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SHOP TALK

DIGITAL DOCUMENTATION TRANSFORMS UNDERGROUND CONSTRUCTION

> Beau Feerick Field Supervisor Hydrovac Solution

PROVIDING SOLUTIONS

Contractor finds innovative growth through strategic personnel and collaboration

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ON THE COVER:

Beau Feerick, a field supervisor and hydrovac operator for Hydrovac Solutions (a division of Pipeline Solutions), sets up a job site as he prepares to use the company's new 2024 Peterbilt Tornado F4 hydrovac unit in Beaumont, Texas. The company takes on jobs throughout the Gulf Coast and to the East Coast of the U.S. (Photography by Jon Shapley)

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WE LOVE TO RECOGNIZE THE SPIRIT OF THOSE WHO TAKE ON THESE TOUGH JOBS DAY IN AND DAY

OUT. THEIR COMMITMENT TO EXCELLENCE, THEIR WILLINGNESS TO EMBRACE CHALLENGES HEAD-ON, AND THEIR UNWAVERING DEDICATION TO ADVANCING THE FIELD INSPIRE US ALL.

Embracing Challenges

TACKLING THE TOUGHEST JOBS IN HDD, TUNNELING AND VACUUM EXCAVATION

BY CORY DELLENBACH, EDITOR

n the world of underground construction, you often find yourselves faced with challenges that seem insurmountable. From navigating through densely populated urban areas to traversing rugged terrains, the demands

on horizontal directional drilling, tunneling, trenching and vacuum excavation professionals are ever-evolving. Yet, it's these challenges that drive innovation, foster expertise and define our industry's resilience.

Just a few months ago I was sitting in classroom sessions at the 2024 NASTT No-Dig Show hearing contractors, engineers and customers like municipalities and utilities, talking about some of these jobs that they've undertaken.

These jobs included seemingly impossible horizontal directional drill jobs miles and miles long with bends and curves all over the place. Or tunneling projects that needed to be done fast to resolve problems.

Every project talked about was a success and it was great hearing how they accomplished some of these jobs and what they had to go through to do that.

NO EASY TASK

As editor of *Dig Different*, I've had the privilege of hearing firsthand from contractors like you about the remarkable feats accomplished by companies like yours. Whether it's the installation of critical utility lines beneath bustling city streets or the creation of intricate underground passages, the individuals and teams dedicated to these tasks embody the spirit of perseverance and ingenuity.

Horizontal directional drilling, with its ability to minimize surface disruptions while installing pipelines and conduits, continues to be a cornerstone of modern infrastructure development. However, as projects push the boundaries of technology and geography, HDD contractors find themselves confronted with increasingly complex scenarios. Yet, with advanced drilling techniques, state-of-the-art equipment and a wealth of experience, they rise to the occasion time and time again.

Tunneling, too, presents its own set of challenges. Whether carving through solid rock or navigating beneath water bodies, tunneling projects demand meticulous planning, precise execution and unwavering dedication to safety. Yet, with advancements in tunnel boring technology and engineering expertise, these endeavors not only conquer the physical obstacles but also pave the way for future innovation and connectivity.

In vacuum excavation, where precision and efficiency are paramount, professionals like Hydrovac Solutions profiled in this issue — adeptly navigate a delicate balance between excavation speed and site integrity. As they uncover buried utilities and unearth critical infrastructure, they do so with a precision that ensures both project success.

HIGHLIGHTING THOSE TOUGH JOBS

We love to recognize the spirit of those who take on these tough jobs day in and day out. Their commitment to excellence, their willingness to embrace challenges head-on and their unwavering dedication to advancing the field inspire us all.

As we look ahead, let us continue to push the boundaries of what's possible, to embrace innovation, and to tackle the toughest jobs with confidence and determination. You will continue to shape the underground landscape, building the foundations for a brighter, more connected future.

If you've recently completed a project that you'd love to share about, email me at editor@digdifferent.com.

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PROVIDING SOLUTIONS LOUISIANA-BASED SERVICE COMPANY FINDS A UNIQUE WAY

LOUISIANA-BASED SERVICE COMPANY FINDS A UNIQUE WAY TO ADD SERVICES AND BECOME A ONE-STOP SHOP FOR CLIENTS, WHILE ALSO MAKING A COMMUNITY IMPACT

STORY: CORY DELLENBACH PHOTOS: JON SHAPLEY



There are many ways to grow a company from acquisitions to additions of services and everything in between. Kenny Lacoste, however, found a different way to grow his little company. That method was by bringing on people that he knew were proven in the industry and allowing them to bring

in customers to help the company grow. What began as a humble venture with Pipeline Solutions has blossomed into a multifaceted company, comprising five divisions and spanning a service area that stretches from the Gulf Coast to the Eastern Seaboard. One of those divisions spurred was Hydrovac Solutions, which came to fruition at the end of 2021.

With headquarters in Slidell, Louisiana, and satellite locations strategically scattered across Louisiana and Texas, Hydrovac Solutions stands as a testament to ingenuity, perseverance and a commitment to community.

EXPANSION BEGINS

Lacoste's journey began with Pipeline Solutions, laying the groundwork for what would evolve into a comprehensive suite of services catering to the diverse needs of clients across industries from environmental remediation to pipeline maintenance. "EXCAVATION CAN BE DANGEROUS ESPECIALLY AROUND PIPELINES. OUR HYDROVAC AND PIPELINE MAINTENANCE DIVISIONS WORK IN TANDEM, ENSURING SAFETY AND EFFICIENCY IN EVERY PROJECT." Jamie Johnson



Hydrovac Solutions, a division of Pipeline Solutions, often works in tandem with other branches of the company, including the Environmental Solutions division.

"The company started with Pipeline Solu-

tions, but it was in 2017 that we expanded our horizons with the addition of the Environmental Division," says Jamie Johnson, a manager with Pipeline Solutions. "This expansion marked a turning point, setting the stage for further growth and diversification."

Lacoste wanted to grow the company to be more of a one-stop-shop for customers. Each division created was carefully curated and fielded by a network of industry veterans.

"When it was time to push into hydroexcavation, we reached out to Walter Vincent, who I had known since 2012 and we offered him a position to start this new division with us," says Johnson. "We've added the divisions by bringing in people we've networked with over the years in the industry."

Vincent jumped aboard in 2022, and later that year Hydrovac Solutions was born. He now leads the hydroexcavation division as operations manager.

Feerick dons his personal protective equipment before starting the day's work. The company spotlights its safety program which it adopted from ExxonMobil. "We started with one truck," says Heather Spradley, business development manager for Hydrovac Solutions. "Now we boast a fleet of 12 hydrovac trucks, alongside an air-vac truck."

Spradley, who started with the company in June 2022 remembers her first week well, recalling that she had a customer who called and they needed three trucks. At that time they still only had one truck.

"I didn't know what I was going to do," Spradley says. "We were waiting for trucks to come in. We had them on order, but we didn't have them yet. We were reaching out to contacts and they were kind of covering us until we could get our trucks."

This rapid expansion underscores the company's capacity for adaptation and its unwavering commitment to meet evolving demands.

"We had so many customers that we had built relationships with in the past and continued to grow," Johnson says. "They always reached out to us when they needed something, so we grew fast."

Hydrovac Solutions (a division of Pipeline Solutions) Slidell, Louisiana

OWNER:	Kenny Lacoste
EMPLOYEES:	184 (across all five divisions)
SERVICES OFFERED:	Pipeline construction and maintenance which includes right of way maintenance, full-service environmental (demolition, asbestos, lead abatement, vacuum truck services [waste hauling], tank cleaning), hydrovac/air excavation, electrical and instrumentation
SERVICE AREA:	All of the Gulf South region to the East Coast
WEBSITE:	pipelinesolutionsllc.com/hydrovac
SOCIAL MEDIA:	linkedin.com/company/hydrovac-solutions-llc

OVERCOMING TRUCK CHALLENGES

One of the first challenges the new division faced early on was the COVID pandemic and the availability of truck chassis for its trucks on order from manufacturers.

"We were six months out on some of the ones we

ordered," Johnson says. That dilemma has since eased and the company has transitioned to using Custom Truck One Source for most of its hydrovac trucks.

"We met the folks of Custom Truck at a trade show in Vegas (CONEXPO-CON/AGG) and those guys had the ability to let us try Tornado trucks," Johnson says. "We got one and loved the truck. Walter felt it was better than some of the other trucks we had been using, and Custom Truck and Tornado were just there for every truck we needed after that."

Hydrovac Solutions' vacuum excavators are all Tornado F4 Eco Lites, with the oldest being a 2020 model. The company also has an air-vac unit in its fleet, an MTS Dino (OX Equipment). It's a side-dump unit that the company uses on sites where water can't be used and soil can be dumped back on the site.

"When you go out to these facilities in West Texas, water is hard to get," Johnson says. "If you have to truck water out there, it's going to cost the customer a lot of money. They'll get our air excavator out there. It runs a little slower and doesn't excavate as fast as hydro, but it's just dirt, so we can just dump it right back on site."

In fact, one customer has now started to request that air-vac unit all the time.



"WE WANT TO STAND OUT AND MAKE A DIFFERENCE." Jamie Johnson

Some of the leadership team at Hydrovac Solutions includes, from left, Jamie Johnson, a manager with Pipeline Solutions (parent company); Beau Feerick, field supervisor; and Heather Spradley, business development manager for Hydrovac Solutions.

