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TO DO THINGS DIFFERENTLY **PAGE 22**

MONEY MACHINES

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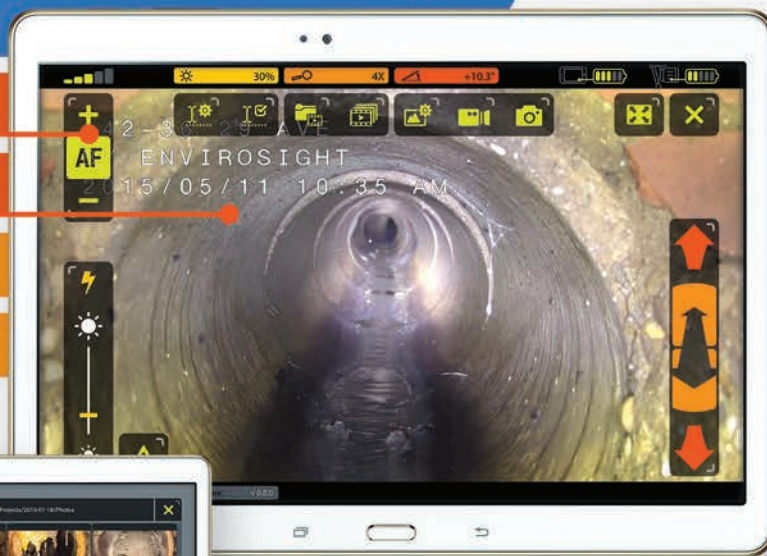
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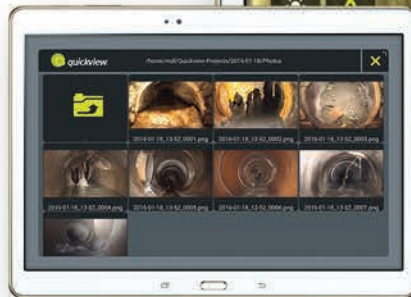
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ON THE COVER:

Chris Roseland is co-owner of Backlund Plumbing in Omaha, Nebraska. The company has distinguished itself from the competition both with its services and its approach to business. Today the company is a multi-million-dollar operation with 65 employees and a large fleet of trucks running on compressed natural gas. (Photo by Matt Ryerson)

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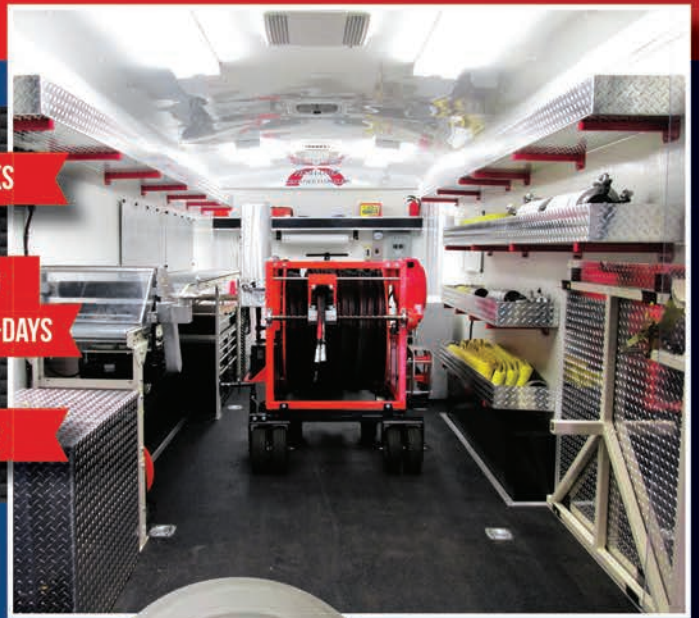
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Luke Laggis
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More Than One Way

You don't have to do things the way they've always been done; you just need to do them well

By Luke Laggis

There's no one right way to run a business. You can focus on one small niche or offer every service under the sun, and you can do either with a hundred employees or one.

Backlund Plumbing of Omaha, Nebraska, is one of the companies featured in this issue of *Cleaner*. The company is traveling a different path, in vehicles powered by a different fuel.

Few things reflect Backlund's progressive business nature better than its fleet of CNG-powered vehicles. The conversion efforts began in 2012 with 10 Ford Econoline service vans used for drain cleaning and plumbing work. Today, natural gas powers more than two dozen vehicles, including vacuum trucks, service vans and dump trucks from a variety of manufacturers.

Backlund's revenues have increased since the CNG conversions. Chris Roseland, who owns the company with his father, attributes much of the increase to the company's ability to brand itself as a "green" business. He says the company hasn't promoted it in any way other than with its vinyl vehicle wraps, but when people call, they usually ask about the CNG trucks. Press coverage of the conversion has helped, too. Roseland says if they're on par with a competitor price-wise, they get chosen because they're "greener."

An alternative fuel made the difference for Backlund, but you don't need to convert your fleet or come up with a whole new business model to be successful.

Sometimes doing the exact same thing as your competitors but just doing it better is all that matters.

Eric Wagner and his wife, Jenny, have a four-generation history in the plumbing trade in and around Toledo, Ohio. Growing up in the plumbing industry provided a wealth of perspective and experience, from basic plumbing and repair to working in new construction. Wagner learned the industry from the ground up, including the importance of customer service and using it as a foundation for good business. Pipe Doctor, which the Wagners opened in 2006, is built around the old-fashioned and family-proven premise that service is the key.

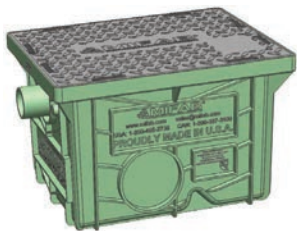
Within their tried-and-true model, the Wagners have made some operational improvements. In 2014, they brought in a new software system that has been a game changer for the company. It's helped with dispatch, management, training and tracking ongoing projects, and has improved the overall efficiency and operations of their company.

The Wagners are still doing a lot of things the way they were done generations ago, but they've found new ways to serve their customers and have embraced new technology that helps them carry out their mission.

In many ways, that's the beauty of entrepreneurship: You get to make your own way and fail or succeed on your own merits. That's opportunity — the American dream.

Here's to living your dream.

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HUMAN RESOURCES

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Hiring other people to work for you can be a sign of success. It can also be — let's face it — a bit of a headache. Are you following overtime laws? What about withholding the correct amount in taxes, Social Security and Medicare contributions? Relax. Third-party firms can handle this for you, and their services aren't just for big employers. [>>cleaner.com/featured](http://cleaner.com/featured)



STEADY BUSINESS

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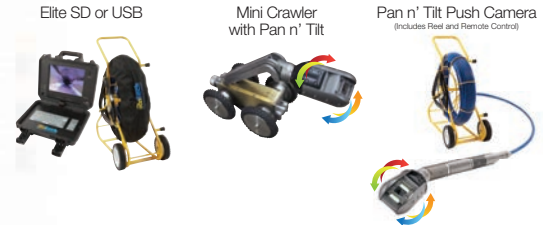
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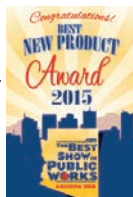
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NATURAL EVOLUTION

BY KEN WYSOCKY | PHOTOS BY MATT RYERSON

WHEN MARK AND SALLY ROSELAND BOUGHT BACKLUND PLUMBING IN 1987, THE OMAHA, NEBRASKA-BASED BUSINESS WAS A SMALL SERVICE SHOP WITH THREE EMPLOYEES. TODAY, IT'S A MULTIMILLION-DOLLAR-A-YEAR COMPANY WITH 65 EMPLOYEES AND A LARGE ARRAY OF TRUCKS AND EQUIPMENT.

**THE KEYS TO THIS EXTREME MAKEOVER? THE THREE D'S:
DIFFERENTIATION AND DIVERSITY – AND DETERMINATION.**



Backlund Plumbing technician Jamey Severn guides the boom from a Vacall AllExcavate hydroexcavator into a Rain for Rent dewatering tank at the Leavenworth Lift Station replacement project in Omaha, Nebraska.

A good example of differentiation is the company's fleet of compressed natural gas vehicles. The vehicles have not only saved the company tens of thousands of dollars during the last several years through reduced fuel costs, but also provide a "green" marketing angle that distinctively sets Backlund apart from its competitors. As for business diversity, the company offers a broad range of services, from residential and commercial plumbing and drain cleaning to municipal sewer and water work and septic tank pumping.

"We basically grew as our customers' needs grew," says Mark and Sally's son, Chris, who joined the company in 1994 and became a master plumber in 2004. He now co-owns the company with his father. "We also made a decision years ago to try to offer as many services in-house as possible versus using subcontractors. We've always felt that we can maintain the quality of our work and do a better job if we control these jobs instead of relying on subcontractors.



profile

BACKLUND PLUMBING

- OWNERS:** Chris and Mark Roseland
- ESTABLISHED:** 1932
- SERVICES:** Hydroexcavation, sewer cleaning and repair, septic cleaning, installation and repair
- EMPLOYEES:** 65
- SERVICE AREA:** Greater Omaha, Nebraska, area
- WEBSITE:** www.backlundplumbing.com

Jamey Severn pumps mud from a dewatering tank at the Leavenworth Lift Station replacement project.

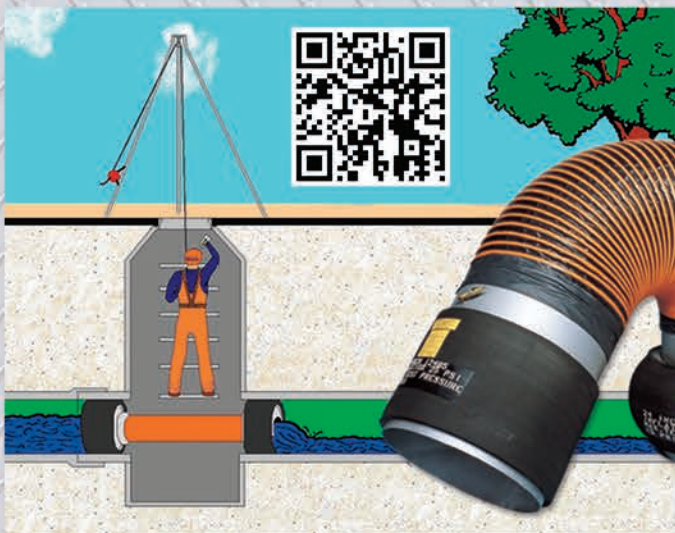


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ABOVE: Compressed natural gas flows into one of Backlund's Ford E-250 service vans. Most of the company's fleet has been converted to run on CNG.

<< LEFT: Shaun Sailors (left) and Jamey Severn use a 2010 Super Products Camel 1200 jet/vac truck to clean and pump a residential lift station after its pumps failed.

"If the phone rings at 2 a.m., we answer it. Same-day service is a huge must in our world. And we also have the equipment ready to handle virtually any problem; WE'RE A ONE-STOP SHOP FOR PLUMBING, PUMPING, UTILITY WORK AND HYDROEXCAVATING."

Chris Roseland

"If someone calls with a problem at midnight, we show up with all our vehicles and we don't have to wait for a sub to show up," he adds. "We run a 24-hour operation — no answering service. If the phone rings at 2 a.m., we answer it. Same-day service is a huge must in our world. And we also have the equipment ready to handle virtually any problem; we're a one-stop shop for plumbing, pumping, utility work and hydroexcavating. If people asked us to paint their house, we'd probably paint their house. ... We'll literally do anything."

Moreover, offering a variety of services avoids the all-eggs-in-one-basket problem that some companies run into, which leaves them vulnerable to market downturns, he says.

CNG CONVERSIONS

Few things reflect the Roselands' progressive business nature better than their fleet of more than two dozen CNG-powered vehicles. The conversion efforts began in 2012 with 10 Ford Econoline service vans used for drain cleaning and plumbing work. Today, natural

gas also powers seven Ford Transit vans, two Dodge 2500 flatbed delivery trucks, three Freightliner FL70 service trucks, two vacuum trucks built on Freightliner M2 chassis and two dump trucks, featuring Freightliner FL70 chassis and 7-cubic-yard dump bodies, fabricated in-house.

