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By Craig Mandli

INDUSTRY NEWS

JUNE 2024



ON THE COVER // When brothers Dave and Mark Denny decided to get into the pipeline maintenance industry back in 1991, they had one simple objective in mind: provide for their families. Says Dave, "We didn't want to be rich or become the biggest company in the world. We just wanted to support our families, and in order to do that, we had to keep growing." More than three decades later, the company they formed — Twin D, based in Layton, Utah, about 20 miles north of Salt Lake City — has more than provided for the Denny families. It also provides a livelihood for 40 employees and their families. The company generated about \$10 million in sales in 2023. (Photography by Kim Raff)









Profile: Hoover Electric, Plumbing, Heating & Cooling, Troy, Michigan // Update: Marvel Sewer and Drain, Spring Lake Park, Minnesota // Better Business: Battling burnout

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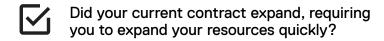
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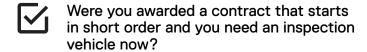


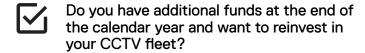


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THE EDITOR

// Kyle Rogers

A SMOOTH EXIT

When a business owner is ready to retire, sometimes the next steps go off without a hitch. Other times, it's not so easy.



editor@cleaner.com

OW TO LAUNCH A BUSINESS. Growing and scaling a company. Hiring and retaining employees. Adding new services.

The various topics pertaining to the operation of a business are seemingly endless. They're important, no doubt. But a subject that is sometimes lost in the day-to-day hustle of running a successful company is what to do when you're ready to call it a day. Hang up the cleats. Ride off into the sunset. Kick back and relax. Insert your preferred retirement idiom here.

One of the companies featured in this month's issue is



experiencing that transitional period. Twin D out of Layton, Utah, was started in 1991 by brothers Mark and Dave Denny. Mark retired a few years ago and sold his part of the venture to Dave. Now Dave is in the same position and preparing to transfer ownership of Twin D later this year to his four sons. Everything seems to be going well. Each of the sons has an area of expertise within the company and Dave has enlisted them in formal management training to further aid a smooth transition.

But not all companies are as fortunate. Recently I spoke with Mark and Christine Fowler, owners of High Country Pipe in Colorado. You'll be able to read about them in a future issue. They too are nearing the time when they'd like to retire, but they're still not sure exactly what their exit strategy will look like. None of their children have interest in taking over the business, so they are having to look elsewhere for a potential ownership transfer. The Fowlers are not quite ready to retire yet, but they're being proactive — constantly pursuing and considering options, seeking out that best fit. So far nothing is locked in yet.

Relatedly, back in January at the WWETT Show, I visited the booth for Business Acquisition & Merger Associates out of North Carolina. The firm has experience working with companies in the water and wastewater arena, both helping its clients grow through acquisition as well as selling companies. Matthew Bradbury, founder and managing director of Business Acquisition & Merger Associates, estimated that his firm has sold about \$500 million worth of companies connected to the water and wastewater industry. They agreed to write an article, providing insight about the current market out there and the process of valuating a business for a sale. Keep an eye out for that in a future issue as well.

If any readers have thoughts to share on this topic, you can reach me at 715-350-8442 or editor@cleaner.com. For some companies, when it comes to an owner retiring, succession plans might just come together naturally. But there are also plenty of companies that struggle for various reasons when they reach that point, not certain how to proceed. As Mark Fowler told me, "A lot of great places close down because at some point they're out of options." Any insight is helpful.

Enjoy this month's issue. c

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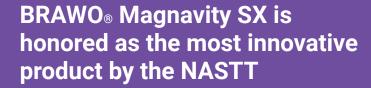
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Becoming a Brand Ambassador

Colin Luttrell, owner of Colin the Plumber in Rochester, New York, was featured in the May



issue. In this online exclusive, he explains what it's like to be part of a manufacturer's brand ambassador program and the benefits he feels he has gotten out of it. >> cleaner.com/featured

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THE BASICS

Sewer

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FAMILY FIRST

TWO BROTHERS BUILT A THRIVING COMPANY IN UTAH BY FOCUSING ON AN UNDERSERVED MARKET AND NOW PREPARE TO PASS IT TO A SECOND GENERATION // By Ken Wysocky



hen brothers Dave and Mark Denny decided to dive into the pipeline maintenance industry back in 1991, they had one simple objective in mind: provide for their families.

"Our main goal was to put shoes on our kids' feet and food on our tables," Dave Denny says. "We didn't want to be rich or become the biggest company in the world. We just wanted to support our families, and in order to do that, we had to keep growing."

Mission accomplished. More than three decades later, the company they formed — Twin D Inc., based in Layton, Utah, about 20 miles north of Salt Lake City — more than provides for the Denny families (Dave has four sons and Mark has three sons). It also provides a livelihood for 40 employees and their families.

The company generated about \$10 million in sales in 2023 and boasts a fleet of combination sewer trucks and camera trucks worth millions of dollars.

"I think we've done pretty good," Denny says. "Mark and I were blessed with a strong work ethic and a firm belief in being honest about everything we do. And those two things have done a lot for us."

How Twin D morphed from a small, two-man operation that relied on a used 1974 jetting truck into one of the largest companies of its kind in Utah testifies to more than just the

≪ Twin D employees Christopher Coots and Nathaniel Dodd prepare to do an inspection with a CUES camera.



power of hard work. It also underscores the benefits of investing in advanced and productivity-enhancing equipment, following a strategic growth plan that capitalized on an underserved market niche, and developing a company culture that emphasizes customer service.

"Our core values are excellence, empathy, character and 'earn it," Denny says. "That means we do top-shelf work, we value customers as human beings and don't view them as dollar signs, and we operate with integrity. Trust is hard to earn, but very easy to lose.

"As for 'earn it,' it means we work hard, stay humble and be grateful for the opportunities to work for people."

Denny says naysayers also motivated him and his brother.

"When we first started out, two people in the industry said we'd be out of business in six months," he recalls. "It was very motivational — Mark and I used to joke about it all the time. If you tell me I can't do something, I'm going to work hard to prove you wrong."

HUMBLE BEGINNINGS

The seeds for Twin D were planted around 1989 when a friend of Denny's, who inspected pipelines for municipalities, asked Denny



if he was interested in buying pipeline cleaning equipment to clean lines prior to inspections.

A former auto mechanic, Denny was already familiar with the wastewater industry after working for about four years as an equipment maintenance manager for a local wastewater treatment facility. The job duties included occasionally cleaning sewer lines with a Vactor combination vacuum truck, he says.

While considering the offer, Mark, who was working in human resources for the state of Utah, asked if he could join as a business partner.

"We're very close, so I said yes," Denny says.

They bought a used 1974 jetting truck for \$4,500 from a local municipality and went to work.

"We would jet lines, pull debris back to the manhole, climb down and put the debris in buckets and then hoist them up and out of the manhole," Denny explains. "It was very primitive."

LET THE GROWTH BEGIN

But the duo eventually realized they couldn't make a go of it by relying only on the business of their friend's pipeline inspection company. So Denny sent out surveys to several hundred cities and municipal sewer districts in Utah asking about interest in hiring them to do scheduled sewer maintenance.

"WE DIDN'T WANT TO BE RICH OR BECOME THE BIGGEST COMPANY IN THE WORLD. WE JUST WANTED TO SUPPORT OUR FAMILIES, AND IN ORDER TO DO THAT, WE HAD TO KEEP GROWING."

DAVE DENNY

"We got pretty good results from that survey," he says. "At the time, it was unheard of for municipalities to contract out for sewer maintenance."

The brothers formed Twin D and bought an older, used vacuum truck. About three years later, they bought the company's first camera truck — a used van outfitted with a CUES pipeline inspection system. They also invested in a Camel combination vacuum truck from Super Products.

