

Complete editorial scores accompany a reader traffic chart graphing scores by page number

Advertisements are listed within product categories and ranked by their recall scores

Respondents report their job titles and company activity

adRecall™

Report to Advertisers

March 2016

underground
construction

Quick Study

ADVERTISING

Top 5 "recall seeing" scores

- 73% Ditch Witch
- 69% John Deere
- 67% Vermeer Corporation
- 65% Pipelines 2016 Conference
- 64% Toro

Top 5 "read some" scores

- 63% INROCK Drilling Systems
- 62% I Make America
- 60% Bit Brokers International
- 57% HDD Broker
- 56% Tulsa Rig Iron, Inc.

74% of respondents report reading articles of interest and looking through remaining pages

82% of the respondents report taking one or more purchasing actions during the past year as a result of ads/articles appearing in *Underground Construction*

Respondents report that they pass along their copies of *Underground Construction* to an average of **2.7 other professionals**

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In response to consumer demand, five new products from John Deere feature "customer-driven designs." Gregg Zupancic, product marketing manager for John Deere Construction and Forestry, said customers' input "resulted in machines with increased durability, higher engine power, improved fuel capacity and updated cab and productivity features." The five products include four Final Tier 4 G-Series skid steers and the 317G, a compact track loader. In a Baxter Research Center Inc. readership survey of the March 2016 issue of *Underground Construction*, an outstanding 73 percent of polled respondents recalled seeing "New Products: Latest industry developments." Kubota announces the new SVL95-2s, a new compact track loader. Volvo CE announces the L45H and L50H, two H-series compact wheel loaders with more versatility and power.

"Product Showcase" was recalled by 70 percent of polled respondents. Thirty products are featured, each with an image and a paragraph of text. Products include the versatile D40x55 S3 Navigator from Vermeer, McElroy's self-propelled TracStar 1200, the CCFRPM pipe from Hobas, and many others. Ditch Witch offers their Certified Training Program for new and experienced underground construction operators.

Sixty-five percent of respondents recalled seeing "Directional Drilling: Complexities of modern HDD." Richard Levings, director of product management at American Augers, says that "equipment owners are becoming more progressive, keeping wear parts on hand and paying attention to equipment care" to prevent downtime. Vermeer recommends that contractors perform general maintenance at the end of each day so small problems don't get bigger.

One hundred percent of respondents recalled one or more of the 21 editorial items included in the survey, indicating consistent through-the-book readership. Complete editorial scores are on page 2.

Ad exposure

A full-page, four-color ad from **Ditch Witch** earns this issue's top score, with 73 percent of respondents recalling it. The headline touts, "Drills that only clock out when you do." The Ditch Witch JT25 is shown in action near an office building; a smaller product shot is at the bottom

against a screened-back logo. Copy describes how the JT25 is the "most powerful and productive machine in its class."

An ad from **John Deere** is up next, with a "recall seeing" score of 69 percent. This full-page, four-color ad presents a split photo with a construction worker on the left. On the right, his human arm is replaced by equipment. The headline reads, "Up. Lift. Thanks to your input, L-series backhoes will raise your expectations." The 310SL HL Backhoe is pictured at the bottom with text detailing how their products have up to "25 percent more lift capacity plus an additional 10 to 15 percent boost in life mode."

A full-page, four-color ad from **Vermeer Corporation** rounds out the top three scores at 67 percent. The headline reads, "The ultimate crew meets the ultimate tools." A worker in a hardhat speaks into a walkie-talkie with the DigiTrak F5 locator in front of him. Five smaller, outlined crew members appear below, described as the "ultimate crew behind the job." Text describes how B&T Drainage, Inc., was recently termed the ultimate crew with their D40x55 S3 Navigator HDD.

An advertisement's "recall seeing" score, which indicates the ad's stopping power, is best interpreted by comparing it with those of similar advertisers within the same product category.

Ads from established advertisers tend to receive the highest "recall seeing" scores. This high respondent recall most often is the result of the increased exposure these advertisers have achieved for their companies, brand names, logos and/or products through frequent advertising over time.

Ad engagement & involvement

A half-page, four-color ad from **INROCK Drilling Systems** brings in a top score here, with 63 percent of respondents reading some of it. The headline announces "Evolution in drilling starts now. Bit inclination available in real-time." An illustration shows a bit moving through material surrounded by concentric yellow circles. Text describes how ABIA motors can "capture information at the bit" so drillers can react in real time. Of the 32 percent of survey respondents who recalled seeing this ad, 63 percent read some of it, and 50 percent of these read most of the ad's written material.

(Please turn to "Ad scores" on page 10)

underground construction

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Report Terminology

The Baxter Research Center Inc. *Report to Advertisers* reports the following recall scores:†

EXPOSURE

Recall Seeing shows the ability of an ad or editorial item to attract the respondent's attention. The "recall seeing" score reports the total percentage of respondents indicating they had been exposed to an item by either seeing it or reading it.

