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**JANUARY 2024** 

Think outside the bucket



FOCUS: WWETT Show Issue; Work/Mechanic Trucks, Mini Excavators, Mini Skid-Steers, Compact Utility Loaders and Attachments



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Graham Gill is CEO of Pro-Vac, headquartered in Puyallup, Washington. The company, which is investor-owned, has 475 employees and offers hydroexcavation, jetting, CCTV inspection, pipeline repair and other underground infrastructure services in multiple states. It was founded in 2002. (Photo by Stephen Brashear)

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THIS SEASON IS ALSO A GREAT TIME TO GET YOURSELF AND YOUR CREWS SOME OF THAT EXTRA TRAINING AND **EDUCATION THAT** IS NEEDED TO GROW AS AN INDIVIDUAL AND COMPANY.

# Keeping Busy in the Winter

#### FROM TRADE SHOWS TO PICKING UP SIDE JOBS, THERE ARE MANY DIFFERENT OPTIONS FOR YOU TO HELP DEVELOP YOUR COMPANY

BY CORY DELLENBACH, EDITOR

now covers the ground and the frigid temperatures have returned where I live in Northern Wisconsin. Winter is here. For many in the northern U.S., it also means there is a slow down in work.

Many contractors shift from doing the utility construction work to snow plowing in these areas. It's not a bad gig to get into when your prime business is in the warm spring, summer and fall seasons, but you still need something to do in the winter months.

For those that don't, it means layoffs for employees until that nicer weather comes. Every company handles the change in season and work patterns differently. There is no right or wrong way to do it, it's just a matter of what fits best for you and your service area.

This season is also a great time to get yourself and your crews some of that extra training and education that is needed to grow as an individual and company. This is the time of the year that industry trade shows take place.

#### **RACING TO INDY**

The first show coming up for this industry in the new year is the Water & Wastewater Equipment, Treatment and Transport (WWETT) Show in Indianapolis being held Jan. 24-27 at the Indiana Convention Center.

Education sessions ranging from training your employees on vacuum trucks to business and safety tracks fill three days of the show week, giving you and your team great opportunities to hear from the experts and connect with others in the same industry facing the same challenges you are.

The expo floor will feature hundreds of exhibitors likely showing off equipment that you are already looking to add to your fleet or will give you ideas of services you want to add to your offerings.

It's a great time to sneak away to this show as work is typically slower for most companies. Take a look at the show's website at wwettshow.com and plan your trip to Indy!

#### **NO-DIG TIME**

One of the next shows coming up for the industry arrives a short time later in April. The NASTT No-Dig Show will be held April 14-18 in Providence, Rhode Island, this year.

This is a show that is very case-study and educational based. There is a expo hall component to it that is open three hours each day, but the rest of the No-Dig Show is various tracks ranging from CIPP to vacuum excavation and everything underground related in-between. You get to hear contractors who have done the work on projects talking about the projects and what they've learned.

It's a great opportunity to hear what they learned on the job and how that could help you and your team on your next project.

#### **FILLING YOUR TIME**

There are many smaller, more regional shows that you could attend as well. No matter what you decide to do attend a trade show, find some work in the winter, or take time to get ready for next summer — do it with the dedication you have during your busy season.

Your business will grow as a result of any route you decide to take.

Let me know what you and your company do during the "slower months" of winter. I can be reached at 715-350-8436 and editor@digdifferent.com. ▼



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#### WINTER'S RISKS

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#### **How to Protect** Yourself

Business owners are increasingly worried about becoming the target of a sophisticated cyberattack. Similar incursions into hospitals and government agencies tend to



receive most of the media's attention, but businesses across all industries are being targeted. When it comes to protecting yourself online, ignorance isn't bliss.

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#### **WORKPLACE INJURIES**

### **Avoid a Dismissive Attitude**

The online article emphasizes the critical importance of addressing workplace hazards proactively, challenging the dismissive attitude often encapsulated in the phrase "It's no big deal." Create a safer work environment by speaking up and addressing potential dangers before they lead to serious injuries.

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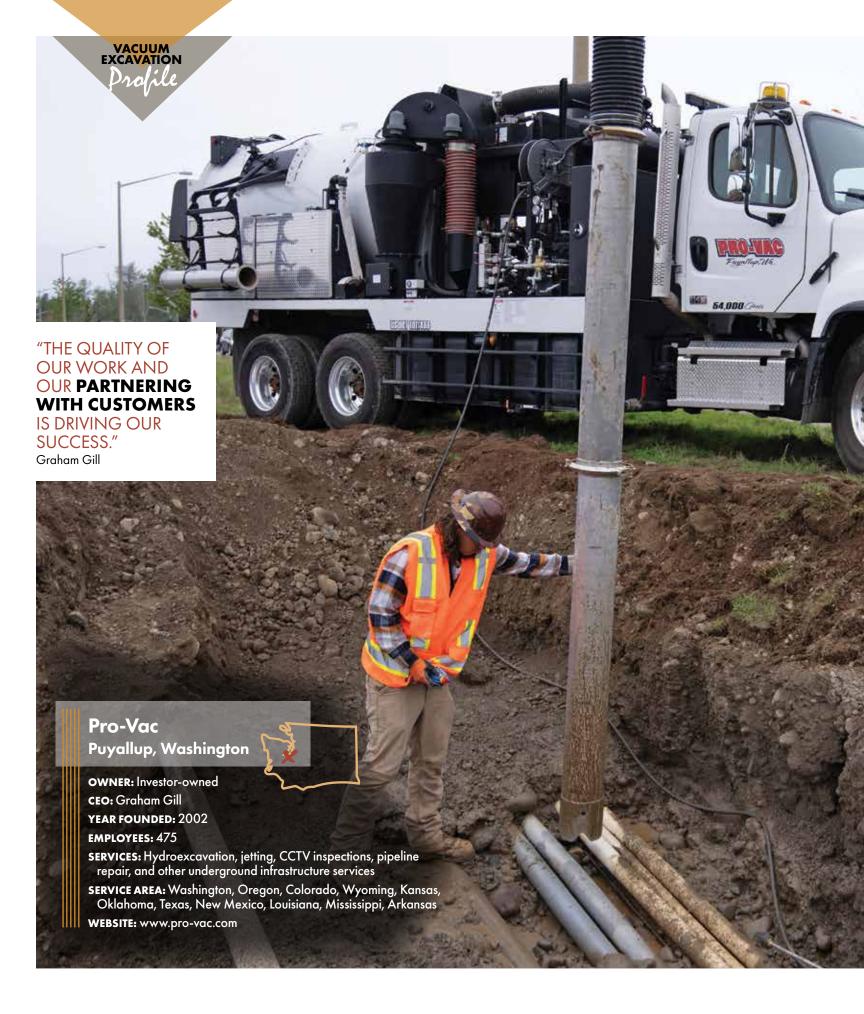
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Pro-Vac operator Koll St. Pierre operates a Vac-Con combo truck via a remote to expose utility lines at a new development site in Puyallup, Washington. The company's services include hydroexcavation, jetting, CCTV inspection and pipeline repair.