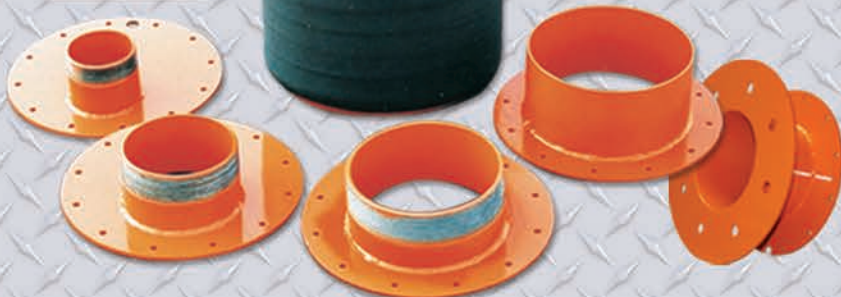
High fuel prices played a key role in the decision to convert to CNG. In 2012, the average price for a gallon of gas nationwide hovered around \$3.60. "At the time, we were doing work for the city's Metropolitan Utility District (MUD) and I noticed they were converting their vehicles," Roseland recalls. "So I inquired about it."

Research showed that CNG at the time cost just \$1.70 a gallon. In addition, natural gas prices historically aren't subject to the volatile swings commonly seen in gasoline prices. And while the conversion price was expensive — about \$12,000 per service van — MUD was offering a 50 percent rebate. That sealed the deal, Roseland says.

"With financial assistance from the rebates, our break-even point was running 3,000 gallons (of CNG) through the vehicles," he explains. "Each van saved

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CROSS-TRAINING CREATES HAPPIER, MORE PRODUCTIVE EMPLOYEES

One of the keys to Backlund Plumbing's exponential growth over the past couple decades is a cross-training program that enables employees to perform a variety of functions, which improves efficiency at the Omaha-based company.

At Backlund, some plumbers know how to operate a vac truck, for instance. In other instances, sewer line cleaners can also run inspection camera systems. And along the way, employees make themselves more valuable to the company — and sometimes even earn pay increases. “One of my best drain technicians became a full-time cross-bore CCTV technician,” says Chris Roseland, who co-owns the business his father, Mark, bought in 1987. “He got a substantial pay raise for acquiring a new skill.

“Cross-training is a big reason why we excel,” he adds. “We have very smart employees. One of our technicians likes to fix things, for example, so he learned how to repair pipeline inspection cameras. We also have interior commercial plumbers who want to be out in the dirt, digging. So they learn how to run excavating equipment. Then in winter, when there's less digging going on, they can go back to doing interior plumbing again.”

Cross-training is time-consuming and requires thorough planning as well as a strong commitment. But in the end, it's worth the time invested, Roseland says, and not just because of the increased efficiencies. He points out that employees appreciate their employers more when they feel the company is interested in satisfying their career goals. As such, cross-training can reduce turnover as well as keep employees refreshed.

“I think our employees are happier because on most days, they never know what they'll be doing. We're as far from an assembly-line job as you can get,” Roseland says. “Doing different things keeps them invigorated about their jobs and helps to prevent burnout.”

Backlund also improves retention by paying top wages and offering good benefits, such as providing more paid time off and a matching 401(k) retirement program, plus paying the bulk of employee health insurance premiums. “When people came to work for us 10 years ago, they came because we could give them 60- to 70-hour weeks and enable them to make more money,” Roseland points out. “Now they seem to prefer that we offer a 40- or 50-hour workweek, pay them a good wage and back it all up with a good benefits package.”

To build company loyalty and teamwork, Backlund also holds special events for employees, like Thursday night bowling-and-pizza parties or fishing/hunting trips. “Once we took 50 guys to a Kansas City Chiefs game,” Roseland says. “We treat employees like gold because they're our most valuable asset.

“In 2015, we went from \$8 million to \$10 million in sales — with the same number of employees,” he adds. “I never thought we could top \$10 million in sales. But we did it, thanks to diversified services and cross-trained employees.”



Jamey Severn uses a pressure washer connected to a Vacall hydroexcavator to loosen sediment from a dewatering tank.

about \$4,000 the first year through reduced fuel costs. I'd say 90 percent of those first 10 conversions paid for themselves within the first two or three years.”

REDUCED OPERATING EXPENSES

Now that gas is just above \$2 a gallon, the savings aren't nearly as dramatic. But Roseland points out that since the vans' conversions, the company also converted the two Freightliner dump trucks and other vehicles that use diesel fuel, which currently is about 50 cents per gallon more expensive than CNG. The cost of larger CNG-powered vehicles, such as the Freightliner dump trucks (which come with John Deere or Cummins CNG engines), is about \$60,000 more than for a conventional truck. As such, the payback period is longer — about two years, he notes. “When diesel is at \$4 a gallon and CNG is \$2 a gallon, we might save up to \$250 a day,” he explains.

“In my opinion, fuel prices eventually are going to go back up,” Roseland says. “Our vehicles have a seven- or eight-year life cycle, so we're betting that fuel costs will average out higher in the next seven years.” In the short term, Roseland remains undaunted by lower fuel prices; the company plans to buy and convert five more Transit vans during 2016, he says.

Truck Center Companies does the CNG conversions. The process is relatively simple: The gas tank and fuel-delivery system is replaced with a CNG tank and a new fuel-delivery system. A different conversion kit enables the original gas engine to run on CNG, Roseland says.

Backlund's revenues have increased since the CNG conversions, and he attributes much of it to the company's ability to brand itself as a “green,” eco-conscious business. “I can verify that because we've only promoted it on our vinyl vehicle wraps, and when people call, they usually ask about the CNG trucks,” Roseland says. “They notice that we've done it. Our employees tell me that customers are always asking how it works. I

CONTINUED >>



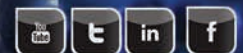
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think that if we're on par with a competitor price-wise, we get chosen because we're 'greener.'"

There is one drawback to CNG-powered vehicles: Fueling stations are scarce. Roseland says the company is fortunate because there are two CNG stations within a mile of the company's headquarters. In addition, all the CNG vehicles have only a 250-mile range, so drivers must always be aware of their proximity to fueling stations. "But they're adding more refueling stations every year," he notes.

DRAIN CLEANING EXPANSION

Backlund started offering drain cleaning services in the late 1990s, again in response to customer demands. "We used to sub it out to a drain cleaning company, but we wanted to keep our quality up to par and keep the revenue in-house," Roseland explains. "It turned out to be a financial winner."

As demand for drain cleaning services grew, so did the company's roster of equipment. Today, the company owns two trailer-mounted Spartan 798 (4,000 psi at 18 gpm) water jetters equipped with 500-gallon water tanks and a 2010 Camel 1200 jet/vac truck (Super Products) with hydroexcavating capability. It features a 12-cubic-yard debris tank, a 1,500-gallon water tank, a Roots Systems blower (4,460 cfm) and a water pump (80 gpm at 2,000 psi) made by Myers.

"I think that if we're on par with a competitor price-wise, WE GET CHOSEN BECAUSE WE'RE 'GREENER.'"

Chris Roseland

In addition, the company relies on five cart-mounted drain cleaning machines made by Duracable Manufacturing, six VuTek push cameras made by Insight Vision Cameras for pipeline inspections, several RIDGID Mini-SeeSnake inspection cameras and a Dodge Sprinter camera truck equipped by CUES with a LAMP inspection camera that includes lateral-launch capability.

The company also owns a 2012 Vacall AllExcavate hydroexcavating truck, built on a Sterling chassis with a 12-cubic-yard debris tank, a 1,300-gallon water tank and a 5,150 cfm Hibon blower; and two trailer-mounted hydroexcavators made by Ditch Witch. Used primarily for utility potholing, the units feature 500-gallon debris tanks and 250-gallon water tank.

In addition, the company owns five mini-excavators and two skid-loaders made by Bobcat Co., three John Deere loaders and one Caterpillar excavator.

Owning a wide range of equipment helps Backlund land jobs that it otherwise couldn't bid on. A good example is a massive, ongoing sewer rehabilitation project in Omaha, slated for completion in 2027. Known as Clean Solutions for Omaha, the project includes separating combined stormwater and sanitary sewer lines, which in turn will reduce the number of sewer system overflows that result in raw sewage discharges into the Missouri River and other local waterways.

"It's been a real boon to our vac truck business," Roseland says of the project, which also includes construction of a deep tunnel and underground detention basins to store excess stormwater during heavy rainfalls. "The detention basins have to be periodically cleaned of debris."

But what happens if competitors start investing in vacuum trucks? Roseland says his employees' skills and experience will still differentiate the company from competition. "We recently were hired to pump and remove solids that were located 50 feet underground, after another company failed with the same equipment," he points out. "We used different fittings to increase airflow. ... Good operators are everything in the vac world. You can't just turn on a switch and drop a hose in a pool of water."

As for the future, Roseland says the company is aiming for 10 percent



Backlund Plumbing technician Johnny Compos uses a remote control to guide a hydroexcavation boom at the Leavenworth Lift Station.

growth in sales during 2016, with much of the increase coming in sewer and water infrastructure work.

He also says acquiring another company isn't out of the question. "We're always thinking like that. We're always willing to consider getting into something new." **C**

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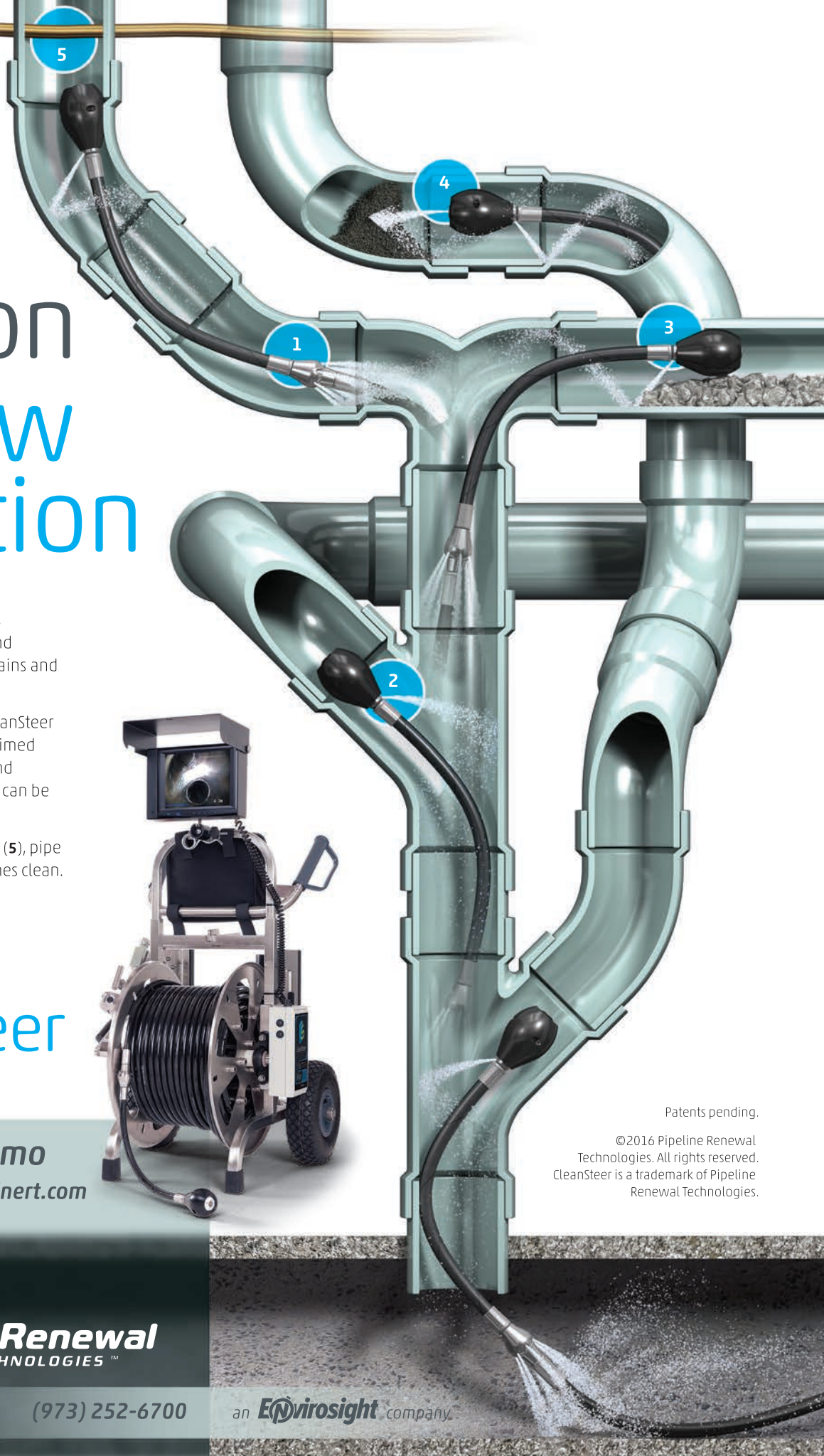
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A Lateral Improvement

Trenchless sewer rehab system opens up a pipeline to more revenue for Pennsylvania drain cleaner

By Ken Wysocky

As a plumber and drain cleaner who's grown his business from one truck to 34 employees and 32 service vehicles in the last 12 years, Matt Mertz is the kind of businessman who knows an opportunity when he spots one. So it was a no-brainer for his company, Matt Mertz Plumbing in Pittsburgh, to expand into pipe lining services.