ENGAGEMENT

Read Some indicates the percentage of "recall seeing" respondents who, after seeing the item, were engaged enough to be led into the copy by the headline, layout and subject material.

INVOLVEMENT

Read Most describes the percentage of "Read Some" respondents who found the copy to be sufficiently interesting so that they became involved enough to read more than half of the editorial or advertising item.

Seeing literature promoting the product/service notes the percentage of respondents who recall seeing promotional literature for the product or service advertised in the past 60 days.

Having a sales discussion about the product/service notes the percentage of respondents who recall discussing the product or service advertised with a sales representative, staff member or co-worker, over the phone or in person, in the past 60 days.

Visiting the advertiser's website for product information notes the percentage of respondents who recall visiting the advertiser's website in the past 60 days.

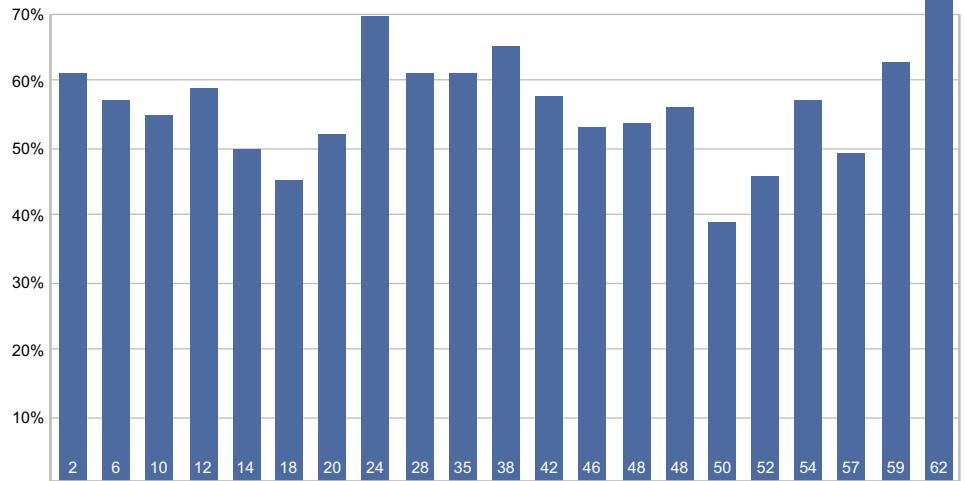
Note: Literature, discussion and website scores should not be considered direct measures of the program's performance. They are measures of the respondents' recall of the literature, conversation or website.

† Percentage totals may not equal 100, due to rounding.

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Editorial reader traffic



Base = 200

Editorial reader traffic scores are based on each editorial item's "recall seeing" score. The recall score for each article is expressed as a percentage and presented in the chart above.

	Page Number	Recall Seeing	Read Some	Read Most
EDITOR'S LOG: NASSCO: 40 years of trenchless...	2	61%	64%	38%
NEWSLINE	6	57%	63%	36%
WASHINGTON WATCH: FERC investigates...	10	55%	65%	31%
FIRST LOOK: New reaming tool clears debris, rock...	12	59%	63%	27%
UCT well-received in Atlanta: Event gains...	14	50%	64%	25%
Annual ShowStopper Award winners announced	18	45%	53%	33%
RehabZone mission a major success at UCT 2016	20	52%	46%	58%
PRODUCT SHOWCASE	24	70%	74%	46%
WATERWORKS: Make way for progress	28	61%	75%	37%
WATERWORKS NEWS	35	61%	74%	29%
DIRECTIONAL DRILLING: Complexities of modern...	38	65%	69%	44%
DIRECTIONAL DRILLING: Mud recycling becoming...	42	58%	59%	44%
DIRECTIONAL DRILLING: Downhole directional...	46	53%	53%	46%
DIRECTIONAL DRILLING: Drilling fluids/polymers	48	54%	56%	40%
DIRECTIONAL DRILLING: Mud mixing systems	48	56%	52%	31%
NASSCO standard bearers - John Nelson	50	39%	59%	30%
REHAB TECHNOLOGY: NASSCO celebrates 40th...	52	46%	61%	39%
REHAB TECHNOLOGY: Product focus: Slipline pipe	54	57%	65%	49%
REHAB TECHNOLOGY NEWS	57	49%	73%	42%
BUSINESS: Latest industry news	59	63%	70%	30%
NEW PRODUCTS: Latest industry developments	62	73%	71%	42%

