 | 10 | 95301 |
| 30 | 2-1/4" | 3-1/4" | 8-32 | 10 | 99786 |
| 35 | 2-1/4" | 3-1/4" | 8-32 | 10 | 99788 |
| 45 | 2-1/4" | 3-1/4" | 8-32 | 10 | 99791 |

**Gun Cleaning Brushes -** Shotgun Brushes

Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 5/16"-27 male coupling.

| Gauge | Brush Part | Overall Length | Coupling Size | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|
| 12 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 99714 |
| 16 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 99694 |
| 20 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 95084 |
| 410 | 1-5/8" | 2-7/8" | 5/16-27 | 10 | 95129 |

**Special Brush Designs -** Design a power tube brush for your specific application.

**Special Tube Brush Specification Sheet:**
**(Use the illustration on this page as a guide)**

1. Brush diameter _____
2. Length of brush part _____
3. Overall brush length _____
4. Special stem diameter (if required) _____
5. Stem material:
   ❑ Galvanized Steel ❑ Stainless ❑ Other
6. Application _____
   _____
7. Brush fill material:
   ❑ Steel wire ❑ Stainless wire
   ❑ Nylon Abrasive Filament (Nylox®)
   ❑ Brass wire ❑ Other_____
8. Fill material diameter _____
9. Special tip style (if required) _____
10. ❑ Single stem ❑ Double stem
11. Order Quantity _____

**** Special tube brushes are not returnable, as they are manufactured to order.***

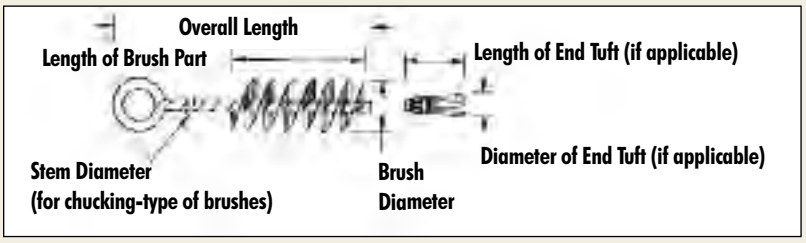
Name: _____
Company Name: _____
Address:_____
Phone: (_____)_____
Fax: (_____)_____
E-mail: _____

End-User Name: _____
City: _____
State: _____ Zip: _____

**For additional information call:**
Weiler's Application Engineering
Hotline toll free at:
**888-299-APPS (2777)**

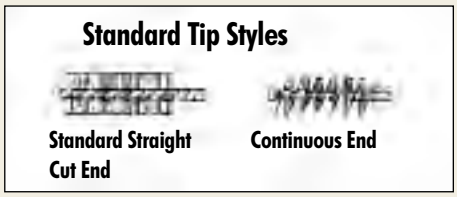
**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

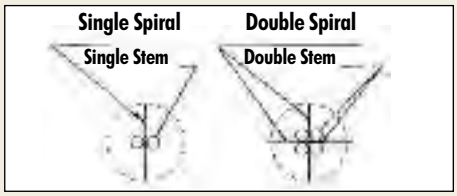
**Or visit our website at:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**









# Miniature Brushes



Removing galled spots from a metal forming die.

**Miniature Brushes -** The Weiler family began producing miniature brushes for the jewelry industry in 1898, and their tradition of providing the highest quality, most cost-effective products continues to this day.

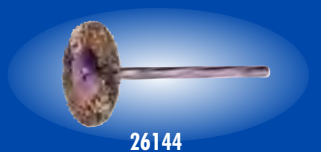
Weiler's line of miniature brushes are designed for precision cleaning, light deburring, and finishing applications in variety of crafts, trades, and industries. In addition to use in jewelry production and in dental and optical labs, miniature brushes have many applications in modern industries such as electronics and instrumentation production, aerospace and aircraft manufacture, and precision tool and die shops. They are permanently mounted on 1/8" or 3/32" stems for quick mounting and efficient use on high-speed electric rotary tools and air-powered pencil die grinders.



99554

## Applications

- Decorative finishing
- Light deburring and edge blending
- Buffing and polishing of small parts
- Light-duty cleaning



26144

### Wire Wheel Brushes -

**Fine crimped wire fill for light-duty cleaning and deburring.**



| Dia. | Wire Size | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 5/8" | .005 | 1/8" | 1/8" | 37,000 | 144 | – | 99554 | – |
| 3/4" | .003<br>.005 | 3/16" | 1/8" | 37,000 | 144 | 26000<br>26003 | –<br>26005 | 26001<br>26004 |
| 3/4" | .003<br>.005 | 3/16" | 3/32" | 37,000 | 144 | 26140<br>26143 | –<br>– | 26141<br>26144 |
| 1" | .003<br>.005<br>.005 | 5/16"<br><br>5/16" | 1/8"<br><br>3/32" | 37,000 | 144 | 26012<br>26015<br>26155 | 26014<br>26017<br>– | –<br>26016<br>– |
| 1-1/4" | .005 | 3/8" | 1/8" | 37,000 | 144 | 26021 | – | – |
| 1-1/2" | .005 | 1/2" | 1/8" | 25,000 | 144 | 26296 | 26294 | – |



26041

### Bristle Wheel Brushes -

**Natural hair fill for scratch-free cleaning of small parts or for buffing and polishing of features such as slots and grooves using abrasive compounds.**



| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/4" | Stiff Hair<br>Soft Hair<br>Stiff Hair*<br>Stiff Hair | 3/16" | 3/32"<br><br><br>1/8" | 37,000 | 144 | 26041<br>26042<br>26043<br>26059 |

* Double thick



26074

### Wire Cup Brushes -

**Fine crimped wire fill for light-duty cleaning or deburring in confined areas.**



| Dia. | Wire Size | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 5/8" | .003<br>.005 | 1/4" | 1/8" | 37,000 | 144 | 26071<br>26074 | –<br>26076 | 26072<br>26075 |



26095

### Bristle Cup Brushes -

**Natural hair fill for scratch-free cleaning of confined areas or for buffing and polishing of small recessed surfaces using abrasive compounds.**



| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 1/2" | Stiff Hair | 7/32" | 3/32" | 37,000 | 144 | 26091 |
| 9/16" | Stiff Hair<br>Soft Hair | 1/4" | 1/8" | 37,000 | 144 | 26093<br>26094 |
| 1" | Stiff Hair<br>Soft Hair | 7/16" | 1/8" | 25,000 | 144 | 26095<br>26096 |

# Miniature Brushes



Deburring the I.D. of a small machined part.

## Wire End Brushes - Fine crimped wire fill for light-duty cleaning or deburring in very small recessed areas or ID's.

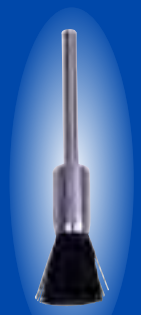
| Dia. | Wire Size | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 3/16" | .003 | 1/4" | 1/8" | 37,000 | 144 | – | – | 26097 |
| | | | | | | 26098 | 26099 | – |
| | | | 3/32" | | | 26101 | – | – |
| 1/4" | .005 | 7/16" | 1/8" | 37,000 | 144 | – | – | 26106 |
| | | | | | | 26107 | 26108 | – |
| 5/16" | .005 | 9/16" | 1/8" | 25,000 | 144 | 26113 | 26114 | – |

## Bristle End Brushes - Natural hair fill for scratch-free cleaning or for buffing and polishing of very small recesses using abrasive compounds.

| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/16" | Stiff Hair | 1/4" | 1/8" | 37,000 | 144 | 26115 |
| | Soft Hair | | | | | 26122 |
| | Stiff Hair | | 3/32" | | | 26116 |
| 1/4" | Stiff Hair | 3/8" | 1/8" | 37,000 | 144 | 26119 |
| 5/16" | Stiff Hair | 9/16" | 1/8" | 25,000 | 144 | 26121 |



26114



26121

## Bristle End Brushes - Plastic Ferrule

Feature a plastic ferrule or cup to protect internal surfaces during use.

| Dia. | Fill Type | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/16" | Stiff Hair | 1/4" | 1/8" | 37,000 | 144 | 26128 |
| 1/4" | Stiff Hair | 3/8" | 1/8" | 37,000 | 144 | 26131 |
| 5/16" | Stiff Hair | 9/16" | 1/8" | 25,000 | 144 | 26133 |



26133

## Abrasive Nylon End Brushes - Plastic Ferrule

Nylox® abrasive nylon fill for buffing and polishing without compounds. They can also be used in automated applications for precision deburring and finishing of small part features.

| Dia. | Filament Dia./Grit | Trim Length | Stem Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/16" | .018/500 | 1/4" | 1/8" | 37,000 | 144 | 26136 |
| 1/4" | .018/500 | 3/8" | 1/8" | 37,000 | 144 | 26138 |
| 5/16" | .018/500 | 9/16" | 1/8" | 25,000 | 144 | 26146 |



26136

**DID YOU KNOW?** Weiler Corporation is the largest manufacturer of miniature brushes in the world.

# Non-Sparking Brushes



Creating an antique finish on a brass plate.

**Non-Sparking Brushes -** Weiler offers an assortment of wire power brushes featuring high-quality bronze or brass wire which offer a very soft brushing action in comparison to steel and stainless steel and which will not generate a spark when used on metal surfaces. They are frequently used for cleaning molds and dies in the injection-molding and extrusion of plastics, and in maintenance activities in areas where flammable or potentially explosive materials are present, such as refineries and petrochemical plants.

Non-sparking brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and they are manufactured with individual knot hole and solid ring construction for high performance and long life. Weiler's non-sparking power brushes are available with plain arbor holes, nuts, and permanently-attached stems for use on a variety of tools.

## Applications

- Light to medium duty cleaning of surfaces, recesses, and ID's
- Deburring component parts machined from soft, non-ferrous metals



13121



01475



29078



17641



13299

### Standard Twist Wheels - Provide a heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications.



| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Bronze |
|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .020 | 1/2"- 3/8" | 20 | 3/8" | 5/8" | 1/2" | 7/16" | 25,000 | 10 | 08271 |
| 4" | .020 | 5/8" - 11 | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 5 | 13121 |

### Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications.



| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item No. Brass |
|---|---|---|---|---|---|---|---|---|---|
| 6" | .005<br>.0118 | 5/8"-1/2" | 1/2" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 2 | 01415<br>01475 |

For other available arbor holes, see Arbor Hole Table pg 20.

### Small Diameter Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.



| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. RPM | Std. Pack | Item Number Brass |
|---|---|---|---|---|---|---|---|
| 1-1/2" | .005 | 3/8" | 1/4" | 7/16" | 20,000 | 10 | 29178 |
| 2" | .005<br>.0118 | 1/2" | 3/8" | 1/2" | 20,000 | 10 | 29059<br>29086 |
| 3" | .014 | 1/2" | 5/8" | 1" | 20,000 | 10 | 29078 |

### Conflex Brush - Small diameter copper-center wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.



| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 3" | .0118 | 1/2" | 1" | 20,000 | 10 | 17641 |

### Knot Wire Cup Brushes - Provide heavy-duty brushing action with some flexibility for more demanding cleaning applications on relatively flat surfaces.



| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|---|
| 2-3/4" | .020 | 5/8"-11 UNC | 1" | 14,000 | 1 | 13299 |
| 4" | .020 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12776 |

# Non-Sparking Brushes

**Crimped Wire Cup Brushes -** Provide a very flexible brushing action for light-duty cleaning applications on somewhat irregular surfaces.



| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Bronze | Item Number Brass |
|---|---|---|---|---|---|---|---|
| 3" | .020 | 5/8"-11 UNC | 7/8" | 14,000 | 1 | 13231 | – |
| 4" | .020 | 5/8"-11 UNC | 1-3/8" | 10,200 | 1 | 14616 | – |
| 5" | .014 | 5/8"-11 UNC | 1-1/4" | 8,000 | 1 | – | 14606 |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,600 | 1 | 14316* | – |

* With internal nut

**Utility Crimped Wire Cup Brushes -** Smaller diameter cup brushes which provide a flexible brushing action for light-duty cleaning applications.



| Dia. | Wire Size | Trim Length | Stem Diameter | Max. RPM | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1-3/4" | .006<br>.0118 | 3/4" | 1/4" | 13,000 | 10 | 14310<br>14314 |
| 2-3/4" | .0118 | 7/8" | 1/4" | 6,000 | 1 | 14311 |

**Knot Wire End Brushes -** Feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.



| Dia. | Wire Size | Trim Length | Stem Diameter | Max. RPM | Standard Pack | Item Number Bronze |
|---|---|---|---|---|---|---|
| 1-1/8" | .020 | 7/8" | 1/4" | 22,000 | 10 | 10067 |

**Crimped Wire End Brushes -** Feature a solid end and very flexible brushing action ideal for light-duty cleaning applications in corners and hard-to-reach areas.



| Dia. | Wire Size | Trim Length | Stem Diameter | Max. RPM | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1/2" | .005 | 7/8" | 1/4" | 25,000 | 10 | 10158 |
| 1" | .005 | 7/8" | 1/4" | 20,000 | 10 | 10128 |
| 1" | .0118 | 1" | 1/4" | 22,000 | 10 | 10091 |

**Double Stem, Double Spiral Power Tube Brushes -** Constructed with four stem wires and a double spiral of straight wire fill material to provide a more aggressive internal cleaning action.



