

Cleaner

FOR DRAIN AND PIPE CLEANING,
INSPECTION AND REHABILITATION
PROFESSIONALS

SHIFTING GEARS

AFTER A DECADE OF WORKING IN OREGON'S
TIMBER INDUSTRY, AUSTIN WILLETTS FOUND
SUCCESS RETURNING TO HIS FAMILY'S ROOTS
IN SEPTIC AND DRAIN CLEANING / 12

MODERN TIMES

JOLLY PLUMBING ASPIRES TO
UPEND INDUSTRY STEREOTYPES / 22

LEAKPROOF
EXPANSION
PLUGS
/ 32

PRODUCT FOCUS

PIPE BURSTING METHODS AND PROJECTS / 46



THE NEXT GENERATION FLEXIBLE SHAFT MACHINE



Flexi-Rooter®



Chain Cutter
with Clog Chopper

General has rethought high-speed, flexible shaft machines. The stronger, stiffer shaft lets you clean a wider range of drain lines, up to 75 feet long. It's flexible enough to negotiate 2" lines yet tough enough to clear roots in 4" lines.

General's unique ClogChopper® cutter in combination with the carbide tipped chain cutter makes a formidable combination, capable of clearing the toughest stoppage.

The built-in variable speed motor with foot pedal control makes the machine easier to operate. And the shaft is field repairable. It's everything a flexible shaft machine should be.

To learn more, visit www.drainbrain.com/Flexi-Rooter, or call the Drain Brains® at 800-245-6200



MADE IN U.S.A. © 2023 General Wire Spring

The toughest tools down the line.™ **General**
PIPE CLEANERS

“THE PROFIT MARGINS ARE HIGHER THAN ANY OTHER SERVICE.”

Profile NuFlow Certified Contractor

When Aaron Simpson opened his plumbing company, I Fix Pipe in 2019, he knew he wanted to add pipe lining to his list of services.

“It’s a better option for the customers and the profit margins are higher than any other service. There are no draw backs when it comes to lining.”

He chose to become a NuFlow Certified Contractor.

“I tried other companies, but the products were more complicated. I chose NuFlow for their product and the knowledge of their team.”

Over the years, they have utilized NuFlow’s training and job support.

“The best training was on the job site. Real world situations mean so much more. We call the team to go over projects. Their experience is so valuable, the team really knows the product and how to use it.”

Today, Aaron has grown the lining side of his business.

“About 50% of our work is now pipe lining, maybe more. We subcontract lining work for other plumbers in the area, some call me for help every week. Now, we’ve started booking larger, more technical projects.”



Aaron Simpson,
I Fix Pipe, Odessa, TX



Grow with NuFlow. We Got You.
www.nuflow.com | 866-430-2134

SCAN ME



CONTENTS

APRIL 2023

12 COVER STORY: SHIFTING GEARS

After a decade of working in Oregon's timber industry, Austin Willetts found success returning to his family's roots in septic and drain cleaning. // By Giles Lambertson

FEATURES

22 PROFILE: MODERN TIMES

Kentucky firm aspires to upend people's stereotypes about what plumbing and drain cleaning companies look and feel like.

// By Ken Wysocky

DEPARTMENTS

8 FROM THE EDITOR: A BROKEN RECORD

Trench collapse deaths were at their highest level in years in 2022, making it appropriate to once again emphasize the importance of proper safety protocols. // By Kyle Rogers

10 @CLEANER.COM

Be sure to check out our exclusive online content.

30 SAFETY FIRST: ESTABLISHING SITUATIONAL AWARENESS

We should all take on the responsibility for our coworkers' safety and well-being.

// By Ronnie Freeman

32 BEHIND THE GEAR: PLUGGING ALONG

Since 1981, Real-Tite has focused on providing the industry easy-to-use, leakproof expansion plugs.

// By Kyle Rogers

38 MONEY MACHINES: DUAL FUNCTION

Combo jetter/inspection camera boosts efficiency and customer satisfaction.

// By Ken Wysocky

42 BETTER BUSINESS: FOCUS ON THE EXPERIENCE

A simple pathway to success is consistently delivering on the promise you make to customers and employees. // By Jason Bradshaw

46 PRODUCT FOCUS: PIPE BURSTING METHODS AND PROJECTS

By Craig Mandli

54 PRODUCT NEWS

Spotlight: Robotic reinstatement cutter offers flexibility to contractors. // By Craig Mandli

56 INDUSTRY NEWS



ON THE COVER // Austin Willetts grew up around drain cleaning and septic businesses, but he was unsure if he was meant for that line of work, which took him down the path of a decade-long career as the lead millwright for the largest hardwood plywood manufacturer on the West Coast. But he eventually returned, starting Roseburg Rooter & Drain Cleaning in Oregon in 2020. Now he's combining those decades of family experience in the industry with what he picked up during his previous career. Although still a one-person operation at the moment, he sees a lot of future opportunity for his company. "At the end of the day, I wouldn't trade what I am doing now for the world," Willetts says. (Photography by Richard Bacon)



32



22



38

coming next month: May 2023

focus: Residential and Commercial Sewer and Pipe Maintenance

Money Manager: Business credit basics // Tech Perspective: Utility damage mitigation // Money Machines: Productive pipe milling

INSIGHTS DELIVERED INSTANTLY

QUICKVIEW

GET THE BIG PICTURE

Quickview airHD's high-powered zoom optics make it the perfect tool to assess your collection system. Lower into a manhole to rapidly prioritize CCTV, cleaning and rehab activities—and make better use of precious resources. Get instant insight on emergency callouts, as well as pre- and post-cleaning sewer assessments.

Ready for a demo? Scan here:

Learn more at envirosight.com/quickview



PRECISE

Fine-tune your view with remotely adjustable camera tilt and height.



WIRELESS

An app-based interface lets you stream and record HD video, and control zoom, illumination and tilt.



PORTABLE

Quickview fits in a pickup, deploys rapidly and can be operated by a single user.



(866) 936-8476

[ENVIROSIGHT.COM](https://envirosight.com)

©2021 EnviroSight

ADVERTISER INDEX



A.R. North America, Inc. 45
ALLAN J. COLEMAN
SINCE 1982
 Allan J. Coleman Co. 35, 40
 American Jetter 60



Apex CIPP Solutions..... 21



Cam Spray 51



Central Oklahoma Winnelson..... 55

CLOVERLEAF Tool Co. 51
 Cloverleaf Tool Co..... 51



Coast Manufacturing..... 55

Cua Claws..... 60



CUES, Inc. 29



Duracable Manufacturing Co..... 37

Dynamic Repairs 60



Easy-Kleen
 Pressure Systems Ltd. 60

EasyCAM 8

ENVIRO SIGHT

Envirosight LLC 5



Enz USA Inc. 53

FORBEST

Forbest Products Co. 53



GapVax, Inc. 63



General Pipe Cleaners,
 div. of General Wire Spring 2



GI Industries Inc. 43

Gorlitz Sewer & Drain, Inc. 31



HammerHead Trenchless 9

Hermann Sewerin GmbH 20



HotJet USA 60



IPP Solutions, LLC 17



Ken-Way Corporation 61



Lansas Mfg. by
 Vanderlans & Sons Inc. 26 & 27



MaxLiner 25



Milwaukee Rubber Products, Inc. ... 56



MyTana LLC..... 11

Nexstar Network, Inc. 20



NuFlow Technologies..... 3



Pearpoint (USA) 44



Picote Solutions..... 44

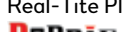
Pipeline Renewal Technologies 15

Pro-Built Tools, Inc..... 19



Ratech Electronics, Ltd..... 40

Real-Tite Plugs, Inc..... 36



RODDIE, Inc..... 45



Root Rat..... 59



SECON 59



Spartan Tool LLC 64

SubSurface Locators, Inc..... 55



T&T Tools, Inc..... 57, 60



The Cable Center..... 33, 61



The Sewer Camera Connection..... 36

The Utility Expo..... 41



Trojan Worldwide, Inc. 49

TruGrit Traction Inc. 60



Vac-Con, Inc. 7



Vivax-Metrotech Corp. 47

Western Drain Supply..... 57



Westmoor Ltd. 28

Classifieds..... 58-59

Cleaner

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

Published monthly by COLE Publishing, Inc.
 PO Box 220, Three Lakes, WI 54562

In U.S. or Canada call toll-free 800-257-7222
 Mon-Fri., 7:30 a.m.-5 p.m. CST

Website: www.cleaner.com | Email: info@cleaner.com | Fax: 715-350-8456

SUBSCRIPTION INFORMATION: A one year (12 issue) subscription to *Cleaner* in the United States or Canada is free to qualified subscribers. A qualified subscriber is any individual or company in the United States or Canada that is involved in the inspection, cleaning, repair and installation of residential and commercial sewer lines. Non-qualified subscriptions are available at a cost of \$60 per year in the United States and Canada/Mexico. Subscriptions to all other foreign countries cost \$80 per year. To qualify, visit www.cleaner.com/order/subscription or call 800-257-7222.

Our subscriber list is occasionally made available to carefully selected companies whose products or services may be of interest to you. Your privacy is important to us. If you prefer not to be a part of these lists, please contact Holly at holly.gensler@colepublishing.com.

CLASSIFIED ADVERTISING: Submit classified ads online at www.cleaner.com/classifieds/place_ad. RATE: No Photo Classified \$25 for 20 words, each additional word \$1. All classified advertising must be PAID IN ADVANCE. DEADLINE: Classifieds must be received by the first of the month for insertion in the next month's edition. PHONE-IN ADS ARE NOT ACCEPTED. Ads may be faxed only when charging to MasterCard, VISA, Amex or Discover. Please supply all credit card information with faxed ads. Be sure to include your phone number (with area code) in your ad. Make checks payable to COLE Publishing Inc. and mail with classified ad to the address above. CLASSIFIED ADVERTISING APPEARS NATIONWIDE AND ON THE INTERNET. Not responsible for errors beyond first insertion.

DISPLAY ADVERTISING: Contact one of our sales staff at 800-994-7990. Publisher reserves the right to reject advertising which in its opinion is misleading, unfair or incompatible with the character of the publication.

DIGITAL REPRINTS AND BACK ISSUES: Visit www.cleaner.com for digital reprint options and pricing. To order back issues, call Holly at 800-257-7222 or email holly.gensler@colepublishing.com.

CONTROLLED CIRCULATION: 21,500 per month. This figure includes both U.S. and international distribution.

© 2023 COLE PUBLISHING INC.

No part may be reproduced without permission of the publisher.



KAYLA BISNETTE JIM KOSHUTA

cleaner.com



PREMIUM FOR THE MASSES

The all-new non-CDL Vac-Con Titan comes in a 3-yard configuration that provides the quality and performance expected from our premium Titan line of products — in a unit ANYONE can use.

Weighing in under 26,000 GVWR, the non-CDL Titan is an ideal option for smaller organizations and those who need to be able to jump in the truck and go — no CDL required.



Email me with comments, questions or opinions at editor@cleaner.com

A BROKEN RECORD

Trench collapse deaths were at their highest level in years in 2022, making it appropriate to once again emphasize the importance of proper safety protocols

THE TOPIC OF THIS MONTH'S COLUMN, trench safety, is nothing new. It's been addressed before in the pages of this magazine and in numerous articles over the years on Cleaner.com.

But the need to bring it up again seemingly hasn't waned. As 2022 was coming to a close OSHA reported that there had been 35 worker fatalities due to trench collapses during the year, more than double the number of incidents in 2021 and the highest amount in at least a decade.

A cubic yard of soil can weigh as much as 3,000 pounds and all it

takes is mere seconds for a trench to cave in. There's no mystery behind how to prevent such incidents. Yet there are still a number of companies that choose to side-step the proper safety measures and put their employees at risk. Why? There isn't a good answer.

I'm often at a loss on how to broach this subject because what new information is there to present? We know how to make trenches safe to work in. All there is to do is continue to emphasize the importance of always following those safety procedures and not becoming complacent about it. You could be lackadaisical about proper trench safety and get away with it for a long time with no problems. But all it takes is one time, with the worst-case scenario being death.

As I'm writing this, I've come across several reports about the conclusions to OSHA investigations into incidents that caused worker deaths. They all read the same: Workers entered deep trenches with no shoring protection in place. There were no inspections done at the beginning of the work day. There was a cave-in. Worker or workers died. OSHA proposes hundreds of thousands of dollars in penalties to the responsible company.

There have been news items about more recent trench collapses, all across the country — Colorado, Maryland, Texas, Pennsylvania, Kansas. Some ended in tragedy. Others were simply a close call. Such stories are often vague about whether property safety measures were in place, only stating that an OSHA investigation is underway. I'm sure I can guess what those investigations will discover.

In another recent news story, I read about the signing of a new state law in New York that significantly raises the minimum penalties for companies receiving criminal convictions for worker deaths or serious injuries. The law is named after Carlos Moncayo, a man who died in a trench collapse in 2015. I guess the potential for loss of life isn't enough for some companies and they need the threat of considerable monetary penalties in order to follow basic safety protocols to protect their employees.

I hope all of you readers aren't like some of the companies overlooking proper safety procedures I've seen highlighted in these recent news stories. I know it's easy and tempting to ignore some safety items, especially if you've never had a bad incident. But it's not worth it. All it takes is once.

Enjoy this month's issue. **c**

EasyCAM SEWER CAMERAS



EasyCAM is American made, guaranteed for 2 full years, and engineered by a plumber to be rugged, reliable, and field repairable.



EasyCAM IT JUST MAKES SENSE!



www.EasyCAMLLC.com

239.260.2056



IT'S ALL HERE

FOR WATER SYSTEM REHAB AND REPLACEMENT, WE'RE YOUR ONE-STOP SOLUTION.

When it comes to trenchless rehab and replacement for water infrastructure projects, we have it all. From RS Blueline® CIPP lining systems offering flexibility and reliability to HydroBurst® static pipe bursting systems that combine simplicity and power, it's all engineered here, made here, and supported here in Wisconsin, USA. So, why go anywhere else? HammerHead® Trenchless is your single-source for water infrastructure rehab and replacement.



REHAB & REPLACEMENT. REDEFINED.

Learn more: hammerheadtrenchless.com

@Cleaner.com

Visit the site daily for new, exclusive content. Read our blogs, find resources and get the most out of *Cleaner* magazine.



WISE INVESTMENT

Pipe Lining Pays Off

Ask Matt Mertz to name the best equipment investment he ever made while he owned Matt Mertz Plumbing in Pittsburgh, and he answers without hesitation: A pipe lining system he purchased in 2012 from Perma-Liner Industries. "I was a self-made multi-millionaire in my early 30s and I attribute a lot of that to our ability to line pipes," says Mertz, who sold his business in 2021 to Armstrong Comfort Solutions, recently profiled in the February issue, and now serves as that company's director of plumbing operations. "With the Perma-Liner system, I could do all kinds of jobs that I could never do before. And it helped that I got into it early, before a lot of other people started doing it. We still do millions of dollars a year in pipe lining business with that system. Without it, we wouldn't have been as successful as we were." >> cleaner.com/featured

OVERHEARD ONLINE
"It's easy to put your equipment and supply needs on autopilot, but simply reaching out to your vendors on a regular basis and requesting up-to-date product and pricing information can go a long way."

— Improving Vendor Relations
>> cleaner.com/featured



TROUBLESHOOTING

Examining Drain Clog Culprits

In this online exclusive, regular contributor Anthony Pacilla takes a look at the common ways different types of sewer pipes clog, from terracotta to cast iron. >> cleaner.com/featured



SCAN ME

WEB SURFING

Sharing the Best Content

We're always on the lookout for relevant and interesting plumbing and drain cleaning content across the internet and social media. In our e-newsletters, we regularly highlight that and share what else out there we're reading and watching. For example, this

YouTube video by Sweet Honey Inc. of Iowa about hoses to use for cleaning grease traps. Be sure to sign up for *Cleaner* e-newsletters if you haven't already. >> cleaner.com/featured

EMAILS AND ALERTS



Visit Cleaner.com and sign up for newsletters and alerts. Get exclusive content delivered right to your inbox and you'll stay in the loop on topics important to you!

JOIN THE DISCUSSION



facebook.com/CleanerMag



twitter.com/CleanerMagazine



POWER THRU™

Sewer & drain tools
built to prevail.

M745 Variable Speed
Cable Machine
100-300 rpm



Trust MyTana equipment to find and fix tough problems quickly. Our pro-grade cameras, hydro-jetters, flexible shaft cleaner, cable machines and accessories prepare you for any challenge. And everything comes backed by our legendary service team.

www.MyTana.com ■ (866) 948-7576

MyTana

INSPECTION SYSTEMS CABLE MACHINES FLEXIBLE SHAFT CLEANER JETTERS

CABLE ATTACHMENTS NOZZLES HOSE PARTS TOOLS FACTORY DIRECT SUPPORT

SHIFTING GEARS

AFTER A DECADE OF WORKING IN OREGON'S TIMBER INDUSTRY, AUSTIN WILLETTTS FOUND SUCCESS RETURNING TO HIS FAMILY'S ROOTS IN SEPTIC AND DRAIN CLEANING // By Giles Lambertson

Austin Willetts could have followed his father or uncle and stepped into a family-owned septic or drain cleaning business right out of high school. Instead, the Roseburg, Oregon, native opted to establish himself in another trade in town. For a decade he worked at Roseburg Forest Products doing machine and facility maintenance, accumulating a whole other set of skills. But he eventually ended up transferring those skills to the industry he grew up around, starting his own septic and drain cleaning venture in 2020.

"Looking back, it was scary. It was the scariest thing I've done in my life," Willetts says. "To quit my job after 10 years as a lead millwright for the largest hardwood plywood manufacturer on the West Coast, to give up job security and just say, 'I'm done' and walk away — that leap was huge."

But he landed safely.

"It also is by far the most rewarding thing I have ever done," Willetts says. "It gave me a whole different perspective on life. At the end of the day, I wouldn't trade what I am doing now for the world."

A RETURN TO ROOTS

This whole scenario played out in the Douglas County seat of Roseburg, a city of about 25,000 people in the west-central part of Oregon. Trees dominate the landscape and the economy. The city once dubbed itself the nation's "Timber Capital."

Willetts' first career was wedded to the timber industry. Specifically, he worked in the Roseburg Forest Products mill for a decade, earning his journeyman millwright certification, which meant that he helped maintain the mill's heavy equipment and systems that turn timber into lumber.

▲ Austin Willetts spent a decade working as a lead millwright for Roseburg Forest Products before shifting focus to septic and drain cleaning in 2020.



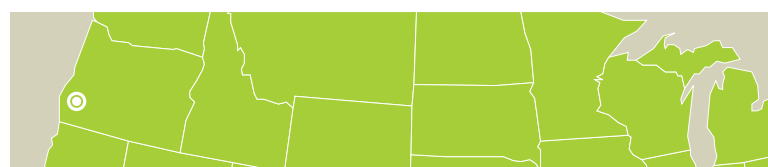


After a decade at the mill, Willetts became dissatisfied with management and did what any reasonable married man would at that point: He had a serious talk with his wife, Kara, a nurse in the intensive care unit of the local hospital. More to the point, she is Willetts' personal business consultant.

"She is a driving force in her support of the company. I couldn't do it without her," Willetts says.

The couple agreed that it was time for Willetts to get back to his roots, to move from helping manufacture wood products to ripping out tree roots that invade septic systems and drainpipes. They started the company as a part-time venture at first while Willetts remained at the mill. He began to solicit customers for the new company, Roseburg Rooter & Drain Cleaning, and things looked promising. Willetts soon quit the mill and went all in.

The year was 2020, the same year that the COVID-19 pandemic fully arrived on the scene.



Roseburg Rooter & Drain Cleaning

ROSEBURG, OREGON

OWNER Austin Willetts

FOUNDED 2020

SERVICES Drain and sewer line work including hydrojetting, snaking, camera inspection and locating as well as septic tank maintenance and pumping

SERVICE AREA Roseburg and most of surrounding Douglas County

WEBSITE www.roseburgrooter.com

"The first year, we didn't know what to expect," Willetts says. "As soon as I went full time, boom, there was the pandemic. It got scary for a little bit."

But what Willetts soon realized — as did others in the industry — is that the pandemic's disrupted work routines and



« Willetts uses the Jetters Northwest Model Brute 20/20 inspection camera on a job.

» Willetts removes a Spartan Tool Model 300 cable machine from his work truck.



“AT THE END OF THE DAY, I WOULDN’T TRADE WHAT I AM DOING NOW FOR THE WORLD.”

AUSTIN WILLETTS

subsequent public policies actually benefited septic and drain cleaning businesses in certain ways. Because people were staying at home for longer periods and utilizing their home plumbing systems more hours in the day, the frequency of clogged pipes and full septic tanks increased.

“The pandemic drove business up for me,” Willetts says. “Today, the pandemic is not as big of an issue, but business never leveled out or dove back down. We got busier.”

FAMILY GUIDANCE

Willetts is a one-man operation at this stage, so “busier” means longer days and frequent emergency runs on weekends and after hours. His day begins stocking the truck and checking to ensure his various machines are ready to run. He is usually on a first job by 8:30 a.m. and calls it a day 11 to 12 hours later.

“Scheduling is the toughest part,” Willetts says. “You don’t know for sure how long a job is going to take. I might have six snaking jobs a day and they will take all day. Another day, six jobs might only take till 11 a.m.”

He’s learned to be flexible.

The earlier generations of Willettses in the industry were his

father, Kevin, who from 1998 until retirement in 2017 operated the largest drain cleaning business in the area. Willetts started riding to jobs with his father at age 8 and eventually worked alongside him as a teenager.

An uncle, Brian, owned the largest septic tank pumping company in Douglas County, dating to the early 1990s. He sold the company two years ago. Growing up, Willetts periodically worked for his uncle, learning the pumping side of things.

Willetts says he always saw the potential of both businesses — drain cleaning and septic — yet was undecided as a younger man if it was for him.

"At that point, they were happy just maintaining the level of their business activity," Willetts says of his father and uncle. "Me, I saw so many things they could do to grow the business by upping their game. I just saw more opportunity."

So he decided to work at the Roseburg Forest Products mill instead.

When Willetts finally returned to the drain cleaning and septic industries, both relatives "wholeheartedly supported him" in the new venture. They talked about the difference between working for someone else and working for himself.

"We've definitely had lots of talks about that," Willetts says. "It's a 24-hours-a-day deal."

Today, he still looks to his father and uncle for guidance.

"If I have questions or need help with something, I have 60 years of experience a phone call away," Willetts says.

EQUIPMENT LINEUP

The initial equipment for Roseburg Rooter & Drain Cleaning was a utility box service truck stuffed with tools of the trade. That included Spartan and RIDGID cable and sink machines and a MyTana electric jetter for quiet indoor operation. For inspecting pipe, Willetts has a Jettors Northwest Brute 20/20 push camera system that works well in pipe 3 to 8 inches in diameter, as well as a smaller SECON unit. He also packs a ProtoTek Linefinder 2000, a 512 Hz pipe locator that he uses in conjunction with his push camera to establish the path of a pipe.

"People sometimes buy homes with septic tanks without having lines visually inspected and then start having issues," Willetts says. "Sometimes they don't even know where the tank is. That's where the locator and camera come in."

In 2022, when he expanded his septic maintenance work to include pumping, he bought an older model Autocar chassis with a 2,200-gallon tank and a National Vacuum Equipment pump. Willetts says the unit has proven to be a "workhorse." He averages 10 septic tank pumpouts a week.

Willetts also has a self-fabricated jetter, a unit he built utilizing the talents he developed at the mill. He installed it in a 4-by-6-foot trailer with a 125-gallon water tank, 250 feet of

jetter line on a reel, 150 feet of water supply hose on another reel, and a Cat pump powered by a Honda GX390 engine.

"I knew what I wanted. To go out and buy it was going to cost me \$20,000 to \$30,000," Willetts says. "I decided there was no need for that. Having the background that I do definitely has helped me."

He also built and installed on his truck a pivoting arm and winch system to help move heavy equipment and supplies.



SpeedyLight+ is LED-based Light Cure

Cures Faster, Relines Bends, No Styrene or Mixing

- Works with many approved felt and glass fiber liners
- Cures up to 3.3 fps over 328'
- Handles bends, transitions
- 3 interchangeable heads for 4-12"
- Single component, off-site wet-out
- Forward-view camera



PRT
Pipeline Renewal
Technologies

www.pipelinert.com • 866.936.8476

WITNESSING THE NEW AND OLD IN THE SEPTIC WORLD

Residents and businesses in Roseburg, Oregon, are served by a sewer authority with some 11,000 sewer connections. But most of surrounding Douglas County is rural and residences there are served by individual septic tanks.

Austin Willetts estimates there are two or three times more rural residences with septic tanks than there are houses and businesses connected to the city's sewer authority. Clearly, Willetts' Roseburg Rooter & Drain Cleaning has a solid base of potential customers.

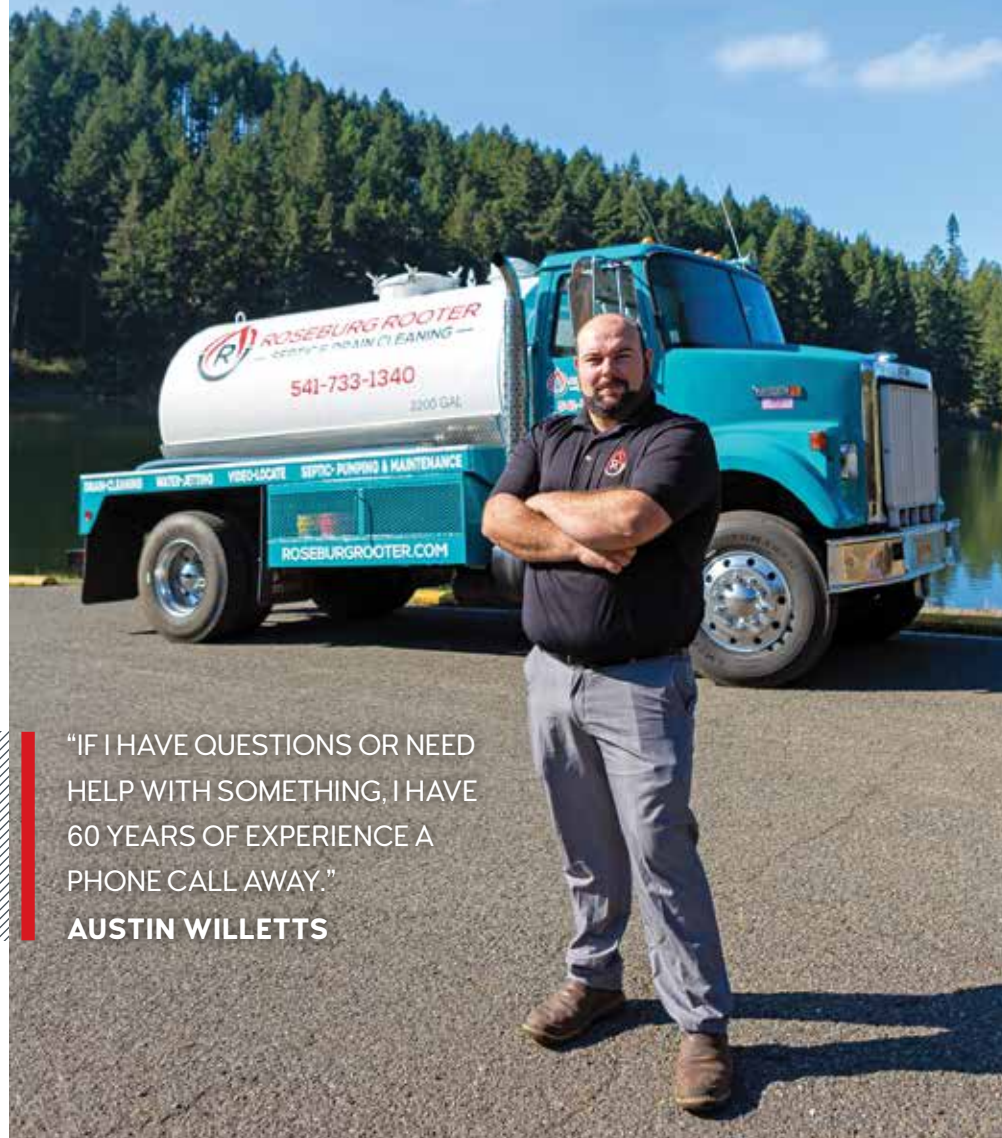
"The tanks now are pretty much all hauled in," he says. "Pretty much all prefabricated tanks."

A standard tank for a three-bedroom home holds 1,000 gallons of effluent. A four-bedroom home requires a 1,500-gallon tank or larger. The tanks are higher tech now, of course, Willetts says, such as Orenco's AdvanTex septic tank treatment system that reduces effluent to a clear liquid.

"You see a lot of those in the ground now. It's a pretty amazing system," he says.

But low-tech solutions have worked pretty well, too. Willetts says he has encountered buried cars turned into septic tanks.

"On one job, there was this old big boat of a car," he says. "Its windows were welded shut with steel plates. The sewer pipe ran into the car at one end and out the other end to lines in a makeshift drainfield. It was in the ground for 40 years and worked pretty well. Just when you think you've seen it all."



"IF I HAVE QUESTIONS OR NEED HELP WITH SOMETHING, I HAVE 60 YEARS OF EXPERIENCE A PHONE CALL AWAY."

AUSTIN WILLETTTS

Although Willetts is only a few years into running his business, he has a lot of past experience in the septic and drain cleaning industries. His father operated a drain cleaning business, and his uncle owned a septic company. Willetts periodically worked for both men while growing up.

"They wanted two grand for one of those. I built one for a few hundred dollars," he says.

CARING FOR CUSTOMERS

The trucks and trailer roll to rural Douglas County septic tank service calls and to drain cleaning calls inside Roseburg. The company's service area is an 80-mile-square segment within the county. Willetts says he determined that going farther out than that would not be cost-effective nor competitive. Rural clients include a couple of wineries, of which there are several in the county. Roseburg customers are residences as well as various commercial properties, including Walmart, In-N-Out Burger and shopping malls.

One septic service the company offers is installing risers on tanks to provide

easier access for pumping. The capped openings are often below the surface of the ground and risers make them more accessible. Willetts has an interesting way of encouraging the purchase of risers.

"Customers sometimes dig out the access openings themselves. I let them," he says. "If you can get customers to dig them out themselves, we then can offer to put in risers so they don't have to find them and dig them out again. They often opt to go with a riser."

Willetts says he enjoys the pumping and drainline work because he enjoys the people for whom he's doing it.

"You get to go into all these homes and sometimes I meet some incredible people. I enjoy meeting and helping them," he says. "Douglas County sort of has two ends of the spectrum — wealthy people

CONTINUED >>

*A Timesaving Pipeline
Coating System That Pays
For Itself Quickly.*

PipeCaster™ Pro

THE NEXT LEVEL PIPE REHABILITATION
WITH **SPRAY & BRUSH** APPLICATION

NEW RESIN PipeCast Flex Aqua

The fastest curing epoxy resin in the industry.

- ✓ NSF61 Approved.
- ✓ California green book approved.
- ✓ High chemical resistance.

PipeCast Flex Aqua is surface tolerant and is hydrophobic to provide excellent waterproofing properties and adhesion.



Equipment and resin made
in USA, ready to ship today



CONTACT US

🌐 www.ipp solutions.com

📍 **Colorado**
P.O. Box 3879
Avon, CO 81620

📞 **+1.970.444.5655**

📍 **California**
5192 Bolsa Avenue, Ste 5
Huntington Beach, CA 81620

📞 **+1.714.410 0707**

ipp
Solutions, LLC



« In 2022, when Willetts added septic pumping to his services, he bought an older model Autocar chassis with a 2,200-gallon tank and a National Vacuum Equipment pump. Willetts says the unit has proven to be a “workhorse.” He averages 10 septic tank pumpouts a week.

“IT HUMBLER ME SOMETIMES TO REALIZE WHAT I HAVE. HELPING PEOPLE IS A HUGE DRIVE FOR ME IN DOING WHAT I DO.”

AUSTIN WILLETT

“I’m going to offer the restaurants not only tank pumping but also the cleaning of lines running from the kitchen as well as tank maintenance,” he says. “We’re going to offer to maintain a whole system. I’ve already talked to a couple of restaurant owners here in town.”

The other slice of business Willetts wants to develop further is apartment complex drain cleaning.

“We’ve contracted a ton of work with property managers,” he says. “Some managers have 3,000 or 4,000 units apiece and we’re going to go after them. Those alone will keep work pretty steady.”

Willetts is convinced both the pumping and drain cleaning sides of the business have equal growth potential. He just needs to get the trucks and personnel, maintain the professional image he’s thus far cultivated, and continue to attract five-star customer reviews on Google.

“We’re going to stay the course we’re on and do it with integrity,” Willetts says. c

and not-so-wealthy people. It humbles me sometimes to realize what I have. Helping people is a huge drive for me in doing what I do.”

Willetts says he recognizes that people call because they need help — it’s not a social call — so he makes it a point to always answer the phone as much as possible.

“I try to answer the phone immediately, at least 90% of the time,” Willetts says. “Even if I have to tell them I won’t be able to get to them till tomorrow or something, they appreciate me picking up. That’s one of the biggest things my dad drummed into me: You have to answer the phone.”

LOOKING AHEAD

What’s in Willetts’ future? Some help, he hopes. He’s working on hiring his first employee.

Willetts is going to need the help. In 2023, he is going after two markets in particular. One is grease traps at restaurants where cooking oils and liquids accumulate. Currently, some companies travel from town to town along Interstate 5, including Roseburg, cleaning grease traps. They focus on the easy work, Willetts says.

FEATURED EQUIPMENT

JETTERS NORTHWEST

877-901-1936
www.jettersnorthwest.com

RIDGID

800-474-3443
www.RIDGID.com

MYTANA LLC

800-328-8170
www.mytana.com
(See ad page 11)

SECON

702-527-5100
www.seconv.com
(See ad page 59)

NATIONAL VACUUM EQUIPMENT, INC.

800-253-5500
www.natvac.com

SPARTAN TOOL LLC

800-435-3866
www.spartantool.com
(See ad page 64)

PROTOTEK

800-541-9123
www.prototek.net



Pro-Built Tools

4002 W MILLER RD STE 100 GARLAND, TX 75041

We Manufacture, Sell, and
Distribute Sewer Cameras
Across the Globe.

SEWER CAMERAS

A Variety of Models to Choose From

WIFI PB2000ES SERIES

100' - 150'



STARTING AT \$1999

SEWER CAMERA JETTER PACKAGE



2 Sewer Cameras - 1 Control Box - 1 Jetter - 1 Locator
STARTING AT \$8999

PB2000 ULTRA ELITE SERIES

100' - 150'



STARTING AT \$2699

MYCRO ULTRA ELITE SERIES

100' - 150'



STARTING AT \$3148

PB2400ES SERIES

200' - 275'



STARTING AT \$1979

PB3600ES SERIES

300' - 500'



STARTING AT \$3479

*Pro-Built Tools is a **FULL** Service Center. We Work On **ALL** Brands, and Offer **FREE** Diagnosis.*

ALL SEWER CAMERAS HAVE A 5 YEAR WARRANTY | WE OFFER FLEET PRICING DISCOUNTS

OTHER SEWER PRODUCTS

We carry a large line of Hydro Jetters, Drain Machines, Locating Equipment, Nozzles, Hoses, Drain Cables & Leak Detection



EXPEDITED SHIPPING AVAILABLE

CALL FOR DETAILS (214) 503-0402

www.probuilttools.com

Come and visit us.
ACE²³
 Toronto
 June 11-14, 2023
 Booth No. 3013



While others are still searching ...
... WE ARE FINDING LEAKS!



The 7 SEWERIN Summits for professional Water Leak Detection

Hermann Sewerin GmbH | Office +1 888 592 9916 | Cell +1 888 592 9916 ext. 102 | sewerin-usa@sewerin.net | www.sewerin.com



Be Great

Hard work and dedication define your business. A business that's been built with blood, sweat, and a few tears over the years. But you know it takes more than that to create something enduring – something great. It takes a vision for a better way and a team that's all in. It takes a commitment to growth and connections you trust. You've got this and we've got your back.

Join us on our mission to turn the world's best tradespeople into the world's best businesspeople.

Learn more at NexstarNetwork.com/Contact



**Talk to a pro or request
your custom quote!**

DC SUPER FLEX ROBOTIC CUTTER
82' OR 164' LENGTH

- 360° ROTATION WITH PIVOT
- NAVIGATES BENDS
- ONE-PERSON OPERATION
- HD DISPLAY
- INTEGRATED CAMERA
- JOYSTICK CONTROLS
- PRECISION CUTTING
- **FREE TRAINING AT YOUR LOCATION!**

**Most Advanced
Technology For 3"-6"**

24/7 Ordering
DANCUTTERUSA.COM



HPV HEADSET



ROBOTIC
CUTTING ARM

**Unbeatable Navigation
& Reliability**

Legendary Service
855.997.0524

LINE THE ENTIRE SYSTEM!

**New!
Repipe Liner**



**Stainless Steel
Repipe Cannon**



**Connection Liners
in all configurations**



APEX CIPP
941-300-0441 APEXCIPP.COM

MODERN TIMES

KENTUCKY FIRM ASPIRES TO UPEND PEOPLE'S STEREOTYPES ABOUT WHAT PLUMBING AND DRAIN CLEANING COMPANIES LOOK AND FEEL LIKE // By Ken Wysocky

IT'S EASY TO IMAGINE THERE'S NO SUCH THING AS JUST ANOTHER DAY AT THE OFFICE AT JOLLY PLUMBING, DRAINS, HEATING & AIR.

The company's modern, industrial-chic headquarters in Wilder, Kentucky — just across the Ohio River from Cincinnati — is much more than just an office building. It's also a recruiting tool. A branding vehicle. A community engagement center. Also a great place for a game of H-O-R-S-E, thanks to the full-size basketball court in the middle of the 18,000-square-foot former warehouse/office facility.

And on a much broader level, the renovated building reflects owner Brady Jolly's aspirations to upend people's notions and stereotypes about what plumbing and drain cleaning companies look and feel like.

"When you walk into our offices, you'd never think it's a plumbing company," says Jolly, a former basketball star at a local high school who also played hoops at nearby Northern Kentucky University. "It's sharp and sleek — more like a tech company than a plumbing company."

The company invites local basketball teams to practice on the court, which also is used for basketball leagues and to host community events. In all, about 35,000 people a year visit the building for various events and functions, which provides an opportunity to expose them to the company culture and values, he says.

"It's a big part of our recruiting process," Jolly says. "The first thing we do with job recruits is tour the facility. And if the door is open to my office, which sits at half-court, I usually can hear people's comments when they see the court. They say they've never seen anything like this before. I wanted to do something a little over-the-top and next-level to recruit people. I wanted to put our money where our mouth is when we say this is more than just a place to punch a clock."

MAKING THE TRANSITION

Barry Jolly, Brady's father, founded the company in 1979. The elder Jolly did everything from plumbing for remodeling and new construction to service and repair work to replacing water and sewer lines.



“He’d do whatever plumbing customers needed,” Jolly says.

Jolly worked for his father as a part-time employee while growing up. Shortly after he earned a degree in entrepreneurship from Northern Kentucky University in 2014, he became general manager of the family company at age 22. His father retired in 2017 and Jolly bought the company soon after that.

At that point, the company’s growth had been relatively flat for six or seven years.

“So it was a really great opportunity for me,” Jolly says. “My dad did an incredible job of building a great company to that point and it was set up for more growth. All it needed was someone to put their foot on the gas pedal and take the business to the next level.”

NEW BUSINESS MODEL


Jolly did just that. The first step: A dramatic shift from commercial to residential service and repair.

“Before, about 80% of our revenue was from commercial work,” he says. “Now it’s about 80% residential.”

Why the switch? Jolly says residential service and repair is a much better fit for the company’s customer-centric business philosophy.

“We’re a high-value, high-touch service company,” he says. “All the training we do is centered on how to make the customer experience the best it can be. When you do remodeling and new construction work, the service part doesn’t seem to matter as much because oftentimes the people receiving the service — general contractors or maintenance companies, for example — aren’t the ones experiencing the service. We prefer to work directly for the people that experience our service; our entire infrastructure is based on providing quality service.”

▲ Brady Jolly took over ownership of his family’s company after his father retired in 2017.



Jolly Plumbing, Drains, Heating and Air

WILDER, KENTUCKY

OWNER	Brady Jolly
FOUNDED	1979
EMPLOYEES	80
SERVICES	Residential plumbing service and repair, drain cleaning, heating/cooling
SERVICE AREA	Northern Kentucky and metro Cincinnati
WEBSITE	www.jollyplumbing.com



« Technicians Andrew White, left, and Austin Wilburn look over an iPad as they do repair work at a residential property. The company uses the tablets to give customers quotes, as well as for job tracking and scheduling.

» Wilburn puts the finishing touches on a hose bib replacement.

“I WANTED TO DO SOMETHING A LITTLE OVER-THE-TOP AND NEXT-LEVEL TO RECRUIT PEOPLE. I WANTED TO PUT OUR MONEY WHERE OUR MOUTH IS WHEN WE SAY THIS IS MORE THAN JUST A PLACE TO PUNCH A CLOCK.”

BRADY JOLLY

The new approach has yielded impressive results. Revenue from plumbing and HVAC services has more than tripled since Jolly started managing the company in 2014. And revenue from residential work has increased about 1,500% since he bought the company.

How did Jolly’s father feel about the changes? Unlike some family situations where fathers and sons butt heads, Barry Jolly had no problem with the new direction.

“I’m so lucky,” Jolly says. “The (father-son) dynamic between us has always been great. My dad was winding down his career. So many of the things we’ve done I’m sure he would’ve done if he had the appetite to do them.”

DRAIN CLEANING SPECIALISTS

A couple years ago, the company also created a team of technicians only dedicated to drain cleaning.

“Most plumbing technicians don’t want to do drain cleaning,” Jolly says, explaining the move. “And it’s much easier to train someone to clean drains than to train a service technician.”

Drain technicians receive three months of training. The idea



is to get them into a truck as fast as possible so they can learn soft skills related to customer service and communication, then promote them to apprentice plumbers within a year, he says.

Deploying technicians that are dedicated to just drain cleaning also leads to more large drain projects, such as replacing sewer laterals. Instead of just unclogging lines, the technicians are trained to look for the cause of persistent drain issues and refer leads to a sewer sales consultant — something that wasn’t always a priority for harried plumbing technicians, Jolly says.

» Keeping track of where technicians are going and scheduling work are the employees in the Jolly Plumbing call center at headquarters in Wilder, Kentucky, like Britney Johnson, left, and Laura Fielding.



To clean drains, technicians rely on RIDGID K-1500 and K-60 sectional drain machines and a Soldier trailer-mounted water jetter from Spartan Tool (4,000 psi at 10 gpm). To inspect lines, they use standard RIDGID SeeSnake cameras and an M18 pipeline inspection camera from Milwaukee Tool.

The company runs about 30 service vehicles, mostly Nissan NV2500 box vans and Nissan NV 200 compact cargo vans. Sewer repair crews drive Dodge RAM 3500 pickup trucks equipped with utility bodies from Reading Truck. The crews also rely on four Caterpillar 304E2 mini-excavators and a Bobcat skid-steer.

EXPANDING SERVICES

Customer requests for HVAC services spurred the company to add heating and air-conditioning to its repertoire in April 2021.

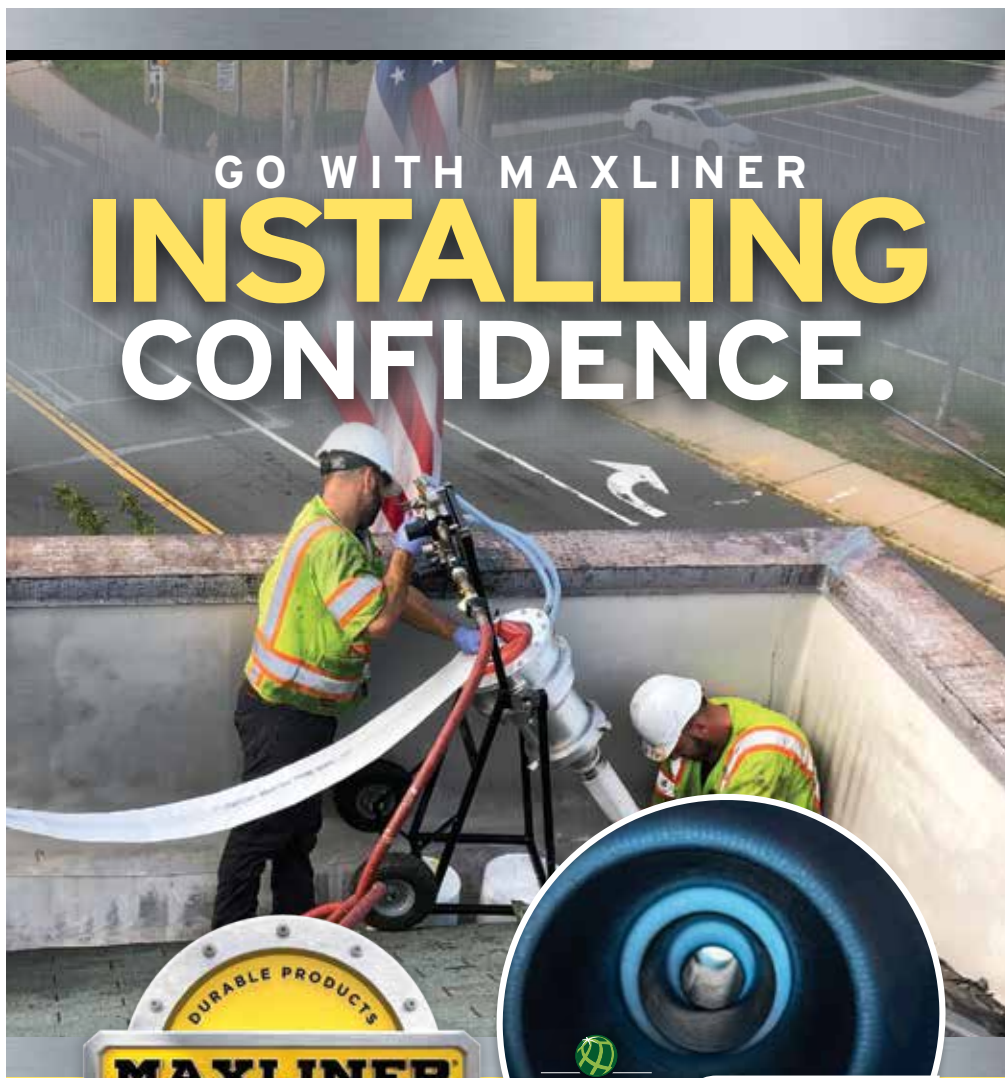
"We felt like the processes we built for plumbing are very repeatable," Jolly says. "The business models work the same way as it does with drain cleaning. The HVAC service technicians pass on job leads to an HVAC sales guy and then to an installer."

HVAC is an attractive add-on service because it complements plumbing, plus it's easier to scale up in volume than plumbing.

"Because the jobs are more expensive, you only need half as many HVAC customers to generate the same revenue as twice as many plumbing customers," Jolly explains, noting the difference between replacing a heating system and fixing a faucet. "If you can get all of your plumbing customers to also use your HVAC service, you could theoretically generate twice as much revenue as plumbing."

That hasn't happened so far. Jolly says he thought it would be relatively easy to convert plumbing customers into HVAC customers. But as it turns out, the company's plumbing customers are just as loyal to their HVAC providers as they are to the Jolly Plumbing for plumbing services.

"It's been more difficult than we anticipated," he says.



GO WITH MAXLINER
INSTALLING
CONFIDENCE.



Be more than prepared on every job site with the right lateral equipment, materials and support.



Introducing **WovoX**
A WovoLiner® Product

The Next Generation addition to the WovoLiner® suite of liners

WovoX is a game-changer:

- Upsize 4" transition liners to 6"
- Multiple bends up to 90 degrees
- Increased consistency for calculating stretch and drawback

877.426.5948 | MAXLINERUSA.COM





« Wilburn solders copper pipe while doing a hose bib replacement job.

Nonetheless, the company generated about \$2.5 million in HVAC revenue in 2022, Jolly says.

MORE GROWTH EXPECTED

Looking ahead, Jolly intends to apply a full-court press for further growth. Because the company already has a sizable local market share, much of the expected growth will probably come from the metro Cincinnati area, Jolly says.

“Only 30% of our work is in Cincinnati, so there’s a ton of growth potential there,” he says. “We’ve spent significant time, effort and capital on building the back end of our business in preparation for growth, gearing up our call center and dispatchers to handle more leads. We’re now at a point where we can proactively search for leads and not reactively go crazy trying to service everyone.”

To better navigate a tight labor market, the company also hired a full-time recruiter. And part of that role also includes establishing a formal apprenticeship program so the company can “build techs from the ground up,” Jolly says.

“MY DAD DID AN INCREDIBLE JOB OF BUILDING A GREAT COMPANY TO THAT POINT AND IT WAS SET UP FOR MORE GROWTH. ALL IT NEEDED WAS SOMEONE TO PUT THEIR FOOT ON THE GAS PEDAL AND TAKE THE BUSINESS TO THE NEXT LEVEL.”

BRADY JOLLY

Lansas[®] PRODUCTS
Manufactured by Vanderlans & Sons, Inc.



**“We Just Made The
BEST Test Plugs
Better!”**

BUSINESS COACHING GROUP AMPS UP COMPANY'S GROWTH

When Brady Jolly took over the management of Jolly Plumbing in 2014, the company generated a little more than \$2 million in gross revenue. In 2022, the company reached \$14 million — a 600% increase.

How does a company achieve that kind of growth? Jolly gives a lot of credit to his father, Barry Jolly, who founded the company in 1979 and was an invaluable mentor. Expanding the company's services also helped.

But Jolly also credits the Nexstar Network, a business development, training and coaching organization with more than 1,000 members in the residential services industry.

"I definitely made a whole bunch of mistakes in the first three or four years after I bought the company," Jolly says. "A lot of what I learned was trial by fire. Then we joined Nexstar about four years ago. They've been huge in terms of showing us other ways of doing things, rather than just doing things because that's the way we've always done them. Nexstar was instrumental in helping us develop sound processes for our plumbing business as well as launch our heating and air business."

Based on Nexstar training and recommendations, the company switched to an upfront pricing model, which provides customers with price transparency.

"Nexstar helped us build a price book for flat-rate pricing," Jolly says. "Since then, we've had far fewer price complaints. We also raised our

price a little bit, but we didn't have many complaints because customers know the price up front."

Nexstar also provides valuable networking opportunities with fellow members. For example, advice from other contractors led the company to establish a formal process for handling potential leads for larger jobs that plumbing and drain technicians can't handle. Before, if drain technicians found a larger problem while cleaning a drain — think broken sewer line, for example — there wasn't a good process for getting that job lead to an estimator, Jolly explains.

"The process had a lot of holes in it and wasn't managed very well at the time," he says. "But we implemented a process we learned from Nexstar members, which has very much been a factor in driving revenue and profit increases."

The company's Jolly Home Plan, a customer service retention program that gives customers a full slate of value-added benefits for a \$14.99-a-month membership fee, also came from a Nexstar peer, he says.

In addition, Nexstar members get discounts and rebates when they purchase products and services from selected vendors. Jolly says the rebates the company earns almost pay for the annual Nexstar fee.

"So many good things in our business have come from people at Nexstar," he says. "They've been tremendous business partners."

PIPE PLUGS & PIPELINE TESTING EQUIPMENT



NUCA
We Dig America



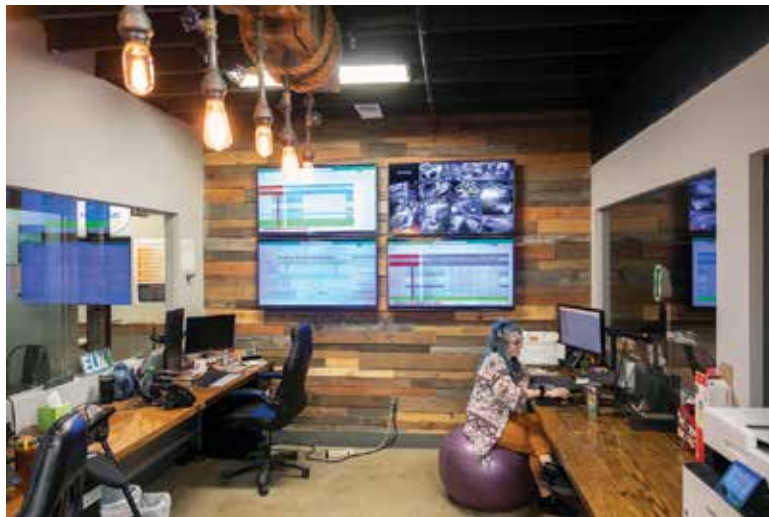
Lodi, California
800.452.4902 • 209.334.4115

www.lansas.com

LODI • ATLANTA • HOUSTON • CHICAGO

"IT'S BETTER FOR US TO HIRE PEOPLE WE CAN GROW AND MOLD INTO OUR SYSTEM. SOME OF OUR BEST GUYS CAME HERE AS GREEN AS COULD BE, NOT KNOWING ANYTHING ABOUT THE TRADES."

BRADY JOLLY



Barry Jolly, left, who started the company in 1979, and his son and current owner Brady Jolly pose for a photo at the company's headquarters in Wilder, Kentucky. The company has an indoor basketball court at its headquarters that both the staff and community members use.

Jolly Plumbing's 18,000-square-foot office goes against typical industry stereotypes. "When you walk into our offices, you'd never think it's a plumbing company," says Brady Jolly. "It's sharp and sleek — more like a tech company than a plumbing company."

"It's far easier to find people with good attitudes and that appreciate our core values, even if they don't have much experience," he says. "It took me a long time to realize that it's better for us to hire people we can grow and mold into our system. Some of our best guys came here as green as could be, not knowing anything about the trades."

TEAM EFFORT

As Jolly looks back at the company's dynamic growth during the past nine years, he says he's very proud of his team and what's been accomplished — and grateful for what his father built.

"I feel really blessed to take over a company like this," he says. "It was an incredible opportunity and I'm grateful for my parents' trust in me. We have an awesome team, too, with a lot of people that I'm very close to. I love coming to work every day and that feels pretty cool. And in a way, I feel like we're just getting started." c



A portable vacuum pumping service unit designed for the most demanding liquid pumping applications.

Ideal for: grease trap service pumping, machine coolant pumping-cleaning, remote portable toilet pumping, marina vacuum pump out service, or any pumping and transfer of liquid waste.



westmoorltd.com • Westmoor Ltd., Sherrill, NY
orders@westmoorltd.com • 1-800-367-0972

FEATURED EQUIPMENT

BOBCAT CORPORATE

800-743-4340
www.bobcat.com

MILWAUKEE TOOL

800-729-3878
www.milwaukeetool.com

NEXSTAR NETWORK, INC.

888-240-7827
www.nexstarnetwork.com
(See ad page 20)

READING TRUCK BODY

800-458-2226
www.readingbody.com

SPARTAN TOOL LLC

800-435-3866
www.spartantool.com
(See ad page 64)



PORTABLE VIDEO INSPECTION SOLUTIONS

for drainage, water and plumbing networks

Easier



Faster



Simpler



flexitrax™ C550c

The CUES flexitrax C550c is designed around simplicity of operation. Ready to use in 30 seconds from powering on, it requires minimal training to operate, letting you concentrate on the pipe inspection.



800.327.7791 | salesinfo@cuesinc.com | www.cuesinc.com

ESTABLISHING SITUATIONAL AWARENESS

We should all take on the responsibility for our coworkers' safety and well-being /// By Ronnie Freeman

MAYBE YOU HAVE HEARD of the phrase “situational awareness” recently. It has been used here and there in different settings and maybe you understand what it refers to, but do you know what it means?

Situational awareness can be useful in many areas of our lives. From going out shopping, being on vacation, being at the airport, driving our cars, walking in our neighborhoods, going to the park and answering an unexpected knock at the door. We can get complacent when nothing in our lives ever seems to be out of place. This is where employing situational awareness can be a great benefit in preventing incidents from happening whether at work or in our daily lives.

The definition of situational awareness has three parts: (1) perception of the elements in the environment, (2) comprehension of the situation and (3) projection of future status.

Perception – What information do I need?

Comprehension – What does this information mean to me?

Projection – What do I think could happen next?

Situational awareness has been recognized as a critical, yet often elusive, foundation for successful decision-making across a broad range of situations, many of which involve the protection of life and property. In the workplace, situational awareness is a great tool in injury prevention.

Simply put, situational awareness is knowing what is going on around us. What are the hazards? Understanding the consequences of our actions. Knowing how to respond should a critical situation arise. Knowing how to work safely in the environment we find ourselves in each day, whether it be in the office or in the field excavating a trench.

Simplifying the term situational awareness a little further, the following color codes give us a guideline so we know what state of situational awareness we might be in:

White — The lowest level. You are basically unaware of what is going on around you and you are not ready for anything to happen.

Reasons affecting your status could be fatigue, stress, distractions or apathy.

Yellow — You are alert and aware yet relaxed. You are familiar with your surroundings and the employees and visitors who are in your area. You know where the emergency response equipment is located just in case, and you are prepared if needed to respond.

Orange — You are in a state of heightened awareness. You sense something is not right. This is the time to make important decisions in case something must be done. This is also the time to mitigate the situation if needed.

Red — Something has happened! You are taking decisive and immediate action. You recognize a threat is ongoing and you are responding to limit the damage done and promote recovery.

Black — Something is happening and you are now in panic mode because you are unprepared and do not know how to respond.

WHEN HAZARDOUS SITUATIONS ARISE, WE ARE
“SHOCKED” AND EITHER DO NOT KNOW WHAT TO
DO OR PANIC AND DO NOTHING AT ALL.

There is a breakdown of mental and physical performance.

Sadly, too many of us live in the “white” status far too often. We have become so comfortable in our everyday lives that we tend to go through the motions of daily living whether it is at work or at home or in our communities. Therefore, when hazardous situations arise, we are “shocked” and either do not know what to do or panic and do nothing at all.


Situational awareness should be important to all of us, and it is important that we are aware of the potential hazards in our work environment. We all should take on the responsibility for each other's safety and wellbeing while at work and when we are out in public and at home as well.

WAYS TO IMPROVE SITUATIONAL AWARENESS

1. Do not allow yourself to be distracted. When you allow yourself to become distracted, you take away any chance at a proper response. Any response is then delayed and, in some cases, too late. Keep your phone someplace where it is not a distraction or temptation to constantly look at.
2. Have a plan, just in case. Always ask the "What if?" questions regarding your work situation and tasks at hand. What if the trench collapses? What if another employee passes out in a confined space? Have you been trained in the proper response to these major incidents?
3. Scan your area. Be alert and stay alert to what could potentially be a hazardous situation. Look for things that are out of the ordinary or just not right. An unusual loud noise in your equipment could be an early warning sign that failure is about to occur.
4. Have a designated escape route. If there is the potential for a situation to go bad, always have a plan of escape to minimize the danger and/or damage.
5. Train and practice being situationally aware. Safety training does not do anyone any good if it is ignored or just so routine employees doze off during the training and do not hear important information. Practice helps employees retain the training. **c**

ABOUT THE AUTHOR

Ronnie Freeman is safety director for Mount Pleasant Waterworks and safety committee chair for the Water Environmental Association of South Carolina.



GORLITZ SEWER & DRAIN INC.

10132 Norwalk Blvd. Santa Fe Springs, CA 90670




**MACHINES
FEEDERS
CABLES
RAMPS
CONNECTORS
LEADERS
CHUCKS
ENDS
RETRIEVERS
SPICES
AUGERS**




**JETTERS
NOZZLES
HOSES**

**SOCKET
FUSION KITS**

10% OFF
online sales
Go to Gorlitz.com
Coupon code:
Cleaner23

Engineering, Dedication, Quality, Sales and Service All In One Stop!

www.gorlitz.com
Email: Sales@gorlitz.com
 GORLITZ on Facebook



Tel: 562.944.3060
Fax: 562.944.7630

PLUGGING ALONG

Since 1981, Real-Tite has focused on providing the industry easy-to-use, leakproof expansion plugs

// By Kyle Rogers

CAROL THOLEN LINS MAY HAVE grown up the daughter of a plumber, but her experience in the industry was limited. She instead built a successful career in business and pharmaceutical marketing, sales and auditing.

That changed in 2006, when her father's failing health caused her to take over his company, Real-Tite Inc., a manufacturer and distributor of plumbing expansion plugs.

Since then she's worked hard to continue his legacy and build on Real-Tite's reputation for making expansion plugs that are easy to install and remove, while still producing a leakproof seal.

Cleaner recently spoke with Tholen Lins about the company's history and what differentiates its expansion plugs in the market.

CLEANER: Tell us a little about the history of Real-Tite.

Tholen Lins: My father, James Tholen, saw a problem in the field when his employees were struggling with removing brass and iron clean-out covers that over time had become fused together by rust and corrosion. This process of removal involves a heavy hammer, chisel and sawzall and leaves the clean-out hub with damaged threads. It requires extra time for the tech to remove it, not to mention replacing it with another plug. Time is money. This observation led to the engineering of the Real-Tite Plug, the patenting process and the marketing. The first marketing opportunity to reach a wide plumbing audience was by participating in a COLE Publishing trade show in the early 1980s, which served as a successful launching pad for the Real-Tite Plug.

Shortly after, Real-Tite was spun off into an entity of its own, gaining market share with wholesalers and contractors.

I was presented with the opportunity to purchase the company in 2005 when my father realized that his health was failing and his time was limited. My husband Bob and I made a life-changing decision to purchase the company to continue the legacy of my father and continue to serve the plumbing and drain cleaning industry. We felt that we both had acquired the necessary skills in both

the sales world and business development fields to take on the task. Bob in national sales for Nestlé Foods and myself, an entrepreneur at heart, having started and sold two small companies and at the time working in the pharmaceutical industry, living "the life" in Montana. We headed to Minneapolis to spend time with my father and get reacquainted with my large family.

We closed on the business on Feb. 23, 2006. In March, my father's health started failing quickly and on April 23, 2006, he passed away. My desire of spending quality time with my father lasted a short 60 days.

At this time, I rolled up my sleeves and dug into this new adventure. Admittedly, the only thing this plumber's daughter knew was how to flush the toilet and turn on the shower. But I had a strong work ethic and a passion for a challenge. I knew that if my goal for the company was expansion, I had to begin the process of building upon the solid foundation my father had started.

CLEANER: What differentiates Real-Tite Plugs from the competition?

Tholen Lins: Real-Tite Plugs are unique in several ways. They are the only plug that incorporates a one-piece design with a fully enclosed stainless steel stop bolt so they cannot become disassembled, preventing loss of plug parts into the opening. They are the only expansion plug available in 12-gauge stainless steel tops for use in driveways and parking lots and available in a private label with the customer's call-back information for marketing



**CAROL
THOLEN LINS**

President and CEO of Real-Tite Inc.

YEARS IN THE INDUSTRY: 17

YEARS WITH COMPANY: 17

THE CABLE CENTER • 1-800-257-7209



END OF THE YEAR LIQUIDATION. CALL FOR USED EQUIPMENT

\$7,400



SL-GXP-E

Standard GenEye X-Pod Plus
USB & Wi-Fi Recording

Free Delivery

\$6,800



SL-GXP-A

Mini GenEye X-Pod Plus
USB & Wi-Fi Recording

Free Delivery

\$6,400



SL-GPW-E

200' Standard GenEye WiFi Pod

Free Delivery

WE HAVE COMPLETE USB, SD, X-POD, OR POD SYSTEMS IN STOCK

\$1,800



**Speedroooter
S92-Basic**

No Cable, No Cutters.
Call for complete kit availability

\$1,700



T-4-Basic

No cable, No cutters.
Call for
complete kit availability

\$8,800



JM-3080-Basic

No Hose, No Nozzles
Call for complete kit availability

THE
CABLE
CENTER

HOURS - MONDAY-FRIDAY, 7AM-3:30PM CST

8318 OLIVE BLVD. • ST. LOUIS, MO 63132 • 314-993-3099 • thecablecenterinc.com

» Real-Tite Plugs are the only plug that incorporates a one-piece design with a fully enclosed stainless steel stop bolt so they cannot become disassembled, preventing loss of plug parts into the opening.

✓ While Real-Tite still largely focuses on the plumbing and drain cleaning sector, today the company has expanded into many other areas, including new construction, data centers and distribution centers, power dams and wind turbines — any area that needs quick access for a point of entry, fast and ready to re-seal tightly.

“WHEN COMPARING UNIT COST KEEP IN MIND WHAT THE PLUG IS CONTAINING IN THE PIPE. DON’T ALWAYS GO FOR THE MOST INEXPENSIVE PLUG AVAILABLE IF YOU ARE EXPECTING A LEAK-PROOF SEAL.”

CAROL THOLEN LINS



purposes. Unlike traditional expansion plugs, Real-Tite Plugs have a flush finish with no bulky wingnut, making them perfect for installing in floors or under carpet. Most expansion plugs seal behind or over the threads of an opening. Real-Tite Plugs have an oversized gasket that seals three ways, behind the threads, over the threads and utilizing a shoulder seal for triple protection against leaks. Real-Tite Plugs are available in 1 1/2-inch to 4-inch sizes in 1/2-inch increments, even the hard to find 2 1/2-inch size. They can be used in straight pipe, saving cost by eliminating an adapter or fitting. A 5/32-inch Allen wrench is used to install and remove, making them tamper-resistant.

CLEANER: What’s the most common problem you see your customers facing?

Tholen Lins: There are actually two common problems customers face. Sealing smooth or threaded openings or openings with damaged threads and finding the correct size plug to provide a leakproof seal for the opening.

CLEANER: What are some recommendations for customers shopping for expansion plugs?

Tholen Lins: I would recommend customers consider the plug location and look for an expansion plug with a large gasket and no exposed metal on the backside of the plug that can rust or corrode. When comparing unit cost keep in mind what the plug is containing in the pipe. Don’t always go for the most inexpensive plug available if you are expecting a leakproof seal.

CLEANER: What’s new for Real-Tite in 2023? What can customers expect in the future?

Tholen Lins: Today, the company has national and international sales and serves many different industries. While our bread and butter is still the plumbing and drain cleaning sector, the Real-Tite Plug has expanded into areas of new construction, data centers and distribution centers, power dams and wind turbines. Basically, any area that needs quick access for a point of entry, fast and ready to re-seal tightly. Our stainless steel expansion plugs are the only product on the market designed to withstand



heavy industrial traffic and we have re-engineered our product to serve correctional facilities and institutions with tamper-resistant security clean-out plugs.

We have launched a “smart solutions” database of thousands of customers, which offers targeted emails in a “problem, solution, result” format, and have quickly become a go-to resource for our industry. We have developed our Facebook page with the goal of connecting our customers to one another and offer networking opportunities and problem-solving discussions across the country.

We personally answer our telephone 24/7, 365 days a year, and refer and help whenever we can. If we can’t solve the problem, we will direct the caller to a trusted company that can.

CLEANER: What do you want your customers to think of when they hear the name Real-Tite Plugs?

Tholen Lins: Quality, U.S. made, and a reputable company that stands behind our product and our customers.

A CEO of an international plumbing wholesale company we serve says it best: “The Real-Tite Plug is the gold standard of clean-out/expansion plugs.”

I can count on one hand, the number of returns we have had — a testament to our quality control and application promise. **c**

ALLAN J. COLEMAN

SINCE 1905

Call us today!
Chicago 773-728-2400
Phoenix 602-638-0600

5725 N. Ravenswood Ave. • Chicago, IL 60660
60035 40th St., Ste. #5 • Phoenix, AZ 85042

info@allanjcoleman.com • www.allanjcoleman.com

OLDEST NAME IN THE BUSINESS — OVER 115 YEARS OLD



FLEXSHAFT, K9-306

- 3" - 6" Pipes
- Includes: 125' of 3/8" cable and kit
- Faster setup and cleanup, quick cleaning



FLEXSHAFT, K9-204

- 2" - 4" Pipes
- Includes: 70' of 5/16" cable and kit
- Faster setup and cleanup, quick cleaning, and cordless convenience

FLEXSHAFT, K9-102

- 1 1/4" - 2" Pipes
- Includes: 50' of 1/4" cable and kit
- Faster setup and cleanup, quick cleaning, and cordless convenience for additional time savings



SeeSnake® TruSense™ Camera Reel

- High dynamic range (HDR) offers bright, clear in-pipe imaging
- TiltSense displays the pitch in a pipe

NaviTrack® Scout®

Scout is designed to solve demanding remote transmitter (sonde) locates using multi-directional locating technology.



SeekTech® SR-20

SeekTech uses omni-directional antennas, guidance arrows and an easy to read mapping display.



Pipe Patch Kits

Pipe Patch Kits enable quick and efficient trenchless point repairs with all required consumables and components packaged together for one-time use. Patch Kits make inventory management easier on your business while ensuring you have all components needed when showing up to a job. Fiberglass patch meets ASTM F1216 requirements and cured patches have a life expectancy of up to 50 years under normal conditions. RIDGID Pipe Patch Kits are designed for 2", 3", 3-4", and 4-6" Packers and at lengths for 32", 3', and 6' repairs.



CS6x))) VERSA Digital Recording Monitor With Wi-Fi



- A high and low monitor mounting position and pivoting frame lets users tilt the monitor to the desired angle for optimal viewing. The sunshade remains open in all situations for glare reduction
- 5.7" daylight viewable screen. TruSense™ compatible
- Docks to the Compact 2/C40/M40 camera reels for efficient transport, storage, and operation, and can be used mounted or unmounted
- Operates on one 18 V battery or AC power adapter
- Capture images and video directly to a USB drive

RIDGID



CSx))) VIA™ Wi-Fi Control Device

- Compatible with all RIDGID SeeSnake reels when using the RIDGID SeeSnake Standard & Mini CSx Via Mount
- Reliable connectivity between CSx Via and mobile devices with the HQx Live app or HQ software for Windows
- Rapid communication by email, text or upload photos and videos to customers or colleagues in real time

We Have RIDGID Parts!



Buy Online at
AllanJColeman.com

Authorized SeeSnake Repair Center
THE BEST SERVICE AND FAST TURN AROUND!

If you buy the best, you are only sorry once!

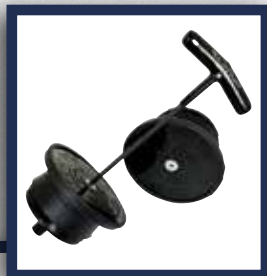
**The Professional
Plumber's Choice**

REAL-TITE® PLUGS
INCORPORATED

Triple-Seal Protection



With an
Extra Wide
Gasket



REAL-TITE® PLUGS: Seal new or damaged, cast iron, plastic, threaded or unthreaded openings with quality, reusable, leak-proof Triple Seal protection with an Extra Wide Gasket.



REAL-TITE® Stainless Steel
for Driveways &
High Traffic Areas



REAL-TITE® Expansion Sleeves
for Hard to Fit
Irregular Openings

Advertise your company with our
Private Label Printing for customer
callbacks and to create new
customers with every plug!



Visit our website at www.real-titeplugs.com • Call us at 800-877-0610

**The Sewer
Camera Connection**
(718)477-1425
thesewercameraconnection.com

**Live Tech Support - Parts &
Accessories - Troubleshooting -
Available for All Brands
We Repair All Brands**



**No Bench Fee No Diagnosis Fee
Fast Turnaround**

**Nationwide
Sales**



**Hands Free
WiFi Enabled
Smart Device
Compatible
Sewer
Cameras
Starting at
\$1999**

**Available Cordless
Ask us About
Custom Colors**



**East Coast
Sewer
Equipment
Service**



**Fast Shipping
Call For a Quote Today!**

**Inspection
Cameras
Starting at
\$1999**



**Sewer Camera and Locator
Combos Available
Ask About Dealer/Quantity
Discounts**

**Gas Powered
HydroJetters
Starting at
\$2799**



“CUSTOMERS GOT TO KNOW ME
AND THE KIND OF WORK I DID AND
AFTER EIGHT OR NINE YEARS
**THEY STARTED ASKING ME
WHY I DIDN'T START
MY OWN BUSINESS.”**

KRIKOR “KOKO” CHIRANIAN

Koko Drains
PASADENA, CALIFORNIA

Read what **matters** to contractors
in every issue of *Cleaner*.

Subscribe for FREE at cleaner.com



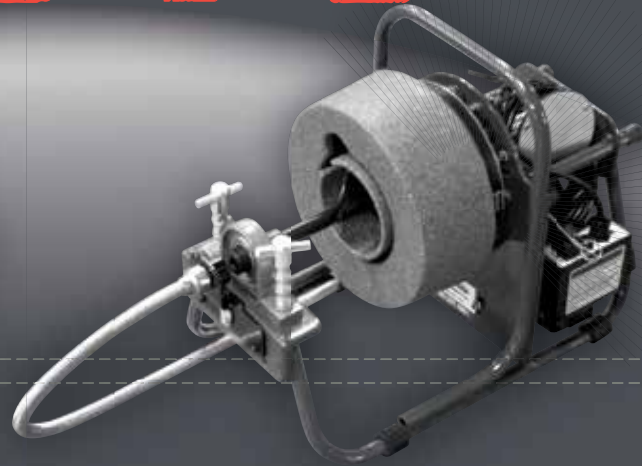
DURACABLE DALE



WORDS OF WISDOM

SMALL MACHINES - BIG SALE

**SAVE
20%**



20% OFF
DM125 AND DM138
DRAIN CLEANING MACHINES

DURACABLE SINK MACHINES COMBINE
PORTABILITY WITH POWER FOR
RESIDENTIAL CLOG-CLEARING IN SINK,
SHOWER AND TUB DRAINS.

OFFER VALID APRIL 1 - 30, 2023. APPLIES TO MODELS DM138A, DM138A2, AND DM125A.
NOT VALID WITH OTHER OFFERS OR ON PREVIOUS ORDERS. SUBJECT TO CREDIT APPROVAL.

DURACABLE.COM



DURACABLE
— MANUFACTURING CO —

800-247-4081

DUAL FUNCTION

Combo jetter/inspection camera boosts efficiency and customer satisfaction

// By Ken Wysocky

CLEANING AND INSPECTING a clogged sewer line simultaneously may sound as improbable as an old clay-pipe lateral with no offsets.

But it's an everyday reality for technicians at Stokes Plumbing & Trenchless thanks to the Viper combination camera and jetter from Envirobot. Technicians can use the jetting function to easily steer the unit into one or multiple branch lines, which improves productivity, says Wesley Stokes, owner of the Florence, South Carolina, company.

"I first saw the Viper at the Water & Wastewater Equipment, Treatment & Transport (WWETT) Show," says Stokes, who established his company in 2008. "We thought it would be a great addition mainly because it's basically steerable. When you get to a junction, you can steer it one way or another. You can also jet a line while televising it — guys can see what they're doing while they're working on a clog. And we can provide customers with a video of the line that shows what's causing the clog. It's a really good deliverable to give to our customers at the end of a job."

Unclogging drainlines doesn't always require an inspection, Stokes notes. But when an inspection is required, the Viper can eliminate the usual painstaking cycle of insert camera, insert jetter, insert camera again and insert jetter again.

"There is some time and labor savings there when you can consolidate those steps," Stokes says.

TECHNOLOGY SPURS GROWTH

Stokes bought his first Viper, a Long Range model, about 12 years ago. (Envirobot also offers Viper Compact and Viper Light models.) Now Stokes Plumbing — which has about 40 full-time employees, runs around 25 service vehicles and does commercial and industrial plumbing and repair work for customers nationwide — owns 10 Viper Long Range machines, which is a testament to their value, Stokes says.

To use a Viper, contractors need a water jetter that generates at least 1,600 psi of pressure and 8 gpm of flow. Stokes Plumbing



▲ Mason Powell, a technician for Stokes Plumbing & Trenchless, uses a Viper combination camera and jetter to inspect and clean a 36-inch-diameter stormwater sewer at a business in Georgia.

relies on water jetters made by Harben (a subsidiary of Flowplant Group Ltd.) and Mongoose (a brand owned by Sewer Equipment).

The company primarily uses the Vipers to clean sanitary sewer and stormwater lines, Stokes says.

STOKES PLUMBING & TRENCHLESS

FLORENCE, SOUTH CAROLINA

OWNER Wesley Stokes

MACHINES Viper Long Range combination jetters/inspection cameras from Envirobot

FUNCTION Simultaneously cleaning and inspecting drainlines

FEATURES Weighs 139 pounds; measures 23 inches wide by 25 inches deep by 28 inches high (with the telescoping handle retracted); 265 feet of 3/8-inch-diameter hose; ergonomically designed, two-wheel handcart; camera cable integrated into the hose jacket; designed for pipes from 3 to 16 inches in diameter; high-resolution, stainless steel camera with digital-zoom capability, a 160-degree wide-angle lens and dimmable LED lights.

COST About \$80,000 each

WEBSITE www.envirobot.com

Investing in newer, productivity-enhancing technology like the Vipers has been instrumental to the company's growth, which has come through landing large national and regional accounts.

"Serving big national customers absolutely makes it important to keep investing in advanced equipment," Stokes says. "They want to do business with companies that have well-trained, well-equipped guys that do jobs right and charge a fair price. And those kinds of companies are hard to find in today's market."

"Once these large accounts find a company that comes in and does exactly what they say they're going to do, they really appreciate it. And they're willing to pay a little bit of a premium because we figure out what's causing a clog and we don't leave until the problem is resolved."

It also pays dividends when businesses like Stokes Plumbing offer diversified services because it's more cost-effective to pay one company to clean and inspect a line — then repair it if needed — than it is to hire a company to clean and camera a line and then

"THERE IS SOME TIME AND LABOR SAVINGS THERE WHEN YOU CAN CONSOLIDATE THOSE STEPS."

WESLEY STOKES

hire another company to perform repairs, Stokes says.

The company also does pipe lining with a system from Perma-Liner Industries.

STEERING TOWARD PROFITABILITY

The portable Viper Long Range weighs about 139 pounds and measures 23 inches wide by 25 inches deep by 28 inches high (with a telescoping handle retracted). It comes with 265 feet of 3/8-inch-diameter hose and features an ergonomically designed, two-wheel handcart.

The Viper's camera cable is integrated into the jacket of the high-pressure hose, which optimizes handling and protects against damage. The machines are designed to work in pipes from 3 to 16 inches in diameter and the camera and nozzle can pass through 45-degree bends in pipes 3 inches in diameter or larger and 90-degree bends in pipes that are 4 inches in diameter or larger.

The high-resolution, stainless steel camera features digital-zoom capability and a 160-degree, wide-angle lens; dimmable LED lights; a sensor that indicates inclination and direction; and a locator sonde.

To steer the unit, the operator rotates the hose in the desired direction.

GOOD ROI

The Vipers cost about \$80,000 each these days, but Stokes says they pay for themselves in two to three years through improved productivity, not to mention enhanced client retention that stems from providing great service.

"Any piece of equipment that pays for itself in two to three years and lasts more than 10 years, like our older Vipers have, is a pretty good investment," Stokes says. "I like them, our guys like them and our clients like them. It's a win-win-win situation." ■

More choices, more solutions, more innovation. That's Ratech.

- ✓ One-Touch USB recorder or SD recorder
- ✓ 10.4" sunlight-readable LCD
- ✓ Built-in Lithium Ion battery
- ✓ Wi-Fi connectivity-record direct to smartphone or tablet
- ✓ 100'-400' Premium Gel Rod™ Push cable
- ✓ 1.375" dia. Self-leveling camera
- ✓ Keyboard, footage counter, 512Hz sonde

Ratech
ELECTRONICS

Video Pipeline Inspection Systems

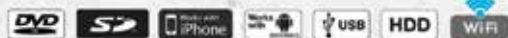
- ✓ 3/4" micro camera compatible
- ✓ Pan n' Tilt push camera compatible
- ✓ Authorized service centers nation-wide



Pan n' Tilt Push Camera
(Includes Reel and Remote Control)



Control unit
can be
mounted
to reel.



For more information on these or other products call toll free:
1-800-461-9200 or 905-660-7072 www.ratech-electronics.com

Upload your inspection videos to [YouTube](https://www.youtube.com) Ask us HOW?

MANUFACTURING SEWER CAMERAS SINCE 1981.

ALLAN J. COLEMAN
SINCE 1905

5725 N. Ravenswood Ave. • Chicago, IL 60660
6003S 40th St., Ste. #5 • Phoenix, AZ 85042

Call Us Today! Chicago 773-728-2400
Phoenix 602-638-0600

OLDEST NAME IN THE BUSINESS — Over 115 YEARS OLD

info@allanjcoleman.com • www.allanjcoleman.com



**DIRECT
HIT®**

The C38rs

The safest way to enter
an unknown blockage

PICOTE
LIFE FOR PIPES

**Stocking In
Both Locations**

Warthog® Nozzles



Products
Manufactured By **JETTERS**
EQUIPMENT

**Mountable or Portable -
Skid/Cart**



9 gpm @ 4000 psi

Repair Center for:
RIDGID ProPress & SeeSnake, Gen-Eye,
Electric Eel, and Hathorn cameras

If you buy the best, you are only sorry once!

**We Have
RIDGID Parts!**



**Buy Online at
AllanJColeman.com**



SEPTEMBER 26-28 | 2023 | LOUISVILLE, KY



Where the Utility Industry Goes to Grow

The largest and fastest growing trade show for the utility infrastructure and construction industry is back. Experience the latest technologies, innovations and trends through live talks and hands-on demos in our expansive layout.

1.4 MILLION

square feet
of exhibits

OVER 19,000

attendees

32 ACRES

of equipment
and services

Learn more today! theutilityexpo.com



Jason Bradshaw

FOCUS ON THE EXPERIENCE

A simple pathway to success is consistently delivering on the promise you make to customers and employees // By Jason Bradshaw

A S A BUSY BUSINESS OWNER, you are faced with a seemingly endless list of things to do to keep your company operating and an ever-increasing list of ideas on how to improve it.

It can be overwhelming, so perhaps consider throwing out the hundred plus to-do items and ideas. Instead, focus on the experience you deliver to customers and your employees. Start with these three fundamental steps:

1. Define the promise
2. Measure the gaps
3. Share the stories

Before unpacking these steps, let's clarify a couple of important elements.

First, the term experience. In this context it means customer experiences, employee experiences, the experiences that you promise, and ultimately, the ones you deliver. You may even make experience promises about your brand and products. For now, we're going to focus on customer and employee experiences. Also, the singular experience — the transaction — is just as important as the plural, collective experiences.

INVESTING IN IMPROVING YOUR EMPLOYEES' EXPERIENCE WILL RESULT IN INCREASED PRODUCTIVITY AND IMPROVED CUSTOMER EXPERIENCES.

Finally, let's be clear that the customer and employee experience does not mean hugging your haters, nor does it mean surprising your customers/employees with champagne and caviar.

Each of these steps applies to customers and employees equally. If you don't know where to start, begin with your employees' experiences. Investing in improving your employees' experience

will result in increased productivity and improved customer experiences.

STEP 1: DEFINE THE PROMISE

This step comes in two parts. It starts with defining what you mean by the words "customer/employee experience." It is crucial to define what you mean by the term to ensure that every team member understands it. Part two is defining what you promise to deliver for your customers/employees.

Every day people check in to two-star hotels and fly low-fare airlines, while at the same time people also check in to five-star hotels and fly first class. In both instances, there are companies that make a profit and those that don't. The difference is clear. Some companies compete on price, and others — who win — do so by delivering consistently on the experience that their ideal customers are drawn to and are willing to pay for.

Don't be afraid of defining your promise and sharing it broadly. There are customers who will choose your company, and your promise, over your competitors if you deliver on that promise consistently.

Beyond prospective customers being drawn to your promise, the superpower of defining your promise is that every team member will understand that above all else their priority is to deliver on the promise.

STEP 2: MEASURE THE GAPS

After you've defined what you promise to deliver, it is time to measure the gap between the promises and the reality. To get started, just measure the gap between one of your promises. Your main promise.

For example, if you promise to deliver service within 24 hours, start measuring how often you actually deliver within 24 hours. If you 100% of the time deliver within the promise, then start measuring the gap of the next promise.

However, if you aren't delivering on your main promise, then

your mission is to focus on closing the gap, every day being 1% closer.

STEP 3: SHARE THE STORIES

Companies send out surveys to measure the gap. But don't be one of those companies that sends out surveys and then keeps all the data locked up.

The power of the third step is in sharing with your team and celebrating the impact of delivering on your promise. The celebration of delivering on your promise reinforces what great looks like and the behaviors required to achieve success.

However, it is also important to share, just as broadly, the stories and the impact on customers when you fail to deliver on your promise. This not only reinforces the value of delivering on the promise, it provides a clear coaching point. An opportunity to identify, and fix, what processes, systems or tasks create the break in delivering on your promise. **c**

ABOUT THE AUTHOR

For the past three decades, Jason Bradshaw has worked with some of the world's most recognizable brands, improving the experience to transform the business. He is a best-selling author and an expert on customer experience and experience management. Visit www.jasonbradshaw.com.



Still using a drill to power your drain cleaning?

Jetter meets cable machine... end of story.

- Variable speed from 0 to 1,200 rpm
- Cutting/Cleaning, Grinding, Re-instating and Descaling
- Forward/Neutral and Reverse Rotation
- Cleans up to 150 ft.
- Built-in Air/Water Flush
- ID from 1/2" to 2 ft.
- Runs on 110/220 volt
- Universal tool attachment

NEW
WARLOCK
for less than **\$7,400**
See the details at www.giind.com

Contractor's Package
Part Number - TCM-6001

- 1 TCM-6000
- 1 Flexible Shaft 100'
- 1 Flexible Shaft 50'
- 1 4" Pipe Cutter "Re-instater"
- 1 4" Flexible Hone
- 1 Expandable Root Cutter
- 1 Complete maintenance kit
- 2 Universal attachments
- 1 Flexible Shaft 25' (under 2" pipes)
- 1 2" Flexible Hone
- 1 1.5" Ball Grinder

Freight Included
Package \$7,380.15

GI INDUSTRIES

GI Industries Inc.
800-724-1944 • www.giind.com • sales@giind.com
Owned/Operated and Made in the U.S.A.

PICOTE HIGH-SPEED CLEANING

RANGE OF MULTI-USE MILLERS & SPECIALIZED TOOLS FOR 1¼" - 12" PIPES



**PERFECT FOR DESCALING
REMOVE:**
TUBERCULATION
ROOTS
CONCRETE
FATS, OILS & GREASE
METAL REBAR
INTRUDING PIPE
FAILED CIPP LINER



TRAINING COURSES
AVAILABLE AT
THE PICOTE
TRAINING CENTER
PHOENIX, AZ



SCAN ME



864-940-0088 | sales@picotesolutions.com

PICOTEGROUP.COM/RESELLERS

PICOTEINSTITUTE.COM

CUES



welcome to the
"flexi-world"

www.cuesinc.com

+800.327.7791



TOP SHOT

Directional Drill

- ✓ Force Mains
- ✓ Water Lines
- ✓ Communication
- ✓ Electric Conduit
- ✓ Gas

Specifications...

- 42" Wide
- 9' Long
- 3,000 lbs.
- 15,000 lbs. push & pull force
- 1,100 lbs. rotational torque



RODDIE inc.

The Smallest Surface launch drill on the market & the most powerful

No problematic electronics

Air cooled engine

Basic to work on & operate

See it Work!
 **YouTube**
Roddie Top Shot

RODDIE INC.

Phone: 888-406-3821
 RoddieUnderground.com
 Columbia Falls, Montana

**SERVICE LINE UTILITIES
 ARE NOW EASY**

THE FUTURE OF INDUSTRIAL PUMPS BROUGHT TO YOU BY



**ANNOVI
 REVERBERI**
 The Power of Experience

AR **RTD**



Industrial
 140°F - Max Water Temp
 1 1/2" - Inlet Thread
 1" - Discharge Thread
 150 cc - Oil Capacity



Noise Pump

RTD 1000 RPM N VERSION SOLID SHAFT 35MM

MODEL	MAX GPM	MAX L/MIN	MAX PSI	MAX BAR	POWER EBHP	BORE DIA MM	STROKE MM	CRANKSHAFT ID STAMP	WEIGHT LBS.
RTD80-300	21.0	79.5	4350	300	65.0	32	42	4	128
RTD100-200	25.0	94.6	2900	200	49.8	32	42	3	128
RTD100-200SX	25.0	94.6	2900	200	49.8	32	42	3	128
RTD130-160	32.0	121.1	2300	160	50.5	36	42	3	128
RTD130-200H	34.5	115.0	2900	200	68.0	36	42	3	128
RTD160-130	40.0	151.4	1850	130	50.8	40	42	3	128

SX - 180° Rotated Shaft Configuration
 H - Nickel Plated

AR **RTX**



Industrial
 140°F - Max Water Temp
 1" - Inlet Thread
 1/2" - Discharge Thread
 76 cc - Oil Capacity

RTD 1450 RPM N VERSION 30 x 80MM SOLID SHAFT

MODEL	MAX GPM	MAX L/MIN	MAX PSI	MAX BAR	POWER EBHP	BORE DIA MM	STROKE MM	CRANKSHAFT ID STAMP	WEIGHT LBS.
RTX30	8.0	30.3	4350	300	23.9	20	23	3	72
RTX50	12.0	45.4	4350	300	35.8	25	23	3	72
RTX60	14.0	53.0	4350	300	41.8	25	28	1	72
RTX70	17.0	64.4	3000	200	33.8	30	23	3	72
RTX85	21.0	85.0	2200	200	31.7	30	28	1	72
RTX-HW85.150N*	21.0	85.0	2200	200	31.7	36	23	1	72
RTX100	24.0	90.8	1800	124	29.8	36	23	3	72
RTX150	39.6	150	1450	100	36.2	40	28	1	72

*HW - includes Hot Water Kit



NORTH AMERICA
 When Quality Matters
www.arnorthamerica.com
 763-398-2008

**For
 More
 Information
 Contact**

Thom Calvin
 (763) 398-7564
thomasc@arnorthamerica.com

Randy Rowan
 (768) 999-5405
randyr@arnorthamerica.com

PIPE BURSTING METHODS AND PROJECTS

By Craig Mandli

» HYDROEXCAVATION

1 // DITCH WITCH HXT LINE

Contractors looking for the efficiency and payload capacity of a truck-mounted vacuum excavator can turn to Ditch Witch's HXT Line of vacuum excavators. The HXT50 and HXT75 are powered by Kubota engines with 50 and 75 hp, respectively, for optimal suction power. The HXT50 has a 1,005 cfm blower and 3,000 psi of water pressure. Both units are available with 500-, 800- and 1,200-gallon spoils tank configurations, allowing contractors the freedom to stay on a job site longer and avoid repeated spoils disposal and water refilling. The 500-gallon configuration is designed to be under commercial driver's license requirements, allowing contractors to transport the machine without a CDL driver on staff. The HXT75 offers 1,315 cfm and up to 5.5 gpm water pump flow. They are designed with a spoils tank door that can be controlled curbside or remotely to keep operators clean during spoils disposal. Both come with a multifunction remote control option for the boom, allowing operators to more easily control the vacuum hose. 580-336-4402; www.ditchwitch.com



2 // DYNABLAST HV590FLS-12VRED

The HV590FLS-12VRED hydrovac water heater from Dynablast produces 590,000 Btus with an output temperature of 175 degrees F at 7 gpm. An optional electronic 12-volt thermostat can hold a more precise water temperature. The unit is suitable for colder climates and improves digging in clay-filled areas. It enables fuel savings of 3/4 gph and a weight reduction of 250 pounds over the current 690,000 Btu model. It comes with ETL certification for safety, which also includes certification on the coil for higher efficiency and heat transfer, stainless steel target plate for increased coil life and serviceability with momentary override control. 905-867-4642; www.dynablast.ca



3 // ENZ USA CB RANGE

The CB (Cutting Ball) Range from Enz USA is equipped with a carbide root knife or penetrator blade for pipes that are clogged by more than 50%. The CB90, CB70 and CB50 work without impact, but are equipped with a plug that can be removed, which creates a vibration in the tool when rotating (except the CB50). The cutters on the side are self-sharpening and maintain their sharpness over their entire service life. The area of application of the cutting ball is diverse. Due to their spherical shape they can easily navigate bends without damaging the pipe. Moreover, the proven braking system ensures for a lower rotation speed. The CB90, CB70 and CB50 are leakage-free and can be operated with recycling water. They are particularly suitable for roots in seepage pipes, mineral deposits and limescale. All are supplied in a case. 877-369-8721; www.enz.com



4 // GAPVAX VHX SERIES

The GapVax VHX Series hydrovac is designed to deliver optimal weight distribution, improved safety features and increased performance. The debris body is 7.5 cubic yards, offering a 15,000-pound payload. The low profile (12 feet, 2 inches) makes it suitable for all-around hydroexcavation projects. The vacuum system with single mode wet/dry filtration is quiet, reliable and simple, according to the maker. It includes a 4,000 cfm positive displacement blower, 600 hp transfer case with air-shift engagement and ultra-quiet air injection, and discharge silencers. This filtration design includes a top-loading debris tank, 14-inch stainless steel float-ball shut-off, efficient centrifugal cyclone separators and long-lasting filter bags. It is equipped with a 12 gpm, 3,000 psi water system with optional 200 cfm air compressor system. A full-tilting debris body, over 45-degree dump angle and full-opening tailgate allow for fast unloading and easy cleanout. The 8-inch telescoping VHX boom offers a 22-foot reach with 15-degree downward pivot. 888-442-7829; www.gapvax.com





vCam-6 HD Inspection System

- 9.7" HD Display
- 1TB Hard-drive
- 1080 HD Cameras
- 512Hz Sonde
- Locatable Pushrod
- MP4 Recording format



VMMap Mapping App

- Free mapping app
- iOS and Android
- Cloud based storage
- Low and high GPS accuracy settings



vCamMX-2 Mini Inspection System

- 512Hz Sonde
- Locatable Pushrod
- High Resolution Cameras
- Direct USB Recording
- MP4 Recording format



vLoc3-Cam Sonde and Utility Locator

- Directional arrow guidance
- Locates sondes and pushrod
- Graphical user interface
- Optional Bluetooth connectivity
- 4.3" Full-color display

Inspect and Locate with Speed, Accuracy and Confidence



VIVAX

METROTECH

Vivax-Metrotech Corporation

3251 Olcott Street Toll Free: 1-800-446-3392

Santa Clara, CA 95054, USA Instagram: [vivax_metrotech](https://www.instagram.com/vivax_metrotech)

Email: SalesUSA@vxmt.com

www.vivax-metrotech.com

5 // HI-VAC X-13 HYDRO EXCAVATOR

The **Hi-Vac X-13 Hydro Excavator** was created to maximize productivity and ROI and minimize downtime by eliminating high-maintenance components. A modular design provides clean and intuitive controls and simple, planned maintenance accessibility for all critical systems. It is ideal when on-site dumping is required and for off-highway applications that require the maximum legal payload. A 13-cubic-yard debris tank, up to 24,500-pound payload capacity and 1,140-gallon freshwater capacity result in fewer costly job site trips. A 5,800 cfm 27-inch Hg high-performance blower and a run-dry water pump that delivers 20 gpm at 2,500 psi provide power. The top-mounted, 360-degree boom ensures accessibility in all directions and a heavy-duty, hydraulic vibrator facilitates fast and efficient unloading of the debris body. A severe-duty boiler safely heats water for frozen ground applications. **800-752-2400; www.x-vac.com**



6 // HOTJET USA VAC 'N JET SERIES

The **HotJet USA Vac 'n Jet Series** of vacuum trailer jettors are rugged, compact, engineered to haul equipment and spoils loads, able to clean valve boxes and storm drains and able to hydroexcavate and/or clean drainlines and sewer lines. They offer hot- and/or cold-water operation with a choice of engines ranging from 13 to 66 hp and gas or diesel. They are equipped with premium triplex pumps, a 500-gallon spoils tank, 200-gallon water tank, Gardner Denver vac/blowers, 4-ton hydraulic dump and CentriClean filter system. They can also be designed to meet specifications. **800-624-8186; www.hotjetusa.com**



7 // HYDRA-FLEX MACHETE

The **Machete** from **Hydra-Flex** is a linear oscillating hydroexcavation nozzle that combines the penetration of a straight tip with the movement of a rotating tip. Its long stream and powerful slicing motion dig faster and deeper through compact soil and is suitable for trenching, sloping, and bell holing. Its zero-degree straight-water stream oscillates to create a 15-degree wedge that efficiently digs the deepest distances. Its oscillating stream means less movement, better ergonomics, and less wear and tear on operators. Its premium components protect the nozzle, users, and utilities, and are engineered to be field-repairable to extend the nozzle's life. **952-808-3640; www.hydraflexinc.com**



8 // PACIFIC TEK PV500 POWER VAC

The **PV500 POWER VAC** from **Pacific Tek** is used widely in the construction, utilities and rehabilitation/remediation industries. The company manufactures nine different sizes from the PV66 up to the PV1200, all of which can be supplied as skid-mounted, trailer- or truck-bed-mounted complete systems with vacuum, high-pressure washing, sewer jetter skids, manual or hydraulic vacuum hose support booms, and custom safety lighting. Power drives include standard output gas engines to propane or hydraulic motors to diesel high-output models. Low-profile skid and trailer models are available for large parking structure maintenance and mining dewatering applications. **800-884-5551; www.pacific-tek.com**





9 // RIVAL HYDROVAC T7 TANDEM AND T10

The T7 Tandem from Rival Hydrovac was designed primarily to be a unit that could be loaded with debris and drive within legislated road limits with most types of debris on board. The unit comes standard with a scale that reads real-time weights both in the cab and on the wireless remote to confirm weight prior to travel. The T10 is built with the same features and operating system, but with larger capacities and components. It is popular with clients who do both utility and industrial work. It is available in three chassis layouts to meet weight restrictions in a given area. An air compressor option allows for excavating with air when required, while a truck-mounted coring system allows for removal of hard surfaces prior to nondestructive excavating. 403-550-7997; www.rivalhydrovac.com



10 // SEWERPROSHOP RAVEN

The Raven hydroexcavation nozzle from SewerProShop has been precision engineered by Intersewer and manufactured to the highest technical standards of ISO 9001:2008 certification in Germany. The weight has the purpose to counteract the high-pressure kickback of the wand. It is constructed from high-grade stainless steel, is threaded and includes a replaceable ceramic nozzle insert with forward water jet angled at zero degrees or a fan jet. It is rated for 18 gpm at 4,000 psi up to 80 gpm at 2,500 psi. It includes a 1/2- to 1-inch sewer hose connection. It is operator-friendly with no maintenance required. 877-864-9394; www.sewerproshop.com

THE PROFESSIONAL'S CHOICE

TROJAN

WORLDWIDE INC.™

PROFESSIONAL GRADE EQUIPMENT THAT GETS THE JOB DONE!
THERE'S NO JOB OUR EQUIPMENT CAN'T HANDLE!

C100-512SL

TW2000
TRAILER JETTER

COLT

PONY

STALLION

DIGITAL LOCATOR

VISION-HD
1080P

WE BUILD OUR EQUIPMENT
BASED ON THREE SIMPLE CONCEPTS:
DURABILITY, RELIABILITY, & POWER

Sewer Cables **IN-STOCK**
For All Major Brands

REPAIR CENTER

We REPAIR
all major brands
of sewer & drain
cleaning machines,
jetting, and
inspection equipment.

-Free quotes
-Fast turnaround

800-392-4902

TrojanWorldwide.com

3306-C Ella Blvd, Houston, TX 77018

11 // SOIL SURGEON HYDROEXCAVATING TOOL

The **Soil Surgeon** hydroexcavating tool fits any sewer combination truck equipped with a telescoping 6- or 8-inch boom and a 1-inch water connection. The operator controls water pressure and power through truck controls. It has a 6-foot Tuff-Tube with handles to guide the unit down for potholing or side to side for trenching. Six jets boring inward cut the soil while six boring outward bring the tube down. 949-363-1401; www.soilsurgeoninc.com



12 // SUPER PRODUCTS MUD DOG 700

Mud Dog 700 vacuum excavators from **Super Products** are designed for operator convenience and consistent performance to meet the challenges of compact, urban projects to large-scale excavation. Regardless of the task, the vacuum excavators offer versatility as well as safety and productivity on the job site, according to the maker. They offer a compact footprint for excavation in urban environments while maximizing payload and are designed to maintain the power and precision of larger units. The unit features a 7-yard debris body and 600-gallon water tank. This model comes standard as a dump body with an electric vibrator offering a 50-degree dump angle with the capability of dumping into a 48-inch container. It is equipped with a rear-mounted, extendable, 8-inch-diameter boom that reaches 18 feet, has 270-degree rotation and pivots 10 degrees downward to minimize job site restoration and traffic congestion near roads. 800-837-9711; www.superproducts.com



13 // TORNADO GLOBAL HYDROVACS F3 ECO-LITE

Tornado Global Hydrovacs engineered the **F3 ECO-LITE** to have big functionality in a mid-sized platform. It was made specifically to legally haul large payloads in urban environments with a debris capacity of 10 cubic yards and a water capacity of 1,250 gallons. A float-style indicator is positioned on the outside of the debris tank for easy monitoring of volume. It comes with a boom capable of reaching to 26 feet with 342 degrees of rotation and an 8-inch boom hose. The truck uses a 3,800 cfm Robuschi 125 blower, a Pratisoli KT28 water pump and a Dynablast 740,000 Btu burner. A hydraulic dump door measuring 48 by 52 inches is mounted on the back of the tank and sits 42 inches high for easy use over bins. 877-340-8141; www.tornadotrucks.com



14 // TRUVAC FLXX

The **TRUVAC FLXX** is a vacuum excavator built to perform for utilities and contractors installing, replacing and repairing underground infrastructure, utilizing both air and hydroexcavation options for all conditions. This machine offers more power and maneuverability to work in tight urban settings where street excavation jobs can include supporting, repairing and installing a city's water, sewer, power and telecommunications infrastructure. It has the highest legal payload capacity in a mid-size truck with a 10-cubic-yard debris body. In addition, it offers Park-n-Dig, an always-connected water source; safe and precise digging with the DigRight one-touch flow control technology; a water heater to dig in all types of weather/material conditions; a 22-foot boom reach with 340-degree rotation; and a DigFast option to maintain peak vacuuming performance and a clear airstream in the vacuum tube. 800-627-3171; www.truvac.com



CONTINUED >>

Pipeline/Sewer Cleaning & Maintenance Equipment for Jetters & Jet/Vacs



- Jetter Hose, 1/8" — 1-1/2"
- Pipe & Sewer Plugs
- Confined Space Entry Systems
- Hose Reels
- Clamps, Vac Tubes, Debris Hose
- Buehler® Milling Cutters
- Warthog Nozzles
- Hose Reel Swivel Joints
- Valves: Ball, Lever, Piston
- Pressure Relief Valves, Vactor® Parts
- Nozzles, Pipe & Sewer
- Tiger Tail® Hose Guides
- Manhole Accessories
- Root Cutters & Saw Blades
- Plus Many Other Items

CLOVERLEAF Tool Co.

