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Rene Cortes  
Technician  
Lamers Construction

# BRINGING ON CHANGE

Addition of pipe bursting is  
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Published nine times yearly by COLE Publishing, Inc.  
P.O. Box 220, Three Lakes, WI 54562

In U.S. or Canada call toll free 800-257-7222  
Mon.-Fri., 7:30 a.m.-5 p.m. CST

Website: [www.digdifferent.com](http://www.digdifferent.com) / Email: [info@digdifferent.com](mailto:info@digdifferent.com) / Fax: 715-350-8456

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## Using Data to Your Advantage

**TRACKING INVENTORY, TIME ON JOBS AND OTHER INFORMATION CAN HELP YOU MAKE BETTER DECISIONS WITH YOUR COMPANY NOW AND IN THE FUTURE**

BY CORY DELLENBACH, EDITOR

**W**hen Scott Lamers, general manager of Lamers Construction in Kaukauna, Wisconsin, was looking at ways to expand his general construction business, he had to gaze into the future to see what the next big thing would be.

OK, so he didn't really look into the future. Instead Lamers had to look at what construction projects were coming up, what was being asked of contractors in those projects, any new trends, new equipment hitting the market, and a whole lot of other criteria to look at.

That helped Lamers to pinpoint pipe bursting as a service market to move into with his construction business. He saw the communities in that area of the state pushing to remove lead pipes from homes and homeowners not wanting their properties torn up. Lamers Construction went full-in on pipe bursting and hasn't looked back since as you'll read in this issue's profile on the Wisconsin company.

### FORECASTING THE FUTURE

Much like weather forecasters use data to give you a look at what the weather for the upcoming week could be like, you could be using data to determine several things with your utility construction company. Do you have a job similar to one last year that you handled coming up? Look at that experience and decide what you need at the job site to make it run more efficiently.

You can also use data to help with inventory. Winter is upon us, what parts and components do you tend to use more during these colder months? Maybe stock up more on those this time of year rather than ones that you tend to use more in the warmer months.

Not only will being able to plan for the future help in serving customers better, it will help you control costs better too. Why spend unnecessary money on parts you don't need right now if you have enough of them in stock for work that could come up soon.

### TAKING YOUR TIME

Finding the data to help you make a solid prediction shouldn't be difficult. Just take a look at your past billing statements to customers and look at job tickets to see what your crew has done the last year, or further.

If you don't have the data readily available right now, start collecting it. Keep track of tools and supplies you are using on each job, track how long your crews are on jobs. You can collect almost any type of data you think of and almost all of it will be useful at one point or another.

Scott didn't jump into his new market right away, he took the time to explore opportunities and decide which way his company should go. The last thing you want to do is move too fast and get into a situation that destroys your company.

### WHAT DO YOU TRACK

I'd like to hear what data you track at your company and how it has made your company more productive or profitable. Email me at [editor@digdifferent.com](mailto:editor@digdifferent.com).

Enjoy this issue! ▼



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## STAYING SAFE

### Cold, Confined Spaces

Working in pits to clean or reline pipes and other confined spaces during the colder months can bring new sets of challenges for many workers. This online exclusive article examines some of the most common dangers to watch out for and how to keep yourself and your crew safe.

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## WHAT DOWNTIME?

### Maximizing Winter Hours

This online article discusses how contractors can productively utilize the winter months, traditionally a slower season, by focusing on equipment maintenance, organizing workspaces and enhancing safety training.

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# BRINGING ON CHANGE

**ADDING PIPE BURSTING SERVICES EARLY GIVES WISCONSIN CONTRACTOR  
A LEG UP ON COMPETITION AND CONTINUES TO SEE GROWTH IN THE MARKET**

STORY: GILES LAMBERTSON PHOTOS: MIKE ROEMER



Scott Lamers Construction technician Rene Cortes uses a HammerHead PB30 to pull a cable that will be used to pull a new water and sewer line into a home. The company added pipe bursting to its service offerings 15 years ago and continues to see it grow.

Technician Jose Leiva prepares a 4-inch HDP SDR17 sewer and 1 1/4-inch HDP SDR9 waterline that is being installed in a home remodeling project in Appleton, Wisconsin.



Scott Lamers has worked in construction since he left high school in 1986. Fifteen years ago, after two decades in the industry in and around his hometown of Kaukauna, Wisconsin, Lamers looked at the work he was doing and realized he needed to reposition his company if he wanted it to continue to be successful. He got into the trenchless pipe repair business.

“I sat down and looked at what I was doing,” Lamers recalls of that pivotal moment. “I was working steadily, but it was hard to get work and to be competitive.” He peered into the future and saw that sewer work in general and inflow and infiltration issues in particular would be a focus of contractual work.

Subsequent conversations with local municipal engineers confirmed his view. “So, I decided to spend some more money and get into the specialty work,” he says. He bought his first pipe bursting machine in 2008 and quickly began scaling up the work.

Today, Scott Lamers Construction is the premier pipe bursting contractor in the Fox Valley and is still growing in the East Central Wisconsin market.

#### ENTERING THE INDUSTRY

While the move was a prescient business decision, a willingness to change was not out of character for Lamers. The 55-year-old contractor grew up on a dairy farm but left the agrarian life behind at age 18 to become a mason tender, or helper, carrying brick and mixing mud. In time, he moved along to do concrete flatwork for a contractor.

He then left that to get into excavation work and, for the following nine years, moved a lot of Wisconsin soil for a contractor operating backhoes and dozers, push-loading scrapers and excavators. Most of the dirt-moving was commercial site work.

At that point, Lamers once again found himself wondering about his future.

“I remember one night lying awake at night thinking about all the stuff I was going to be doing for the company that I was working for and saying to myself, ‘If this is what I’m going to be doing, I might as well be doing it for myself.’”

**“MY THING ALWAYS HAS BEEN, I DON’T WANT TO GET CALLS FROM CUSTOMERS BECAUSE WE ARE THE CHEAPEST. I WANT THEM TO CALL BECAUSE THEY KNOW WE WILL COME OUT AND GET THE JOB DONE.”**

Scott Lamers



Leiva carries an old pipe segment from the job site. Crews were installing new lines in a residential property.



**“WE WANT TO BE A ONE-CALL COMPANY AND MAKE IT EASY FOR EVERYBODY. WHETHER IT’S BURSTING OR DIRECTIONAL DRILLING OR OPENCUT, WE WANT TO BE THE COMPANY THEY CALL AND TO DO ALL THE WORK IN-HOUSE.”**

Scott Lamers

Scott Lamers, general manager and founder

no equipment and one employee. What he did have was a contract for snow removal in a region that receives 30-40 inches of snow in winter months. He bought a backhoe and went to work.

Today, the company still offers a snow removal service and traditional excavation and earthmoving work. Its equipment yard is filled with machinery capable of performing such work — four hydraulic excavators ranging in size from a 15-ton Caterpillar to a Volvo mini model, as well as a pair of full-size wheel loaders and three skid-steers.

More to the point, in the yard are three HammerHead PB30 portable pipe bursting units, each with 30-ton pulling force. On a good day, each of his crews uses the equipment to burst two or three faulty lines on job sites and pull in replacement lines, most of the pipe being in the 4-inch to 6-inch range.