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1/2" | .006 | 2" | 5/32" | 5" | 10 | 21178 |
| 5/8" | .008 | 2" | 7/32" | 5" | 10 | 21219 |
| 3/4" | .006 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21179 |
| 1" | .006 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21218 |

**Round Power Tube Brushes -** Feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; suitable for use on smooth or threaded blind holes.



| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 1/4" | .004 | 1" | 1/8" | 3-1/2" | 10 | 21332 |
| 1/2" | .005 | 1" | 3/16" | 3-1/2" | 10 | 21182 |
| 1-1/2" | .008 | 1" | 1/4" | 3-1/2" | 10 | 21152 |

**Single Stem, Single Spiral Hand Tube Brushes -** Constructed using a single continuous length of galvanized steel stem wire and feature a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Brass |
|---|---|---|---|---|---|---|
| 3/16" | .003 | 1-1/2" | 3/32" | 7" | 10 | 21221 |
| 1/4" | .003<br>.005 | 1-1/2" | 3/32" | 7" | 10 | 21270<br>21139 |
| 3/8" | .004 | 2" | 1/8" | 8" | 10 | 21191 |
| 1/2" | .004 | 2" | 1/8" | 8" | 10 | 21165 |



Removing labels from a compressed-gas storage cylinder.



14316



14314



10067



10158



21178



21332



21191

Non-Sparking Brushes

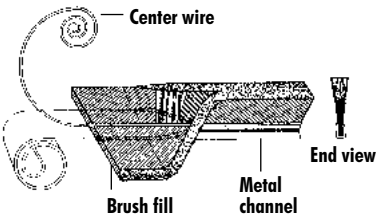
# Strip Brushes



Straight strip brush used as a guard to prevent chips from flying.

**Metal Channel Strip Brushes -** Consist of natural, synthetic or wire bristles, held securely in place by a U-shaped metal channel and center wire, as illustrated. All Weiler brushes are first manufactured into a straight strip brush. The strip can then be coiled into cylinder brushes, or other shapes such as discs and cups.

There is a variety of brush fill and virtually an infinite number of brush specifications within each metal channel size. All strip brushes are manufactured to our customers' individual requirements. This provides the proper filament stiffness, and allows for customers' unique modification of length and trim, enabling us to provide the ideal brush for the application.




## Applications

- Spreading powdered materials
- Dusting tires, tile, paper, etc.
- Splash guard on grinders and machine tools
- Conveyor belt cleaning - assembled on hubs to form rotary brushes
- Lag brushes
- Eliminating static electricity
- Curtains to prevent chips from flying

**DID YOU KNOW?**

Weiler Strip Brushes are used to apply wax to apples.



## General Fiber Characteristics

| | 6.6 Nylon | 6.12 Nylon | Polypropylene | Horse Hair | Tampico |
|---|---|---|---|---|---|
| Heat Distortion (˚F) | 300 | 250 | 225 | 370 | 283 |
| Melting Point | 500 | 405 | 330 | – | – |
| Bend Recovery (%) | 90 | 90 | 70-80 | excellent | poor |
| Shelf Life | excellent | excellent | good | poor | fair |
| Abrasion Resistance | excellent | excellent | good | good | poor |
| Specific Gravity (G/CC) | 1.13-4 | 1.04-5 | .90-1 | 1.3 | .6 |
| Tensile Strength (PSI) | 60-70M | 50-60M | 50-80M | – | – |

## Chemical and Environmental Resistance

| | 6.6 Nylon | 6.12 Nylon | Polypropylene | Horse Hair | Tampico |
|---|---|---|---|---|---|
| Dilute Alkalis | excellent | excellent | excellent | poor | good |
| Dilute Acids | good | good | excellent | poor | good |
| Strong Acids | fair | good | good | good-poor | good-poor |
| Alcohols | good | good | excellent | poor | good |
| Petroleum Distillates | excellent | excellent | good | poor | good |
| Hot Water | good | good | fair | poor | good |
| Alcohols, Vegetable Oils | good | good | excellent | poor | good |

# Strip Brushes – Straight

## Strip Brushes - Straight

Can be mounted on metal or wood back-up plates or on rotary hubs with machine or wood screws.

### Fill Materials

- Hair (horse, goat, etc.)
- Carbon steel
- Type 302 stainless steel
- Non-ferrous metals (brass, bronze, etc.)
- Nylon abrasive filament (Nylox®)
- Natural fibers (tampico)
- Synthetics (nylon, polypropylene)



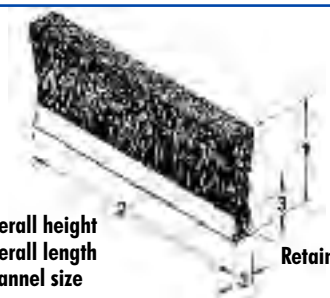
### Strip Brushes - Straight

| Metal Channel Size | Before Forming | After Forming (width x height) | Channel Materials | | | Max. OAH | Max. Bristle Dia. (nylon) | Max. Bristle Dia. (wire) |
|---|---|---|---|---|---|---|---|---|
| | | | Galv. Steel | Stainless Steel 400 Series | Stainless Steel 300 Series | | | |
| #2.5 | 5/16" x .025 | 1/8 (.125) x 1/8" (.125) | XXX | XXX | – | 1-1/2" | .012 | .006* |
| #3 | 3/8" x .025 | 5/32" (.156) x 5/32" (.156) | XXX | XXX | – | 3-1/2"** | .014 | .006* |
| #4 | 1/2" x .030 | 3/16" (.187) x 3/16" (.187) | XXX | XXX | XXX | 4" | .025 | .010 |
| #5 | 5/8" X .040 | 7/32" (.218) X 1/4" (.250) | XXX | XXX | – | 4-1/2" | .030 | .014 |
| #7 | 7/8" X .040 | 5/16" (.312) X 5/16" (.312) | XXX | XXX | XXX | 6" | .050 | .020 |
| #10 | 1-1/4" X .050 | 7/16" (.437) X 7/16" (.437) | XXX | XXX | – | 6" | .060 | .020 |

* Available in brass or bronze only.
** Max. wire OAH 1-1/2".

### Straight Strip Brushes Specification Sheet - Use illustration as guide

1. Overall brush height _____
2. Overall brush length _____
3. Channel size:
   ❑ #2.5 ❑ #3 ❑ #4
   ❑ #5 ❑ #7 ❑ #10
4. Channel material:
   ❑ Galvanized Steel ❑ Stainless Steel
5. Brush fill material:
   ❑ Horsehair ❑ Nylon
   ❑ Carbon Steel ❑ Bronze
   ❑ Polypropylene ❑ Brass
   ❑ 302 Stainless ❑ Tampico
   ❑ Nylon Abrasive Filament (Nylox)
   ❑ Other _____
6. Fill material:
   ❑ Crimped ❑ Straight
   Diameter _____
   Color (if applicable) _____
7. Application: ❑ Wet ❑ Dry
   Operating Temp. _____°F
8. Quantity required _____




1. Overall height
2. Overall length
3. Channel size

Retaining wire

**** Straight strip brushes are not returnable, as they are manufactured to order.***

Name: _____

Company Name: _____

Address: _____

_____

_____

Phone: (_____) _____

Fax: (_____) _____

E-mail: _____

End-User Name: _____

_____

City _____ State _____

Zip _____

**For additional information call:**
Weiler's Application Engineering Hotline
toll free at: **888-299-APPS (2777)**

**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**

# Strip Brushes – Discs, Cups & Holders

**Strip Brushes - Coil Wound -** Can be supplied as an unmounted refill coil, mounted on disposable tubing or wound on a customer's shaft.



### Fill Materials

- Hair (horse, goat, etc.)
- Carbon steel
- Type 302 stainless steel
- Non-ferrous metals (brass, bronze, etc.)
- Nylon abrasive filament (Nylox®)
- Natural fibers (tampico)
- Synthetics (nylon, polypropylene)

**Alligator Clips -** Use on #7 channel only. Coil Wound Strip Brushes can be supplied with Alligator Clips that have tabs at each end to be attached to customers' mandrel.



L.H. Tang | Straight Tang | R.H. Tang

### Strip Brushes - Coil Wound

| Metal Channel Size | Before Forming | After Forming (width x height) | Channel Materials: Galv. Steel | Channel Materials: Stainless Steel 400 Series | Channel Materials: Stainless Steel 300 Series | Min. I.D. | Max. O.D. | Max. Bristle Dia. (nylon) | Max. Bristle Dia. (wire) |
|---|---|---|---|---|---|---|---|---|---|
| #2.5 | 5/16" x .025 | 1/8 (.125) x 1/8" (.125) | XXX | XXX | – | 3/8" | 3-3/8" | .012 | .006* |
| #3 | 3/8" x .025 | 5/32" (.156) x 5/32" (.156) | XXX | XXX | – | 3/8" | 7" | .014 | .006* |
| #4 | 1/2" x .030 | 3/16" (.187) x 3/16" (.187) | XXX | XXX | XXX | 1/2" | 7" | .025 | .008 |
| #7 | 7/8" X .040 | 5/16" (.312) X 5/16" (.312) | XXX | XXX | XXX | 1" | 11" | .050 | .020 |

* Available in brass or bronze only.

### Coil Wound Strip Brushes Specification Sheet - Use illustrations as guide

1. Outside diameter size _____
2. Inside diameter size _____
3. Brush face _____
4. Channel size:
   ❑ #2.5 ❑ #3 ❑ #4 ❑ #7
5. Channel material:
   ❑ Galvanized Steel
   ❑ Stainless Steel
6. Brush fill material:
   ❑ Horsehair ❑ Nylon
   ❑ Carbon Steel ❑ Bronze
   ❑ Polypropylene ❑ 302 Stainless
   ❑ Tampico ❑ Brass
   ❑ Nylon Abrasive Filament (Nylox)
   ❑ Other _____
7. Fill material: ❑ Crimped ❑ Straight
   Diameter _____
   Color (if applicable) _____
8. ❑ Close wound ❑ Open wound
   Specify pitch between spirals_____
9. Mounting Clips: ❑ Yes ❑ No
10. Application: ❑ Wet ❑ Dry
    Operating Temperature _____°F
11. Quantity required _____

**** Coil wound strip brushes are not returnable, as they are manufactured to order.***

Name: _____

Company Name: _____

Address: _____

_____

Phone: (_____) _____

Fax: (_____) _____

E-mail: _____

End-User Name: _____

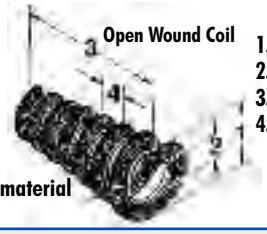
City: _____ State: _____

Zip: _____

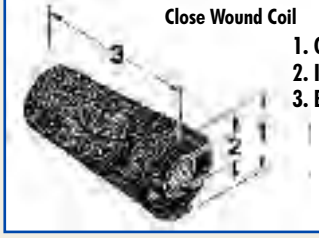
**For additional information call:**
Weiler's Application Engineering Hotline
toll free at: **888-299-APPS (2777)**

**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**




1. Outside Diameter
2. Inside Diameter
3. Brush Face
4. Pitch between spirals




1. Outside Diameter
2. Inside Diameter
3. Brush Face

# Strip Brushes – Discs, Cups & Holders



## Strip Brushes - Disc Brushes

**Outside Disc:** A circular single loop brush with the bristles facing OUTWARD, and the metal channel on the inside.

**Inside Disc:** A circular single loop brush with the bristles facing INWARD, and the metal channel on the outside.

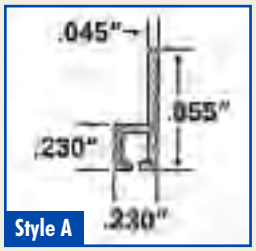


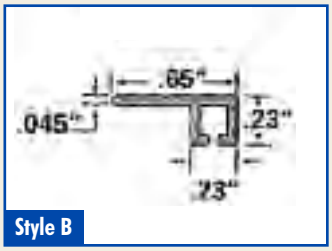
## Strip Brushes - Formed Cups

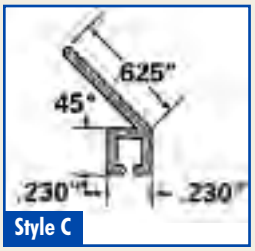
These strip brushes are formed into a circle with the bristles facing down, commonly found in vacuum cleaning applications.