"Quality Products at Affordable Prices"

P.O. Box 20179, Brandenton, Florida 34204 USA

TF: 800-365-6583 • www.cloverleaftool.com

T: 941-739-0707 • E: sales@cloverleaftool.com



WORKING WELL UNDER PRESSURE

Building Drain and Sewer Equipment since 1981

NEW



4008H Power Unit

±8 gpm @ 4000 psi ±400' x 3/8" Jet Hose
±800 cc EFI Honda Engine on DC Powered Reel

Just Add A Tank!

Call for Quote

3012H Power Unit

±12 gpm @ 3000 psi ±400' x 1/2" Jet Hose
±800 cc EFI Honda Engine on DC Powered Reel

Call for Quote

4008H Compact Skid

±8 gpm @ 4000 psi ±400' x 3/8" Jet Hose
±800 cc EFI Honda Engine on DC Powered Reel
(100 GALLON TANK)

Call for Quote

3012H Compact Skid

±12 gpm @ 3000 psi ±400' x 1/2" Jet Hose
±800 cc EFI Honda Engine on DC Powered Reel
(100 GALLON TANK)

Call for Quote

NEW



NEW



RCJ4008H

±8 gpm @ 4000 psi ±200' x 3/8" Jet Hose
±800 cc EFI Honda Engine on Manual Reel

Call for Quote

NEW



LJ4008H

±8 gpm @ 4000 psi ±200' x 3/8" Jet Hose
±800 cc EFI Honda Engine on Manual Reel

(NARROW DESIGN)

Call for Quote



VM4008H

±8 gpm @ 4000 psi ±50' x 3/8" Washdown
±690 cc Honda Engine Hose on DC Reel

Call for Quote



CV4008H-HOT

±8 gpm @ 4000 psi ±400' x 3/8" Jet Hose
±690 cc Honda Engine on DC Reel

Call for Quote

TRAILER MODELS AVAILABLE
through 25 gpm @ 4000 psi

All Jets Shown Come with Pullie Valve, 2 Jet Nozzles,
Tool Box, Gloves, Safety Glasses, Tip Cleaner, Tiger Tail,
Wash Down Trigger Gun with Nozzles.

Pressure Washers & Drain Jetting Equipment

We Build Electric, Gas and Diesel powered models
up to 4000 psi, flows up to 40 gallons per minute.
Don't see exactly what you want...

We will custom build exactly what you want!

800-648-5011 | www.camspray.com | sales@camspray.com

PRODUCT FOCUS

15 // VAC-CON MUDSLINGER MS800

The **Mudslinger MS800** trailer-mounted hydrovac from **Vac-Con** is designed to provide the same power, suction and capacity of a truck hydroexcavator on a portable, pull-behind trailer. It includes the choice of Tier 4 diesel or gas engine options providing up to 1,190 cfm and 16 inches Hg with a PD blower and 325 gallons of water. It has an 845-gallon debris tank and a 9-foot boom with 24 inches of hydraulic extension providing a full range of motion. It is designed to be a standalone unit, but can also provide support to construction, HDD and public utility fleets. A variety of applications includes daylighting, potholing, culvert and manhole cleaning, and utility locating. 904-284-4200; www.vac-con.com



16 // VACALL ALLEXCAVATE AND ALLEXCAVATE2

Standard intelligent controls and easy startup and operation set **Vacall AllExcavate** and **AllExcavate2** machines apart. Both models efficiently remove dirt around utility lines and foundations. Water pumps generate 24.5 to 120 gpm and pressures to 3,000 psi. The AE2 model adds air excavation at 185 cfm and dual psi of 110 and 150. Water system, wand, control panel, tools and worker apparel are protected in a heated compartment. An AllSmartFlow CAN bus intelligent control system features a programmable LCD display that monitors engine, water flow, air pressure and vacuum performance for precise boom and reel adjustments. Aluminum water tanks with lifetime warranty carry 1,000 to 1,300 gallons. Galvanized debris tanks have a supreme finish, and are available with 8-, 10- and 13-cubic-yard capacities. They use one engine to power the chassis and excavation functions, reducing service and operation costs. 800-382-8302; www.vacall.com



» PIPE BURSTING TOOLS

17 // POW-R MOLE TRENCHLESS SOLUTIONS PD-33M

The **PD-33M** pipe bursting machine from **Pow-R Mole Trenchless Solutions** is designed to replace existing underground pipes 2 to 6 inches in diameter. Its nonslip, cylinder-activated jaws prevent cable damage while providing 60,000 pounds of pulling force. It offers a cost-effective alternative to open-cut excavation, reducing customer disruption and increasing company profits. The process replaces the existing pipe with a fused HDPE pipe, which eliminates all joints and allows the operator to pull through bends such as 45-degree fittings. This system is modular and can be easily disassembled and reassembled for manhole and basement applications. With a compact design and very small footprint of only 20 by 20 inches, this unit can be used in tight locations. 800-344-6653; www.powrmole.com



18 // TRIC TOOLS E24

The **E24** revisits the essential **TRIC Tools** 4-inch lateral bursting package that created the industry of trenchless home sewer replacement decades ago. Redesigned with economy and practicality in mind, it is geared primarily toward residential bursting jobs up to 4 inches in diameter. The standard system includes a portable and reliable 10,000 psi electric pump, plus lightweight 5/8-inch compact swaged cable. It is suitable for indoor use, difficult backyard easements, and very tight spaces with limited access. 888-883-8742; www.trictools.com



Bad Boy, Bad Boy...
What you're gonna use
when you can't get through!

**The new CB90 with Carbide Coating,
the bad boy of the family!**

This water driven Cutting Ball moves easily around curves in 3-6" pipes safely removing severely hard lime scale and concrete.

- Extremely aggressive forward cutting
- Self-sharpening blades
- Designed for ease of handling
- Dual modes: with vibration or without



CALL 1 877 ENZUSA1
For a dealer near you
www.enz.com



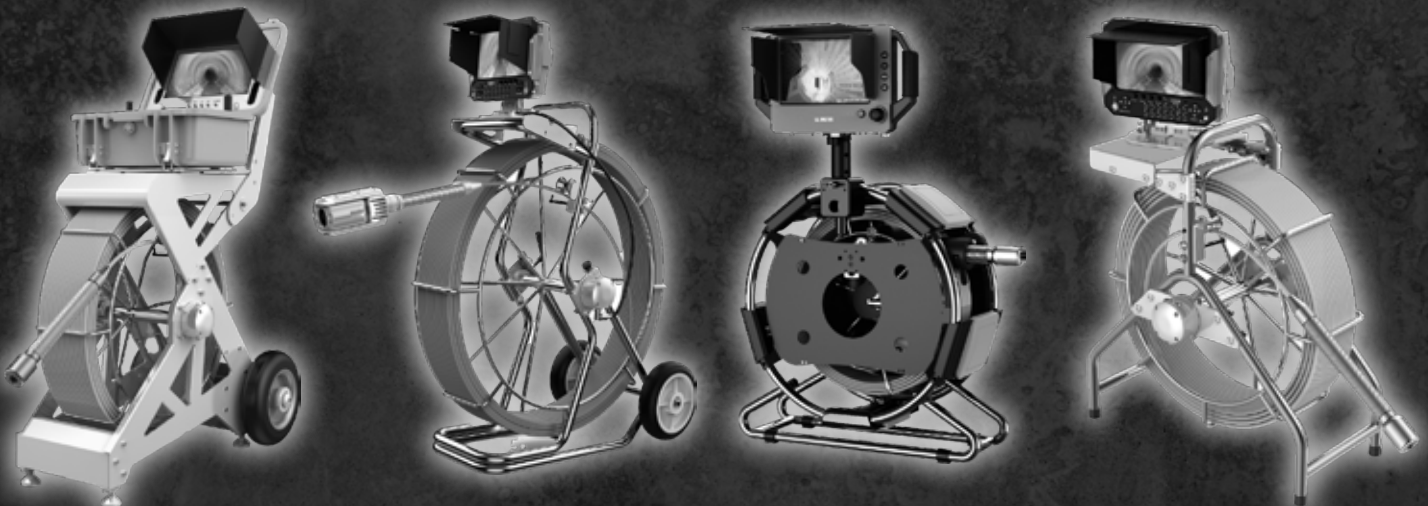
1585 Beverly Ct., Unit 115 | Aurora, IL 60502



FORBEST PRODUCTS CO.

WELCOME TO THE FORBEST HD ERA

**High Definition Imaging, with the same Affordability,
Customization and Service you are used to.**



www.ForbestUSA.com

Western USA:

44130 Old Warm Springs Blvd, Fremont, CA 94538

TF: 1 877 369 1199 P: 510 226 7988

Eastern USA:

810 Interchange Blvd, Newark, DE 19711

Canada:

44 E Beaver Creek Rd, Unit 6, Richmond Hill, ON L4B 1G8

TF: 1 877 369 1199 P: 905 709 6226

PRODUCT SPOTLIGHT

ROBOTIC REINSTATEMENT CUTTER OFFERS FLEXIBILITY TO CONTRACTORS

By Craig Mandli

Opening reinstatements in a lined pipe with several 90-degree bends was once impossible. That isn't the case anymore though, as the DC Super Flex 50 Meter, distributed in the U.S. by Dancutter USA and select distributors, including APEX CIPP Solutions, is a powerful answer for cutting, milling and grinding pipes and liners 3 to 6 inches in diameter, regardless of material or whether the pipe is straight or has bends.

"The DC Super Flex can go through several 90-degree bends in 4-inch and open reinstatements in 3-inch pipe," says Craig Underwood, general manager of APEX CIPP Solutions. "Our research showed that the market demanded a product that was flexible, user-friendly and could quickly be set up and put away when the job was finished."

According to Underwood, the unit only takes a few minutes to set up: The wheeled stainless steel frame — holding the supply hoses, control unit and cutter — is driven up to the work site. The cutter is already connected to the supply hose, and air and power are connected to the system. The cutter is inserted into the pipe up to its working position. The hose has a reach of approximately 164 feet. It is easy to operate using the two joysticks on the frame-mounted



control unit. A 12.1-inch color display is built into the control unit's lid, providing a sharp, precise image of the cutter's position. The milling motor's rotation and functions — such as raising, lowering and running back and forth — are operated from the control unit. The cutter is also equipped with a built-in slip ring that enables the cutter to work freely in a continuous 360-degree rotation.

"Input from our customers also gave us the inspiration to develop the 360-degree continuous head rotation and to keep the cutter's different hoses for air and sprinkler fluid protected inside one larger hose," Underwood says.

The purchase of a DC Super Flex includes a two-day training at the customer's location or at APEX CIPP Solution's Florida headquarters

for up to four people. According to Underwood, once crews are trained, the unit leads to valuable additional business.

"This cutter is a true workhorse in the field," she says. "Not only can it make dozens of reinstatements in a single shift, it can also remove a failed liner or grind out a metal nail. Our customers can't wait to tell us that their teams are more productive, saving precious time and money." 855-997-0524; www.apexcipp.com c

Cleaner

JOIN THE CONVERSATION.

JOIN THE CAMARADERIE.

JOIN THE COMMUNITY.



Manufacturing Drain Cleaning Equipment for over 30 years

Drain Cleaning Machines | Cables
Blades | Cable Ends | Handgun Cables | Accessories



TM750



TM50



TM25



Fabricated from high quality wire
Most ends & couplings available
All sizes and lengths
Innercore available



Various shaped and sized blades

Heavy duty construction
The most powerful motor
in the industry
Quick and easy reel changeover
A one year rock-solid warranty



COAST MANUFACTURING

541.684.0743
www.coastmanufacturing.com

ADVANCED WATER LEAK DETECTOR

The LD-18 Digital Water Leak Detector uses patented technology to significantly reduce ambient noises from dogs barking, footsteps, people talking, etc. The digital amplifier samples the sounds every few tenths of a second, rejecting intermittent sounds instantly.

See the LD-18 at www.subsurfaceleak.com.



SubSurface Locators™

(408) 249-4673

www.subsurfaceleak.com

YOUR SOURCE FOR RIDGID®



**SeeSnake® TruSense™
Camera Reel**



**CS12x Digital
Reporting Monitor***



**Flexshaft
K9-102, K9-204**



**SeeSnake® Compact M40
Camera System**



**CS65x Digital
Reporting Monitor***



**SeeSnake®
MAX rM200
Camera System
*With Wi-Fi**



microDrain Reel



**CS6xVersa Digital
Recording Monitor***



**8% ONE YEAR
FINANCING
AVAILABLE!**

Longer lease rates also available.
Call Keith for details.

Contact us about
RIDGID's Spring Fling Promotion

From Now Until April 30

BUYING A SEESNAKE?

**CALL US FOR
GREAT PRICING &
FREE SHIPPING!**

**WE
WILL NOT BE
UNDERSOLD**

**- Call Evenings
and Weekends - Keith: 405-602-9155**

**CALL
TOLL FREE: 888-947-8761**

5037 NW 10th • Oklahoma City, OK 73127

www.centralwinnelson.com

HOOK UP

With All Your Equipment Needs



Call Toll-Free
1.800.325.3730
www.MilwaukeeRubber.com

INDUSTRY NEWS

Epoxytec launches new website

Epoxytec launched its new and improved website, www.epoxytec.com. The website features a user-friendly experience in the water and wastewater coatings world where owners, engineers and contractors can research and select the best interior coatings for projects. Customers can navigate the technology behind created coatings, view all products and connect with Epoxytec's support team and coating experts for more information on how to get started.

ProPulse celebrates 25 years

Twenty-five years ago, Schieffer Co. International opened in Peosta, Iowa with six employees in a 12,000-square-foot facility. In the two and a half decades since, the hose manufacturer has changed its name and expanded exponentially. In 2021, ProPulse added a 20,000-square-foot manufacturing space to the production facility. Now known as ProPulse, a Schieffer Co., it employs 130, utilizes 130,000 square feet of space, and celebrated its silver anniversary in March.

IRC announces company acquisitions

Infrastructure Renewal Co. acquired Insta-Pipe and IPI. Dennis Smith, the founder of both Insta-Pipe and IPI, will remain active with both organizations as a consultant and strategic partner. The official announcement was made in Phoenix in January. Jason Walborn, recently appointed CEO of Insta-Pipe, and Kent Jordan, president of IPI, will continue their roles, respectively, in addition to holding executive positions as officers within IRC. **c**

HAVE A STORY IDEA?

Email us at editor@cleaner.com



This is what it would look like if we printed
cleaner.com
thousands of stories, products and ideas

Get access to everything we can't fit in the magazine. Additional stories, videos, news briefs and other great information that lets you get the most out of *Cleaner*.

www.cleaner.com

T&T TOOLS

T&T Tools, Inc.

Fax: 800.521.3260

Email: sales@mightyprobe.com

800.521.6893
www.MightyProbe.com

Call for a FREE Catalog



HOOKS...

- > Several different styles of heat-treated hooks are available
- > Top Poppers are great to open manhole covers
- > The Handy Hooks allow two handed use

PROBES...

- > Insulated, standard, and specialty soil probes
- > Metal shaft sizes: 3/8" round, 3/8" hex, or 7/16" hex
- > Replaceable tips are threaded on and hardened
- > A "slide" allows the handle to pound the shaft into the ground

**LIKE
WHAT YOU SEE?**

GO ONLINE TODAY FOR A
FREE SUBSCRIPTION,
CLEANER.COM

COLE Publishing Inc. | 800-257-7222



Cleaner



**Western Drain
SUPPLY**

THE PRO DRAIN
CLEANER'S
SOURCE FOR
EQUIPMENT,
SUPPLIES &
REPAIRS

CERTIFIED
RIDGID
AND PICOTE
REPAIR CENTER

WESTERNDRAIN.COM

MILWAUKEE TOOLS - RIDGID - PICOTE - DRAIN GEAR
DURACABLE - GORLITZ - MAXLINER
AMERICAN PIPELINING SUPPLIES - BRAWOLINER

1140 N. KRAEMER PLACE | ANAHEIM, CA 92806

(714) 632-0447

CLASSIFIEDS

see photos in color at www.cleaner.com

BLOWERS

Cotta (single & dual stage) & OMSI transmission parts. Cloverleaf Tool Co., Sarasota, Florida. Phone 941-739-0707; Email: sales@cloverleaftool.com (CBM)

BUSINESSES

42 year old drain and sewer cleaning business for sale in beautiful Wisconsin. Owners are retiring from this turn key business with excellent reputation, and a very large clientele in both commercial and residential. This is an exceptional business to own with lucrative cash flow. Serious inquiries only 715-540-6842. (C04)

INVESTOR OPPORTUNITY, 32 Year established company in Memphis Tn and North Mississippi, full service Plumbing, Drain Cleaning and Pumping Services. Average yearly sales \$1,200,000 huge growth potential. We have been semi retired last couple years and employees do a great job. We value the company higher than what we are asking as we are older and have health issues prompting a quick sale. We are asking \$ 375,000 for the company, \$300,000 for trucks equipment etc too much to list. Well established National Brand, contact bmc1212@yahoo.com no financin (C04)

www.RooterMan.com. Franchises available with low flat fee. New concept. Visit web site or call **1-800-700-8062.** (CBM)

DRAIN/SEWER CLEANING EQUIPMENT



Aries camera system for sale. Two Cameras, Two crawlers, Two Reels, and Two Controllers. \$65K USD for both or \$35K USD each. this system comes with an assorted set of wheels and is sold as is. the system is in working ordered and is used. This is not a brand-new system and has been used before and has ware on it. But has complete functions. Shipping is not included in the cost and willing to ship anywhere in Canada or the US.

Call Keifer at 905-301-3055 for offers and questions. (C04)



Portable Jetter: 3000psi @ 5gal/min, 18hp Briggs & Stratton engine, TS2021 General pump, 1 reel with 200ft 3/8" hose and approx 50ft 1/4" hose. All parts in excellent condition. Asking \$2000.00 US

Jim Meredith 519-671-9557 (Call or Text) (C04)



!!!!ALL PRICES HAVE BEEN LOWERED!!!! CCTV Trucks / Vactor/Jetter Combo Trucks for Sale. Go to <https://spands.net> to see a variety of Well-Maintained Sewer Cleaning & CCTV Inspection Equipment for sale. **!!!!ALL PRICES HAVE BEEN LOWERED!!!!**

Call 708-475-7128 (C05)

JET VACS



2011 International Vaccon 12yd, PD Blower, EX- city, 53k miles low hours, Auto. Work ready, can assist with shipping world wide... Price \$69,500.00

1-800-627-0778 (C04)

2023 Freightliner 114SD cab & chassis with a Vacall AJV1215 combination unit – 12 cubic yard debris & 1,500 gallon water – Roots 824 blower with General 87 GPM @ 2,000 PSI water pump (coming in August) www.vacuumsalesinc.com (888) VAC-UNIT (822-8648) (CBM)

1995 Vactor 2100 Combination machine w/ newer HR42 blower, 1,500 gallon debris body, 1,500 gallon fresh water tanks, 500' jet hose, hand gun for hydroX, 6 aluminum vac tubes, debris body flusher, International 530, 8 speed Eaton Fuller transmission, 145,097 miles, 6,879 hours. New steel debris body insert. \$35,000 Call Eric @ 570-336-1088. (C06)

JETTERS – TRAILER

2001 Harben DTH-300 jet trailer with Harben radial piston. Diaphragm pump, 16 GPM @ 4000 PSI driven with hatz Diesel engine. Stock# 1386V www.VacuumSalesInc.com (888)VAC-UNIT (822-8648) (CBM)

2010 Harben Trailer Jetter 110 gallon water tank easy to pull. 300 feet of 1/2" hose. Diesel engine Low Hours. Harben Pump. Good Condition. Well Maintained. Many Extras. Ready to go to work. \$25,000 OBO. Pictures on request. Contact 920-738-1880 (C04)



The HotJet II® is a best-selling hot- and cold-water drainline cleaner featuring a 35hp Vanguard engine by Toyota and delivering 10gpm @ 4,000psi that cleans drains up to 300' and 12" in diameter. The HotJet II® is American made using nonproprietary parts for affordability and ease in serviceability making its return on investment truly impressive. Prices subject to change. Financing available. Contact us for current pricing and availability

800-624-8186;
sales@hotjetusa.com;
www.hotjetusa.com (CBM)



NEW, Never-Used 2017 Gardner Denver TY375M, (Former US Government Machine), MDL TRC package, 10,000 psi 25 gpm, John Deere 6-cylinder turbo diesel engine, twin disc MDL # SP2111P3, trailer mounted, in dry storage independence OR reader to inspect and ship. 2021 New Tier 4's are approximately \$225,000 - this new NEVER used tier 3 price was \$99,500, but Cleaner Magazine sale price is \$65,000 no tax.

Call Ed at 480-776-9605 (CBM)

PIPE BURSTING EQUIPMENT

For Sale: Tric X30 pipe bursting system, purchased Oct. 2019. System still in crates-new, never opened, never used. \$35,000 Email danbronson@nynymail.com or call 315-265-8193 and ask for Dan. (C05)

PIPELINE REHABILITATION



2008 Cues T/V Cutter truck Ford F-650 XL Super Duty Cummins Diesel Van Air Compressor. Call For more pictures

Kelly (608) 835-7767 (CBM)



STEAM UNIT ; • Improved Heater Efficiency • Increased Air Flow Capacity • Increased Water Storage Capacity • Optional Wireless Data Acquisition System to Record Discharge Temperature and Upstream/Downstream Liner Temperature - RUSH STEAM UNIT GENERATION II - MODEL RSU 000 • 4,200,000 BTU Diesel Fired Heater With 1 1/2" Helical/Economizer Heat Exchanger • Fully Automated Burner Control System • 240 Gallon Fuel Storage Tank (Canadian Certified) • 750 Gallon Copolymer Polyethylene Water Storage Tank • Cat Triplex Boiler Feed Pump • 1 1/2" SA-106 Grade B Manifold System To Include: o Steam Distribution Valves o ASME Certified Boiler Relief Valve o ASME Certified Steam/Water Separator o Steam Trap with Automatic Purge Valve • 700 CFM I/R Blower with Air Cooler With Sound-Attenuated Enclosure • Large Toolboxes Mounted around Unit • LED Work Lights Mounted around Unit for Night Operation • Rear Enclosure With Aluminum Roll Up Doors • Painted Customer's Color

Please contact Adam Russell - Adam@jdbrule.com 613-293-1965 (C04)

PLACE YOUR AD ONLINE AT www.cleaner.com – IT'S ALWAYS THERE TO MEET YOUR BUSY SCHEDULE

16ft Cues TV/Cutting tandem axle trailer
Also have Cues TV/Cutter truck with 18 ft box. Vanair undercarriage compressor. Also selling lots of miscellaneous equipment, Safety equipment, Cherne plugs, 42" to 60" specialty down the hole tools, Cementitious man hole lining trailer, TV Trucks, Jetters and lots of parts pneumatic piercing tools & accessories 14' tandem axle TV/Trailer (Envirosight) minus equipment. Too much equipment to list. For photos or more information Call Kelly (608) 835-7767 (CBM)

POSITIONS AVAILABLE

Retired manager? Have you sold your company in the past? Do you have General Manager Skills? **WE NEED YOU!** THE PLUMBERS PLUMBER, INC. Family Owned and operated since 1980. Featured on the cover of July 2022. Looking for a seasoned veteran to take over managing operations and help our company run more effectively. We are bursting at the seams and need help from an expert that has experience. **ALL PAY IS NEGOTIABLE.** PLEASE TEXT RICK: 239-340-3840 (C06)

PUMPS

Vactor, General, Myers, Giant & others – New & parts also. Cloverleaf Tool Co., Sarasota, Florida. Phone 941-739-0707; Email: sales@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-hr. turn-around time. General Wire, Ratch, Ridgid, Electric Eel, 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 manhole covers easily. Free catalog. www.TandTtools.com. Phone 800-521-6893. (CBM)

TV INSPECTION

Municipal equipment ready to work...Vac-tors, Flushers, easement machines, TV Inspection trucks and portable units... Call or text 1-717-554-1715 for info. (C05)

1990 TV grout inspection GMC step truck. Ask \$25,000. Auction date March 30. Good Project Truck. 15k miles on motor. 440-283-9615 (C04)

NEED TRACTION? We make aftermarket gritted/gripping pads for all chain-driven camera transporters. Custom fabrication secured to a high-quality, nickel-plated carbon-steel chain that doesn't stretch. Also have non-gritted pads, wheels, and tires for all different brands. Pad samples upon request. **Pipe Tool Specialties LLC:** 888-390-6794; Fax 888-390-6670; pipetoolspecialties.com or email pts4422llc@gmail.com (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)

CAMERA OPERATORS, STOP SPINNING YOUR WHEELS IN GREASY PIPE! After-market gritted polymer wheels, steel carbide wheels, gritted and treaded tracks, tow cables, kiel sticks and more. Fitting Aries, CUES, Envirosight, Ibak, Rausch, RST, Schwalm & IDTec. **ORDER TODAY** at www.TrugritTraction.com; info@trugrittraction.com; 407-900-1091 (CBM)

WATERBLASTING

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)

JOIN
THE CONVERSATION.
THE CAMARADERIE.
THE COMMUNITY.

FOLLOW US



COMPLETE PARTS & SERVICE
WE DIAGNOSE & SERVICE ALL BRANDS
NO BENCH FEE
FREE DIAGNOSIS

made in the • Fast Shipping
USA • Call Us For A Quote
(702) 527-5100
LIVE TECH SUPPORT • PARTS & ACCESSORIES
AVAILABLE FOR ALL EQUIPMENT
WWW.SECONV.COM

POWERED BY DEWALT

SECON-EXTREME CORDLESS
STARTING AT **\$2,518**

GAS ENGINE PORTABLE
JETTERS PRICES
STARTING AT **\$2,999**
EXTREME JET

ASK ABOUT QUANTITY DISCOUNTS
SEWER CAMERA & LOCATOR PACKAGES AVAILABLE

TRAILER JETTERS STARTING AT \$35,999

DON'T SEE SOMETHING YOU REQUIRE FOR A JOB? ASK US!!

MADE IN THE USA

702-527-5100 **WWW.SECONV.COM**

RAT OUT YOUR ROOT PROBLEMS

Uniquely designed nozzles for big sewer line headaches – roots and encrustations in all sorts of pipe.

Interchangeable heads: chain rotor or cable rotor.

Simplified service means extra uptime.

3/8", 1/2", 1" nozzles come in kit form.

ROOT RAT NOZZLES
Patented

Call 330.874.4300 to learn more about the nozzle you've been waiting for

Made in USA • www.rootrat.net

PLACE YOUR AD ONLINE AT www.cleaner.com

DYNAMIC REPAIRS

We Repair:

General Wire, Ratch, RIDGID, Hathorn Corp.
Electric Eel, GatorCams, Vision Intruders
and Vivax Inspection Cameras,
Locators, Command Modules and Cables

**New & Refurbished Inspection
Equipment For Sale**

Rental Equipment Available
Daily & Weekly Rates

Ask
About
Our
48-Hr.
Turn
Around
Time

**INSPECTION CAMERAS
ARE OUR
ONLY BUSINESS!**

973-478-0893

DYNAMIC REPAIRS

40 Arnot St., Unit 20
Lodi, NJ 07644

dynamicablerepairs@yahoo.com
www.dynamicrepairs.biz

EASY-KLEEN PRESSURE SYSTEMS LTD.

MANUFACTURER OF HIGH PRESSURE CLEANING EQUIPMENT
**WOLVERINE
DRY STEAM GENERATORS**

DRY STEAM GENERATORS



20/30/40/50 BHP
Up To 2,000,000 BTU

Curing
Thawing
Degreasing
Degassing
Melting
Cleaning & Restoring
Prepping Surfaces
for Paint
Purifying
Weed Control



YouTube

www.youtube.com/easyklean

1-800-315-5533

www.easyklean.com • sales@easyklean.com

OUR BEST SELLING DRAIN LINE JETTER!

HOTJET II

10GPM @ 4000 PSI • 35HP VANGUARD
Cleans 2-12" Drains with Hot OR Cold Water

TRAINING AND
FREE
WARTHOG
NOZZLE
INCLUDED!

OVER 30 YEARS
BUILDING QUALITY
EQUIPMENT

HotJetusa

1-800-624-8186
WWW.HOTJETUSA.COM
PRICES SUBJECT TO CHANGE - CALL FOR CURRENT PRICING

T&T Tools, Inc.

800.521.6893

**CALL
for a
FREE
Catalog**

Many styles
Available

Insulated
Soil Probes
(for locating)

Heat-Treated
Hooks
(for covers, lids, etc)

www.mightyprobe.com

TRUGRIT TRACTION

- World's first patented poly carbide wheel
- Solid steel wheels
- Solid steel gritted tracks

We have • Wheels • Tracks
• Wheel kits • Tow cables • Tires
• We can resurface any worn carbide wheels

TruGritTraction.com | 407-900-1091

EASY-KLEEN

PRESSURE SYSTEMS LTD.
MANUFACTURER OF HIGH PRESSURE CLEANING EQUIPMENT

VAN PACK JETTERS

12 GPM @ 3500 PSI

OPEN JETTER TRAILERS

GROUNDHOG JETTER

20 GPM @ 4000 PSI

ENCLOSED JETTER TRAILERS

(Hot Water)

VACUUM TRUCK HEATERS

440,000 BTU to 4,000,000 BTU

YouTube
www.youtube.com/easyklean

1-800-315-5533
www.easyklean.com
sales@easyklean.com

Cua Claws

A Simple Solution for
Slippery PVC Pipe -
22 Years of Service

We resurface all makes
of steel transport wheels

CALL JERRY AT **714-697-8697**
www.cuaclaws.com

AMERICAN JETTER.COM

51T Trailer Jetter Hot or Cold
20 GPM @ 4000 PSI
76 HP Kohler EFI
FREE Shipping/Delivery

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

866-944-3569

**It's A
Bag
Full
Cleaner**

cleaner.com

- > Classifieds
- > E-zines
- > Product Categories

**WE WON'T BE BEATEN ON
SEESNAKE PRICING**



THE CABLE CENTER
1-800-257-7209

**LARGEST
FACTORY-AUTHORIZED
REPAIR CENTER OF SEESNAKE**

**FULL CATALOG OF RIDGID
REPAIR PARTS AND ACCESSORIES**

**24^{HR} TURNAROUND
ON REPAIRS**

**NO
SALES TAX
ON OUT-OF-STATE
SALES**

THE CABLE CENTER 1/2 OPEN - M-F, 7AM-3:30PM CST St. Louis, MO • 314-993-3099 • www.TheCableCenterInc.com



**FEATURED
IN AN
ARTICLE?**

Make the most of it!

REPRINTS AVAILABLE:

Electronic reprints

**Go To Cleaner.com/order/reprint
for articles and pricing**

**KEN-WAY Beats the Others
DAY-IN • DAY-OUT**

And they have for over 50 years

KEN-WAY CABLE CLEANERS

for cleaning sewer, drain or process lines
from one to ten inches, up to 75 feet
with the Junior and up to
a full length of 300 feet
with the Model 400



**KEN-WAY
Exclusive Built Cables**

- Heat Treated
- Inner-Core or Non-Core
- Fit Most Other Brands
- Interchangeable with Most Brands
- Coupling or Blade Holding Types



Leasing plans available. Call for details.

1-800-533-0551

930 ROBERTS ROAD, SPARTA, WI 54656
www.ken-way.com • E-mail: info@ken-way.com

“I WANT TO SHOW YOUNG PEOPLE THAT THE TRADES
CAN BE A GREAT AVENUE FOR A CAREER,
SHOW THEM THE SATISFACTION THAT COMES FROM
TAKING CARE OF PEOPLE,
SOLVING PROBLEMS FOR THEM AND
HELPING THEM NAVIGATE
THROUGH STRESSFUL TIMES.”

CHRIS REYNOLDS
Hall's Plumbing
WOODLAND, CALIFORNIA



Read what **matters** to contractors in every issue of *Cleaner*.
Subscribe for FREE at cleaner.com

WEIGHT NO MORE! MEET YOUR NEW FAVORITE ROAD LEGAL HYDRO VAC



TRUE WET OR DRY OPERATION • ULTRA-EFFICIENT CYCLONES AND LONG LASTING FILTER BAGS
750 GALLONS OF WATER • 15,000 LB PAYLOAD • 4,000 CFM, 28" HG PD BLOWER
13 GPM / 3,000 PSI • HYDRAULICALLY DRIVEN WATER PUMP
OPTIONAL VERTICAL HEATED CABINET FOR WATER SYSTEM
OPTIONAL 200 CFM AIR COMPRESSOR
& MORE



#BESTTRUCKSINTHEBUSINESS



NATM CERTIFIED
CUMMINS AVAILABLE
GAS OR DIESEL
500 OR 700 GALLON WATER TANK
TRAILER OR SKID MOUNT

JETTER

LESS DOWNTIME, INCREASED PERFORMANCE ALONG WITH CUSTOMIZATION TO MEET YOUR NEEDS, IS WHAT YOU GET WITH GAPVAX. AIR MOVERS, HYDROVACS, COMBINATION JETVACS, JETTERS, RECYCLERS, SKID-MOUNTED VAC UNITS, PARTS AND ACCESSORIES & MORE. CUSTOM-BUILT FOR YOU! GIVE US A CALL TODAY TO SCHEDULE A DEMO!

GapVax

GAPVAX.COM

281-884-8658
LA PORTE, TX

888-442-7829
JOHNSTOWN, PA

MACHINES
THAT WORK
AS HARD
AS YOU DO



OFTEN IMITATED
NEVER
DUPLICATED



MODEL 100



MODEL 1065



MODEL 300

You need tools you can count on to get the job done.

Only one name in the industry is known for tools that don't quit, even after quitting time. Spartan Tool is proud to outfit the toughest professionals in the industry who rely on our machines to get job done, time after time.



Cable you can depend on, built in America.

The toughest machines need the most dependable cable. Only Spartan Tool can deliver cable with the lowest failure rate in the industry. Built from quality wire sourced in North America and manufactured right in our facility in Niles, Michigan. Scan the code to see the difference.

SPARTANTOOL.COM
800.435.3866