# ONWIDE

#### MASSIVE GROWTH IN FIVE YEARS SPURRED BY STRATEGIC PLANNING, ACQUISITIONS AND CUSTOMER SUPPORT

STORY: GILES LAMBERTSON PHOTOS: STEPHEN BRASHEAR

One definition of growth might be this: 533% in five years. Or one could express the same thing another way: Pro-Vac. The Puyallup, Washington, underground infrastructure maintenance and hydroexcavation company is experiencing startling growth and not at all by accident.

"When I took over, we had about 75 employees," says Graham Gill, Pro-Vac's CEO, citing the numbers behind the 533%. "Now we have about 475 employees. We had 30 hydrovac trucks. We're now at 150 vac trucks."

Almost as significant a growth indicator, though not as statistically impressive, is that the firm now is operating in 11 states in the western half of the country, up from two states (Oregon and Washington) in 2018. It has employees and trucks meeting the needs of customers in Wyoming, Colorado, Kansas, Oklahoma, Texas, New Mexico, Louisiana, Arkansas and Mississippi, as well as the two original states.

All of that didn't just happen. The growth was by design. Gill says expansion has been in the forefront of his mind since he moved into the CEO position five years ago. "What the company was doing was really exceptional, as far as offering a full suite of infrastructure services, and I wanted to expand it across the country."

What puts an exclamation point on his expansion of the company footprint is that it mostly has occurred in the last two years. "The company had made a name for itself in Washington and Oregon and I built upon that reputation during the first three years after I became CEO," he says. "Then we began real expansion into other areas in the Northwest and the Southwest."

A final relevant observation is that much of the Pro-Vac growth has occurred during the COVID and post-pandemic years that impacted business cycles. According to Gill, the Seattle metro area was among the first to be impacted by the virus and the ensuing disruptive response. Pro-Vac did experience an initial slowdown in the April-May 2020 period, but it was a short-lived downturn. "We continued to see growth during 2020-21 and 2022."

The Pro-Vac juggernaut kept rolling along.

#### **BUILDING UP**

Two brothers, Mike and Steve Olson, started Pro-Vac in 2002. It began as a service company offering sewer and wastewater pipe-cleaning and CCTV inspection. Those were still the principal company services



Koll St. Pierre loosens debris with a hydroexcavating wand and a vacuum tube via a remote control.

when Gill joined the firm as a laborer about 15 years ago. He worked himself up to supervising projects before moving over into sales, being promoted to sales manager and, eventually, becoming general manager.

The family business became an investor-owned enterprise in 2016 and two years later Gill moved into the top spot upon the retirement of the owner and founder. His systematic transformation of the local/regional company began in earnest. He is 39 years old.

Hydroexcavation entered the picture in 2010 and has grown into the major component of Pro-Vac's book of business. "Hydroexcavation work continues to grow," Gill says. "The way contractors are digging, having less space than before in which to dig, and doing it all without a dump truck, that all leads to hydro."

Of the 150 trucks in the Pro-Vac fleet, 65 are Vac-Con combo trucks, The remainder are reserved for hydroexcavation and are a mix of Vactor and GapVax manufacture. Generally, the rigs have debris bodies with 10 to 12 cubic yard capacity. In addition, Pro-Vac has seven air-vac trucks for when dry debris is preferred for customer reuse.

The company's move out of exclusively the Pacific Northwest and into climes as different as Denver, Colorado, and Austin, Texas, had some impact on how the trucks are set up to operate. For example, the Rocky Mountain elevations in Colorado and Wyoming brought the need for boiler units in some of the trucks to keep water from freezing. Because different soils impact excavation, cutters became more specialized to locales.

"The trucks are pretty universal though," Gill says of the fleet. "We try to max it out (in configuring the trucks) across the board and then dial it down in softer soil."

For the CCTV work, Pro-Vac relies on CUES cameras and systems, with the gear spread among a dozen camera-inspection trucks. In its pipe coating projects, Epoxytec and Strong-Seal (The Strong Company) are the go-to products. Jetter heads vary among the excavation trucks according to operator preference.

#### **ACCELERATED EXPANSION**

One of the customer appeals of Pro-Vac, says Gill, is the sheer variety of services offered. Yes, hydroexcavation is the mainstay, along with pipe jetting and inspecting. But the gamut of services also includes, among other things, street-sweeping (the gutter debris eventually finds its way into sewers, after all), water containment tanks on construction sites (another contributor to sewer flow) and such relatively exotic products as cathodic (anti-corrosion) protection systems for underground pipes.