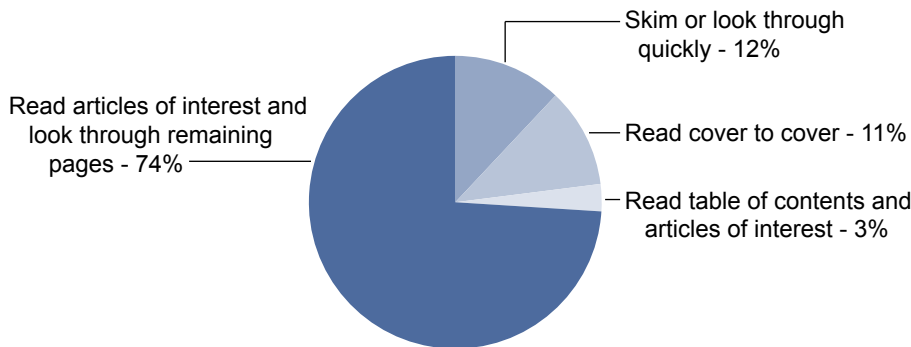
Magazines read regularly

Sixty-nine percent (69%) of respondents are regular readers of *Underground Construction* and report reading three or four of the four most recent issues.

	Read 3 or 4 of 4	Read 4 of 4	Read 3 of 4	Read 2 of 4	Read 1 of 4	Receive But Do Not Read	Do Not Receive	No Response
<i>Underground Construction</i>	69%	42%	27%	19%	12%	0%	0%	0%
<i>Trenchless Technology</i>	41%	29%	12%	15%	8%	3%	25%	8%
<i>Public Works</i>	32%	22%	10%	9%	4%	3%	36%	16%
<i>Construction Equipment</i>	31%	17%	14%	16%	11%	1%	28%	13%
<i>Utility Contractor</i>	31%	19%	12%	10%	9%	4%	34%	12%

Base = 200

How readers read *Underground Construction*



Job title

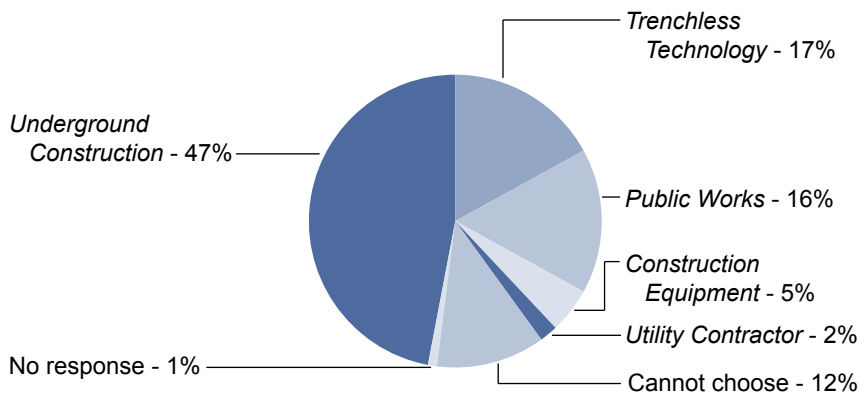
Manager	23%
Engineer	14%
Owner	11%
Supervisor	9%
Public works director/manager	7%
Superintendent	7%
General manager	6%
President/director	6%
VP	4%
Foreman & assistant	3%
Office manager	3%
Purchasing personnel	1%
Other	6%
No response	0%

Base = 200

Respondents report that they pass along their copies of *Underground Construction* to an average of 2.7 other professionals.

Base = 200

Most useful publication



Base = 200

Company activity

Municipality/public works (water, sewer, etc.)	34%
Utility contractor (water & sewer)	16%
Design/construct including engineering company	10%
Sub-contractor	6%
Gas utility company/pipeline transmission company	5%
Cable contractor	3%
Gas distribution contractor	3%
Pipeline contractor (oil & gas)	3%
Telephone company	2%
Other	16%
No response	2%

Base = 200

Trenchless construction methods

Sixty-three percent (63%) of respondents' companies are involved in trenchless construction methods.

No response = 4%

Base = 200

Note: These data define known readers of *Underground Construction*. No attempt was made to use subscriber lists from the other publications listed above.