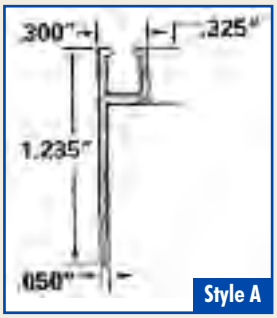
## Holders for Metal Channel Size #2.5 - Max. length 12'

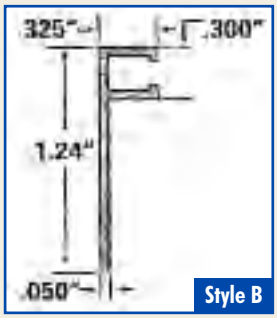


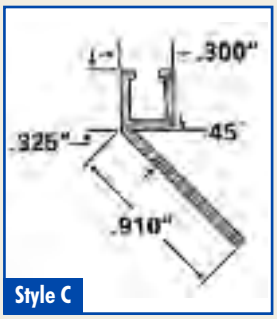



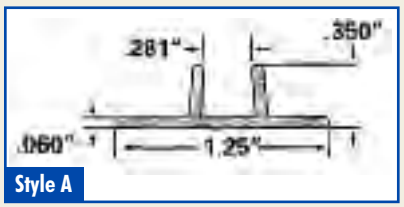

## Holders for Metal Channel Size #4 - Max. length 12'

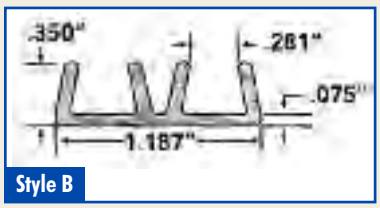


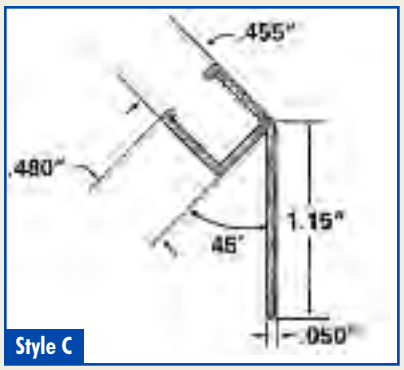



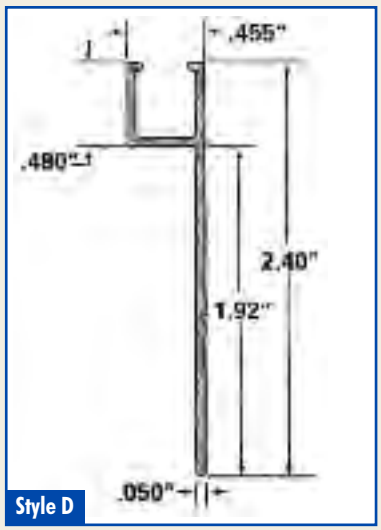



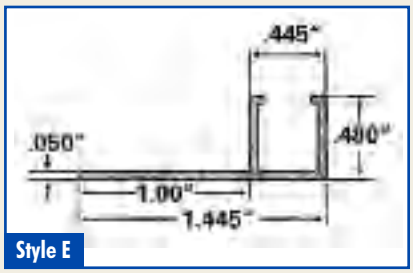

## Holders for Metal Channel Size #7 - Max. length 12'



# Wide Face Brushes



Removing light corrosion and mill scale from coiled steel.

**Wide Face Brushes -** Cylindrical brush assemblies have proven to be reliable and economical tools for a wide variety of industrial surface conditioning applications. In addition to gang-mounting a series of individual wheel brushes onto a shaft or reusable arbor, one-piece wide face brush units can be manufactured to cover broad surfaces or provide maximum brushing action in a minimum amount of space.

Cylindrical brushes can be manufactured using several different styles of construction, and the characteristics of each style of construction can significantly affect brush performance. Weiler will custom-design a wide face brush in the most appropriate type of construction for your specific application. Please call our Application Engineering Team at 888-299-APPS (2777) to discuss your requirements.

## Applications

- Scrubbing debris from the surface of material during processing
- Removing corrosion, surface contamination, mill scale, or heat discoloration
- Roughening surfaces to promote adhesion or bonding
- Removing applied finishes and coatings
- Producing decorative surface finishes
- Deburring or finishing cylindrical parts
- Deburring the cut ends of tubing and extrusions



**Need Help**

Call our Application Engineering Hotline at 888-299-APPS (2777). If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or your facility. Either way, Weiler will provide the most cost-effective solution for your specific application.

**Disposable Brush Assemblies -** Wide face assemblies for brushing flat surfaces can be manufactured as disposable units with a variety of available fill materials depending on the specific application. Available fills include; metallic filaments such as steel, stainless steel, or brass crimped wire; Nylox® nylon abrasive filaments; synthetic filaments such as nylon or heat-stabilized polypropylene; or natural fibers such as tampico.

Disposable mountings can be constructed of carbon steel or stainless steel components, and "flow-through" mountings which allow coolant to be circulated through the core and out the face of the brush are available for wet applications.



**Refillable Brush Assemblies -** Wide face assemblies for brushing flat surfaces can also be manufactured as a replaceable brush unit wound onto a permanent and reusable arbor. Depending on the specific application and production environment, the refilling of reusable arbors may be a more economical option than using disposable units. Reusable mountings can be designed by Weiler or supplied by the customer.

In addition to the secondary operations such as nibbling and grinding of the brush face and dynamic balancing of the completed unit, Weiler also offers maintenance services on mounting hardware like collars and bearings.

# Wide Face Brushes

**Tube End Deburring Brushes -** Cylindrical rotary brushes are an ideal media for production applications involving the batch deburring of the ends of tubing that has been cut-to-length. Automated brushing systems are readily available and considerably less expensive to purchase and operate than chamfering machines.

Brush deburring machines can be integrated with cut-off operations to eliminate work-in-process and increase throughput, and they are flexible enough to be quickly adjusted for various shapes, sizes, and lengths of tubing. Unlike chamfering operations, brush deburring does not leave secondary burrs, brushing equipment is more tolerant of slight variations in machine set-up and tube length, and quality brushes last much longer than cutting inserts on double-end finishers.

Tube end deburring brushes are most commonly manufactured as disposable assemblies which are then mounted onto keyed shafts. High-tensile steel, hard-drawn steel, and Type 302 stainless steel wire are the most common fill materials used in tube end deburring brushes. Weiler offers high quality brushes with wire sizes from .006 to .020 and four available levels of fill density so that the brushing performance can be tailored to the material, burr condition, and budget of the end-user.



Deburring steel tubing on an automated machine.

**Replacement Tube End Deburring Brushes - The brushes in the chart below are a few of the popular Weiler replacement brushes that are available for the most common tube end deburring machines.**

| Dia. | Face Width | Arbor Hole | Wire Size | Brush Density | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|
| 10" | 18" | 3-1/4" | .014 | General Purpose<br>High Performance | 1 | 07340<br>07341 |
| 12" | 18" | 3-1/4" | .014 | General Purpose<br>High Performance | 1 | 07286<br>07342 |
| 12" | 18" | 3-1/4" | .020 | General Purpose<br>High Performance | 1 | 07343<br>07344 |

* The most common arbor hole sizes are 3-1/4" and 2" with 1/2" x 1/4" keyways.
Other arbor holes are available upon request.

Contact your Weiler Sales Rep. or our Customer Service Department for price and availability.

**DID YOU KNOW?**

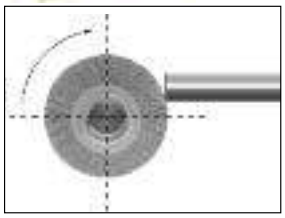
The largest wide face brush we manufacture weighs 152 pounds.

**Custom Tube End Deburring Brushes -** Please use the appropriate specification sheet on the next page when requesting a quotation on a custom tube end deburring brush.

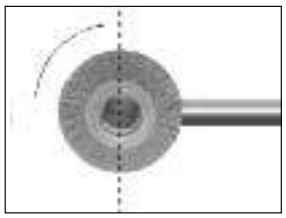
Tech Note

## Brush-Tube Orientation

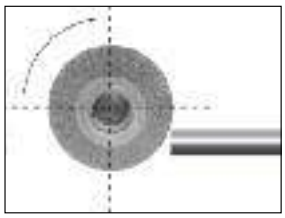
Brush-tube orientation determines which edges of the tube are deburred. The illustrations below show three orientations and the target edge.



Deburring Tube I.D.



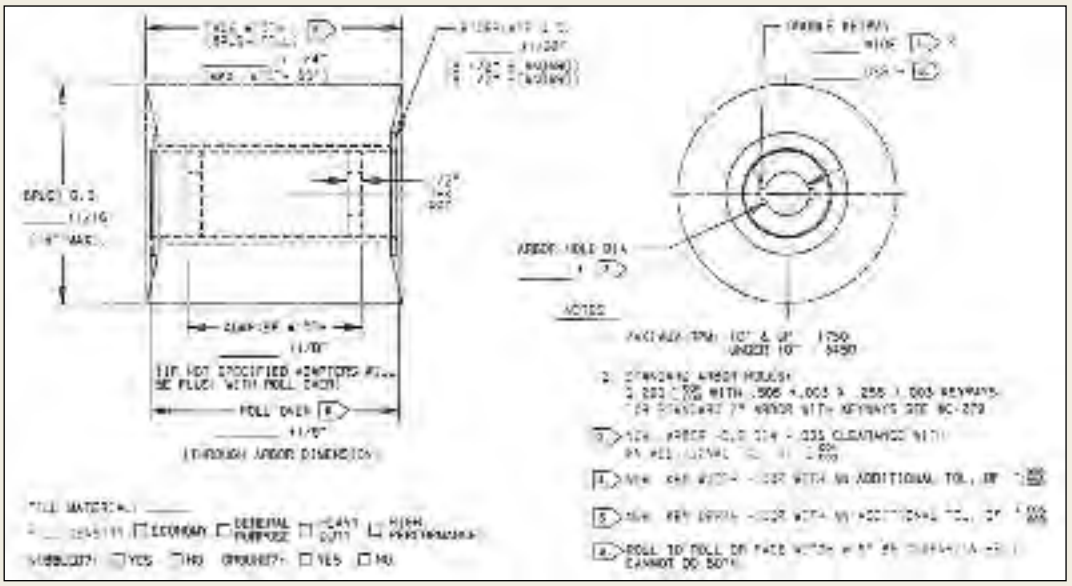
Deburring Tube I.D. and O.D.



Deburring Tube O.D.