All of these newer services came through acquisition of existing companies, most of them in Oregon, Washington and Colorado. "We wanted to create a larger suite of services, so we brought on a sweeping services company.

Temporary storage tanks were advantageous for us, so we started acquiring those tanks and then invested in a company with an existing customer base for them," Gill explains.

While organic growth of existing services has been strong, consciously looking for companies to acquire has accelerated the company's expansion, according to the CEO. "Having a skillset that would benefit them, we've reached out to other good companies and invested in them as part of Pro-Vac."

This has been a winning formula for Pro-Vac: A respected company investing in other respected companies — some of them having been around longer than Pro-Vac — at the same time building out its native client base. With hydroexcavation as its foundation, the firm has in this way constructed a framework of services that is scalable and viable in a variety of urban and industrial markets.

#### MAINTAINING THE CULTURE

One danger for any company that augments organic growth with inorganic growth — that is, that absorbs

other companies — is that the original character of a company can be lost. Sometimes an original culture is diluted that way and a standard of performance eroded. Gill says the opposite has occurred with the growth of Pro-Vac. (continued)



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Huttenlocker uses a Vac-Con combo unit to pull mandrels through an electrical conduit.

"We try to create and maintain our culture," he says, but it is not a static system. "Sometimes we look at other businesses and find they are doing something a better way, so we mesh it all to create a new Pro-Vac way, our way of selling a job, booking the work, dispatching, maintaining — we try to standardize all of that and hold people to our expectations and our standards. We have seen a lot of success doing that and it still evolves as we grow."

He notes that bringing new companies aboard really means bringing in new people. "We are building this company off of the great people we have working here. They are what makes Pro-Vac the company it is. Since I've been here, we've grown from 30 people to 475. That's a lot of talented individuals coming into the company,"

So, the Pro-Vac way: What distinguishes the firm from its compet-

itors? Besides the employees who comprise it, Gill cites two things: quality of work and the variety of services it offers.

Graham Gill

"We really are a one-stop shop. It's easier for a vendor to call on a third party to do it all — hydroexcavate and clean the pipe and run a camera through it — than to call two or three people. We also try to build relationships with customers by getting out front to meet their needs. You know, 'What do you have coming up and how can we do different things with our equipment to make your job easier?' The quality of our work and our partnering with customers is driving our success."

#### **THE END GAME**

Growth brings challenges, of course. The company now must manage 13 branch offices scattered among several states, for instance. But growth also has energized the company, the CEO says, by bringing in people with fresh ideas and different angles on approaching challenges, a vitality that replenishes itself day by day.

Gill acknowledges that the company's endgame is to expand across the country.

"Our ability to grow and flex separates us from some other companies in the industry," he says. "Through organic and inorganic growth, we want to continue to move our operations down the West Coast, into the central states and on to the East Coast. We are looking for the right opportunities to keep growth in the forefront."



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## **Adapting to Regulations**

"THE WAY CONTRACTORS ARE DIGGING,

TO DIG ... THAT ALL LEADS TO HYDRO."

HAVING LESS SPACE THAN BEFORE IN WHICH

The Pacific Northwest has a certain reputation vis a vis the rest of the country. No, we're not talking about Sasquatch or Bigfoot. The region, more than some others, has an exercised environmental consciousness born of a desire to preserve its celebrated natural resources. Consequently, businesses operating in the state of Washington are made aware of environmental considerations in their business planning.

CEO Graham Gill knows all about it. His Pro-Vac underground infrastructure and hydroexcavation company is constantly disturbing and relocating soils, flushing sewers, protecting pipes with cathodic and epoxy coating and otherwise interacting with Mother Nature on several levels. The company is being watched as it does so.

"There definitely are different regulations from the West Coast to the East Coast," says the Washington native. "In the Northwest, regulations are more environmentally strenuous than in the middle of the country, for instance."

This is relevant to the company because it is expanding its operations beyond Washington and Oregon into other regions. The different expectations in different jurisdictions can translate into different operating methods — not less responsibly, but with different criteria in mind.

"As we've gone into different markets, we haven't run into any regulations more strict than what we were used to here," Gill says. That is, state and jurisdictional regulators in the new markets haven't been an issue. What has changed is the expectations of different customers.

"The industries are different in our new markets," says the chief executive. "In Texas and Oklahoma, for instance, we're working with oil and gas companies. That's far different than on the West Coast where we typically work with pulp mills and paper mills. So, the differences in regulations that we're encountering are not at the governmental level, but at the customer level."

And the company is adapting to them and continuing to grow.





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## A Greener Future

#### THE RISE OF RENEWABLE DIESEL AND WHAT IT HAS TO OFFER THE CONSTRUCTION INDUSTRY

#### BY ASSOCIATION OF EQUIPMENT MANUFACTURERS STAFF

o fully understand the potential of renewable diesel and its role in what's expected to be a greener, more sustainable future for the construction industry, it's important to understand what's expected of the fuel in both the near term and the long term.

In November of 2022, the California Air Resources Board approved amendments to its offroad regulation aimed at further reducing emissions from the off-road sector. In amending the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation), CARB required fleets to phase out the oldest and highest polluting off-road diesel vehicles in California, prohibit the addition of high-emitting vehicles to a fleet and require the use of R99 or R100 renewable diesel in off-road diesel vehicles, effective as of Oct. 1, 2023 (with requirements beginning as early as Jan. 1, 2024). Finally, as part of its announcement of the regulation, CARB said the program was expected to yield more than \$5 billion in health benefits between 2024 and 2038.