Why? For starters, his company — established in 2004 — was already repairing and replacing residential lateral lines. Secondly, the master plumber was literally handing money to other local companies by hiring them as subcontractors to do trenchless repairs he wasn't equipped to perform.

"We were giving away a few hundred thousand dollars a year," says Mertz, noting that he had five crews that were digging up laterals every day. "It was painful to give up that kind of revenue.

"Because I was subbing out pipe lining work, I could see there was a lot of money to be made there," he continues. "Plus, it gave me another service to offer to customers — something different that not a lot of other companies offered. And I could leverage my existing customer base to obtain business. We were already doing a considerable amount of sewer repair, so it just made sense to be able to offer customers an upsell."



Dylan Belfiore guides the Perma-Lateral inversion unit (Perma-Liner) at the entry pit on a lateral relining job.



Dylan Belfiore, a plumber with Matt Mertz Plumbing in Pittsburgh, Pennsylvania, runs a Perma-Liner Stinger mini steam unit during the installation of a residential lateral liner.

money machines

- OWNER:** Matt Mertz Plumbing Inc., Pittsburgh, Pennsylvania
- MACHINE:** Perma-Liner pipe lining system
- FUNCTION:** Trenchless rehabilitation of residential lateral lines
- FEATURES:** 18-foot Express Trailers wet-out trailer, Viper air compressor (80 cfm) from Vanair Manufacturing, Stinger boiler from Perma-Liner for steam curing liners, Ford 5500 dually pickup truck
- COST:** About \$150,000 for all components
- WEBSITE:** www.matt-mertz-plumbing.com

Mertz decided to invest in a lining system made by Perma-Liner Industries. The primary components are an 18-foot wet-out trailer (made by Express Trailers), where the liner is impregnated with resin prior to the actual lining process; a Viper air compressor (80 cfm), made by Vanair Manufacturing and used to inflate the liner; and a Stinger boiler, made by Perma-Liner for steam-curing the liner after it's installed. A Ford 5500 dually pickup truck, which tows the trailer, rounds out the system. To clean laterals prior to liner installations, Mertz relies on two Spartan Tool trailer-mounted water jetters and jetter nozzles from StoneAge and NozzTeq.

The investment was significant — about \$150,000 — but Mertz, a fourth-generation plumber, says the unit has easily paid for itself. In fact, the pipe

lining system now contributes more than \$1 million a year in gross revenue, which is a substantial contribution to the company's total annual sales.

Mertz decided to go with Perma-Liner for several reasons. First of all, the subcontractors he had been hiring used Perma-Liner, so he felt familiar with the system. Second, Perma-Liner took the time to get its liners certified for use in Mertz's service area, which ensures they will pass inspections by local municipal officials. Thirdly, he says the tech support is top-notch, with customer service reps available for consultation even after business hours — including weekends. Moreover, Mertz says that the company's liners stretch the same amount every time, which is an important consideration in a process that leaves little margin for error.

"I've found that Perma-Liner's 6-inch liners stretch about a 1/2 inch every 10 feet," he explains. "When we insert a liner, we have to get it into the wye (connection with the mainline sewer), but it can't protrude into the main. There's only about a 4-inch-long 'landing spot' for the end of the liner, so there's not a lot of room for error. If it stretches too far and protrudes into the main, you have to trim it off, which is difficult and expensive to do because it's hard to access."

The optional Stinger boiler, which produces steam heat that helps cure liners faster than letting them harden in ambient temperatures, has been a great productivity and profitability enhancer — especially since some municipalities won't allow ambient curing. While he cautions that steam curing isn't suitable for every job, using it can lop off up to four hours per job. That's a significant savings that frees up invaluable time for his crews to perform more jobs annually, Mertz says.

"I do it by feel," Mertz says of steam curing. "It takes an average of about five minutes to cure every 10 feet of a 6-inch liner. But there's definitely a learning curve to it. Unfortunately, you have to learn by messing up an installation, which you hopefully can salvage by reinflating the liner. I would suggest that guys start out by using ambient curing and work their way up to steam curing."

Selling customers on a pipe lining job is typically fairly easy because it's usually cheaper than digging up a customer's yard to replace a lateral. It doesn't make as much sense for spot repairs of small sections of pipe, Mertz notes. But in some situations, it's clearly a better option than digging up a driveway or sidewalk, for instance, or removing a tree or tearing out expensive landscaping to replace a lateral.

"I'm going to see someone today with a sewer (lateral) that goes under a concrete driveway, then through the neighbor's yard and under a state highway," he says. "Now that's a perfect situation for pipe lining."

Mertz says contractors who are thinking about expanding into pipe lining, but feel a bit intimidated, should embrace the technology and take the time to thoroughly learn it. "I used to practice shooting liners in my shop — glue pipes together with fittings to see

how much liner is used for each bend in the pipes.

"If someone is mechanically inclined, they can pick it up pretty quickly if they just put the initial time into it," he continues. "But they need to be confident in their skills, because it's very expensive to fix an incorrectly installed liner." Furthermore, pipe lining requires a crew of at least three workers — even more for longer runs — so it's not suited for small companies, he notes.

"But we did more than \$1 million in liners last year alone, and it definitely gave us a good 10 percent jump in revenue the first year we started doing lining. It was a very worthwhile investment." **C**

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TITANS OF TOLEDO

OHIO CONTRACTOR'S FAMILY TREE HAS PRODUCED FOUR GENERATIONS OF PLUMBERS WITH FIRM ROOTS IN THE TOLEDO AREA

Eric Wagner and his wife, Jenny, began writing their own chapter of a four-generation plumbing tale a decade ago.

Like his father, grandfather and great-grandfather before him, Wagner's story is laid out like a labyrinth of water and sewer lines, reaching back more than a century and extending well into the Toledo, Ohio, area's future.

Growing up in the plumbing industry provided a wealth of perspective and experience, from basic plumbing and repair to working in new construction. Wagner learned the industry from the ground up, including the importance of customer service and using it as a foundation for good business. Pipe Doctor, which the Wagners opened in 2006, is built around the old-fashioned and family-proven premise that service is the key.

Wagner, equipped with a pickup truck, his master plumber license and some homemade business cards and fliers, formed the company as a plumbing shop. He also brought in the latest drain cleaning and repair technology, and the menu of services now includes sewer cleaning and repair, CCTV inspection and pipe bursting. The customer base is running 60 percent residential and 40 percent commercial and municipal. He does about 50 percent in plumbing and 50 percent in sewer.



Eric Wagner, owner of Pipe Doctor Plumbing, Heating, Sewer and Gas, stands in front of his truck near his warehouse and office in Perrysburg, Ohio.

BUILDING A BASE

As the customer base grew, so did the service offerings. By 2012, the company was providing point repair using Pipe Patch from Source One Environmental, and pipe bursting soon followed with HammerHead Trenchless Equipment.

The company currently has an agreement with the City of Toledo, taking care of residential sewer lines that lie within an easement. The city has its own equipment for maintaining the mainlines, but when problems arise they contact Pipe Doctor, have them go out and inspect the line to see if point repair is a suitable solution. Wagner will contact the homeowner and then work with the supervisor and the inspector, who will be on site while repairs are carried out.

"We have also developed a relationship with the City of Sylvania, a suburb of Toledo," he says.

A recent job in Sylvania involved a 12-inch clay pipe that ran under Sylvania Avenue, a major thoroughfare. The city was concerned about a developing sinkhole in the road, and inspection found issues in the pipe. The major spot had water and sand coming up through the bottom of the pipe continuously, right where the sinkhole was starting. Water was also infiltrating other spots, which Pipe Doctor was able to repair using its Pipe Patch system.

Wagner expects more opportunity with Sylvania and other municipalities that aren't equipped for these types of repairs.

BY MARIAN BOND | PHOTOGRAPHY BY AMY VOIGT

Pipe Doctor owner Eric Wagner (right) and technician Matt Lambert, use a RIDGID SeeSnake video inspection system to inspect a drainline in a restaurant kitchen.



“We have other technology besides point repair where we can help other plumbers who don’t have the technology.

“They will either give us the job, tell the customer to call us, or in some cases will want to make a little money, and ask us for a price and mark it up a bit,” Wagner says. “We have great relationships with other contractors in the area, and we would never solicit their customer. We have uniforms and our trucks are marked, but that has never been a problem. We are always professional. We just want to help the customer.”

Wagner says customers are more comfortable with a marked van on the property because there are so many scams going on. They like to know who is working on their problem.

“In the older sections of the cities the infrastructure is also getting older. With the sewer lines, they have old clay with lots of infiltration and separated joints. These have been around for 40 years or more. That seems to be our primary call volume now, taking care of the sewers. We have a couple calls a day with these problems.

“In the new neighborhoods and subdivisions they have plastic lines, and we get calls where people want new fixtures, new toilets or they need a sump pump or a water heater.”

A BETTER SYSTEM

In 2014, Wagner brought in ServiceTitan software, and it has been a game changer for the company. This has been helpful for management, training and keeping track of ongoing projects.

“It has all the pricing and dispatch software. It’s an all-in-one service

profile

PIPE DOCTOR PLUMBING, HEATING, SEWER AND GAS

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OWNER: Jenny Wagner
OPERATIONS MANAGER: Eric Wagner
SERVICES: Plumbing, heating, sewer and gas, point repair, pipe bursting, jetting, CCTV
EMPLOYEES: 7



Currently, they can repair pipes from 2 to 15 inches with their equipment. “We can even go as low as 1 1/2-inch pipe with our repair,” he says.

Pipe Doctor has also been called in as a subcontractor on some new construction, as well as for other plumbing firms in the area where drain cleaning, patching or repairs are needed.



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 video profile at www.cleaner.com.

Eric Wagner (right) and employee Matt Lambert look over a piece of hardware they need for a commercial kitchen remodeling project.

“We have great relationships with other contractors in the area, and we would never solicit their customer. We have uniforms and our trucks are marked, but that has never been a problem.

**WE ARE ALWAYS PROFESSIONAL.
 WE JUST WANT TO HELP THE CUSTOMER.”**

Eric Wagner

management program,” Wagner says. “It gives me and Jenny benefits because it keeps track of all the numbers every day. You have a dashboard and you can look at all the key performance indicators. You can do special reports. I can go in anytime from my phone or iPad, or laptop, or desktop, and see exactly where everyone is, and what they are doing. All that information is there.”

Wagner says the program has also helped with training and coaching employees.