# Wide Face Brushes

## Wide Face Brush Specification Sheet - For 8" to 16" brushes



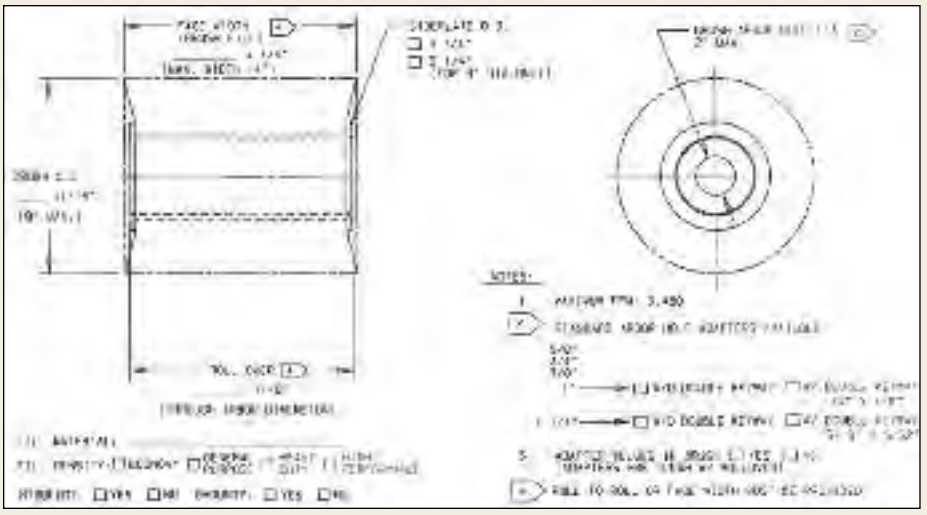
**Name:** _____
**Company Name:** _____
**Address:** _____
_____
**Phone:** (____)_____ **Fax:** (___)_____
**E-mail:** _____
**End-user Name:** _____
**City** _____ **State** _____ **Zip** _____

**For additional information call:**
Weiler's Application Engineering Hotline
toll free at: **888-299-APPS (2777)**

**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**

## Wide Face Brush Specification Sheet (2" I.D.) - For 6" & 8" brushes with a 2" I.D.



**Name:** _____
**Company Name:** _____
**Address:** _____
_____
**Phone:** (____)_____ **Fax:** (___)_____
**E-mail:** _____
**End-user Name:** _____
**City** _____ **State** _____ **Zip** _____

**For additional information call:**
Weiler's Application Engineering Hotline
toll free at: **888-299-APPS (2777)**

**Mail or fax specification sheet to:**
Application Engineering
Weiler Corporation
One Weiler Drive
Cresco, PA 18326-0149
**Fax: 800-635-3615**

**Or visit our website:**
**www.weilercorp.com**
**E-mail: info@weilercorp.com**

# Display Packaged Product

**Display Packaged Product -** In order to generate impulse purchases, a variety of our most popular Weiler industrial grade items are available in highly visible display packaging to stimulate impulse sales. Customers can easily view the product and assess its high quality. Package labeling includes key technical information and UPC barcodes. A multi-lingual safety slip is included with all products, providing comprehensive information on the safe use of the product.

## Standard Twist Wheels - Provide heavy-duty brushing action with some flexibility; Ideal for demanding cleaning applications on somewhat irregular surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Std. Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3" | .014 | 1/2"-3/8" | 20 | 3/8" | 5/8" | 1/2" | 7/16" | 25,000 | 1 | 08014P | – |
| 4" | .014 | 1/2"-3/8" | 24 | 1/2" | 7/8" | 1/2" | 7/16" | 20,000 | 1 | 08044P | – |
| 4" | .014 | 5/8"-11 | 24 | 1/2" | 7/8" | – | 7/16" | 20,000 | 1 | 13106P | 13113P |
| 6" | .014 | 5/8"-1/2" | 24 | 1/2" | 1-3/8" | 1-1/4" | 9/16" | 9,000 | 1 | 08085P | – |


13106P

## Cable Twist Wheel - Maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface prep applications on relatively smooth surfaces.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Standard Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | 5/8"-11 | 24 | 1/4" | 7/8" | 1/2" | 7/16" | 20,000 | 1 | 13266P |


13266P

## Roughneck® Stringer Bead Wheels - Maximum impact action for fast removal of slag, spatter, oxidation as well as other surface prep and cleaning applications.

| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel | Item Number Stainless |
|---|---|---|---|---|---|---|---|---|---|---|
| 4" | .020 | M10 x 1.25<br>5/8"-11 | 32 | 3/16" | 7/8" | 7/16" | 20,000 | 1 | 13125P<br>13131P | –<br>13138P |
| 6" | .020<br>.023 | 5/8"-11 | 56<br>24 | 3/16"<br>1/2" | 1-1/8"<br>1-3/8" | 7/16"<br>9/16" | 12,500 | 1 | 09400P<br>08776P | –<br>– |
| 6-7/8" | .020 | 5/8"-11 | 56 | 3/16" | 1-1/8" | 7/16" | 9,000 | 1 | 09000P | – |


13131P

## Crimped Wire Wheels - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Max. AH Avail. | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 6" | .014 | 5/8"-1/2" | 3/4" | 1-7/16" | 1-1/4" | 7/16" | 6,000 | 1 | 01075P |
| 6" | .014 | 5/8"-1/2" | 5/8" | 1-1/16" | – | 1/2" | 6,000 | 1 | 02325P |
| 6" | .014 | 5/8"-1/2" | 7/8" | 1-1/8" | – | 7/8" | 6,000 | 1 | 06645P |
| 7" | .014 | 5/8"-1/2" | 3/4" | 1-9/16" | – | 1/2" | 6,000 | 1 | 02335P |
| 8" | .014 | 5/8" | 3/4" | 2-1/16" | 1-1/4" | 1/2" | 6,000 | 1 | 01175P |


01075P

## Conflex Brushes - Small diameter copper center wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.

| Dia. | Wire Size | Face Width | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 3" | .008<br>.014 | 1/2" | 1" | 20,000 | 1 | 17615P<br>17617P |


17617P

## Threaded Adapters - For mounting brushes with a 5/8"-11UNC nut to other threaded spindles.

| Fixed Thread Size | Adapted Thread Size | Standard Pack | Item No. |
|---|---|---|---|
| 5/8" - 11 UNC | M10 x 1.25 | 1 | 07771P |
| 5/8" - 11 UNC | M10 x 1.50 | 1 | 07772P |


07771P



12316P

## Knot Wire Cup Brushes - Single Row - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 2-3/4" | .014 | 5/8"-11 UNC | 1" | 14,000 | 1 | 13025P |
| 2-3/4" | .020 | M10 x 1.25<br>5/8"-11 UNC | 1" | 14,000 | 1 | 13281P<br>13286P |
| 3-1/2" | .023 | 5/8"-11 UNC | 7/8" | 13,000 | 1 | 13156P |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316P |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 7,000 | 1 | 12276P* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376P |

* With internal nut



13245P

## Crimped Wire Cup Brushes - Very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; featuring a threaded nut for use on angle grinders.

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 3" | .014 | M10 x 1.25<br>5/8"-11 UNC | 1" | 14,000 | 1 | 13240P<br>13245P |
| 4" | .020 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 14036P |
| 6" | .020 | 5/8"-11 UNC | 1-1/4" | 6,600 | 1 | 14076P* |

* With internal nut



10012P



10028P

## Knot Wire End Brushes - Feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|
| 3/4" | .014<br>.020 | 1-1/8" | 22,000 | 1 | 10025P<br>10026P |
| 1-1/8" | .014<br>.020 | 7/8" | 22,000 | 1 | 10027P<br>10028P |

## Crimped Wire End Brush - Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.

| Dia. | Wire Size | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|
| 1" | .020 | 1-1/8" | 20,000 | 1 | 10012P |



13001

## Mini-Grinder Kit - For use on small right angle grinders. All products have a 5/8"-11 Arbor Hole

| Kit Contains | Item No. |
|---|---|
| 4-1/2" Abrasive Flap Disc (Zirconium Grain, 60 Grit); Item #50519:<br>For grinding and finishing in one step. | 13001 |
| 2-3/4" Knot Wire Cup Brush (.020 Steel Wire); Item #13286:<br>For cleaning large surface areas. | |
| 4" Stringer Bead Knot Wire Wheel (.020 Steel Wire); Item #13131<br>For weld cleaning, deburring and surface preparation. | |



13002

## Air Tool/Drill Accessory Kit -

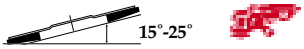
All products have a 1/4" Stem and are ideal for general purpose cleaning and deburring in recessed or confined areas.

| Kit Contains | Item No. |
|---|---|
| 3" Crimped Wire Wheel (.0118 Steel Wire); Item #17616 | 13002 |
| 1-3/4" Crimped Wire Cup Brush (.0118 Steel Wire); Item #14301 | |
| 3/4" Crimped Wire End Brush (.020 Steel Wire); Item #10008 | |
| 3" Abrasive Flap Wheel (Aluminum Oxide Grain, 80 Grit); Item #52028 | |

# Display Packaged Product

## Vortec Pro® - Display Packaged Flap Discs- Angled Style (Type 29)

**Convenient hang-card makes increasing point-of-purchase sales easy!**




| Diameter | Grit Size | Max. RPM | Phenolic Back - Zirconium | | | Aluminum Back - Zirconium | | |
|---|---|---|---|---|---|---|---|---|
| | | | Arbor Hole | Standard Pack | Item Number | Arbor Hole | Standard Pack | Item Number |
| 4" | 36 | 15,000 | 5/8" | 6 | 30822 | 5/8"-11 | 6 | 30821 |
| | 60 | | | | 30825 | | | 30823 |
| | 80 | | | | 30826 | | | 30824 |
| 4-1/2" | 36 | 13,000 | 7/8" | 6 | 30828 | 5/8"-11 | 6 | 30827 |
| | 60 | | | | 30831 | | | 30829 |
| | 80 | | | | 30832 | | | 30830 |



30828

## Multi-Purpose Brush Countertop Display -

**Economical brushes provide lasting, efficient service at minimal cost.**

| Display Contains | Item No. |
|---|---|
| (20) 2" Multi-Purpose Brushes, White Bristle - Wood Handle; Item #40068<br>(10) 3" Multi-Purpose Brushes, White Bristle - Wood Handle; Item #40070 | 61011 |



61011

## Stainless Steel Scratch Brush Countertop Display -

**Ideal for removing rust, scale and paint from metal surfaces.**

| Display Contains | Item No. |
|---|---|
| (36) Stainless Steel Small Hand Scratch Brushes,<br>7-1/2" x 1/2" Block Wood Handle; Item #44167 | 61012 |



61012

**FREE Sweeping Center Rack And Header with Qualifying Order - Rack #44901 and Header #44902**

Contact Customer Service at 800-835-9999 for details on how to receive a FREE rack and header to use when displaying Weiler maintenance products.
**A Qualifying Order is required.** Below is an example of a Qualifying Order.

### Recommended List of Product for Sweeping Center Display

| | Description | Item No. |
|---|---|---|
| 6 each: | 24" Contractor Broom, Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center, 3" Trim | 44581 |
| | 24" Contractor Broom, Palmyra, 4" Trim | 44584 |
| | 24" Contractor Broom, Medium Maroon Polypropylene, 3-1/4" Trim | 44587 |
| | 24" Contractor Broom, Stiff Blue Polypropylene, 3-1/4" Trim | 44590 |
| 12 each: | 57" Light Industrial Corn Broom, 17" Trim | 44548 |
| 24 each: | 5' x 1-1/8" Contractor Broom Handle with Free Brace | 44635 |

Item #s 44901 & 44902 must appear on purchase order.



42300

**FREE Pro-Flex™ Display Box with Qualifying Order - Display Box #44625**

Contact Customer Service at 800-835-9999 for details on how to receive your FREE display box to use when displaying Weiler Pro-Flex products.
**A Qualifying Order is required.** Below is an example of a Qualifying Order.

### Recommended List of Product for Pro-Flex™ Display Box

| | Description | Item No. |
|---|---|---|
| 3 each: | 24" Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center, 3" Trim | 44600 |
| | 24" Palmyra, 4" Trim | 44601 |
| | 24" Medium Maroon Polypropylene, 3-1/4" Trim | 44604 |
| | 24" Stiff Blue Polypropylene, 3-1/4" Trim | 44606 |

Each sweep comes with handle attached and ready to display.

Item #44625 must appear on purchase order.



44625

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# Weiler® Products For The Rail Axle Industry












- Cleaning and Reconditioning Products
- Grease Application Products
- Maintenance Products

**High Performance Consumables For Axle Reconditioning, Repair & Maintenance**

# Railcar Axle Reconditioning Products



Knot cup brush cleaning an axle body.

**Power Brushes** are ideal tools for the removal of accumulated grease, road dirt and rail dust from axles either prior to or after the disassembly of the wheel set. Wire-filled brushes do not remove base metal, and they cut through caked-on surface contaminants much more quickly and efficiently than abrasive products.