"Regulations like this one are here now," said David Bolderoff, fleet manager for the Los Angeles County Sanitation Districts, who detailed his thoughts on renewable diesel during an education session at CONEXPO-CON/AGG 2023. "They vary state by state, but this one in particular is a game-changer."

#### WHAT IS RENEWABLE DIESEL?

With regulations like the amended CARB Off-Road Regulation starting to come into play, consumption of renewable diesel is expected to rise significantly in the coming years. But what is "renewable" diesel, exactly? It turns out it has a very similar chemical and structural composition to petroleum diesel, though it's often composed of fats and oils (animal waste fats, wasted fish products, used cooking oil, vegetable oil residues, tall oil pitch, crude palm oil, rapeseed oil and waste grease).

However, according to Bolderoff, what really sets renewable diesel apart from counterparts such as petroleum diesel and biodiesel is its higher energy density, which is somewhere in the range of 5%.

"That's important, because the more energy you have in fuel, the less you need to produce the same amount of power," said Bolderoff. "One of the real downsides with biodiesel is it has less energy density. And though it is rather difficult to beat the

properties of petroleum diesel, renewable diesel is slightly better, and it burns cleaner."

Renewable diesel also:

- Is a paraffinic fuel (with a superior cetane number of >65, which indicates its combustion quality)
- Offers a desirable cloud point
- Provides efficient combustion
- Increases engine life
- Reduces maintenance costs
- Provides a smaller environmental footprint (65-90% carbon reduction)
- Provides superior cold-weather performance
- Offers good storage properties
- Is essentially odorless

#### "DROP-IN" FUEL

Currently, the vast majority of all renewable diesel consumption occurs in California. And, as of just two years ago, Oregon was the only other state where renewable diesel was consumed. That, however, is about to change. According to the U.S. Energy Information Administration, U.S. renewable diesel production is expected to more than double during the next two years to meet ever-growing demand and increased regulatory activity.

"What we're seeing in terms of the trend moving forward is big oil getting behind renewable diesel," noted Bolderoff. "And what we're seeing is they are spending a lot of time converting their refineries. So, in the next few years, we could really see significantly more production."

However, the most notable characteristic of renewable diesel that is expected to impact its adoption is that it's a true "drop-in" fuel that can be easily blended with petroleum diesel or biodiesel. In addition, and perhaps more importantly, it meets the same ASTM D975 certification standard that ultra-low sulfur diesel does as well.

"We've seen a ton of state and federal infrastructure projects requiring the use of alternative fuels, and renewable diesel is an easy-to-use dropin," said Bolderoff. "So, construction professionals don't need to buy new equipment. And while it's not necessarily recommended to mix it on a regular basis, if you have a half a tank of fossil-based diesel fuel, you can drop this fuel in and you're not really going to have any negative or detrimental effects."

#### **USING IT YOUR WAY**

Because widespread adoption of renewable diesel has yet to take place, there isn't a ton of consistent guidance regarding how it should be used. According to Bolderoff, equipment service and operations manuals often feature a couple of pages on biodiesel, but nothing specifically on renewable fuel. More recently, he noted, OEMs have issued statements saying that if a fuel meets the ASTM D975 standard, using it won't void the manufacturer's warranty and it won't hurt the engine.

"So, if you have a good understanding of its fuel and what it offers from an efficiency standpoint and an emissions reduction standpoint — as it offers somewhere in the range of a 65-90% carbon reduction — you can actually use that in your bid process," said Bolderoff.

"Because what if bids are based on total carbon footprint, rather than just the lowest bid?" he continued. "In California, with what we've actually seen with things like the Renewable Identification Number and Low-Carbon Fuel Standards credits, we've found that (using renewable diesel) actually saved us money, or at least it was price comparable."

Demand for renewable diesel is expected to rise in the not-too-distant future, in no small part to increased regulation of the off-road industry. And, as the construction industry begins to evaluate how to comply with various regulations, they'll need to possess a strong understanding of the options available to them — while still considering implications related to productivity, safety and the ability to service and maintain vehicles and equipment.

#### **ABOUT THE AUTHORS**

The Association of Equipment Manufacturers is the North America-based international trade group representing off-road equipment manufacturers and suppliers with more than 1,000 companies and more than 200 product lines in the agriculture and construction-related industry sectors worldwide. The equipment manufacturing industry in the United States supports 2.3 million jobs and contributes roughly \$316 billion to the economy every year.

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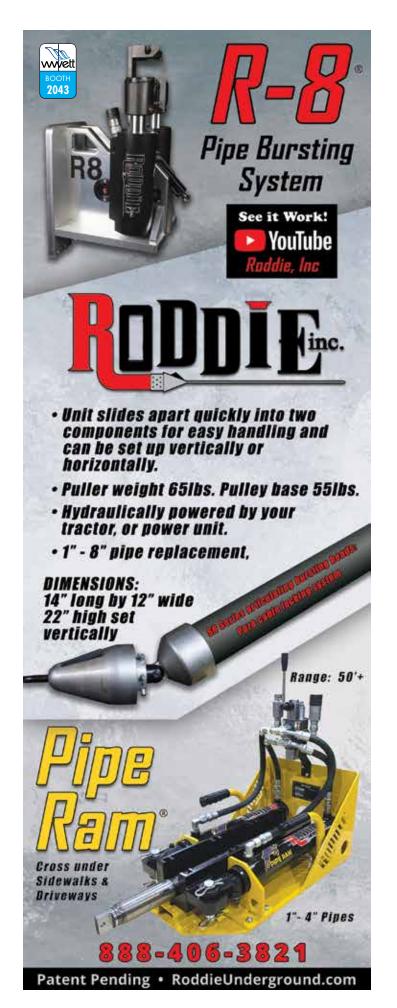


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# Tips to Orchestrating Success

# FOLLOW THIS SOLID HUMAN RESOURCES ADVICE AND YOUR TEAM WILL QUICKLY BE FIRING ON ALL CYLINDERS

BY KATE ZABRISKIE

hey're here, but they're not here. My staff isn't committed, and it's obvious to me and our customers. We're in trouble."

"To say that initiative is lacking is an understatement. My staff doesn't think beyond the basics. If they hit a wall, they stop. The idea of looking for a window never crosses their minds. Frustrating!"

"Maybe it's them. Maybe it's me. Our team just goes through the motions. I wish there were a magic formula to get people focused and motivated."

While there isn't an instant solution for increasing enthusiasm, focus and initiative, there are steps any owner or manager of a small business can take to orchestrate success.

#### **STEP ONE: COMMUNICATE THE DIRECTION**

It's hard for people to reach a destination if they don't know what it is. Whether you call it mission, purpose or something else, employees need to have a solid understanding of the organization's why, the team's why, and their why. Leaders who promote engagement regularly connect day-to-day tasks and expectations with the bigger picture.

Work on creating clear lines of sight. For instance, "Debbie, we're here to service members. Everything we do should help our members get the most from our conferences. As the registration clerk, it's important for you to accurately register members and send their confirmation documents within two days of receiving a request. Our goal is timeliness and accuracy."

#### **STEP TWO: DELEGATE RESPONSIBILITY AND AUTHORITY**

Once people know the direction, good leaders give them responsibility and the tools they need to execute the plan. Will everything be done exactly as the leader would do it if he or she were to take on the task? Doubtful. However, great leaders know when to step in and when to stand back and let others own their work.

"John, your job is to manage customer returns. While I have guidelines for you to follow, you can decide and then let me know how you will organize your work."

## **STEP THREE:** RECOGNIZE GOOD WORK AND THE IMPORTANCE OF OTHERS

No matter their role or level in an organization, people like to be appreciated and recognized. Whether someone is a vice president or a temporary worker, leaders who engage their teams communicate the idea that everyone has an important role. Take the time to articulate how others contribute. "Eric,

you are the face of the office. When people visit us, you are the person who sets the tone. Thank you for taking pride in the appearance of the reception area and screening visitors in a friendly way that doesn't feel like an interrogation. You're nailing it."

#### **STEP FOUR: SUPPORT STUMBLES**

Slips, trips and falls will happen when people solved problems, and leaders who engage their teams to the full capacity have the good sense to support the stumbles employees will inevitably encounter. In other words, it's about having the maturity to get beyond blame and focus on what to do differently in the future. Do you assume the best? Do you steer clear of throwing others under the bus? Do you treat errors as learning opportunities? If not, you've got some room to improve. "Eric, the event did not go as you had hoped, and now is the time to learn from the experience. In hindsight, what could have been done differently?"

#### STEP FIVE: INSTILL A SENSE OF CALM AND CERTAINTY

Without a clear course, employees spend a lot of time worrying and focusing on what-ifs that may never happen. But with a sense of certainty, people's shock absorbers function at maximum capacity. A leader with a plan reduces fear, uncertainty and stress. The plan can be short-term and it can change, as long as it's there and communicated. Do you do all you should do to keep people in the loop? "Folks, we're in a period of transition. We have several companies interested in acquiring us. Nothing has been decided and for the next two months, we're going to operate as usual. When I get information to share, I will share what I know. Until then, if you have questions, ask."

WILL EVERYTHING BE DONE EXACTLY AS THE LEADER WOULD DO IT IF HE OR SHE WERE TO TAKE ON THE TASK? DOUBTFUL. HOWEVER, **GREAT LEADERS KNOW WHEN TO STEP IN** AND WHEN TO STAND BACK AND LET OTHERS OWN THEIR WORK

#### **STEP SIX: PROMOTE A LEVEL PLAYING FIELD**

Fairness trumps favoritism every time, and people will stick with a leader through some horrible circumstances when that person is a straight shooter and doesn't favor some over others. Stay mindful of what's fair, and think about how your team will perceive your actions.

#### **STEP SEVEN: ADDRESS PROBLEMS**

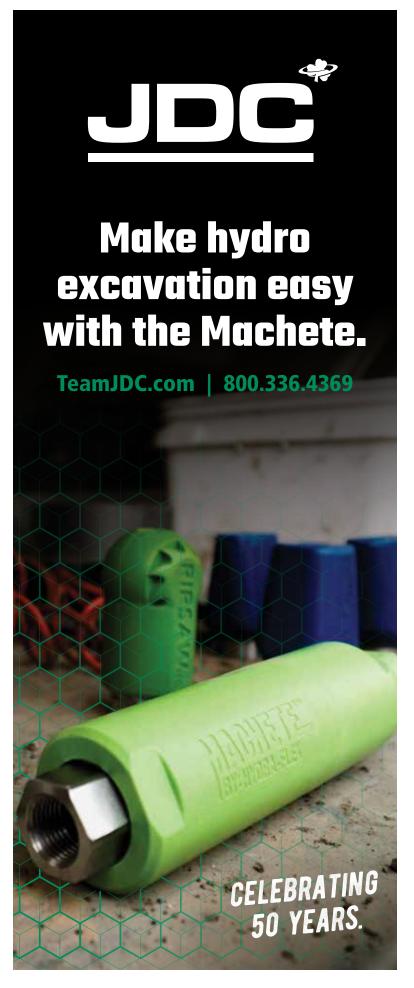
Engaged teams don't like mediocrity, and the people at the top have high standards for everyone. When problems occur, leaders who engage confront them head on. If you have conversations you've put off, now is the time to reset and communicate what's expected.

#### **RESULTS WILL COME**

Leaders who engage don't do so by accident or without work. If you want to jump-start or refocus your team, start with these seven steps. With some deliberate effort on your part, you should start seeing results.

#### **ABOUT THE AUTHOR**

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



# WORK/MECHANIC TRUCKS, MINI EXCAVATORS, MINI SKID-STEERS, COMPACT UTILITY LOADERS AND ATTACHMENTS

**BY CRAIG MANDLI** 

### **Compact Equipment**

#### **Ditch Witch MT164**

Built to help power and fiber-optic contractors easily create a clean, narrow trench in one pass, the Ditch Witch MT164 microtrencher attachment offers maximum compact cable installation performance. Equipped with a standard hydraulic plunge and option to offset the frame,



the MT164 provides variable depth control and allows contractors to cut right up next to a curb. It can trench up to 2 inches wide by 16 inches deep to cut deep enough to get through a standard-sized curb. It can also be set up for a push or pull application depending on the job site. The microtrencher's compact footprint provides increased flexibility with minimal disruption to surrounding infrastructure in urban areas.

580-336-4402; www.ditchwitch.com

## **Equipment Attachments**

#### Hall's Gradeblade

Hall's Gradeblades are backhoe or excavator bucket blades that mount in minutes. Simply slip one over the bucket teeth and chain-bind it to the provided weld-on tab on the back of the bucket. They are available in two models — the Crumbing Blade, which is the same width as the bucket



for top grading or smoothing the bottom of a trench; or the Squeegee Blade, which is wider than the bucket, with angled wings for greater surface grading. They help reduce backfill time, leaving no teeth marks, eliminating the need to rake, shovel, spread or compact. They are available for buckets 12 to 36 inches.

800-214-1649; www.gradeblade.com

#### **Pressure Lift HydraBore**

The HydraBore equipment attachment from Pressure Lift fits on the end of any vacuum hose for a simple, more cost effective approach to hydroexcavation. It breaks up soil, removing it quickly and easily to reduce labor requirements to a one-person operator, keeping every project extra clean improving safety. This tool reduces the downtime of an operator changing clothes when finished and requires fewer workers by using the tool for its other benefits of pumping deeper and faster. It can also be used in concert with smaller vacuum equipment to gain maximum benefits while capitalizing on project expenses.

866-504-6596; www.pressurelift.com

### **Excavating Equipment**

#### **Comet Pump ET 55 Series**

From small trailers to large truck-mounted units, the Comet Pump ET 55 Series pump was designed for hydroexcavating and industrial jet/vac services in mind. Its high-performance features, compact design, and symmetrical crank-



case allows for easy right to left shaft conversion — making installation simple and easy to accomplish. It contains high-reliability high-pressure seals with low-pressure lubrication and recirculation chambers proven to withstand corrosion. It can withstand extreme temperatures with its stainless-steel suction

valves and guiding pistons, nickel-plated brass and an aluminum alloy pump body. It can operate at 1,450 rpm and 3,626 psi. Its shaft support system and tapered roller bearings will enable this pump to run for extended periods of time.

800-864-1649; www.cometpump.com

#### Excavators

#### John Deere 85 P-Tier

The 85 P-Tier excavator from John Deere boasts an 18% engine horsepower increase over the 85 G-Tier model, and the addition of a turbo for high-altitude performance. Hydraulic performance improvements include increased



pump torque and improved dig forces. The larger, redesigned cab is equipped with an 8-inch monitor with Bluetooth and a 270-degree camera system integrated into the main monitor. Improved service access and optional features, such as angle blade with float and continuous flow auxiliary hydraulics, round out the updates that improve the performance and versatility.

800-503-3373; www.johndeere.com

#### Takeuchi TB350R Series 3

The TB350R Series 3 compact excavator from Takeuchi features a short tail-swing design that makes it ideal for working in tight or confined spaces. Inside the cab a 7-inch, multifunction color monitor with touchscreen places a wide range of functions at the operator's fingertips. A dedicated coupler circuit on cab models allows for the quick and easy



exchange of various hydraulically driven attachments. A jog dial with one-touch controls lets operators easily control throttle position and multiple machine functions. It also offers greater working ranges, including a dig depth of 11 feet, 8 inches, maximum reach of 19 feet, 10.8 inches and maximum dump height of 12 feet 11.3 inches. Thanks to its high-flow primary auxiliary circuit, it is ideal for multiple applications, including excavating, demolition, land/vegetation management, general contracting, landscaping, rental and residential and commercial construction.

706-693-3600; www.takeuchi-us.com

#### **Yanmar Compact Equipment ViO80-7**

The 18,122-pound ViO80-7 mini excavator from Yanmar Compact Equipment offers 18% more power over its predecessor with its new 67 hp Yanmar Tier 4 Final diesel engine. It provides operators with increased attachment performance with 20% more PTO flow rate. It achieves a maximum dig depth of 14 feet, 3 inches, and includes signature zero tail-swing allowing the excavator to rotate next to a structure with less



risk of hitting it. Improved engine output and hydraulics allow for more productivity and greater attachment performance. Those same improvements also allow for a 15% increase in work speed, 13% lower fuel consumption rate and 25% increase in travel speed on slope. A 2-Pump Load Sensing hydraulic system increases pump flow rate under high loads to direct power where it's needed to improve performance.

800-205-9913; www.yanmarce.com



#### Loaders

## CASE Construction Equipment 580SV Construction King

The 580SV Construction King backhoe loader from CASE Construction Equipment

brings a tool carrier-style front end back to the company's backhoe line, ideal for businesses who use the loader end of their backhoe as a primary material handler — loading and unloading pallets, moving pipe and other bundled material around the yard. Adding a 4-in-1 bucket, a 6-in-1 bucket, or any of the countless attachments available for CASE backhoes turns this into a robust multipurpose job site solution — and a hydraulic quick coupler makes it easy. Both center pivot and side-shift models are available.

