



VIPER NOSE®

CTI

Vipers

A GROUND BREAKING FAMILY



Read on to see why
so many have moved to
Viper Quads instead of
round nose Quads!

CTI

Ceres Turf, Inc.
P.O. Box 12447
Wilmington, NC 28405



W.S. CONNELLY & CO. INC.



VIPER NOSE TINES

Viper Nose Tines have a new and unique beveled tip that provides many exceptional benefits. Viper Nose tines will pull up more material and last longer than similar round nose Quads and Coring tines. A full array of these exceptional tines is now available. They truly are a 'Game Changer'.



PHOENIX TINES

CTI Phoenix technology offers many remarkable benefits to the aerification process. Previously, you had to choose between a long-life, durable carbide tipped coring tine, or a clean efficient cut and core with a standard heat treated tine. Phoenix provides both including significantly reduced 'grow-in' period and rust resistance for longer life. Phoenix tines offer greatly improved cost/longevity benefit ratio. For more info on our Phoenix technology, see *How is Phoenix Better* at www.ceresturf.com.

SOLID L-SHAPED TINES

All 'L' tines are made of 4140 alloy steel and heat treated to optimum industry standards.



SOLID ROUND TINES

Solid round tines are made of 4140 alloy steel and designed to provide the longest life possible for an outstanding value. The individual design of each tine is a result of years of research and customer feedback.



TALON TINES

(Cross tines)

Our Talon tines are designed to maximize surface area and minimize plant trauma to provide the optimum gas and water exchange. There is so little disturbance to the green that it is possible to resume play immediately after an aerification with little or no impact on putting. The 'root severing' action promotes root branching for a stronger, healthier root mass.



VENT TINES

(Bayonet or Slicing tines)

Our Vent tines are a modified Talon design where the hole remains open and continues to provide gas and water exchange. Vent tines offer exceptional plant respiration benefits for up to three weeks. Vent tines promote drainage and prepare surfaces for sodding, hot spots, or as a pre-seeding prep process due to minimal soil disruption. Resume play immediately after an aerification with little or no impact on putting.



CTI CORING TINES

CTI is the first to use 4140, solid rod alloy steel for its standard coring tines - a far stronger and more durable option than tubular steel. Making tines of solid rod material is more costly but makes it possible to add additional material at wear points for extra strength and longevity. CTI has a new line of top-eject coring tines.



DEEP CORING TINES

(Redexim; Toro SR; Wiedennman)

CTI has improved the Deep Coring tine by using a single piece of solid 4140 alloy steel - unlike other companies who construct tines in a two piece design with a shank and hollow tube (joined by a roll-pin). Solid 4140 steel alloy is a stronger, more durable choice compared to hollow 4130. Our Deep Tines also come in Phoenix options.



< **Golf Course Maintenance**

1/8 inch Viper Quads on 5 blocks leading Competitor on one block using Toro 648. Your version pulled significantly more material than the others. THE WINNER WAS CLEAR!



< **Golf Course Maintenance**

Doing a test with some new 3/8 tines today and the results are night and day. I've never cut a core on ultradwarf that good that small. I'll post more when the manufacturer ok's it, but a DEFINITE GAME CHANGER.



< **Premier, Private NY Club**

Tested 1/8 inch Viper Quad against 3 Top competitors...Your version pulled SIGNIFICANTLY MORE material than the other two.



< **Superintendent from Top US Golf Course**

Viper Nose compared on the left to a round nose 3/8 inch quad on the right. RESULTS WERE ASTOUNDING!



- **EASE OF USE**

1/8" Viper Quads have made a new turf management strategy possible; fast and easy aerification. One can punch ahead of the first round in the morning and blow off the cores with a backpack blower. No need to close the course! Opens a column 2-2½" deep for gas and water exchange without trauma.

- **PULLS MORE**

Viper nose tines pull up significantly more material as compared to other round-nose tines of same size. This has been demonstrated over and over in side-by-side tests.

- **NEVER PLUGS**

Viper nose tines pull consistent cores, even in mixed soils with varying moisture levels.

- **CUT AND CORE**

Viper cut is noticeably better than a 'round nose' tine and the grow-in is faster.

- **LONGER LIFE**

Viper nose tines outlast round-nose 'heat treated' tines under similar conditions. [Although they do not last as long as a carbide tipped tines, they will pull up two or three times as much material.]

- **THATCH REMOVAL**

1/8" Vipers are excellent for thatch removal and will last 18 holes when used as directed. If pushed to full depth, two or three sets may be required.

