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**JULY 2021** 

Think outside the bucket



FOCUS: Vacuum Excavation



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City-suitable trucks, social-media marketing trigger quick expansion for Toronto company.

By Ken Wysocky

### ON THE COVER:

Torovac operator Bruno Cornacchia, left, and Byron Mifsud, crewman, work on a job site in Pickering, Ontario, where they are exposing for utilities. Torovac Services, based in Toronto, was founded in 2019 by Frank Rotundo and Bento Soares and now has six employees and serves the greater Ontario region. (Photography by Bruce Bell)

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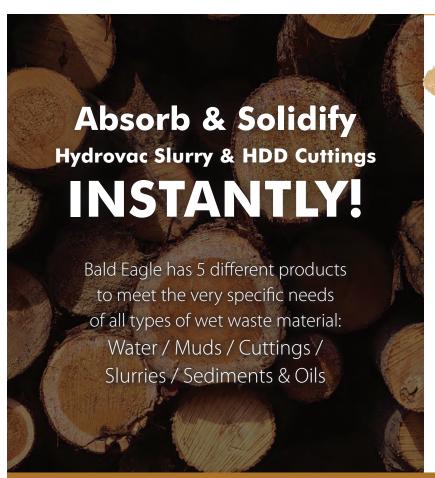


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IT IS IMPORTANT TO ENSURE YOUR TRUCKS AND EQUIPMENT ARE IN GOOD WORKING SHAPE BECAUSE YOU WANT TO KEEP THEM OPERATIONAL FOR YOUR COMPANY ... WITHOUT THEM BEING PRODUCTIVE THERE IS NO MONEY COMING IN.

# Making It all Look Good

CATCHY LOGOS, COLOR SCHEMES AND KEEPING EQUIPMENT CLEAN CAN SHOW CUSTOMERS THAT YOU CARE ABOUT YOUR COMPANY AND YOUR WORK

BY CORY DELLENBACH, EDITOR

hen you look at your trucks, drills and other equipment, what do you see? For most people who see you on the streets, it's just a large vehicle that gets you from one point to the next, or a tool to dig into the ground with.

To you, however, that truck, drill and trencher is your income, your livelihood and the best way for your potential customers to notice you.

Torovac, a hydroexcavation company based in Toronto, Ontario, wanted to make sure its trucks were noticeable at a glance. It did that by making the hydrovac units black with gold lettering and a gold outline of metro Toronto.

The company, featured in this issue, says the design has helped it get noticed. People even reach out just to acquire company hats and other apparel. That brand recognition has helped to drive Torovac from a one-man, one-truck operation to four trucks and six employees in just three years.

### **LOOKS DO MATTER**

It is important to ensure your trucks and equipment are in good working shape because you want to keep them productive and operational for your company. Without them being productive, there is no money coming in.

Part of that being in good working shape should include having them cleaned often. We all know the equipment gets muddy often. Don't store it like that. Take a few minutes at the end of the day and wash them off, even with a quick water spray.

Not only will that help keep components on the truck and equipment working the way they should be, but it also gives the appearance to customers that you take care of the equipment and that you'll take care of the job site. That is important to a customer and could be the difference between securing one or not.

### TAKE PRIDE IN WHAT YOU HAVE

We want to let you show off that pride you have for your vacuum excavators, directional drills and trenchers. Do you have a logo or design on them that stands out or that you're proud of?

In this issue you'll see our newest feature, Dig My Rig. Mack Construction Services of Alberta, Canada, has an eye-popping red and white vacuum excavator with a maple leaf streaking across the side of the debris tank. It's definitely turning heads and drawing attention as it rolls down the roads.

We invite you to email a photo of your truck, drill or trencher, lettered with your company name or logo, to editor@digdifferent.com, along with your contact information and information on the piece of equipment pictured and we'll run them in *Dig Different*.

### YOU'RE NEXT

What do you do to take care of your trucks and equipment? Is there certain maintenance you would recommend to other contractors or things to do to take care of the equipment? Email me at editor@digdifferent.com or call me at 715-350-8436.

Enjoy this issue and I look forward to seeing the pictures of your trucks, drills and trenchers! ▼



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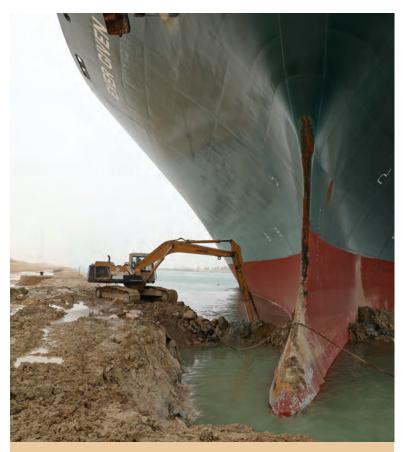


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### **BIG TASK**

# Excavator Operator Reflects on Suez Canal Job

Back in late March, Abdullah Abdul-Gawad was called on to help dislodge the Ever Given container ship that had become stuck in the Suez Canal, putting a halt to traffic flow on a key shipping route for days. Read more about his experience in this online exclusive.

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# **OVERHEARD ONLINE**

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THAT SHOWS EXACTLY HOW
TO COMPLETE EVERY SINGLE
PROCESS AND HANDLE EVERY
SITUATION YOUR EMPLOYEES
MIGHT ENCOUNTER ON THE JOB,
THERE'S NO ONE TO GET ANGRY

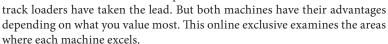
# THERE'S NO ONE TO GET ANGRY WITH BUT YOURSELF."

3 Questions to Ask When an Employee Makes a Mistake digdifferent.com/featured

# **PROS/CONS**

# A Look at Wheeled Skid Steers and Compact Track Loaders

Wheeled skid steers' popularity peaked in the mid-2000s. Since then, compact



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# **COST COMPARISON**

# Pipe Lining vs. Traditional Excavation

Is pipe lining truly worth it? In this online exclusive, industry veteran John Heisler, of Pipe Lining Supply, breaks down some numbers using a fictional scenario to show how lining stands up to the standard dig-and-replace method. digdifferent.com/featured

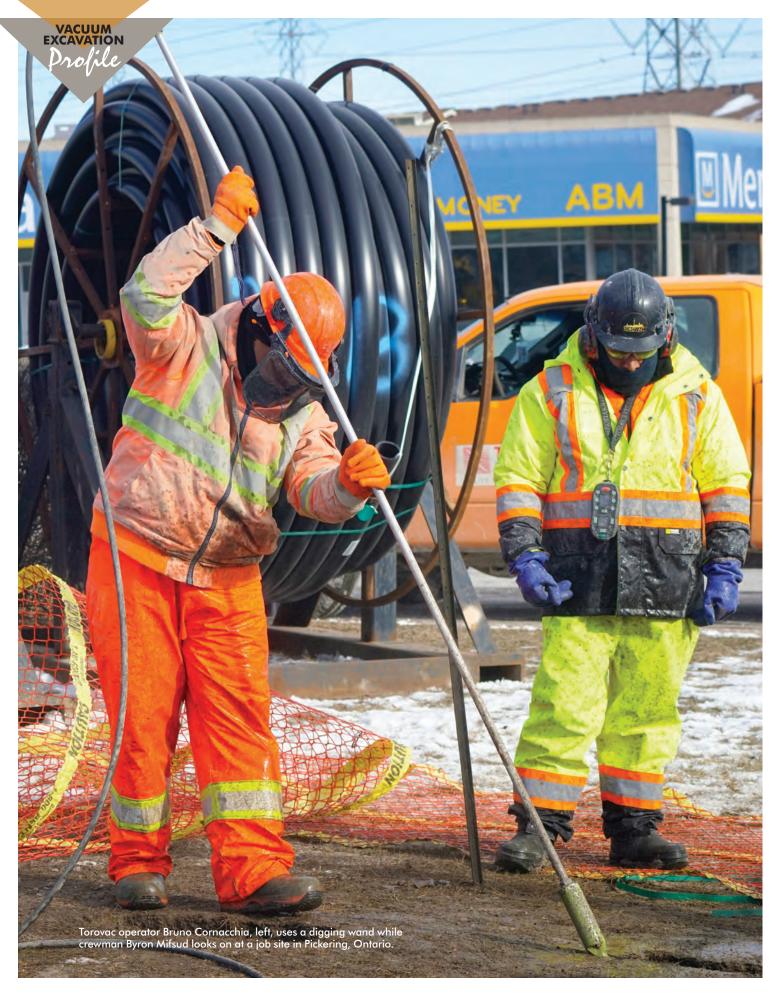








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Torovac Services boasts four Rival T10 hydroexcavators with plans to add another to the fleet later this year.

# GROWTH SPURT

# CITY-SUITABLE TRUCKS, SOCIAL-MEDIA MARKETING TRIGGER QUICK EXPANSION FOR TORONTO COMPANY

STORY: KEN WYSOCKY PHOTOS: BRUCE BELL

When Frank Rotundo established his hydroexcavation company. Torovac Services, about two years ago, he had no grand plans in mind for explosive growth. "At first, I just thought it would be a one-truck thing," he says. "I didn't think hydroexcavating would be so popular. I figured I would just buy myself a job and work for myself."

But now the company — based in Toronto, Ontario, and co-owned by Rotundo, his wife Kristal, and his father-in-law, Bento Soares — owns four Rival T10 hydrovac trucks. And Rotundo, 37, a 15-year-veteran in the hydroexcavation industry, plans to invest in another one later this year.

"My initial plans have changed quite a bit," he says.

The primary reasons for the company's exponential growth in slightly less than two years? A fleet of Rival "street-legal" hydroexcavating trucks that are small enough to maneuver in congested urban areas yet still big enough to carry heavy payloads, a crew of experienced and skilled operators and a marketing campaign primarily based on social media and an eye-catching logo.

In fact, the company's branding efforts — an Instagram-led campaign Rotundo's wife, Kristal, leads — is so effective that she constantly receives requests for Torovac-branded gear, featuring the city of Toronto skyline, from people around the world.

"We also see random people walking around the city with Torovac hats on," she says. "It's pretty cool."



# Torovac Services Ltd. Toronto, Ontario

# **OWNERS:**

Frank Rotundo, Kristal Rotundo, and Bento Soares

### FOUNDED:

2019

### **EMPLOYEES:**

6

### SERVICES:

Hydroexcavation and industrial services

# **SERVICE AREA:**

Ontario

### WEBSITE:

www.torovac.ca



"THAT WAS THE MEAL TICKET RIGHT THERE — WORKING CLOSE TO HOME. IT'S A HUGE ADVANTAGE FOR OUR OPERATORS AND A BIG BENEFIT TO OUR CUSTOMERS, TOO."