"They decided that it's a better fit for them because it's so expensive to find dump sites nearby," Spradley says.

The company overall uses several other pieces of equipment throughout its divisions, including vacuum trucks and tanker vacs to haul large quantities of water and wastewater for the environmental division, as well as closedin mowers and a long-armed trimmer for the right-of-way division.

Software used by Hydrovac Solutions includes Homebase to dispatch trucks and Cleargistix on tablets that crews have with them in the field to help with job tickets.

WORKING TOGETHER

Central to Hydrovac Solutions' success is its collaborative approach, bridging the gap between divisions to deliver seamless solutions.

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The Key to Safety

Safety lies at the core of Hydrovac Solutions' mentality, a commitment ingrained in its DNA from its inception.

"Kenneth, the owner of Pipeline Solutions, previously worked for a construction company and maintenance company that was a contractor for ExxonMobil and when he started this company he adopted ExxonMobil's safety program," says Jamie Johnson, a manager with Pipeline Solutions.

By drawing inspiration from the oil company's stringent safety protocols, the Hydrovac Solutions has maintained a remarkable record, boasting 10 years without an OSHA recordable injury.

Heather Spradley, business development manager, attributes this achievement to the company's emphasis on hiring individuals who prioritize safety and take pride in their workmanship.

"The key to safety is finding the right people," Spradley says. "People that are safe, that take pride in their work and don't rush and I think that makes everything that much safer. Taking your time, doing your job and doing the safety training."

Prior to each job, company staff will go through a checklist of what can happen in regards to workplace safety and following the job, they'll meet again to see if there was anything that could have been done differently.



Sporting a hard hat and safety shield, Feerick uses the digging wand to pothole for utilities at a job site in Beaumont, Texas.

"Excavation can be dangerous especially around pipelines," Johnson says. "Our hydrovac and pipeline maintenance divisions work in tandem, ensuring safety and efficiency in every project." This integration not only streamlines operations, but also enhances the company's ability to address complex challenges with agility and precision.

If the company is doing an integrity dig at a pipeline location and an anomaly is detected, Johnson says it's easy to work through because they have their other divisions available to help immediately.

"We've got our pipeline maintenance team that can repair that anomaly," Johnson says. "When they're out there and they discover that it's asbestos coated, then our environmental division goes out."

Many of Pipeline Solutions team members are cross-trained for the various divisions.

"A majority of the guys are cross-trained, and I think that's one advantage for us because if one division is slower, we can use employees on another division," Spradley says. "We've been able to do that from time to time, but we're fortunate because we don't have that much slow time either."

HELPING OTHERS

Hydrovac Solutions' impact transcends the realm of commerce, extending into the realm of social responsibility. Johnson recounts a poignant moment



Feerick reels the water hose back into the cabinet of the Tornado F4 hydrovac.

following a devastating hurricane northeast of New Orleans, where the company's hydrovac trucks played a crucial role in restoring normalcy.

"These towns were covered in mud," she recalls. "Residents couldn't even get into their homes, so we went in there with three hydrovac trucks and we blew out driveways, cleared culverts and opened up roadways." This act of service underscored the company's ethos of giving back to communities in times of need.

Crews had nowhere to stay during that event as hotels were full from residents who lost homes, so company staff working in the area converted their company headquarters in Slidell into a makeshift place to stay.

"We put a bunch of air mattresses and beds and other things in and our crews stayed at our office," Johnson says.

It was that event when the company knew they needed more trucks.

"During events like that, you cannot find trucks," Spradley says. "They're in such high demand after hurricanes and storms because everyone is calling on them. There are times we could use 20 more trucks and we'd keep them busy."

PLANNING FOR THE FUTURE

Looking ahead, Hydrovac Solutions is poised for continued growth and innovation. With a focus on expanding its clientele and solidifying its presence in the market, the company remains steadfast in its mission to be the quintessential solution provider.

"We want to stand out and make a difference," Johnson says. "We have a great team and we've all worked together a long time, and I think our goal for the future is just to continue to grow and build our clientele and just see where the future leads us."

As Hydrovac Solutions charts a course into the future, it does so with a sense of purpose and unwavering dedication. From its humble beginnings in Slidell to its expansive footprint across the Gulf South, the company serves as a beacon of inspiration, embodying the transformative power of perseverance, collaboration, and community stewardship.



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Unraveling Complexity

SIMPLER APPROACHES TO SERVING CUSTOMERS WILL IMPROVE THEIR EXPERIENCE, ENCOURAGING THEM TO CALL AGAIN AND AGAIN

BY KATE ZABRISKIE

ho designed this convoluted process? A monkey could have done a better job."

"Why do I have to come in and talk to someone? This whole transaction could be handled online. Frustrating!"

"I dread going there. The parking lot is impossible to navigate, you fill out what seems like 8.000 forms before you see anyone, and often the staff is confused by the complexity of the processes they follow. I'm glad I only have to go there once or twice a year."

Every day, countless service providers make choices that unnecessarily complicate service interactions. At best, those decisions make the customer experience less enjoyable. At worst, unneeded complexity opens the door to complaints, bad reviews and competitors.

GOOD & SIMPLE

Organizations that know the value of simplicity strive to streamline processes and eliminate rocks on the service-experience road. Furthermore, those who understand the Kate Zabriskie

importance of effortless service know achieving it is an ongoing group effort. From the boardroom to the service window, everyone from top to bottom diligently works to eradicate needless steps, complexities or jargon that may confuse customers and obstruct them from reaching their goals.

EXAMPLES OF THE PAYOFFS

Streamlined processes: Simplifying processes, procedures and workflows eliminates unnecessary complexities, making customer interactions more efficient and effortless.



ORGANIZATIONS THAT KNOW THE VALUE OF SIMPLICITY STRIVE TO STREAMLINE PROCESSES AND ELIMINATE ROCKS ON THE SERVICE-EXPERIENCE ROAD.

Clear communication: Using straightforward language ensures product information, instructions and policies are easily understandable, creating a faster customer experience.

Intuitive navigation: Creating intuitive interfaces helps customers quickly find what they need without clicking on the wrong link, going to the incorrect location or calling the wrong number.

Reduced cognitive load: Organizing information and choices in a clear and logical manner helps customers make confident decisions, reducing the likelihood of buyer's remorse, returns or calls to the help desk.

Efficient problem resolution: Providing simple and accessible channels for customer support enables quicker problem resolution.

User engagement: Presenting information or products in a simplified way makes customers want to use a service provider.

WE'RE DIFFERENT

My business is complicated! We're not running a hamburger stand or a retail store. Our product is highly technical. While not every interaction is basic, all service providers can make interactions easier. No matter who you are, there are opportunities to streamline design, usability, communication, accessibility and problem resolution.

Obvious opportunities: If you open your eyes, many problems are

obvious. Here are a few of the usual suspects: complex payment process, inefficient customer relationship management systems, excessive use of industry jargon, multiple contact attempts.

Other places to explore: In addition to the easy-to-find improvement opportunities, most teams can find more if they start asking questions:

- 1. Is our product or service easy to understand?
- 2. Is our website or physical location easy to navigate?
- 3. Can customers easily find the information they need?
- 4. Are our pricing and billing practices transparent and easy to understand?
- 5. Can customers quickly contact us when they need to?
- 6. Is our customer service process straightforward and efficient?
- 7. Are we using plain language in our communications or relying too much on jargon?
 - 8. Are our processes designed with the customer's convenience in mind?
 - 9. Are we offering simple, efficient solutions to customer problems?
 - 10. Can customers easily purchase our products or services?

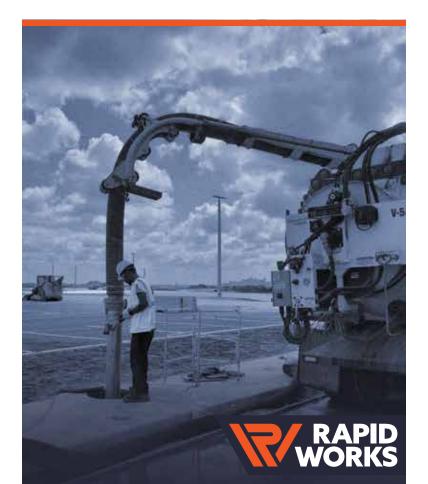
11. Do customers have to go through unnecessary steps or complexities to achieve their objectives?

12. What feedback are we getting from customers about the ease of their experience?

The frontline is a gold mine: Organizations that take simplicity seriously know the goldmine of information frontline service representatives can provide if they are encouraged to bring issues to management.

(continued)





BETTER HYDROVAC OPERATIONS WITH RAPIDWORKS

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Routine complaints: For every customer who voices dissatisfaction, three or four others will say nothing. Organizations that treat service seriously see complaints as canaries in the coal mine, and they encourage service representatives to track concerns and bring them forward.

Multiple contact attempts: If customers need to contact your company multiple times for the same issue or related issues, there's a problem and an opportunity to simplify the resolution process. Frontline representatives are almost always the first to recognize boomerang interactions.

Poorly defined policies: Confused and confounded customers are the result of poorly defined policies. Representatives who must manage them know when guidelines or rules are ill-defined.

Lack of training and tools: Frontline service providers are also acutely aware when they don't know the answer, can't get a system to cooperate or must implement a workaround.