## Large Diameter Knot Wire Wheels -

**For automated cleaning of axles; high aggression provides rapid removal of accumulations from axle bodies.**



09020

| Dia. | Wire Size | Arbor Hole | Number of Knots | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|---|---|---|
| 12" | .020<br>.020<br>.023 | 2"◆ | 56<br>66<br>66 | 5/8"<br>3/4"<br>3/4" | 2-3/4"<br>2-1/4"<br>2-1/4" | 13/16" | 4,500<br>5,000<br>5,000 | 2 | 09710-14+<br>09950+<br>09870 |
| 14" | .0118<br>.014<br>.020 | 2" | 80 | 3/4" | 2-1/2" | 5/8" | 5,000 | 2 | 08300<br>08310<br>08330 |
| 14" | .014<br>.016<br>.020 | 2"◆ | 90 | 3/4" | 1-1/2" | 5/8" | 5,000 | 2 | 09020*<br>09030+<br>09040* |
| 15" | .0118<br>.014<br>.020 | 2" | 80 | 3/4" | 3" | 5/8" | 5,000 | 2 | 09960<br>09980<br>09990 |
| 15" | .014<br>.016<br>.020 | 2"◆ | 90 | 3/4" | 2" | 5/8" | 5,000 | 2 | 09060+<br>09070+<br>09080* |

◆ 1/2" x 1/4" Double Keyway
* Economy

+ Special order item. Contact Customer Service for details. Other arbor hole sizes are available for above items, contact Customer Service for details.

## Large Diameter Crimped Wire Wheels - For automated cleaning of axles; flexible brushing action allows greater conformability for thorough cleaning of wheel seats, dust guards and journal filets.



03200

| Dia. | Wire Size | Arbor Hole | Face Width | Trim Length | Thickness at Face Plates | Max. RPM | Std. Pack | Item No. Steel |
|---|---|---|---|---|---|---|---|---|
| 10" | .0118<br>.014<br>.020 | 2" | 2" | 1-7/8" | 1-5/8" | 4,000 | 1 | 03190<br>03200<br>03210 |

## Knot Wire Cup Brushes - For manual axle cleaning operations and touch-up work; high aggression for efficient cleaning action on right angle grinders.



12376

| Dia. | Wire Size | Arbor Hole | Trim Length | Max. RPM | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 3-1/2" | .023 | M14 x 2.0<br>5/8"-11 UNC | 7/8" | 13,000 | 1 | 13152<br>13156 |
| 4" | .023 | 5/8"-11 UNC | 1-1/4" | 10,200 | 1 | 12316 |
| 5" | .023 | 5/8"-11 UNC | 1-3/8" | 9,000 | 1 | 12276* |
| 6" | .023 | 5/8"-11 UNC | 1-3/8" | 6,600 | 1 | 12376 |

* Internal Nut

## Power Tube Brushes - For manual cleaning of internal threads for axle end-cap retaining bolts; double stem, double spiral construction provides rapid cleaning on drills.



21115

| Dia. | Wire Size | Brush Part | Stem Dia. | Overall Length | Standard Pack | Item Number Steel |
|---|---|---|---|---|---|---|
| 1" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21115 |
| 1-1/8" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21168+ |
| 1-1/4" | .0104 | 2-1/2" | 1/4" | 5-1/2" | 10 | 21167 |

+ Special order item. Contact Customer Service for details.

**Coated and Non-Woven Abrasives** are ideal tools for surface reconditioning and final finishing of wheel seats, bearing journals and bearing-journal filets. Coated abrasives cut more quickly and are typically used for blending and initial finishing work. Non-Woven abrasives produce finer final finishes and are very efficient polishing tools.



A surface conditioning disc polishing an axle journal.

### Tiger Disc - Angled Style (Type 29) - Phenolic Backing - Zirconium Grain

**Maximum aggression and long life; for blending and finishing journals.**




| Diameter | Grit Size | Standard Pack | Max. RPM | Item Number 7/8" Arbor | Item Number 5/8"-11 Arbor |
|---|---|---|---|---|---|
| 4-1/2" | 40 | 10 | 13,000 | 50603 | 50608* |
| | 60 | | | 50604 | 50609* |
| | 80 | | | 50605 | 50610* |
| | 120 | | | 50606 | – |
| 7" | 40 | 10 | 8,600 | 50623 | 50643* |
| | 60 | | | 50624 | 50644* |
| | 80 | | | 50625 | 50645* |
| | 120 | | | 50626 | 50646* |

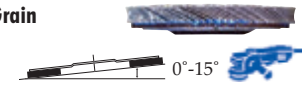
* Patent # 6,945,863



50603

### Big Cat® - High Density Flat Style (Type 27) - Phenolic Backing - Zirconium Grain

**Increased conformability and maximum life; ideal for blending and finishing journal filets and dust guards.**




| Diameter | Grit Size | Standard Pack | Max. RPM | Item Number 7/8" Arbor | Item Number 5/8"-11 Arbor |
|---|---|---|---|---|---|
| 4-1/2" | 40 | 10 | 12,000 | 50803 | 50808* |
| | 60 | | | 50804 | 50809* |
| | 80 | | | 50805 | 50810* |
| | 120 | | | 50806 | – |
| 7" | 40 | 10 | 8,600 | 50823 | 50843* |
| | 60 | | | 50824 | 50844* |
| | 80 | | | 50825 | 50845* |
| | 120 | | | 50826 | 50846* |

* Patent # 6,945,863



52027

### Tiger® Mounted Flap Wheels - 1/4" Stem - Aluminum Oxide.

**For touch-up work on sealing and bearing surfaces.**



| Diameter | Width | Grit Size | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 3" | 1" | 60 | 23,000 | 10 | 52027 |
| | | 80 | | | 52028 |
| | | 120 | | | 52029 |



51522

### Hook & Loop Style Surface Conditioning Discs - For polishing and final finishing.



| Diameter | Grade | Standard Pack | Item Number |
|---|---|---|---|
| 7" | Medium (Maroon) | 10 | 51522 |
| 8" | Medium (Maroon) | 10 | 51525 |

### Back-up Pads - For Grinders with 5/8"-11 Spindles.

| Diameter | Max. RPM | Standard Pack | Item Number |
|---|---|---|---|
| 7" | 6,000 | 1 | 51578 |
| 8" | 4,500 | 1 | 51579 |

Do not exceed maximum RPM of back-up pad.



51579

### Hand Pads - Aluminum Oxide - For touch-up work on sealing and bearing surfaces.

| Size | Grade Type | Grade | Description | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 6" x 9" | Industrial | Medium | Economy General Purpose (Maroon) | 60 | 51460 |
| 6" x 9" | Commercial | Fine | Economy (Green) | 400 | 51456 |



51456

# Repair & Maintenance Products



Applying grease with a paint roller.



56464



40185



44663



49061



49020



25242

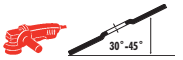
Please note that this brochure features only a small assortment of the surface conditioning products offered by Weiler. The featured items have been selected specifically based upon their popularity in the rail axle market.

For the full offering of Weiler power brushes, abrasives, and maintenance products, please refer to our Solutions Resource Guide, visit our website or call our Applications Hotline at 888-299-2777 to discuss your requirements with a product specialist.

**Bonded Abrasive & Maintenance Products** are cost-effective tools for general purpose grinding and cutting, applying lubricants such as wheel mounting compound and bearing grease, and the clean up of chips and debris produced by the machining of wheels and axles.

## Vortec Pro® Type 27 Grinding Wheels -

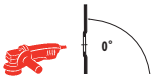
**For general purpose grinding and reworking of part features.**




| Diameter | Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item No. |
|---|---|---|---|---|---|---|
| Aluminum Oxide - For General Purpose Steel Applications | | | | | | |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 13,300 | 10<br>25 | 56454<br>56464 |
| 4-1/2" | 1/4" | 5/8"-11<br>7/8" | A24N - Metal | 13,300 | 10<br>25 | 56455<br>56457 |
| 7" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 8,500 | 10<br>20 | 56468<br>56467 |
| 9" | 1/4" | 5/8"-11<br>7/8" | A24R - Metal | 6,600 | 10<br>20 | 56470<br>56442 |

## Vortec Pro® Small Type 1 Reinforced Cut-Off Wheel -

**For general purpose cutting and repair work.**




| Diameter | Thickness | Arbor Hole | Type | Max. RPM | Std. Pack | Item No. |
|---|---|---|---|---|---|---|
| 4-1/2" | .045" | 7/8" | WA60T - Metal | 13,500 | 50 | 56281* |

*Contaminant-free.

## Vortec Pro® Economy Chip and Oil Brush - White Bristle - Wood Handle

**For light duty application of grease and wheel mounting compound.**

| Width | Thickness | Bristle Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 4" | 3/8" | 1-3/4" | 12 | 40185 |

## Utility Scrub Brush - For application of grease and oil.

| Overall Length | Fill Material | Trim Length | Block Type | Standard Pack | Item Number |
|---|---|---|---|---|---|
| 20" | White Tampico | 2" | Foam | 12 | 44663 |

## Industrial Grade Roller - Poly blend with PVC core - For application of grease and oil.

| Size | Nap | Surface | Standard Pack | Item Number |
|---|---|---|---|---|
| 9" | 5mm | Smooth | 12 | 49061 |

### Roller Frame - Vortec Pro® Standard-duty

| Size | Description | Standard Pack | Item Number |
|---|---|---|---|
| 9" | 1/4" dia. frame with 4 wire cage | 24 | 49020 |

## Vortec Pro® Garage Brushes & Handle - Lacquered Hardwood Block

**Reliable and efficient brushes at a value price. For heavy sweeping of shop debris.**

| Block Size | Fill Material | Trim Length | Standard Pack | Item Number |
|---|---|---|---|---|
| 24" | Palmyra | 4" | 1 | 25242 |
| 24" | Maroon Polypropylene | 3-1/4" | 1 | 25239 |
| 60" Hardwood handle with heavy-duty threaded metal tip | | | 12 | 44300 |

## Upright Brooms - Ideal for sweeping shop floors, reaching into corners, etc.

| Description | Fill Material | Trim Length | Overall Length | Standard Pack | Item No. |
|---|---|---|---|---|---|
| Light Industrial Brooms - Better Quality | | | | | |
| 5 sews - 7/8" handle | Corn & Fiber | 17" | 57" | 12 | 44548 |
| Warehouse Broom - Heavy-Duty | | | | | |
| 4 sews - 1-1/8" handle<br>Wire banded | Corn & Fiber | 18" | 57" | 12 | 44008 |


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# Products for Aluminum, Stainless and Other Hard-to-Grind Metals

## Saber Tooth™ Ceramic Abrasive Products













**Ceramic Abrasive Products:**

- Flap Discs
- Blending Discs
- Resin Fiber Discs
- Belts

**Fast-cutting, ceramic abrasives for superior performance on stainless, aluminum and other hard-to-grind metals.**



Weiler TIGER® DISC

# Saber Tooth™ Your "Hard-to-Grind" Metals Solution!

**Weiler's Saber Tooth Ceramic Abrasives provide cool, fast-cutting action on Aluminum, Stainless Steel and other hard-to-grind metals, resulting in *lower grinding and finishing costs.***

- **Fast cut and long life** due to the aggressive self-sharpening ceramic grain.
- **Specially formulated grinding aid** prevents dulling and glazing of grain and allows for "cool-cutting" protecting high value parts from heat discoloration.
- **Designed to work with heat sensitive materials** such as Aluminum, Stainless Steel, Inconel, Titanium and other hard-to-grind metals.

- Weld Blending
- Grinding
- Deburring
- Deflashing
- Surface Finishing
- Edge Chamfering




50109




- Weiler's Ceramic Flap Discs are contaminant free, which means Iron, Sulfur and Chlorine is ≤ 0.1%.
- Bright red grinding aid provides cool, fast cutting.

56494



56495

## Flap Discs

**Saber Tooth Ceramic Flap Discs -** Grind and finish aluminum, stainless steel and other hard-to-grind metals in ONE step, resulting in fewer changeovers and increased productivity – and that means instant value.