Frank Rotundo

# **BUILDING PERSONAL RELATIONSHIPS**

In short, Torovac — shorthand for Toronto vacuuming — isn't a conventional hydroexcavation company.

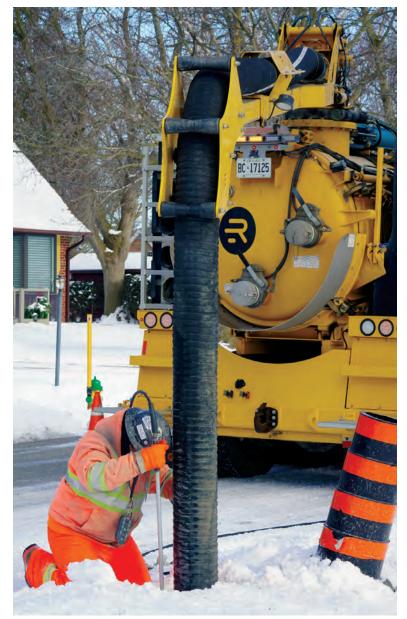
"We're definitely not your typical construction company," Kristal says. "I show up on job sites to bring treats to the crew. We have a very personal connection to the company.

"We also have very personal connections with customers," she continues. "We don't just send our trucks out to job sites. We go there, too, and interact with customers. I think it's invaluable for customers to see us face-to-face.

"It shows we care," she adds. "I know it might sound corny, but it's working."

That personal connection with customers also carries over into the couple's relationship with their employees. "We literally treat them like family," Kristal says. "We hold parties for them and we have them over for dinner. Our two sons know our operators very well."

David McGill uses the digging wand from the Rival Hydrovac unit to locate utilities on a job site near Toronto.



Bruno Cornacchia and the entire crew at Torovac believe in the importance of establishing personal relationships through effective interaction with customers.

### YEARS OF EXPERIENCE

Frank started working as a hydrovac truck operator in 2005 and honed his experience and skills while working for several different companies. In 2016, he was hired by a company that used hydrovac trucks built by Rival, and he soon was sold on their reliability and maneuverability.

When a company he was working for in 2018 went bankrupt, Frank had to recalibrate his career plans. And with the encouragement and support from his father-in-law, they formed Torovac.

Early on, the company benefited from Frank's extensive network of contacts established during his years in the industry.

It also helped that he decided to make the greater Toronto area the company's primary market. That made it easier to attract skilled drivers because most competitors are on the city's outskirts, which means operators might spend 2 to 2-1/2 hours a day commuting to work.

"That was the meal ticket right there — working close to home," he says. "It's a huge advantage for our operators and a big benefit to our customers, too."

The company's primary customers are utilities and municipalities that need underground lines exposed and telecommunications companies that also need lines "daylighted" and located, he says.

# "WE DON'T JUST SEND OUR TRUCKS OUT TO JOB SITES. WE GO THERE, TOO, AND INTERACT WITH CUSTOMERS. I THINK IT'S INVALUABLE FOR CUSTOMERS TO

Kristal Rotundo

### MANEUVERABLE MARKETING MACHINES

**SEE US FACE-TO-FACE."** 

The tandem-axle Rival T10 trucks, built on Western Star chassis, are designed for urban work. They weigh less and feature a smaller footprint than many conventional hydrovac trucks.

Furthermore, a drop-axle helps distribute weight more evenly, which minimizes wear-and-tear on roads and highways and helps operators avoid weight-restriction violations, which carry heavy fines in Canada. (In Canadian parlance, the drop-axle makes the trucks SPIF vehicles — Safe, Productive and Infrastructure-Friendly.)

Built on Western Star chassis, the trucks feature 10-cubic-yard debris tanks; 1,200-gallon water tanks; Robuschi-Gardner Denver blowers (3,850 cfm); Pratissoli (a brand owned by Interpump Group S.p.A.) water pumps (10 gpm at 3,000 psi); a hydraulic hoist for easier dumping; and a 25-foot-long boom (when fully extended) that can rotate up to 340 degrees. *(continued)* 

# Unique project calls for a meeting in the middle

In a lot of ways, almost every job is a tough job when it comes to hydroexcavating. Nonetheless, there's always a project or two that stand above the others in terms of complexity — and for Torovac, that project occurred earlier this year at a busy intersection in downtown Toronto, where the company is based.

The project involved installing an approximately 50-foot-long, 12-inch-diameter PVC water main. Not that big a deal, typically — except that the line would have to run under the tracks used by the city's electric-powered streetcar system, explains Frank Rotundo, co-owner of the company.

In addition, the main would pass below a highly traveled four-lane street, he says.

The job underscored the benefits of hydroexcavation. Using traditional open-trench excavation to install the new pipe would've taken about a month and significantly disrupted streetcar and vehicular traffic.

"But we only had to shut down one lane of southbound traffic," Rotundo notes.

The job went quickly, too; Torovac crews started the project on a Friday and ended the next day, he says.

To excavate the 50-foot-long tunnel, Rotundo took a unique approach by positioning one truck on each end of the job site, about 60 to 70 feet apart and perpendicular to the train tracks and the lanes of traffic. Then both trucks excavated toward the middle of the pipe route.

The initial stretches of both ends of the tunnel were excavated about 4 feet tall and 3 feet wide to keep it from collapsing in order to accommodate a person who had to crawl inside to install shoring as the dig progressed. But the diameter of the tunnel eventually tapered down toward the middle, Rotundo explains.

"It was tricky to get the two tunnels to meet in the middle," he says. "It's all about having experienced crews and a lot of communication between the two operators to keep the tunnel at a consistent height."

The trucks also serve as giant and flashy marketing tools. They feature a bold yellow-and-black color scheme that bolsters brand recognition and vinyl wraps featuring the company's distinctive Toronto-skyline logo.

"Most trucks around here are basic white, which makes it hard to tell one company from another," Kristal explains. "But our trucks look so cool that it's not unusual for people to take pictures of them as they drive past. Our trucks driving down the streets are a huge marketing tool."

### **EFFECTIVE SOCIAL MEDIA**

Instagram usually isn't a conventional marketing tool for hydroexcavation companies, but Kristal is doing her part to change that. What started as just a fun way to document the company's growth has evolved into a full-blown marketing mechanism that boosts brand recognition and generates service calls, she says.

"Social media has really helped us get the word out about our services," she says. "People message me about jobs all the time, which is shocking in this industry."

The company has nearly 750 followers on its Instagram account, which is pretty impressive for a hydroexcavation company, she notes.



"SOCIAL MEDIA HAS REALLY HELPED US GET THE WORD OUT ABOUT OUR SERVICES. **PEOPLE MESSAGE ME ABOUT JOBS ALL THE TIME, WHICH IS SHOCKING** IN THIS INDUSTRY."

Kristal Rotundo



"And I don't even promote it," she points out. "We have that many followers just from people finding us on their own. I honestly started posting on Instagram to document the company's story for our sons," she continues. "I never saw it as a marketing tool. But it just blew up from there, which I never expected."

Better yet, Instagram costs nothing but the time she spends taking and posting photos, she notes.

Kristal believes social media will become a more accepted form of marketing in the industry as younger company owners slowly replace the preceding generation.

"This trend will grow because that's all we (young people) know," she says. "Social media is how we communicate and how we get things done. And it's not that complicated to learn how to do."

# **TAKING A BREATHER**

The Rotundos say they've enjoyed the company's surprisingly rapid growth. And they see continued growth on the horizon.

In the long term, Frank envisions eventually investing in a horizontal directional drilling machine, which would add a complementary service that goes hand in hand with hydroexcavation. "That would make us a turnkey operation," he says.

Frank also would eventually like to own nine or 10 hydrovac trucks.

But the couple also is wary about overextending company resources and losing control over quality, which in turn can decrease customer satisfaction.

So instead of aggressively pursuing further growth, they're currently content to take a break and instead focus on refining internal processes.

"We want to play it smart," Kristal says. "We would like to add a fifth truck, but we really haven't been open all that long. So we want to make sure our four existing trucks are working steadily before we expand further," she continues. "We also want to take enough time to find the right operators — people we can confidently put out there and who will represent our company as well as we do. That's a lot harder to do when you're growing too fast."



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# **Taking Proper Precautions**

# TRENCH ACCIDENTS CAN HAPPEN WHEN PROPER SAFETY PRECAUTIONS AREN'T TAKEN, REGARDLESS OF THE CREW'S EXPERIENCE

**BY DAVID DOW** 

n April 2021, a Long Island contracting company was ordered to cease all excavating operations and pay \$136,000 in penalties, the result of a trench collapse accident that killed two workmen in late 2020.

The resulting agreement also commits the company to do the following:

- Develop an excavation safety checklist to identify hazards and protective measures for work in excavations and ensure that a competent person on site will consult and complete the checklist whenever employees enter excavations.
- Engage a qualified professional safety and health consultant to conduct at least one on-site assessment of excavation safety while employees are performing work in an excavation.
- Provide companywide training on ladder safety and hardhat use to employees.

Safety precautions shouldn't only be driven by punishment or trying to avoid OSHA violations. Protecting your employees and yourself should always be a top priority. Don't make extra effort for only a few weeks after being reminded about a tragic accident like this. Systemic, lasting change is the only way to prevent these trench collapses from happening. Don't wait until after an accident to put safety procedures and training schedules in place.



If working in a trench deeper than 4 feet, OSHA guidelines say a shoring box or shoring device must be used with a way out, such as ladders.

# SAFETY PRECAUTIONS SHOULDN'T ONLY BE DRIVEN BY PUNISHMENT OR TRYING TO AVOID OSHA VIOLATIONS. PROTECTING YOUR EMPLOYEES AND YOURSELF SHOULD ALWAYS BE A TOP PRIORITY.

If you've done this sort of work for many years, you may hear these stories about people dying in trenches and think, "That's someone else. I've been doing this a long time. I can tell when it's dangerous." But unfortunately, these accidents can happen to anyone and the training is not something anyone — no matter how experienced — should ignore.

The General Requirements Section of OSHA's Subpart P provides a number of common-sense steps to help ensure worker safety. As with any OSHA Standard or other safety procedure, it is important to always remember that these are the minimum requirements to ensure safe job sites.

# **SURFACE ENCUMBRANCES**

To ensure stability and integrity, surface encumbrances need to be removed or supported while an excavation is open. Examples include rocks, trees, telephone and utility poles, fire hydrants, etc.

### **UNDERGROUND INSTALLATIONS**

Examples include gas, electrical, water, sewer lines, etc. They must meet the following conditions:

- Installations are located and marked before beginning work. Property
  owners and/or utility companies should be notified at least 24 hours prior
  to digging, unless a longer time is required by local law. Some states
  require 72 hours advance notice. Most other states require 48 hours' notice.
- Installations are protected, supported or removed while the trench is open.