Purchasing involvement

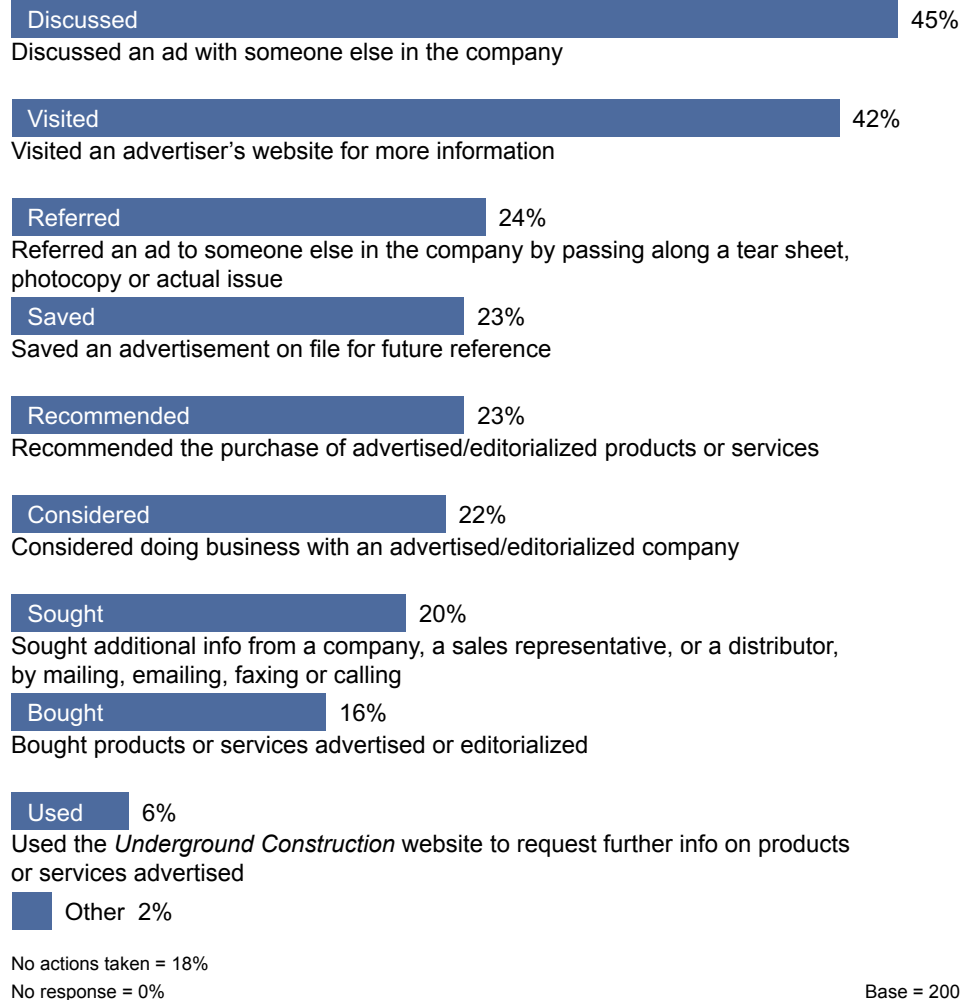
Ninety percent (90%) of readers report involvement — either alone or with others — in buying, recommending, specifying or approving one or more of the following products for their company:

Pipes	.53%
Pumps	.53%
Autos/trucks	.46%
Locators	.44%
Backhoe loaders	.40%
Excavators	.40%
Contracting services	.37%
Trailers	.34%
Trench shoring	.32%
Tractors	.30%
Vacuum systems	.30%
Liners/lining systems	.24%
Trenching machines	.24%
Compactors	.23%
Lasers	.22%
Directional drills	.21%
Hydraulic hammers	.19%
Pipe bursting equipment	.17%
PE fusion equipment	.16%
Piercing tools	.8%
Microtunnelers	.7%
Other	.8%
None of the above	.10%
No response	.0%

Base = 200

Actions taken

Eighty-two percent (82%) of the respondents report taking one or more purchasing actions during the past year as a result of ads/editorials appearing in *Underground Construction*.



Base = 200

underground construction

Ad study schedule*
Reserve space now!

2016

September
closing August 15

Contact your *Underground Construction* sales representative now to reserve your space in the next ad study issue.

* *Underground Construction* reserves the right to change this research schedule without notice.

Dynamic reporting online

Baxter Research Center Inc. presents an expanded view of ad study data tables and charting on its reporting website, B2Ba2z.com. Offering a more thorough analysis than that available in print, advertisers choose from recent or historical ad study data for individual ads, their market or the entire industry.

B2Ba2z.com is password-protected and SSL-secure. The menu-driven environment is easy to use and powerful. Delivering up to 150 data views per issue, dynamic 3-D charts can be user-modified and combined to present the data view you want to best assess ad performance and market conditions from your point of view.