**Saber Tooth Ceramic Flap Discs - Phenolic Backing, Angled Style (Type 29)**

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Package | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 36<br>40<br>60<br>80 | 13,000 | 10 | 50100<br>50101<br>50102<br>50103 |
| 4 1/2" | 5/8"-11 | 36<br>40<br>60<br>80 | 13,000 | 10 | 50104<br>50105<br>50106<br>50107 |
| 7" | 7/8" | 36<br>40<br>60<br>80 | 8,600 | 10 | 50108<br>50109<br>50110<br>50111 |
| 7" | 5/8"-11 | 36<br>40<br>60<br>80 | 8,600 | 10 | 50112<br>50113<br>50114<br>50115 |

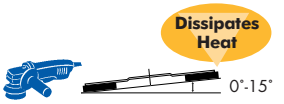
### Adapting Nuts and Spanner Wrench

| Description | Thread Size | Use With | Standard Package | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 5/8"-11 | Discs with 7/8" Arbor | 1 Pair | 56494 |
| Spanner Wrench | – | Adapting Nuts | 1 | 56495 |

**Saber Tooth High Density Ceramic Flap Discs -** A thicker disc with larger flaps which conforms to curved and irregular surfaces while producing a consistent finish. Provides increased conformability and maximum life when grinding aluminum, stainless steel and other hard-to-grind metals.




### Saber Tooth High Density Ceramic Flap Discs -
**Phenolic Backing, Flat Style (Type 27)**




| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Package | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50130<br>50131<br>50132 |
| 4 1/2" | 5/8"-11 | 40<br>60<br>80 | 13,000 | 10 | 50133<br>50134<br>50135 |
| 7" | 7/8" | 40<br>60<br>80 | 8,600 | 10 | 50136<br>50137<br>50138 |
| 7" | 5/8"-11 | 40<br>60<br>80 | 8,600 | 10 | 50139<br>50140<br>50141 |



50131

**Exclusive!**
**Saber Tooth Trimmable Ceramic Flap Discs**
This is the first line of ceramic flap discs in the marketplace that includes a trimmable backed disc, providing these additional benefits:

- **Trimmable backing for extended disc life.**
- **High flexibility** which enables you to access hard-to-reach areas such as right angles and irregular shapes, and grind on-edge without changing tools, increasing productivity.
- **Performance-engineered** with a non-marking backing that will not damage the work-piece, resulting in less re-work and scrap.



The backing can be trimmed up to 3/8" from the original diameter, dramatically extending the life of the disc.




50117

### Saber Tooth Ceramic Flap Discs - Trimmable Backing, Angled Style (Type 29)



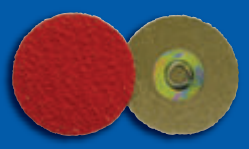

| Diameter | Arbor Hole | Grit Size | Max. RPM | Standard Package | Item Number |
|---|---|---|---|---|---|
| 4 1/2" | 7/8" | 40<br>60<br>80 | 13,000 | 10 | 50117<br>50118<br>50119 |
| 4 1/2" | 5/8"-11 | 40<br>60<br>80 | 13,000 | 10 | 50121<br>50122<br>50123 |



**NOTE**

**All applicable Weiler Abrasives comply with the Safety Standards of the American National Standards Institute: ANSI B7.1 "Safety Requirements – For the Use, Care and Protection of Abrasive Wheels".**

# Blending Discs & Resin Fiber Discs


60150


60170


51552


60508


59557


59601


59604


59603

**Saber Tooth Ceramic Blending Discs -** These cloth backed, coated abrasive discs are ideal for a wide range of light fabrication, repair and maintenance applications on aluminum, stainless steel or other hard-to-grind metals.

### Saber Tooth Ceramic Blending Discs

Compatible with Norton Speed-Lok® TS back-up pads.

Compatible with 3M Roloc™ back-up pads.

| Diameter | Grit Size | Std. Pkg. | Metal Hub Item No. | Plastic Button Item No. |
|---|---|---|---|---|
| 2" | 36 | 100 | 60150 | 60170 |
| | 60 | | 60151 | 60171 |
| | 80 | | 60152 | 60172 |
| 3" | 36 | 50 | 60155 | 60175 |
| | 60 | | 60156 | 60176 |
| | 80 | | 60157 | 60177 |

Dissipates Heat

### Accessories for Blending Discs

| Description | Size | Max. RPM | Std. Pkg. | Item No. |
|---|---|---|---|---|
| Metal Hub Style Back-up Pad | 2" | 25,000 | 1 | 60508 |
| Metal Hub Style Back-up Pad | 3" | 20,000 | 1 | 60509 |
| Plastic Button Style Back-up Pad | 2" | 25,000 | 1 | 51551 |
| Plastic Button Style Back-up Pad | 3" | 20,000 | 1 | 51552 |

Do not exceed maximum RPM of back-up pad.

**Saber Tooth Ceramic Resin Fiber Discs -** These fiber backed, coated abrasive discs are designed for all purpose weld blending, grinding, surface preparation and finishing on Aluminum, Stainless Steel and other hard-to-grind metals.

### Saber Tooth Ceramic Resin Fiber Discs - Unique bright red color.

Dissipates Heat

| Diameter | Arbor Hole | Grit Size | Std. Pkg. | Item No. |
|---|---|---|---|---|
| 4-1/2" | 7/8" | 24 | 25 | 59550 |
| | | 36 | | 59551 |
| | | 50 | | 59552 |
| | | 60 | | 59553 |
| | | 80 | | 59554 |
| 5" | 7/8" | 24 | 25 | 59557 |
| | | 36 | | 59558 |
| | | 50 | | 59559 |
| | | 60 | | 59560 |
| | | 80 | | 59561 |
| 7" | 7/8" | 24 | 25 | 59564 |
| | | 36 | | 59565 |
| | | 50 | | 59566 |
| | | 60 | | 59567 |
| | | 80 | | 59568 |

### Accessories for Resin Fiber Discs

| Description | Thread Size | Max. RPM | Std. Pkg. | Item No. |
|---|---|---|---|---|
| 4-1/2" Back-up Pad | 5/8"-11 | 11,000 | 1 | 59611 |
| 5" Back-up Pad | 5/8"-11 | 10,000 | 1 | 59600 |
| 7" Back-up Pad | 5/8"-11 | 8,500 | 1 | 59601 |
| Spanner Wrench | – | – | 1 | 59603 |
| Disc Nut | 5/8"-11 | – | 1 | 59604 |



**Ceramic Belts also available!**
Contact Customer Service at 800-835-9999 for available sizes and grits.

Distributed By:


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Form Reorder No.: WC615 Rev 8-13 • 8135LP

# TIGER PAW






## CUTTING-EDGE ABRASIVE FLAP DISCS FOR STEEL AND STAINLESS STEEL METALWORKING APPLICATIONS

# TIGER PAW™. GET THE EDGE.

**GRINDS BETTER. LASTS LONGER. DOES MORE.** For steel and stainless steel metalworking applications, you need more than just another abrasive flap disc. You need maximum aggression for sustained stock removal. You need superior edge grinding. And you need a contaminant-free, long-life solution. **You need Weiler Tiger Paw discs.**

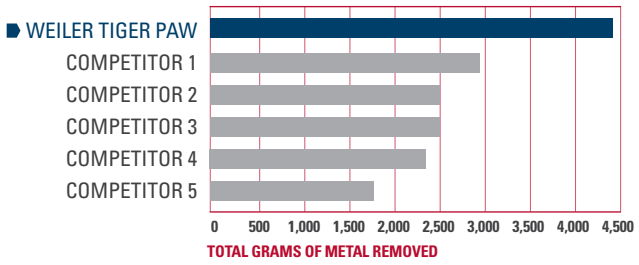


- **100% High-Performance Zirconia Alumina Grain** – Hardworking and long lasting. Engineered coating density is perfect for demanding applications like edge grinding.
- **Superior Grain Retention** – Lasts longer to maintain a perfect cutting angle. Sustained stock removal when grinding on-edge.
- **Engineered Poly/Cotton Cloth** – Eliminates premature shedding to maximize disc life.
- **Contaminant-Free** – Perfect for worry-free use on stainless steel and other higher-priced materials.
- **Grind and Finish in One Step** – One disc does it all. Saves time and money.
- **American Made** – Highest quality and quick availability.

**TESTED. PROVEN. TIGER PAW GRINDS MORE, LASTS LONGER.**
In a standardized test, Weiler Tiger Paw discs removed more material and lost less cloth than any other tested competitor — your assurance of higher productivity and lower costs.

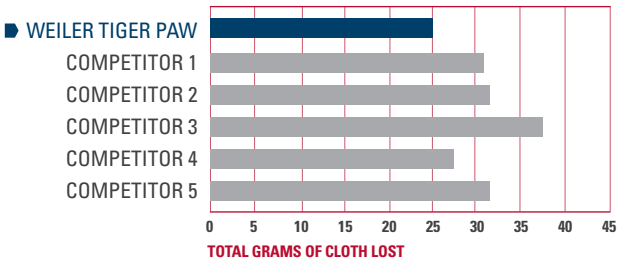
## TIGER PAW REMOVES MORE MATERIAL

**TOTAL GRAMS OF METAL REMOVED FROM WORKPIECE OVER LIFE OF FLAP DISC**




## TIGER PAW LASTS LONGER

**TOTAL GRAMS OF CLOTH LOST OVER LIFE OF FLAP DISC**




***Test Procedure:*** *Weiler Tiger Paw 4-1/2" Type 29 standard density flap disc vs. similar competing flap discs. Test grinder mounted at 15° angle against 1/8" workpiece with 15 pounds of pressure. Bi-directional 8" travel. Discs and workpiece weighed after each minute of operation. Tiger Paw usable life: 17 minutes. Competitors' usable life: 8 – 10 minutes.*

## PICK YOUR PERFORMANCE




**1** **Premium – Original Tiger®**

- Weld blending
- Ideal for flat and contoured surfaces
- Superior life
- Industrial grade
- Broadest offering
- Most cloth




**2** **High Performance – Tiger Paw™**

- Edge grinding
- Extended life
- Heavy duty
- Excellent grain retention
- 100% zirconia alumina grain




**3** **Fast Cut – Vortec Pro®**

- Weld blending at a value price
- Good life
- Standard duty

# TIGER PAW ANGLED AND FLAT STYLE FLAP DISCS

Designed for high performance and long life when used on steel and stainless steel. Perfect for demanding applications like edge grinding.
**Typical applications:** weld blending, deburring, deflashing, stock removal, surface finishing, edge chamfering, etc.



## Angled Style (Type 29)








51118



51147

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4" | 5/8" | 40 | 15,000 | 10 | 51104 |
| | | 60 | | | 51105 |
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51118 |
| | | 40 | | | 51119 |
| | | 60 | | | 51120 |
| | | 80 | | | 51121 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51123* |
| | | 40 | | | 51124* |
| | | 60 | | | 51125* |
| | | 80 | | | 51126* |
| 5" | 7/8" | 40 | 12,000 | 10 | 51129 |
| | | 60 | | | 51130 |
| 5" | 5/8"-11 Nut | 36 | 12,000 | 10 | 51153* |
| | | 40 | | | 51132* |
| | | 60 | | | 51133* |
| | | 80 | | | 51154* |
| 7" | 7/8" | 40 | 8,600 | 10 | 51145 |
| | | 60 | | | 51150 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51149* |
| | | 40 | | | 51146* |
| | | 60 | | | 51147* |
| | | 80 | | | 51148* |



## Flat Style (Type 27)








51115

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4" | 5/8" | 40 | 15,000 | 10 | 51101 |
| | | 60 | | | 51102 |
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51107 |
| | | 40 | | | 51108 |
| | | 60 | | | 51109 |
| | | 80 | | | 51110 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51112* |
| | | 40 | | | 51113* |
| | | 60 | | | 51114* |
| | | 80 | | | 51115* |
| 5" | 7/8" | 40 | 12,000 | 10 | 51134 |
| | | 60 | | | 51135 |
| 5" | 5/8"-11 Nut | 36 | 12,000 | 10 | 51155* |
| | | 40 | | | 51156* |
| | | 60 | | | 51157* |
| | | 80 | | | 51158* |
| 7" | 7/8" | 40 | 8,600 | 10 | 51137 |
| | | 60 | | | 51138 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51139* |
| | | 40 | | | 51140* |
| | | 60 | | | 51142* |
| | | 80 | | | 51143* |

# TIGER PAW XHD SUPER HIGH DENSITY FLAP DISCS

Super high density abrasive delivers 40% more life and conformability than a standard flap disc — ideal for exceptionally demanding steel and stainless steel applications. Thicker and larger flaps conform to curved and irregular shapes to produce a consistent finish.