  Most states have so-called 811 one-call laws. Simply dial 811 to contact the one-call center in your state. (continued)

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### **ACCESS AND EGRESS**

These are fancy words for entering and exiting a trench. The requirements include the following:

- In trenches that are 4 feet or more in depth, provide a means of access and egress (exit).
- Spacing between ladders, stairs or ramps should not be more than 50 feet.
- No worker should have to travel more than 25 feet laterally to reach a means of egress.
- Ladders must be secured and extend 36 inches above the landing.

In addition, it is important to use wood or fiberglass ladders where there is a possibility of electric shock. Many utility companies and contractors always use wood or fiberglass ladders to ensure there is never a problem.

A "competent person" must design all structural ramps used solely by employees. Further, a competent person qualified in structural design must design all structural ramps used for equipment. Usually this person will be a registered professional engineer.

Finally, the components used in structural ramps must be connected, be of uniform thickness, be constructed so that cleats and other connectors do not create a tripping hazard, and if ramps are used instead of steps, they must be provided with cleats or other surface treatments to prevent slipping.

This means you must know the maximum allowable separation between each column of shoring, which is to say how far apart horizontally two shoring bars may be placed. Manufacturers must provide those distances for each soil type.

The manufacturer specifications, or "tabulated data," also tells users when plywood is required with shoring. While it's generally not needed due to the arch effect, sometimes it will be required to prevent minor collapses from the arch wall surface soil.

Due to the relatively complex nature of shoring devices, it can be tempting to use only trench boxes, but you could be asking for trouble. Even though they're strong enough to take the collapse, they can be less convenient and less versatile depending on the situational factors of a given trench. If laterals or other utilities are a factor in digging the trench, it could limit the space for a bulky metal box.

Another factor is that different types of boxes have varying weight limits. Depth is the main factor here — weaker aluminum boxes, while often easier

# THE FACT OF THE MATTER IS THAT PREVENTING TRENCH **COLLAPSES IS NOT ALWAYS A SIMPLE ENDEAVOR.** OSHA REGULATIONS ATTEMPT TO SIMPLIFY IT AS MUCH AS POSSIBLE, BUT IF IT WERE A PIECE OF CAKE, WORKERS

### **EMERGENCY RESCUE EQUIPMENT**

Such equipment must be available when a hazardous atmosphere exists or could reasonably be expected to exist. Employees entering confined spaces must be properly trained. Harnesses and lifelines are required whenever employees enter bell-bottom pier holes and other deep confined spaces. Lifelines must be attended at all times.

### **WATER ACCUMULATION**

Water must be controlled to prevent cave-ins. Methods for controlling water vary with each situation. Employees are not permitted to work in trenches where accumulation exists unless the following conditions are met:

- Special support systems or shields are used to protect employees from cave-ins.
- Water removal equipment is used and monitored by the competent person to prevent water accumulation.
- Safety harnesses and lifelines are used to protect employees.

Surface water must be diverted or controlled. The competent person must inspect the trench after each rainstorm.

# **STABILITY OF ADJACENT STRUCTURES**

The objective is to protect employees from cave-ins. A support system, such as shoring, bracing or underpinning, must be used to support structures that may be unstable due to excavation operations.

Excavating below the base or footing of a foundation or wall is not permitted unless they have these characteristics:

- A support system is provided to ensure the stability of the structure.
- The excavation is in stable rock (this is very rare).
- The operation is approved by a registered professional engineer.

Support systems must be provided for sidewalks, pavements and other structures that may be affected by excavation operations.

Understanding the difference between shoring columns and trench boxes is crucial. Shoring is designed to pressurize the trench wall and take away its ability to lean or cave in. Trench boxes are designed to be strong enough to take on the collapsing soil. While a trench box is designed to simply hold back any soil that does collapse, shoring is meant to prevent a collapse in the first place.

Shoring functions via a principle called an "arch effect." Basically, at the point where the shoring contacts the soil, it compresses outward in an arching pattern. So from point of contact, there is a dome of protection in the arch wall, the size of which depends on soil type.

to maneuver, cannot be used past a certain depth because it cannot hold the weight of all the soil that could potentially cave in. Even the sturdiest steel construction boxes have limits, though they are in most cases deeper than any realistic trench.

Boxes are also required to be stacked up to the top of the trench, so multiple boxes may be needed, which is a lot to haul or maneuver to and around a job site.

### PROTECTION OF EMPLOYEES FROM LOOSE ROCK OR SOIL

Employees must be protected from being struck by soil or rocks that are falling or rolling from the edge and face of a trench. Spoils and equipment must be set back at least 2 feet from the edge of a trench.

# **FALL PROTECTION**

WOULDN'T BE DYING.

It is required that walkways and bridges be provided over trenches that are least 6 feet above lower levels and are greater than 30 inches wide. Bridges and walkways must be equipped with standard guardrails and toe boards. Additional fall protection may also be required.

# **INSPECTIONS**

A competent person must make all inspections.

The fact of the matter is that preventing trench collapses is not always a simple endeavor. OSHA regulations attempt to simplify it as much as possible, but if it were a piece of cake, workers wouldn't be dying.

Stocking collapse prevention devices and following trench safety procedures to the letter may be a hassle, but supervisors at all levels don't have the luxury of cutting corners — or fieldworkers will be those who pay, possibly with their lives.

### **EDITOR'S NOTE:**

Kim Peterson and Jared Raney contributed to this story.

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# Mack Construction Services Ltd.

# MACK CONSTRUCTION SERVICES LTD.

# SHERWOOD PARK, ALBERTA, CANADA

Mack Construction Services, located in Sherwood Park, Alberta, Canada, recently added this very noticeable **Foremost hydrovac unit** sporting a design similar to the Canadian flag. The hydrovac unit is built on a Kenworth T800 TriDrive and has a Robuschi 145 6176 CFM blower. The truck has a 13-yard debris tank capacity and 2,000-gallon water tank capacity. The company currently has three identical TriDrive units and four Rival Hydrovac T7s. Mack acquired the units in its acquisition of Derrick Hydrovac in November 2020. The company offers utility construction, directional drilling, hydrovac, trenching, plowing, HDPE fusion, fiber splicing and turnkey solutions throughout Alberta.

# Got a vacuum excavator or directional drill with real WOW appeal?

Show it off to Dig Different readers! Send photos of your truck or drill after it has been lettered with your company name. Please limit your submission to one piece of equipment only. Your Dig My Rig submission must include your name, company name, mailing address, phone number and details about the truck, including debris tank size, cab/chassis information, pump/blower information, the company that built the truck and any other details you consider important. In particular, tell us what features of the truck help make your work life more efficient and more profitable. Email your materials to editor@digdifferent.com. We look forward to hearing from you!





Inspired by Nature

# ALL SIJANA STEMPEST

Engineered to Perform

a Storm is Brewing...

TORNADOTEMPEST.COM/F2

DIRECTO	xcavation 202	MODEL NAME	TYPE	Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Door (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)
<b>Ditch</b>	<b>Ditch Witch</b> 1959 W. Fir Ave.	FXT30 Air	Air	Chassis	2.5 or 4		45 degrees	200 or 400 gal	4.2 gpm, 3,000 psi
Witch <sup>®</sup> See ad on back cover	Perry, OK 73077 tf: 800-654-6481 f: 580-336-3458	FXT50 Air	Air	Chassis	2.5 or 4		45 degrees	200 or 400 gal	4.2 gpm, 3,000 psi
\	www.ditchwitch.com info@ditchwitch.com	FXT65 Air	Air	Chassis	2.5 or 4		45 degrees	200 or 400 gal	4.2 gpm, 3,000 psi
		FX20	Hydro	Trailer	0.75		45 degrees	80 gal	2.6 gpm, 3,000 psi
		FX25	Hydro	Trailer	2.5		45 degrees	80 or 200 gal	4.0 gpm, 3,000 psi
		FX30	Hydro	Trailer	2.5 or 4		45 degrees	80, 200 gal, or 300 gal	4.2 gpm, 3,000 psi
		FX50	Hydro	Trailer	2.5, 4, or 6		45 degrees	200, 300, or 500 gal	5.1 gpm, 3,000 psi
		FX65	Hydro	Trailer	2.5, 4, or 6		45 degrees	200, 300, or 500 gal	5.5 gpm, 3,000 psi
		MV800	Hydro	Trailer	4		45 degrees	100 gal	4.0 gpm, 3,000 psi
		FXT30	Hydro	Truck	2.5 or 4		45 degrees	200 gal or 400 gal	4.2 gpm, 3,000 psi
		FXT50	Hydro	Truck	2.5 or 4		45 degrees	200 gal or 400 gal	5.1 gpm, 3,000 psi
		FXT65	Hydro	Truck	2.5 or 4		45 degrees	200 or 400 gal	5.6 gpm, 3,000 psi
		НХ30	Hydro	Trailer	2.5 or 4	48 "	45 degrees	200 or 400 gal	4.2 gpm, 3,000 psi
		HX50	Hydro	Trailer	4	48 "	45 degrees	200 or 400 gal	5.3 gpm, 3,000 psi
		НХ75	Hydro	Trailer	4	48"	45 degrees	200 or 400 gal	5.5 gpm, 3,000 psi
See ad on page 35	Fast-Vac 21209 Durand Ave. Union Grove, WI 53182 tf: 800-558-2280 p: 262-878-0756 f: 262-878-4019 www.Fast-Vac.com sales@Fast-Vac.com	Fast Vac	Hydro	Chassis & Trailer	20+ Gross		50 degree	1500	Variable flow 3,000 psi
See ad on page 47	GapVax Inc. 575 Central Ave. Johnstown, PA 15902 tf: 888-442-7829 p: 814-535-6766 f: 814-539-3617 www.gapvax.com	HV33 HydroVax	Hydro	Chassis	6	Fully Opening	90 degree	600	12 gpm 3,000 psi
	Inquiry@gapvax.com	HV55 HydroVax	Hydro	Chassis	12 1/2	Fully Opening	90 degree	400-1,400	5-40 gpm 2,000-5,800 psi
		HV56 HydroVax	Hydro	Chassis	15	Fully Opening	90 degree	400-1,200	5-40 gpm 2,000-5,800 psi