“Before, I was teaching off of memory and emotion,” he says. “Now you have actual numbers that you can go to. You can actually see how a job was handled, and it helps in training and coaching and managing.”

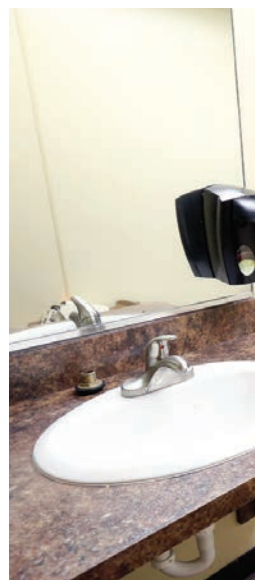
The plumbers have a mobile version, and if they need to purchase something they can enter the details. It lets them know how they are doing on each job. It dispatches and marks drive time with GPS, and logs job and invoice information.

He says proper training is time-consuming but well worth it. He prefers hiring either licensed plumbers or those who want to enter an apprenticeship program, and new hires spend a lot of time on in-house training regardless of their experience.

“I like to spend as much time as possible with a new hire going over ServiceTitan, and also the way we do things, because it is so much different than what a normal service company does. Plumbers are used to going in and fixing a job and leaving, and not having to do anything on a computer or a phone. It takes a lot of time getting used to that, and finding out what they know and what they don’t know. So we have a lot of technology for them to learn and our equipment. We do more than fix toilets.”

Wagner wants all his technicians and plumbers to be cross-trained so they can be proficient with all equipment and processes. He has also honed up his own interviewing skills as he looks for new employees.

“Before, I was looking at people who would say what they thought I wanted to hear,” he says. “I would be looking for people who knew everything about plumbing, wanted to be a plumber.



BUILDING STRONG RELATIONSHIPS

When Eric Wagner reflects on the beginning of his push to get Pipe Doctor started back in 2006, he says persistence and creativity were the keys.

“I just had a passion for this business,” he says. “But you can quickly become frustrated, and you have a lot of idle time when you start from nothing. I was blessed that I was able to borrow and to grow to where we are today. When I made money, I was able to reinvest in the company. But it didn’t take too long until I was working every day, all day, and I got established.”

He says he did miss out on some family time in those early years,

but now he has more time for his son, daughter and wife, Jenny. He’s also had time to build some long-term relationships with customers.

The company recently helped refurbish a local restaurant that had first become a client seven years earlier after other contractors were unable to track down the source of a sewage smell in the restaurant. Pipe Doctor was finally called in for its turn at locating the issue.

“There were horror stories about people falling through the ceiling while looking for the foul odor,” Wagner says. “We came in with the diagnosis. It was in the wall. We spent less than one day, opened the wall, solved the problem.”

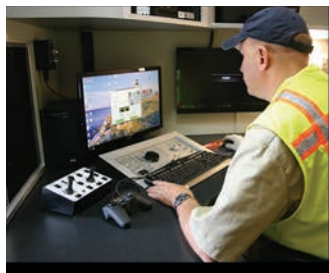
“Now I’ve done a reversal on those questions. I have about 15 questions that I ask, and they’re aimed at getting to know more about the type of person it is. What are their goals, hobbies — if they just need a job. You want to know before you hire so you are making a smart investment. My questions help me know what they are thinking. Sometimes a person will say they have never been asked those types of questions before. I have learned there are different ways of doing things, and this has helped me to expand and grow. I have evolved and changed my thinking.”

WELL EQUIPPED

Pipe Doctor’s fleet consists of a mix of Ford, Chevy and Nissan service trucks, in addition to the enclosed trailer that is set up for Pipe Patch point repairs. The trucks are well stocked with tools and inventory, as is the trailer, with confined-space equipment, a compressor, generator and other gear.

The team relies on a trailer jetter (40 gpm/3,500 psi) with a 600-gallon water tank for cleaning sewer lines, along with a HammerHead Portavision camera and numerous other RIDGID cameras and locators.

Eric Wagner tests and inspects new fixtures in a commercial restroom.



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Matt Lambert keeps a close eye on the monitor while inspecting a drainline.

"I have learned there are different ways of doing things, and this has helped me to expand and grow.

I HAVE EVOLVED AND CHANGED MY THINKING."

Eric Wagner

The company is a 24/7 operation, with four plumbers sharing responsibility for emergency calls.

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"We have had many consecutive days below zero in the past, and had nonstop flooding in the lines. We have to be ready for whatever."

Wagner says the plumbers typically take their trucks home rather than return to the yard. The company has facilities in Toledo and the suburb of Perrysburg. They have parts inventory at both locations, and also have supply houses nearby so they never run out of equipment or materials.

"With the services we offer we have endless responsibilities," he says.

"We always keep in mind that plumbers and drain cleaners protect the health of the nation. Sewage is bad for everyone and water needs to be good for us. And we need gas to keep warm and cook. In our company, we take care of it all." **c**



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The Strategy of Deals and Discounts



Erik Gunn is a magazine writer and editor in Racine, Wisconsin.

You can give customers sale prices and special offers without crippling cash flow

By Erik Gunn

Take a look at the advertising circulars that come with your Sunday newspaper and it's not hard to find yourself asking this question — does anything sell for “full price” anymore?

Retailers bombard us with Black Friday bargains during the holiday season. Online booksellers tout prices for best-sellers 40 percent below what is posted on the inside jacket flap. Brick-and-mortar stores slash prices to try to keep up with the deep discounts offered by web-based merchants like Amazon.

And it's not just in retail. In a world where consumers seem to feel entitled to a deep discount everywhere they turn, the pressure is mounting on service businesses like yours.

Competition and a fundamental change in consumer psychology are posing challenges to the old model, when the price structure was supposed to adequately cover the cost of operation and ensure a reasonable return for the work delivered.

This change can be especially vexing, because if you're not careful, you could wind up in a no-win situation: Refuse to offer any discounts or deals at all, and you risk falling by the wayside to aggressively priced competitors. Slash prices indiscriminately, and you're in danger of training your customers to devalue your work — and cutting your own throat in the marketplace.

The way these practices can train customers is demonstrated in the recent turbulent history of retailer J.C. Penney. A few years ago, Penney tried to shift away from a model of frequent sales in favor of “everyday low prices” — and wound up driving away customers in the process, Kenney notes. Penney is recovering from that misstep, but the power of the promotional sale is evident today on any Saturday morning at the department store, “when they offer their ‘Door Buster Deals’ to a store full of ‘hungry shoppers,’” she observes.

BUNDLE IT

Kenney — who in addition to her consulting work is the author of *How to Build Buzz for Your Biz, Tap into the Power of Social Media, Publicity, and Relationship Marketing to Grow Your Business* — suggests many more circumspect approaches that can tap into the customer's instinct to grab a deal and won't send your business in a race to the bottom.

“Offer a package deal,” Kenney says. “Instead of just discounting one common service, bundle together a package of services with one price.”

You can see that at your local auto repair shop, which may offer deals such as an oil change, an air filter replacement and an alignment at a bundled rate lower than the individual services would cost on their own.

“Because it's two or more services bundled together, the customer is less likely and less able to associate a certain price with a certain service, therefore not locking that price in their mind and devaluing your service,” Kenney points out.

If you take that tactic, she adds, “Make sure you always let customers know how much they are saving, or what the value is.” For example, let's say the individual services combined in the bundle would normally add up to \$100, while your bundled price is \$59.95. “Don't just say the bundled service is \$59.95,” Kenney says. “Say that service is \$59.95 — a \$100 value. Give them context about just how great a deal it is.”

PARTNERS, REFERRALS, SEASONALITY

Perhaps you can team up with other vendors whose product niches don't compete with yours, yet still complement the sort of work you do. For instance, if you clean and inspect laterals but don't offer repair or rehabilitation services, partner with a contractor who specializes in lateral lining.

“Offer a package deal together so that there is added value and reach,” says Margo Schlossberg, marketing manager for JumpIt Pass, a subscription-

“The tactic of offering deals is a psychological inducement to encourage customers to take action. It taps into the person's emotions and may incite them to action because of their fear of missing out on a great deal.”

Wendy Kenney

TAP INTO EMOTIONS

I posed questions about this issue to a cross section of marketing experts. My correspondents came from outside the wastewater industry, yet their niche businesses have some things in common with the readers of this column, and their insights are easily translatable.

Wendy Kenney, who advises auto repair shops and other businesses, explains how deals can serve as a positive force in generating sales.

“The tactic of offering deals is a psychological inducement to encourage customers to take action,” says Kenney, who operates the consulting firm 23 Kazoos based in Sitka, Alaska. “It taps into the person's emotions and may incite them to action because of their fear of missing out on a great deal.”

based service that helps families find classes for their children in activities ranging from the arts to sports in the Washington, D.C., area.

Schlossberg also suggests offering customers incentives to refer other potential customers — say, a one-time discount on a drain inspection for a client who refers a neighbor or friend to you for service.

The medical spa business might not seem to have much in common with what you do, but Julia Avalon, who runs Avalon Medical Spa in Miami, Florida, offers some sensible ideas that aren't limited to laser removal or Botox injections.

If you find your business has ups and downs that follow the calendar, Avalon says, it might be worthwhile to tie deals to certain days of the week or months of the year — discounting routine procedures during slow seasons.

ADD SERVICE

Service contracts can be another way to offer limited discounts without devaluing your main business. One approach would be to provide a contract for continuing service with a low introductory price for the first visit, while the regular maintenance visits that follow would reflect the service's standard price.

Like Kenney, Avalon also suggests package deals “with add-ons a client may not have thought of but do not require a lot of time.”


A variation on that approach would be “complimentary add-ons that would bring value to the client and set you apart from the competition,” Avalon adds. “This can be done even without lowering the initial price.”

Kenney, too, is a fan of throwing in a small — but not meaningless — “added value” bonus. When the customer buys a certain service, give them an extra freebie, not just a token trinket, Kenney says.

“The key is to give something of tangible value. The dollar value of the freebie item doesn't matter, it's the perceived value to the customer,” says Kenney. “Basically, give them something they want.”

MAKE IT WORK

So are deals and discounts a good strategy? In the current environment, they might be unavoidable. The bottom line is, don't just hand them out like Monopoly money. Be strategic about them and find ways to make them help your business, not just for short-term revenue but long-term sustainability.

If your deals live up to that standard instead of being a no-win burden, they truly can be a win-win opportunity — for your customer and for you. 

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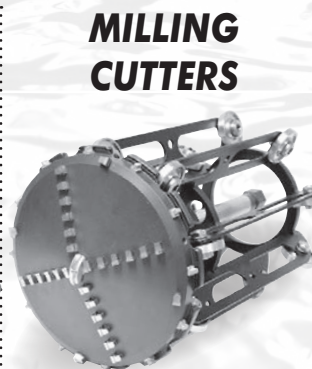
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Making the Cold Steel Ring

Pipe ramming contractor overcomes significant obstacles on railroad culvert project

By Matt Fueston

Pipe ramming can be the most efficient and economical underground trenchless technique for installing and replacing culverts. At times it may be the *only* feasible option. Such was the case in a southern Illinois railroad culvert replacement.

CN Rail Line contracted HURK Underground Technologies of Grinnell, Iowa, to install two 180-foot-long, 60-inch-diameter culverts beneath the railway in Cairo, Illinois. The culverts were designed to relieve an existing, partially collapsed, 48-inch steel culvert with reduced capacity.

Work began in November 2013. From the start, HURK was faced with daunting obstacles. For one, the job site was in extremely wet ground conditions far from the access road.

“This was the most difficult ram the company has performed,” says Jason Pollock, HURK’s director of ramming operations on the project. The project was difficult because of the size and length of the ram and also from complications with subzero temperatures, inundated ground conditions and unexpected obstacles inside the railway substructure.

EQUIPMENT AND CASING

In addition to an excavator used to create the working pit, HURK brought to the job site a mini-excavator; track loader; horizontal drilling machine with 48-inch-diameter posthole auger, 1,300 cfm air compressor, adjustable pipe stands and 24-inch pipe ramming hammer from HammerHead; and appropriate tooling for 60-inch pipe.