866-542-2736; www.casece.com

#### **Mecalac North America AX1000**

The AX1000 articulated loader from Mecalac North America combines heavy-duty performance with self-stabilizing maneuverability and a sleek design. Its monoboom provides greater boom rigid-



ity and strength, resisting the twisting that can occur with the traditional twoarm setup. Combining large, tinted windows with the unique monoboom design, it eliminates the two loader arms obstructing the operator's view and allows clear visibility to the left and right in addition to straight ahead. Along with enhanced safety, this outstanding visibility boosts productivity. It also offers greater stability because the machine's pivot joint is offset at a positive angle. As the machine articulates, the center of gravity is transferred to the rear, so it can re-level itself, greatly reducing the risk of the machine toppling over. It has a standard bucket volume of 1.3 cubic yards, plus a 75 hp engine. It has a lift capacity of 9,038 pounds, and maintains lifting power from the ground to its highest point.

508-921-3076; www.mecalac.com ▼

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## **THE LATEST: Products**



#### Cat Pumps hydroexcavating pumps

Over 50 years of high-pressure pump manufacturing experience has earned Cat Pumps a reputation of producing the highest quality, longest lasting pumps for every market 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 8.0 gpm at 3,000 psi; Model 660 with 10.0 gpm at 3,000 psi; and Model 3560 with 20.0 gpm at 4,000 psi, or 25.0 gpm at 3,000 psi. 763-780-5440; www.catpumps.com

#### 2. CASE Construction Equipment E Series wheeled excavators

With the ability to travel up to 25 mph, the new E Series wheeled excavators from CASE Construction Equipment give contractors the ability to self-deploy from job site to job site, while minimizing the time and expense involved with transporting by trailer. Offering the same powerful hydraulic performance and attachment flexibility as their steeltrack counterparts, these fully featured rubber-tired excavators also offer





significantly lower total cost of ownership than machines with a steel track and undercarriage, allowing utilities contractors to improve their bottom line. 866-542-2736; www.casece.com

#### 3. McElroy TracStar iSeries

McElroy announced the addition of the TracStar 412i and TracStar 618i. Like their current Series 2 counterparts, the TracStar 412i is designed to fuse pipe sizes from 4-inch iron pipe size to 12-inch ductile iron pipe size, and the TracStar 618i fuses pipe from 6-inch IPS to 18-inch outside diameter. The TracStar 412i and 618i will incorporate the FusionGuide Control system seen on other TracStar iSeries models, providing operators with three levels of control during the fusion process. Each level has varying degrees of assistance, from manual control to fully automatic fusion. A new indexer keeps the heater and facer attached to the four jaw carriage, condensing the heater, facer and jaws into a single unit. Operators will be able to move the indexer side to side along a set of rails, allowing them to position the heater and facer between the carriage's movable jaws as needed. 918-836-8611; www.mcelroy.com

## This Issue's Feature:

## Locating while Digging Made Easier with Radar

#### BY CORY DELLENBACH

When it comes to digging underground contractors are always at risk of running into existing buried utilities ranging from electrical to water and wastewater lines. Even when utilities are marked it's a gamble of knowing where exactly those are and how deep they are.

RodRadar offers a unique technology platform, which automatically detects underground utility infrastructure in real time, on location, without the need for expert analysis. RodRadar's flagship product is the LDR Excavate, the first of a series of products and services to carry the company's Live Dig Radar (LDR) technology.

Embedded in the digging bucket, LDR technology overcomes existing GPR limitations, detecting underground utilities during excavation, including at shallow depths. On the surface and during trenching, LDR Excavate creates a new scan with each pass, alerting the excavator operator of utilities in proximity to the bucket, in the 'next digging bite.'

"It's the first ever GPR integrated into a GPR," says Amir Tsrouya, director of business development for RodRadar. "It communicates the data collected at the bucket's sensor, to the tablet in the cab. That allows the operator to have an independent system in real time, which makes digging safer and more efficient. It allows them to work faster around utilities and retrieve accurate information about the buried utilities."

When an operator uses the excavator with the bucket attached, they position the LDR Excavate bucket on the ground away from the cab and press the "start scan" on the in-cab tablet. The operator will then draw the bucket towards the cab by sliding it along the ground. Results will appear within a few seconds on the tablet revealing any gas, electrical, water, fiber or phone utilities buried there. Information will include the distance from the start of the



scan and depth range of the underground utility.

The buckets come in three different sizes, including Type I for excavators between 3,000 and 10,000 pounds; Type II for excavators 10,000 to 24,000 pounds, and Type III for excavators 24,000 to 45,000 pounds. All buckets come in 18- or 24-inch widths.

"The antennas and electronics are the same for all buckets," Tsrouya says. "What will change is the mechanical interface to fit the customers' types of machines they have. They can also order the buckets with or without the teeth."

While the product is currently available, RodRadar is selecting the customers and partners they are working with.