Standard Blower (hg & cfm)	Filtration Type	Boom Size (ft.)	Degree of Rotation	Offloading Type	Controls Location	Wireless Y/N	Vacuum (cfm/psi)	Power Source	Compressed Air Flow	Compressed Air Pressure	Accessories Available	Other
500 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes			300 cfm or 200 cfm	250 psi/100 psi or 200 psi/100 psi		
1,020 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes			301 cfm or 200 cfm	251 psi/100 psi or 200 psi/100 psi		
1,215 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes			302 cfm or 200 cfm	252 psi/100 psi or 200 psi/100 psi		
543 cfm	washable polyester	N/A		tank mounted at angle for gravity dump	Curbside	No						
543 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes						
500 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes						
1,027 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes						
1,215 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes						
543 cfm	washable polyester	N/A		full open rear door and tank lift	Curbside	Yes						
500 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes						
1,020 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes						
1,215 cfm	washable polyester	14 ft.	270	full open rear door and tank lift	Curbside	Yes						
15" hg 512 cfm	washable polyester	12.5 ft.	330	full open rear door and tank lift	Curbside	Yes		Kubota D1105			Lighting Tool Boxes	Water Heaters
16" hg 1,005 cfm	washable polyester	12.5 ft.	330	full open rear door and tank lift	Curbside	Yes		Kubota D1803			Lighting Tool Boxes	Water Heater
16" hg 1,315 cfm	washable polyester	12.5 ft.	330	full open rear door and tank lift	Curbside	Yes		Kubota V3307			Lighting Tool Boxes	
28" hg 6,600 cfm	80 dry and 8 wet bags	15+ ft.	330	gravity with optional auger	In cab and outside enclosure and 40 ft. pendant	Yes					winterization lighting tool boxes racks cabinets	
27" hg 4,000 cfm	wet/dry single mode	14-18 ft. reach 18 ft. 10" up 4 ft. 6" down	270	Decant and fully opening tailgate. Auger and sludge pump options available	Curbside	Yes					winterization lighting	On-board scales with digital readout stops loading when set target is reached (optional); 26 Filter bags; inverted tailgate to reduce length; 200 cfm air pump; 4,500 cfm, 18" hg blower
28" hg 5,250 cfm	wet/dry single mode	17-25 ft. reach from center of truck	270	Decant and fully opening tailgate. Auger and sludge	Driver's side curbside controls vary	Yes					tool boxes racks cabinets	34 Filter bags, 5 cyclones for superior filtration; safe working area on top of truck; various options available
28" hg 5,250 cfm	wet/dry single mode	17-25 ft. reach from center of truck	270	pump options available	depending on options	Yes						200 cfm air pump, 6,600 cfm, 28″ blower optional

Vacuum F	vegyation OOC	71								
DIRECTO	xcavation 202	MODEL NAME	TYPE	Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Door (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)	
See ad on page 33  HYDREMA	Integrity Rail Products Inc. Distributor of the tinbin 56 Westminster Ave. Hamilton ON L9C 4L9 p: 905-928-6415 tinbincanam.com info@tinbincanam.com  Hydrema U.S., Inc. 4515 Hemingway Trl Cumming, GA 30041 p: 404-614-1747 www.hydrema.us Email: sales.us@hydrema.com	tinbin TC2	Air	Attachment	1 cubic yard	2 doors, 3 ft. x 3 ft.	Straight down	10 gallons (dust suppression system)		
KAISER PREMIER See ad on page 9	Kaiser Premier 2550 East Bijou Ave. Fort Morgan, CO 80701 p: 970-542-1975 http://www.kaiserpremier.com sales@kaiserpremier.com	CV Series	Hydro	Chassis	11-13	96" x 48" half round	19 degree floor	1,800 - 2,250	20 gpm 3,000 psi	
		UrbanX	Hydro	Chassis	8	67" diameter	35 degrees	800	10 gpm 3,000 psi	
E U U P M E N I	Ox Equipment Inc. 11-B 680 Tradewind Dr. Ancaster, ON L9G 4V5 tf: 888-290-4044 f: 905 296 6348 www.ox-equipment.com info@ox-equipment.com	MTS Dino 12	Air	Chassis	15	Side Tipping	138 degrees	Optional	Optional	
	(continued on following page)	MTS Dino 8	Air	Chassis	10.5	Side Tipping	138 degrees	Optional	Optional	
		MTS Dino 4.5 LT	Air	Chassis	6	Side Tipping	138 degrees	Optional	Optional	
		MTS Dino 4.5	Air	Chassis	6	Side Tipping	138 degrees	Optional	Optional	

Standard Blower (hg & cfm)	Filtration Type	Boom Size (ft.)	Degree of Rotation	Offloading Type	Controls Location	Wireless Y/N	Vacuum (cfm/psi)	Power Source	Compressed Air Flow	Compressed Air Pressure	Accessories Available	Other
	Water curtain, coarse screen				Excavator cab		7,000 cfm, 2 Hg	Carrier hydraulics				Air lance Rotation top, manual hose An excavator attachment that features dry suction excavation. Spoils can be reused or dumped into a bin or dump truck.
28" hg 6,600 cfm	3 stage	8" x 26 ft.	340	fixed, end dump, mechanical assist	rear, curbside	Yes			200 cfm	200 psi	winterization lighting tool boxes cabinets	Air Compressor, air purge, ladder and platform, extreme weather package, 700K BTU boiler, trash pump, towing package, steam package, dual digging package, rear steps, custom dump door porting, extended van bodies.
28" hg 2,400 cfm	3 stage	6" x 18 ft.	320	Full opening door, tilt and dump	rear, curbside	Yes			200 cfm	200 psi	winterization lighting tool boxes cabinets	Air compressor, 400K BTU Boiler, air purge, ladder and platform.
Twin Fan 24,000 cfm	Automatic Self-Cleaning System Polyester Cartridge	10" x 21 ft. Power Arm	180	Side Tipping	Driver's Side	Yes	24,000	PTO/OMSI Transfer Case	360 cfm	185 psi	lighting tool boxes	Hydrostatic ground drive system, ladders, storage, air spade, pneumatic power shovel, jackhammer, boom vibrator system, emergency tool kit
Twin Fan 24,000 cfm	Automatic Self-Cleaning System Polyester Cartridge	10" x 21 ft. Power Arm	180	Side Tipping	Driver's Side	Yes	24,000	PTO/OMSI Transfer Case	360 cfm	185 psi	lighting tool boxes	Hydrostatic ground drive system, ladders, storage, air spade, pneumatic power shovel, jackhammer, boom vibrator system, emergency tool kit
Twin Fan @ 24,000 cfm	Automatic Self-Cleaning System Polyester Cartridge	10" x 21 ft. Power Arm	180	Side Tipping	Driver's Side	Yes	24,000	PTO/OMSI Transfer Case	360 cfm	185 psi	lighting tool boxes	Ladders, storage, air spade, pneumatic power shovel, jackhammer, boom vibrator system, emergency tool kit
Twin Fan @ 24,000 cfm	Automatic Self-Cleaning System Polyester Cartridge	10" x 21 ft. Power Arm	180	Side Tipping	Driver's Side	Yes	24,000	PTO/OMSI Transfer Case	360 cfm	185 psi	lighting tool boxes	Hydrostatic ground drive system, ladders, storage, air spade, pneumatic power shovel, jackhammer, boom vibrator system, emergency tool kit

Vacuum F	vegyation OOC	71							
DIRECTO	xcavation 202	MODEL NAME	TYPE	Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Door (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)
E U U I P PI E N I	Ox Equipment Inc. (cont.) 11-B 680 Tradewind Dr. Ancaster, ON L9G 4V5 tf: 888-290-4044 f: 905 296 6348 www.ox-equipment.com info@ox-equipment.com	MTS Dino 4.5 High Rail	Air	Chassis with High Rail Kit	6	Side Tipping	138 degrees	Optional	Optional
		MTS City Dino	Air	Chassis	4.5	Rear Tipping to Bag Bins	138 degrees	Optional	Optional
PRESVAC SYSTEMS	Presvac Systems 4131 Morris Drive Burlington, ON L7L 5L5 tf: 800-387-7763 p: 905-637-2353 f: 905-681-0411	Presvac HydroX Mini	Hydro	Chassis	7	Full Diameter Full Opening		800	18 gpm 3,500 psi Adjustable Flow and Pressure
	www.presvac.com sales@presvac.com	Presvac HydroX	Hydro	Chassis	15	78" Full Opening	90 degree	1,000	18 gpm 3,500 psi Adjustable Flow and Pressure
See ad on page 17	Ramvac Vacuum Excavators by Sewer Equipment 1590 Dutch Rd. Dixon, IL 61021 tf: 888-477-7638	AX Air Excavator	Air	Chassis	2, 3 and 4	3/4 full opening	50 degree	50-300	10 gpm @ 60 psi, 10 gpm @2500 psi
	www.sewerequipment.com sales@ram-vac.com	Ramvac 2000 & 3000	Hydro	Trailer	6	Full Opening	50 degree	150	5 gpm @ 2500 psi
		HX Hydro Excavator	Hydro	Chassis	3 to 15	3/4 full opening	50 degree	325-1,300	10 gpm @ 2,500 psi, 18 gpm @ 2,500 psi
RIVAL HYDROVAC  See ad on page 19	<b>Rival Hydrovac Inc.</b> Box 5 Major, SK SOL 2H0 tf: 844-467-4825 p: 403-550-7997	Rival T7	Hydro	Chassis	8	54" Full Opening Rear Door, Two Stage Hoist	70 degree	800	10 gpm 3,000 psi
	www.rivalhydrovac.com tdell@rivalhydrovac.com	Rival T10	Hydro	Chassis	10	54" Full Opening Rear Door, Two Stage Hoist	70 degree	1200	10 gpm 3,000 psi
Super Products See ad on page 11	130 BOXHOITI DI.	Mud Dog 1600	Hydro & Air	Chassis	16	full opening rear		2,000	18 gpm 3,000 psi
	p: 262-784-7100 www.superproducts.com info@superproducts.com	Mud Dog 1200	Hydro & Air	Chassis	12	full opening rear		1,500	18 gpm 3,000 psi