Why HammerHead? It’s an established brand, of course, but Lamers also was drawn to the manufacturer because it’s a Wisconsin company. “I try to stay local. That’s important to me,” he says. The company caught his attention also because it was instrumental in getting pipe bursting accepted in the area plumbing code.

Since going with HammerHead, Lamers Construction has developed something of a professional relationship with the manufacturer. This past summer, for example, the company tried out some new tools using Lamers’ crews “to give the products some real-world trial-and-error testing.”

Also found in Lamers’ work trucks are RIDGID SeeSnake inspection cameras. However, they are infrequently used, according to Lamers, because 80% of the company’s work is on municipal projects. “They do their own camera work. They already have inspection reports.” Nevertheless, each pipe bursting crew has a camera and knows how to operate it to find intersecting lines and otherwise peer in pipes.

### BECOMING A STANDARD

Seventy percent of the company’s business is pipe bursting, which is more than adequate proof that Lamers was right to concentrate on trenchless repair work 15 years ago. The excavators and wheel loaders still get workouts on commercial site developments, though, and produce some 20% of company revenue. The balance of income is from snow removal work.

A new service that has just begun to be offered, directional drilling, is a consequence of a change of ownership. Lamers was approached by another local businessman — who is a dairy farmer among other enterprises. He subsequently sold the business to Seven Oaks HD earlier this year. Now, Lamers is formally general manager of the company he founded and is chomping to get out of the office and back to bursting and digging.

“I very much prefer being in the field to being in the office,” he says. “I’ve



Jose Leiva carries a 4-inch HDP SDR17 sewer line on the job site. The company does pipe bursting work throughout the year, even though it slows down in the wintertime.

|

## Scott Lamers Construction LLC

### Kaukauna, Wisconsin

<b>OWNER:</b>	Seven Oaks HD (as of spring 2023)
<b>EMPLOYEES:</b>	12
<b>YEARS IN BUSINESS:</b>	20
<b>SERVICES:</b>	Pipe bursting, general excavation, snow removal, directional drilling
<b>SERVICE AREA:</b>	Wisconsin, principally the Fox Valley
<b>WEBSITE:</b>	scottlamers.com

Such entrepreneurial instincts aren’t found in every working man or woman, but Lamers was the oldest son of a dairyman, so he was acquainted with what it meant to be self-employed. His two younger brothers today also work for themselves. Wanting to be one’s own boss runs in the family.

Scott Lamers Construction came into being at that point, but it didn’t burst upon the Kaukauna construction contracting market in a big way. Lamers had

expressed to the new owner that he find someone to take over my desk. It's not where I like to be."

The change at the top will have no impact on the business besides enhancing its lineup of services. "We want to be a one-call company and make it easy for everybody," Lamers says. "Whether it's bursting or directional drilling or open-cut, we want to be the company they call and do all the work in-house."

As he has for 15 years, the now-general manager will still be pushing the company's mainstay product — a trenchless solution. Lamers first promoted pipe bursting by leaning on municipal engineers until they began to include it in their bids. Then he went to local sewer cleaning companies and persuaded many of them to refer pipe repair jobs to him in return for a finder's fee.

The upshot is that, in the Fox Valley, trenchless repair has become the standard for repairing a faulty pipe, according to Lamers. Most of the trenchless work is by bursting a pipe, with pipelining a distant second choice. "Open-cut is a last resort."

When Lamers entered the local market, one other trenchless outfit was in business. That company's market share has since faded and a new competitor has come on the scene, but Lamers Construction remains the principal pipe bursting contractor in Fox Valley.

## GROWING WORK

The bursting activity is a year-round work, according to Lamers, though not as much as he would like. The Valley is not so far north that frozen ground can't be penetrated in winter months and the business owner is trying to get local engineers to schedule more work then.

Because pipe bursting requires minimal surface excavation, frozen soil is not an issue. A Lamers crew places an electric blanket on the ground where the crew wants to excavate an entry hole and within three or four days, the ground is diggable. Actual bursting is below the frost line. "Things slow down in the winter, but we try not to lay off guys. I'm pushing hard for municipalities to schedule some of these jobs from December through March."

Regardless of the season, Scott Lamers Construction LLC is all about doing a job right. Lamers says his goal all along has been to attract customers through quality of work rather than the cost of it. "My thing always has been, I don't want to get calls from customers because we are the cheapest," he says. "I want them to call because they know we will come out and get the job done." ▼



Operating the hydraulics to the HammerHead PB30 pipe bursting machine at the entry pit is Jerry Geiger. The company has three PB30 units for its crews.

## Trenchless Pipe Repair Excellence Backed by Education and Public Service Outreach

Scott Lamers Construction LLC attracts trenchless pipe repair customers for a fundamental reason: It does good work.

A secondary attraction is the clarity with which it explains how the work is done. On the company website ([scottlamers.com](http://scottlamers.com)), company founder Scott Lamers offers a straightforward explanation under the banner "Trenchless Sewer Repair Process."

Through illustrations, photos and text, pipe bursting is explained to a website visitor in terms that nearly anyone can understand. The education of his customers on the website doesn't end there, but it is a good example of Lamers' teaching about the work he does.

"I don't get feedback from people about how much they like the explanation or something," he says. "I do get emails from people who have come across it when they Google pipe bursting. Bursting really is a simple process, though there is some not-so-simple stuff that goes with it. We just send people to the website to learn about it."

The Kaukauna, Wisconsin, company has been in trenchless repair work for 15 years and is well-known in its market. It is respected enough that municipal engineers regularly call Lamers for tips — or for requests to hold a teaching session. "We're very much a fan of educating the public," he says. "We usually just steer them to the website because most of the information they need is there. Or we offer to meet with a group if they prefer. We do plenty of those."

All of this sharing of information has the extra benefit of giving Scott Lamers Construction a higher profile in the Fox Valley, where it principally operates. Call it public service marketing. "Word of mouth is our bread-and-butter way of advertising," says Lamers. "We don't do much marketing. In fact, we don't do any."



Lamers, right, general manager, and Joe Lambie, project manager/estimator, look over plans at the Scott Lamers Construction office.

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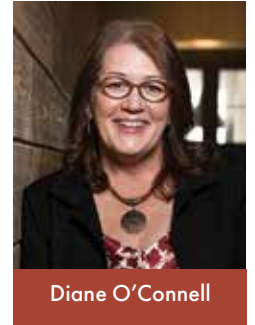
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# Maintaining a Healthy Culture

## CONSIDER THESE FIVE LESSONS — THROUGH THE LENS OF THE TITANIC DISASTER — ABOUT ENSURING EMPLOYEES’ WELL-BEING

BY DIANE O’CONNELL



Diane O’Connell

**T**he sinking of the Titanic stands as a tragic and haunting reminder of human fallibility. Surprisingly, the parallels between the Titanic disaster and today’s workplace well-being cultures are striking.