KEEP IT SIMPLE

Once you start looking, it's easy to become overwhelmed by the amount of work involved to make things easy. Take a breath, and then take another. Just as most processes don't become convoluted overnight, it takes time to go in the other direction.

Start with straightforward fixes to build momentum. Next, prioritize what is easier to implement and what will have the most impact on the customer experience. Then get to work.

ABOUT THE AUTHOR

Kate Zabriskie is president of Business Training Works Inc., a Maryland-based talent development firm. Reach her at www.businesstrainingworks.com. ▼

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Product Focus: VACUUM EXCAVATION

BY CRAIG MANDLI

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Pacific Tek AIR KING

The AIR KING air and hydroexcavation trailer from Pacific Tek is available with a 500- or 800-gallon-capacity debris tank made of carbon steel and sandblasted then powder coated inside and out. It



employs a 185 cfm compressor with 100 psi output connected to an air wand allowing the operators to return the spoils collected in the debris tank to the ground. The system also has a pressure washer system (4 gpm at 3,500 psi) in case the operators want to hydroexcavate for faster or deeper digs. A simple three-way valve selector switch is situated on the curbside of the trailer for easy toggling from vac to air to hydroexcavator functions. The trailer itself is made of carbon steel and is sandblasted then powder coated like the debris tank. Options include a telescoping vacuum hose boom, reverse flow feature, LED work lamps, spare tire and mount, and a tool storage box.

800-884-5551; www.pacific-tek.com

RAMVAC Vacuum Excavators by Sewer Equipment Tempest

The Tempest industrial air mover from RAMVAC Vacuum Excavators by Sewer Equipment is capable of removing dry and liquid materials over a long distance and



from great depths. This unit delivers maximum vacuum efficiency even in the toughest working conditions. While utilizing high suction from a 28 inches Hg, 5,500 cfm positive-displacement blower through an 8-inch system, this unit offers a self-discharging filter system that provides automatic interval cleaning of the filter house during vacuum operations. This system significantly reduces the downtime associated with premature cleaning of the baghouse when the debris box is not full. It allows operators to keep working, while recognizing maximum debris capacity. Additionally, its hydraulically powered articulating extendable knuckleboom is exclusive in the marketplace. With 270-degree range of motion and 16-foot working length, this boom hinges back and forth, providing maximum support of the vacuum tube for increased operator ergonomics as well as cleaning efficiency.

888-477-7638; www.sewerequipment.com

Blower

National Vacuum Equipment B500

The B500 high-vacuum tri-lobe blower from National Vacuum Equipment comes fully assembled with a Yanmar 36.8 hp diesel engine or Vanguard 37 hp gasoline engine with a 50-amp



alternator. The high-pressure water pump is 4.0 gpm at 4,000 psi with adjustable pressure settings, and has a 12-volt electric clutch. The unit is equipped with a four-way vacuum/pressure changeover valve that allows the unit to operate in vacuum or pressure, high-crank capacity battery, E20 coupler, pressure relief valves, lighted control panel with additional switch accommodations, intake and exhaust silencer, integral flush kit for blower, and powder coated steel frame. Each unit has easy service points for easy maintenance. **800-253-5500; www.ngtvac.com**

Boom and Boom Accessories

Mr. Manhole Cookie Cutter System

The Mr. Manhole Cookie Cutter System involves drilling a small hole above the utility, using the cutter to remove a 74-inch round asphalt or concrete piece of pavement. This keeps workers 56% below OSHA limits. The removed "cookie" is then lifted out, and a protective cage is placed for vacuum excavating. This method exposes the utility for repair while preserving the road base. The result is a smooth, clean repair aligning with the road's original design. This approach revolutionizes road and utility repairs, making the process quicker and more efficient.



833-242-2221; www.mrmanhole.com

Hose and Hose Accessories

Kuriyama of America Alfagomma T704HA Series THE BOOMER

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 blend cover provides abrasion and ozone resistance. The hose can be grounded. All sizes are rated to full vacuum and a pounds-per-square-inch safety factor of 3-to-1 for 2-to-8-inch hose and 2.5-to-1 for 10-inch hose. 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

Hot Water Boilers

Easy-Kleen Pressure Systems hot-water heaters

Oil-fired hot-water heaters from Easy-Kleen Pressure Systems are install-ready for vacuum and hydrovac trucks. These rugged, heavy-gauge frames offer durability even in severe road and weather conditions.



A full range of heater options is available including dry steam, redundancy packages, schedule 80 and 160 stainless steel or A53 boiler pipe, and fine-tuned temperature and flow control systems. Their coils are manufactured in-house. (CRN Boiler Approved Coils now available). These heaters can be mounted in a cabinet or supplied as a completed cabinet unit ready to install. **800-315-5533; www.easykleen.com**

Dynablast HV420F-12VRED

The Dynablast HV420F-12VRED hydrovac water heater produces 420,000 Btu with an output temperature of 175 degrees F at 5 gpm, making it suitable for colder climates and improved digging in clay-filled areas. All models come with ETL certification for safety, which also includes certifica-



tion on the coil for higher efficiency and heat transfer, a stainless steel target plate for increased coil life and a design with serviceability in mind utilizing momentary override control. A 19-by-19-inch footprint makes it suitable for compact installations.

905-867-4642; www.dynablast.ca

Hydroexcavation Trucks and Trailers

Ditch Witch Warlock W12

The Warlock W12 from Ditch Witch is a PTO-driven vacuum excavator that offers dual 600-gallon saddle tanks and a 12-cubicyard debris tank, bringing increased capac-





ity and performance to the job site. Available with a 5,000 cfm blower and 27 inches Hg of vacuum power, it helps operators take on bigger jobs and maximize job site uptime.

580-336-4402; www.ditchwitch.com

GapVax VHX Series

The GapVax VHX Series hydrovac is designed for optimal weight distribution, improved safety features and improved performance. The debris body is 7.5 cubic yards, offering a 15,000-pound payload. The low profile (12 feet, 2 inches) makes



it suitable for all-around hydroexcavation projects. The vacuum system with single mode wet/dry filtration is quiet, reliable and simple, according to the maker. It includes a 4,000 cfm positive displacement blower, 600-hp transfer case with air-shift engagement and ultra-quiet air injection, and discharge silencers. This filtration design includes a top-loading debris tank, 14-inch stainless steel float-ball shut-off, efficient centrifugal cyclone separators and long-lasting filter bags. It is equipped with a 12 gpm, 3,000 psi water system with optional 200 cfm air compressor system. A full-tilting debris body, over 45-degree dump angle and full-opening tailgate promote fast unloading and easy clean out. The 8-inch telescoping VHX boom offers a 22-foot reach with 15-degree downward pivot.

888-442-7829; www.gapvax.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 jetters 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

KAISER PREMIER CV Series

The CV Series line of hydrovacs from KAISER PREMIER include a powerful 27-inch Hg, 6,250 cfm Robuschi DV145 positive displacement blower. The unit comes ready to dig with its Top Gun boom that allows 342-degree rotation and a 26-foot reach or 20-foot depth without clamping on extension

Product Focus: VACUUM EXCAVATION

pipes. It carries 1,800 to 2,200 gallons of water depending on the model. Material evacuation is simple with the wide-mouth door. There is no need to raise the truck bed, as the sloped floor uses gravity, a high flow washout system, and optional dozer plate to quickly and easily offload material. All critical components are centralized and housed in a protected, insulated and heated van body. **970-542-1975; www.kgiserpremier.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 and 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 prior to nondestructive excavating.

403-550-7997; www.rivalhydrovac.com

Sharp Equipment EV4

The EV4 from Sharp Equipment is an all electric hydroexcavator that offers up to 1,000 cfm and 20 inches of mercury in a tri-lobe blower. The water pump is variable from 1,000 to 3,000 psi at 4 gpm. It is a direct-drive sys-



tem with two electric motors; one driving the water pump and the other driving the blower. Being direct drive, there are no pulleys, belts, clutches or tensioners, which results in less maintenance. Being electric and direct drive results in higher efficacy and lower noise levels, resulting in a quiet, powerful unit. It is designed to operate an 8- to 10-hour day and takes about 6 hours to charge. It has a standard remote control for the blower to assist with battery run time. The 45 kWh, 400-amp hour battery is rated at 4,000 duty cycles and is designed and built by Sharp.

918-607-0130; www.sharpequipmentusa.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 maxi-



mizing 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-inchdiameter 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

TRUVAC FLXX

The TRUVAC FLXX offers a safer and more efficient way to dig while reducing the risk of damage to underground utilities. Digging safe is at the core of the TRUVAC, ensuring



that excavation projects are completed without any accidents or disruptions. By utilizing the unit, contractors and utility workers can confidently tackle any digging project with peace of mind.

815-672-3171; www.truvac.com

Vac-Con X-Cavator

The X-Cavator hydrovac from Vac-Con includes a cold-weather enclosure for the water systems and control panel as well as an interior area for operator seating and workspace. Unit filtration is based on the



Titan combination machine, with a single-cyclone design and final cartridgestyle 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

Nozzle

Hydra-Flex Machete

Hydro-excavate with the power and precision of the Machete from Hydra-Flex. This linear oscillating nozzle combines the penetration of a straight tip with the movement of a rotating tip. The long stream and powerful slicing motion dig faster and penetrate



deeper in compact soil, which makes it the ideal tool for trenching, sloping and bell holing. The motion has incredible ergonomics, which results in less movement for the operator and means less wear and tear on the user over time. Its 0-degree straight-water stream oscillates to create a 15-degree wedge that efficiently digs and promotes safe use on and around underground utilities. It is engineered to be field-repairable to extend the nozzle's life.