Standard Blower (hg & cfm)	Filtration Type	Boom Size (ft.)	Degree of Rotation	Offloading Type	Controls Location	Wireless Y/N	Vacuum (cfm/psi)	Power Source	Compressed Air Flow	Compressed Air Pressure	Accessories Available	Other
Twin Fan 24,000 cfm	Automatic Self-Cleaning System Polyester Cartridge	10" x 21 ft. Power Arm	180	Side Tipping	Driver's Side	Yes	24,000	PTO/OMSI Transfer Case	360 cfm	185 psi	lighting tool boxes	Hydrostatic ground drive system, ladders, storage, air spade, pneumatic power shovel, jackhammer, boom vibrator system, emergency tool kit
Twin Fan 12,000 cfm	Automatic Self-Cleaning System Polyester Cartridge	8" x 16 ft. Power Arm	180	Rear Tipping into Bags	Driver's Side	Yes	24,000	PTO/OMSI Transfer Case	360 cfm	185 psi	lighting tool boxes	Hydrostatic ground drive system, ladders, storage, air spade, pneumatic power shovel, jackhammer, boom vibrator system, emergency tool kit
28" hg 2,650 cfm	Cyclone and Inlet Filter	6" x 20 ft.	340	45 Degree Dump and optional pressure off-load	passenger	Yes					winterization lighting tool boxes racks cabinets	Can be built to DOT/TC Code
28" hg 4,000-6,400 cfm	Two large Cyclones and Inlet Filter	8" x 25 ft.	340	45 Degree Dump and optional pressure off-load	passenger	Yes					winterization lighting tool boxes racks cabinets	Can be built to DOT/TC Code
16-28" hg 1,400- 3,000 cfm	cyclone separator media filter	6-9 ft.	180		curbside	Yes	16-28" hg 1,400- 3,000 cfm	РТО	185-300 cfm	150-250 psi	winterization lighting tool boxes racks cabinets	
18" hg 2,400- 3,000 cfm	cyclone separator media filter	12-18 ft.	260		curbside	Yes	18" hg 2,400- 3,000 cfm	Auxiliary engine			lighting tool boxes racks	
18-28" hg 3,000- 5,400 cfm	cyclone separator media filter	16-26 ft.	330	decant pump/ pressure offload 5 psi (pressure offload)	curbside	Yes	18-28" hg 3,000- 5,400 cfm	REPTO	185 cfm	150 psi	winterization lighting tool boxes racks	
27" hg 2,650 cfm	cyclone and cartridge	6" x 20 ft.	342	Tilt and Pressure off	curbside	Yes	2,650 cfm	PTO/ Hydraulics			winterization lighting tool boxes racks cabinets	All accessories are included. Weights displayed on Wireless Remote.
27" hg 3,850 cfm	cyclone and cartridge	8" x 25 ft.	342	Tilt and Pressure off	curbside	Yes	3,850 cfm	PTO/ Hydraulics			winterization lighting tool boxes racks cabinets	All accessories are included. Weights displayed on Wireless Remote.
28" hg 5,800 cfm		8 ft. telescoping with 19-27 ft. reach	335	Ejector	passenger side Inside heater cabinet	Yes			185 cfm	175 psi	winterization lighting tool boxes cabinets	
28" hg 5,800 cfm		8 ft. telescoping with 19-27 ft. reach	335	Ejector	passenger side Inside heater cabinet	Yes			185 cfm	175 psi	winterization lighting tool boxes	(continued)

Vacuum Excavation 2021  Debris Body Capacity Debris Door Debris Door Debris Door Water Tank Capacity Water Pump										
DIRECTO	RY ZUZ	MODEL NAME	TYPE	Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Door (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)	
TORNADO GLOBAL HYDROVACS	Tornado Global Hydrovacs Ltd.	F3 ECO-LITE	Hydro	Chassis	10	48" x 52"		1,250	20 gpm 4,060 psi	
See ad on page 23	7015 Macleod Trail S, Ste. 510 Calgary, AB T2H 2K6 tf: 877-340-8141 p: 403-742-6121	F4 ECO-LITE	Hydro	Chassis	12	Hydraulic Door With Hydraulic		1400	20 gpm 4,060 psi	
	www.tornadotrucks.com media@tghl.ca	F5 ECO-LITE	Hydro	Chassis	12	Latch		2000	20 gpm 4,060 psi	
		T-70 Twister	Hydro	Trailer	5.6			720	5.6 gpm 3,500 psi	
See ad on page 2	TRUVAC by Vactor Manufacturing, Inc. 1621 S. Illinois St. Streator, IL 61364 tf: 800-627-3171	Paradigm	Air	Chassis	3.3		50 Degree	300 Air only = 100 gallons	8 gpm 2,500 psi Air only = 4 gpm @ 2,500 psi	
	p: 815-672-3171 www.truvac.com sales@truvac.com	Prodigy	Hydro	Chassis	9		50 Degree	600	10 gpm 2,500 psii	
		HXX Hydro Excavator	Hydro	Chassis	12 or 15		50 Degree	1,200	10 gpm 3,000 psi	
		HXX Mid-Size	Hydro	Chassis	12 or 15		50 degree	1,200	10 gpm 3,000 psi	
<b>XX</b>	<b>Vacmasters</b> 5879 W 58th Ave. Arvada, CO 80002 tf: 800-466-7825	Vacmasters SpoilVac	Hydro	Chassis & Trailer	1, 2.5, 4, 5, 6	25" Posi-Seal Full Hydraulic	45 degrees	200 Additional Water Available	4 gpm 3,000 psi	
VACMASTERS See ad on page 7	p: 303-467-3801 f: 303-420-3971 www.vacmasters.com cbell@vacmasters.com	Vacmasters System 1000	Hydro & Air	Chassis & Trailer	1.5 or 2.5	25" Posi-Seal Full Hydraulic	45 degrees	85 Additional Water Available	4 gpm 3,000 psi	
		Vacmasters System 3000	Hydro & Air	Chassis	1.5	25" Posi-Seal	45 degrees	110 Additional Water Available	4 gpm 3,000 psi	
		Vacmasters System 4000	Hydro & Air	Chassis	2.25	25" Posi-Seal	55 degrees	85 Additional Water Available	4 gpm 3,000 psi	
		Vacmasters System 5000	Hydro & Air	Chassis	2.75 or 3.5	48" Full Opening Hydraulic	45 degrees	85 Additional Water Available	4 gpm 3,000 psi	
		Vacmasters System 6000	Hydro & Air	Chassis	4.75	60" Full Opening Hydraulic	30 degrees	85 Additional Water Available	4 gpm 3,000 psi	

Standard Blower (hg & cfm)	Filtration Type	Boom Size (ft.)	Degree of Rotation	Offloading Type	Controls Location	Wireless Y/N	Vacuum (cfm/psi)	Power Source	Compressed Air Flow	Compressed Air Pressure	Accessories Available	Other
27" hg 3,800 cfm	Three Stage System	8 " Topgun 26 ft.	342	Tornado Concave and Sloped Floor Design	Multifunction	Yes						Water Heater: 690,000 BTU. 12 volt with full diagnostics
27" hg 3,800-6,400 cfm	Three Stage System	8 " Topgun 26 ft.	342	Tornado Concave and Sloped Floor Design	Wireless Remote With Auxiliary	Yes					winterization	Water Heater: 690,000 BTU. 12 volt with full diagnostics
27" hg 3,800-6,400 cfm	Three Stage System	8 " Topgun 26 ft.	342	Tornado Concave and Sloped Floor Design	Levers	Yes					lighting tool boxes racks cabinets	Water Heater: 690,000 BTU. 12 volt with full diagnostics
15″ hg 1,200 cfm	Three Stage System	5" with 14 ft. reach over	342	Tornado Concave and Sloped Floor Design	Multifunction Wireless Remote w/Passenger Side Controls	Yes					canillers	Water Heater: 300,000 BTU. 12 volt with full diagnostics. Glycol with recirculation port.
15" 2,200 cfm	Dual Cyclone and 5 micron polyester final filter	6" diameter 5 ft. extension	225	dumping, tilting debris body	right side	Yes						
16" hg 3,200 cfm	Cyclone and polyester final filter	6" diameter	320	dumping, tilting debris body	right side	Yes					winterization lighting	
28" hg 5,250 cfm or 6,176 cfm	Dual Cyclone and polyester final filter	8" Diameter 7 ft. extension	320	dumping, tilting debris body	right side	Yes					tool boxes racks cabinets	
PD= 18" hg 4,970 cfm	PD=Cyclone and final filter/ fan=cyclone	8" Diameter 7 ft. extension	320	dumping, tilting debris body	right side	Yes						
15" hg 860 cfm	Cyclonic/ Cartridge	Hose Assist Arm	360	Hydraulic Dump	curbside	No	860 cfm	49 hp Kubota T-4 Final	N/A	N/A	winterization lighting tool boxes racks	Vacmasters SpoilVac full hydraulic door reverse flow
15" hg 860 cfm	Cyclonic/ Cartridge	Hose Assist Arm	360	Hydraulic Dump	curbside	No	860 cfm	74 hp John Deere T-4 Final	100 cfm	150 psi	winterization lighting tool boxes racks	For All Models: Wheelbarrow Mount Barrel Top Interceptor
15" hg 1,220 cfm	Automatic Purge/ Cyclonic/ Cartridge			Hydraulic Dump	curbside	No	1,220 cfm	99 hp John Deere T-4 Final	165 cfm	185 psi	winterization lighting tool boxes racks	Core Drill/Generator Pneumatic Jack Hammer Pneumatic Tamper Sand Blaster
15" hg 1,220 cfm	Automatic Purge/ Cyclonic/ Cartridge	Hose Assist Arm	180	Hydraulic Dump	curbside	No	1,220 cfm	155 hp John Deere T-4 Final	300 cfm	220 psi	winterization lighting tool boxes racks	
15" hg 1,700 cfm	Automatic Purge/ Cyclonic/ Cartridge	Hose Assist Arm	180	Hydraulic Dump	curbside	Yes	1,700 cfm	173 hp John Deere T-4 Final	300 cfm	220 psi	winterization lighting tool boxes racks	
16" hg 2,200 cfm	Automatic Purge/ Cyclonic/ Cartridge	5" Hose Extends 22 ft.	270	Hydraulic Dump	curbside	Yes	2,200 cfm	250 hp John Deere T-4 Final	350 cfm	250 psi	winterization lighting tool boxes racks	(continued)

# Vacuum Excavation 2021

DIRECTO	RY Z O Z	MODEL NAME	TYPE	Style	Capacity (cu. yards)	Debris Door (dimensions)	Debris Door (dump angle)	Capacity (gallons)	Water Pump (gpm & psi)	
Vermeer MV Solutions™ See ad on page 5	Vermeer MV Solutions 27137 South Hwy 33 Okahumpka, FL 34762 p: 352-728-2222 www.vermeer.com	Mini-Combo unit	Hydro	Trailer	2.5, 4 or 6	Hydraulic rear door		300/400	15 gpm 1,500 psi	
	jjeffords@vermeer.com	VX75	Hydro and Air	Chassis or Trailer	2.5, 4 or 6	Cam-over hydraulic		250/410	8/12/18 gpm 3,000 psi	
		VXT8 Mega Truck Vac	Hydro	Chassis	8	Cam-over hydraulic		800	10 gpm 3,000 psi	