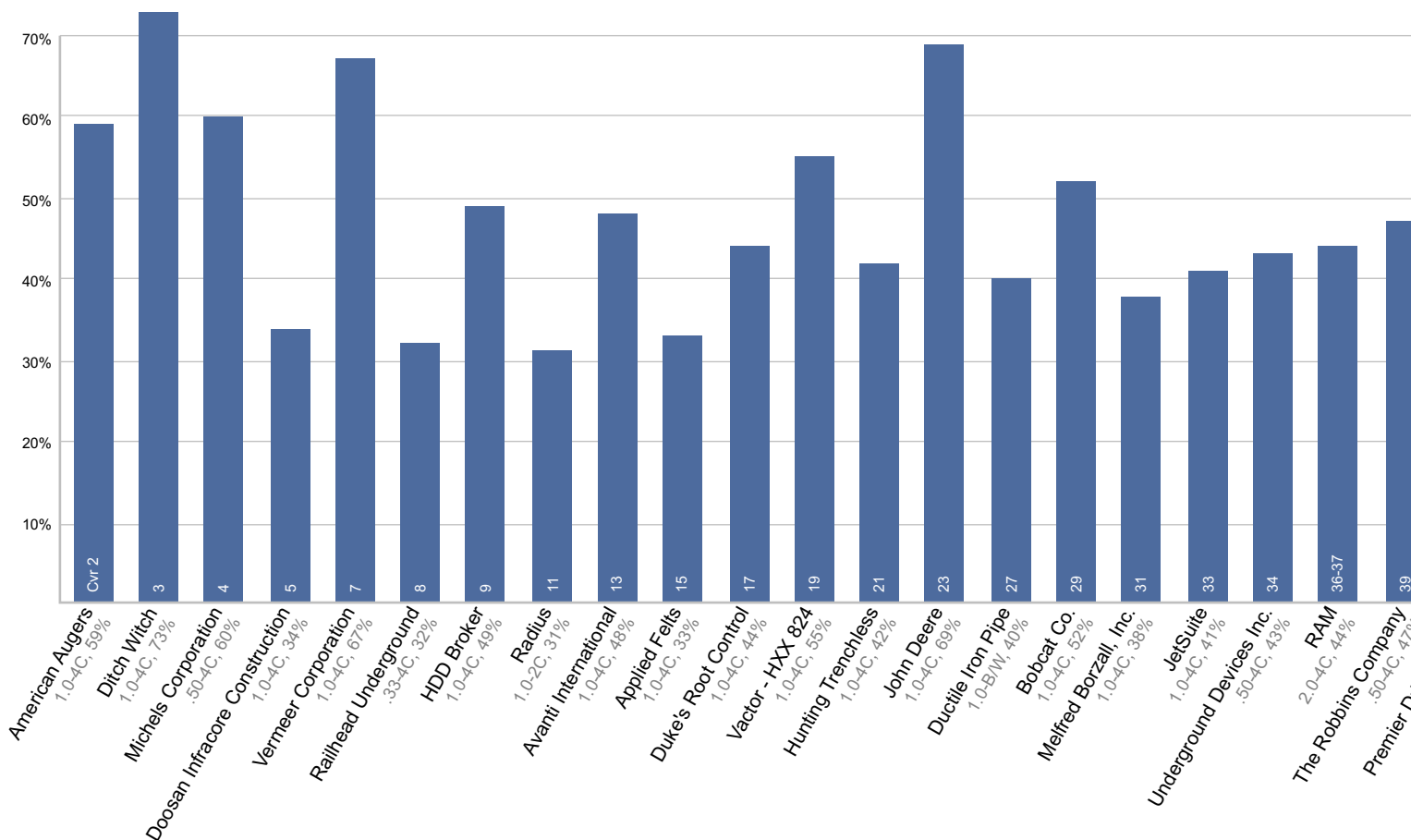
Ad recall scores by product category



	Page Number	Size and Color	Issue exposure			In the past 60 days		
			Recall Seeing	Read Some	Read Most	Seeing Product or Service Literature	Discussing Product or Service	Visiting Advertiser's Website
Autos/trucks								
RAM	36-37	2.0-4C	44%	52%	61%	3%	3%	10%
Backhoe loaders								
John Deere	23	1.0-4C	69%	55%	26%	9%	9%	16%
Bobcat Co.	29	1.0-4C	52%	37%	37%	3%	9%	10%
Doosan Infracore Construction Equipment	5	1.0-4C	34%	24%	13%	2%	2%	2%
Category averages:			52%	39%	25%	5%	7%	9%
Boring machines/equipment								
American Augers	Cvr 2	1.0-4C	59%	32%	47%	7%	2%	5%
The Robbins Company	39	.50-4C	47%	28%	23%	5%	5%	0%
Category averages:			53%	30%	35%	6%	4%	3%
Contracting-engineering services								
Michels Corporation	4	.50-4C	60%	43%	46%	9%	7%	2%
Mears Group, Inc. - HDD LLC	58	.50-4C	48%	40%	47%	3%	3%	7%
Laney Directional Drilling	57	.25-4C	40%	40%	44%	7%	2%	7%
Miller Pipeline Corp.	55	.50-2C	38%	42%	44%	5%	5%	3%
OZ Directional Drilling	61	.25-4C	38%	42%	44%	3%	5%	3%
Category averages:			45%	41%	45%	5%	4%	4%
Directional drills								
Ditch Witch	3	1.0-4C	73%	45%	21%	9%	9%	9%
Vermeer Corporation	7	1.0-4C	67%	46%	32%	7%	7%	12%
Toro	60	.50-4C	64%	52%	36%	10%	10%	10%
American Augers	Cvr 2	1.0-4C	59%	32%	47%	7%	2%	5%
HDD Broker	9	1.0-4C	49%	57%	32%	2%	7%	9%