"We're doing it that way to get feedback from them on the technology so we can continuously develop and advance it toward full market availability," Tsrouya says. www.rodradar.com





#### 4. Vermeer VXT600 vacuum excavator

The Vermeer VXT600 vacuum excavator has undergone a redesign to enhance its performance. With a 12-cubic-yard elongated spoil tank design and 1,200-gallon freshwater tank capacity, the vacuum truck weighs in at just 40,000 pounds. It has a low profile with a height (with boom) of 12.25 feet so that it can maneuver under trees, power lines and bridges. The VXT600 is a powerful digging machine that operates quietly while on the job. It features a vacuum system that is powered by a 6,400 cfm Helical tri-lobe Jurop blower. With a 23-foot boom, an 8-inch diameter dig hose, a vacuum level of 27 in Hg, and a water pump that produces 10 gpm of flow at 3,000 psi, the truck can dig quickly and deeply. Additionally, the boom dig hose can be stowed with the dig tube attached to minimize setup time between digs. Additionally, the VXT600 includes a handwashing station for operator convenience. 352-728-2222; www.vermeer.com

#### 5. Century Products PDC arm attachment for Falcon FR Series

Century Products' PDC arm attachment for the Falcon FR Series hole openers further expands the existing selection of cutters which includes TCI conical, TCI chisel and milled tooth. The PDC arms are for HDD bores in soil, shales and soft rock. Designed for optimal stability and superior durability, Century's PDC Cutters contain a diamond-impregnated layer making it incredibly resistant to wear and abrasion, resulting in extended drilling life spans. The PDC arms have been engineered to reduce the amount of force needed on the cutting tool. 262-820-3600; www.centuryproducts.net

#### WHAT'S YOUR STORY?

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

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PLEASE LIMIT YOUR SUBMISSION TO ONE RIG ONLY.

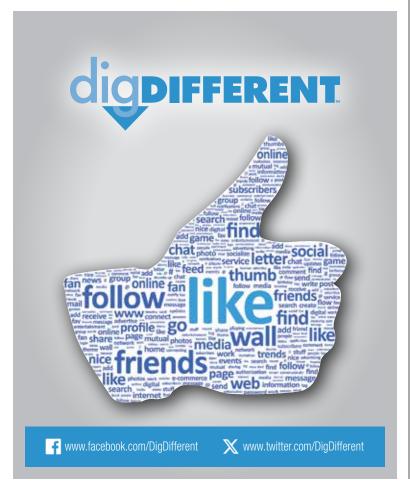


#### MARKETPLACE ADVERTISING









#### THE LATEST:

# News

#### Felling Trailers names Capobianco as regional sales manager

Felling Trailers has appointed Jim Capobianco as its northeastern

regional sales manager. In his new role, Capobianco will be responsible for all sales development, activity, and dealer support within Maine, New Hampshire, Vermont, New York, Rhode Island,



Jim Capobianco

Massachusetts, New Jersey, Maryland, Delaware, Connecticut, Pennsylvania, and Washington, D.C. He will be taking over the Northeastern region once served by Mike Flynn, who retired in January of 2023 after 22 years with the company.





Mats Scott Young Sköldberg





Jay Parker Joakim Arndorw

#### Volvo Construction Equipment announces leadership changes

Mats Sköldberg was appointed head of technology at Volvo CE. Most recently, he was head of technology for Volvo CE in China and has held a number of other senior technology roles in recent years. Scott Young was named head of sales region North America. He previously was head of the Volvo CE Uptime Center of Expertise and has held a number of other roles in strategy, technology and other

functions within Volvo CE. Jay Parker was named to the newly created role of head of digital and IT. And Joakim Arndorw has been appointed the new head of Volvo CE sales region international.

#### Mattracks welcomes Michelle Gjerde as marketing leader

Mattracks has hired Michelle Gjerde as its new marketing manager. Gjerde is a seasoned sales and marketing leader with over 20 years' sales and marketing experience ranging from global



Michelle Gjerde

manufacturing to technology, including Gateway, HP, Dell, 3M, Digital-River and Digi-Key. Gjerde also founded Propel, a sales and marketing consulting firm focused on building launch plans and go-to-market strategies for emerging and evolving organizations seeking to amplify their growth plan.

# NUCA announces STAR safety program finishers

National Utility Contractors Association announced that BPG Designs finished the NUCA Safety, Training, Awareness and Recognition program. NUCA's STAR program provides a venue for companies in the utility construction industry to measure the effectiveness of their safety programs and recognize how these important company programs can be improved. BPG Designs, of Tempe, Arizona, achieved the STAR program's Gold Level status. The company is both a NUCA National and an Arizona Chapter of NUCA member.

Burgess Civil also completed the NUCA STAR safety program. The Tampa, Florida-based company achieved the STAR program's top Platinum Level status. The company is both a NUCA National and a Suncoast Utility Contractor Association member.

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#### Jan. 21-26

Underground Contractors Association of Illinois Annual Convention, Casa de Campo Resort, Dominican Republic. Visit uca.org.

#### Jan. 24-27

Water & Wastewater Equipment, Treatment & Transport Show, Indiana Convention Center, Indianapolis. Visit wwettshow.com.

#### Feb. 22-23

Horizontal Directional Drilling Academy: Undergrounding Utility Infrastructure, Arizona State University SkySong Center, Scottsdale. Visit hddacademy.com.

#### March 6-13

Ohio Contractors Association Annual Convention, Fairmont Grand Del Mar San Diego. Visit ohiocontractors.org.

#### March 19-21

Underground Construction Technology International Conference & Exhibition, Oklahoma City Convention Center. Visit uctonline.com.

#### March 19-21

Global Excavation Safety Conference, Ernest N. Morial Convention Center, New Orleans. Visit globalexcavationsafetyconference.com.

#### March 21-23

Mid-America Trucking Show, Kentucky Expo Center, Louisville. Visit truckingshow.com.

#### March 27-28

Atlantic Heavy Equipment Show, Moncton Coliseum, New Brunswick, Canada. Visit ahes.ca.

#### **April 11-12**

National Heavy Equipment Show, International Centre, Mississauga, Ontario, Canada. Visit nhes.ca.

#### **April 14-18**

NASTT's No-Dig Show; Rhode Island Convention Center, Providence. Visit nodigshow.com.

#### **April 14-18**

Common Ground Alliance Conference & Expo, The Broadmoor, Colorado Springs. Visit cgaconference.com.

#### **April 19-25**

World Tunnel Congress 2024, Shenzhen World Exhibition & Conference Center, China. Visit wtc2024.cn.

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