The new casing consisted of 30-foot lengths of 0.875-inch smooth wall steel pipe for new culverts set 2 feet apart from each other at an elevation 40 feet below the railbed.

SITE PREPARATION

Staging the equipment and setting up the access pits was the first problem to overcome. Both sides of the roadbed were wetland areas. Only a mile-long drive across cropland Pollock described as “soupy” could be used to get to the installation site. To get to and from the site, HURK used its tracked equipment to pull the company’s trucks across the field most days.

The surface of the railroad bed was about 40 feet above the culvert



tough job

PROJECT:	Installing and replacing culverts
CUSTOMER:	CN Rail Line
CONTRACTOR:	HURK Underground Technologies (Grinnell, Iowa)
RESULT:	Installed both culverts without having to dig up railway

insertion point. This job site scenario, known as “high fill” or “deep cut,” is difficult to survey. The spot chosen for the installation allowed HURK to stage its equipment just above water. The soggy ground conditions, however, presented another problem. The HURK crew tried to dig a 60-foot-long, 30-foot-wide working pit to a vertical depth of 10 feet at the toe of the railway berm. With each attempt, the pit’s sides repeatedly collapsed, filling the excavation with mud and frustrating the crew.

Pollock and his crew hit upon the strategy of digging just half of the working pit 3 feet lower than the intended working grade. They immediately filled the excavation with 3-inch rock, setting sump baskets in the backfill. Then they quickly excavated the other half. The trick worked. With diesel-powered pumps in the sump baskets dewatering the first half of the pit, they were able to finish the pit to full size.



<< LEFT: Pipe ramming progress was halted several times when the equipment ran into wooden piers from an old train trestle. They had to be removed manually each time before pipe ramming could continue.

BELOW: The HURK crew begins restoration of the finished installation.

BOTTOM: The crew also had to remove a 5-foot-diameter tree stump buried during original construction of the railway substructure. (Photos contributed by HURK Underground Technologies)



Once pumping operations started, all six 190 gph pumps ran continuously for four months through project completion, including weekends and Thanksgiving and Christmas work breaks.

Overcoming these complications at this location had taken the crew a week longer than usual to complete the working pit.

RAMMING PROCESS

The excavation's size allowed HURK to install both culverts from a single working pit. Each section of casing required the crew to attach the hammer to it, ram the pipe into the berm at about a 2 percent grade, detach the hammer, weld on the next section of pipe, reattach the hammer and continue ramming.

Two welders could complete the root weld and fill passes on the large-diameter pipe to industry specification usually in less than five hours.

Ramming progressed at about 6 inches per minute while the hammer was operating.

MORE OBSTACLES

Pollock says that whenever pipe ramming progress drops to less than 1 inch per minute, he believes the pipe is cutting through tree roots or rock, or is pushing an obstacle out of the way.

"So when the progress stopped at the 90-foot mark, ramming the fourth length of pipe, and would budge no farther, even after 30 minutes of hammering, we suspected the pipe had met an immovable obstacle," Pollock says. "Continued ramming could have damaged the pipe or hammer."

The crew stopped pipe ramming operations to detach the hammer and auger out the spoils in the pipe.

The pipe diameter permitted the crew to physically enter it to inspect the obstacle, and they discovered a 5-foot-wide tree stump perfectly aligned to block their 5-foot-wide pipe.

"You couldn't have hit that tree that precisely if you had been trying to," Pollock says.

Pollock figured the tree must have been felled to make way for the original berm construction, but rather than removing it, it must have been simply covered over. Burial in the wet conditions had preserved the wood remarkably well. The crew cleared the stump away from the pipe path piece by piece



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using small electric chain saws. Pipe ramming then continued.

Shortly after they had resumed pipe ramming operations, progress was once again halted. The hammer was removed, the pipe was augered out and the crew crawled inside to see what the new obstacle might be.

"This time it was a wooden pier, the first of many we discovered every 10 to 20 feet from that point on," Pollock says. "The piers were remnants of a bridge or train trestle that predated the berm. Piers were encountered on both of the pipe runs."

Except for these two obstacles and the harsh working conditions, there were no other complications. Undaunted, HURK completed both culverts to their 180-foot length.

"When the progress stopped at the 90-foot mark, ramming the fourth length of pipe, and would budge no farther, even after 30 minutes of hammering, we suspected the pipe had met an immovable obstacle. Continued ramming could have damaged the pipe or hammer."

Jason Pollock

LUBRICATION NOT REQUIRED

Pipe ramming on this job was repeatedly interrupted, not only to deal with complications such as cutting away obstacles by hand, but also to give the crew time off for rest and to take weekend and holiday breaks. One concern was that the ground would seize the pipe after a period of inactivity. Yet each time HURK resumed operations after a brief period, the pipe moved without any hesitation.

Pollock rigged up the lubrication system lines and had a lubrication mix ready to use on the first pipe, but he never had to inject the mix. "The wet conditions were sufficiently lubricating the pipe," he says. So after the first length was installed, he did not rig up a lubrication system on the others.

After installing the two culverts, the HURK crew back-grouted the failed 48-inch culvert, and restored the working pit and tracks from vehicle and equipment transportation. The project was completed in February 2014.

LESS TIME AND MONEY

Although the obstacles HURK encountered doubled the time it took to complete the installation project, Pollock says an open-cut installation would still have cost the project owner many times over what the pipe ramming operation entailed. Additionally, open cutting would have required closing this section of the line to rail traffic, adding the expense of rerouting cargo and preventing revenue from this line for an extended period.

Further, railbed restoration after an open-cut operation is vulnerable to settling and consequent subsidence over time, requiring future maintenance and additional cost to repair the berm and railbed at a later date.

In contrast, Pollock says, using the pipe ramming method permitted rail service to continue unimpeded throughout the entire four-month project. The ground conditions of the berm and the integrity of the overlying roadbed were never disturbed. They are not subject to further settling. **C**

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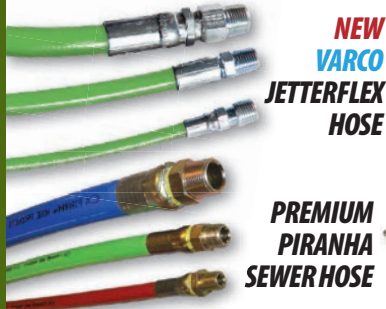
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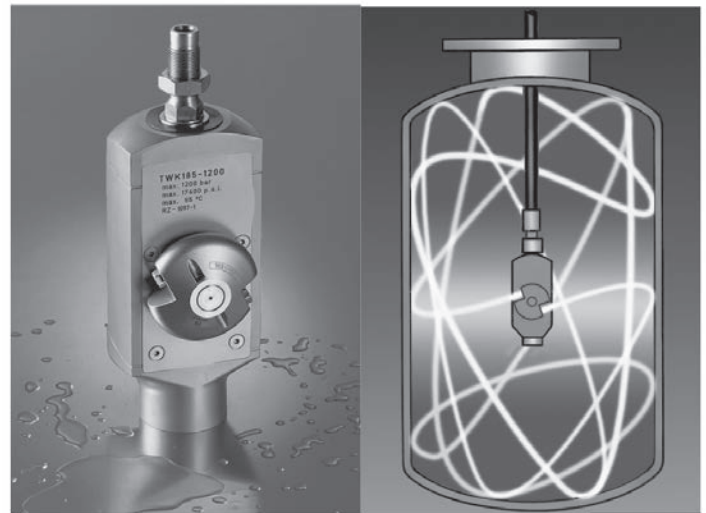


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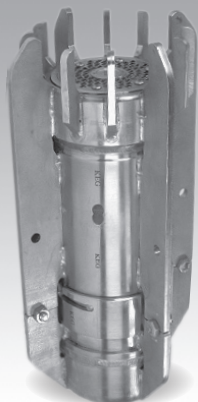
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Inspect More Pipe

Digital Universal Camera from CUES combines high image quality with increased production

By Kyle Rogers

Productive video pipe inspection requires a skilled operator. Advanced equipment alone won't get the job done. Still, with the right system, an already productive camera operator can be even more productive.

That's the guarantee CUES makes with its Digital Universal Camera, says regional sales manager Chris Parker. The camera was among the equipment CUES had on display at the 2016 Water & Wastewater Equipment, Treatment & Transport Show.

"I always use the analogy, you can give someone a Ferrari, but you can't make them drive fast," Parker says. "It's the same with the DUC. It's a production device, but there's no way we can promise production. What we can promise is the quality the customer can receive."

Image quality is one of the top features of the DUC system. At 3.1 megapixels, Parker says it delivers about eight times the quality of the average analog camera system.

"That detail allows for the rapid condition assessment of basically any pipeline asset," he says.

High-resolution imagery combines with features that give a camera operator an opportunity to be more productive: a wide-angle lens that provides a 360-degree view of the pipe's interior and continuously scans, taking four snapshots a second. Those images are stitched together to create several different deliverables — video that allows for the ability to virtually pan, tilt or zoom to any area of interest; a flat, unfolded view of the entire pipe for quick review; and an expanded flat view that allows for close-ups of specific defects. That continuous scan allows the operator to run the camera through the pipe without stopping to pan and tilt.

"When you remove that aspect of pipeline inspection, you can travel at a very high rate of speed, upward of 40 feet per minute in an 8-inch pipe," Parker says. "That's why you're able to go and take care of a 400-foot segment in about 12 minutes, compared to about 30 minutes using the standard pan and tilt."

In addition to the high pixel count, the quality of the images is improved by two key features on the camera's high-intensity LED lights. Some of the LEDs are beneath a frosted surface, diffusing their intensity, while others are not. This allows for better light distribution. It is thrown far down the pipe as well as spread in the immediate area around the camera. The second key feature is that the lights are strobed in sync with the camera's shutter. The result is optimum lighting with less heat.

The DUC has been on the market for about four years, and Parker says the product is constantly being improved. The most recent upgrades have been on the software side and, like the features on the camera itself, are aimed at helping operators be as productive as possible. For example, operators can save their most common observations as "favorites," which allows them to code pipe defects more quickly.

"Instead of going through the process of selecting the defect and coding



CUES customer relations representative Avery Wilson (right) talks to WWETT Show attendees about the benefits of the Digital Universal Camera system. (Photo by Kyle Rogers)

the defect, you can pull up a drop-down list within the software that has all your favorite observations," Parker says. "That's good for inventory items like laterals that are constantly coded every pipeline. With that quick access, you could code, say, 10 laterals in a 400-foot section within 15 seconds."

The DUC is designed for pipes ranging in size from 6 to 60 inches. Parker sees it as a fit for both municipal customers and private contractors. Municipalities can quickly get high-quality data to better assess their infrastructure and make smart capital spending decisions, and contractors can use the same data to better serve their end customers. Even customers who already have a fairly robust pipe inspection program can benefit because they still may not be capturing the high-definition 360-degree views the DUC can provide, Parker says.

"Pretty much everybody is sustaining a production increase, and beyond that they're also gaining quality," he says of current DUC users. "To have both of those things at the same time is rare. Most times, when you increase production, your quality diminishes."

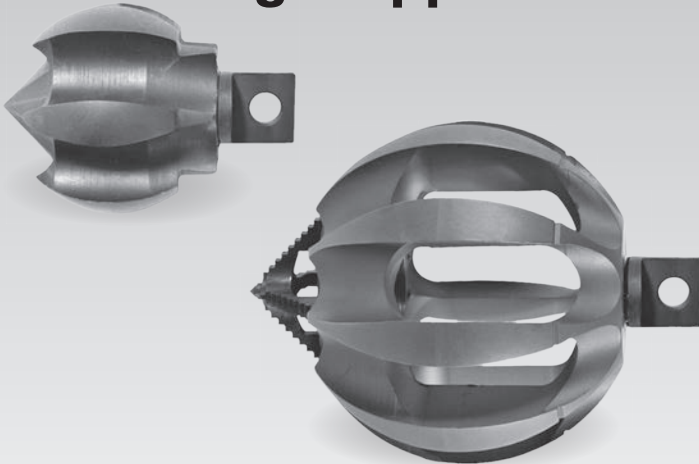
The WWETT Show is a good place to showcase the DUC because there are people who may not know about the technology, although it isn't new to the CUES product line, says Parker.

"It opens up the marketplace," he says. "It makes people aware of the technology, and we're at a position in the industry where we have a lot of the workforce closer to retirement age. There is a younger generation coming on board who has been more exposed to the latest technologies and are maybe more willing to make a change." **C**



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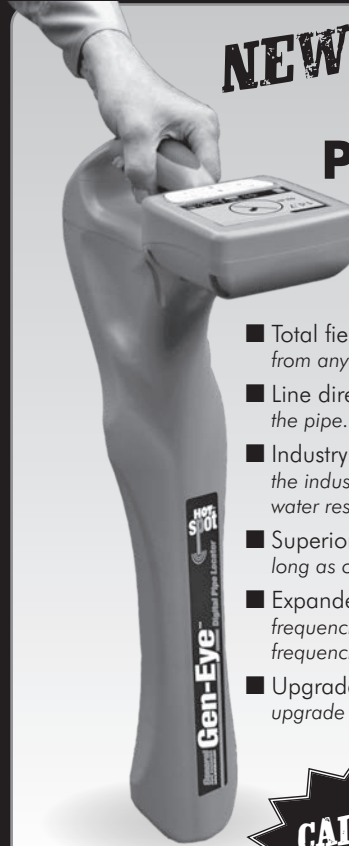
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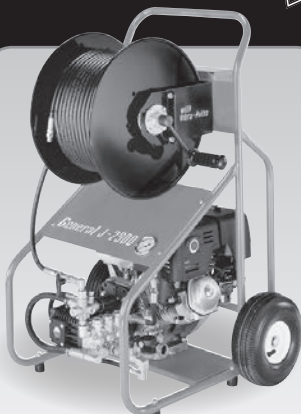
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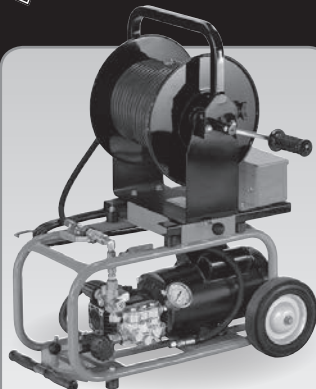
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- 1" Color Camera Head with 512HZ Built-in Sonde for Option
- 65'/100'/130' Cable Reel Available for Choice
- Heavy-duty Waterproof Case



Layflat Pipe Inspection Camera

FB-PIC3588A/3588BT

- 7" LCD Control Station with Built-in USB Flash and SD Card Recorders and Li-Ion Battery
- 3/8" 150' /200' Cable & Reel w/Electronic Meter Counter
- Crawler for easier push
- 7/8" Stainless Steel Color Camera Head w/Built-in 512HZ Sonde Transmitter for 3588A (1.5" Self-leveling Head w/ Built-in 512HZ Sonde Transmitter for 3588BT)



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Potable Color Sewer/Drain Camera

FB-PIC3188A/3188DN

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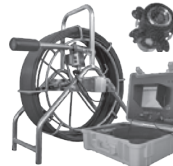
- 65'/100'/130' Cable & Reel
- Color Camera Head
- 7" LCD Monitor w/ w/o DVR & MIC
- Heavy Duty Waterproof Case
- Option 1: upgrade to Color Camera Head w/ Built-in 512HZ Sonde Transmitter
- Option 2: upgrade to 130' Cable & Reel w/Meter Counter



Mid-Range Pipe Inspection Camera

FB-PIC3388UT/3388MT

- 200' Cable & Reel w or w/o Meter Counter
- Self-leveling Camera Head w/Built-in 512HZ Sonde Transmitter
- 10" LCD Monitor w/DVR & MIC
- Recording with USB Flash Drive or SD Card
- Heavy-duty Waterproof Case
- Crawler for easier push



FB-R2012

Specs:

- Frequency: 512HZ
- Operation Mode: NORM/NOISE CONTROL
- Power Supply: 6* AA
- Current: < 55mA
- Sensitivity: NEAR/FAR
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- Output Intensity: LCD 15 Levels
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- 130' Cable & Reel w or w/o Meter Counter
- 1" Color Camera Head w/Built-in 512HZ Sonde Transmitter
- 10" LCD Monitor w/DVR & MIC
- Recording with USB Flash Drive & SD Card
- Heavy-duty Waterproof Case



Long Range Pipe Inspection Camera

FB-PIC3288T/3488T

- 300'/400' Cable & Reel w/Meter Counter
- Self-leveling Camera Head w/ Built-in 512HZ Sonde Transmitter
- 10" LCD Monitor w/DVR & MIC
- Recording with USB Flash Drive or SD Card
- Heavy-duty Waterproof Case
- Crawler for easier push



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Be a Better Manager

Formulate a solid business plan, assemble a top-notch crew to carry it out and watch your company grow

By Richard J. Bryan

Fr Frank is ex-special forces with a fine arts degree — an unusual mix in the world of business. He achieved a lot in his career by following five simple principles he was able to apply to any business. If you can apply these same principles consistently, you will move away from being a micromanager and become far more strategic in the way you run your company.

So, what are these magic principles? Really, they are just good common sense, but as Frank was fond of saying, “Good business is just common sense; unfortunately, common sense is not common practice.”

PRINCIPLE 1: DEFINE YOUR ROLE

Too often, business owners are not clear on the difference between *management* issues and *ownership* issues. Management issues are things like dealing with accounting, administration and the sales process. They are seemingly urgent matters that must be dealt with in a timely fashion. The person overseeing these functions can be the business owner or an appointed manager.

Ownership issues are the things that only the business owner can do, such as dealing with banking partners and setting the long-term strategy for the organization.

Frank’s approach was simple: Have a clear split between ownership of the business and management of the business, and find the most talented people to run day-to-day operations. This sometimes means that the owner needs to step aside from management and make way for another qualified leader.

Concentrate on an area where you are talented and do what you are passionate about. Let others take care of the things that you are not so good at, and that conform to their strengths. Everyone will benefit.

PRINCIPLE 2: CREATE A COMPELLING VISION

One of the most effective ways to harness the potential of an organization is to get everyone pulling in the same direction. However, without a compelling vision, this can be difficult to achieve.

Vision is a crucial component in getting employees to understand the company’s goals and encouraging them to make meaningful suggestions about how to meet them. It doesn’t matter if your vision revolves around customer service excellence or creating innovative products — as long as it is inspiring and challenging.

Frank did not believe in having a vision that was just there to tick the box and display on a plaque. Rather, it was an important part of the overall company strategy.

Set time aside to work *on* your business rather than *in* your business by developing a vision that enables you to grow the business and achieve your life goals. Don’t make the excuse that you are too busy to spend this

time crafting a quality vision — it will be the best investment of time you ever make.

PRINCIPLE 3: HIRE A-GRADE PLAYERS

Frank believed the key to running an organization successfully in the longer term is to hire great people. As he was fond of saying, “If you can surround yourself with people who are smarter than you are, chances are your business will do just fine.”

Many leaders feel insecure about hiring really smart people, as they believe it will undermine their credibility, but building a great team enhances your reputation as a leader. Make sure hiring A-grade players is a priority for you as a business owner or leader.

PRINCIPLE 4: DEVELOP TRUST

The key to leading your team is to develop trust. This is what keeps top performers working for you in the longer term. Frank knew if you can become a better coach and mentor, rather than micromanaging your best people, you will find they trust you and are more loyal to the organization. “After all,” Frank would say, “people leave bosses, not organizations.”

The best employees know their market value. What keeps them working for you is not money, but the ability to work independently and express their talents in their own way. They are self-motivated and driven to achieve excellent results. Too much interference from their immediate superior can strip them of motivation.

PRINCIPLE 5: HAVE FUN

Frank was always firm but fair in his leadership. One of his greatest strengths was knowing when to have fun.

Celebrating success — such as landing a major new customer or having a particularly profitable quarter — was always something he believed in doing as a way to reinforce the positive behavior that caused it.

Even when under pressure to perform, Frank knew the value of a joke or lighthearted moment to relieve the tension. Look for opportunities in your own business to have some fun, as this can be a key retention strategy for your best workers.

By following Frank’s simple principles you can grow your business and also have a lot more time to spend with your family and pursue other interests. As Frank would say, “You only live once and life is short, so you had better enjoy it!” **C**

ABOUT THE AUTHOR

Richard J. Bryan is a speaker, executive coach and author of *Being Frank: Real Life Lessons to Grow Your Business and Yourself*. For more information, visit www.richardjbryan.com.

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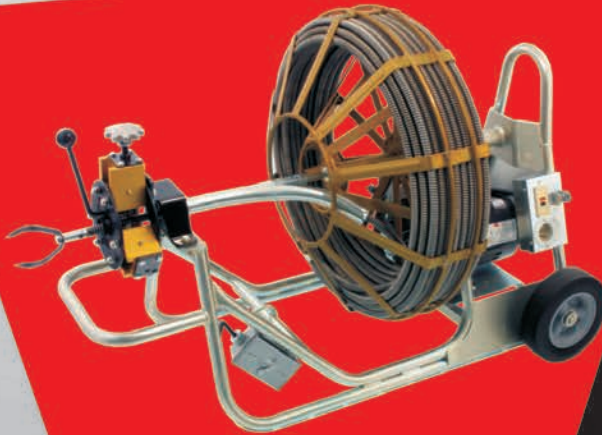
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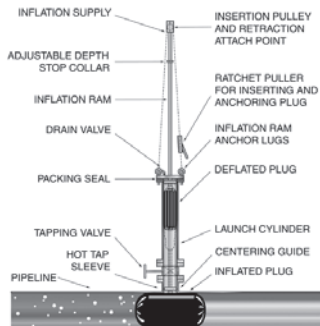
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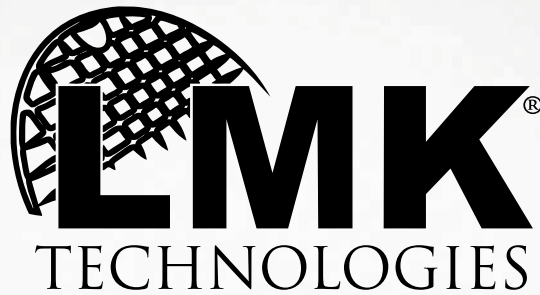
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Committed to a Safety Culture

Windcreek Services' safety program is integrated into everything employees do

By MaryBeth Matzek

Randon Williamson holds the title of environmental health safety director at Windcreek Services, but every one of the company's 80 employees makes safety an integral part of their job.

"Our goal is that everyone goes home safely every single night," he says. "Our company's culture is deeply committed to safety and it's vital to everyone's work."

And it shows. In 2015, the Gillette, Wyoming-based company had zero recordable injuries or lost time accidents. That's an accomplishment for any business, but even more so for a company providing excavation, pipeline, fluid management and other services in the oil and gas and other industries.

Williamson says the company's safety culture starts from the top. "Company leaders take safety seriously and make sure we as a company are where we need to be," he says.

The company's Near Miss Program, which focuses on catching potential safety issues before they happen, is a cornerstone for its safety initiative. An example of a near miss would be an employee who forgot to put on safety glasses, says Jason Scallen, Windcreek's sales manager.

"We're very proactive and trying to 'catch' something before it happens," he says, adding that the employee who left behind his safety glasses would be chided by his co-workers into bringing a 12-pack of soda for the team. "It's all done in a fun manner."

Employees who spot a near miss are asked to fill out a form explaining what happened. As part of the report, employees rank the near miss from a 1, which means the potential for injury was very minor, up to a 4, which means the injury potential was very high.

To help employees identify and report near misses, the company held a contest for teams who spotted the most near misses. Employees won a break from work and had the opportunity to shoot skeet, play horseshoes or other fun activities.

All employees can spot the near miss and report it, Scallen says. "One of the guys called out our company president (Don Williamson) for not wearing his hard hat in the field," he says. "He was then asked to bring a 12-pack of pop for the crew. That shows you safety is everyone's job."

In addition to empowering employees to spot near misses, Williamson also created a safety team. A safety team member — recognizable by their red hard hats — is on every job site. Team members receive additional training and their red hats are a visible reminder of the additional attention paid to safety.

"I can't be at all the sites, and the team has had a big safety impact just by their very presence in the field," Williamson says. "You always have to be aware when it comes to safety, since you never know what you're going to run into in the field."

Windcreek employees also conduct a daily job safety control analysis. At the start of the day, employees outline and investigate potential hazards and double-check equipment. Williamson says this process ensures safety is the first thing employees think about each day.

While 2015 was a safety success for Windcreek, Williamson says the company remains as committed as ever to safety. If the company finishes 2016 without any reportable injuries, all employees will receive three extra vacation days.

Safety plays a role in the hiring process, too. When interviewing potential employees, managers try to get a feel for the applicant's commitment to safety and following procedures. Once an employee is hired, they go through an onboarding program where they receive safety training and learn about Windcreek's safety processes, Scallen says. New hires wear a green hat and complete a six-month mentorship to learn more about safety processes. After six months, the employee earns a white hard hat and assumes full responsibility for his assigned duties.

Williamson says Windcreek's safety record makes it stand out from the crowd since oil and gas businesses want safety information about their service providers. To get employees focused on safety, the company not only follows OSHA's monthly requirement, but goes "above and beyond," he says.

"If we're doing confined space training, we not only review the information, but then do a hands-on activity," Williamson says. "Or when we discussed defensive driving techniques, employees put on special goggles that impaired their vision and had to drive around some cones. They could really see how impaired vision can affect your driving."

Windcreek used a state grant to build a mobile training center. The fully heated and air-conditioned trailer can be taken to different locations for employee training sessions. The trailer includes a computer, large screen and chairs, and allows the company to offer real-time training to employees.

The company's safety-first attitude extends beyond the workplace, Williamson says, adding that he saw an off-duty Windcreek truck using chock blocks in the Wal-Mart parking lot.

"Our employee was off the clock, but yet he was still embracing the safety culture we've created," he says. "The worker didn't even think twice about it (putting down the blocks) since safety is just part of who our workers are." **C**

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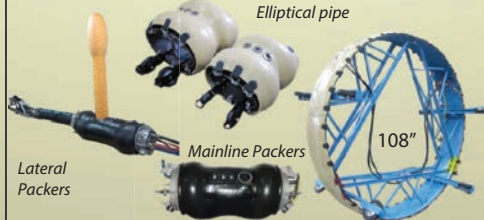
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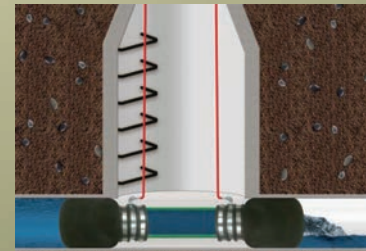
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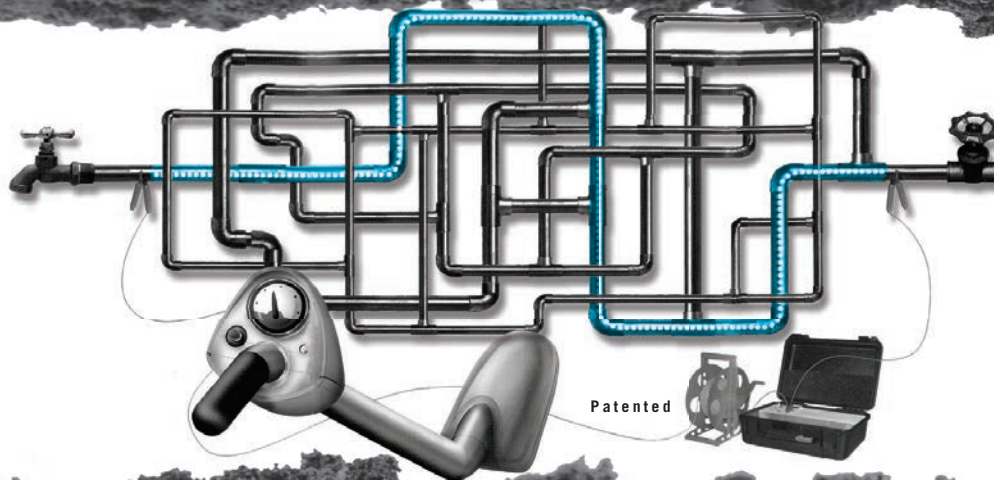
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PRODUCT SPOTLIGHT

Pure Technologies PureRobotics crawler can inspect 85 feet per minute

By Luke LeNoble

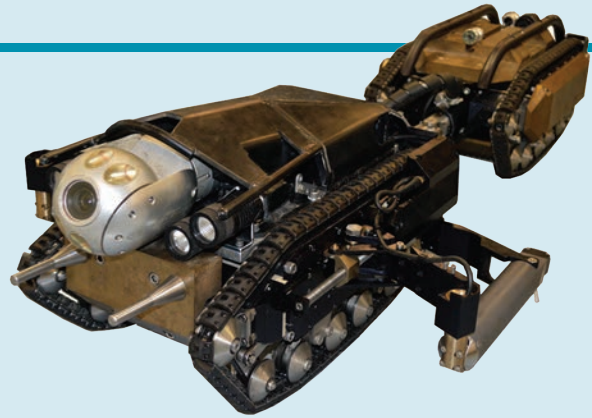
The PureRobotics pipe inspection system from Pure Technologies is a transportable robotic crawler designed to pull or carry a variety of tools and sensors through pipelines. The robot's feet are modular and can be changed out for different styles depending on the pipeline type. The track chassis can also be expanded for large-diameter lines.

Safer than manned inspections, the crawler can travel through dewatered pipe or while submerged up to 3.1 miles from a single access point. At a maximum speed of about 85 feet per minute, it's twice as fast as previous models, according to Carlos Pineiro, robotics engineer at Pure Technologies.

"It's double the speed from the previous generation, which means you can inspect twice as much pipe in the same amount of time," Pineiro says of the third-generation crawler. "When you're doing an inspection, you have to mobilize a number of people, a number of resources. So far, in all the jobs that we did, we've never had any job that we couldn't finish in time."

The standard system features a high-definition pan/tilt/zoom camera that delivers real-time video for detecting leaks and other anomalies in underground pipes.

The robot can be equipped with a variety of specialty tools, including an inertial measurement unit for XYZ mapping of geographic



information, 3-D LIDAR scanning or pull condition assessment tools such as 2-D laser technology that can measure a pipeline's size, shape and level of corrosion.

An optional inertial measurement unit uses fiber-optic gyroscopes and accelerometers to track depth, lateral and horizontal movements from a known GPS reference point. The output is a GIS spatial map of the pipeline that depicts elevation changes as well as other features.

PureEM electromagnetic assessment detects anomalous regions in the pipe cylinder. This data is correlated with odometer readings from the crawler's umbilical tether to attempt to locate areas of distress within the pipe.

Designed for multiple isolated inspection runs where a quick setup and breakdown can improve efficiency, the transporter can be deployed from a number of access points, including valves, open flanges and pipes.

"There's a fair amount of inspection time that's reduced," says Mark Fodchuk, content specialist. "If you can get a robot through quicker, you don't have to have the roads shut down or other blockages, so it's just far more efficient." 855/280-7873; www.puretechltd.com.



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1 GENERAL PIPE CLEANERS CABLE MACHINE

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2 MILWAUKEE ELECTRIC TOOL CORP. LIQUID PAINT MARKERS

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3 COXREELS SWITCH BOX

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overload. The open variation is available in 12-volt DC, and the closed variation is available in 12- and 24-volt DC. Both variations contain a push-button momentary switch. 800/269-7335; www.coxreels.com.


4 DITCH WITCH AIR EXCAVATORS

The FXT Air Series (FXT30, FXT50 and FXT65) of air excavators from Ditch Witch provides both air and hydroexcavation capabilities for digging, potholing and locating utilities on below-grade job sites. All three models use a PTO-driven air compressor for efficient power transfer and increased productivity. The filtration system utilizes a cyclonic separator to remove fine particles before reaching the vacuum system. Operators can monitor and command all components using an electronic controller that displays system parameters. 800/654-6481; www.ditchwitch.com.

5 DPL TELEMATICS GPS TRACKING SYSTEM WITH ANTI-TAMPER PROTECTION

The Trackall OBDII vehicle tracking system from DPL Telematics delivers real-time vehicle and driver behavior data. The unit plugs into the existing OBDII port of most vehicles and installs in seconds. Anti-tamper features include a backup battery that delivers immediate disconnection notifications with location as well as GPS jamming detection. Managers can wirelessly monitor vehicles through an internet-based software package and mobile app. 800/897-8093; www.dpltel.com.

6 PROTECTIVE INDUSTRIAL PRODUCTS PROTECTIVE GEAR

Falcon protective gear from Protective Industrial Products is designed to offer protection from rain and other elements and provides splash protection for industrial pressure washing applications. 800/262-5755; www.pipglobal.com. 

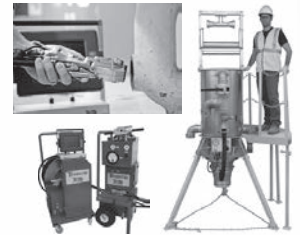


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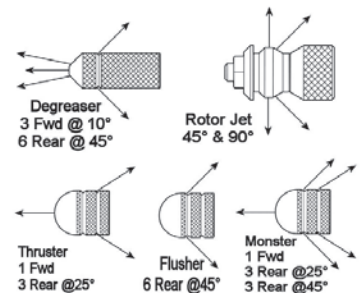


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ServiceTitan partners with ReviewBuzz

ServiceTitan partnered with ReviewBuzz, creator of a reputation management system for service businesses. The integration between ReviewBuzz's online review generation technology and ServiceTitan's operations management platform is expected to help drive more sales and make it easier for businesses to generate more five-star reviews on the internet.

Ditch Witch honors top individuals, dealership

Ditch Witch, a Charles Machine Works Company, presented the Harold Chessnut Award to Archie Sours of Ditch Witch of Virginia. Kenny Mangrum of Ditch Witch of South Louisiana received the Service Excellence Award. Ditch Witch of South Louisiana was recognized as the top dealership for service and support in 2015.

Fluid Imaging Technologies celebrates growth

The FlowCam particle imaging and analysis system from Fluid Imaging Technologies is now in operation in 50 countries, including all seven continents and on a fleet of ocean vessels worldwide.

Dwyer Group celebrates 35 years

Dwyer Group celebrated its 35th anniversary in March. Founded in 1981 by Don Dwyer Sr., Dwyer Group has grown to include 11 different commercial and residential franchise service brands with more than 2,500 franchisees operating in several countries that boast more than \$1.3 billion in annual systemwide sales.

Green Truck Association names board of governors

The Green Truck Association, an NTEA affiliate division, named Shawn Brougham, director of product development at Altec Industries, chairman. Amy Dobrikova, president of Intelligent Fleet Solutions, was elected vice chairman and Chris Weiss, vice president of engineering at The Knapheide Manufacturing Company, was named treasurer.

Current Applications purchases Galway Pumps

Current Applications purchased Galway Pumps. The manufacture and assembly of Galway Pumps was moved to Current Applications' 30,000-square-foot facility in Watertown, New York.

Tigre-ADS USA names regional sales manager

John Kane joined Tigre-ADS USA as regional sales manager for Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Oregon, Nevada, Utah, Washington and Wyoming. He has a sales and marketing background with a history in the wastewater management segment and plumbing distribution market.