952-808-3640; www.hydraflexinc.com 🔻



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Success Stories:

VACUUM EXCAVATION

BY CRAIG MANDLI

Challenge of repairing rural waterlines in an urbanizing area

PROBLEM

Bear Creek Water Association provides water and sewer services to around 50,000 people in Madison County, Mississippi. The system includes pipes of varying sizes. As urbanization increases, so do challenges with utilities like electric lines and sidewalks. Originally serving rural areas, BCWA now also serves subdivisions and commercial areas, leading to an increase in line repairs. The team primarily uses trackhoes and mini-excavators for repairs, although these can cause additional damage in some cases. BCWA sought alternative digging methods to minimize utility damage during repairs.

SOLUTION

They found a solution in Madison County's horizontal directional drilling crews' use of vacuum excavators for precise digging with minimal ground disturbance. Seeing potential beyond potholing, BCWA, in 2017, purchased a **Vermeer VX50 vacuum excavator**, ideal for Madison County's Yazoo Clay conditions and the depth of buried utilities, ranging from 3 to 6 feet. This acquisition enhanced efficiency in repairing water lines.

RESULT The BCWA team utilizes a vacuum excavator to dig around utilities. This approach helps to minimize the size of the repair working area and helps maintain a cleaner site. By using this method, the team has been able to eliminate the need to repour driveways, resod yards and incur additional costs from damaging nearby utility lines in certain situations. Furthermore, using a vacuum excavator provides a more efficient and less physically demanding method and the need for manual labor with shovels.

352-728-2222; www.vermeer.com ▼



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Vacuum Excavatio	n'20	24		Debris Body	Dalaria D	Dah P	Water Tank	Standard Water Pure	Standard	Eilane ¹
DIRECTORI	MODEL NAME	TYPE	Style	Capacity (cv. yards)	Debris Door (dimensions)	Debris Body (dump angle)	Capacity (gallons)	Water Pump (gpm & psi)	Blower (hg & cfm)	Filtration Type
Ditch Witch 1959 W. Fir Ave. Perry, OK 73077-0066	W12	Hydro	Chassis	12		36 degree	1,200	20 gpm 2,800 psi	5,000 cfm	Cyclonic
tf:800-266-3255 www.ditchwitch.com	HX30G	Hydro	Trailer				500/800	4.2 gpm 3,000 psi	15″ hg 542 cfm	Washable polyester
See ad on pages 16-17	HXT75	Hydro	Chassis				500/800/ 1,200	5.5 gpm 3,000 psi	16″ hg 1,315 cfm	
Foremost Stettler 5221 46 Street	Foremost 1200	Hydro	Chassis	10	44" x 48" 4" and 6" Heated decant valves		1,200	25 gpm 3,000 psi	28″ hg @3,850 cfm	Cyclone and cartridge
Stettler Alberta tf: 800-661-9190, ext. 5851 p: 403-988-7626 www.foremost.ca sales@foremost.ca	Foremost FVS 1600	Hydro	Chassis	13	48" x 58" 8" and 6" Heated decant valves		1,600	25 gpm 3,000 psi	28″ hg @3,850 cfm 28″ hg @6,400 cfm	Cyclone and cartridge
GapVax, Inc. 575 Central Ave. Johnstown, PA 15902	GapVax VHX	Hydro	Chassis	7	Fully opening	50 degree	750	13 gpm 3,000 psi	28″ hg 4,000 cfm	Wet/dry single mode
tf: 888-442-7829 p: 814-535-6766 f: 814-539-3617 www.gapvax.com Inquiry@gapvax.com See ad on page 43	HV55 Hydrovax	Hydro	Chassis	12 1/2	Fully opening	50 degree	400-1,400	5-40 gpm 2,000-5800 psi	28″ hg 5,250 cfm	Wet/dry single mode
	HV56 Hydrovax	Hydro	Chassis	15	Fully opening	50 degree	400-1,200	5-40 gpm 2,000-5800 psi	28″ hg 5,250 cfm	Wet/dry single mode
Guzzler Manufacturing 1621 S. Illinois St. Streator, IL 61364 p: 815-672-3171 www.guzzler.com sales@guzzler.com	Guzzcavator	Hydro	Chassis	16 or 18	3/4 or full	50 degree	600 or 1,300	10 gpm / 2,500 psi 20 gpm / 2,500 psi	27″ hg 5,250 cfm	1st Stage: Radial Diversion Wing 2nd Stage: Cyclone Baghouse Chambers 3rd Stage: 60 70-inch bags provide a 9.94-to-1 air-to-cloth ratio 4th Stage: Microstrainer

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
26 ft.	340		Remote	No					winterization lighting tool boxes cabinets	
				No					winterization	
14 ft.	270		Remote	No					winterization tool boxes cabinets	
8" x 26 ft.	340	Sloped debris floor and centrifugal pump tank flush	Curbside	Yes	3,850 cfm	Transfer case			winterization lighting	Light Package Backup Cameras Airweigh System Re-circ Pump
8" x 26 ft.	340	Sloped debris floor and centrifugal pump tank flush	Curbside	Yes	3,850 cfm 6,400 cfm	Transfer case			tool boxes racks cabinets	Light Package Backup Cameras Airweigh System Re-circ Pump Sludge Pump
22 ft. reach with 15 degree downward pivot		Decant and fully opening tailgate	Curbside	Yes						21 filter bags; the following options: On-board scales with digital readout stops lading when set target is reached; 200 cfm air compressor; vertical heated cabinet for water system; water heater; glycol injection
17-25 ft. reach from center of truck	270	Decant and fully opening tailgate; auger and sludge pump options available	Curbside and driver's side, location varies depend- ing on options	Yes					winterization lighting tool boxes racks cabinets	34 filter bags; 5 cyclones for superior filtration; safe working area on top of truck; various options available
17-25 ft. reach from center of truck	270	Decant and fully opening tailgate; auger and sludge pump options available	Curbside and driver's side, location varies depend- ing on options	Yes					winterization lighting tool boxes racks cabinets	Optional 200 cfm air compressor; 28" hg blower, 6,000 cfm
8″ diameter	320	Dumping, tilting debris body	Curbside	Yes	185 cfm/ 150 psi or 300 cfm/ 250 psi	Chassis			winterization lighting tool boxes cabinets	Water Heater, Rear-Mounted Sludge Pump Air Purge, Extendable Boom Up to seven hours of continuous operation between refills Multiflow pump water system with push button adjustment Telescoping boom for greater job site access Superior air routing and filtration process with the lowest pressure drop of any machine in its class

acuum Excavati			Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Body (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)	Standard Blower (hg & cfm)	Filtration Type
Hi-Vac Corporation 117 Industry Rd. Marietta, OH 45750	X-Vac X-8 Hydro Excavator	Hydro & Air	Chassis	8	67" diameter, full opening	45 degree tank tilt	575	10-20 gpm 3,000-4,000 psi	27″ hg 3,125 cfm	Cyclone plus cleanable 85 micron inlet filter
f: 800-752 2400 b: 740-374-2306 www.x-vac.com bales@hi-vac.com bee ad on page 37	X-Vac X-13 Hydro Excavator	Hydro & Air	Chassis	13	67" diameter, full opening	45 degree tank tilt	1,150	10-20 gpm 3,000-4,000 psi	27″ hg 5,775 cfm	Cyclone plus cleanable 85 micron inlet filter
	X-Vac X-15 Hydro Excavator	Hydro & Air	Chassis	15	67" diameter, full opening	45 degree tank tilt	1,650	10-20 gpm 3,000-4,000 psi	27" hg 5,775 cfm	Cyclone plus cleanable 85 micron inlet filter
KAISER PREMIER KAISER PREMIER 2550 East Bijou Ave.	CV Series	Hydro	Chassis	11-13	96" x 48" half round	19 degree floor	1,800 - 2,250	20 gpm 3,000 psi	28″ hg 6,600 cfm	3 stage
Fort Morgan, CO 80701 p: 970-542-1975 http://www.kaiserpremier.com sales@kaiserpremier.com	UrbanX	Hydro	Chassis	8	67" diameter	35 degrees	800	10 gpm 3,000 psi	28″ hg 2,400 cfm	3 stage
Ox Equipment Inc. 1343 Sandhill Dr.	MTS Dino 4.5	Air	Chassis	6	Side dumping	138 degrees	Not Needed Slurry Free	Not Needed Slurry Free	Twin Fan Turbines	Automatic Self-Cleaning System Polyester Cartridge
Ancaster, ON L9G 4V5, Ste. 101 f: 888-290-4044 www.ox-equipment.com nfo@ox-equipment.com	MTS Dino 8	Air	Chassis	10.5	Side dumping	138 degrees	Not Needed Slurry Free	Not Needed Slurry Free	Twin Fan Turbines	Automatic Self-Cleaning System Polyester Cartridge
	MTS Dino 12	Air	Chassis	15	Side dumping	138 degrees	Not Needed Slurry Free	Not Needed Slurry Free	Twin Fan Turbines	Automatic Self-Cleaning System Polyester Cartridge
Presvac Systems 4131 Morris Drive Burlington, ON L7L 5L5	Presvac HydroX Mini	Hydro	Chassis	7	Full diameter Full opening		800	18 gpm 3,500 psi Adjustable flow and pressure	28″ hg 2,650 cfm	Cyclone and inlet Filter
ff: 800-387-7763 p: 905-637-2353 f: 905-681-0411 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	28″ hg 4,000-6,400 cfm	Two large cyclones and inlet filter

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
8" x 19 ft.	360	Tilt tank, optional sludge pump and tank vibrator	Cab, curbside and remote	Yes	3,125 cfm 13.25 psi	Chassis powerplant	Optional 200 cfm	Optional 200 psi	winterization lighting tool boxes racks cabinets	Limited lifetime water tank and debris tank warranty
8" x 25 ft.	360	Tilt tank, optional sludge pump and tank vibrator	Cab, curbside and remote	No	5,775 cfm 13.25 psi	Chassis powerplant	Optional 200 cfm	Optional 200 psi	winterization lighting tool boxes racks cabinets	Limited lifetime water tank and debris tank warranty
8" x 25 ft.	360	Tilt tank, optional sludge pump and tank vibrator	Cab, curbside and remote	Yes	5,775 cfm 13.25 psi	Chassis powerplant	Optional 200 cfm	Optional 200 psi	winterization lighting tool boxes racks cabinets	Limited lifetime water tank and debris tank warranty
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 bodie
5" 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
10" x 23 ft. Power Arm	180	Side Tipping	Driver's side	Yes	24,000 cfm	PTO to OMSI Transfer case	360 cfm	185 psi	lighting tool boxes racks cabinets	Hydrostatic ground drive system; Mega arm, stainless stee bin and lid, design panels, IKE excavation system, boom hose vibrators, container vibrators, high-rail system
10" x 23 ft. Power Arm	180	Side Tipping	Driver's side	Yes	24,000 cfm	PTO to OMSI Transfer case	360 cfm	185 psi	lighting tool boxes racks cabinets	Hydrostatic ground drive system; Mega arm, stainless stee bin and lid, design panels, IKE excavation system, boom hose vibrators, container vibrators, high-rail systen
10″ x 23 ft. Power Arm	180	Side Tipping	Driver's side	Yes	24,000 cfm	PTO to OMSI Transfer case	360 cfm	185 psi	lighting tool boxes racks cabinets	Hydrostatic ground drive system; Mega arm, stainless stea bin and lid, design panels, IKE excavation system, boom hose vibrators, container vibrators, high-rail systen
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
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

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acuum Excavat	MODEL NAME	TYPE	Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Body (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)	Standard Blower (hg & cfm)	Filtration Type
RIVAL Rival Hydrovac A division of Summit Truck Equipment Canada LTD)	Rival T7	Hydro Air Option	Chassis	7	54" Full opening rear door two-stage hoist	40 degree	800	10 gpm 3,000 psi	27″ hg 2,650 cfm	Cyclone and cartridge
690 Edgar Industrial Court ed Deer, AB T4N3R5 : 403-347-1400 /ww.rivalhydrovac.com m.dell@summitbodies.com ee ad on page 25	Rival T10	Hydro Air Option	Chassis	10	54" Full opening rear door two-stage hoist	40 degree	1,200	10 gpm 3,000 psi	27″ hg 3,850 cfm	Cyclone and cartridge
Super Products® Super Products LLC	Mud Dog 700 Vacuum Excavator	Hydro, Air Option	Chassis	7		50 degree	600	11 gpm 3,000 psi	18" hg 3,100 cfm or 27" hg 3,700 cfm	
Aukwonago, WI 53149 :: 800-837-9711 vww.superproducts.com	Mud Dog 1200 Vacuum Excavator	Hydro, Air Option	Chassis	12	Full opening rear		1,500	18 gpm 3,000 psi	28″ hg 5,800 cfm	
nfo@superproducts.com ee ad on page 7	Mud Dog 1600 Vacuum Excavator	Hydro, Air Option	Chassis	16	Full opening rear		2,000	18 gpm 3,000 psi	28″ hg 5,800 cfm	
TELLUS	TUT-5500	Air	Chassis	1.5	25″ diameter	55 degree	70	3.5 gpm 1,500 psi	15″ hg 1,200 cfm	Self cleaning 1.0 micron
Tellus Underground Technology 100 Hester St., PO Box 157 ortland, PA 18351 1: 866-579-9911	TUT-6500	Air	Chassis	2	25" diameter	55 degree	70	3.5 gpm 1,500 psi	15″ hg 1,200 cfm	Self cleaning 1.0 micron
: 800-379-9911 : 570-234-0325 570-245-0026 ww.tellusunderground.com yon@tellusunderground.com se ad on page 9	TUT-2001	Air	Trailer	1			70	3.5 gpm 1,500 psi	15″ hg 1,200 cfm	Self cleaning 1.0 micron
TRUVAC RUVAC 621 S. Illinois St.	АРХХ	Hydro	Chassis	12 or 14	3/4	50 degree	1,200	10 gpm 3,000 psi	27" hg 5,250 cfm	Dual Cyclone and 5 micron polyester final filter
treator, IL 61364 : 815-672-3171 /ww.truvac.com ales@truvac.com ee ad on back cover	нхх	Hydro	Chassis	12 or 15	3/4	50 degree	1,200	10 or 20 gpm 3,000 psi	18" hg, 4,970 cfm 28" hg, 5,200 cfm 28" hg, 6,176 cfm	Single or dual Cyclone and 5 micron polyester final filter
	FLXX	Hydro	Chassis	10	3/4	50 degree	800	10 gpm 3,000 psi	16" hg 3,200 cfm	Dual Cyclone and 5 micron
	Paradigm Hydro Air Chassis 3.34 3/4 50 degree 300 Air Only: 100 8 gpm 2,500 psi 15" hg 2,200 cfm	polyester final filter								
	TRXX	Hydro	Trailer	2.48 or 3.96	3/4	50 degree	200 or 400	5 gpm 3,000 psi	15" hg 1,000 cfm	5 micron final filter

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
6" x 20 ft.	342	Tilt and pressure off	Curbside	Yes	2,650 cfm	PTO/ Hydraulics	200 cfm optional	200 psi optional	winterization lighting tool boxes racks cabinets	All accessories are included; Weights displayed on wireless remote back-up cameras standard; Retractable railing atop truck
8" x 25 ft.	342	Tilt and pressure off	Curbside	Yes	3,850 cfm	Transfer case or hydraulics	200 cfm optional	200 psi optional	winterization lighting tool boxes racks cabinets	All accessories are included; Weights displayed on wireless remote back-up cameras standard; Retractable railing atop truck
8" diameter with 18 ft. reach	270	Dump unloading	Cabinet	Yes					winterization lighting tool boxes	
8" diameter with 19-27 ft. reach	335	Eject unloading	Dog House	Yes					winterization lighting tool boxes	
8" diameter with 19-27 ft. reach	335	Eject unloading	Dog House	Yes					winterization lighting tool boxes	
4″	270		Rear of Truck	No	1,200 cfm @ 7.5 psi	Diesel Engine	185 cfm	150 psi		
4″	270		Rear of Truck	No	1,200 cfm @ 7.5 psi	Diesel Engine	185 cfm	150 psi	winterization lighting tool boxes	Operates both dry and wet, 200 psi compressed air available
4"			Rear of Truck	No	1,200 cfm @ 7.5 psi	Diesel Engine	185 cfm	150 psi	racks cabinets	
8" diameter	320	dumping, tilting debris body	curbside	Yes	185 cfm/ 150 psi or 300 cfm/ 250 psi	Chassis				
8" diameter	320	dumping, tilting debris body	curbside	Yes	185 cfm/ 150 psi or 300 cfm/ 250 psi	Chassis			winterization lighting	
6" diameter	340	dumping, tilting debris body, optional sludge pump	curbside	Yes	185 cfm/ 150 psi	Chassis			tool boxes racks cabinets	
6" diameter	195	dumping, tilting debris body	curbside	Yes	185 cfm/ 150 psi or 300 cfm/ 250 psi	Chassis				
4" diameter	170	dumping, tilting debris body	curbside	Yes	N/A	Auxilliary				

acuum Excavat			Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Body (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)	Standard Blower (hg & cfm)	Filtration Type
VAC-CON MORE FOWER TO YOU Vac-Con, Inc. 969 Hall Park Rd. Green Cove Springs, FL 32043	Mudslinger MS800	Hydro	Trailer	4		55 degree	325	4 gpm 4,000 psi	16″ hg 990 cfm or 1,190 cfm	Dry Filter Package
p: 904-284-4200 www.vac-con.com info@vac-con.com See ad on page 3	Mudslinger MST800	Hydro	Chassis	4		55 degree	325	4 gpm 4,000 psi	16″ hg 990 cfm or 1,190 cfm	Dry Filter Package
	Mudslinger MXT	Hydro	Chassis	3 to 16		50 degree	800 to 1,300	11 gpm 2,200 psi	200″ H2O 8,000 cfm	Single stage separator
	X-Cavator CXT	Hydro	Chassis	9, 11, and 12	Flat style rear door	50 degree	800 to 1,300	20 gpm 4,000 psi	200″ H2O 8,000 cfm	Dual cyclone
	X-Cavator EXT	Hydro	Chassis	12		50 degree	1,500	20 gpm 4,000 psi	28" hg 6,176 cfm	Cyclone separator 26" pleated cartridge final filter
ACMASTERS	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	15" hg 860 cfm	Cyclonic/ cartridge
ACMASTERS 5879 W 58th Ave. Arvada, CO 80002 f: 800-466-7825 5: 303-467-3801	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	15" hg 860 cfm	Cyclonic/ cartridge
303-420-3971 ww.vacmasters.com bell@vacmasters.com ee ad on page 19	Vacmasters System 3000	Hydro & Air	Chassis	1.5	25" Posi-Seal	45 degrees	110 additional water available	4 gpm 3,000 psi	15" hg 1,220 cfm	Automatic purge/ cyclonic/ cartridge
	Vacmasters System 4000	Hydro & Air	Chassis	2.25	25" Posi-Seal	55 degrees	85 additional water available	4 gpm 3,000 psi	15" hg 1,220 cfm	Automatic purge/ cyclonic/ cartridge
	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	15" hg 1,700 cfm	Automatic purge/ cyclonic/ cartridge
	Vacmasters System 6000	Hydro & Air	Chassis	4.75	60" full opening hydraulic	30 degrees	85 additional water available	4 gpm 3,000 psi	16" hg 2,200 cfm	Automatic purge/ cyclonic/ cartridge

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
9 ft. boom with 16 ft. x 4″ boom hose	270	Full open hydraulic dump door and hydraulic dump hoist	Passenger side	Yes	990 or 1,190 cfm	49, 74, or 114 hp Kubota die- sel engine			winterization lighting tool boxes racks	
9 ft. boom with 16 ft. x 4″ boom hose	270	Full open hydraulic dump door and hydraulic dump hoist	Passenger side	Yes	990 or 1,190 cfm	49, 74, or 114 hp Kubota die- sel engine			winterization lighting tool boxes racks	
6 ft. boom with 8" vacuum intake hose	270	Full opening rear door	Passenger side	Yes		Hydrostatic drive Vac-Con 3-stage fan PD blowers available			winterization lighting tool boxes racks	
10 ft. boom with 8″ vacuum intake hose	270	Hydraulically- driven scissor lift	Centrally- located passenger side	Yes	5,775 cfm	Hydrostatic drive PD blower or 3-stage fan			winterization lighting tool boxes racks cabinets	
7 ft. boom with 26 ft. reach	310 degrees horizontally +45/-22 degrees vertically	Hydraulic scissors lift	Passenger side	Yes	6,176 cfm	Transfer case PD blower			winterization lighting tool boxes racks cabinets	Operator enclosure, heat or AC climate controls
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
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
		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
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	For all models:
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	Wheelbarrow Mount Barrel Top Interceptor Core Drill/Generator Pneumatic Jack Hammer Pneumatic Tamper
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	Sand Blaster

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Vacuum Excave		Z4 TYPE	Style	Debris Body Capacity (cu. yards)	Debris Door (dimensions)	Debris Body (dump angle)	Water Tank Capacity (gallons)	Standard Water Pump (gpm & psi)	Standard Blower (hg & cfm)	Filtration Type
Vermeer	ECO-25-100G	Hydro	Chassis	100 Gallons	Manual		50	4 gpm 3,000 psi	10″ hg 575 cfm	2 micron washable filter
Vermeer 7835 Augusta Rd. Piedmont, SC 29673 352-638-4021	EV150	Hydro	Trailer	150 Gallons	Manual wheel locking system/ hydraulic tilt		40	4 gpm 3,000 psi	13″ hg 580 cfm	.5 micron washable filter
www.vermeer.com csellars@vermeer.com See ad on page 13	CS GT	Hydro	Trailer	800 and 1,200 Gallons	Hydraulic door and hydraulic tank lift		Optional 100 gallons	3.5 gpm 2,500 psi	14″ hg 580 cfm	.5 micron washable filter
	CV GT	Hydro	Trailer	500, 800 and 1,200 Gallons	Hydraulic door and hydraulic tilt tank		200, 300 and 400	4 gpm 3,000 psi	14″ hg 580 cfm	Cyclone
	CV SGT	Hydro	Trailer	800 Gallons	Hydraulic door and hydraulic tilt tank		300	4 gpm 3,000 psi	14″ hg 1,000 cfm	Cyclone
	LP XDT	Hydro	Trailer	500, 800 and 1,200 Gallons	Hydraulic door and hydraulic tilt tank		200 and 400	4 gpm 3,000 psi	14" hg 580 cfm	.5 micron washable filter
	LP SGT	Hydro	Trailer	500, 800 and 1,200 Gallons	Hydraulic door and hydraulic tilt tank		200, 300 and 400	4 gpm 3,000 psi	14″ hg 1,000 cfm	.5 micron washable filter
	LP SDT	Hydro	Trailer	500, 800 and 1,200 Gallons	Hydraulic claw door		200 and 400	4 gpm 3,000 psi	16″ hg 1,000 cfm	Cyclone, .5 micron washable filter
	VX50	Hydro	Trailer	500, 800 and 1,200 Gallons	Cam over hydraulic door dual cylinder		250 and 410	5.6 gpm 3,000 psi	15″ hg 1,025 cfm	2 micron washable filter
	VX75	Hydro & Air	Trailer	800 Gallons	Cam over rear door dual cylinder		410	8 gpm 3,000 psi	15″ hg 1,500 cfm	2 micron washable filter
	HTV PTO	Hydro	Chassis	4	Hydraulic claw door	50	400	4 gpm 3,000 psi	16″ hg 1,000 cfm	Cyclone, .5 micron washable filter
	VXT300	Hydro	Chassis	8	Cam over hydraulic door	50	800	10 gpm 3,000 psi	18″ hg 3,500 cfm	Dual cyclones, 2 micron washable filter
	VXT600	Hydro & Air	Chassis	12	Cam over hydraulic door		1,200	10 gpm 3,000 psi	27″ hg 6,400 cfm	Dual cyclones, 2 micron washable filter

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
3″ hose			curbside	No	575 cfm	24 hp gas				
3″ hose		Reverse pressure	curbside	No	580 cfm	27 hp gas				
3″ hose		Optional reverse pressure	curbside	No	580 cfm	27 hp gas				
3" hose with opt. strong arm		Reverse pressure and in tank washout	curbside	Yes	580 cfm	27 hp gas			winterization	
3" hose with opt. strong arm		Reverse pressure and in tank washout	curbside	Yes	1,000 cfm	38 hp gas			winterization	
3" hose with opt. strong arm		Reverse pressure and in tank washout	curbside	No	580 cfm	24 hp diesel			winterization	
4" hose with opt. strong arm		Reverse pressure and in tank washout	curbside	No	1,000 cfm	38 hp gas			winterization	
4″ hose with opt. strong arm or boom		Full opening hydraulic door tilt and dump in tank wash- out, reverse pressure	curbside	Yes	1,000 cfm	49 hp diesel			winterization	
4" hose with opt. strong arm or boom		Full hydraulic door tilt and dump in tank wash- out, reverse pressure	curbside	No	1,025 cfm	49 hp			winterization	
5″ hose with opt. strong arm or boom		Full hydraulic door tilt and dump in tank wash- out, reverse pressure	curbside	Yes	1,500 cfm	74 hp diesel			winterization	
4″ hose with opt. strong arm or boom		Full opening hydraulic door tilt and dump in tank wash- out, reverse pressure	curbside	Yes	1,000 cfm	PTO driven			winterization	
6" hose with up to 19 ft. reach	335	Full opening hydraulic door tilt and dump in tank wash- out, reverse pressure	curbside	Yes	3,500 cfm	PTO driven			winterization lighting tool boxes racks cabinets	
8″ hose		Full opening hydraulic door tilt and dump in tank wash- out, reverse pressure	curbside	Yes	6,400 cfm	PTO driven	Optional 180 cfm	Optional 110 psi	winterization lighting tool boxes racks cabinets	



Unearthing Value

LEVERAGING DIGITAL MAPPING AND JOB SITE DATA FOR COMPLIANCE AND PROFITABILITY

BY CORY MAKER AND PATRICK IYONSI

n the ever-changing landscape of underground construction, digital documentation has become an indispensable tool for underground professionals. From pre-drill planning to comprehensive post-drill reporting, the advantages are abundant. It enables contractors to navigate congested easements, sidestepping the dangerous and costly pitfalls of cross bores. By closely monitoring equipment usage, operators can gain valuable insights into performance and identify areas for improvement. And leveraging digital documentation can help operators big for jobs by taking into account the unique risks and challenges of each project.

However, the compelling reasons to adopt digital documentation continue. A new imperative is emerging that adds a sense of urgency to this practice — compliance and regulation. As regulations tighten, operators will soon find themselves compelled to document their jobs as a matter of legal necessity.

For example, California's Senate Bill 865 will require that all new subsurface installations in the state be "mapped using a geographic information system and maintained as permanent records of the operator." The bill's activation has been delayed. But when it does take effect, the bill will make California the first state to legally require the creation and preservation of maps for subsurface installations.

Other states are likely to follow suit and enact similar laws. And cities across the U.S. are also creating their own requirements at the local level to protect people and underground utilities.

At the same time, more bid specs are also requiring that contractors provide electronic drilling records as part of a job. This involves logging specific data about your drills' operating parameters during a job.