- **NO CAPPING**

Viper nose tines have never had 'capping' issues where only the top 'cap' of the core is removed.

- **NOW AVAILABLE IN PHOENIX VERSIONS THAT LAST TWICE AS LONG.**

[IMPORTANT: The beveled Viper nose is necessary for full material removal. Running a Toro 648 at full throttle will damage the beveled nose and shorten the life. Always, run the 648 at 2650-3200 RPM's for best results. This allows the Viper to do its magic.]





VIPER NOSE SPECIFICATIONS

3/8" mount

1QV-134337

1/8"

Viper Nose Mini Quad
.160" ID | .275" OD | .040" Wall
1/8" x 4.36" with 3/8" mount

1QVP-134337

1/8"

Phoenix Viper Nose Mini Quad
.160" ID | .275" OD | .040" Wall
1/8" x 4.36" with 3/8" mount

1QV-255037

1/4"

Viper Nose Quad Tine
.250" ID | .392" OD | .063" Wall
1/4" x 5" with 3/8" mount

1QVP-255037

1/4"

Phoenix Viper Nose Quad Tine
.250" ID | .392" OD | .063" Wall
1/4" x 5" with 3/8" mount

1QV-375037

3/8"

Viper Nose Quad Tine
.310" ID | .454" OD | .072" Wall
3/8" x 5" with 3/8" mount

1QVP-375037

3/8"

Phoenix Viper Nose Quad Tine
.310" ID | .454" OD | .072" Wall
3/8" x 5" with 3/8" mount

1QV-376037

3/8"

Viper Nose Quad Tine
.310" ID | .454" OD | .072" Wall
3/8" x 6" with 3/8" mount

1QV-525037

1/2"

Viper Nose Quad Tine
.418" ID | .562" OD | .072" Wall
1/2" x 5" with 3/8" mount

1QVP-525037

1/2"

Phoenix Viper Nose Quad Tine
.418" ID | .562" OD | .072" Wall
1/2" x 5" with 3/8" mount

1QV-526037

1/2"

Viper Nose Quad Tine
.418" ID | .562" OD | .072" Wall
1/2" x 6" with 3/8" mount

1QV-625037

5/8"

Viper Nose Quad Tine
.481" ID | .625" OD | .072" Wall
5/8" x 5" with 3/8" mount

1QVP-625037

5/8"

Phoenix Viper Nose Quad Tine
.481" ID | .625" OD | .072" Wall
5/8" x 5" with 3/8" mount

1QV-626037

5/8"

Viper Nose Quad Tine
.481" ID | .625" OD | .072" Wall
5/8" x 6" with 3/8" mount

3/4" mount

1SV-505075

1/2"

Viper Nose Coring Tine
.398" ID | .542" OD | .072" Wall
1/2" x 5" with 3/4" mount

1SVP-505075

1/2"

Phoenix Viper Nose Coring Tine
.398" ID | .542" OD | .072" Wall
1/2" x 5" with 3/4" mount

1SV-506075

1/2"

Viper Nose Coring Tine
.398" ID | .542" OD | .072" Wall
1/2" x 6" with 3/4" mount

1SVP-506075

1/2"

Phoenix Viper Nose Coring Tine
.398" ID | .542" OD | .072" Wall
1/2" x 6" with 3/4" mount

1SV-625075

5/8"

Viper Nose Coring Tine
.478" ID | .622" OD | .072" Wall
5/8" x 5" with 3/4" mount



1SVP-625075

5/8"

Phoenix Viper Nose Coring Tine
.478" ID | .622" OD | .072" Wall
5/8" x 5" with 3/4" mount

1SV-626075

5/8"

Viper Nose Coring Tine
.478" ID | .622" OD | .072" Wall
5/8" x 6" with 3/4" mount



1SVP-626075

5/8"

Phoenix Viper Nose Coring Tine
.478" ID | .622" OD | .072" Wall
5/8" x 6" with 3/4" mount

12mm mount

1DV-626247

5/8"

Viper Nose Deep Coring Tine
.390" ID | .540" OD | .075" Wall
5/8" x 6.2" with 12mm Mount
for VD

1DV-628247

5/8"

Viper Nose Deep Coring Tine
.390" ID | .540" OD | .075" Wall
5/8" x 8.2" with 12mm Mount
for VD

1DVW-628147

5/8"

Viper Nose Deep Coring Tine
.390" ID | .540" OD | .075" Wall
5/8" x 8.1" with 12mm Mount
for Wiedenmann

Your CTI Distributor is:

