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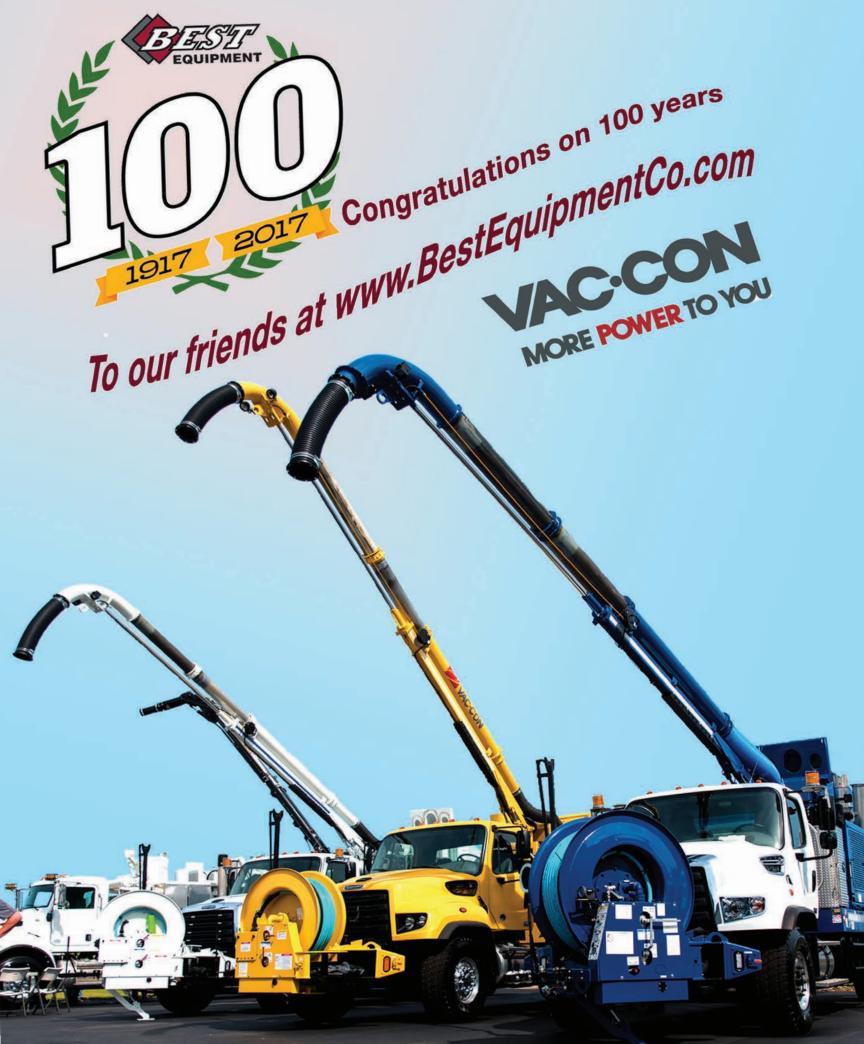
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ON THE COVER

Doyle Parsons, owner of Parsons Plumbing, Heating & Cooling in Ball, Louisiana, has seen significant yearafter-year growth in his company, but it wasn't until he sought leadership training that business really boomed. (Photography by John Ballance)

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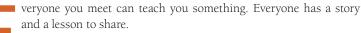
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Connecting with others in the industry helps everyone grow

By Luke Laggis



I met Doyle Parsons at the 2017 WWETT Show. We started talking and I was immediately interested in his story. For much of his 10 years in business he had no idea the show existed, and he had no idea there was a magazine like *Cleaner* that's dedicated to the industry. We talked for a while the afternoon we met, and made an appointment to talk some more the next morning.

Doyle told about me about building his business and his belief in the need to be part of something bigger than himself. He wants to lift people up and change the lives of those around him. I'm sharing that story with you in this month's profile on Parsons Plumbing, Heating & Cooling.

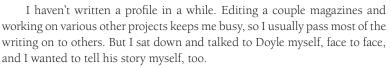


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I'm hoping to bring you more stories from the people I met at the show in upcoming issues. Meeting you connects me to the industry. Connecting with you personally, telling your stories through my own interactions and experiences with you, is a bit like getting out in the field. It's the difference between planning the jobs and running the business from behind your desk, and heading out to the job site and getting your hands dirty.

I mentioned Doyle, along with some other contractors from the show, back in my April column. One of them, Ben Smith of Minnesota-based Marvel Sewer and Drain, emailed to thank me and shared a pretty cool story about the first time he saw a copy of *Cleaner*. He said it opened his eyes to the world of drain cleaning. As editor, that's a pretty cool thing to hear, and naturally, I'm hoping to tell his story in the near future.

I'm also planning to spend some more time talking to Bill Shuster, a New Jersey plumber I met in Indianapolis. In addition to building his business, he's trying to provide community education opportunities and help kids get into the trades.

Doyle Parsons was an inspirational guy. Talking to him inspired me to write the story myself, and writing his story has me excited to lend my own voice to these stories.

RING IT UP

This issue features our annual Buyer's Guide. Whether you're looking for a new combo unit, inspection camera or shoring equipment, the industry's best can be found in the guide.

This issue also includes some tips and advice on making your next equipment purchase, big or small. Laying down the cash — or tying up the credit — to make a big purchase can be stressful, but these buying tips can serve as a guideline and give you the confidence to make the right decision. After all, the right equipment makes all the difference.

Enjoy this month's issue. C





FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

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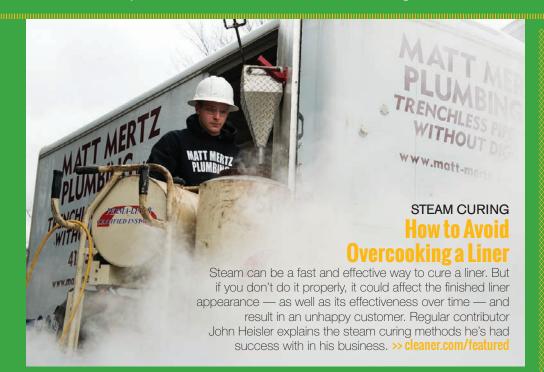
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MONEY MANAGER

Is It Time to Lease Your Land?



Erik Gunn is a magazine writer and editor in Racine, Wisconsin. Direct Money Manager inquiries to editor@cleaner.com.

You have options when it comes to owning your business office and shop

By Erik Gunn

o lease or to buy?

For contractors like you, that question more typically comes up when talking about equipment — that new jet/vac truck, for instance. In this case, we're exploring a more basic business asset: the land and space your business calls home.

If that surprises you, you're probably not alone. Leasing business space — isn't that something that professional offices do? Lawyers and accountants?

Isn't that a stretch for a service contractor, who needs not just an office but also a garage to store and repair service trucks and other heavy equipment? Not as much as you might think.

BETTER RETURNS

John Ingrassia, a New Jersey land developer and investor, suggests there are some sound reasons to consider leasing your business real estate instead of buying it. That's what most big Fortune 500 companies do, he points out.

"They almost all of the time lease rather than buy," Ingrassia says. "The question is, 'Are you in the real estate business, or are you in some other business that will benefit more over the years from your ability to use the money to buy newer and better equipment and products to sell and increase your overall business?"

Given the volatile nature of real estate prices, he believes, over a 10-year period a well-run business will do better putting its money in areas such as marketing and inventory, ensuring it's visible to customers and prospective customers, and always prepared to meet their needs. Even after one subtracts the monthly or annual cost of leasing your business property, Ingrassia says, the return on investment could easily be 10 to 12 percent a year better.

"You rarely see a bank, McDonald's, or other large successful company owning real estate, because money invested in inventory or advertising yields a greater return — even given the tax credit of owning."

STARTUPS AND VETERANS

For a startup business, leasing is an obvious attraction. Just as a new college graduate taking her first job may have no choice but to rent an apartment instead of buying a home until she can save for that big down payment, the startup business can marshal whatever capital resources it has more efficiently if it doesn't tie it up in a major real estate commitment to start with.

Especially for a long-established, multi-generation operation, there are, of course, solid reasons to own your real estate — especially if you already do own it free and clear. If your grandparents started up your sewer and drain cleaning business, bought the land and built the buildings, and your parents made improvements and have paid them off, there probably isn't

much advantage to just turning your back on that and going out to lease something new instead.

On the other hand, perhaps you already have a business reason to move. You could be landlocked with no room to expand your footprint even as you're growing at such a fast clip that you've added new employees, new equipment and even new services as you expand into related lines of business.

Where is that extra garage going to go for the three new inspection vans you've acquired? Or what do you do if your community has developed so that your primary customer base has moved farther and farther west of town, no longer surrounding you like spokes around the hub of a wheel? All those and more scenarios may put you in the position of having to look at relocating anyway — and if so, the buy-or-lease decision may be relevant even to you.

"A contractor should rent or lease a facility to start, preferably on a short-term basis. This way the business can plan for growth and not commit too early to square footage or a location that may not work for them a few years down the road."

Harry Hecht

NO SINGLE ANSWER

Harry Hecht, a strategic business consultant and entrepreneur coach in Orlando, Florida, says the real answer to the "lease or buy" question when it comes to business real estate is, "it depends."

"A contractor should rent or lease a facility to start, preferably on a short-term basis," Hecht says. "This way the business can plan for growth and not commit too early to square footage or a location that may not work for them a few years down the road."

An alternative? "Share a space with another company," he says. "Many property owners are not fully utilizing their facilities, and may be able to offer greater flexibility through a sharing arrangement.

"The goal for any business, especially a newer one, is to keep expenses as low as possible until the business is consistently profitable. Owning a property might seem like a good idea, but there are significant risks should business begin to deteriorate or possibly accelerate where additional space is needed." But this is not a one-size-fits-all question, he cautions.

"Owning offers a business the opportunity to build equity outside of the value of the business," Hecht points out. Some, like Ingrassia, might look askance at the tax advantages or the potential for appreciation when you own your property. But Hecht says those can be real benefits.

"In addition, there are tax advantages and potential appreciation gains available should the value of the property increase," he says.

But there is still that potential downside: "There is also the risk that the property value could go down, and the owner may then have to come up with cash to sell the property if they are in a negative equity situation."

THE LOCATION FACTOR

There's the old saw that in real estate, the three most important features are "Location, location, location." That's an important point to remember when considering your business property options and making that leaseor-buy decision. Leasing, of course, gives you the flexibility to move should your current location no longer be adequate for your needs.

So, too, when buying, you need to be able to look at that location with the long view in mind.

"Always be sure that when acquiring any property for a business that location is still very important and should be in your servicing area and close to your employees," Hecht says. "Also be sure that there are options for expansion and that the zoning is properly researched prior to any commitment."

There is another option to consider, Hecht points out. As the owner of your contracting business, you could set up a separate business entity that owns the property, then leases it back to your contracting firm, which pays the rent. An arrangement like this can give you some of the advantages of flexibility — unshackling your business from the land it is on — while at the same time maintaining the advantages that building long-term equity can provide. Should changes make it advisable for you to move your operation elsewhere, you might still profit in the long-term if you can find a new customer for the property you own even as you leave it behind.

Then, your answer to Ingrassia's question might actually be, "Well, I'm in both the real estate business and my other business."

These are highly complicated arrangements, and you shouldn't consider them without walking through all your options, their advantages and disadvantages against your specific business conditions, needs, and longterm plans with your lawyer, accountant and other professional advisers.

If rethinking exactly what kind of relationship you want to have with the grounds and buildings your business stands on intrigues you, it might be time to take a closer look. \mathbf{c}

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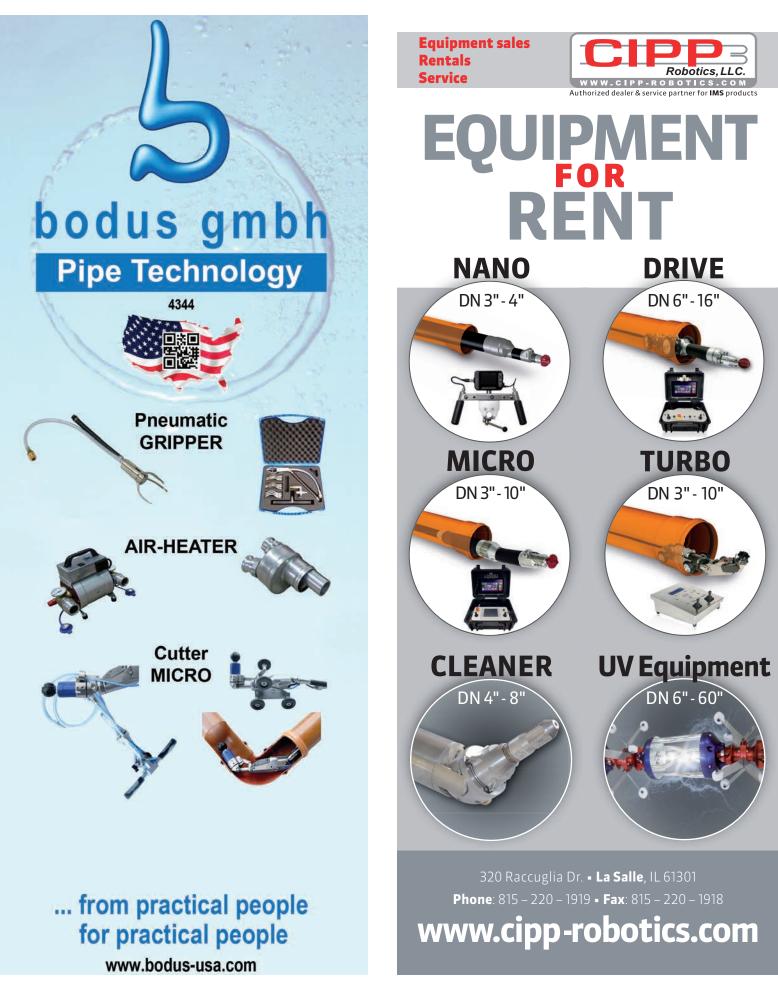
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CONTRACTOR'S GROWTH AND EXPANSION

BY LUKE LAGGIS PHOTOGRAPHY BY JOHN BALLANCE

oyle Parsons woke up one morning and knew it was time to make a change.

That was 10 years ago. Parsons, a licensed plumber in Louisiana, had spent two years doing hurricane relief work in New Orleans after getting fired from his plumbing job back home. He was living in his truck, going home to see his family for 12 hours a week.

"I had just obtained my master plumber license while I was in New Orleans and then decided to come home to provide for my family," Parsons says. "I had no clear ambition except just to provide for my family. And then after five years, we had a consistent 30 percent growth rate, at six years we were at a 40 percent growth rate, and at seven years we were at 47 percent. I wasn't sure where to go and just started reading a bunch of books, and I then just felt like the sky was the limit."

James Dockery of Parsons Plumbing, Heating & Cooling

inspects a residentia lateral line with a

General Gen-I Micro-Scope.

Today, Parsons Plumbing, Heating & Cooling has nine service trucks on the road with 11 crew members in the field and three in the office. The company generated \$1.8 million in revenue in 2016.

STARTING OUT

Parsons spent his first day back in Ball, Louisiana, making phone calls. On the second day, he had 10 hours of work, and he never looked back.

"I never turned a job down," he says. "Even if I didn't have the equipment I would go rent it. My very first drain job I had to go rent the equipment from Home Depot. So I rented it for a week and just prayed for work.

"I didn't have any tools. I had no service truck — no work body — so I had to find a way to pick up a 500-pound machine and put it in the back of a pickup truck. I used a four-wheeler ramp and had to just take off running to get it up the ramp and into the back of the truck."

Through the rental process he was eventually able to secure a line of credit and buy the Electric Eel cable machine he had been renting. He used that same machine for several more years without any problems.

The business started growing when Parsons began getting calls for water leaks, drains and broken lines underneath the slab. He would sometimes dig 10 to 15 feet under houses by himself to replace lines, and says he developed a reputation for getting the job done, no matter how big or small, or what it entailed.

"My biggest deal was that if a customer called, I always took the job no matter if I knew how to do it or not," he says. "I just had the confidence. You always show the confidence in front of the customer that you know what you're doing and you do the best professional job.

"I was always expanding services. I didn't know about having a niche, I just wanted to take care of the customer if they called. I didn't want them calling anybody else. My theory was if they call someone else then I've lost them. I just built on that — taking every job, no matter how big, how small, how nasty — just do it."

SOCIALLY TRENCHLESS

Parsons says Louisiana is 20 years behind the curve on trenchless work, and his primary service area is even further behind. Nonetheless, he was aware of the opportunities it presented.

He's the only one in his area providing pipe bursting and hydroexcavation, which are recent additions to his plumbing and drain cleaning services.

"A year and a half ago through Instagram I started seeing other plumbers from around the country pipe bursting, relining and hydroexcavating. I didn't know anything about those three processes, and being that my driving ambition was always to be on the cutting edge and offer services that no one else offered, just on a leap of faith I went and purchased a hydroexcavating trailer (Vac-Tron Equipment) and pipe bursting equipment from Spartan Tools. I had no jobs, no use for it, never seen it. I just knew that if we were on the cutting edge, somehow, somewhere the word was going to get out.



The Parsons Plumbing, Heating & Cooling team includes (front, from left) Angee Free, Rebecca Parsons, Doyle Parson and James Dockery; Back: Brad Keen, Kaleb Bolton, Lee Wild Andrew Horton, Thomas Paulk, Jody Lemoine, Chris Moreau, Dustin Ashworth, Jessie Wigley and Bryar Johnson.



"I WAS ALWAYS EXPANDING SERVICES. I DIDN'T KNOW ABOUT HAVING A NICHE, I JUST WANTED TO TAKE CARE OF THE CUSTOMER IF THEY CALLED. I DIDN'T WANT THEM CALLING ANYBODY ELSE. MY THEORY WAS IF THEY CALL SOMEONE ELSE THEN I'VE LOST THEM." Doyle Parsons

"We hired a social media team through Facebook and they started posting for us on hydroexcavating and pipe bursting. We've had the pipe bursting equipment for three months and we have not done one job. The hydroexcavating though, we landed a \$32,000 job just on a Facebook ad."

Parsons did close to \$58,000 in hydroexcavation business in the first three months he had the equipment, primarily through the company's social media presence and word-ofmouth referrals.

"Everyone we come across now, they know we have the equipment," Parsons says. "We do a lot of work for the local colleges, a lot of municipal people, so now we're just promoting it verbally to everyone we know."

The company recently tackled a hydroexcavation project at a local military base, with very exact requirements. They had to dig a 4-foot-deep, 4-foot-wide trench 40 feet under two separate sections of a building to replace a sewer line. It was unlike anything they'd done to date, but they were successful.

They also get called onto construction sites to locate utilities before any traditional digging begins, and have been using the equipment on their own jobs in lieu of traditional excavation equipment to prevent any utility damage. Parsons says it will dovetail nicely with pipe bursting when that picks up.

"I wanted to catch up with what the rest of the nation is doing. I wanted to get up to speed because that is the future," he says. "That's why I bought it."

Parsons' leap of faith didn't end with hydroexcavating and pipe bursting equipment. The company is now moving into lining, based solely on the potential it represents.

"We're actually in the process of purchasing MaxLiner equipment so we can offer total trenchless technology as a whole. It's a big risk. I'm investing over \$100,000 I don't have, LEFT Jessie Wigley cuts through a leaking cast iron pipe under a house.

BELOW Jessie Wigley watches the monitor on a General Gen-Eye SD inspection system while Andrew Horton feeds the camera down a vent stack from the roof.



and I don't have a job lined up," he says. "Everything you want is on the other side of fear."

MaxLiner will come out and provide on-the-job training and oversight of the crew on the first few lining jobs. Spartan is doing the same on the company's initial pipe bursting jobs.

STRONG LEADERSHIP

Parsons gives credit for the company's growth not to the equipment upgrades or the expanded service menu, but to something decidedly less technical in nature.

"My biggest growth period came through leadership training," he says.

"I went to a John Maxwell course to become a certified speaker and business coach. In every book I've read, everything rises and falls on leadership."

The business was in a cycle — up to five employees, down to two, up to five and down to three, up to six and back down to three. Parsons says he didn't have the capacity to effectively lead more than three employees at that time.

"I decided it was my attitude. So I actually hung a board up in our office and I assigned one person to rank my attitude every day based on what everyone else said. The first day they gauged my attitude at a 6, and one of the guys said, 'If you'd have done this last year you'd have been at a 0 every day.' So it took me a matter of two days to change my attitude and how I

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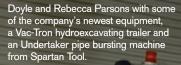
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treat my people. I treat them with the utmost respect. My attitude, they say it hovers around a 9 every day. And since then, my business has been growing double every year. It's been two years and I've gone from three to six to now 14 employees. If your business isn't growing or you're losing employees, your leadership ability is not there. ... It applies to every business, every organization. Your business will not outgrow your leadership capabilities."

Parsons also hired a business coach last year to help restructure and come up with better systems and processes. As a result, the company is on pace for 100 percent growth in 2017.

One of the notable changes is a shift to free inspections, which started at the beginning of this year. The driving force, Parsons says, was to help upsell jobs, and his General Pipe Cleaners Gen-Eye cameras have done just that.









CHANGING PEOPLE'S LIVES

Doyle Parsons formed Parsons Plumbing, Heating & Cooling in Ball, Louisiana, with a focus on providing for his family. Over the course of the past 10 years, the mission has evolved.

"My biggest deal is that I want to change my team members' lives," says Parsons, a soft-spoken but enthusiastic entrepreneur. "I'm building my business around the concept of helping others achieve their dreams."

Parsons has several stories of redemption among his staff. One of his plumbers was told he'd never amount to anything by another employer. Under Parsons' wing he obtained his plumbing license and shortly thereafter ran the biggest job the company had ever taken on.

Another was a drug addict who'd been in the business for five years but had nothing to show for it. He didn't even have a driver's license. Now the man is in good health, licensed both on the road and as a plumber, and recently bought his first house.

"As a business owner, you have to allow your team to fail. If you cannot trust your employees to fail, you're never going to grow. It's called failing forward," Parsons says. "There is no straight line to success, so you have to be willing to let your guys fail. Treat them with utmost respect. Ultimately they're human beings. They have feelings and emotions. Each person responds differently. Make sure you're aware of what's going on in their home, their lives ... it affects their jobs. And make sure you treat them with respect."



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"IT'S A BIG RISK. I'M INVESTING OVER \$100.000 I DON'T HAVE, AND I DON'T HAVE A JOB LINED UP. EVERYTHING YOU WANT IS ON THE OTHER SIDE OF FEAR." **Doyle Parsons**

"We put a camera in every truck that has drain equipment. In most of the area they charge you a camera fee," he says. "We do not. After we run the drain and clear it we actually run the camera to inspect it and see if there are any issues. Then we explain to the customer what's going on and they choose an option, whether they want to fix it, repair it or let it be. Since we've implemented that process we've taken \$140 drain jobs and turned them into \$2,000 jobs.

"We're now finding that if we camera the line for free after we do the job then it actually ensures that we have no call-backs," he adds. "So it's actually cut our costs."

Right now all the inspection work is residential, but Parsons recently obtained his Louisiana municipal mechanical license, so municipal work could factor into future plans.

One thing is certain, with municipal clients or without, Parsons has ambitious expansion plans.

"Ultimately, we're trying to get to 200 locations in the next 40 years, so I'm not sure if the municipal work will fit into that scope," he says. "I want four locations in every state in America. I have one right now and we're looking to send a man into New Orleans soon."

The 40-year plan, he says, is part of something bigger than himself.

"Scripture says without a vision a man perishes. So this vision will help drive and motivate me every day." C

featured equipment

Bryar Johnson uses a General Drain-Rooter PH to clear a drainline through the cleanout behind the client's washing machine.

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<u>3⁄4"</u>	Premium Pirhana Blue 3000psi	\$1,154 <mark>.00</mark>	\$1,385.00					
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	<u>1⁄8"</u>	\$15.28	\$21.25	\$26.38	\$37.49	\$48.60	\$56.74	\$66.88	\$87.15	\$107.45	
	<u>3⁄16''</u>	\$21.23	\$26.95	\$33.60	\$44.89	\$56.84	\$68.80	\$80.75	\$104.66	\$128.58	\$152.50
	<u>1⁄4"</u>	\$29.85	-	\$55.85	\$81.82	\$ 107.77	\$126.38	\$1 50.52	\$ 198.77	\$ 247.02	\$295.28
SOURCE KEY	<u>3⁄8"</u>	\$62.08	\$ 91.2 8	\$105.54	\$151.12	\$ 215.0 6	\$259.57	\$ 304.0 5	\$382.09	\$469.43	\$556.77
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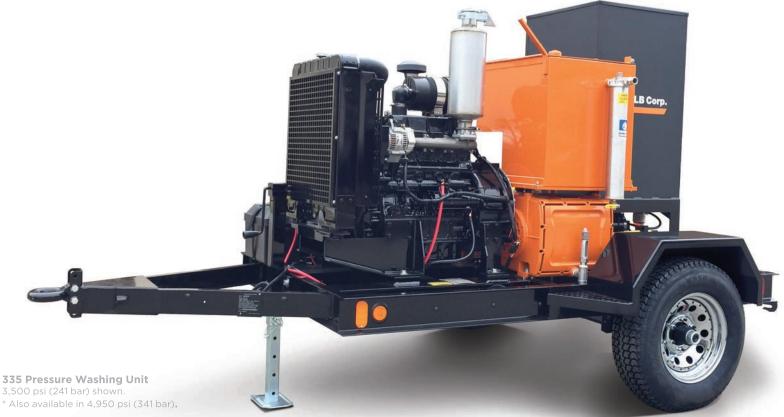
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BUYER'S GUIDE SPECIAL

A Quick Primer on Jetters and Nozzles

Make sure you understand what to look for before making your next purchase

By Ken Wysocky

etters are among the fundamental tools of sewer and drain cleaning. The right jetter will help make you efficient, effective and profitable, so choosing wisely based on your own specific needs is critical.

In general terms, larger-diameter pipes require higher flow, while smaller pipes require higher pressure, especially if you're cleaning heavy grease or clearing tree roots.

A smaller cart-mounted jetter with a 1.5 hp electric motor generates about 1,500 psi at 1 1/2 to 2 1/4 gpm and is ideal for interior lines up to 4 inches in diameter. For lines up to 6 inches in diameter, a 13 hp unit (with a gas-powered engine) that generates 3,000 psi at 4 gpm should do the trick. And to clean lines ranging from 3 to 12 inches in diameter, you'll need an even larger trailer-mounted unit with a gas engine that ranges from 19 to 40 hp and produces anywhere from 2,000 to 4,000 psi at about 12 gpm. Even larger mainlines and storm drains might require 25 gpm at 3,000 to 4,000 psi.

It's also important to understand pressure ratings and how they're measured. On some jetters, pressure is rated at the pump. On others, it's rated at the end of the hose. Regardless of which point pressure is measured at, keep in mind that pressure drops as the hose run increases, and a more powerful unit may be needed to compensate for longer runs.

And if you're looking at a bigger trailer-mounted jetter, you also have to consider your vehicle's towing capability. A unit with a full 600-gallon water tank will add 4,800 pounds for just water alone, so you'll need a truck that can handle the weight.

Other trailer jetter features include:

- Safety shut-offs that automatically turn the machine off when it runs out of water or runs low on oil
- Manual or power hose rewind
- Pulse action that vibrates the hose to help it work around bends and through tough clogs (also an option on smaller jetters)
- Remote-control operation
- A pivoting and telescoping hose reel that makes it easier to align the hose with clean-outs, manholes and the like
- Weatherization kits that prevent internal systems from freezing up
- Hot-water capability for thawing drainlines and more effective cleaning of grease clogs

NOZZLES

Without the correct nozzles, a jetter will never deliver peak performance. Jet trajectory is critical to nozzle selection. Jet angles in the 30 to 45 degree



range are ideal for cleaning pipe walls. Jet angles in the 0 to 10 degree range are primarily designed for thrust to propel a nozzle up the line and punch through a blockage. These angles are also the most efficient for moving debris. A jet in the 15 to 20 degree range can clean the pipe wall, propel the nozzle and move debris, but using two nozzles for each job would be more efficient. Many newer nozzles combine angles to perform multiple functions simultaneously.

Beyond angles, nozzles are broken down into three tiers based on efficiency for moving water:

- Tier 1 steel housing with orifices drilled out in different locations and sizes, and at different angles, which can mean poor flow dynamics and less efficiency.
- Tier 2 better flow dynamics than Tier 1 nozzles. They have replaceable inserts for longer life, and flow straighteners for better performance.
- Tier 3 higher capacity and more effective cleaning by directing flow more efficiently for less energy loss.

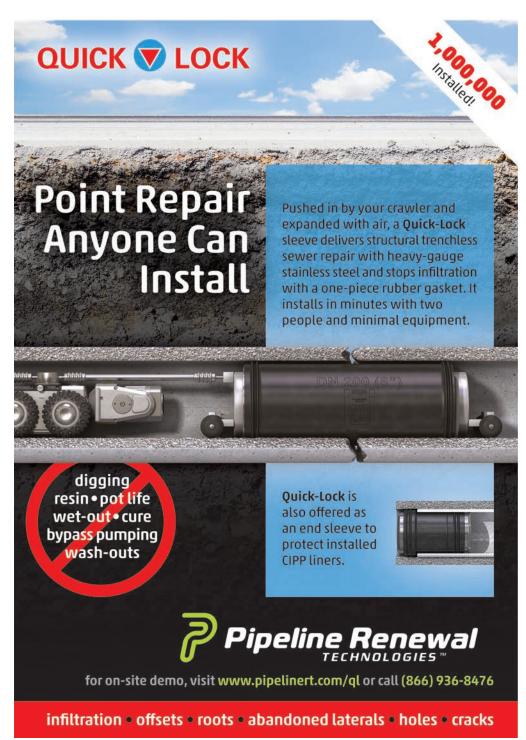
It's important to know what you'll be cleaning and to select nozzles that are designed for that specific task. Part of that equation is making sure your nozzles have the right tips.

Tips are small, replaceable inserts that screw into holes in the nozzle. Tips are typically made from four different materials:

- Stainless steel commonly used by sewer and drain cleaners. They can better tolerate rough handling, and require the use of clean water (filtered to 25 microns or better) at pressures of less than 20,000 psi.
- Carbide steel since it's harder and won't wear as fast, carbide steel is ideal for sewer contractors who use dirty, unfiltered water that's propelled at high flow rates below 20,000 psi.
- Ceramic like carbide, ceramic tips are best for contractors who use dirty, unfiltered water below 20,000 psi.
- Sapphire predominantly for extremely high-pressure hydroblasting jobs like cutting concrete at 40,000 psi or more.



For more on jetters and nozzles, check out the Cleaner Classroom series at Cleaner.com. Manufacturers make a wide variety of jetters and nozzles designed for everything from general cleaning and flushing to very specific tasks like root cutting or concrete removal. Check out the enclosed Buyer's Guide for manufacturer's info, and take the time to find the equipment that suits your exact needs. **C**





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ARKANSAS EXCAVATION FIRM FINDS OPPORTUNITY FOR GROWTH WITH A NEW FOCUS ON MUNICIPAL SEWER MAINTENANCE

38 Cleaner July 2017

BY MARIAN BOND PHOTOGRAPHY BY BRETT ROJO Children often take inspiration for their career paths from their parents. In the Humbard family, it was just the opposite.

Inspired by their son, Quinton Humbard, and the knowledge base he brought to the business as a recent civil engineering graduate from the University of Arkansas at Fayetteville, Chris and Tammy Humbard restructured their Arkansas excavation firm and took a new direction.

The Humbards moved aggressively into sewer inspection, cleaning and rehabilitation. They parked their bulldozer, excavator and dump truck on their 5-acre facility in Green Forest, Arkansas, and walked away from the buckets and blades in favor of trenchless technology.

Humbard Contracting first hooked up with Illinois-based TT Technologies to learn the basics of pipe bursting. From there the company added a Vac-Con with a hydroexcavation package, and a fully equipped R.S. Technical Services CCTV van. The company took another step in 2015 with lining equipment and training from LMK Technologies.



LMK Technologies' Schwalm Robot operator Kyle Mucci (center) helps unload an ultraviolet liner while Saertex-multiCom sales representative Tim Lupia (left) and Humbard Contracting laborer Malcolm Brumley guide the liner into a manhole.

NEW DIRECTION

Quinton Humbard immediately stepped into a major role as an estimator, field worker, CCTV operator and project coordinator. Tammy Humbard is the other CCTV operator. Quinton's younger brother Garrett, while still in high school, works with the team as time permits.

Quinton pays close attention to bid notices in local newspapers, various bidding sites such as Bid Ocean Inc., and opportunities with engineering and contracting firms. He visits the project site before putting in a bid, looking for red flags or obstacles that could stand in the way of a professional job.

"We need to know what we are dealing with," he says. "The line could be in the backyard of a neighborhood, and you have to see where the entrance is, and know what is accessible.

"If we really want a job, we usually come out winning the bid. We usually do not turn down an opportunity to bid. We advertise our capabilities through various channels, including associates we have from the years we did excavation."

Crews can be on a job as long as six months, depending on the needs of the customer. They will clean, televise, repair and replace laterals and mainlines primarily with trenchless technology. They occasionally dig and replace, but they are seeing a growing demand for trenchless technologies in



most municipalities.

Tammy Humbard says that although she and her husband come from an excavating background, they realize times are changing. There are pockets in the country where the dig-and-replace mentality is still prevalent, but new technology is taking hold. By getting on the leading edge, they hope to position the company with the experience and expertise to drive the trenchless market closer to their home base.



ABOVE Saertex-multiCom lead technician Alex Kaefer (left) lowers the ProKASRO light train into the manhole as project superintendent Quinton Humbard (center) and laborer Cody Kilgore assist on a lining job in Blackwell, Oklahoma.

BELOW Malcolm Brumley monitors the ProKASRO light train during the curing process.



TRAINING DAY

Building a staff of qualified technicians who can help further the company along its new path is no easy task, notes Tammy Humbard.

"We are dealing with specialty equipment, some we own and some we rent," she says. "We want someone who is going to embrace this technology — someone who takes pride in what the job entails, and understands the importance of doing it correctly. We explain what we do and we look for the same enthusiasm that we feel, not just someone looking for a paycheck. We want someone who wants to be there and do the job correctly."

She says they devote time to teaching the technology at their facility and on the job site. The process has worked well for lateral lining as well as all other duties.

"On the job site we do hands-on training again to let the technicians build awareness of what they are actually going to be doing. Things don't always go as easily or as fast as anticipated, but we make sure everybody knows where they need to be and what they need to know."

During the work cycle on out-of-state projects, they have a per diem package for employees, who can typically travel home on weekends while the equipment stays on site. >> Saertex-multiCom sales representative Tim Lupia (center) talks to his lead technician Alex Kiefer (left) as Humbard Contracting's Malcolm Brumley guides an ultraviolet liner into a manhole.

"WE WANT SOMEONE WHO IS GOING TO EMBRACE THIS TECHNOLOGY – SOMEONE WHO TAKES PRIDE IN WHAT THE JOB ENTAILS, AND UNDERSTANDS THE IMPORTANCE OF DOING IT CORRECTLY. WE EXPLAIN WHAT WE DO AND WE LOOK FOR THE SAME ENTHUSIASM THAT WE FEEL, NOT JUST SOMEONE LOOKING FOR A PAYCHECK." Tammy Humbard



Quinton will schedule himself to lead one job, while Chris and Tammy team up on a second project. As president of the company, Tammy is a hands-on administrator who understands the equipment and the job. Jobs are scheduled to make efficient use of equipment. When inspection work is done on one project, for example, the CCTV equipment might move on to the next job, while the jetter stays on location.

"On a recent project in Indiana, we were in a neighborhood where they had a lot of issues with I&I," Tammy says. "We were there as a subcontractor to install the T-liners into the laterals. We are bidding on another project in the same city for laterals and mainlines.

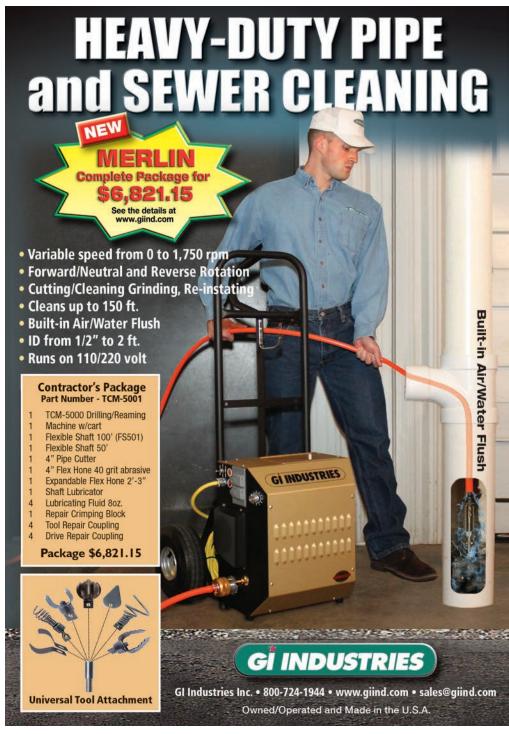
"The municipalities are beginning to see positive results. They see we fixed one neighborhood and they want us to take a look at another."

She also notes that many of the smaller municipalities don't have the equipment to handle this type of work, and would otherwise likely rely on opencut repair or replacement.

The company is often called in to provide CCTV inspection and determine the cause and location of problems.

"An example, a wastewater treatment plant might have an extensive amount of sewage coming to their plant," she says. "They keep track of the water distributed throughout the city, and they should know based on how much water they are distributing how much should be coming back for treatment. If what is coming back to them to be treated far exceeds what they are distributing, then they know they have a problem.

"When we inspect the pipeline, we find out. There might be a crack in the mainline so there is stormwater when it rains. Not only do you have sewage water, you have rainwater running down the line. We come in to find out what is going on."





Tammy says the conditions of job sites across the states they work in are similar in many ways. In the older communities it is often clay tile pipe. Most newer towns or neighborhoods have PVC pipe, but even there roots can flourish if there is a crack or the pipe wasn't installed properly.

"When relining, you go in and cover the possibility of anything getting in that line."

THE NEXT STEP

Humbard uses LMK equipment for laterals and lines from 4 to 12 inches in diameter. Recently, the company took another step and moved into UV lining for larger mainlines. Humbard consulted with SAERTEX-multiCom to learn about the process. The Humbard crew was able to learn the process and how to use the equipment, and was able to rent the necessary equipment with rental fees applied to the purchase price. SAERTEX will send out a UV truck and operator for Humbard's initial projects.

"They will become a supplier for our company for future mainline projects."

Humbard's relationship with TT Technologies continues. The company's Grundotugger lateral pipe bursting system includes the bursting unit, bursting heads for 4- and 6-inch pipe, hydraulic power pack and pipe fusion equipment.

THE PROPER CURE

Humbard Contracting has supported its shift in direction with a relentless determination to find the best processes and provide the most beneficial services for its clients.

From its initial relationship with TT Technologies, its ongoing partnership with LMK Technologies, to the most recent connection with SAERTEX-multiCom, the company has exhaustively worked to bring their company into the trenchless spotlight.

When the company was ready to expand into larger mainline rehabilitation, the Humbards talked to local engineers about their needs and concerns. They wanted a system with a proven track record that meshed well with municipalities' needs.

Research pointed them toward the UV curing process, and then they were given the opportunity to observe a demonstration for an Arkansas engineering firm, where they saw firsthand the benefits of a UV-cured mainline CIPP project.

"There were no folds or wrinkles in the curing process," says Tammy Humbard. "Also, with UV lining the process does not allow for any styrene to escape into the environment, making it a logical solution for environmentally sensitive areas. With the SAERTEX UV product we can line anywhere from 6- to 64-inch pipe with several different liner products in many different situations."

Humbard says she was personally impressed with the company and the passion they showed for their product.

"As a contractor trying to push the new technology in our area it was very helpful to have a company willing to provide the demonstration of the product, and then answer any questions we had. We feel confident in their product because they are confident in their product.

"They are all about the contractor being successful."

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"ON THE JOB SITE WE DO HANDS-ON TRAINING AGAIN TO LET THE TECHNICIANS BUILD AWARENESS OF WHAT THEY ARE ACTUALLY GOING TO BE DOING. THINGS DON'T ALWAYS GO AS EASILY OR AS FAST AS ANTICIPATED, BUT WE MAKE SURE EVERYBODY KNOWS WHERE THEY NEED TO BE AND WHAT THEY NEED TO KNOW." Tammy Humbard

Inspections are handled with a full complement of R.S. Technical Services equipment, including OmniEYE cameras and transporters, coupled with IT Pipes software.

ON THE JOB

One of the company's recent sewer repair and rehabilitation projects took the crew to Blackwell, Oklahoma, for a 60-day stay.

This project consisted of replacing approximately 725 feet of 8-inch vitrified clay sanitary sewer with pipe bursting, pulling in new 8-inch HDPE. They also inspected and lined approximately 8,400 feet of sewer line. Another manhole rehabilitation portion of the project was subcontracted.

"We do not offer complete manhole repair at this time," Quinton says. "We do have a confined-space entry training program and offer that as one of our services."

The project required re-establishing all lateral connections and maintaining sanitary flow throughout the project. Quinton Humbard served as project manager and ran the CCTV van.

The Humbard Contracting team includes (from left) project superintendent Quinton Humbard, laborer Isaac Carpenter, laborer Danny Tanner, laborer Kegan Flippo, laborer Malcom Brumley, Vice President Chris Humbard and laborer Payton Marshall, with the company's Vac-Con jet/vac truck.

Another interesting project took place in August 2016 when the company

was subcontracted to handle lateral cleaning and CIPP lining in Dunkirk, Indiana.

"This was our first project pertaining to CIPP lateral lining," Quinton says. "The job consisted of approximately 45 lateral CIPP liners to be installed. Dunkirk has opened up bids for another upcoming project that involves lateral lining, and we are planning on submitting bids for that job as well."

Regardless of where the next job takes the company, Humbard Contracting is establishing a new niche with new technology.

"We believe this is exciting technology and the industry is important for the welfare of our country," Tammy says. "We like to impart that. Anybody can dig a hole. The true excitement comes when you are not having to tear up a yard to achieve an important goal."

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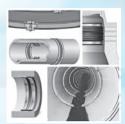




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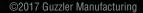
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BUYER'S GUIDE SPECIAL

Buy the Right **Inspection Van**

It's a commitment, so make sure you're getting the service you need before making your next CCTV purchase

By Jim Aanderud

hopping for a new CCTV inspection van can be overwhelming. With so many pipeline inspection equipment manufacturers, narrowing down the search to just one can be a challenge.

Keep in mind that manufacturers have sales representatives

who will come out and demonstrate their equipment. They will explain the features and benefits of the equipment. But at the end of the day, the choice can still be confusing, because each brand offers a range of options.

The right CCTV inspection van for the drain cleaning company down the street may not be the right choice for your business. It's important to identify what you need and to understand how inspection equipment differs among manufacturers.

LONG-TERM RELATIONSHIP

One of the major differences between manufacturers, and in my opinion the most important, is the service they provide. Buying an inspection van isn't like buying a car. There are hundreds of places you can take your personal vehicle to be repaired, but service options for CCTV vans are usually limited to manufacturers and distributors. And contact with the car manufacturer normally ceases once you drive it off the lot.

This is not the case with CCTV inspection vans. You enter into a long-term relationship with the manufacturer, and in most cases the distributor, too. Pipeline inspection equipment needs regular service; equipment will break down whether

Your relationship with your CCTV equipment manufacturer and distributor can dictate the success or failure of your pipeline inspection program. Service is a crucial part of the purchasing process so make sure to ask the right questions before you buy.

as they should.



it's new or old. You are operating sensitive - and expensive - electronic

equipment that is being introduced into a very hostile environment. In

addition, you entrust equipment to employees who may not treat it as carefully



SERVICE COMES FIRST

Your relationship with the manufacturer and distributor can dictate the success or failure of your pipeline inspection program. Service is a crucial part of the purchasing process, so make sure to ask the right questions before buying a CCTV inspection van.

Ask the manufacturer or distributor these questions:

- Where is the repair facility located?
- What repairs can the local distributor make? At what point does equipment need to be shipped to the manufacturer?
- What is the expected turnaround time for repairs?
- If the repair is going to take awhile, are loaners available so crews can keep working?

Waiting a week or more for equipment to be returned after it's shipped across the country for a repair is unacceptable. You need a quick turnaround time to get your crews back to work. You should be assured that equipment will be serviced as quickly and efficiently as possible with minimal downtime.

The above questions should be answered before purchasing any equipment. Once you own it, the service options are limited. Make sure the service agreement is acceptable, and make sure it's in writing. **C**

So, you want to buy a CCTV inspection van. If you buy the right equipment, plan properly and provide quality service, your investment can pay off handsomely. Just don't forget about the additional costs of running your equipment:

EMPLOYEES. Wages and training are a big expense. Two full-time employees alone could equal the cost of contracting inspection services.

MAINTENANCE. Although repairs may be infrequent when equipment is new, they escalate as it ages. Repairs can easily exceed 15 to 25 percent of the original cost of the van per year.

INSURANCE, PERMITS AND LICENSES. It's pretty simple: they all cost money.

TOOLS AND EQUIPMENT. An inspection van carries specialized tools and equipment, everything from gas monitors to computer battery backups. Inevitable upgrades and replacements can translate into thousands of dollars per year.

CONSUMABLES. DVDs, thumb drives, printer paper and toner, even light bulbs, screws, and many other small parts for the CCTV equipment. It all adds up.

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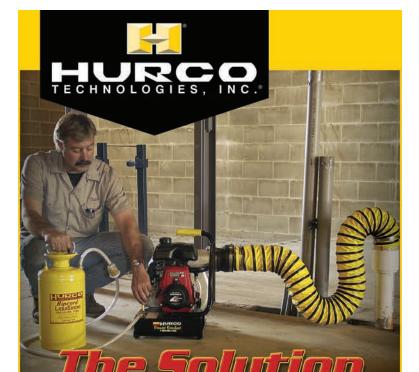
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The Cost of Poor Performance

Failing to properly train employees costs your business a lot more than you think By Evan Hackel

any people have heard this story, which has become a legend in the training industry.

A CEO and department head were having a brief conversation after their monthly strategy meeting, where the main focus was on employee training. The CEO said, "What if we spend all this money training our staff and they leave us?" And the department head replied, "What if we don't train them and they stay?"

A simple but pointed response. If you spend a lot of money training your people on the finer points of drain cleaning and sewer rehabilitation and they leave, that's not an optimal outcome. But if you don't train your employees and they stay, it costs you a lot more.

A franchise group, comprised of more than 2,000 stores, experienced this training quandary firsthand. The head of sales had a simplified approach to hiring. He simply hired salespeople who had worked for competitors that sold the same kind of products. His assumption was that the experienced salespeople he hired were "pretrained" and that hiring them would save a lot of time and expense. Plus, there would be no need to acquire the tools and systems that were needed to implement a training system.

His decision to hire experienced salespeople made sense, but it was flawed. The fact that those salespeople had experience didn't mean that they

Return on investment in training is dramatically greater than most company owners and operators believe it will be. came armed with the best selling skills or factual product knowledge. But after a few years of using his "hire the experienced" approach, he saw that he wasn't achieving the kind of results he wanted. He sensed that the size of each average transaction on the selling floor was too small. Buyers were not becoming repeat customers. Plus, his stores were receiving negative comments online about the quality of their customer service.

Because he could see that the skills of his salespeople needed improvement,

he took the plunge and brought in an experienced training development firm that developed a program of e-learning for salespeople that trained them to increase the size of the average ticket size, to improve their closing percentages, and to provide better customer service.

The performance of the salespeople his company trained was dramatically better than the performance of experienced sales people he simply hired. Plus, he soon realized that training was giving him another benefit; because he could hire high-energy, high-potential employees — not only those with experience — he was building a much stronger and enthusiastic sales force.

After a year, the average annual sales made by company-trained salespeople had in many cases outperformed seasoned professional hires by \$200,000 or more. When he factored in sales and contribution margin improvement, the people trained in-house produced about \$80,000 a year more in profit. With an average five-year tenure for each employee, the training was worth \$400,000 more in profit dollars.

That is another way of saying that the cost of not training each salesperson amounted to \$80,000 a year for that company. So what really happens if you don't train people and they stay? It means that you're going to be losing a lot of money.

TRAINED TO PRODUCE

There are many reasons why trained salespeople produce more income. In addition to closing more sales and generating larger average sales, trained salespeople:

- Sell fewer products at discounted prices, and more products at list price
- Make fewer mistakes
- Sell the right products, reducing the cost of returns and product replacements
- Build customer relationships that result in more repeat business
- Generate more positive reviews online
- Increase your net promoter scores
- Help keep morale and productivity high among all your employees, because people don't like to work with untrained people who don't know what they are doing

What is having poorly trained salespeople costing you? Not training people costs money — a lot of money.

BOTTOM LINE

Training has a major impact on customer service practices across a variety of industries. Drain cleaning and sewer maintenance is no different. Consider your own business and the benefits of customer service-focused training. The basics, such as explaining to customers the details of the installation process, an emphasis on crystal clear communication prior to the start of the job, and of course, conveying the importance of punctuality, can boost customer retention. Training staff to be cognizant of their customer service practices can also increase referral business, which can add significantly to your bottom line.

Return on investment in training is dramatically greater than most company owners and operators believe it will be. In simple terms, if a trained worker becomes 100 percent productive and an untrained worker is only 60

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percent productive, you are losing \$40,000 in value on every \$100,000 of business you conduct.

Not training is a huge expense — far more costly than training. In your company, you should look for all the opportunities where proper training can dramatically increase profits, reduce waste and provide an outsized ROI for every training dollar you spend. If you start to look, it's nearly guaranteed that you will find many more opportunities than you expect. **C**

ABOUT THE AUTHOR

Evan Hackel is CEO of Tortal Training, a firm that specializes in developing and implementing interactive training solutions for companies in all sectors.



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A Warning for the Weary

Fatigue-tracking devices alert workers when they are at greater risk for accidents

By Cory Dellenbach

t can be hard to know when it's time to stop and rest. Workers are often pushing to get the job done faster, and sacrificing health and safety in the process.

"It's well known that we are bad at judging our own fatigue levels," says Silvano Angelone, a fatigue solutions consultant with Caterpillar Inc. "Often we think we are much more alert than we are."

Caterpillar's Cat Smartband, released in 2015, helps employees track employees' fatigue level. The wrist-worn device detects an employee's sleep and wake periods, and converts the data into an effectiveness score. If an employee is too tired, the score will be lower. When a score approaches 70 percent, that employee is considered to be fatigue impaired.



Do you have a Tough Job story to tell?

Drop us a line at editor@cleaner.com and tell us about how you met a serious jobsite challenge to delight a customer. "Unlike the typical devices that are sold at your local electronics store, this Cat Smartband is 93 percent accurate at conducting a polysomnography sleep study, which is considered the gold standard in regard to sleep studies," Angelone says. "When the wearer uses the device, it will calibrate to that individual and provide information in regard to fatigue and alertness or effectiveness."

The Cat Smartband, a device built by Fatigue Science, is built to stand up to the rigors of construction work. The device measures motion with an internal 3-D accelerometer. When the employee stops moving, it assumes they are asleep.

USING THE INFORMATION

That information is downloaded into a software program that looks at patterns of activity and matches those with things like the time of day and how long it's been since the person wearing the device last slept.

The Smartband provides supervisors with the capability to bring up the information from the devices on a tablet or computer. In addition to reviewing current levels of fatigue, the software also allows the supervisor to review the predicted fatigue level for the group by shift's end. The level of information that the supervisor has access to can be controlled during the setup of the project.

"The technology has helped bring a greater awareness and understanding of fatigue and how it relates to one's safety," Angelone says. "In addition, it has often created a competitiveness with the operators to see who can achieve the best effectiveness score, which is achieved by improving sleep quality and quantity."

TREATING FATIGUE

Caterpillar Safety Services uses the technology, along with other tools, to conduct a Fatigue Risk Assessment. With that, a company can determine how to treat fatigue.

"As we continue to strive toward zero incidents, having the ability to connect workers only adds to making it a safer work environment for all involved," Angelone says.

He adds that it isn't unusual to hear from an operator involved in a Fatigue Risk Assessment using one of Caterpillar's tools. "They're surprised. They didn't realize how tired they really were," Angelone says. "It helps them understand their need to improve their safety." **C**



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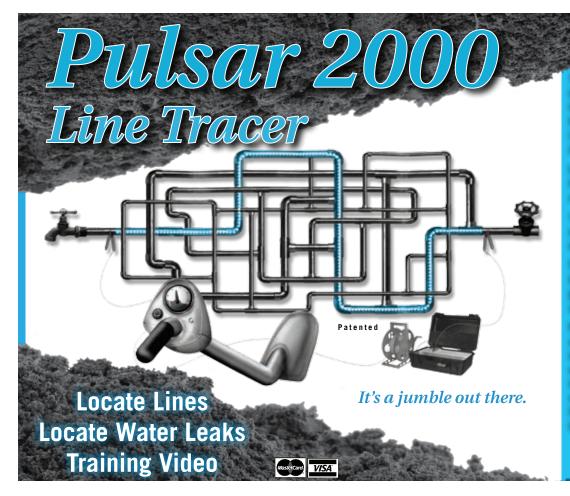


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PRODUCT NEWS

PRODUCT SPOTLIGHT

Picote Smart Spider takes on delicate cleaning scenarios

By Jared Raney

From cleaning PVC to pipes with holes or sections missing, drain cleaning professionals often run into situations where typical chain tools or abrasive cleaning methods can do more harm than good.

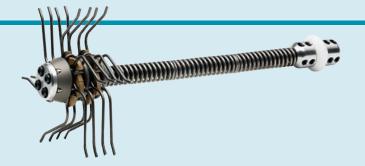
The Smart Spider cleaning tool from Picote Solutions is designed to excel in delicate pipe cleaning scenarios.

"The Smart Spider cleans all types of pipes fast and efficiently — it is even safe to use in PVC pipes. It is a unique tool designed specifically for pipes where the base or other sections are missing," says Katja Lindy-Wilkinson, CEO of Picote Solutions. "It's cost-effective, easy to operate and practical to maintain.

"Picote cleaning chains can't be used in these situations, as the chains would not be able to navigate through a missing section or hole in the pipe," Lindy-Wilkinson says. "If you have a fragile old cast iron pipe with holes to clean, the Smart Spider is a good option."

Versions of the Spider are available powered by the Picote Maxi Miller (110 volts) for 4- and 6-inch pipes, or the Maxi Power+ Miller (400 volts) for bigger 6-, 8- and 9-inch pipes.

"We were asked to develop a cleaning tool that can be used in pipes where sections are missing. Most tools get stuck in the pipe when a section is missing," Lindy-Wilkinson says. "Several prototypes were



developed and tested in order to find the design that works, and the raw materials for parts that would get the job done and be durable, yet not too aggressive in a fragile pipe."

Though not designed for general drain cleaning applications, the Spider can be used to prepare a pipe for lining or coating. It creates a rough surface, allowing an ideal bond between the resin and the pipe wall. The Smart Spider+ with the Maxi Power+ can be used to remove collapsing liner if the liner is not fully collapsed.

Rotating at a maximum of 1,000 rpm, the Smart Spider "pulverizes scale into a fine dust, making it easy to flush with water, without causing any blockages further down the line."

It comes with 12 changeable legs, 4 or 6 inches in length, which are now thicker and stronger than before. More innovations for the product are already on the way, to improve performance and durability.

"All Smart Spider products will soon be equipped with a siliconebased elastic part that can withstand higher temperatures compared to the earlier natural rubber version," Lindy-Wilkinson says. "We have also been testing a specialty Smart Spider with cardbide tips (at the tip of the legs) to remove inconsistent or failed coating in the pipe." 219/440-1404; www.picotesolutions.com



COXREELS THREE-WAY PIN LOCK

The three-way pin lock from COXREELS locks reels for transport in heavy-duty applications. It can be installed on either side of the reel and, with the use of the universal bracket, can be installed in 0-, 30-, 60- or 90-degree rotation in respect to the base-mount surface of the reel. The lock safely secures the reel and eases the activation of the rewind while ensuring the two actions are mutually exclusive. The pin lock engages into a separate ring or the chain sprocket rather than into the side of the drum-side disc for extra strength and reliable activation. **800/269-7335; www.coxreels.com**.

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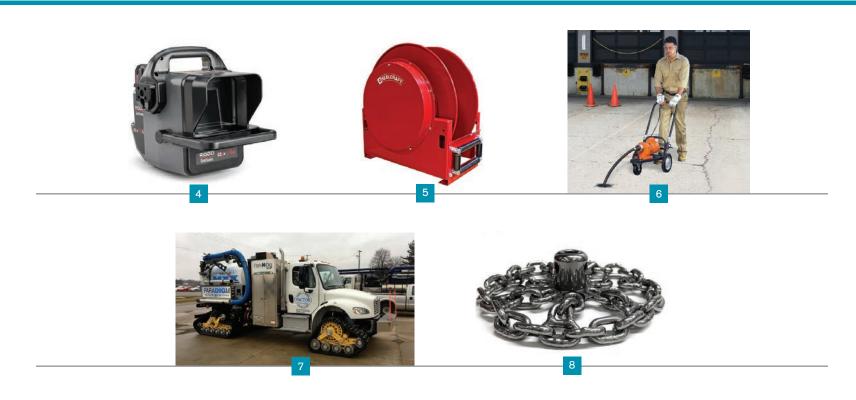
The Westech Wolf noncode certified hydroexcavator uses a Hibon 8702 tri-lobe blower rated at 5,300 cfm and 27 inches Hg. The side-mounted water

tanks on the truck are designed to reduce weight by more than 40 percent and are joined from left to right with a crossover equipped with glycol heat tracing. The debris body is lifted using a telescoping, dual-acting hydraulic cylinder capable of 36,000 pounds of force. The water system uses a Cat 3560 triplex water pump rated at 20 gpm and 3,000 psig. The boom is a 10-inch turret design with 26-foot overall reach and 320 degrees of motion. **780/955-3030**; www.westechvac.com.

3 PLASTIFLEX HI-VAC LTW SEWER/SEPTIC PUMPER HOSE

The Hi-Vac LTW Sewer/Septic Pumper Hose from Plastiflex is designed for moderate to heavy-duty suction service. Engineered with a new polymer resin blend and enhanced profile design, it provides durability for a variety of service CONTINUED >>>





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RIDGID DIGITAL RECORDING MONITORS

The SeeSnake CS6x and CS6xPak digital recording monitors from RIDGID feature Wi-Fi and Bluetooth connectivity for quick viewing of drainline conditions. The monitors stream and record inspections to a designated iOS or Android phone or tablet using the free HQx Live companion app. Each monitor has a water-resistant keyboard for direct control of camera and monitor functions to provide for uninterrupted work in tough conditions. **800/769-7743; www.ridgid.com.**

5 REELCRAFT'S SPRING-RETRACTABLE HIGH-CAPACITY HOSE REELS

The G9000 Series high-capacity hose reels from Reelcraft are compact and allow for longer lengths of larger-diameter hose. The redesigned gooseneck can be removed from the reel for easier hose attachment. An external drive spring allows for convenient access to the spring components and improved servicing of the reel. The roller bearing inside the pillow block produces a smoother spool rotation and easier operation. Models are available for 1 1/2-inch I.D. by 50-foot low pressure air and water hose, 1-inch I.D. by 75-foot and 3/4-inch I.D. by 75-foot medium-pressure oil hose. **800/444-3134; www.reelcraft.com.**

6 GENERAL PIPE CLEANERS MODEL 88 SECTIONAL DRAIN CLEANER

The Model 88 sectional drain cleaner from General Pipe Cleaners features a heavy-duty 3/4 hp motor as standard equipment and drives a 3.5-1 gear head ratio for power. It has a longer frame to protect the drive coupling, and a larger front caster wheel. The cleaner spins 8- or 10-foot quick-coupling cable sections at distances of 200 feet or more. The cables self-feed while the

operator stands behind the machine as the cables screw into the line. Standard equipment includes a safety clutch, air-actuated power switch, ground fault circuit interrupter, folding handle, 10-inch wheels and a cable-feeding tool. **800/245-6200**; www.drainbrain.com.