John Kane

ARS Rescue Rooter franchisees earn Angie's List Super Service Award

Six ARS Rescue Rooter franchisees earned the Angie's List Super Service Award. Receiving the award were Andy's Statewide (Detroit, Michigan), ARS Pittsburgh, ARS Boston, ARS/Rescue Rooter Lafayette (Indiana), Conway Services (Memphis, Tennessee) and Columbus (Ohio) Worthington Air.

Avanti International names regional manager

Avanti International named Jacob Swanson Midwest regional manager. He has over 10 years of injection grouting experience.



Jacob Swanson

McElroy Manufacturing launches website redesign

McElroy Manufacturing launched a redesigned website, www.mcelroy.com. The site features a new menu structure, where machines are grouped into two categories based on the type of industries served, and a search feature.

Envirosight releases Sewer Zoom Camera Buyer's Guide

Envirosight released a new *Sewer Zoom Camera Buyer's Guide*. The complimentary guide can be downloaded off the company's website, www.envirosight.com.

Isuzu Commercial Truck of America appoints president

Shaun C. Skinner was named president of Isuzu Commercial Truck of America, where he previously served as executive vice president and general manager. Skinner, who also serves as president of Isuzu Commercial Truck of Canada, joined American Isuzu Motors in 1987.

LMK Technologies names regional sales manager

LMK Technologies named Pete Tortorici as Central Midwest regional sales manager. He has over 30 years of experience in the trenchless, water and sewer industries, which includes representing protective coatings and lining products in the municipal and industrial markets.



Pete Tortorici

GapVax nears completion of first phase of expansion

GapVax is nearing completion on the first phase of a 160,000-square-foot addition to its manufacturing facility in Johnstown, Pennsylvania. The first phase encompasses about 100,000 square feet for blasting, painting and finishing product. The upcoming second phase will focus on the fabrication process. GapVax will have about 250,000 square feet of manufacturing space on 15 acres once expansion is complete.

Ring-O-Matic partners with Utility One Source

Utility One Source — sales, rental and aftermarket service provider of heavy equipment — will make Ring-O-Matic's vacuum jetters available to customers nationwide from its 23 locations.

Trio-Vision acquires Cobra Technologies

Trio-Vision acquired the assets of Optical Robotics' Cobra Technologies brand. Trio-Vision will keep the brand of Cobra Technologies' products and introduce a new range of inspection products, including portable crawler systems and manhole cameras. **c**

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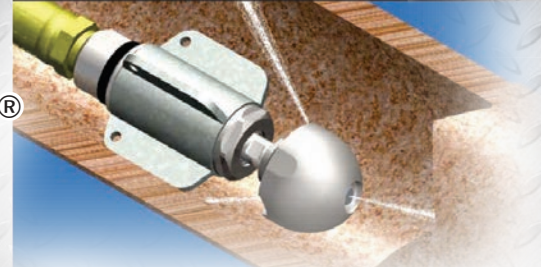
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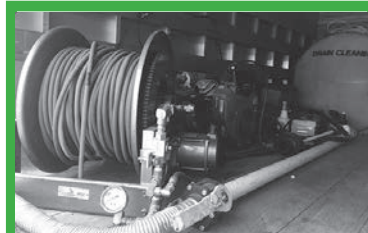
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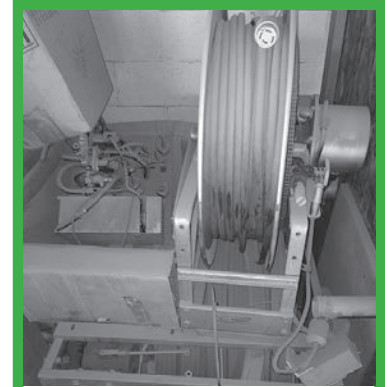
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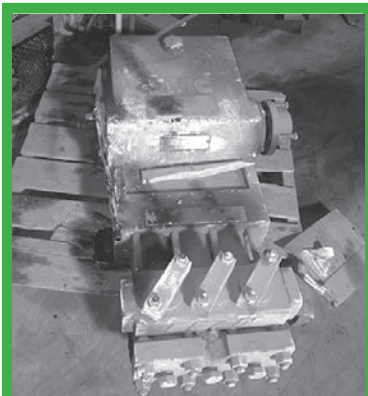
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Honda horizontal GX engines, new in-the-box w/warranty. GX200QX - \$399; GX270QAG - \$579; GX390QA - \$599 delivered price. 800-363-9855 or GXParts.com (CBM)

PUMPS



FMC (Bean) water pump: 50gpm @ 3,000psi water pump for Vac-Con s/n 07110700B055. Rebuild over year ago - never used. Model L161456. \$4,000 USD
arussell@cwscanada.com
613-227-8671, ON C07

Honda model WP40X, 8 hp, 4" with hoses. Honda 4 hp, 2" pump with hoses. The Cable Center: 800-257-7209. (CBM)

New F.E. Myers DP80-20 RH Drive - \$13,529; D65-20 RH Drive - \$12,353. Other models available. Cloverleaf Tool Co. 941-739-0707 www.cloverleaftool.com (CBM)

RENTAL EQUIPMENT

Liquid vacs, wet/dry industrial vacs, combination jetter/vacs, vacuum street sweeper & catch basin cleaner, truck & trailer mounted jetters. All available for daily, weekly, monthly, and yearly rentals. **VSI Rentals, LLC, (888) VAC-UNIT (822-8648) www.vsiRentalsllc.com.** (CBM)

SERVICE/REPAIR

Dynamic Repairs - Inspection Camera Repairs: 48 hour turn-around time. General Wire, Ratech, RIDGID, Electric Eel Mfg, Gator Cams, Insight Vision, Vision Intruders. Quality service on all brands. **Rental equipment available.** For more info call Jack at 973-478-0893. Lodi, New Jersey. www.dynamicrepairs.biz (CBM)

TOOLS

T&T Tools: Probes, hooks. Probes feature steel shafts with threaded and hardened tips. The insulated **Mighty Probe™** tested to 50,000 volts. **Top Poppers™** open man-hole covers easily. Free catalog. **www.TandTtools.com.** Phone **800-521-6893.** (CBM)

RIDGID model #300 with stand, RIDGID tri-stand vises, RP 330 ProPress kit. The Cable Center: 800-257-7209. (CBM)

Bosch Brute hammer drill with cart irons. The Cable Center: 800-257-7209. (CBM)

TRAILERS – VACUUM/TANKER

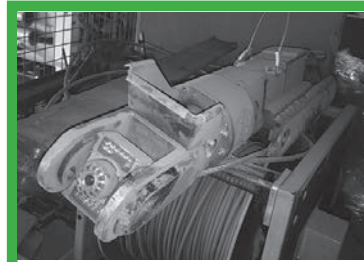
2002 Super Products Camel 3-cubic-yard vacuum trailer with a Roots 412 blower package. (Stock# 0197C) **www.VacuumSalesinc.com (888) VAC-UNIT (822-8648)** (CBM)

TV INSPECTION



2010 Envirosight Supervision Inspection System, SVA350 Reel - 1,050' cable, 140 crawler, 250 crawler, SVC100 pan/tilt/zoom camera, desktop controller, CCU, wheels, extensions, Wincan software. Complete system. \$45,000 OBO
Call 317-773-7996, IN C08

Aries Seeker: Self-leveling color camera, 200 feet, self-contained reel assembly, electronic footage counter, LCD monitor with overlay, 512Hz locator. Includes test cable and cable to plug into Aries mainline system. \$5,500. 618-566-3003 (C07)



Envirosight Rovver System: RA200 reel with 450' cable s/n 0361082. New termination, CCU with new cards, 6,335 hrs. S/N 0161945. Rovver 125 and Rovver 225. Both crawlers have new seals and lift was refurbished. Lots of extra wheels. \$15,000 USD
arussell@cwscanada.com
613-227-8671, ON C07

Used and rebuilt camera kits in stock: RIDGID Mini Compact, Mini Color, Standard Self-Leveling, General Gen-Eye I, II and III, Aries Seeker, and SRECO kits. The Cable Center: 800-257-7209. (CBM)

Aries Saturn case unit: Approximately 750 ft. cable, pan and tilt camera, setup for DVR, lots of extras. Also comes with Aries push cam. This system works good. \$15,000. dlamke@envspec.com 920-261-4000 (C09)

2004 E350 V8 TV Inspection Truck. 24,547 miles and like-new tires. RST single conductor camera system. Omni II pan and tilt zoom color camera with recently new tractor. Approx. 1,300' of cable. Inclination feature. Locating sonde. POSM software updated in 11/15. Rebuild kit, tools, printer, et al. included. Onan CMM7000 generator rebuilt with 1,500 hours. Great shape and ready to be used. \$57,500 OBO. Please call John at 612-817-6913. www.alpinesewerinspection.com (C07)

NEED TRACTION? We make aftermarket more aggressive pads and chain assemblies for all chain-driven camera tractors. Custom, dependable, double-hole fabrication secured to high quality carbon steel chain, or just pads and rivets. Samples upon request. **Pipe Tool Specialties LLC:** 888-390-6794; Fax 888-390-6670; www.yourtractionpads.com or email pts4422@yahoo.com (CBM)

USED Envirosight ROVVER System: Brand new RC90 camera. Cable reel (SN 360570) has new power supply, motor, clutch, cable (656') and winding rollers. 125 crawler (SN 0260768) has new top plate, side plates, axles and seals, plus new control board compatible with rear-view camera accessory (not included). CCU (SN 0160981) with new power card, new 56V card, new +/-26 card, and new card. Control pendant (SN 0492645) is compatible with RC90 camera and R225 crawler. \$27,500. Call 973-252-6700. (CBM)

Used SeeSnake Camera Systems in all sizes; Used General Wire Spring Camera Systems in all sizes; Used machines in all sizes. We want your trade! The Cable Center: 800-257-7209. (CBM)

PEARPOINT — Mainliner buying & selling used equipment. Canada & USA PEARPOINT MAINLINE EQUIPMENT ONLY. Will buy complete Pearpoint trucks. Will buy your old system. Do you need parts? 399, 599 reels; 420, 448 tractors: 494 digital and zoom 420 light heads. Call 800-265-4298 or mainliner2075@hotmail.com (CBM)

2003 Chevrolet 3500 pipe televising van for sale. Envirosight 225 Rovver. All computer, converter tools, etc. included. \$20,000 OBO. Email LeviIballeck@semswa.org (C07)

WANTED

Wanted: Used US Jetting jetter parts, damaged trailer jet or a jet no longer in service. Specifically looking for 4018 pump or parts, but will consider whole units. Please email usedjetterparts@gmail.com with contact information and what you have available and we will get back to you. (C07)

Wanted to Buy: Vactor 2100s and late model Guzzlers. Cash. 800-336-4369. (CBM)


WATERBLASTING

Gardner Denver T-375M: Bare Shaft pump. Gardner Denver T450M Bare Shaft pump. Gardner Denver TF-375M 21 gpm @ 10,000 psi. Gardner Denver TX-450HB 21gpm @ 20,000 PSI. Gardner Denver TF-450MB 52gpm @ 10,000 psi. NLB 10-200. 34 gpm @ 10,000 psi. HT-150S 25 gpm max 10,000 psi max, Shell Side Machine, Wheatley 165: 30 gpm @ 10,000 psi. Wheatley 125 with aluminum bronze fluid end. Boatman Ind. 713-641-6006. View @ www.boatmanind.com. (CBM)

20,000 - 55,000 psi Sapphire Nozzles, OS4, OS6, OS7 replacements, UHP hoses & replacement parts. Excellent quality & prices. 772-286-1218, info@alljetting.com, www.alljetting.com. (CBM)

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WATER JETTING EQUIPMENT: We sell, repair and retrofit water blasters. Visit us at www.waterjettingequipment.com or phone 714-259-7700. (CBM)



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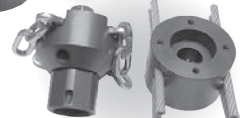
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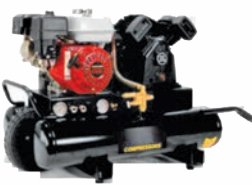
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