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State/Province	Zip/Postal Code	Do you pass Dig Different magazine along to others to read? • Yes • No
Phone	Phone Extension (optional)	When it comes to equipment and other purchasing decisions, what is your role?  O Not at all involved O Somewhat involved O Heavily involved O Final decision maker
Fax	Cell Phone (optional)	How many pieces of excavation equipment do you have in service?  O 1-3  O 4-5  O 6-7  O 8-9  O 10+
Email		What is your annual equipment budget?
FAX this form to 715-MAIL this form to CC Three Lakes, WI 5456	DLE Publishing, P.O. Box 220,	<ul> <li>○ 0-50K ○ 51K-75K ○ 76K-150K ○ 151K-250K ○ 251K-350K ○ 350K+</li> <li>What services do you perform on a regular basis?</li> <li>○ Excavating ○ Vacuum Excavating ○ Trenching ○ Horizontal Directional Drilling/Boring</li> <li>○ Pipe Bursting ○ Utility Location/Leak Detection ○ Other</li> </ul>
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Standard Blower (hg & cfm)	Filtration Type	Boom Size (ft.)	Degree of Rotation	Offloading Type	Controls Location	Wireless Y/N	Vacuum (cfm/psi)	Power Source	Compressed Air Flow	Compressed Air Pressure	Accessories Available	Other
15" hg 1,000 cfm	.5 micron cartridge filter	15 ft., 6-way hydraulic boom option	330	reverse pressure	curbside	Yes	1,000 cfm and 1,500 psi	74 hp Kohler diesel tier 4 final			winterization lighting tool boxes	
15" hg 1,200 cfm	2 micron washable filter	14 ft. hydraulic boom option 5" Hose	270	reverse flow	curbside	Yes	1,200 cfm and 3,000 psi	74 hp Deutz	185 cfm option	100 psi option	winterization lighting tool boxes	Can be both chassis or trailer style
18" hg 3,500 cfm	2 micron washable poly filter	6" hydraulic boom	270		curbside	Yes	3,500 cfm	350 hp PACCAR PX 9	176 cfm	110 psi	winterization lighting tool boxes	

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Richard Hart, Harts Services, Tacoma, Washington



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# WHAT IF YOUR EXCAVATOR COULD SUCK LIKE A VAC TRUCK?



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Louisville, KY September 28 - 30, 2021

BOOTH # E - 1314

# Hose and Hose Accessory

# Kuriyama of America Alfagomma T704HA Series THE BOOMER

The corrugated Alfagomma T704HA Series THE BOOMER industrial sewer vacuum hose from Kuriyama of America is made

with a 1/4-inch-thick red gum rubber tube designed for wet or dry applications where severe abrasion is a factor. The corrugated black conductive



styrene-butadiene/natural rubber (SBR/NR) blend cover provides abrasion and ozone resistance. The rugged hose is suitable for dry or wet abrasive materials and can be grounded. All sizes are rated to full vacuum and a pounds-per-square-inch safety factor of 3-1 for 2 to 8 inch and 2.5-1 for 10 inch. The hose remains flexible in temperatures from 40 degrees below zero to 212 degrees F. It is available with soft-cuffed ends for easy installation and clamping.

847-755-0360; www.kuriyama.com

# Hose Reel

# **Hannay Reels 6000 Series**

The 6000 Series manual or power rewind reels from Hannay Reels are suitable for applications that require longer lengths of hose like water blasting and sewer cleaning. This heavy-duty reel is available in aluminum or stainless steel construction and ruggedly designed to handle daily use in the most demanding



environments. A gear-driven crank rewind or a chain and sprocket drive powered rewind are available in a reliable steel hub assembly. These reels can handle pressures up to 2,000 psi, with an upgrade available for pressures up to 5,000 psi.

877-467-3357; www.hannay.com

# Hot Water Boiler

# Easy-Kleen Pressure Systems Wildcat Heaters

Wildcat Heaters high-pressure, oil-fired hotwater/steam heaters and hydraulic pump systems from Easy-Kleen Pressure Systems are designed for reliability and efficiency and are installation-ready for vacuum trucks and hydroexcavators. A full range of heater options includes dry steam, redundancy



packages, Schedule 80 and 160 stainless steel or A53 boiler pipe, fine-tuned temperature and flow-control systems. All coils are manufactured in-house, with CRN boiler-approved coils now available. Heaters can be designed for mounting in a cabinet or supplied as a completed cabinet unit. They are CSA and ETL approved. Hydraulic pumping systems are available.

800-315-5533; www.easykleen.com

# Hydroexcavation Equipment

# Fruitland 870 Series

Fruitland's 870 Series pump allows vacuum levels of 28.5 inches Hg and continuous vacuum of 27 inches Hg. Additionally, it is capable of providing 30 psi pressure for offloading. Oil consumption is 1 gallon for 18 hours of operation, which provides cost savings and reduces environmental impact, according

to the maker. Fruitland is less restrictive on the type of oil used, allowing customers to buy locally available, nonproprietary oil. The pump delivers 510 cfm (free air) through 4-inch porting.

905-662-6552; www.fruitlandmanufacturing.com

# Soil Surgeon hydroexcavating tool

The Soil Surgeon hydroexcavating tool fits any sewer combination truck equipped with a telescoping 6- or 8-inch boom. The tool has a 1-inch water connection. The operator controls water pressure and power through truck controls. It has a 6-foot Tuff-Tube with handles to guide the unit down for potholing or side to side for trenching. Six jets boring inward cut the soil, while six boring outward bring the tube down.



949-363-1401; www.soilsurgeoninc.com

# Hydroexcavation Trucks and Trailers

### Ditch Witch HX30G

The HX30G vacuum excavator from Ditch Witch boasts high-profile power in a low-profile design that eases navigation in congested and height-restricted areas. It is powered by a 31 hp Vanguard gas engine for optimal suction power and water



pressure. To boost efficiency on any job, it comes with a powerful 542 cfm blower, 3,000 psi water pressure and 4.2 gpm water flow. It is offered with the choice of a 500- or 800-gallon tank for a variety of job requirements. The machine is available in multiple trailer configurations, including the VT9 trailer that, when equipped with the 500-gallon tank, does not require a commercial driver's license to transport.

800-654-6481; www.ditchwitch.com

# HotJet USA Vac 'n Jet Series

The HotJet USA Vac 'n Jet Series of vacuum trailer jetters are rugged and compact, are engineered to haul equipment and spoils loads, can clean valve boxes and storm drains and hydroexcavate and/or clean drainlines and sewer lines. They offer hot- and/or cold-water operation with a



choice of engine options ranging from 13 to 66 hp and gas or diesel operation. They are equipped with premium triplex pumps, a 500-gallon spoils tank, 200-gallon water tank, Gardner Denver vac/blowers, 4-ton hydraulic dump and Centriclean filter system. They can also be custom engineered and designed to meet specifications.

800-624-8186; www.hotjetusa.com

# 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

# **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.

877-735-4640; www.ram-vac.com

# **Rival Hydrovac T7 Tandem**

The T7 Tandem hydrovac from Rival Hydrovac was designed primarily to be loaded with debris and driven within legislated road limits with most types of debris on board. The unit comes standard with a scale that reads real-time weights both in the cab and on the wireless remote to con-



firm weights prior to travel. An air option is available on both the T7 and T10 models. These units also have the same hydro system as any other Rival unit. This hydraulically driven compressor runs in both a low- and high-pressure range allowing for 150 psi and 150 cfm for the operating of air tools or 200 psi and 200 cfm for the operating of an air knife.

403-550-7997; www.rivalhydrovac.com



# Super Products Mud Dog

Mud Dog vacuum excavators from Super Products are designed to safely and efficiently meet the challenges of



a wide variety of applications from compact, urban projects to large-scale excavation, potholing and trenching projects. The product line comes standard as a hydroexcavator with an optional air excavation package, allowing operators to choose the best application for the job. Units are available with 12- or 16-yard debris capacity and 1,500- to 2,000-gallon water tank capacity. Each model comes standard with eject unloading and safety features including backup cameras, visual and audio alarms and emergency stop switches. Units are also equipped with a rearmounted boom that reaches 27 feet, has 335-degree rotation and moves in a 45-degree upward and 25-degree downward pivot, allowing for versatility within dig areas.

800-837-9711; www.superproducts.com

# Tornado Global Hydrovacs F4 ECO-LITE

The F4 ECO-LITE from Tornado Global Hydrovacs has a 12-cubic-yard mud tank and holds



1,550 gallons of freshwater. The unit is more than 7,000 pounds lighter than the company's older models and offers more than double the payload. The boom has a 342-degree rotation and 26-foot reach. The smaller F3 ECO-LITE is a 10-cubic-yard, 1,250-gallon tandem-axle unit that more than doubles older payload capacities. It features an 8-inch boom and 3,800 cfm blower.

877-340-8141; www.tornadotrucks.com

# **TRUVAC** by Vactor Paradigm

Designed for utility, municipal and contractor customers involved in the installation, maintenance and repair of underground water, sewer, gas, electric and telecommunications lines, the Paradigm subcompact vacuum excavator from TRUVAC by Vactor can dig holes with water or air; vacuum,



contain and dispose of drill mud; power pneumatic, hydraulic or electrical tools; and provide transport and storage of replacement parts, equipment and tools. The truck's Park-n-Dig design minimizes time between job site arrival and excavation, including the ability to dig up to 6 feet without additional pipe and hose. The air compressor powers utility tools such as jackhammers and tampers. The truck offers tool storage space, including a long-handle toolbox. The truck can tow up to 20,000 pounds.

800-627-3171; www.truvac.com

### **Vac-Con X-Cavator**

The X-Cavator hydrovac from Vac-Con includes a coldweather enclosure for the water systems and control panel as well as an interior area for oper-



ator seating and workspace. Unit filtration is based on the Titan combination machine, with a single-cyclone design and final cartridge-style filter. The redesigned boom is lightweight and flexible, rotating 310 degrees around the unit and moving plus 45 degrees and minus 22 degrees vertically. The durable rubber hose material can withstand harsh environments, according to the maker, and has a reach of 26 feet.

904-284-4200; www.vac-con.com

# Vermeer MV Solutions Mini-Combo

Mini-Combo vacuum excavators from Vermeer MV Solutions deliver a versatile combination of components and options that facilitate hydrojetting



and excavation work in a single machine. They are available in three models — the 573 SDT, 873 SDT and 1273 SDT — that range from a 300- to 400-gallon water tank capacity and 500 to 1,200 gallons in waste tank capacity. All three models are engineered with a pump rated at 1,500 psi at 15 gpm and a powertrain featuring a 74 hp engine. This powerful engine and pump combination enables these machines to clean lateral lines up to 12 inches in diameter and 300 feet in length. They can be outfitted with a mechanically operated strong arm or hydraulic boom.