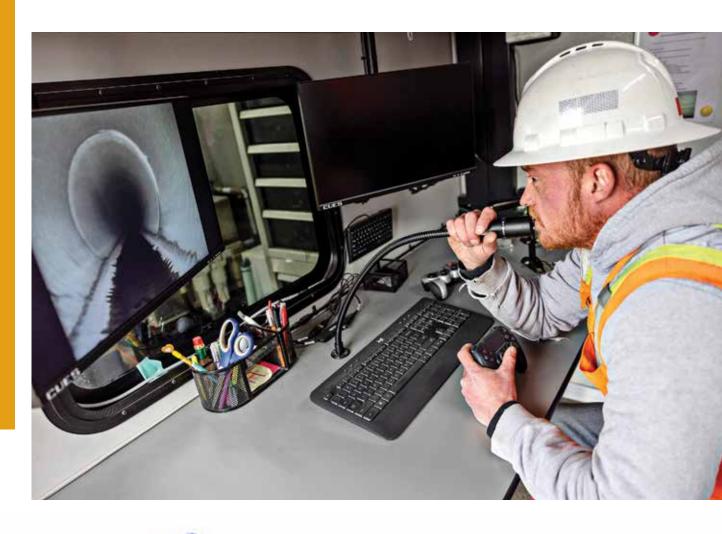
"We kept adding services as demand from customers dictated — and driven by the need to make more money," Denny says.

As the business grew, so did its fleet of equipment. Today the company owns three Vactor 2100 Plus combination trucks and six Vactor 2100i units, with a GapVax combo truck on order. Most of the vac trucks have 10-yard debris tanks, water tanks of at least 1,500 gallons, reels with 800 feet of hose, Roots blowers and water pumps that generate up to 80 gpm at 2,500 psi.

The company also owns six camera trucks, outfitted with CUES cameras carried by either Ultra Shorty tractors (CUES) or Aries Badger tractors. One remaining truck also carries a robotic cutter from Schwalm for reinstating laterals.

Twin D also relies on pressure testing equipment from Cherne (part of the Oatey family of companies); SL-RAT acoustic testing equipment from InfoSense; a Primeliner trenchless spot repair system





>>> Christopher Coots reviews footage from a pipeline inspection.





from PrimeLine Products, for 6- to 36-inch-diameter pipes; and a U-Vue push camera from UEMSI, used in pipes that are too small to accommodate the CUES cameras.

↑ Twin D employees Haven Zuech and Johnny Vasquez operate a Vactor 2100i truck.

MUNICIPAL MAINTENANCE

Regularly cleaning and inspecting pipes for about 100 municipal customers generates about 55% of the company's revenue. On average, Twin D cleans about 4 to 5 million feet of pipe a year and inspects between 3 to 4 million feet of pipe. It also performs acoustic testing on another 7 to 8 million feet of pipe annually.

Obtaining contracts to perform what Denny calls "rotational maintenance plans" for municipal sewer lines has been one of the company's biggest growth drivers.

"We changed the landscape of this industry in the state of Utah," Denny says. "Before, the prevailing mindset was emergency response work. But we offered to preventively maintain municipal systems — become a partner with municipalities and offer them a preventive plan to clean and inspect a couple thousand feet of sewer a year. We decided to focus on this niche and be the best we can be at servicing that niche."

Twin D started out by only cleaning pipelines, while the other company that they agreed to work with inspected the pipes. But the brothers decided in 1994 to also handle the inspection side as well, Denny says.

The company's first municipal customer was a wastewater utility in Fillmore, Utah. And as a testament to Twin D's customer service, the utility still is a customer today, Denny notes.

"WHEN WE FIRST STARTED OUT, TWO PEOPLE IN THE INDUSTRY SAID WE'D BE OUT OF BUSINESS IN SIX MONTHS. IT WAS VERY MOTIVATIONAL.... IF YOU TELL ME I CAN'T DO SOMETHING, I'M GOING TO WORK HARD TO PROVE YOU WRONG."

DAVE DENNY

S M O O T H S U C C E S S I O N

unning a family-owned business can be challenging. Passing it on to the next generation can be difficult, too, as well as risky, given the high failure rate when succeeding generations take over.

But at Twin D, owner Dave Denny hopes to buck those statistical odds of failure by providing management training for his four sons, who will soon take ownership of the company when he retires later this year.

While Denny hopes the management philosophies he and his brother, Mark, instilled into the company over the years have rubbed off on his sons, he's not taking any chances. Almost a year ago, he reached out to a company that provides management training so that his sons could go through a more formal process. Aaron, age 41, is currently the company's business manager; Nate, 40, handles business operations; Stuart, 38, heads up sales and marketing; and Brayden, 36, is the company's fleet and facilities manager.

"I wanted to improve their potential for success," Denny explains. "The focus is on helping those four boys develop management skills."

The management trainer sometimes meets with all four brothers at the same time. Other times the trainer does individual meetings to focus on developing specific leadership and managerial skills in each brother's areas of expertise.

Denny also paved the way for their success by making them work their way up the corporate ladder.

"None of them were 'golden children," he says. "They all had to learn the company from the ground up. I think that's important because it sends a signal not only to them, but also to employees that just because Denny is their last name, it doesn't mean they just walk in and become a boss. They had to earn their way into the industry."

It helped that Denny's sons naturally gravitated toward different areas of the company and now have clearly defined roles that don't overlap, which reduces the potential for friction. And they're all considered equals, Denny notes.

"They should be looked at equally, but differently," he says. "One thing we've always told the boys is there's no keeping score — one brother isn't better or more important than the other. Everyone has their little facet of the company that contributes to its overall success."

Denny says he's excited to see where his sons take the company and expects to see them succeed because they all have the same strong work ethic that he and Mark brought to the table.

"They all give 100% all the time," he says. "In fact, I tell them they work too much."

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>> Twin D's fleet includes three Vactor 2100 Plus combination trucks and six Vactor 2100i units, with a GapVax combo truck on order.

But the company also does pipeline inspection and cleaning for hundreds of developers and contractors, which contributes most of the remaining 45% of the firm's revenue.

THE BUSINESS OF FAMILY

Mark retired in 2018 and sold his part of the company to Denny. They survived running a family business together for close to three decades by strictly adhering to two basic rules: business should never come before family, and all decisions must be unanimous.

"We always looked at the business as a means to an end, which was supporting our families," Denny says. "It could never be as important as family. So if family ever got in the way, then the business should go away."

While plenty of challenges emerged during the many years they ran the company together, Denny says he and his brother had a lot of fun overall, despite occasional differences of opinions.

"We always agreed to go ahead with things only if we had unanimous agreement," Denny says.

"WE CHANGED THE LANDSCAPE OF THIS INDUSTRY IN THE STATE OF UTAH. BEFORE, THE PREVAILING MINDSET WAS EMERGENCY RESPONSE WORK, BUT WE OFFERED TO PREVENTIVELY MAINTAIN MUNICIPAL SYSTEMS.... WE DECIDED TO FOCUS ON THIS NICHE AND BE THE BEST WE CAN BE AT SERVICING THAT NICHE."

DAVE DENNY



In recent years, Twin D has expanded into some other services, such as lateral reinstatements, acoustic testing, pressure testing and trenchless spot repairs.

"We added services because customers asked us to do this and that," Denny says.

It also made sense to offer additional services because pipeline inspections often revealed problems that Twin D then would have to subcontract out to other companies equipped to solve the problems.

On the other hand, Denny says one key to the company's success has been a very conservative approach to adding services. For example, one customer recently asked if Twin D would do manhole rehabilitation, something that will require some careful consideration, Denny says.



"We don't want to jump right into something and then just stumble along," he says. "You don't want to get in over your head and fail."

Along the way, Twin D has also stopped doing certain jobs, like an annual pit cleaning project at a poultry processing plant in Utah. The company cleaned out what was known as a "blood pit" for nearly a decade before calling it quits because the conditions were so brutal, Denny says.

"I can't even describe how bad it smelled," he recalls. "Guys would literally puke while working. We had to buy special boots, protective clothing and breathing apparatus because guys would have to wade into the pit, 3 or 4 feet deep with blood and foam. It was unimaginably bad."



★ Twin D co-founder Dave Denny, middle, is preparing to pass the company's ownership to his four sons: Aaron, Brayden, Nate and Stuart.