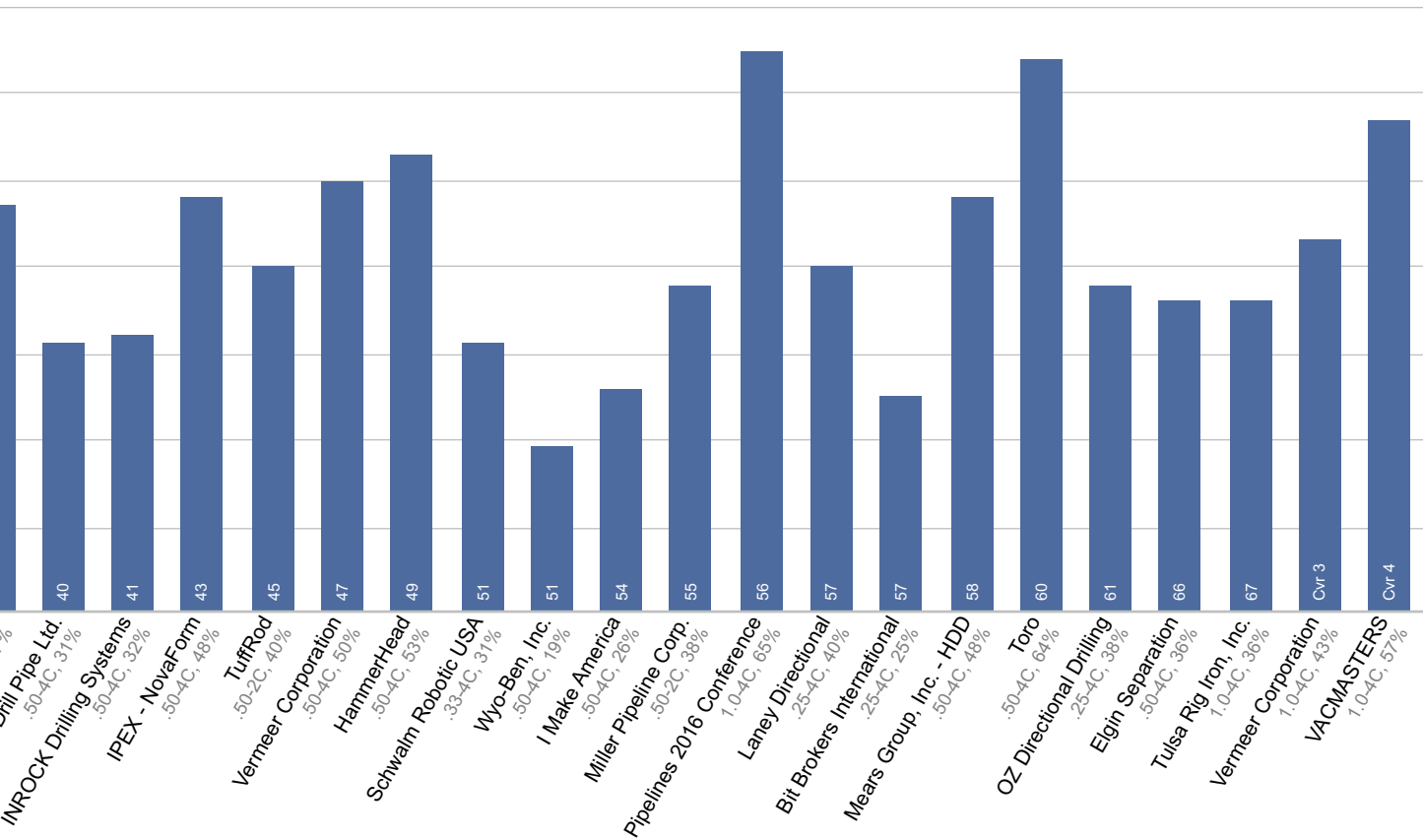
Base = 100
(continued)

Advertising reader traffic



Ad recall scores by product category *continued*

	Page Number	Size and Color	Issue exposure			In the past 60 days		
			Recall Seeing	Read Some	Read Most	Seeing Product or Service Literature	Discussing Product or Service	Visiting Advertiser's Website
Directional drills <i>continued</i>								
Vermeer Corporation	Cvr 3	1.0-4C	43%	40%	29%	7%	9%	9%
Tulsa Rig Iron, Inc.	67	1.0-4C	36%	56%	50%	5%	7%	7%
Category averages:			56%	47%	35%	7%	7%	9%
Drilling equipment and supplies								
Ditch Witch	3	1.0-4C	73%	45%	21%	9%	9%	9%
American Augers	Cvr 2	1.0-4C	59%	32%	47%	7%	2%	5%
Vermeer Corporation	47	.50-4C	50%	52%	54%	12%	5%	3%
Underground Devices Inc.	34	.50-4C	43%	51%	45%	5%	7%	9%
Vermeer Corporation	Cvr 3	1.0-4C	43%	40%	29%	7%	9%	9%