**Typical applications:** weld blending, deburring, deflashing, stock removal, surface finishing, edge chamfering, etc.



## Flat Style (Type 27)








51165



51168

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 12,000 | 10 | 51160 |
| | | 40 | | | 51161 |
| | | 60 | | | 51162 |
| | | 80 | | | 51163 |
| 4-1/2" | 5/8"-11 Nut | 36 | 12,000 | 10 | 51164* |
| | | 40 | | | 51165* |
| | | 60 | | | 51166* |
| | | 80 | | | 51167* |
| 7" | 7/8" | 40 | 8,600 | 10 | 51170 |
| | | 60 | | | 51171 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51168* |
| | | 40 | | | 51169* |

# ADAPTING NUTS AND SPANNER WRENCH



56494



56495

| Description | Thread Size | For Use With | Std. Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 3/8"-24 | 4" Flap Discs with 5/8" Arbors (Can be used with an adjustable or combination wrench) | 1 | 56484 |
| Adapting Nuts | 5/8"-11 Nut | 4-1/2" & 7" Flap Discs with 7/8" Arbors | 1 | 56494 |
| Spanner Wrench | – | Item No. 56494 only | 1 | 56495 |

## Mounting Flap Discs with 5/8" & 7/8" Arbors




** Patent # 6,945,863*



For the full offering of Weiler power brushes, abrasives and maintenance products, please refer to our Solutions Resource Guide or visit our website. To discuss specific requirements with a product specialist, call our Applications Hotline at 888.299.2777.

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# TIGER X







TIGER® X

**FASTER GRINDING AND LONGER LIFE FOR STEEL AND STAINLESS STEEL METALWORKING.**

# UNLEASH TIGER X

**Tiger X flap disc raises the bar** for those who are driven to get the job done right and done fast. Tiger X holds nothing back with its industry-first X3 technology that combines an advanced anchoring system, dual flap design and engineered backing. The combination delivers fast grinding AND long disc life for increased productivity.



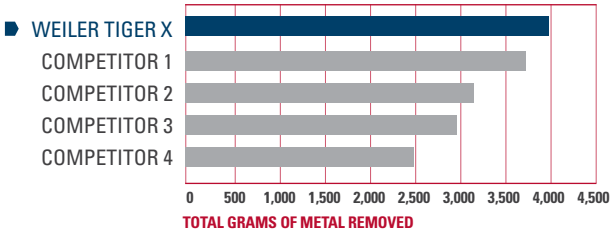
Tiger X delivers the ultimate productivity enhancing X-Factors so you can do more in less time while lowering your consumable costs.

- **Increased Productivity** – The combination of aggressive grinding and long disc life deliver the ultimate X factor, a disc that gets more done in less time.
- **Lower Consumable Costs** – The combination of extreme aggressive grinding and long disc life means you get more for your money.
- **Enhanced Worker Safety** – Increased aggression lets professionals use less force to get equal or better results. This means less stress and reduced fatigue.
- **Greater Versatility** – X3 technology allows for greater versatility, reducing the need to switch discs when changing applications.

**TESTED. PROVEN. TIGER X WORKS FASTER, LONGER.**

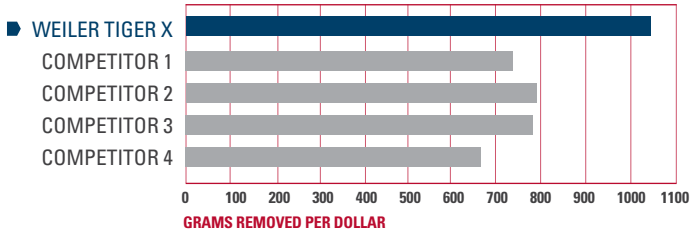
## TIGER X REMOVES UP TO 40% MORE MATERIAL

**TOTAL GRAMS OF METAL REMOVED FROM WORKPIECE OVER LIFE OF FLAP DISC**




## GET UP TO 40% MORE FOR YOUR MONEY

**TOTAL GRAMS OF METAL REMOVED FOR EVERY DOLLAR YOU SPEND**




***Test Procedure:*** *Weiler Tiger X 4-1/2" Type 29 standard density flap disc vs. similar competing flap discs. Test grinder mounted at 15° angle against 1/2" workpiece with 15 pounds of pressure. Bi-directional 8" travel. Discs and workpiece weighed after 5 minutes of operation for life of product. Tiger X usable life: 100 minutes. Competitors' usable life: 65 – 90 minutes.*

TIGER®



## THE ULTIMATE PERFORMANCE LINE

Weiler's Tiger discs are engineered to maximize productivity and minimize operating costs for professionals who demand more. Get the right flap disc for your application and **get more done with Tiger.**

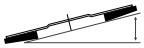
# TIGER X ANGLED AND FLAT STYLE FLAP DISCS

MADE IN USA

**Typical applications:** weld blending, flat surface grinding / finishing, heavy stock removal, light pressure blending / deburring, etc.



## Angled Style (Type 29)








51205





51216

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 36 | 13,000 | 10 | 51200 |
| | | 40 | | | 51201 |
| | | 60 | | | 51202 |
| | | 80 | | | 51203 |
| 4-1/2" | 5/8"-11 Nut | 36 | 13,000 | 10 | 51204 |
| | | 40 | | | 51205 |
| | | 60 | | | 51206 |
| | | 80 | | | 51207 |
| 5" | 7/8" | 36 | 12,000 | 10 | 51208 |
| | | 40 | | | 51209 |
| | | 60 | | | 51210 |
| | | 80 | | | 51211 |
| 5" | 5/8"-11 Nut | 40 | 12,000 | 10 | 51212 |
| | | 60 | | | 51213 |
| | | 80 | | | 51214 |
| 7" | 7/8" | 36 | 8,600 | 10 | 51215 |
| | | 40 | | | 51216 |
| | | 60 | | | 51217 |
| | | 80 | | | 51218 |
| 7" | 5/8"-11 Nut | 36 | 8,600 | 10 | 51219 |
| | | 40 | | | 51220 |
| | | 60 | | | 51221 |
| | | 80 | | | 51222 |



## Flat Style (Type 27)








51232

| Dia. | Arbor Hole | Grit Size | Max. RPM | Std. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40 | 13,000 | 10 | 51223 |
| | | 60 | | | 51224 |
| | | 80 | | | 51225 |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 10 | 51226 |
| | | 60 | | | 51227 |
| | | 80 | | | 51228 |
| 7" | 7/8" | 40 | 8,600 | 10 | 51229 |
| | | 60 | | | 51230 |
| | | 80 | | | 51231 |
| 7" | 5/8"-11 Nut | 40 | 8,600 | 10 | 51232 |
| | | 60 | | | 51233 |
| | | 60 | | | 51234 |

Ceramic Alumina and Zirconia Alumina grain mix

**Grinds Faster and Lasts Longer.**



# ADAPTING NUTS AND SPANNER WRENCH



56494



56495

| Description | Thread Size | For Use With | Std. Pack | Item Number |
|---|---|---|---|---|
| Adapting Nuts | 5/8"-11 Nut | 4-1/2" & 7" Flap Discs with 7/8" Arbors | 1 | 56494 |
| Spanner Wrench | – | Item No. 56494 | 1 | 56495 |

## Mounting Flap Discs with 7/8" Arbors




** Patent # 6,945,863*

**Industry First**

**X3**

**Technology**

grain anchoring system, dual flap design, & engineered backing.



For the full offering of Weiler power brushes, abrasives and maintenance products, please refer to our Full Line Catalog or visit our website. To discuss specific requirements with a product specialist, call our Applications Hotline at 888.299.2777.

Weiler Corporation
One Weiler Drive
Cresco, PA 18326
USA

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VENDING




# VENDING MADE EASY

## HIGH PERFORMANCE VENDING-READY PRODUCTS


WHAT YOU NEED.
WHEN YOU NEED IT.

# WEILER PRODUCTS FIT
# INTO YOUR VENDING PROGRAM

We understand that a successful vending program requires products that fit into a machine without hassle and dispense properly, every time. Weiler now offers single pack quantities of vending-ready products. Our packaging eliminates the need to re-pack products, which can be both expensive and time consuming.

In addition to single packs, Weiler's products are also available in small intermediate pack quantities for easy refill. This minimizes the handling from your storage location all the way to the end-user. Our products come the way you need them, ready to load into vending machines.

## WEILER VENDING-READY PRODUCTS ARE:

### QUALITY:
The same high performance Weiler products you know and trust now available for vending.

### PROVEN:
Our Weiler vending products are guaranteed to work within all Helix-coil vending machines.

### CONVENIENT:
We package and ship in easily refillable quantities, reducing your costs.

### RELIABLE:
All vending products guaranteed in-stock for quick, reliable shipping anywhere at any time.



Our vending program drives cost out of the supply chain for our business partners by simplifying the vending process.

# END BRUSHES

**STEM-MOUNTED END BRUSHES** are intended primarily for use on high-speed portable power tools for addressing smaller surfaces and recessed areas. End brushes feature an internal 1/4" steel stem for safe operation at high speed and quick mounting into the collet or chuck of electric or pneumatic die grinders.





10041V

**CIRCULAR FLARED END BRUSHES** – Steel – Suited for broad and slightly contoured surfaces.



| Diameter | Wire Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|
| 3″ | .008 | 16,000 | 1 | 10041V |



10026V

**KNOT WIRE END BRUSHES** – Provides heavy-duty brushing action in recessed areas.



| Diameter | Wire Size | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 3/4″ | .020 | 7/8″ | 22,000 | 3 | 10026V | – |
| 3/4″ | .014 | 7/8″ | 22,000 | 3 | – | 10029V |
| 1-1/8″ | .014 | 7/8″ | 22,000 | 3 | 10027V | 10031V |
| 1-1/8″ | .020 | 7/8″ | 22,000 | 3 | 10028V | – |
| 1-1/8″ | .006 | 1″ | 20,000 | 3 | 10141V | – |



14301V

**UTILITY CRIMPED WIRE CUP BRUSHES** – Small diameter cup brushes for use on air tools.



| Diameter | Wire Size | Trim Length | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| | | | | | Steel |
| 1-3/4″ | .0118 | 3/4″ | 13,000 | 1 | 14301V |
| 2-3/4″ | .0118 | 7/8″ | 6,000 | 1 | 14302 |



10009V

**CRIMPED WIRE END BRUSHES** – Solid end construction for cleaning hard-to-reach areas.



| Diameter | Wire Size | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|
| | | | | | Steel | Stainless |
| 1/2″ | .006 | 7/8″ | 25,000 | 3 | 10001V | 10013V |
| 3/4″ | .006 | 7/8″ | 22,000 | 3 | 10005V | 10017V |
| 3/4″ | .020 | 7/8″ | 22,000 | 3 | 10008V | – |
| 1″ | .006 | 1″ | 22,000 | 3 | 10009V | 10021V |
| 1″ | .0104 | 1″ | 22,000 | 3 | 10010V | 10022V |
| 1″ | .020 | 1-1/8″ | 22,000 | 3 | 10012V | – |



**MOUNT END BRUSHES SAFELY** - When mounting end brushes, the amount of overhang from the tool should be minimized by clamping on as much of the straight portion of the stem as possible. However, the collet or chuck should NOT clamp on the radius at the base of the stem to insure a secure hold before use. See photo on left for the correct brush orientation.

# TUBE BRUSHES

**STEM-MOUNTED TUBE BRUSHES** are intended for internal cleaning and deburring applications in tubing, pipe, drilled-and tapped holes, and machined bores and passages.