7 VACTOR MATTRACKS 400 SERIES TRACK CONVERSION SYSTEM

The extreme-terrain configuration of the Vactor HXX Paradigm features a Mattracks 400 Series rubber track conversion system for pipeline, utility and construction applications. The hub-mounted design of the system facilitates a fast conversion, approximately 45 minutes in a shop, from tires to tracks. It features a rubber torsion anti-torque system and a 20-inch-wide front track and 30-inch-wide rear track, and has a steering assist and rocker suspension. **800/627-3171; www.vactor.com**.

PICOTE PVC CHAIN

• Picote PVC chains are available as the Cyclone and Original designs, and do not have carbide inserts, making them safe for use inside PVC pipes. The chains are used with the Picote Micro or Mini Miller machines, utilizing the 1/3-inch-diameter shaft in 2-, 3- and 4-inch-diameter pipes. When used with the Midi and Maxi Miller machines with its 1/2-inch shaft, the chains can be used in 4- and 6-inch-diameter pipes. **219/440-1404; www.picotesolutions.com**.

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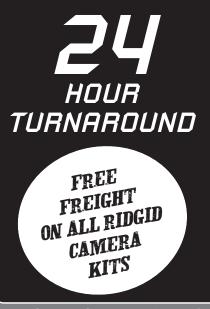
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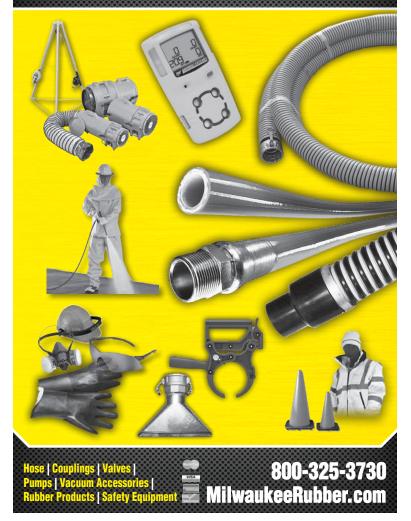
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INDUSTRY NEWS

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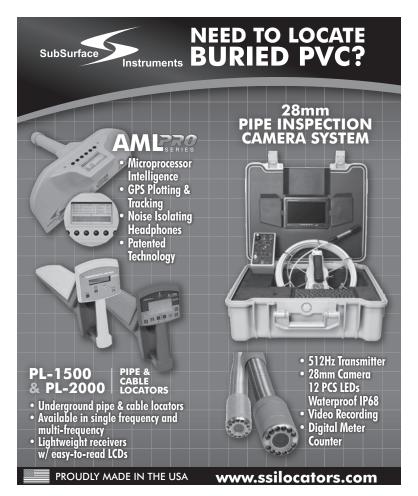
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2016 O'Brien jetter: a40 gallons per minute at 3,000 psi. Purchased new. 66 hours. Has remote and several nozzles. Stored indoors. Truly brand-new unit. Cummins diesel. Two (2) 350-gallon water tanks. \$32,000 Call 706-252-4743. GA C08

Harben 4016: New pump and gearbox. New. heavy-duty custom trailer with only 120 hours on it. Two (2) 300-gallon tanks, antifreeze system, aluminum toolbox. Has large hose reel, I have jump jet for it, but not installed. \$20,000 firm. Cash sale. Mike Bowman 765-427-7575 (C08)

JETTERS-TRUCK



1999 SECA 747-SP: 40 gpm @ 2,000 psi, 700-gallon poly tank. 4,940 hours. Mounted on ex-municipal truck with 37,400 miles. \$14,000 608-835-7767, WI CRM

Jack Doheny Supplies Inc. offers a full range of late model combo units and DOT industrial vacuum loaders. Call us @1-800-3DOHENY. (CBM)

LOCATORS

Used RIDGID NaviTrack, Gen-Eye Model 100 and Goldak Model 4400. The Cable Center 800-257-7209. (CBM)



PIPELINE REHABILITATION

Perma-Liner Style Model 246 Steam Unit. Used 2 times. \$4,800 OBO. Text or call for pics and videos: 239-340-3840 . (C08)

POSITIONS AVAILABLE



CCTV/Cutter Operator & CIPP Installers wanted! Trenchless Pipe Repairs LLC out of Sumner, WA is hiring! Contact Nick Patrick for details.

253-320-1350 co7 nick@trenchlesspiperepairs.com

Cleaner AVERAGE MONTHLY CIRCULATION REACHES 26,460 READERS! GapVax, Inc., a nationally recognized manufacturing business, is seeking a talented, highly motivated individual to fill a full-time Sales Position in the Midwest (Iowa based preferred) region. GapVax is the leading manufacturer of industrial and municipal vacuum units and hydroexcavation units in the United States. We provide the most reliable, comprehensive, and efficient mobile vacuum units in the industrial and municipal markets. Specifications of the position are listed on our website, www.gapvax.com, click on the Now Hiring link in the left hand column. Send resumes to or betty@gapvax.com or 575 Central Avenue, Johnstown, PA 15902. (CBM)

PRESSURE WASHERS

Industrial Pressure Washer - New w/warranty \$9,500. 2,000psi, 18gpm. 999cc Kohler & AR pump. Will deliver. 321-800-5763 (CBM)

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

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

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

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 manhole covers easily. Free catalog. **www.TandT tools.com.** Phone **800-521-6893.** (CBM)

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

TV INSPECTION



2006 Ford E350 televising van, 5.4 engine, 61,000 miles. Envirosight 125 crawler (recently serviced), new cable, Onan generator, washdown system. Dual monitors for viewing inspections. New in-dash screen with backup camera. \$45,000 484-535-2550, PA cor

2011 Chevy 3500 Hi-Cube TV inspection truck. 18,000 miles, 2 cameras, 2 crawlers, new cable. All tools, spare parts, safety gear and rebuilt Honda generator. \$46,500. For photos, text your email address to 630-333-3704 or call 630-333-3704. (C07)

2008 Ford E450, 16-ft. box, CUES pipe inspection unit. 7.5kw Genset, Jenny compressor, ProData 2000. Only 36,000 miles. V8 diesel, roof dash a/c. Local govt. retired. \$69,999. www.shumatetruckcenter.com or 813-877-6638 (C09)

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2008 IBAK Portable mainline system for sale. System mounted in 2005 Dodge Sprinter 2500 Short WB van. 4 x Marine battery over Xantrex inverter power source. BK Portable Control box, Two reels - KT180 mainline and HSP40 pushreel. Two pipe crawlers - KRA65 with inclinometer & KRA75 with inclinometer & scissor lift. Recent motors replaced in KRA65. Two cameras - Orion and Hvdrus. Lots of wheel sets, spare parts, ZSW light-ring and two spare cables. Turnkey inspection van with Wincan 8 software. Also including 1998 Vactor 2100 dual-stage combination flush truck on International chassis that is operational but needs TLC (needs a fan replaced). Career change requires sale. Asking \$75,000. Open to reasonable offers. Darrin @ boorman50@hotmail.com (C07)

PEARPOINT — Mainliner buying & selling used equipment. Canada & USA PEAR-POINT 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)

2016 IBAK Premium Mainline Inspection System for 5" - 48" pipe. Includes: Orpheus pan & tilt, zoom camera, T76 mainline tractor with remote elevator, 1,000' of cable, winch, control room, Onan 5.5Kw generator. Mounted in 14' enclosed trailer. Call Mike or Robert at 800-294-0149 or visit www.williamseqpt.com (C07)

2002 Chevy 3500 RST van with new POSM computer - \$35,000. 2001 Chevy 2500 RST van with new POSM computer - \$30,000. Pictures upon request @ cdscar@aol.com. 916-747-3819 (C08)

USED Envirosight ROVVER Inspection Crawler System: Overhauled with lots of new parts and ready to run. Includes cable reel, camera, tractor and controls, plus accessories. \$27,500. Call 973-252-6700. (CBM)

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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)

CUES full outfit camera unit. 2005 E450 diesel CUES-built truck. Cameras, tractors, new parts, tools, gas monitors, EVERYTHING to work. Owner retiring. Vactor 2100 and jetters available too! 204-688-5220 (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)

VACUUM LOADERS



1999 International Guzzler vacuum excavator: Totally refurbished, purchased new for Big Dig Project. 27" blower, CAT engine, auto remote. Special noise-suppression equipment. Tri-axle. High-pressure wash-down system - 300-gallon water tank. \$85,900 OBO. Also available **1997 Ford Guzzler** vacuum excavator same features as 1999 International. No washdown system. \$85,900 OBO.

617-212-0162, MA

C07

WANTED

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

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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)

Waterblasters - NLB / Jetstream, quantiplex / triplex, 10-20K, 150hp-375hp Cummins, hoses, accessories, Stoneage tools... Way too much to list - industrial contractor liquidating inventory. Call 813-323-4940. (C07)

For Sale: Two (2) Myers M1610K40 – pumps only. www.waterjettingequipment.com or phone 714-259-7700. (CBM)

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