352-728-2222; www.vermeer.com

# **Nozzles**

# **Enz USA Hydro X**

The Hydro X nozzle from Enz USA is available in 3/8-inch NPT or 1/2-inch connecting threads, and it can function at up to 5,000 psi with flow as low as 8 gpm. It combines a powerful, oscillating water jet with a high removal rate of debris. A tungsten carbide front jet ensures a longer life than ceramic jets can offer. For quick and easy maintenance, a repair kit is available. Due to the nozzle's simplicity, repairs can be made quickly and efficiently in the field with little downtime. For the operator's safety, a plastic cover provides protection against harsh and sensitive environments.

888-369-8721; www.enz.com

# **Hydra-Flex Machete**

The Machete hydroexcavating nozzle from Hydra-Flex channels water in an oscillating motion, creating a small spray angle and a direct stream with a forceful impact. This premium penetration will allow faster digging and more precise trenching capabilities. Its durable, replaceable cover allows for quick changes while increasing the nozzle's lifespan. It is available in three sizes, with operating pressure ranges from 1,000 to



3,200 psi and a heat rating of 180 degrees F. It will last in excess of 500 hours, improving digging times and replacement costs.

952-808-3640; www.hydraflexinc.com

# Water Pump

# Dynablast Pratissoli HY-PACK KT28ASPF-P47CC

The Pratissoli HY-PACK KT28ASPF-P47CC water pump package from Dynablast offers 18.4 gpm at 2,900 psi at 1,450 rpm. It has a T13 female spline shaft input and SAE B 2/4 bolt flange mounted from



the factory with either an Interpump 47 cc FOX piston hydraulic motor or a 64 cc motor. It has a spherical cast iron, nickel-coated manifold, a self-lubricating design with no oiler kit or weekly oiling required, internal fins on an aluminum crankcase that provides cooling to lower the oil temperature, and two-bore ceramic plungers that offer thicker ceramic on the water end to prevent thermal shock.

905-867-4642; www.dynablast.ca ▼

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# Got a RIG that you really DIG?

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o you have a really cool-looking rig, directional drill, excavator or work truck with all the bells and whistles? We'd like to feature it!

Your **Dig My Rig** submission must include a photo of your rig lettered with your company name, along with your name, company name, mailing address and phone number. Include information such as the manufacturer of your rig, cab/chassis and pump/blower; tank capacity; and water pump mfr./gpm/psi; and any other details you consider important. In particular, tell us what features of the truck help make your work life more efficient and more profitable.

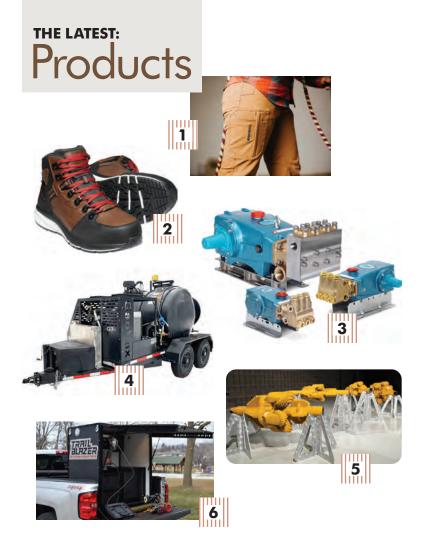
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We look forward to hearing from you!







#### 1. Truewerk Women's Fit T2 WerkPant

Truewerk's new T2 WerkPant for women is a technically advanced softshell work pant featuring four-way stretch fabric for a more allinclusive fit, as well as double-stitched seams and technical patterning that improve mobility, fit and durability. A durable, water-repellent coating repels everything including stains, rain, snow and wind, making it a perfect three-season work pant. Other features include seven pockets with riveted corners and body fabric pocket bags to protect legs from sharp pocket contents. Truewerk is helping elevate modern tradeswomen and promoting a culture that won't settle for the workarounds women in the trades have been used to. The T2 WerkPants provide an effortless, professional look and approach equipped to tackle anything. 719-624-8720; truewerk.com

#### 2. KEEN Utility Red Hook work boot

With the introduction of the Red Hook, KEEN Utility is introducing a work boot that can keep up with challenging jobs. A high-performance hiker-meets-athletic boot designed to keep pace with a versatile workload, the Red Hook brings comfort and performance features. Full-grain leather and Techtuff upper provides superior abrasion resistance in high-wear areas and keeps feet dry thanks to the KEEN.DRY waterproof, breathable membrane. The KEEN.ReGEN midsole cushioning delivers 50% more energy return than standard EVA foam, while lightweight and asymmetrical carbon fiber toes offer an unobtrusive fit 15% lighter than steel. The Red Hook is also electrical hazard rated, providing a secondary source of protection in case of accidental contact with live electrical circuits. Other highlights include 100% nonmetallic construction to allow easy passage through metal detectors and slip-resistant safety features. 866-676-5336; www.keenfootwear.com/work

#### 3. Cat Pumps hydroexcavating pumps

Over 50 years of high-pressure pump manufacturing experience has earned Cat Pumps a reputation of producing the high-quality, long-lasting pumps in the markets it serves. With its dedication to zero-defect manufacturing, ease of service and availability from stock, Cat Pumps designs and builds high-pressure pumps and systems to suit the demanding environments of the hydroexcavation industry. Popular models include model 56 with 5.5 gpm at 3,500 psi; model 56HS with 8 gpm at 3,000 psi; model 660 with 10 gpm at 3,000 psi; and model 3560 with 20 gpm at 4,000 psi, or 25 gpm at 3,000 psi. 763-780-5440; www.catpumps.com

#### GapVax G7 trailer jetter

GapVax's G7 trailer jetter has a simple design and a high-efficiency engine. The fit-and-finish assembly prior to powder coating ensures maximum long-term durability. The jetter is built on a heavy-duty, contractor grade NATM-certified trailer. Several engine choices, including Cummins diesel, are all certified and sized appropriately for the water pump combinations. The hose reel is hydraulically powered with a direct-drive gearbox and variable speed control. The hose reel offers a 3-foot curbside articulation from center of bearing, 180-degree rotation and 800 by 3/4inch capacity. The polyethylene plastic water tank is available in 300-, 500-, 600- or 700-gallon capacities, and the water pump is center-fed for optimum performance. The control box is weather-tight and lockable. The controller is interlocked with safety features that will show low fuel levels, low water and is capable of a complete engine shutdown in the event of an emergency. 888-442-7829; www.gapvax.com

#### 5. Vermeer roller cone hole openers

Vermeer roller cone hole openers are available in diameters of 8 to 24 inches in 2-inch increments and include a range of customizable options. The cutters feature metal-faced seals similar in style to what is on a dozer or excavator rather than conventional rubber seals. The openers are also built with a precision machining manufacturing process that allows the tool to have equal loading on each cutter. With a wide range of sizes and centralizer options as well as two different cutter options for hard and medium hard rock and a multitude of customizable options, Vermeer roller cone hole openers are equipped to meet the specific needs of any job site. 800-837-6337; www.vermeer.com

#### 6. Aries Industries TrailBlazer Enclosure

Aries Industries introduced the TrailBlazer operations and transport enclosure, a self-contained equipment housing that can get critical equipment into tight work sites. The TrailBlazer mounts onto a pickup truck, ATV or trailer, allowing pipeline inspection equipment to be brought into locations too small for larger vehicles. The lightweight, lockable enclosure can house either an Aries Industries Mobile Pathfinder System or Master Controller System, both ready to send remote-control inspection robots into pipes and record interior conditions with video cameras. It has a weatherproof and corrosion-proof shell to protect and transport the control systems. Inside are two 250-pound capacity drawers to securely store tractors, cameras and accessories. Two installed monitor options are available: one 17-inch sunlight-readable screen, or two 15-inch sunlight-readable units. The TrailBlazer has four 120-volt outlets and two USB outlets. 800-234-7205; www.ariesindustries.com ▼



## This Issue's Feature:

# Horizontal directional drill offers additional versatility

BY CRAIG MANDLI

Horizontal directional drill units are sizable investments for any utility construction company. That's why identifying a unit that offers multiple configurations can offer your business the most efficiency.

The **D220x500 S3 Navigator horizontal directional drill** from **Vermeer** fits the bill. With the ability to be configured for large-diameter water and utility installs in urban areas as well as challenging pipeline work, the unit delivers up to 54,000 foot-pounds of torque at a spindle speed of 36 rpm, and fluid flow rates of up to 350 gpm if the onboard pump is selected. Contractors can choose between a rod stager or full-length catwalk as well as add an optional mud pump, crane or hydraulic scissor lift for optimum staging efficiency.

"The D220x500 S3 integrates many of the quality features found on the Vermeer D220x300 S3 Navigator HDD, but with even more versatility and ramped-up performance," says Tod Michael, product manager of trenchless products for Vermeer. "This drill is designed to meet the needs of utility contractors performing large-diameter city work as well as pipeliners that are performing long, large-diameter bores."

Its 30-foot rack gives crews the ability to use a variety of range 2 drill pipe at various diameters and a range of 29 feet to 32 feet in length — an ideal setup for performing pipeline work. This rack configuration can be paired with a rod stager that holds four rods or a full-length catwalk. Crews will also like the benefits of using the optional hydraulic scissor lift with the rod stager to help reduce drill rod and wireline staging cycle times. Also, if paired with a stand-alone pump, the unit, with its four 1.5-inch mudlines and 3-inch head shaft, can accommodate 650 gpm of downhole drilling fluid flow.

For more mobile operations, the D220x500 S3 can be equipped with an onboard excavator-style cab that has a view of the open-top vises as well as the rack and rod stager. It is built with a 415 hp Cat C13 ACERT Tier 4 Final engine that is convenient to service. The drill also runs quiet at just 81.2 dBA.

"The combination of the D220x500 S3 drill's rotary torque and fluid pressure delivers optimized drilling and reaming performance in challenging ground conditions like rock," Michael says. "More torque helps reduce the number of reamer passes crews need to make when widening a hole, and high fluid flow helps protect tooling while maintaining the drill hole integrity and operational efficiencies."

800-837-6337; www.vermeer.com





## Look Before You Leap

## A LOW-INTEREST LOAN CAN HELP YOU EXPAND YOUR BUSINESS IN MULTIPLE WAYS, BUT THERE ARE ALWAYS RISKS TO CONSIDER

#### **BY JOAN KOEHNE**

he complexities of operating a business can leave you scratching your head. As ideas churn in your mind for new equipment, business expansion or hiring more employees, the bottom line is always the same: How will you pay for it?

If cash is short, a low-interest business loan may be the way to go. While many small businesses are averse to debt, being debt-free actually can restrict business growth or even cause a business to collapse. Without the necessary funds, a business will remain at a standstill or fold. The old adage "you need to spend money to make money" rings true.