"OUR INDUSTRY HAS THE TECHNOLOGY AVAILABLE AND A WORKFORCE THAT UNDERSTANDS **HOW TO USE THIS TECHNOLOGY IN A WAY THAT DOES NOT IMPEDE PRODUCTION** WHEN TRAINED PROPERLY."

Steve Sellenriek

Collecting bore and equipment data may seem like added work. And for fiber installation, operators may worry that work will eat into tight profit margins that are common in the industry. But the truth is, contractors likely already have much of what they need to record the data. And that data can do more than help them comply with new requirements — it can boost job site and operator efficiency and profitability.

UNCOVERING THE POWER OF DATA

Forward-thinking contractors have gone all-in on collecting and using data because they know it can help them work more efficiently. For example, Steve Sellenriek, president of Sellenriek Construction, is finding the collection of data critical to the current and future success of the job site.

"Not only can this information be used for planning, efficiency and compliance now; it can also be used to ensure future builds will be safer and more efficient as well," says Sellenriek. "Our industry has the technology available



LEFT: When California's Senate Bill 865 goes into effect, it will make it the first state to legally require the creation and preservation of maps for subsurface installations. Other states are likely to follow suit. Having such maps makes it easier for utility workers to find what is beneath the surface and safer for those working around them. BELOW: Utility locating devices, such as this GPR unit from Subsite Electronics, use automatic real-time data capture and integrated GPS to help crews locate underground utilities. It can also map and label them as power, water or telecom.



and a workforce that understands how to use this technology in a way that does not impede production when trained properly."

Additionally, contractors are finding data can help them track the productivity of each machine to better plan workloads and monitor machine hours to help plan maintenance in advance. And they can record machine duty cycles, fuel consumption and machine utilization to track costs and understand if operators are properly operating machines.

To gain a similar holistic view of their fleet and their job sites, three key data sets are needed.

No. 1: Data for the plan

A clear plan can help contractors create records for compliance purposes. It can also help contractors reduce risks and improve your productivity on the job.

Widely used utility-locating devices use automatic, real-time data capture and integrated GPS to help locator crews accurately and reliably locate underground utilities. The latest versions of the devices with enhanced receivers even allow crews to locate utilities with centimeter-grade accuracy.

As the device locates utilities, it can map and label them as power, water or telecom. The device records that information locally. Locator crews can then access the information from their smartphones and upload it to their mapping service, whether it's a CAD system or cloud-based mapping service. Crews can also send the information to their supervisors, owners or other parties for approval or further action.

Eventually, as more cities and states require mapping of underground utilities, crews will also be able to upload this information to an external cloudbased system for statewide or even nationwide utility mapping.

What's more, all this can be done using one device and one software — making the planning process simple and efficient. And because all data is recorded and managed digitally, rather than manually, it helps reduce the risk of errors.

No. 2: Data for the bore

Using an HDD guidance system, a drill operator can download a bore plan and see it overlayed on their guidance display. This can help them stay on plan by monitoring critical waypoints as they drill.

The system also logs bore data in real time. While in the field, the drill operator can download this data to their smartphone, tablet or computer to review a profile of their drill and compare it against the plan.

At the same time, onboard equipment telematics can record equipment operating data to help contractors meet EDR requirements and stay productive. The data can show, for example, how a drill is being utilized, how long its engine has been idling and if it is being misused or overused.

Telematics data can also include valuable equipment diagnostics to help minimize machine downtime. Operators on site can monitor fuel and DEF levels, battery performance and other systems. And fleet managers back in the office can track wearable and service parts to understand how quickly operators are going through drilling bits or digging chains. ergies between the technologies generating the data, valuable information can become trapped within isolated silos or restricted to its original source. The key lies in leveraging technologies designed to work harmoniously, enabling operators to streamline data sharing and access any desired information quickly.

By embracing a comprehensive and unified approach to data integration, contractors can unlock the true potential of their operations, experiencing unparalleled efficiency and unlocking a wealth of actionable insights.

ABOUT THE AUTHOR

Cory Maker is the product marketing manager for Subsite Electronics and Patrick Iyonsi is the utility inspection product manager for Subsite Electronics. **▼**

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No. 3: Data for the report

After a job is done, the HDD guidance system can generate an as-built report. Contractors can store the report along with the plan for compliance purposes and to resolve any potential disputes in the future about the bore.

Again, because data logging in the as-built report is digitally automated, it can reduce errors compared to handwritten bore logs. Automated documentation can also help contractors expedite the payment process. Instead of waiting weeks or even months for a paper-based payment to process, contractors can possibly get paid the same week a job is completed.

Contractors can also store equipment telematics data and use it both for EDR reporting and to help them better plan for jobs. They can monitor, for example, how each machine in their fleet is performing. They can look for patterns in idle hours to help schedule preventative maintenance. And they can use historical job site data to better plan for future workloads and more accurately estimate hours for new jobs.

In one case, a company used equipment fuel-consumption data to realize that its machines were running idle for too long — costing the company upwards of \$800,000 per year. Such discoveries can help contractors improve how operators run machines and realize big savings.

The collection of this data is critical to the current and future success of the contractor. Not only can this information be used for planning, efficiency and compliance now; it can also be used to ensure future builds will be safer and more efficient as well. Our industry has the technology available and a workforce that understands how to use this technology in a way that does not impede production when trained properly.

SYNERGY IN ACTION

Harnessing the power of technology that likely already exists within a contractor's fleet can revolutionize their effectiveness at every stage of a project. It empowers them to swiftly identify and map existing buried infrastructure, plan and execute new installations with unwavering confidence and effortlessly generate accurate as-builts and EDRs.

However, bore and equipment data alone is not sufficient — contractors must also possess the capability to integrate this data seamlessly. Without syn-





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IN THE TRENCHES

Forging the Future

THE TRANSFORMATIONAL IMPACT OF IoT ON VACUUM EXCAVATION IN CONSTRUCTION

BY CHAD DECKER

he incorporation of Internet of Things technology into vacuum excavation equipment is bringing in a transformative era in how we manage operations, safety and data on construction sites.

Adopting IoT goes beyond automation — it signifies a comprehensive shift toward more intelligent, secure, and efficient construction methodologies.

This strategic embrace of IoT is revolutionizing project management and execution, mirroring the wider influence of IoT in the construction sector that bolsters both productivity and safety standards throughout the industry.

OVERVIEW IN VACUUM EXCAVATION

The advent of IoT technology is revolutionizing the field of

vacuum excavation, reshaping how we plan, execute and manage projects. Essentially, IoT involves connecting devices over the internet, allowing them to send and receive data. In the context of vacuum excavation, this means outfitting hydrovacs with advanced sensors that monitor everything from soil composition to pipeline integrity. These sensors transmit data in real time to operators and project managers, facilitating immediate responses and adjustments.

This enhanced connectivity not only boosts safety by providing alerts about potential hazards (like unexpected utility lines or weak soil), but it also supports predictive maintenance. For example, by analyzing data from equip-

ONE OF THE STANDOUT BENEFITS OF INTEGRATING IOT WITH VACUUM EXCAVATION EQUIPMENT IS THE **ABILITY TO ANTICIPATE EQUIPMENT** FAILURES AND SCHEDULE PREVENTIVE MAINTENANCE.

ment sensors, teams can predict when a part might fail or is beginning to fail and replace it before it causes downtime, thereby improving both efficiency and reliability.

IoT also makes it possible for information to constantly flow between all parties involved, from the boots on the ground to those back at the office. This device network makes sure that all project participants are informed, improving collaboration and accelerating decision-making. By compiling comprehensive information on the excavation site, it also plays a critical role in environmental monitoring. This information may be used to make



well-informed decisions that limit the impact on the environment.

Through these applications, IoT is not only a technological upgrade but a comprehensive shift toward smarter, safer, and more sustainable excavation practices. Although in its early stages, it's transforming vacuum excavation into a data-driven science, setting new industry standards and ensuring that projects not only meet but exceed safety and regulatory requirements. This strategic integration of IoT represents a fundamental shift in construction methodologies, paving the way for future innovations in the industry.

REAL-TIME MONITORING AND CONTROL

The real-time monitoring and control of vacuum excavation operations is made possible by IoT technology, which represents a major advancement in the management of these operations. Data on the efficiency of the machinery, the precision of the excavation, and the operation's responsiveness to ever-changing conditions are instantly available to operators. The timely and correct flow of information is essential to meeting project deadlines with greater accuracy and efficiency.

In addition to these benefits, real-time data availability enables timely adjustments to excavation strategies, reducing processes to account for unforeseen ground conditions or accurate changes to planned excavation routes. This capability is particularly useful in complex urban environments where

> underground infrastructure may vary substantially. Additionally, some decisionmaking processes can be automated by IoT-enabled systems, which reduces the burden and risk of human mistakes for human operators.

By using these solutions, which will

establish new industry standards, construction sites can boost their operating efficiency and show their commitment to accuracy and safety. This tactic expedites project timelines and raises the standard of construction while also providing access to a more trustworthy and advanced construction method.

ENHANCED SAFETY MEASURES

Safety is a paramount concern on any construction site, and the application of IoT technology in vacuum excavation equipment contributes significantly to a safer work environment. With IoT, operators are immediately alerted to potential hazards, such as unexpected utility pipes or cables, minimizing the risk of accidents. This capability not only protects the workers but also the integrity of existing underground utilities.