Base = 100

	Issue exposure					In the past 60 days		
	Page Number	Size and Color	Recall Seeing	Read Some	Read Most	Seeing Product or Service Literature	Discussing Product or Service	Visiting Advertiser's Website
Laney Directional Drilling	57	.25-4C	40%	40%	44%	7%	2%	7%
Melfred Borzall, Inc.	31	1.0-4C	38%	45%	18%	5%	7%	2%
Tulsa Rig Iron, Inc.	67	1.0-4C	36%	56%	50%	5%	7%	7%
INROCK Drilling Systems	41	.50-4C	32%	63%	50%	0%	7%	2%
Railhead Underground Products, LLC	8	.33-4C	32%	34%	9%	2%	0%	2%
Premier Drill Pipe Ltd.	40	.50-4C	31%	45%	14%	3%	3%	3%
Radius	11	1.0-2C	31%	39%	25%	2%	5%	9%
Bit Brokers International	57	.25-4C	25%	60%	33%	2%	3%	9%
Wyo-Ben, Inc.	51	.50-4C	19%	37%	29%	2%	3%	2%
Category averages:			39%	46%	33%	5%	5%	6%

(continued)

Ad recall scores by product category *continued*

	Page Number	Size and Color	Issue exposure			In the past 60 days		
			Recall Seeing	Read Some	Read Most	Seeing Product or Service Literature	Discussing Product or Service	Visiting Advertiser's Website
Excavators								
John Deere	23	1.0-4C	69%	55%	26%	9%	9%	16%
Bobcat Co.	29	1.0-4C	52%	37%	37%	3%	9%	10%
Doosan Infracore Construction Equipment	5	1.0-4C	34%	24%	13%	2%	2%	2%
Category averages:			52%	39%	25%	5%	7%	9%
Grouting technology & equip.								
Schwalm Robotic USA	51	.33-4C	31%	55%	18%	0%	5%	3%
Keyholing equipment								
VACMASTERS	Cvr 4	1.0-4C	57%	49%	32%	5%	5%	9%
Liners/lining systems								
IPEX - NovaForm	43	.50-4C	48%	50%	29%	5%	7%	7%
Applied Felts	15	1.0-4C	33%	36%	58%	2%	3%	0%
Category averages:			41%	43%	44%	4%	5%	4%
Mini loaders/excavators								
John Deere	23	1.0-4C	69%	55%	26%	9%	9%	16%
Bobcat Co.	29	1.0-4C	52%	37%	37%	3%	9%	10%
Category averages:			61%	46%	32%	6%	9%	13%
Mud systems: mixers and recyclers								
Elgin Separation Solutions	66	.50-4C	36%	47%	29%	5%	9%	5%
Piercing tools								
Ditch Witch	3	1.0-4C	73%	45%	21%	9%	9%	9%
HammerHead	49	.50-4C	53%	36%	16%	5%	3%	5%
Category averages:			63%	41%	19%	7%	6%	7%

Base = 100
(continued)

	Page Number	Size and Color	Issue exposure			In the past 60 days		
			Recall Seeing	Read Some	Read Most	Seeing Product or Service Literature	Discussing Product or Service	Visiting Advertiser's Website
Pipe (all types)								
Hunting Trenchless	21	1.0-4C	42%	38%	56%	7%	3%	3%
TuffRod	45	.50-2C	40%	35%	14%	7%	2%	3%
Premier Drill Pipe Ltd.	40	.50-4C	31%	45%	14%	3%	3%	3%
Category averages:			38%	39%	28%	6%	3%	3%
Pipe bursting equipment								
HammerHead	49	.50-4C	53%	36%	16%	5%	3%	5%
Pipe rehab systems								
HammerHead	49	.50-4C	53%	36%	16%	5%	3%	5%
Avanti International	13	1.0-4C	48%	31%	33%	3%	7%	7%
Applied Felts	15	1.0-4C	33%	36%	58%	2%	3%	0%
Category averages:			45%	34%	36%	3%	4%	4%
Root control								
Duke's Root Control, Inc.	17	1.0-4C	44%	18%	38%	0%	3%	3%
Trade shows/workshops								
Pipelines 2016 Conference	56	1.0-4C	65%	48%	23%	5%	5%	14%
Vacuum equipment and services								
VACMASTERS	Cvr 4	1.0-4C	57%	49%	32%	5%	5%	9%
Vactor - HXX 824	19	1.0-4C	55%	38%	57%	3%	5%	5%
Category averages:			56%	44%	45%	4%	5%	7%
Miscellaneous								
JetSuite	33	1.0-4C	41%	24%	30%	7%	2%	5%
Ductile Iron Pipe Fittings	27	1.0-B/W	40%	53%	43%	5%	3%	7%
I Make America	54	.50-4C	26%	62%	13%	7%	2%	3%
Category averages:			36%	46%	29%	6%	2%	5%

Base = 100

Ad scores

(Continued from page 1)

This top “read some” score is an outstanding achievement among the ads targeting busy professionals. It indicates that this **INROCK Drilling Systems** ad effectively engaged the *Underground Construction* audience after capturing their initial attention.