Even businesses that never took out a loan before may want

to apply for financing now because interest rates are historically low. Rates are expected to remain low for years as the country recovers from a pandemic-induced economic downturn. Despite the uncertain economy, now may be a good time to take out a loan. There are many good reasons to apply for a business loan, but that doesn't mean you should rush out and apply without carefully considering your options.

"Be really sure you need the loan," advises Dave
Kaster, principal at Fidelis LLC, a business advisory
practice in Green Bay, Wisconsin. "Unless you're in a very stable business with
a regular type of income, you have to think harder about getting a loan."

Savvy business owners don't go into debt for just any old reason. They have a clear vision of how they'll successfully grow their business. Focusing on this vision, they're willing to step out of their comfort zone and pursue financing options.

"If you decide you are willing to take the risk, contact your SBA (Small Business Administration) rep and see what your options are. Then, go to a banker that you feel you have the best relationship with and start talking," Kaster says.

Dig into plans for the loan and how you'll pay it back. Be honest with your self and your ability to repay the loan. Ask questions like, what happens if I miss a payment? What happens if I can't pay off the loan when the time comes? Know the answers to these questions before you sign.

#### **WEIGH YOUR RISK**

Once you understand the terms and conditions of a loan, consult with someone you depend on for business advice — an accountant, business adviser, spouse or colleague. Lastly, make sure your business plan syncs with the requirements of the new loan. A solid business plan includes carefully prepared financial projections, budgets and cost analyses. Lenders will look at

your operational methods to project the rate of return on their investment.

To measure the risk of taking out a loan, consider how you will repay it. For example, you may decide to borrow money for equipment. Consequently, the equipment you purchase becomes a fixed asset.

"The loan on that fixed asset becomes a fixed cost. You have to pay that every single month," Kaster says. Before you invest in the equipment, estimate the income you'll earn by using that equipment.

"Can the money that fixed asset generates make the payments for you?" Kaster says.

In addition to purchasing equipment, you also may decide to expand through acquisition. Business acquisition can breathe new life into an organization but comes with some challenges. When businesses expand, cash can get tight. Taking out a loan will only defer the problem of tight cash until the loan has to be repaid. In this scenario, Kaster tells business owners to plan ahead.

"Make sure that your operations and your marketing plan are lined up in such a way that you'll start getting the income you need to pay off that loan. If you're adding a new territory or acquiring a business, it's going to take a while before you'll see the cash

flow off of that business."

#### **DUCKS IN A ROW**

Cash flow is an issue that businesses deal with every day. A high-level business plan can help you determine how much cash you need and what you can afford to repay, says Aaron Faulkner, senior vice president at Bank First, Green Bay. He offers a number of tips geared to business owners considering applying for commercial lending.

First, he encourages owners to have their personal finances in order. You may think that your business credit and personal credit are two separate things, but they're not. Commercial lenders often base their decisions on how individuals handle their personal finances. A solid credit history shows you paid your bills in the past and are likely to pay your bills in the future. Lenders evaluate you as a business owner to project how you'll handle your business finances, especially during the tough times.

Next, businesses should be ready to contribute equity. Lenders don't want to be the only player in a business venture. For example, if you want to borrow \$100,000, a lender may ask you to contribute \$20,000 to \$25,000 of cash, equity in your home, a gift from your family or a combination of these. Showing a capacity to contribute equity is important because it signals that you are committed to the project.





Likewise, a commercial lender commonly will ask you to pledge collateral to cover your financial obligations if there's a shortfall. Collateral could be the assets in your home, a personal vehicle, vacation property, investment accounts or cash. Be aware that personal and business assets are closely related for small businesses. When you obtain a commercial loan, you sign a personal guarantee. When the loan comes due, the lender isn't simply looking at the business for repayment, it's looking at the owner, too. If the business can't repay the loan, the business owner will be held responsible instead.

# "MAKE SURE THAT YOUR OPERATIONS AND YOUR MARKETING PLAN ARE LINED UP IN SUCH A WAY THAT YOU'LL START GETTING THE INCOME YOU NEED TO PAY OFF THAT LOAN."

Dave Kaster

Lastly, if you're purchasing property, make sure you understand commercial mortgages. A commercial mortgage is different than a home mortgage. Commercial mortgages have shorter amortization, closer to 20-25 years, not 30 years. Typically, commercial mortgages are three- to seven-year notes that end with a balloon payment. In most cases, a business can renegotiate the loan when it comes due, if the business doesn't have the funds to pay it off.

#### **EQUITY OPTIONS**

Compared to residential mortgages, commercial mortgages usually have a higher down payment. The minimum down payment will probably be 10%. Sometimes, the financial institution will lend you that 10% from a home equity loan or some other capital you have.

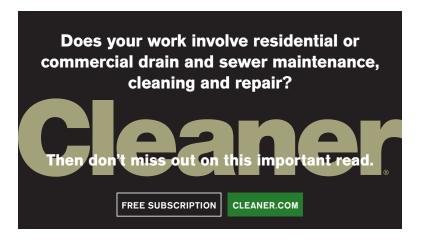
Additionally, lenders work with municipalities and the property sellers to carry some of the debt as well. Equity doesn't have to come exclusively from

the buyer; sometimes it comes from other sources. A trusted lender can walk you through the various scenarios.

There are many things to consider regarding commercial lending. Looking at the big picture, the question isn't just "Should I take out a loan?" Instead, ask yourself, "How will I repay the loan?" and "What will I use the money for?"

Will you purchase a truck or equipment? Buy out a competitor? Construct, buy or lease a building to expand your territory? Hire more employees? Of course, one big question mark is the COVID-19 pandemic and how it will affect your business.

"With economic times being somewhat uncertain with the pandemic, consulting your banker can be a huge value add," Faulkner says. "Many government programs are offering reduced or no fees, as well as offering assistance with making payments for several months on loans. This, coupled with a low interest rate environment, is certainly a reason to connect with your bank to see what type of options are available."  $\blacksquare$ 



## THE LATEST:

#### **HBS Systems announces** integration with Kubota

HBS Systems announced an advanced telematics integration with Kubota. This integration will strengthen the support NetView ECO provides to Kubota dealerships throughout North America. Benefits to Kubota dealers include tracking unit location for dealer and customerowned fleets, creation of geo-fence job sites to receive notifications, minimize theft and potential misuse, and provide customizable management through Service Connect, accessible from anywhere on any device.

#### Larsen retires from **Felling Trailers**

Daniel "Boone" Larsen, Felling Trailers' Great Lakes regional sales manager retired early in May. The 40-year industry veteran joined the Felling team in July



Daniel "Boone" Larsen

of 2010 as its Midwest and Southeast U.S. regional sales manager. He provided dealer support for 15 states spanning from Minnesota to Virginia, to Florida to Mississippi. In the fall of 2014. Boone reduced his coverage area to the Great Lakes region to provide more focused dealer support to the Felling Trailers' dealer base in Ohio, Kentucky, Michigan, Indiana, Illinois, Wisconsin and Minnesota.

#### VMAC recognized as Best Workplace in Canada

VMAC was again recognized as a Best Workplace in Canada for 2021. The list is compiled by Great Place To Work. To be considered, organizations must first be Great Place To Work certified. Then, employees must complete a comprehensive anonymous survey and agree over an array of criteria that their workplace is a great place to work. Finally, an indepth review of the organization's culture is conducted.

#### **Custom Truck** One Source and NESCO combine

Custom Truck One Source and NESCO have combined into one company. With over 40 locations, the combined Custom Truck One Source will create a one-stop-shop provider of specialty rental equipment. The company will offer an 8,800-piece rental fleet, source NESCO's parts, tools and accessories, and provide varied equipment offerings from Custom Truck, like roll-offs, dump trucks, water trucks, vacuum trucks and trailers.

#### Kondex launches online store for HDD products

Kondex launched its online store, www.kondexparts.com, featuring its Drill Defender horizontal directional drilling product line. The store offers HDD contractors an easy-to-navigate source for purchasing underground boring components. The site currently includes a variety of dirt and cobble bits, with starter rods and collars soon to be added.

#### DCA launches new trenchless microsite

The Distribution Contractors Association launched a microsite, www.dcatrenchless.com, during the DCA Virtual Spring Meeting in early March. The site's multimedia content gives users a concise, basic overview of the applications, techniques, equipment and tooling used in horizontal directional drilling and trenchless. Topics also include drilling fluid's purpose, environmentally friendly additives and the recycling process.

#### **CASE ReNew Centers** launches in partnership with dealers

CASE Construction Equipment launched its first CASE ReNew Centers in partnership with dealers Associated Supply, Hills Machinery and RPM Machinery. The centers will inspect, service and recondition CASE lease returns and/or other used CASE

equipment, which will then be sold through CASE dealers in highly populated equipment markets. CASE ReNew Centers also feature certified technicians in the network and will offer reconditioning services for used equipment, including CASE as well as other brands.

#### Vacuum Truck Rentals named authorized service center

Vacuum Truck Rentals has partnered with GapVax and Kaiser Premier and is now an authorized warranty and service center for both manufacturers. As an authorized warranty and service center, each of VTR's 16 locations will provide service, repair and warranty work for GapVax and Kaiser Premier equipment.







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#### **CALENDAR**

#### Sept. 28-30

**The Utility Expo**, Kentucky Exposition Center, Louisville, Kentucky. Visit www.theutilityexpo.com.

#### Oct. 12-15

Common Ground Alliance (CGA) Excavation Safety Conference & Expo, Orange County Convention Center, Orlando, Florida. Visit www.cgaconference.com.

#### Oct. 16-20

**94th Annual Technical Exhibition and Conference (WEFTEC),** McCormick Place, Chicago. Visit www.weftec.org.

#### Oct. 19-2

Tunneling Association of Canada (TAC) 2020-One Toronto: Vision Underground, Hilton Toronto, Toronto, Ontario, Canada. Visit tac2020.ca.

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## Nissan Stadium Parking Lot

### **Confirmed Nashville Exhibiting Companies:**

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**Bucher Municipal North America** 

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Duracable Manufacturing Co.

Electric Eel Mfg.

GapVax, Inc.

Harben, Inc.

ITI Trailers & Truck Bodies, Inc.

Jet-Vac Equipment Co., LLC

**KEG Technologies, Inc.** 

Logiball, Inc.

National Vacuum Equipment, Inc.

Patriot Sewer Equipment & Repair

**Picote Solutions** 

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SewerProShop, LLC Stringfellow, Inc.

**Super Products LLC US Jetting** 

Vacall

Vac-Con, Inc.

Visual Imaging Resources (VIR)

Vivax-Metrotech Corp.

## Register for FREE online at: weqfair.com

### **Future Locations** and Dates:



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Tempe, AZ April 13-14, 2022

















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