MAINTENANCE AND DIAGNOSTICS

One of the standout benefits of integrating IoT with vacuum excavation equipment is the ability to anticipate equipment failures and schedule preventive maintenance. This predictive approach to maintenance not only reduces the downtime of equipment but also extends its life span, ensuring that projects are not stalled by unexpected breakdowns.

PROVIDING DATA ANALYTICS

The wealth of data collected from IoT devices allows construction managers to make well-informed decisions regarding project management, equipment

IOT ALSO MAKES IT POSSIBLE FOR INFORMATION TO CONSTANTLY FLOW BETWEEN ALL PARTIES INVOLVED, FROM THE BOOTS ON THE GROUND TO THOSE BACK AT THE OFFICE.

utilization, and operational strategies. These insights, gleaned from data analytics, empower teams to optimize their workflows, reduce waste and improve overall project outcomes.

INTEGRATION WITH OTHER TECHNOLOGY

The potential of IoT in vacuum excavation doesn't stop with the equipment itself. It extends to integration with other smart construction technologies, such as drones and automated machinery, enabling comprehensive site management. This synergy between technologies streamlines operations, enhancing efficiency and productivity across the board.

CHALLENGES AND SOLUTIONS

While the benefits are clear, integration of IoT in vacuum excavation does present challenges, including concerns around data security and the initial costs of technology adoption. However, solutions are emerging, from advanced cybersecurity measures to incrementally integrating IoT technologies, allowing construction firms to manage risks and costs effectively.

MUCH POTENTIAL

The integration of IoT technology with vacuum excavation equipment is causing a significant transformation in the construction sector, impacting safety protocols, data management, and operational effectiveness. As the industry grows, IoT is quickly taking center stage and altering the standards for managing building projects.

The creative potential provided by the Internet of Things is assuming a central role in the future of the construction sector, with vacuum excavation setting the pace. Construction organizations benefit from using this technology in terms of operational efficiency, safety, and a data-driven culture.

ABOUT THE AUTHOR

Chad Decker is the chief operating officer for California-based service company DEVCO Development & Engineering. To reach Decker, email editor@ digdifferent.com. ▼

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Products



1. Subsite UtiliGuard 2 RTK receiver

Subsite launched its new UtiliGuard 2 RTK (real-time kinematic) receiver. Designed with survey-grade technology and dual-band antennas, the receiver delivers centimeter-grade accuracy, making it an ideal solution for locating abandoned and untracked utilities that are often difficult to pinpoint. Its high-precision capabilities provide valuable insights into underground infrastructure, helping crews avoid cross bores during future projects. Like the UtiliGuard 2 Standard and Advanced units, the RTK receiver features integrated data capture, GPS positioning and an intuitive user interface to improve work quality and maximize locate awareness. Additional enhancements include dead-reckoning capabilities, which help operators maintain accurate locates in heavy tree canopy or areas where GPS signals falter. A multifrequency fault-finding capability also allows contractors to accurately identify and locate faulted power lines using a broad spectrum of customizable frequencies, up to 10 kHz. **800-846-2713; www.subsite.com**



2. Cat Pumps Model 56HS pump for hydroexcavating

Cat Pumps has provided pumping system builders with long-lasting, durable pumps for several decades, and the Model 56HS is no exception. Rated for 8 gpm up to 3,000 psi, the 56HS pump provides the performance and efficiency in a footprint that fits into trucks. Designed for demanding high-pressure applications, the engineers at Cat Pumps have optimized every detail to produce a dependable pump with excellent service life. The 56HS can be belt driven with a clutch, providing an on-demand ability to engage or disengage the water flow, reducing runtime, saving energy and increasing pump life. Or, with a bell housing, an SAE hydraulic motor can be mounted to drive the pump. The 56HS is what you expect from Cat Pumps — high-quality, reliable products backed by outstanding customer service and support. When your business depends on utilizing reliable equipment, trust Cat Pumps with your pumping needs. **763-780-5440; www.catpumps.com** ▼

This Issue's Feature:

Onboard system weighs while you dig

BY CRAIG MANDLI

Weight is a big factor in the hydroexcavation business. Using accurate onboard truck scales can ensure that your truck legally runs at its optimum capacity, which equals maximum efficiency and profits.

With that in mind, **Air-Weigh** recently announced the release of **QuickWeigh**, an onboard **weighing system** for air-ride suspensions on tractors or trailers. It is an app-driven digital PSI gauge out of the box, which easily converts to a scale with single and dual-point calibration. According to Steven Dwight, vice president of sales and marketing at Air-Weigh, the unit is easy to install and Bluetooth-enabled. Users can download the scale app and view psi and weight data on any smart device.

"The industry typically uses air gauges, which means the driver has to stop and look at the gauge while excavating, or simply guess the weight," says Dwight. "This could lead to either underloading or overloading and risking overweight fines. For fleets that need a simple overweight protection solution or to view axle group weights, QuickWeigh is the best option."

The QuickWeigh unit features app over-the-air updates, and a ruggedized and a weather-resistant enclosure that is waterproof rated IP67. It measures psi, and once calibrated, the weight of axle groups in 20-pound or 20 kg increments per axle group. Accuracy with dual point calibration is +/- 300 pounds for weights, and one-tenth of a pound for psi. Weights or psi are displayed in real-time on the display or on the app with no lag.



QuickWeigh from Air-Weigh

"I'm very excited about the release of QuickWeigh, and the feedback we've received from drivers so far is incredible," says Dwight. "They are thrilled to be able to view weigh data on an app without ever leaving the cab and can stop wasting their time making trips to in-ground scales."

QuickWeigh is designed for any fleet type or size using air-ride suspensions. The full retail-ready box includes everything needed for installation including an interface cable, connectors, power cable, optional installation bracket, airline, brass fittings, hardware kit, zip-ties, installation and user guide, quick start guide and warranty card. An optional ABS T-Breakout kit is also available.

"Customers like the simplicity of installation and use, along with an economical price point," says Dwight. "Due to being hard-wired, there's no need to change batteries. Also, the bright backlit display is easy to read."

888-459-3444; www.air-weigh.com

the latest: News





Mike Heitmann Sc

Scott Parrish

Garney Construction honors retired leaders

Garney Construction announced the retirements of two of its leaders, Mike Heitmann, CEO emeritus, and Scott Parrish, president emeritus. Heitmann served as CEO from 2011-2023 and played a pivotal role in Garney's growth and success. His leadership and strategic initiatives have significantly contributed to Garney's expansion, with the company now boasting over 2,000 employees and \$1.8 billion in revenue. Parrish's leadership, from his early days in the field to becoming president in 2018, has propelled Garney's reputation as an industry mainstay. In the fall of 2023, Garney welcomed a new executive leadership team, including CEO David Burkhart and Presidents Matt Foster and Matt Reaves, ushering in a new chapter for the company.

NUCA announces award winners

The National Utility Contractors Association awarded J.F. Wilkerson Contracting of Morrisville, North Carolina, the winner of the association's prestigious William H. Feather Safety Award. The company's impressive record in 2023 of 126,650 workhours worked with zero recordable accidents, injuries or fatalities, brought J.F. Wilkerson to the final selection by NUCA's safety experts. The William H. Feather Award was created by NUCA in 1978 to honor the contributions of William Feather, founding chairman of NUCA's Safety Committee. The awards recognize the superior safety commitments demonstrated by NUCA members in an industry where job sites can present hazards on a daily basis.

NUCA also announced Yvonne Bland of Core and Main as its NUCA Associate Member of the Year award, honoring her work on behalf of the industry. Bland has worked for Core & Main for over 36 years, steadily working her way to her present position as vice president of sales and business development. The Associate Member of the Year award is presented annually to an associate member who has made a significant contribution on the national level to the industry and the association. ▼

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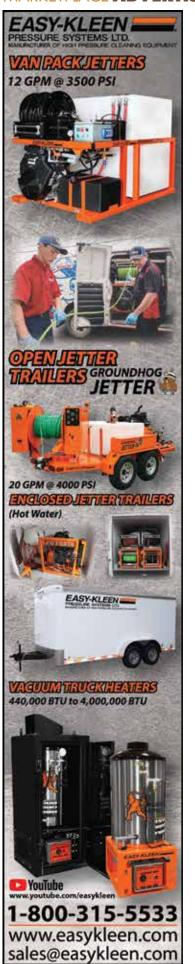
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Sept. 9-11

16th Annual Breakthroughs in Tunneling Short Course,

University of Denver – Joy Burns Center. Visit tunnelingshortcourse.com.

Sept. 23-27

International Pipeline Conference, TELUS Convention Center, Calgary, Alberta. Visit event.asme.org/ipc.

Sept. 28-29

Dozer Day Nebraska, Sarpy County Fairgrounds, Springfield. Visit nebraska.dozerday.org.

Oct. 3

Underground Contractors Association of Illinois Annual Business Meeting, Venuti's Italian Restaurant & Banquet Hall, Addison, Illinois. Visit uca.org.

Oct. 5-9

97th Annual Technical Exhibition and Conference (WEFTEC), Ernest N. Morial Convention Center, New Orleans. Visit weftec.org.

Oct. 6-8

Tunneling Association of Canada Montreal Conference, Hotel Bonaventure Montreal, Ontario. Visit tunnelcanada.ca.

Jan. 28 - Feb. 1

The American Rental Association Show, Las Vegas Convention Center. Visit arashow.org.

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