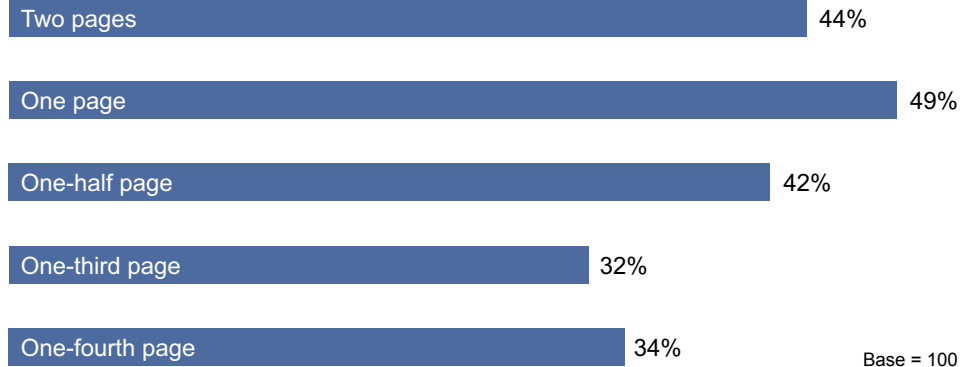
A half-page, four-color ad from **I Make America** earns a 62 percent “read some” tally. A red and blue logo tops the ad, and text asks readers to join I Make America’s grassroots efforts to “dramatically strengthen American manufacturing jobs right here in the U.S.” Of the 26 percent of survey respondents who recalled seeing this ad, 62 percent read some of it, and 13 percent of these read most of the copy.

A quarter-page, four-color ad for **Bit Brokers International** is up next, with a “read some” score of 60 percent. The Bit Brokers logo and contact information are at the top of the ad; a listing of bit types is on the left. Outlined photos of various bits fill the ad. Of the 25 percent of survey respondents who recalled seeing this ad, 60 percent read some of it, and 33 percent of these read most of the material.

High readership scores, “read some” and “read most,” are reported as a percentage of readers who recalled seeing or reading some of an ad, respectively. They indicate an ad’s ability to engage an audience beyond increased awareness, in order to build preference while informing professionals of features and benefits specific to the advertised product or service.

Baxter Research Center Inc. has found that a readership recall score based on the percentage who recall seeing an ad is a clear way to distinguish those advertisements with high readership, regardless of the size of the target audience or stopping power of the ad or logo. Ads with the highest readership scores should

Average ad scores by size



	Number of Ads	Recall Seeing	Read Some	Read Most
Two pages	1	44%	52%	61%
One page	20	49%	41%	35%
One-half page	15	42%	46%	33%
One-third page	2	32%	45%	14%
One-fourth page	3	34%	47%	40%
Issue averages:		44%	43%	34%

be reviewed carefully, as these most often give the target audience valuable information in a highly readable format.

Detailed ad scores begin on page 5.

Literature

Underground Construction readers were asked whether they recalled seeing literature related to an advertised product or service during the 60 days prior to seeing the ad. Such literature may have been a brochure or sell sheet passed on to them by a work associate, delivered in the course of sales discussions, at a trade show, via email, regular mail or by other means. A noteworthy 12 percent of respondents recalled literature from **Vermeer Corporation** during this period.

Discussions

Respondents also report discussions relating to advertised products and services in the 60 days prior to seeing the ad. Discussions could have been with the advertiser’s sales representative or a staff member, or members within the respondent’s organization. A full 10 percent recalled discussing products from **Toro** during this time.

Visits to websites

Underground Construction readers are increasingly accessing advertisers’ websites for more information about advertised products and services. In this category, 16 percent of respondents recalled visiting the **John Deere** site during the 60 days prior to seeing that company’s ad. — BRC

Methodology

How the Report to Advertisers was prepared

Baxter Research Center Inc.’s ad study programs are conducted via email using accepted advertising and editorial reader research methods and practices. This sample was selected from the sponsoring publication’s qualified circulation of 40,356 using a structured random-interval selection process.

Preparation of the survey instrument, sample selection, emailing, processing, tabulation and generation of the final report are conducted under the supervision of BRC.

Readers invited to participate via email are provided with a secure link to the questionnaire. To ensure optimal delivery, all surveys are sent using BRC’s bonded email servers.

In those cases where two versions of the questionnaire are produced to maintain an appropriate level of reader response, both are identical with the exception of the ad listings, which are divided equally between the two. Ad recall data are based on a minimum of 100 returns. Splitting the survey into two or three versions to ac-

commodate more ads will result in editorial and respondent profiles increasing to 200 and 300, respectively. The ad recall data will achieve a lesser number, but no fewer than 100 returns.

Ad and editorial reader recall data are fully disclosed in this report and online at B2Ba2z.com. Advertiser access to B2Ba2z.com is controlled by the sponsoring publication. Advertisers wishing to view online data should contact their magazine advertising sales representative for a password. A copy of the questionnaire is available on request from BRC.

underground
construction

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