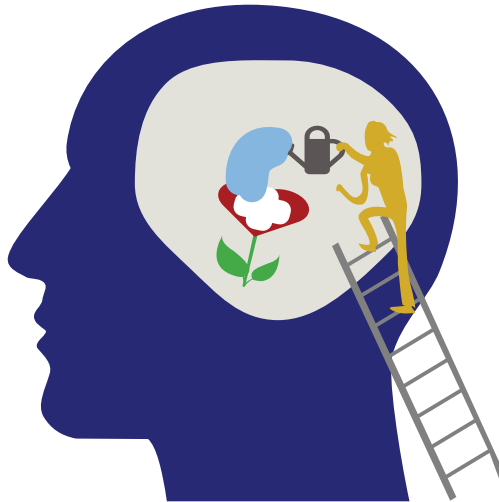
The Titanic, once deemed “unsinkable,” faced unforeseen challenges, inadequate preparation, and communication breakdowns — all factors that bear an uncanny resemblance to issues plaguing today’s workplaces.

Let’s explore the correlation between history’s most infamous shipwreck and the ever-evolving landscape of workplace wellness.

### LACK OF VISION (MENTAL HEALTH)

The Titanic had binoculars hidden away in a locked cabinet. Yet, these crucial tools remained untouched throughout the voyage. The reason? A lack of confidence and the fear of consequences, because the ship was brand new, prevented the crew from breaking the glass cabinet to access them. Not feeling empowered to make the decision left them with severely limited vision, so they didn’t see the iceberg until it was too late.

Just as the Titanic’s fate could have been different with better vision, business leaders today should heed this lesson and equip their talent with the necessary tools and insights to ensure forward vision and the confidence to take action. It’s not enough to thrive in the present. Leaders must prepare for the future, recognizing that employees’ mental well-being directly impacts productivity, which directly impacts profits. This proactive approach guarantees that well-being programs and benefits remain effective and adaptable, capable of meeting the ever-evolving demands of the modern workplace.



### COMMUNICATION BREAKDOWN (SETTING EXPECTATIONS)

Just as poor communication protocols and delayed response played significant roles in the Titanic disaster, within an organization, they can have a ripple effect that deteriorates the workplace culture.

In the absence of clear communication channels, information isn’t adequately disseminated and feedback mechanisms fail, so employees’ access to vital support and resources becomes compromised. This can lead to a decline in overall productivity.

Much like the Titanic crew needed clear communication protocols to navigate expectations and obstacles, modern organizations must foster an environment of open and honest communication, where expectations are well-defined and readily accessible so employees can be fully engaged. In doing so, leaders not only enhance employee satisfaction, mental health and productivity but also safeguard their profits from potential disasters on the horizon.

### NEGLECTING WARNING SIGNS (LEADERSHIP)

The Titanic crew received several warnings about icebergs in its path, which were not adequately heeded because they prioritized sending messages for the first-class passengers. Similarly, poor workplace cultures may neglect warning signs of employee distress, such as high attrition, increased absenteeism or declining productivity because it is focusing attention on the wrong areas. When leadership fails to recognize and address these signals, the repercussions can be profound, impacting employee satisfaction and overall well-being which can lead to disengagement.

By actively recognizing and addressing signs of employee distress, you not only enhance well-being but also safeguard the overall health and success of the organization. In this era where leadership and employee well-being are intrinsically linked, astute and empathetic leadership can make all the difference.

### INADEQUATE PLANNING (CRISIS/RISK MANAGEMENT)

The Titanic’s sinking was partly attributed to insufficient planning and failure to account for potential risks, such as iceberg collisions. Inadequate workplace well-being programs often stem from a lack of strategic planning and risk assessment. Neglecting to anticipate and address employee well-being issues can set the stage for increased stress, burnout, disengagement, and physical and

**THE TITANIC WAS DESIGNED WITH LIMITED LIFEBOATS, A SHORT-SIGHTED AND ARROGANT APPROACH THAT PRIORITIZED PROFITS OVER PASSENGER SAFETY. SIMILARLY, INADEQUATE RESOURCES AND SUPPORT ALLOCATED TO WORKPLACE WELL-BEING PROGRAMS CAN HINDER THEIR EFFECTIVENESS.**

mental illnesses which increase the risk of attrition, injuries, employee-driven lawsuits, costly mistakes and eventually customer dissatisfaction.

The Titanic serves as a sobering reminder that crisis and risk management are essential. Organizations can proactively identify and mitigate risks by safeguarding not only the health and happiness of their workforce but also their





# No Room for Error

## FROM UNDERSTANDING GROUND CONDITIONS TO USING THE RIGHT WATER PRESSURE, HYDROEXCAVATOR OPERATORS CAN STREAMLINE EFFICIENCY AND ENSURE JOB SITE SAFETY WITH THESE BEST PRACTICES

BY CHRIS THOMPSON

**W**ith today's increasingly complex and congested underground environments, there is no room for error when excavating or exposing utilities.

Underground professionals know that damaging existing utilities — whether it be fiber, gas, electric, water or sewer lines — can result in dangerous and often costly consequences. To help ensure operator safety and minimize downtime, contractors have turned to vacuum excavators — and often more specifically, hydroexcavators — as their secret weapon on a variety of underground projects.

From ground and soil considerations to ensuring the proper water pressure, following key best practices can help underground construction professionals improve efficiency, increase productivity and maximize job site safety while hydroexcavating.

### BEST PRACTICES FOR COMPLEX UNDERGROUND

Damage mitigation is the name of the game in the underground construction industry. In an industry that continues to evolve, it takes a village to keep crews safe. From utility locating technicians to underground construction professionals, everyone plays an important role in damage mitigation.

Not to mention, today's job sites are rarely simple, especially when considering the complicated web of utilities and infrastructure that weave underground. In addition to managing a variety of ground and soil conditions, hydroexcavators have the power to support work in complex underground environments. Unlike a traditional excavator or trencher that can cause immense disruption, hydroexcavators are much gentler at removing soil and debris when working underground. When exposing utilities, contractors should always keep their nozzle 8 inches away from the utility to prevent damage to both the equipment and utility. Water pressure

should be kept below 2,800 psi with the nozzle consistently moving when actively excavating.

When operated according to these best practices, hydroexcavators can be used to expose utilities while mitigating potential damage. On today's underground construction job site, a utility strike or cross bore can be extremely costly and potentially dangerous, so a hydroexcavator is a key job site addition.

### BEST PRACTICES FOR VARIOUS GROUND CONDITIONS

Today, most equipment manufacturers design vacuum excavators with both air and hydro capabilities, so operators don't have to choose between the two. For example, contractors can start excavating the ground surface with air and switch to hydro once they reach harder soil formations. With the ability to switch from hydro to air, operators

of soil conditions, including tightly compacted and hard soil, cobble and clay. Because hydroexcavation requires operators to dispose of liquid spoils and replenish water sources while on the job site, following best practices for water conservation is important. However, the ability to conquer various soil conditions quickly and efficiently makes hydroexcavation the preferred method for many contractors.

Air excavation allows operators to break up soil with compressed air and vacuum dry spoils, which can be reused on site as backfill. This method works best on softer soils such as topsoil, sand and some clay formations. Unlike hydroexcavation, which requires access to water, air excavation keeps machines running and operators on the job site without having to make trips to acquire water or dispose of liquid spoils. Additionally, many operators are turning to air excavation on job sites as

**PRESSURIZED WATER TYPICALLY EXPOSES UTILITIES FASTER THAN AIR, HOWEVER, AIR IS OFTEN THE BETTER CHOICE FOR MORE DELICATE JOB SITES THAT ARE AT RISK OF WASHOUT NEAR ROADBEDS.**

can better adapt to changing job site conditions and stay productive in a variety of ground environments.

When choosing between hydro or air excavation, contractors should consider the job site and soil conditions to ensure the method used is the most efficient. For example, pressurized water typically exposes utilities faster than air; however, air is often the better choice for more delicate job sites that are at risk of washout near roadbeds.

Hydroexcavation uses pressurized water to do the hard work. It is the most widely practiced form of soft excavation because it can be used in a range

liquid spoils disposal restrictions tighten and certified disposal sites become more difficult to find.

For both hydro and air excavation situations, the recommended pressure for soft excavation is no greater than 2,800 psi. Although many vacuum excavators and nozzles offer higher psi capabilities, too much pressure can damage utilities and other underground infrastructure. The pressure should be reduced even further if using heated water.

### ABOUT THE AUTHOR

*Chris Thompson is Ditch Witch's vacuum excavation product manager. ▼*

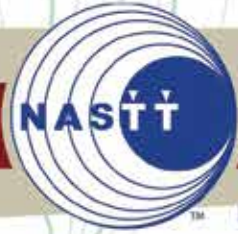
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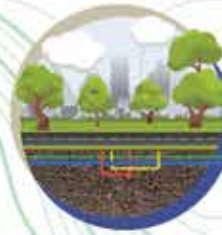
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## Excavator

### John Deere 85 P-Tier Excavator

The John Deere 85 P-Tier Excavator is a powerful and versatile machine designed for demanding tasks. Its spacious and comfortable cab enhances operator comfort during long hours on the job, while a 17% increase in engine horsepower ensures efficient performance. The reduced-tail-swing configuration allows for exceptional maneuverability in tight spaces, making it well-suited for congested job sites. Ergonomic short-throw pilot joysticks provide precise control, and the adjustable heated air-suspension seat enhances operator comfort. JDLink connectivity offers real-time monitoring and diagnostics. The dealer-installed hardware kit enables the analysis of machine performance, tracking of usage, and receipt of diagnostic alerts through the John Deere Operations Center. It also supports John Deere Connected Support for proactive issue resolution, remote monitoring, and more, ensuring peak performance.

**800-503-3373; www.johndeere.com**



## Horizontal Directional Drilling

### Ditch Witch AT120

The AT120 from Ditch Witch enables maxi-drill operators to move down a class size to meet job site constraints without compromising job site productivity. It features 15,000 ft-lbs of rotational torque. With 120,000 pounds of thrust and pullback, it allows operators to take on a wide variety of projects, as well as move through longer bores and larger diameter installations more efficiently. With 20 feet of end-to-end drill pipe on board, it helps operators put more pipe in the ground, further boosting job site uptime. It offers a saver lock design to protect the drill pipe and drive system against wear and tear. With updated and intuitively located compartment panels, operators have increased access to critical components that frequently need to be maintained, streamlining maintenance routines and the serviceability of the drill.

**580-336-4402; www.ditchwitch.com**



## Hydroexcavation Equipment

### Dynablast Pratissoli KTX Series

The Pratissoli KTX Series water pump, distributed by Dynablast, is designed for hydroexcavation. The KTX24ASPF offers 13.5 gpm at 3,625 psi and 1,450 rpm and the KTX28ASPF offers 18.4 gpm at 2,900 psi and 1,450 rpm. Its T13 female spline shaft input and SAE B 2/4 bolt flange enable direct mounting to the hydraulic motor. It has run dry seals with a Kevlar Graphite rope, a 420 stainless steel manifold for protection from cavitation, and a self-lubricating design so that no oiler kit or weekly oiling is required. Its symmetrical crankcase makes it easy to reverse shaft the pump. Internal fins on the aluminum crankcase provide cooling to lower oil temperature. A tapered roller bearing improves lateral loading. The two-bore ceramic plungers are thicker ceramic on the water end to prevent thermal shock.

**905-867-4642; www.dynablast.ca/product/hydrovac**



### GapVax HV33

Designed to safely transport water and debris in urban areas, the GapVax HV33 is shorter, smaller and more compact than its predecessor. It is 30 feet long overall on a medium-duty chassis and includes a 600-gallon water tank, 6-cubic-



yard debris body, 6- or 8-inch top-mounted telescoping boom with a 14- to 17.5-foot reach, 4,000 cfm power and an inverted, full-opening tailgate.

**888-442-7829; www.gapvax.com**

### Haaker Underground TRUVAC 824

The TRUVAC 824 mid-size hydroexcavation truck, distributed by Haaker Underground, ensures nondestructive digging (DigSafe), safeguarding underground utilities and minimizing the risk of damage. This method also reduces the need for manual labor, enhancing operational efficiency and cutting down on project timelines. The mid-size truck is highly maneuverable, allowing it to access confined spaces and challenging terrains effortlessly. The 18-inch PD blower (4,970 cfm) enables swift removal of debris, promoting a cleaner and safer work environment. Equipped with advanced safety features and user-friendly controls, the truck ensures seamless operations while prioritizing worker well-being. By combining precision, power, and adaptability, this truck streamlines processes, enhances productivity and minimizes potential risks, making it a valuable investment for any operation.

**800-200-3432; www.haakerunderground.com**



### Hi-Vac X-13

Contractors, municipalities and utility service providers depend on Hi-Vac X-13 hydroexcavators to safely and efficiently trench for new sewer and wastewater lines with minimal disturbance to surrounding areas. They combine surgically precise hydroexcavating power with low-maintenance components that help minimize downtime. Simple, intuitive controls and quick access to all critical systems mean jobs get done faster. A 13-cubic-yard debris tank, up to 24,500-pound payload capacity and 1,140-gallon freshwater capacity help reduce the number of costly job site returns. Power is provided by a 5,800 cfm, 27-inch Hg high-performance blower and a run-dry water pump that delivers 20 gpm at 2,500 psi. The 360-degree, top-mounted boom provides full accessibility in every direction, and a heavy-duty hydraulic vibrator provides fast and efficient unloading of the debris body. Designed for safe and easy operation, it only requires a short learning curve.

**800-752-2400; www.x-vac.com**



### HotJet USA Vac'n Jet Series

The HotJet USA Vac'n Jet Series of vacuum trailer jetties are compact and specially engineered to haul equipment and the spoils load, perform hydroexcavation, and clean valve boxes, storm drains and drain/sewer lines. They feature hot and/or cold water operation with a choice of engine options ranging from 23 to 70 hp and gas or diesel operation. They are equipped with premium triplex pumps, a 500-gallon spoils tank, up to 440-gallon water tanks, Gardner/Denver vac/blowers, a 4-ton hydraulic dump and a dual filter centri-clean filter system. They can also be custom engineered and designed to meet specifications.

**800-624-8186; www.hotjetusa.com**



### Pressure Lift HydraBore

The HydraBore equipment attachment from Pressure Lift fits on the end of any vacuum hose for a simple, more cost-effective approach to hydroexcavation. It breaks up soil, removing it quickly and easily to reduce labor requirements to a one-person operator, keeping every project extra clean improving safety. This tool reduces the downtime of an operator changing clothes when finished and



requires fewer workers by using the tool for its other benefits of pumping deeper and faster. It can also be used in concert with smaller vacuum equipment to gain maximum benefits while capitalizing on project expenses.

**866-504-6596; [www.pressurelift.com](http://www.pressurelift.com)**

### Presvac Systems Hydrovac

The Presvac Systems Hydrovac is designed for versatility and cold-weather operation with optional full compliance with U.S. Department of Transportation specifications for collection or transportation of hazardous materials. The high-vacuum blower allows extraction of all types of soils, gravel, rock, clay, water and silt material, with knockout features in the debris tank to minimize carryover. Modular filtration configured to blower size provides blower protection and minimal maintenance. It comes with a heavy-duty, 8-inch boom that extends up to 25 feet with six-way hydraulic power and wireless controls for all boom functions, a soft-start water pump, vacuum breaker and truck engine speed.

**800-387-7763; [www.presvac.com](http://www.presvac.com)**



### RAMVAC by Sewer Equipment HX-12

The HX-12 hydroexcavator from RAMVAC by Sewer Equipment has a 12-yard debris tank and a heated, secured equipment locker that contains the entire water system, including water tanks, for cold-weather application and tool security. This machine touts a directional discharge system with the ability to offload debris back into the excavation site when done, without the mess of dumping the tank. This system also allows operators to blow any obstructions out of the dig hose and get back to work. It includes a long-range wireless remote, NEMA 4 electrical system, an 800,000 Btu water heater and a three-stage cyclonic filtration system. The standard 4,400 cfm blower will match the performance of larger blower machines while delivering fuel economy with the ability to go up to 5,400 cfm. The series offers debris capacities from 3 to 15 cubic yards while maintaining a short overall footprint.

**888-477-7638; [www.ram-vac.com](http://www.ram-vac.com)**



### Rival Hydrovac T7 Tandem and T10

The T7 Tandem from Rival Hydrovac was designed primarily to be loaded with debris and drive within legislated road limits with most types of debris on board. The unit comes standard with a scale that reads real-time weights in the cab and on the wireless remote. The T10 is built with the same features and operating system, but with larger capacities and components. It is for both utility and industrial work. It is available in three chassis layouts to meet weight restrictions in a given area. An air compressor option allows for excavating with air when required, while a truck-mounted coring system allows for removal of hard surfaces before nondestructive excavating.

**403-550-7997; [www.rivalhydrovac.com](http://www.rivalhydrovac.com)**



### Super Products Mud Dog 700

Mud Dog 700 vacuum excavators from Super Products are designed to meet the challenges of compact, urban projects as well as large-scale excavation projects. They offer a compact footprint for excavation in urban environments while maximizing payload and maintaining the power and precision that larger units offer. The unit features a 7-yard debris body and 600-gallon water tank. This model comes standard as a dump body with an electric vibrator offering a 50-degree dump angle with the capability of dumping into a 48-inch container. Additionally, it is equipped with a rear-mounted, extendable, 8-inch-diameter boom that reaches 18 feet, has 270-degree rotation and pivots 10 degrees downward, which minimizes job site restoration and eliminates traffic congestion near roads.

**800-837-9711; [www.superproducts.com](http://www.superproducts.com)**



### Vac-Con Mudslinger MS800

The Mudslinger MS800 trailer-mounted hydrovac from Vac-Con is designed to provide the same power, suction and capacity of a truck hydroexcavator on a portable, pull-behind trailer. It includes the choice of Tier 4 diesel or gas engine options providing up to 1,190 cfm and 16 inches Hg with a PD blower and 325 gallons of water. It has an 845-gallon debris tank and a 9-foot boom with 24 inches of hydraulic extension providing a full range of motion. It is designed to be a standalone unit but can also provide support to construction, HDD and public utility fleets. A variety of applications include daylighting, potholing, culvert and manhole cleaning, and utility locating.

**904-284-4200; [www.vac-con.com](http://www.vac-con.com)**



### Vacall AllExcavate 811

Vacall AllExcavate 811 models deliver hydro and air excavation in a smaller footprint. Get in and out of tight jobs faster with the 8-cubic-yard debris tank, 1,100-gallon water tanks and an overall vehicle length of under 35 feet. The AE 811 delivers vacuum forces up to 5,400 cfm at free air and waterjetting power of 0 to 25 gpm at 3,000 psi. It adds air pressure modes at 110 psi at 185 cfm or 150 psi at 150 cfm. The AllSmartFlow CANbus intelligent control system features a programmable LCD that monitors engine, water flow, air pressure and vacuum performance for precise boom and reel adjustments. Aluminum water tanks and optional galvanized debris tanks with supreme finish carry a lifetime warranty. Both models, manufactured by Gradall, use one engine to power the chassis and excavation functions, reducing service and operation costs.

**800-382-8302; [www.vacall.com](http://www.vacall.com)**



### Vermeer VXT600

The Vermeer VXT600 vacuum excavator has a 12-cubic-yard elongated spoil tank design and 1,200-gallon freshwater tank capacity, but weighs in at just 40,000 pounds. It has a low profile with a height (with boom) of 12.25 feet so that it can maneuver under trees, power lines and bridges. The VXT600 is a powerful digging machine that operates quietly while on the job. It features a vacuum system that is powered by a 6,400 cfm Helical tri-lobe Jurop blower. With a 23-foot boom, an 8-inch diameter dig hose, a vacuum level of 27 in Hg, and a water pump that produces 10 gpm of flow at 3,000 psi, the truck can dig quickly and deeply. Additionally, the boom dig hose can be stowed with the dig tube attached to minimize setup time between digs. Additionally, the VXT600 includes a handwashing station for operator convenience.

**352-728-2222; [www.vermeer.com](http://www.vermeer.com)**



## Pipe - PVC, Polypropylene, Polyethylene

### Uponor PP-RCT

Uponor PP-RCT is the lightweight, durable piping solution. Available in sizes from 1/2 to 12 inches, it is 80% lighter than steel, uses heat fusion for joining to eliminate open flame, and resists corrosion, rust and scale buildup for greater durability.

**800-321-4739; [www.uponor-usa.com](http://www.uponor-usa.com)**



## Pipe Bursting

### Pow-R Mole Trenchless Solutions PD-33M

The PD-33M pipe bursting machine from Pow-R Mole Trenchless Solutions is designed to replace existing underground pipes 2 to 6 inches in diameter. Its nonslip, cylinder-activated jaws prevent cable damage while providing 60,000 pounds of pulling force. It offers a cost-effective alternative to open cut

excavation, reducing customer disruption and increasing company profits. The process replaces the existing pipe with a fused HDPE pipe, which eliminates all joints and allows the operator to pull through bends such as 45-degree fittings. This system is modular and can be easily disassembled and reassembled for manhole and basement applications. With a compact design and very small footprint of only 20 by 20 inches, this unit can be used in tight locations.

800-344-6653; [www.powrmole.com](http://www.powrmole.com)



## RODDIE R8

The R8 pipe bursting system from RODDIE is easy to use and lightweight, can be set up vertically or horizontally, and can also be adjusted to use three different size cables. This unit can replace 1-, 2-, 3-, 4-, 6- and 8-inch pipes with ease and speed. Inexpensive cable-grabbing inserts last 70 to 120 jobs, which reduces costs. High-quality tool steels on articulating bursting heads promote rare resistance for long-lasting service. The pulling rate is 8 feet per minute and is hydraulically powered from your tractor, providing a pulling force of 30 tons. The wireless remote system is reliable and has a signal strength that moves through any cellar wall. Maintaining the system is simple, as the user only needs to rinse off and re-grease six Zerk fittings.

888-406-3821; [www.rodzieunderground.com](http://www.rodzieunderground.com)



## TRIC Tools E24

The E24 revisits the essential TRIC Tools 4-inch lateral bursting package that created the industry of trenchless home sewer replacement decades ago. Redesigned with economy and practicality in mind, it is geared primarily toward residential bursting jobs up to 4 inches in diameter. The standard system includes a portable and reliable 10,000 psi electric pump, plus lightweight 5/8-inch compact swaged cable. It is suitable for indoor use, difficult backyard easements, and very tight spaces with limited access.

888-883-8742; [www.trictools.com](http://www.trictools.com)



## Pipeline Surveying and Mapping

### Subsite Electronics UtiliGuard 2 RTK

The UtiliGuard 2 RTK receiver from Subsite Electronics was designed as a simple, easy-to-operate utility locating tool for operators locating, mapping and capturing underground utilities. It utilizes survey-grade technology and features dual-band antennas to provide operators with reliable positioning data with centimeter-grade accuracy. Its precision helps when locating abandoned and untracked utilities that are difficult to pinpoint. By quickly verifying the utilities installed, operators efficiently tailor bids to match a job site needs, as well as gain insight into the underground infrastructure to avoid cross bores during future projects. The receiver provides locate crews with integrated data capture, GPS positioning and an intuitive user interface to improve work quality and maximize locate awareness. By downloading the MyUtiliGuard application, operators simplify and streamline how they capture, map and share data.

800-846-2713; [www.subsite.com](http://www.subsite.com)



### Vivax-Metrotech vLoc3 RTK-Pro

The vLoc3 RTK-Pro receiver from Vivax-Metrotech adds RTK GNSS accuracy to a utility locator. Using the internal cellular module with 4G LTE capa-

bilities, the operator can connect to an NTRIP RTK (Real-Time Kinematic) caster that provides RTCM 3 corrections. By utilizing these corrections, the operator can collect both utility location data and the utility's geographical location with survey-grade accuracy. It is designed for all operator levels, utilizing user-friendly and intuitive locate screens. Operators confirm the utility data with the press of a button and align the electronic spirit level to store data. All field data is sent to the cloud and retained in the receiver's onboard storage for review and exporting to mapping programs.

800-446-3392; [www.vxmt.com](http://www.vxmt.com)



## Pipeline Rehabilitation/Lining

### AGRU America Sure-Grip

Sure-Grip liners from AGRU America are made of HDPE, HDPE-el, PP, PVDF or ECTFE, and serve as a long-term alternative to spray-applied concrete protection products. The liners prevent concrete corrosion and degradation, can substantially extend the lifetime of a structure, and by preventing exfiltration and infiltration, provide direct protection for the environment. The liners have anchoring systems that enable construction in areas of significant backpressure. Unlike spray-applied liners, which have to be reapplied regularly due to cracking or delamination, these liners are long-lasting, and are designed to avoid the residuals cost often associated with concrete spray-on liners, which require tank emptying and cleaning every few years for reapplication.

843-546-0600; [www.agruamerica.com](http://www.agruamerica.com)



### Cherne Multi-Size Big-Mouth

Cherne Multi-Size Big-Mouth plugs are ideal for gravity bypassing or bypass pumping. Their removable tire valve allows for easy replacement, with an optional quick disconnect. They offer a greater expansion range. This product has five variations, ranging from 6 to 10 inches with 4-inch bypass plugs to 12 to 18 inches with 6-inch bypass plugs.

800-843-7584; [www.cherneind.com](http://www.cherneind.com)



### FORMADRAIN Formapox 101

Formapox 101 from FORMADRAIN is a durable steam-cured liner that eliminates the mess and cost of traditional dig-and-replace methods. It is made from a watertight, thin, yet extremely strong composite material and a specially formulated resin. The liner is bright blue in color. It is the mainstay of the company's pushed- or pulled-in-place, steam-cured, fiberglass and epoxy underground pipe repair system. It can be used in line sizes from 2 to 48 inches. The repair is so thin that pipes sustain their original flow capacities, even with a liner installed in such small diameters.

888-337-6764; [www.formadrain.com](http://www.formadrain.com)



### MaxLiner USA GhostLiner

GhostLiner lateral CIPP liner from MaxLiner becomes transparent during wet-out, reduces UV cure times by up to 50% and delivers superior physical properties. It offers a faster and higher quality cure due to transparency once saturated, and negotiates pipe bends up to 45 degrees. It is a uniquely manufactured synthetic fiber felt with a TPU coating designed to maximize LED light-cure capabilities. Tube forming and seam bonding are achieved by an overlocking chain stitched seam with an extruded taped joint,



creating a superior, high-performance impermeable liner designed for sweeping bends up to 45 degrees and very minimal stretch.

877-426-5948; [www.maxlinerusa.com](http://www.maxlinerusa.com)

### Oatey Heavy Duty Clear PVC Cement

Oatey Heavy Duty Clear PVC Cement is recommended for DWV, pressure pipe, potable water and electrical applications. Its thick formula fills gaps in large diameter pipe and loose-fitting joints and is easy to apply with an included in-lid dauber. This clear, heavy-duty, medium-set cement can be used to solvent weld all schedules and classes of PVC pipe and fittings with interference fit up to 18-inch diameter for nonpressure and 12-inch diameter for pressure pipes. The recommended application temperature ranges from 40 degrees Fahrenheit to 110 degrees Fahrenheit. All Oatey solvent cement and primer products are certified to UL Greenguard Gold, and this particular product meets ASTM standard D2564 and complies with NSF/ANSI 61 health effect requirements. It is offered in a variety of sizes, from 4 ounces to 1 gallon.

800-321-9532; [www.oatey.com](http://www.oatey.com)



### Picote Xpress Brush Coating System

The Picote Xpress Brush Coating System provides a solution for refurbishing pipes ranging from 1 1/4 to 12 inches in diameter, boasting rapid curing times, zero waste, and quick setup providing savings in both cost and time. Used in conjunction with Picote Millers, the heart of the system is the Xpress Coating Pump featuring dual hydraulic resin cylinders for the new 1-1, single color epoxy. It has a built-in extended life battery and internal resin heater providing several hours of working time. The system also includes a motorized delivery hose reel with 131 feet of delivery hose, allowing for easier setup, movement and storage. The Xpress Epoxy is applied at approximately 1 mm thickness per layer, and curing time is as low as an hour between coats, resulting in a minimal number of coats needed, little time between coats, and a quick return to service.

864-940-0088; [www.picotegroup.com](http://www.picotegroup.com)



## Trenchless Pipe Replacement

### CUES LOCK

CUES LOCK is a no-dig structural point repair solution. Crossbore strikes, cracks, and separated joints, just to name a few, can be repaired in as little as 30 minutes, with no digging. The gear required to install is very minimal, and on average, will pay for itself in the first one to three repairs. This saves significant time and money versus dig and replace or traditional lining, as well as improving safety for install crews by limiting exposure. The sleeve is constructed with a 316 stainless steel core, rated to 100 year service life. It is available for pipe from 6 to more than 108 inches in diameter and in 12- to 36-inch lengths. Sleeves can be installed in series to repair longer defects. It can be used with an existing CCTV system.

800-327-7791; [www.cuesinc.com](http://www.cuesinc.com)



### HammerHead Trenchless Bluelight LED

The redesigned Bluelight LED CIPP lining system for laterals and small drainpipes from HammerHead Trenchless uses a specially formulated resin that only cures under light in the "blue" wavelength, giving installers a significantly longer working time between liner wet-out and curing. Once installed, the automated curing system pulls the LED light head through the liner, curing the resin almost instantly — up to five times faster than other methods. Instead of waiting hours for the liner to cure, a 50-foot sewer line could be fully cured in under 10 minutes.

800-331-6653; [www.hammerheadtrenchless.com](http://www.hammerheadtrenchless.com)



## Pipeline Renewal Technologies SpeedyLight+

SpeedyLight+ from Pipeline Renewal Technologies is LED-based UV light-curing technology for trenchless pipe rehab that requires less time and energy and is less disruptive to communities and businesses. Closures are minimal and work is able to be completed without having to relocate occupants. LED UV cure eliminates safety risks such as the wrong mixing of resins or dealing with boiler systems. There are no working time considerations, as you turn the light on and off any time you want to stop or start the cure. Interchangeable camera heads show operators what's happening underground, giving them the ability to control the speed and accuracy of the cure. It cures felt or GFRP liner and can cure 90-degree bends in lines down to 2 inches, as well as transitions and verticals.

866-936-8476; [www.pipeliner.com](http://www.pipeliner.com)



## Warrior Trenchless Solutions Thermoform

Thermoform from Warrior Trenchless Solutions is a PVC-alloy structural pipe lining system designed for the trenchless rehabilitation of failing sewer and culvert pipes. It is an environmentally friendly, styrene-free thermoplastic. There are no harmful emissions, and it does not rely on any chemical reaction during installation. Factory-controlled production with rigorous material testing ensures a consistent quality product that conforms to and exceeds the expected standards. The material is highly flexible, allowing it to expand and fit tightly to the host pipe, including changes in shape and dimensions. It is produced in sizes ranging from 4 to 36 inches in diameter, and the wall thickness can be varied according to the application. All installers must be accredited and audited to ensure the highest quality work possible.

716-601-7760; [www.thermoformliner.com](http://www.thermoformliner.com)



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Email your materials to [editor@digdifferent.com](mailto:editor@digdifferent.com)

# THE LATEST: Products



## Cat Pumps hydroexcavating pumps

Over 50 years of high-pressure pump manufacturing experience has earned Cat Pumps a reputation for producing the highest-quality, longest-lasting pumps in every market it serves. Engineers at Cat Pumps designed Model 2560 with 16 gpm at 3,000 psi and Model 2565 with 20 gpm at 2,500 psi for continuous-duty applications. The 2560 and 2565 pumps are dependable, high-quality products backed by outstanding customer service, training and support. BH versions have a machined-bearing cover to mate with the company's 76SAEC.25FR hydraulic bell housing so the 2560BH and 2565BH can be directly driven by an SAE C hydraulic motor. The compact direct drive allows for a space-saving footprint and is simple to install and maintain. 763-780-5440; [www.catpumps.com](http://www.catpumps.com) ▼



Sharp EV4 trailer vac



## This Issue's Feature:

### All in on digging with electric

BY CORY DELLENBACH

There are electric cars, trucks and bikes, but until now there wasn't a fully electric vacuum excavator in the industry. Dan Sharpe, president of **Sharp Equipment**, and business partner Greg Jeter changed that with the creation of their lithium-ion vacuum excavator trailer.

The all-electric **Sharp EV4 trailer vac** runs on a 40 kWh, 340-amp hour, 120-volt battery that Sharpe says will last a typical 8-hour work day.

The trailer unit, which is 21 feet, 6 inches long and 8 feet wide, has a 4 cubic yard debris tank and 270 gallon water tank. The only things a contractor will have to service on the unit are the water pump (CAT 4 gpm pump producing up to 3,000 psi at 2,600 rpm) and the blower (National Vacuum Equipment). It weighs 7,000 pounds.

"You have to change your whole mindset. Regardless of brand of trailer unit, when you turn that diesel motor on and it's running all day revved up," Sharpe says. "With the electric component, you have to change it up. Everything is direct drive."

Sharpe says there are no pulleys, belts, tensioners or clutches for operators to worry about, nor engine oil, fuel or filters to change out.

"Our blower is the most powerful trailer vacuum on the market at 20 inches of Mercury," Sharpe says. The blower defaults to 540 cfm, but a push button on the control panel allows operators to achieve 1,000 cfm for five minutes if needed.

"On a trailer unit, you don't need 1,000 all day long because five minutes is going to suck up a lot of material and fill it up," Sharpe added. "That's part of the mindset, it doesn't need to be running on full throttle to run it."

The unit has a noise level below 85 dba, which allows operators to ditch the OSHA-required hearing protection.

Sharpe and Jeter started to build the prototype in July 2022 and by January 2023 they had a crew from B&H Construction in Oklahoma testing it. B&H also purchased the first production unit through Ditch Witch Oklahoma. "We are selling through several Ditch Witch dealers and several independent dealers," Sharpe says.

The electric unit can typically be charged at a shop on a 220-volt/30-amp outlet and takes about six hours to charge.

**817-889-2800; [www.sharp-ev.com](http://www.sharp-ev.com)**

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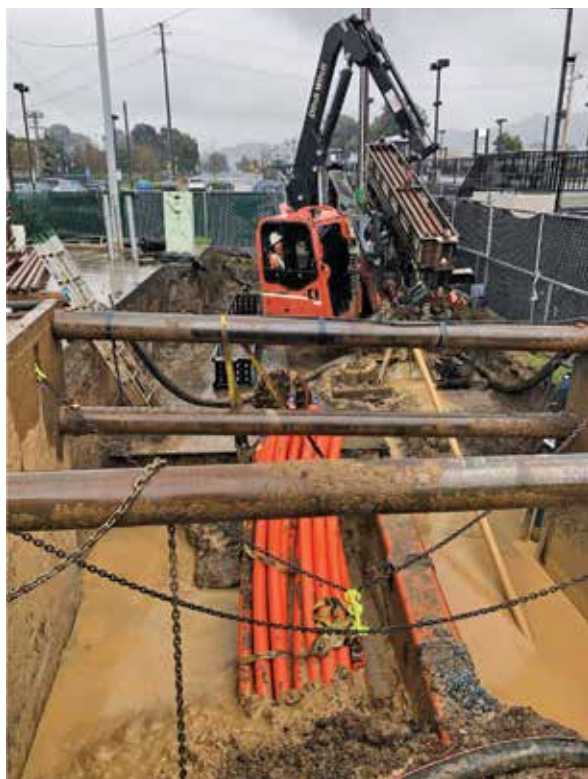
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Success Stories:

PIPE INSTALLATION,  
REPAIR, INSPECTION  
AND REHABILITATION

BY CRAIG MANDLI



## Duct pullers used for intricate multi-duct challenge

### PROBLEM

On a rainy week in San Mateo, California, LT Directional was up against some mighty odds. They were in a metropolitan area that put them up against public transportation railway on the surface and a complex maze of existing underground utilities beneath. That job was to install 54-by-4-inch pipes over 500 feet that paralleled the San Mateo rail. With some significant high-tech companies headquartered in neighboring streets, such as Survey Monkey, Sony Interactive and GoPro, the crew had a lot to lose if they inadvertently hit some existing underground power or communication utility lines along the bore path.

### SOLUTION

LT Directional knew that a custom setup was needed to get all pipes installed safely. They decided upon a 32-inch open-style **Tornado Reamer**, and a **Deluxe Barrel Stabilizer**, both trailed by a custom-manufactured multi-duct puller from the **Melfred Borzall** engineering team. The multi-duct puller had 27 eyes connected to 27 **Deluxe Duct Pullers** that protected the pipe ends with a bell. Engineers had a challenge as they had to build this from scratch and tailor it to LT Directional's job specs. It required engineering a method to keep the package as small as possible but provide clearance for each of the 27 pipes to safely attach. After sharing designs, collaborating, and finalizing the puller, it was tested and delivered by their Northern California HDD specialist.

**RESULT** They safely and successfully installed the product — even in the middle of a rainstorm. 800-558-7500; [www.melfredborzall.com](http://www.melfredborzall.com) ▼

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## THE LATEST: News

### Komatsu announces plans to acquire American Battery Solutions

Komatsu, through its wholly owned subsidiary in the U.S., Komatsu America Corp., has agreed to acquire American Battery Solutions, a battery manufacturer headquartered in Detroit. The acquisition of ABS will enable Komatsu to develop and produce its own battery-operated construction and mining equipment, through the integration of ABS' battery technology with Komatsu's knowledge and network.

### Mike Riley named new business development manager at Oxford Plastics

Mike Riley, based in Richmond, Virginia, was named Oxford Plastics' new business development manager.

He will concentrate on U.S. operations as he spearheads efforts to grow the company's presence in the northeast. Riley brings over 16 years' industry experience and has a background in logistics sales and collaboration with leading construction companies. In addition to developing key markets, Riley will focus on reducing lead times for product approvals, and establishing strong partnerships with major utilities and regional safety directors within the Department of Transportation.



Mike Riley

### Yanmar lands naming rights deal in Minnesota

Yanmar Compact Equipment North America, encompassing the Yanmar Compact Equipment and ASV brands, has entered into a partnership with the city of Grand

Rapids, Minnesota, to secure naming rights of the former IRA Civic Center. Starting Nov. 1, 2023, the facility was renamed Yanmar Arena. With over 200,000 visitors per year, the newly christened Yanmar Arena is a popular venue for ice hockey, figure skating and community events held throughout the year.

### Dan Quam Joins Brokk as parts manager

Brokk has hired Dan Quam as parts manager for the company's Monroe, Washington, parts warehouse. His responsibilities will include managing the parts department and overseeing, receiving and purchasing spare parts for both Brokk and Aquajet products in North America. Quam will work with the Brokk team, including Warehouse Manager Noah Acree and Assistant Warehouse Manager Brodie Kohn, to help ensure Brokk delivers on its promise of same-day shipping on all common parts. Before joining Brokk, Quam worked for Mi Fluid Power Solutions, a hydraulic/pneumatic parts distributor, for more than 32 years.



Dan Quam

### Samson Pumps and Fruitland Manufacturing form business partnership

Samson Pumps and Fruitland Manufacturing, a Canadian vacuum solutions manufacturer within the mobile vacuum industry, announced a business partnership in North America. The partnership will leverage Samson Pumps' expertise in liquid ring vacuum technology and Fruitland Manufacturing's market experience to deliver unparalleled customer solutions within the mobile vacuum industry. ▼

## Happenings

Feb. 22-23

**Horizontal Directional Drilling Academy: Underground Utility Infrastructure**, Arizona State University SkySong Center, Scottsdale. Visit [hddacademy.com](http://hddacademy.com)

March 6-13

**Ohio Contractors Association Annual Convention**, Fairmont Grand Del Mar San Diego. Visit [ohiocontractors.org](http://ohiocontractors.org)

March 19-21

**Underground Construction Technology International Conference & Exhibition**, Oklahoma City Convention Center. Visit [uctonline.com](http://uctonline.com)

March 20-23

**National Utility Contractors Association Annual Convention & Exhibit**, Hyatt Regency Indian Wells Resort & Spa, Palm Springs, California. Visit [nuca.com](http://nuca.com)

March 19-21

**Global Excavation Safety Conference**, Earnest N. Morial Convention Center, New Orleans. Visit [globalexavationsafetyconference.com](http://globalexavationsafetyconference.com)

March 21-23

**Mid-America Trucking Show**, Kentucky Expo Center, Louisville. Visit [truckingshow.com](http://truckingshow.com)

March 27-28

**Atlantic Heavy Equipment Show**, Moncton Coliseum, New Brunswick. Visit [ahes.ca](http://ahes.ca)

April 11-12

**National Heavy Equipment Show**, International Centre, Mississauga, Ontario. Visit [nhes.ca](http://nhes.ca)

April 14-18

**NASTT's No-Dig Show**, Rhode Island Convention Center, Providence. Visit [nodigshow.com](http://nodigshow.com)

April 14-18

**Common Ground Alliance Conference & Expo**, The Broadmoor, Colorado Springs, Colorado. Visit [cgaconference.com](http://cgaconference.com)

April 19-25

**World Tunnel Congress 2024**, Shenzhen World Exhibition & Conference Center, Shenzhen, China. Visit [wtc2024.cn](http://wtc2024.cn)

May 22-24

**NUCA 2024 Washington Summit**, Hyatt Regency Washington on Capitol Hill, Washington, D.C. Visit [wedigamerica.org](http://wedigamerica.org)

Dig Different welcomes your contributions to our Happenings column. To recognize members of your team, please send notices of new hires, promotions, service milestones, certifications or achievements. We also invite your national, state or local associations and organizations to post notices, news items and learning opportunities. Send contributions to [editor@digdifferent.com](mailto:editor@digdifferent.com). ▼

### GOT A STORY THAT'S DOWN AND DIRTY?

Dig Different welcomes news about your tough excavation, pipe bursting, trenching, boring or tunneling job for the Down & Dirty column.

Send your story to [editor@digdifferent.com](mailto:editor@digdifferent.com) or call 715-350-8436

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