RETIREMENT BECKONS

Denny plans to retire later this year in November. After that, a succession plan will kick in, with his four sons — Aaron, age 41; Nate, 40; Stuart, 38; and Brayden, 36 — taking the reins. Future plans may include geographic expansion as well as further service additions, Denny says.

But the bottom line is the sons are free to take the company in whatever direction they want.

"When I'm gone, I'm gone," Denny says. "They can call me for advice if they want, but I'm not going to keep an office there. I want them to become masters of their own destinies and let them take the company wherever they see fit."

Is it hard to let go?

"I'll miss the camaraderie," Denny says. "But I'm ready to do more things with my wife, Amy. The business doesn't define me. I take a lot of pride in what we accomplished, but it doesn't define who I am." **c**

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MONEY **MACHINES**

CHOW TIME

Texas contractor lauds drain machine's ability to eat through pipe scale, making lining job prep more efficient // By Ken Wysocky

HEN CHRIS STOREY DESCALES cast iron drainlines to prep them for lining, two things are of utmost importance: speed and a thorough

"Our goal is to get that pipe as close to its original diameter as possible and do it as quickly as possible," says Storey, a co-owner of C & E Pipe Services, based in Hurst, Texas, about 20 miles northeast of downtown Fort Worth.

The Boss 2.0 flex-shaft machine from Gator Drain Tools delivers on both counts, thanks to features like a stiff, 10 mm (roughly 3/8-inch) cable, a powerful electric motor (6,500 rpm) and chain knocker attachments.

"It eats up scale pretty quickly," Storey says. "It pretty much turns cast iron scale into butter. We've literally cut our descaling time in half compared to other

"Plus with the stiffer cable, we get more pushing power. We can push the Boss through just about anything. And with 100 feet of cable, we can usually clean an entire drainline from just one exterior clean-out — no more cleaning 35 or 40 feet, then having to go pop a toilet to

Storey says he recently descaled two runs of 3-inch-diameter cast iron pipe — one 56 feet long and the other 48 feet long — in only 2 1/2 hours. That included a couple of passes on each stretch and jetting out the scale.

finish cleaning the rest of a line."

"That would have probably taken us all day to do with one of our other machines," he says.

> >> C & E Pipe Services technician Keenan Spotts uses a Boss 2.0 drain machine from Gator Drain Tools on a job.

Established in 2022, C & E Pipe Services employs six people and focuses primarily on pipe lining, drain cleaning, drain inspections and full-service plumbing.

DRAIN CLEANING WORKHORSE

Since the company bought the Boss in November 2023, the machine has become a central part of the company's pipe lining operations and proves its value on a daily basis, Storey says.

In particular, Storey recalls the first time he used the machine. It was a descaling job at a home with an extremely long run of 4-inch cast iron pipe that included two 90-degree and two 45-degree bends.

The run of pipe was so long that not even the Boss' 100-foot cable could clean it all from one access point, so Storey had to dig

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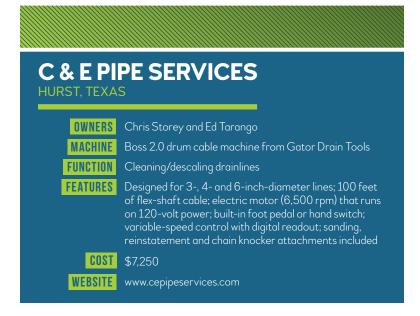


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"IT PRETTY MUCH TURNS CAST IRON SCALE INTO BUTTER, WE'VE LITERALLY CUT OUR DESCALING TIME IN HALF COMPARED TO OTHER MACHINES WE'VE USED."

CHRIS STOREY

down to uncover some pool-related equipment that provided access to insert the cable.

"We cleaned the entire run of pipe in one day," he says. "That would've been impossible with the other equipment we had at the time."

Furthermore, he also used a chain knocker attachment to pull out a bladder that got stuck while lining drainlines under the house.

"We feathered the chain knocker in there and once the bladder got into those chains, we were able to pop it out," Storey says. "You have to do a lot of MacGyvering in this industry."

FEATURES ADD VERSATILITY

In addition, the Boss features flex-shaft technology, which essentially is an 18 mm (about 3/4 of an inch) nylon sheath around the cable that keeps it from whipping around inside a pipe.

"With no cable bouncing around in the pipe, we can more precisely attack target areas," Storey says.

Storey also praises the variable-speed control, which comes in handy when working with older, more fragile pipes.

"Sometimes you don't want full power right away, especially when you're working with delicate pipe," he says. "This feature allows me to start out at a lower speed and minimize the risk of damaging pipes."

The Boss also comes with an assortment of sanding, line reinstatement and chain knocker attachments. Storey is impressed with the latter's durability.

"The impressive thing about the chain knockers is we're still using the same chains we bought last November," Storey says. "Some of the carbide tips have broken off, but the chains are still good."

GREAT ROI

Better yet, all these features come in a machine priced at around \$7,250, Storey points out.

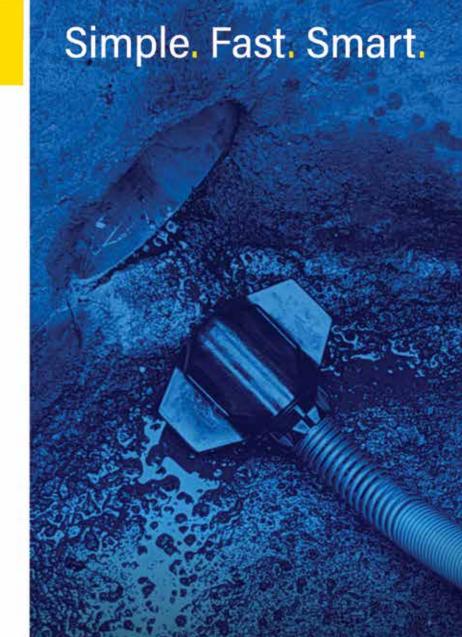
"You can't beat that price, especially for a young and growing company like ours," he says. "It helps us make more money by getting in and out of jobs really quickly. And the more jobs we can do, the more revenue we generate."

Storey says that as the company grows and he needs to add a second crew, he'll also buy another Boss.

"We won't even think twice about it," he says. "This machine pays for itself pretty quickly. It's the best tool in our inventory." **c**

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ONWARD ANDUPWARD

WASHINGTON-BASED PRO-VAC'S OPPORTUNISTIC MINDSET HAS THE DIVERSIFIED UNDERGROUND INFRASTRUCTURE FIRM QUICKLY EXPANDING ITS SERVICE FOOTPRINT THROUGHOUT THE COUNTRY

// By Giles Lambertson

Photography by Stephen Brashear



ne definition of growth might be this: 533% in six 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. "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 six 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," he says.

≪ Graham Gill, CEO of Pro-Vac, in front of one of the company's many Vac-Con units at company headquarters in Puyallup, Washington.



What puts an exclamation point on his expansion of the company footprint is that it mostly has occurred in the last few 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," Gill says. "Then we began real expansion into other areas in the Northwest and the Southwest."

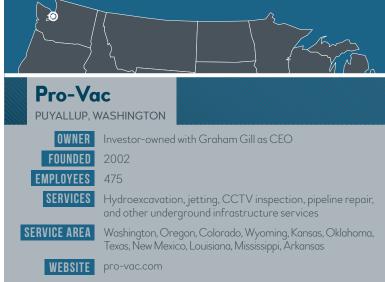
A final relevant observation is that much of the Pro-Vac growth has occurred during the COVID and post-pandemic years that impacted business cycles. According to Gill, the Seattle metro area was among the first to be impacted by the virus and the ensuing disruptive response. Pro-Vac did experience an 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," Gill says.

The Pro-Vac juggernaut kept rolling along.

IN THE BEGINNING

Two brothers, Mike and Steve Olson, started Pro-Vac in 2002. It began by offering pipe cleaning and CCTV inspection services. Those were still the principal company services 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 founders. His systematic transformation of the local/regional company began in earnest.

Hydroexcavation entered the picture in 2010 and has grown into a major component of Pro-Vac's book of business.



≪ Domenic Huttenlocker uses a Vac-Con combo unit to pull mandrels through an electrical conduit at a job site in Seattle, Washington.

➤ A Pro-Vac mechanic works on a pump at the company's shop in Puyallup, Washington.

"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."

GRAHAM GILL

"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 hvdro."

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. 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 Northwest and into climates as varied as Denver 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. "We try to max it out [in configuring the trucks] across the board and then dial it down in softer soil."

For CCTV inspection work, Pro-Vac relies on CUES cameras and systems, with the gear spread among a dozen inspection



trucks. In its pipe coating projects, Epoxytec and Strong-Seal (The Strong Company) are the go-to products. Jetter heads vary among the trucks according to operator preference.

GROWTH THROUGH ACQUISITION

One of the customer appeals of Pro-Vac, says Gill, is the sheer variety of services offered. Yes, hydroexcavation is a mainstay, along with pipe jetting and inspection. But the gamut of services also includes, among other things, street sweeping (gutter debris eventually finds its way into sewers, after all), water containment tanks on construction sites (another contributor to sewer flow) and 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.





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"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.

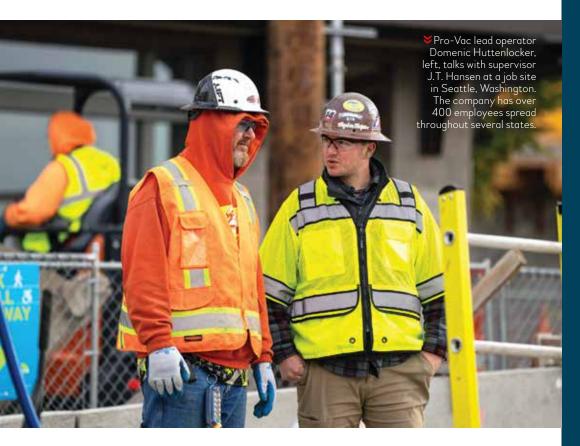
"Having a skillset that would benefit them, we've reached out to other good companies and invested in them as part of Pro-Vac," Gill says.

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 — and at the same time building out its native client base. With hydroexcavation as a 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 HEALTHY 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.

"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." **GRAHAM GILL**



ADAPTING TO DIFFERENT MARKETS

he Northwest has a certain reputation. No, we're not talking about Sasquatch or Bigfoot. The region, more than 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.

Graham Gill, CEO of Pro-Vac, knows all about it. The 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," Gill says. "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," Gill says. "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."

Pro-Vac is adapting to them and continuing to grow.



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>>> Pro-Vac has 150 trucks in its fleet from Vac-Con. Vactor and GapVax.

"We try to create and maintain our culture," he says, noting that it's 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."

"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."

GRAHAM GILL

He says 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," Gill says. "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."

What distinguishes the firm from its competitors? Besides the employees who comprise it, Gill cites two things: quality of work and the variety of services it offers.

"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," he says. "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."

EXPANSION MINDED

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, Gill says, by bringing in people with fresh ideas and different angles on approaching challenges, a vitality that replenishes itself day by day. He 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." c

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SAFETY

FLEET FACTORS

From the vehicles themselves to the employees driving them, there are a number of components to a comprehensive company fleet safety program /// By Joan Koehne

ILLIONS OF MOTOR VEHICLE ACCIDENTS occur each year in the U.S. With so many drivers on the road every day and commercial insurance premiums and vehicle repair costs on the rise, organizations can't afford to neglect driver and vehicle safety policies. Developing an effective fleet safety program lowers an organization's risk level and protects company employees and assets.

John Brengosz, loss control consultant for R&R Insurance in Waukesha, Wisconsin, encourages organizations to take fleet safety seriously, because the consequences of a lackadaisical attitude can

"Most people think the No. 1 way folks die at work is from falls," he says. "It's actually vehicle or driving-related fatalities."

According to Brengosz, vehicles create the single largest risk exposure for a company, and personal injury lawyers complicate the issue.

"That's part of the problem now with fleet safety," he says. "These commercials run all the time, and they're encouraging people to make a claim if they're involved in an auto accident."

Brengosz says he knows that developing and executing a fleet safety program takes time and personnel.

"The good news is, a lot of fleet safety programs don't cost a lot of money," he says.

"IT'S GOOD TO HAVE AN ANNUAL TRAINING ON DEFENSIVE DRIVING AND WHAT COMPANY RULES ARE FOR MAINTENANCE AND OPERATING VEHICLES, SO EVERYBODY'S AWARE OF THEM. ... DRIVING IS VERY MUCH A HABIT. WE WANT THEM TO FORM GOOD HABITS."

JOHN BRENGOSZ

VEHICLE POLICIES

An effective fleet safety program focuses on three elements: vehicles, drivers and policies governing them both.

If an organization provides vehicles, then it needs to set some standards. Brengosz asks clients these types of questions:

- Are you an organization that likes to run vehicles forever and just try to keep them up?
- Do you have a replacement schedule?
- How much are they driven?
- How far are they driven?
- How much are they driven on personal time?

He advises clients to develop vehicle use, replacement, maintenance and inspection policies.

"Remember what could happen if you got a vehicle in an accident and it turns out you haven't kept up at all with maintenance," he says.

Organizations can establish frequency guidelines for routine service based on the vehicle manufacturer's recommended mileage or engine hours. They can track maintenance themselves or have the service provider track it. In addition to routine maintenance, organizations also should conduct periodic vehicle inspections.

"How do we know what the vehicle's condition is if we're not formally looking at it?" Brengosz says.

He recommends checking the oil and inspecting the headlights, taillights, tires and the overall condition of the vehicle. Look for dents or scrapes, because drivers don't necessarily fill out accident forms like they should. In Brengosz's experience, vehicle inspections sometimes turn up surprises.

BEHIND THE WHEEL

The second element of fleet safety involves drivers. Questions to answer include: Who is allowed to operate the vehicle? If an employee takes the vehicle home, is anyone other than the employee allowed to drive the vehicle?

"Don't toss the keys to just anybody," Brengosz says.



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SAFETY FIRST

He advises organizations to screen drivers at the time of hire by requesting their motor vehicle record from a governmental or private service. An MVR, also known as a driver's abstract, reports a driver's accidents and violations. Once you pull an MVR, the next step is to compare the record to the company's formal policy and the standards of an acceptable driving record.

"When I hear somebody say, 'We just eyeball an MVR and make a call on it,' the problem with doing that is a human's ability to rationalize," Brengosz says. "They might rationalize that their No. 1 salesperson or best repair person should be allowed to drive, despite their bad driving record. How is it going to look at a trial if you pulled an MVR, it was poor and you still allowed the employee to drive? My big advice is, if you're going to take the time and expense to run the MVRs, have a formal screening system that allows you to compare an MVR to your own policy and make the call."

Organizations should screen all employees with a vehicle assigned to them, employees authorized to use a vehicle or operate a pool vehicle and employee spouses who are allowed to drive a vehicle the employee takes home.

"Trust me when I tell you, I have had some cases where some of the spouse's driving records are horrendous. If you're not checking them, you wouldn't catch that," Brengosz says.

FLEET SAFETY MANUAL KEYS

Three basic policies should be included in an effective fleet safety manual.

The first is driver eligibility and MVR criteria. The second is a personal use policy. Is a driver allowed to use the vehicle for personal use? Out-of-state vacations? What family members are permitted to drive, and what screening do they need to complete?

The third policy, a non-owned vehicle policy, refers to an employee's use of a private vehicle or rental vehicle for company business.

"For starters, we need them to provide proof of adequate insurance coverage of their own," Brengosz says. "It's also a good idea for them to prove, at least once a year, that they have a valid driver's license."

To reinforce these policies and other components of a fleet safety program, Brengosz recommends annual training.

"It's good to have an annual training on defensive driving and what company rules are for maintenance and operating vehicles, so everybody's aware of them," he says.

In a training session, organizations can reinforce safety rules

regarding seat belt use, traffic laws, locking vehicles, distracted driving and backing up a vehicle.

"Driving is very much a habit. We want them to form good habits," Brengosz says.

EQUIPPED FOR ACCIDENT REPORTING

Post-accident reporting should be discussed at least annually. "You don't have to have a horrible, terrible crash to have lawsuits," Brengosz says.

Thus, every company vehicle should be equipped with an Accident Reporting Kit.

"It's good to have something that the driver can fall back on to make sure they document the scene, get the names of witnesses, and just do a good job of having the insurance company handle the claim," Brengosz says.

Employees involved in an accident should take good notes and clear photos.

"Insurance company claims adjusters say, all the time, that the party that does the best job documenting the damage and what happened generally wins when it comes to these accidents," Brengosz says.

To improve their fleet safety program, many organizations invest in GPS monitoring to track speed, location, idling time and other details. They also mount HD cameras on the front and back to show what drivers see at the time of an accident.

"There are all sorts of really cool monitoring you can do," Brengosz says. "If you're going to pay for that service, be sure you're using the data and talking to your drivers."

An effective fleet safety program requires time and resources to develop and implement, but the results are worth it because of the rising costs of vehicle repairs, insurance premiums and insurance claims. Protect your vehicles, employees, company assets and reputation with a comprehensive fleet safety program. c

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ON THE



Anthony Pacilla

A GUIDE TO REPLACING **OLD GREASE INTERCEPTORS**

Tips covering the initial preparation period to demolition and installation of the new unit // By Anthony Pacilla

T SOME POINT DURING your career in the drain cleaning trade, you might have to replace a large outdoor grease interceptor.

Over time, these devices can deteriorate and become less efficient at trapping and preventing grease buildup. Most times, old concrete tanks will just flat-out break, causing major issues. Consequently, it becomes necessary to replace them.

Here we'll dive into valuable tips and tricks for efficiently replacing old grease interceptors.

PLANNING AND PREP

Thorough planning and preparation are essential before undertaking a grease interceptor replacement project.

Initial inspection and documentation — Begin by inspecting the existing grease interceptor to identify any structural defects, corrosion or underlying issues. Documenting the interceptor's dimensions, weight and access points will help determine the equipment and techniques needed for removal and replacement.

Consider why the old tank failed. Did the old tank fail because it's in a poor location? Is it in a poor location due to an access issue? Did the tank crack because of surrounding earth movement? Does the nearby building show signs of settling, proving earth movement? Or did the local municipality condemn it for some specific reason? You'll need to know these details.

Regulatory compliance — Speaking of local municipalities, it's crucial to have a good understanding of local regulations and permits

ALIGN THE NEW INTERCEPTOR PERFECTLY WITH THE EXISTING SEWER LINE, MAINTAINING THE APPROPRIATE SLOPE AND POSITIONING. THIS ALIGNMENT WILL FACILITATE THE PROPER FLOW OF WASTEWATER, PREVENTING POTENTIAL CLOGS OR BACKUPS.

associated with grease interceptor replacement. Be sure to comply with guidelines for proper disposal of waste materials as well as safety protocols for the working area.

Equipment selection — Choose the appropriate replacement interceptor based on factors such as size, capacity and flow rate. You should get an engineer to size large grease interceptors. Additionally, determine the rigging and demo tools necessary for the project, considering factors like accessibility and maneuverability.

RIGGING TECHNIQUES

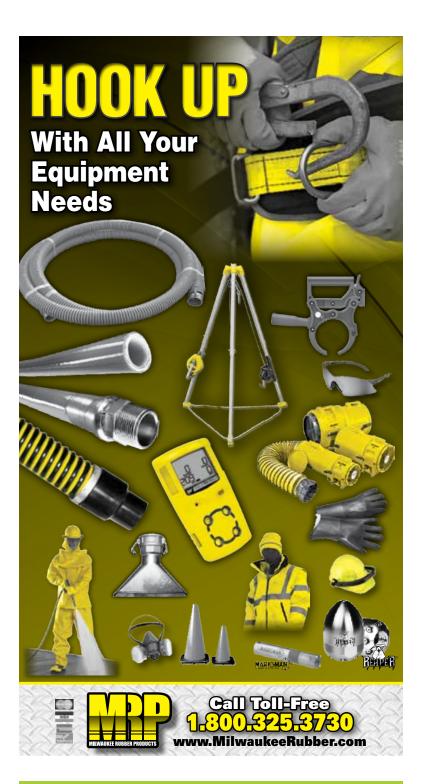
When it comes to actually picking the unit and setting it inside your hole or removing the old interceptor, safe and efficient rigging techniques play a critical role.

Equipment options — Depending on the size and location of the interceptor, various rigging equipment options are available, including rigging straps, slings, chains or hoists. Make sure you have the right gear on site to get the job done. Select the most suitable equipment for the task, considering weight capacities and space limitations.

Load distribution — To prevent an imbalance or damage, distribute the load evenly across multiple lifting points. Most of the new fiberglass or plastic grease interceptors have rigging instructions that come with the unit, including lifting tabs that are integral to the unit. This also aids in better control during the removal and installation process.

Securing the interceptor — Before rigging, adequately secure the interceptor to avoid unintended movement or damage. This should include a guideline being tied to the unit to keep your workers away from the physical unit while still maintaining control. You'll also need to make sure you have a crane or an excavator that can more than handle the weight of the unit. Ensure all accessible connections, such as inlet and outlet pipe fittings, are properly disconnected and capped to prevent debris, odor or spills during the lifting process.

Rigging plan — Create a detailed rigging plan that outlines the order of operations, load capacities and precise lifting techniques.









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ON THE

A B O U T T H F A U T H O R

Anthony Pacilla is a registered master plumber for McVehil Plumbing in Washington, Pennsylvania. He has over two decades of experience in the plumbing, drain cleaning and HVAC trades, and has a bachelor's in business and economics from Thiel College.

This plan should also consider the unloading and positioning of the new grease interceptor.

DEMO TECHNIQUES

Demolishing the old grease interceptor can be challenging. Implementing the right techniques will facilitate smooth removal while minimizing disruptions and risks.

Selective demolition — Depending on the size, accessibility and surrounding structures, selective demolition techniques can simplify the removal process. If the old interceptor is plastic or fiberglass, cutting the interceptor into sections allows for easier extraction and disposal. If the old interceptor is cement, you should get a jackhammer attachment for your excavator and beat it out. Abandoning the old unit, leaving it in place, cracking it and filling it up is sometimes done, but you need to make sure you have a reroute plan for your piping.

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Jetting — Jetting can help break down and dislodge accumulated deposits. It significantly reduces the overall demolition effort and ensures a cleaner work environment.

Dust control and ventilation — Consider using containment barriers, dust collectors, and local exhaust ventilation systems to protect workers from harmful particles and prevent debris from spreading. More than likely, you'll be outside replacing one of these, in which case you should still have some kind of plan to minimize or deal with dust.

Waste disposal — Work with a local septic pumping company and come up with a plan to dispose of the old grease. Then come up with a plan after consulting with local municipalities on their requirements for disposal of grease debris. Dispose of the demolished interceptor and any associated waste materials responsibly, adhering to local regulations. Coordinate with waste management companies or follow appropriate disposal protocols for options like recycling or landfill.

INSTALLATION TECHNIQUES

Proper installation of the new grease interceptor is crucial for it to function optimally.

Ensure proper alignment — Align the new interceptor perfectly with the existing sewer line, maintaining the appropriate slope and positioning. This alignment will facilitate the proper flow of wastewater, preventing potential clogs or backups. Transits and laser systems are critical during the prep stage since the hole you have will be giant. When you're dealing with a large hole and a giant, unmodifiable interceptor, getting your elevations is critical. This cannot be overstated.

Leak testing — After installation, conduct thorough leak testing to confirm the integrity of all connections and seals. Perform this testing before backfilling or covering the interceptor to simplify any necessary adjustments or repairs.

Backfilling — Once the interceptor is properly installed and tested, backfill the area with appropriate materials, taking care not to damage the interceptor or its fittings. Compact the backfill material to avoid future settling issues. Most times, the manufacturers of the new interceptor recommend pea-gravel under and surrounding the unit.

Regular maintenance — Every municipality requires some sort of signed maintenance plan on new grease interceptors. Offer to be the company that does the interceptor maintenance weekly or monthly, even if you sub out the processing of the grease to another company. Your plan could offer routine jetting, chemical treatment of the lines leading to the grease trap, etc. Emphasize the importance of regular maintenance to facility owners or managers. This ensures the longevity and continued efficiency of the installed grease interceptor. c

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LOCATION AND LEAK DETECTION, DRAINLINE TV INSPECTION EQUIPMENT

By Craiq Mandli

>> ELECTRONIC LEAK DETECTOR

1 // HERMANN SEWERIN GMBH SECORRPHON AC 200

The SeCorrPhon AC 200 from Hermann Sewerin GmbH combines the characteristics of a correlator with acoustic water leak detection, meaning prelocation, pinpointing and correlation in a single system. It includes an easy-to-read measurement value display and automated filter selection. It is based on the tried and tested housing and hardware concept of the AOUAPHON A 200. Each is ideal for use for leak detection across all sections, materials, diameters and lengths of pipe. Numerous additional functions are also available for complex location scenarios. 888-592-9916; www.sewerin.com



>> ELECTRONIC LINE LOCATORS

2 // HATHORN INSPECTION CAMERAS UTILI-TRACK

The Utili-Track sonde locator from Hathorn Inspection Cameras is a versatile tool that can be customized to suit individual requirements. Featuring 512 Hz sonde location capability, it accurately indicates both the direction and depth of the sonde. Designed for ergonomic comfort and balance, it offers depth readings up to 25 feet and current measurements, aiding in the identification of target utilities and sondes within congested areas. Equipped with a large, high-contrast LCD, it provides clear signal responses. The device includes automatic depth and current readings, along with proximity directional arrows, ensuring visibility in the brightest sunlight or backlit for viewing in dimmer environments. The unit is powered by six C-cell batteries. 866-428-4676; www.hathorncorp.com



3 // RIDGID SEEKTECH SR-24LE

The RIDGID SeekTech SR-24LE is a precision utility locating receiver with integrated GPS and Bluetooth Low Energy technology for easy integration with smartphones, tablets and high-precision GPS instruments for real-time location coordination via the RIDGIDtrax App. Its omnidirectional antennae capture the complete signal field, making it easy to acquire the signal and trace its path. The receiver maps the utility's position and direction on its display for an intuitive locating experience. Audio and visual warnings notify the operator if the shape of the signal field is being distorted so action can be taken to avoid mismarking the utility's position. Equipped with the 18-volt battery adapter, it is ready to be powered with a RIDGID 18-volt battery (not included) for long-lasting power in the field. It also has a foldable mast for easy transport and storage. 800-474-3443; www.ridgid.com











4 // VIVAX-METROTECH VLOC3

The vLoc3 utility locators from Vivax-Metrotech locate buried utilities and ensure damage prevention while gathering information for analysis. With a multiple antenna array, signal distortion is easily detected and displayed on the bright, full-color display. The series offers locate perspective screens along with a Classic locate mode. The Vector Locate provides fully automatic non-walkover locating. The Transverse Graph mode shows speak and null simultaneously, immediately indicating signal distortion. The Plan View mode shows the relative orientation of the cable at any angle, and the Sonde mode has graphical guidance arrows leading to the sonde location. Plug and play options include an optional Bluetooth module and the marker locator adapter to locate buried markers. 800-446-3392; www.vxmt.com

>> PUSH TV CAMERA SYSTEMS

5 // CUES FLEXIPROBE C540C

The flexiprobe C540c portable pipeline inspection system from CUES simplifies operations by automatically creating a survey report, allowing you to concentrate on your inspection tasks. Share your reports quickly and easily via email or the Dropbox file sharing service. Systems consist of six reel configurations with two different cameras to choose from rated for withstanding water pressure of approximately 160 psi or over 300 feet underwater. Each system serves unique applications and a majority of inspection needs within the sewer industry today, from 1 1/2- to 12-inch pipe. The system is managed by a powerful and intuitive controller with a quick boot-up, an intuitive user interface and a high-definition 10.1-inch TFT display. 800-327-7791; www.cuesinc.com

6 // ELECTRIC EEL EELVISION VIEW

The EELvision VIEW inspection camera from Electric Eel features a 1.3-inch-diameter self-leveling color camera and a large 7-inch monitor for easy viewing. A sunshield allows for outdoor viewing and protects the monitor in transport. It comes standard with 200 feet of 1/2-inch-diameter premium pushrod, a built-in always-on sonde, on-screen footage counter and continuous display odometer, extended ergonomic handle for easy maneuverability and transport, heavy-duty metal frame and wheels, a reel brake and a Makita battery port (battery not included. The provided adapter also accepts Milwaukee and Dewalt batteries. 800-833-1212; www.electriceel.com

7 // ENVIROSIGHT VERISIGHT ULTRA

The Verisight Ultra from Envirosight simplifies workflows while delivering exceptional image quality. It includes a 1080p full HD touchscreen monitor, which records hi-def video and photos to enable quick and accurate identification of blockages, defects and other issues that may compromise the functionality and safety of underground pipelines. Selfleveling pan-and-tilt advanced camera control options are available. It also has a compact and lightweight design for easy maneuverability through tight spaces and uneven terrain. The system offers the ability to perform inspections standing up or on its side for added versatility on uneven ground. It offers the choice of 200 or 330 feet of "built for distance" cables. 866-936-8476; www.envirosight.com

8 // EPL SOLUTIONS GVISION V7

The Gvision V7 from EPL Solutions is a ruggedized elite camera system that can be purchased for mainline use with 200, 300 or 400 feet of stiff yet flexible pushrod or a 150foot mini-camera. Instantly capture video recordings and snapshots with the press of a button and access them anytime within the internal storage. The technician will never have to wonder where a video was taken as geolocation information is automatically attached and displayed on recordings. Add text overlay using the camera reel or a USB keyboard. Copy recordings and snapshots on two USB flash drives at once, or share them using the Gvision app. The app allows the user to remotely control, preview and download video inspections for easy sharing. Users can capture every detail with the color camera head clearly displayed on a 10.4-inch TruView LCD screen. Add an internal battery for up to six hours of runtime. 714-453-9760; www.epls-usa.com

9 // FIBERSCOPE.NET BY MEDIT VIPER PT

The VIPER PT pipe camera from Fiberscope.net by MEDIT offers a fully portable, allin-one design making it easy to transport and set up, allowing users to get to work quickly and without any hassle. The miniature pan-and-tilt camera head measures only 1.1 inch in diameter, providing a comprehensive view of the interior of the pipe. The camera features an HD video sensor, which delivers crystal-clear footage. The system comes with a 98-foot insertion push cable with a pre-attached 512 Hz sonde, making it easy to locate and track the camera head as it moves through the pipe. The control unit features a high-resolution, daylightreadable display. Captured data allows users to refer back to the footage at a later time. Adding text notes also makes it easy to keep track of important details and observations during the inspection. 877-613-2210; www.fiberscope.net

10 // GENERAL PIPE CLEANERS GEN-EYE X-POD PLUS

The Gen-Eye X-POD Plus sewer camera system from General Pipe Cleaners includes the Gen-Pack battery adapter, Wi-Fi transmitter and an on-screen distance counter as standard equipment. The battery adapter lets you operate the camera system for up to 12 hours in remote locations with limited access to power. Fuse-protected to safeguard your equipment investment, the battery adapter is also available separately. A battery and charger are not included. The built-in Wi-Fi transmitter lets you view and record inspections on a cellphone. Using the system's USB port, you can also archive activity on handy flash drives. The on-screen distance counter shows how far the camera has traveled down a line in feet or meters. Settings can be adjusted for full-size or mini-reel configurations. 800-245-6200; www.drainbrain.com

11 // MILWAUKEE TOOL 100-FOOT FLEXIBLE PIPELINE INSPECTION CAMERA

Milwaukee Tool's 100-foot Flexible Pipeline Inspection Camera is part of its M18 Modular Pipeline Inspection System. Featuring a short 25 mm 1080p self-leveling HD camera head with the ability to digitally zoom up to 4X and optimize light output inside of pipes, the unit has a flexible push cable built to navigate tight bends and traps in 1.5- to 4-inch lines, up to 100 feet. The compact and lightweight design offers portability for easy storage and transport on and off the job site. As the first flexible reel added to the system, it joins the 120- and 200foot Mid-Stiff, and 200- and 325-foot Stiff reels to provide the versatility needed to fit any situation. The system is built around the M18 500 GB Control Hub, which powers and allows for easy swaps between reels. 800-729-3878; www.milwaukeetool.com









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12 // MYTANA MS11-NG2

MyTana's versatile MS11-NG2 inspection system inspects 3- to 6-inch lines with a selfleveling camera head. Swap in a smaller head included with the optional MS11+ Combo Kit to inspect 1.5- to 2-inch lines. Each head has a 512 Hz transmitter built in. A high-clarity 6.4-inch daylight-readable monitor and all the controls are integrated on the sturdy reel frame for graband-go convenience; helpful when access points are scattered or hard to reach. Save footage to internal or removable drives, or stream video wirelessly to a mobile device and add voiceover using the built-in microphone. The durable pushrod is available in 150- or 200-foot lengths and can be replaced in your facility. 800-328-8170; www.mytana.com

13 // RATECH ELECTRONICS PLUMBER'S HELPER JR.

The Plumber's Helper Jr. pipe inspection system from Ratech Electronics is based on a small-scale reel and comes with 100 feet of mini Gel Rod cable, a removable compact command module with 7.1-inch LCD, a built-in battery, and an SD recorder for digital images and video. This mini pipe inspection system is available with a full-spectrum, 1.375-inch, self-leveling color camera; a standard color camera; or any of the company's three micro camera heads — 5/8-, 3/4- or 1-inch diameter. 905-660-7072; www.ratech-electronics.com

14 // SPARTAN TOOL TRAVELER 3.0

The Traveler 3.0 is the next generation of Spartan Tool's all-in-one sewer inspection system, upgraded for tough customers. It is the same compact, portable size as before but includes completely rebuilt and upgraded interior components. It offers a stronger, more durable pushrod with a removable reel, allowing you to swap reels in the field quickly and easily. An upgraded camera head with high-intensity LEDs comes standard, but a line of easily interchangeable, customizable camera heads is offered for flexibility. The upgraded interior electronic components are built to withstand harsh environments and deliver better resolution and accuracy. 800-435-3866; www.spartantool.com

15 // SUBSITE ELECTRONICS PUSH CAMERA

When a transporter isn't an option because of pipe size or limited access, the Subsite Electronics Push Camera allows operators to complete inspections in the most challenging conditions. Ideal for pipes from 1.5 to 12 inches, it features single conductor technology with a rigid 1/4-inch fiber pushrod covered with a durable Hytrel jacketing that allows operators to inspect up to 500 feet down the line. Additionally, the 1/4-inch-diameter single conductor cable provides added strength without weight concerns, allowing operators to complete significantly longer inspections without the cable getting twisted or warped. The 1545 camera with an in-line 512 Hz beacon allows the operator to easily locate damage and blockage in the pipe. The camera is controlled by a 1575 controller, which features a rugged, durable and reliable enclosure. 800-846-2713; www.subsite.com

16 // TROJAN WORLDWIDE VIS-130HDPT

The VIS-130HDPT all-in-one camera system from Trojan Worldwide includes a small pan-and-tilt 1080p high-definition camera head measuring 1 inch in diameter. The unit is encased with a 10.1-inch LCD screen, DVR, controls for the camera head and a keyboard for text writing. With the included Wi-Fi capability, the user will have the ability to record audio and video directly to any Android phone or tablet, making this a versatile, compact camera. 800-392-4902; www.trojanworldwide.com

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>>> SMOKE LOCATORS

17 // CHERNE RESIDENTIAL PLUMBING SMOKE BLOWER

The Cherne Residential Plumbing Smoke Blower is a fast and easy leak detection system. The blower uses long-lasting dense smoke that is pumped into a plumbing system to identify leaks quickly and efficiently. Featuring a 5-foot heavy-duty hose that fits a 4-inch clean-out tee, the blower is lightweight and corrosion-resistant. With exhaust pumped through the plumbing, the blower can be used indoors and easily transported with its top-mounted carrying handle. Its efficient 122-CC, 3.5 hp, 4-stroke Honda engine provides more than 700 cfm, making it fast, easy and safe to determine plumbing problem areas. Vibration damping minimizes excess movement and noise, creating a smoother and more efficient experience. 800-843-7584; www.cherneind.com



18 // HURCO TECHNOLOGIES POWER SMOKER 2

The Power Smoker 2 from Hurco Technologies quickly locates leaks in new and existing plumbing systems. The machine is connected to a clean-out, and smoke is sent through the system to reveal any problem areas. The system uses LiquiSmoke, a laboratory-tested safe smoke that costs cents per minute to use and has an indefinite shelf life. When the test is complete, the smoke dissipates without leaving an odor or residue. 800-888-1436; www.hurcotech.com



19 // SUPERIOR SIGNAL 5E FLEX

Superior Signal's 5E FLEX battery-powered smoke blower is designed for smoke-testing building plumbing and sewer laterals. It is compatible with leading 18- to 20-volt tool batteries and, utilizing a high-quality power adapter, the blower integrates with an existing electric tool set. Additionally, it can run off any 12- to 24-volt power source — such as a car or truck battery — using the DC clips power adapter. It gently pushes smoke through the system in only a few minutes and takes seconds to see results. While it is popular for a variety of plumbing applications, it is also useful in testing sewer laterals, and can clearly illustrate where a fault or leak may occur on private property. It comes with an 8-foot industrial-grade hose. Used with 1A or 2B smoke candles, it creates 4,000 or 8,000 cubic feet of smoke, respectively. The smoke candles are also sold in SealPac cans which extend shelf life. 732-251-0800; www.superiorsignal.com c



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PRODUCT NEWS



PRODUCT SPOTLIGHT

CAMERA SYSTEM OFFERS MULTIPLE BATTERY OPTIONS

By Craig Mandli

The inspection camera is one of the most valuable tools on any drain cleaner's truck. Whether you're checking a line to diagnose a problem before beginning a job or you need to locate a blockage to determine how to clear the line, a high-quality, easy-to-operate inspection camera is a must-have.

A well-known name in the inspection camera industry — Electric Eel — recently introduced the EELvision Elite camera specifically designed for inspecting 3- to 10-inch-diameter lines. According to Mark Speranza, vice president of sales for Electric Eel, the new camera includes most of the reliable features the company's camera systems have become known for, and adds several new technology upgrades.

"The EELvision Elite was designed in-house with our customers' needs in mind. The unit is made in the U.S., which our customers told us they preferred," he says. "We have added unique features such as a Makita battery port to the unit and an additional dual adapter that allows the operator to also power the unit with a Milwaukee or DeWalt battery, giving you three battery options. Also unique is the addition of a continuous running on-screen odometer, which lets you track the footage used on each job. An enlarged 7-inch-diameter monitor is daylight readable. A self-leveling color camera, USB recording and footage counter are all standard features."

The EEL vision Elite features a 1.3-inch-diameter self-leveling color camera with vivid adjustable LED lights. A sunshield for the monitor allows for outdoor viewing and protects the monitor in transport. It comes standard with 200 feet of half-inch-diameter premium push



rod, an on-screen footage counter, one-touch recording to USB and screen shot capability, an extended ergonomic handle to facilitate maneuverability and transport, heavy-duty metal frame and wheels, user-friendly control panel, quick start guide tutorial prompts, a QR code for manual and support accessibility, built-in always-on sonde, and dual power sources for AC and battery use.

"Many months of research went into developing the Elite system so that we made sure we have all the features customers are requesting, and a vigorous testing program was implemented to ensure the unit has the required durability to perform in the field," Speranza says. "Customers who have purchased the Elite and have been using the unit in the field are very happy with the picture quality, ease of use, portability and the three choices for batteries to run the unit." 800-833-1212; www.electriceel.com

1 // MILWAUKEE TOOL TORCH WITH NITRUS CARBIDE BLADE

Milwaukee Tool's TORCH with NITRUS CARBIDE blade offers a cutting solution for medium metal applications. The blade has a long life in conduit and strut to get more done with fewer blade changes throughout the workday. The blades deliver increased performance versus carbide blades in medium-thickness metals such as conduit, strut, angle iron and stainless steel. Engineered to dissipate heat, the blades deliver fast and smooth cuts. 800-729-3878; www.milwaukeetool.com







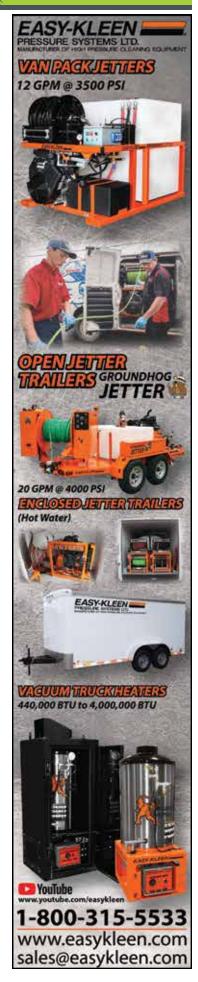
2 // TT TECHNOLOGIES GRUNDOPIT DIRECTIONAL DRILL

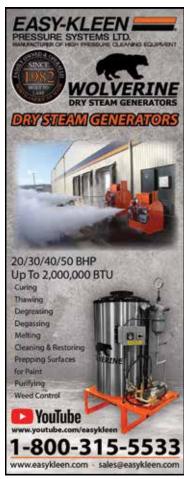
The Grundopit pit-launched directional drill from TT Technologies is an ideal entry-level system for utility and cable installation contractors or as a supplement to larger HDD units. The mini directional drill is well suited for difficult fiber-to-the-home and utility service line installations in tight working conditions. The unit delivers 13,489 pounds of thrust and pullback and 553 ft-lbs of torque. The Grundopit features a patented instant plug-in lock that holds the drill stem in place, cutting the time in half it takes to add drill stems. 800-533-2078; www.tttechnologies.com

3 // SUCCESSWARE FIELD MANAGEMENT SOFTWARE UPDATE

Successware released its newest quarterly update to the platform aimed at enhancing overall workflow. Updates in the new release include key improvements in dispatching, such as advanced usability so relevant job and technician information is available in a single location. It also offers power sorting to quickly sort through unscheduled or unassigned jobs to get them on the board immediately. Jobs can be filtered by location to see where technicians are available, making rescheduling a breeze. Dispatch notices can be tailored to send each technician a list of their jobs for the day, or send a communication by job to the assigned technician, all directly from the dispatch board. The new update also makes it easier to bulk renew customer agreements, helping businesses maintain their consistent revenue by ensuring no agreement gets left behind. 443-873-0499; www.successware.com **c**















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58 Trailer Jetter Hot or Cold 10 GPM @ 4000 PSI 38 HP Kohler EFI Free Shipping/Delivery

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INDUSTRY **NEWS**

General Pipe Cleaners promotes Angela Grieb to national sales manager

General Pipe Cleaners has promoted Angela Grieb to national sales manager. In her new role, Grieb will manage, train and support General Pipe Cleaners' network of independent sales reps, interface with wholesalers, distributors, end users and influencers, and provide



Angela Grieb

customer support. She joined the company in 2005 as an executive assistant. During her 19-year career at General Pipe Cleaners, she has performed many roles including sales support, marketing support, human relations and assistant national sales manager.

RIDGID celebrates 25 years in press technology

RIDGID, a part of Emerson's professional tools portfolio, is celebrating 25 years in press technology. The brand first introduced press technology to North America in 1999 and has continued to help professional tradespeople utilize the platform to drive job site efficiencies. RIDGID offers a product portfolio of innovative solutions that help tradespeople achieve fast, secure and flame-free connections.

Plastics Pipe Institute publishes new technical document

A new technical document that addresses the critical differences between crosslinked PEX tubing systems with polybutylene systems has been published by the Plastics Pipe Institute. The initiative was deemed necessary to eliminate any confusion between the two products because of problems associated with polybutylene, which was discontinued. Prepared by PPI's Building and Construction Division, PPI TN-31: Differences Between Crosslinked Polyethylene and Polybutylene Piping Systems for Potable Water Plumbing Applications discusses the advantages of modern PEX tubing and fittings as compared with PB tubing and fittings, which were last sold in the U.S. during the late 1990s.

CUES software recognized as Esri Cornerstone Partner

CUES GraniteNet Asset Inspection/Decision Support Software was recognized as an Esri Cornerstone Partner at the 2024 ESRI Partner Conference on March 10-11 in Palm Springs, California, for 20 years of commitment to Esri and ArcGIS technology. Developed by CUES in 2004, the inclusion of GIS spatial mapping to asset infrastructure data is now used by over a thousand municipal utilities and contractors.

Kellar Equipment added to Aries Industries' North American network

Aries Industries has strengthened its western U.S. market reach by adding Kellar Equipment to its dealer network. Based in Yucaipa, California, Kellar Equipment specializes in providing top-quality used construction equipment at competitive prices. Its offerings also include new vacuum and sweeping vehicles plus a broad selection of rental equipment. Kellar Equipment is the sole authorized California dealer for X-Broom sweet sweepers, and sole southern California/ Nevada dealer for VACALL vacuum trucks and sewer cleaners.

TruGrit Traction announces expansion to Europe

TruGrit Traction is expanding into Europe and will be establishing manufacturing facilities and shipping operations. In anticipation of the full expansion, the company is introducing flat-rate shipping from the United States to all EU countries. This initiative aims to provide customers in Europe with convenient and cost-effective shipping options while setting up local operations. **c**



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JET VACS



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Contact brian@neverestequipment.com for questions and additional pictures.



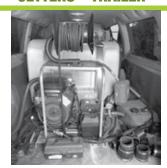
Vactor 2116 on 1991 Ford L8000. 173K Miles. Vactor 2-stage fan. 100GPM@2000psi pump, 1300 gals aluminum water tanks, 16-yard stainless steel debris body, and hydraulic rear door. 7.8L L6 Ford Turbo Diesel. Cummins 6BT Diesel Rear auxiliary engine. Allison Automatic transmission. \$59,000 OBO.

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C06



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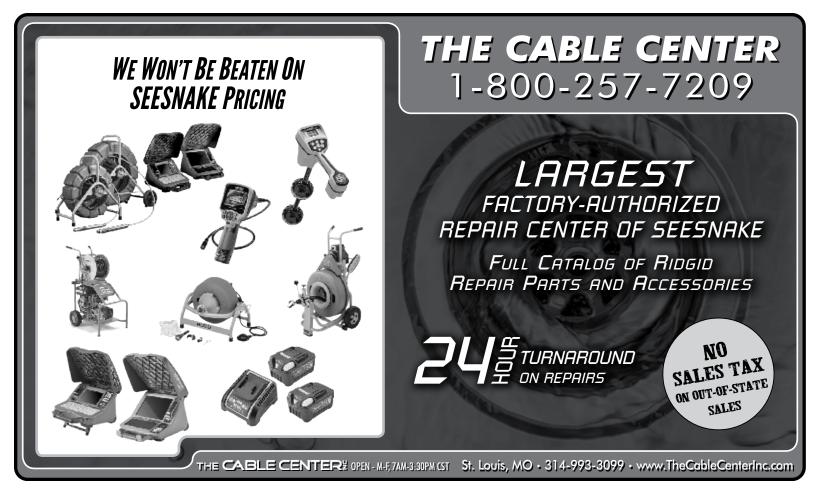
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