**CONFLEX BRUSHES** – Copper center wheels mounted onto a 1/4" stem to provide very flexible brushing.

| Diameter | Wire Size | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless | Brass |
| 2" | .0118 | 3/8" | 1/2" | 20,000 | 1 | 17610V | 17611V | – |
| 3" | .008 | 1/2" | 1" | 20,000 | 1 | 17615V | – | – |
| 3" | .0118 | 1/2" | 1" | 20,000 | 1 | 17616V | – | 17641V |
| 3" | .014 | 1/2" | 1" | 20,000 | 1 | – | 17618V | – |



17616V



**ROUND TUBE BRUSHES** – Crimped wire fill provides flexible brushing action.

| Diameter | Wire Size | Brush Part | Stem Diameter | Overall Length | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 1/4" | .004 | 1" | 1/8" | 3-1/2" | 3 | – | 21081V |
| 3/8" | .004 | 1" | 1/8" | 3-1/2" | 3 | 21073V | – |
| 1/2" | .005 | 1" | 3/16" | 3-1/2" | 3 | 21074V | – |
| 5/8" | .005 | 1" | 3/16" | 3-1/2" | 3 | 21075V | – |
| 7/8" | .006 | 1" | 7/32" | 3-1/2" | 3 | 21077V | – |
| 1" | .008 | 1" | 1/4" | 3-1/2" | 3 | 21078V | – |
| Double Stem, Double Spiral | | | | | | | |
| 1/2" | .006 | 2" | 5/32" | 5" | 6 | 21107V | – |
| 5/8" | .005 | 2" | 7/32" | 5" | 6 | 21108V | – |
| 3/4" | .006 | 2-1/2" | 1/4" | 5-1/2" | 6 | 21110V | – |
| 1" | .006 | 2-1/2" | 1/4" | 5-1/2" | 6 | 21114V | – |



21077V



21110V

**TUBE BRUSH OPERATING RECOMMENDATIONS** - The stems in power tube brushes are not as strong as the stem in most other brushes. It is very important to avoid any load conditions and brush speeds that can cause excessive stem deflections and destructive bending.

A suggested guideline to avoid this unsafe condition is minimizing the overhang of the stem to under an inch, and running the brush at speeds below 2,000 RPM.

Increasing overhang could decrease the safe speed at which the brush can operate. To reach into deeper holes, use drill extension rods instead of increasing stem overhang.

**Correct Mounting**



**Incorrect Mounting**





17681V

**STEM MOUNTED KNOT WHEELS** – Mounted on a 1/4″ stem; ideal for somewhat irregular surfaces.



| Diameter | Wire Size | No. of Knots | Face Width | Trim Length | Max. RPM | Int Pack | Item Number |
|---|---|---|---|---|---|---|---|
| | | | | | | | Steel |
| 3-1/4″ | .014 | 20 | 3/8″ | 5/8″ | 25,000 | 1 | 17681V |
| 4″ | .014 | 24 | 1/2″ | 7/8″ | 20,000 | 5 | 17687V |



13106V

**STANDARD TWIST WHEELS** – Provide heavy-duty brushing action on somewhat irregular surfaces.



| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| 3″ | .014 | 1/2″-3/8″ | 20 | 3/8″ | 5/8″ | 25,000 | 5 | 08014V | 08264V |
| 4″ | .014 | 5/8″-11 UNC | 24 | 1/2″ | 7/8″ | 20,000 | 5 | 13106V | 13113V |
| 4″ | .020 | 5/8″-11 UNC | 24 | 1/2″ | 7/8″ | 20,000 | 5 | 13120V | – |



13266V

**CABLE TWIST WHEELS** – Provide heavy-duty brushing action on relatively smooth surfaces.



| Diameter | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel |
| 4″ | .020 | 5/8″-11 UNC | 24 | 1/4″ | 7/8″ | 20,000 | 5 | 13266V |
| 4″ | .020 | 1/2″-3/8″ | 24 | 1/4″ | 7/8″ | 20,000 | 5 | 08534V |
| 6″ | .023 | 5/8″-1/2″ | 24 | 3/8″ | 1-3/8″ | 9,000 | 5 | 08565V |



13131V



08776V

**ROUGHNECK® STRINGER BEAD WHEELS** – The go to for high-performance weld cleaning.



| Dia. | Wire Size | Arbor Hole | No. of Knots | Face Width | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Steel | Stainless |
| Root Pass Brushes | | | | | | | | | |
| 4″ | .020 | 5/8″-11 UNC | 32 | 3/16″ | 7/8″ | 20,000 | 5 | 13131V | 13138V |
| 4-1/2″ | .020 | 5/8″-11 UNC | 38 | 3/16″ | 13/16″ | 12,500 | 5 | 13232V | – |
| 5″ | .020 | 5/8″-11 UNC | 38 | 3/16″ | 7/8″ | 12,500 | 5 | 08756V | 08806V |
| 6″ | .020 | 5/8″-11 UNC | 48 | 3/16″ | 1-1/8″ | 12,500 | 1 | 08766V | – |
| 6″ | .020 | 5/8″-11 UNC | 56 | 3/16″ | 1-1/8″ | 12,500 | 1 | 09400V | – |
| 6-7/8″ | .020 | 5/8″-11 UNC | 56 | 3/16″ | 1-1/8″ | 9,000 | 1 | 09000V | – |
| Filler Pass Brushes | | | | | | | | | |
| 6″ | .023 | 5/8″-11 UNC | 24 | 1/2″ | 1-3/8″ | 12,500 | 1 | 08776V | – |

# KNOT WIRE WHEELS



# CUP BRUSHES

**CUP BRUSHES** featuring a threaded nut are designed for smooth, efficient operation on angle grinders to make quick work of large jobs. Available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and manufactured with individual knot hole and solid ring construction for high performance and long life.





13245

**CRIMPED CUP BRUSHES** – Provides consistent performance on light-duty cleaning applications.

| Diameter | Wire Size | Arbor Hole | Trim Length | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|---|
| | | | | | | Steel |
| 3″ | .014 | 5/8″-11 UNC | 1″ | 14,000 | 1 | 13245 |
| 3-1/2″ | .014 | 5/8″-11 UNC | 7/8″ | 12,000 | 1 | 13181 |
| 4″ | .014 | 5/8″-11 UNC | 1-3/8″ | 10,200 | 1 | 14026 |
| 5″ | .014 | 5/8″-11 UNC | 1-1/4″ | 9,000 | 1 | 14206 |
| 6″ | .014 | 5/8″-11 UNC | 1-1/4″ | 6,600 | 1 | 14066 |



13156



12376

**KNOT WIRE CUP BRUSHES** – Provides heavy-duty brushing action on relatively flat surfaces.

| Diameter | Wire Size | Arbor Hole | Trim Length | Max. RPM | Int. Pack | Item Number | |
|---|---|---|---|---|---|---|---|
| | | | | | | Steel | Stainless |
| 2-3/4″ | .014 | 5/8″-11 UNC | 1″ | 14,000 | 1 | 13025 | – |
| 2-3/4″ | .020 | 5/8″-11 UNC | 1″ | 14,000 | 1 | 13286 | 13258 |
| 3-1/2″ | .023 | 5/8″-11 UNC | 7/8″ | 13,000 | 1 | 13156 | 13163 |
| 4″ | .023 | 5/8″-11 UNC | 1-1/4″ | 10,200 | 1 | 12316 | – |
| 5″ | .023 | 5/8″-11 UNC | 1-3/8″ | 9,000 | 1 | 12276 | – |
| 6″ | .014 | 5/8″-11 UNC | 1-3/8″ | 6,600 | 1 | 12356 | – |
| 6″ | .023 | 5/8″-11 UNC | 1-3/8″ | 6,600 | 1 | 12376 | – |

# HAND BRUSHES

**HAND BRUSHES** include many block and handle types and sizes. The wide variety of fill materials available assures the right brush for the right job. Common applications are cleaning dirt, rust, scale, chips and paint; plating and welding operations.



**SCRATCH BRUSHES** – Ideal for cleaning and prepping surfaces.

| Block Size | Brush Length | No. of Rows | Trim Length | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 14″ x 7/8″ | 5-1/2″ | 3 x 19 | 1-3/16″ | 1 | 44053 |
| 14″ x 7/8″ | 5-1/2″ | 3 x 19 | 1-3/16″ | 1 | 44054 |
| 10″ x 1-1/8″ | 5″ | 4 x 16 | 1-3/16″ | 1 | 44063 |
| 10″ x 1-1/8″ | 5″ | 4 x 16 | 1-3/16″ | 1 | 44064 |



44063

**INTERNAL TUBE FITTING BRUSHES** – Wire Fill - For internal cleaning and deburring of copper tube fittings.

| Tube Diameter | Actual Diameter | Brush Length | Overall Length | Handle Length | Int. Pack | Item Number |
|---|---|---|---|---|---|---|
| 3/8″ | 1/2″ | 1″ | 6-1/2″ | 3-1/4″ | 6 | 44080V |



44080V

**ACID BRUSHES** – Horsehair - Tin ferrule (unit packs of 4)

| Width | Trim Length | Overall Length | Int. Pack | Item Number |
|---|---|---|---|---|
| 5/16″ | 3/4″ | 5-3/4″ | 6 | 44088V |
| 3/8″ | 3/4″ | 5-3/4″ | 6 | 44089V |
| 1/2″ | 3/4″ | 5-3/4″ | 6 | 44090V |



44089V

**SMALL SCRATCH BRUSHES** – Ideal for cleaning and prepping surfaces. (unit packs of 3)

| Block Size | Block | No. of Rows | Wire Size | Trim Length | Int. Pack | Item Number |
|---|---|---|---|---|---|---|
| Stainless Steel Wire | | | | | | |
| 7-1/2″ x 1/2″ | Plastic | 3 x 7 | .006 | 1/2″ | 5 | 44075V |
| 7-1/2″ x 1/2″ | Wood | 3 x 7 | .006 | 1/2″ | 5 | 44167V |
| Straight Brass Wire | | | | | | |
| 7-1/2″ x 1/2″ | Wood | 3 x 7 | .006 | 1/2″ | 5 | 44189V |
| Straight Black Nylon | | | | | | |
| 7-1/2″ x 1/2″ | Wood | 3 x 7 | .012 | 1/2″ | 5 | 44637V |



44167V



44189V



44637V



30726V

**VORTEC PRO® MOUNTED FLAP WHEELS** – 1/4" Stem – Provide fast action at a value price.



| Diameter | Width | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 1" | 1" | 60 | 30,000 | 3 | 30720V |
| 1" | 1" | 80 | 30,000 | 3 | 30721V |
| 2" | 1" | 60 | 25,000 | 1 | 30723V |
| 2" | 1" | 80 | 25,000 | 1 | 30724V |
| 3" | 1" | 60 | 23,000 | 1 | 30726V |
| 3" | 1" | 80 | 23,000 | 1 | 30727V |



50007V

**TRIMMABLE TIGER® FLAP DISC** – (Type 29) – Trimmable backing for extended disc life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50006V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50007V |



51120V

**TIGER PAW™ FLAP DISC** – (Type 29) – 100% Zirconia Alumina grain for performance & long life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| 4-1/2" | 7/8" | 40 | 13,000 | 5 | 51119V |
| 4-1/2" | 7/8" | 60 | 13,000 | 5 | 51120V |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 51124V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 51125V |



50518V



50603V

**TIGER® FLAP DISC** – (Type 29) – Maximum aggression & long life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| Zirconia Alumina Grain, Aluminum Backing | | | | | |
| 4-1/2" | 7/8" | 40 | 13,000 | 5 | 50513V |
| 4-1/2" | 7/8" | 60 | 13,000 | 5 | 50514V |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50518V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50519V |
| Zirconia Alumina Grain, Phenolic Backing | | | | | |
| 4-1/2" | 7/8" | 40 | 13,000 | 5 | 50603V |
| 4-1/2" | 7/8" | 60 | 13,000 | 5 | 50604V |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50608V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50609V |



50804V

**BIG CAT® FLAP DISC** – High Density (Type 27) – Increased conformability and maximum life.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| Zirconia Alumina Grain, Phenolic Backing | | | | | |
| 4-1/2" | 7/8" | 40 | 12,000 | 5 | 50803V |
| 4-1/2" | 7/8" | 60 | 12,000 | 5 | 50804V |
| 4-1/2" | 5/8"-11 Nut | 40 | 12,000 | 5 | 50808V |
| 4-1/2" | 5/8"-11 Nut | 60 | 12,000 | 5 | 50809V |



50105V

**SABER TOOTH™ FLAP DISC** – (Type 29) – Cool, fast cutting.



| Diameter | Arbor Hole | Grit Size | Max. RPM | Int. Pack | Item Number |
|---|---|---|---|---|---|
| Ceramic Alumina Grain, Phenolic Backing | | | | | |
| 4-1/2" | 5/8"-11 Nut | 40 | 13,000 | 5 | 50105V |
| 4-1/2" | 5/8"-11 Nut | 60 | 13,000 | 5 | 50106V |

# ABRASIVE FLAP WHEELS & FLAP DISCS





Every day, all over the world, businesses find clearer paths to success using Weiler solutions. Together, we can evaluate your operation, identify opportunities for improvement... and find *your* clear path to success.

**Weiler. Your partner in success.**

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Cresco, PA 18326
USA



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