





For over ten years, two General Maxi-Rooters have been the go-to machines for A. Pederson's Plumbing of Dallas, Oregon. "There's nothing quite built like the Maxi-Rooter—it's built like a tank," says Pederson plumber Trenton Hargrove.

Beyond its low maintenance and heavy-duty construction, Hargrove says the Maxi-Rooter's sheer performance makes the machine a worth-while investment. "In addition to the power and mobility, we are able to clean these lines out faster, which saves our customers money," Hargrove concludes.

Questions? Call the Drain Brains® at 800-245-6200. To see Trenton Hargrove rip out a massive tree root with his Maxi-Rooter, visit **www.drainbrain.com/maxi-rooter**



"I LOVE NUFLOW'S COMMITMENT TO QUALITY AND IMPROVEMENT."

PROfile NuFlow Certified Contractor

Brendan Macfarlane chose NuFlow as his lining partner when starting Revive Pipes.

"I liked the capabilities of NuFlow's product. As an engineer, I wanted technical information on the process. Some of the other lining companies just seemed focused on sales."

Brendan focused on research, education, and performing high quality work – leaning on the technical support and training from NuFlow in the early years. Now, eleven years later, Revive Pipes has become the foremost experts in lining sewer pipes in complex configurations in Western Canada.

"Our investment in education and specialized equipment allows us to perform projects that most companies in North America can't do."

"I love NuFlow's commitment to quality and improvement. Their emphasis on research and development of new products and materials is exciting. Revive Pipes is focused on performing high-quality work and not cutting corners - NuFlow helps us achieve that."



nuflow

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

MUCUITE COLD CURE UV Cures In 10 Minutes Reduce Labor Costs Maximize Profit

CONTENTS

36 COVER STORY: LIMITLESS OPPORTUNITY

PipeView Services is on a path to offer expanded services to a growing customer base. // By Giles Lambertson

FEATURES

14 PROFILE: READY TO RESPOND

PowerVac is committed to immediate service and meeting any customer need. // By Ken Wysocky

50 >> SPECIAL SECTION <<

PORTABLE JETTER AND CABLE MACHINE DIRECTORY

DEPARTMENTS

8 FROM THE EDITOR: RECOGNITION YOU DESERVE

The skilled trades don't always get the respect they should, but that's changing.

"By Kim Peterson"

10 @CLEANER.COM

Be sure to check out our exclusive online content.

24 MONEY MACHINES: LOW-PRESSURE LINING

The camera feed and simplified curing process of the Bluelight LED system took the pain out of lining for Matt Porretta. // By Tim Dobbins

30 TECH PERSPECTIVE: A NEW STANDARD

The ASTM International published a new standard practice for cleaning vitrified clay pipelines.

// By Jeff Boschert

46 BETTER BUSINESS:

5 TIPS FOR A POSITIVE CULTURE

Create the future workplace culture you want instead of focusing on things you can't control. // By Jason Bargers

58 BEHIND THE GEAR: CRITICAL CARE

Pearpoint is dedicated to helping its customers inspect and maintain vital infrastructure.

// By Kim Peterson

62 INDUSTRY NEWS

64 PRODUCT FOCUS:

RESIDENTIAL AND COMMERCIAL SEWER AND PIPE MAINTENANCE

By Craig Mandli

74 PRODUCT NEWS

Spotlight: Big drain cleaning power in a small package // By Craig Mandli

MAY 2022



ON THE COVER // Lehi, Utah-based PipeView Services went through some growing pains before Joseph and Justin Turley bought the company in 2018. Joseph now employs a multifaceted plan to keep growth steady and ensure longevity — relying on new marketing, more services and creating greater customer loyalty. (Photography by Douglas Barnes)

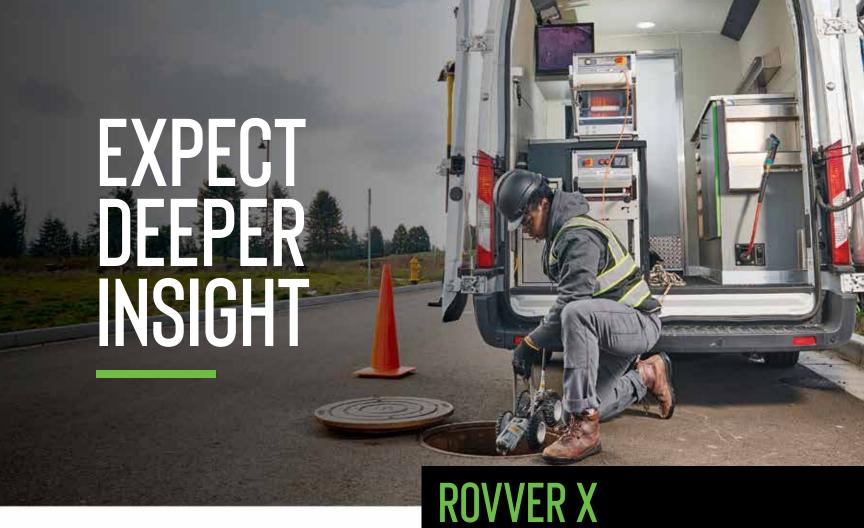


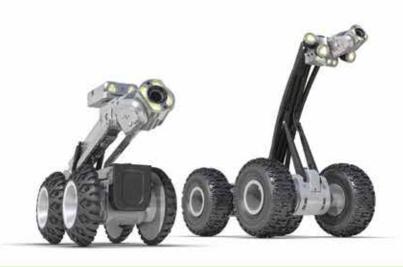




coming next month: June 2022 focus: Location and Leak Detection, Drainline TV Inspection Equipment

Money Manager: How to field employees' questions on wages // Safety First: Developing the role of safety coordinator // Money Machines: Portable mini vac minimizes manual labor





READY FOR ANYTHING

ROVVER X was built to take on the toughest underground environments, while equipping you with adaptive technology for seamless sewer inspections. Discover the crawler that offers unmatched capability and uptime, so you can get the job done every time.

Ready for a demo? Scan here:

Learn more at envirosight.com/rovverx





AGILE

Maneuver around obstacles, through sediment and over offsets with steerable 6-wheel drive.



ADAPTABLE

Inspect pipe of any size, material and condition—plus perform laser profiling, side scanning and lateral launch.



INTELLIGENT

Auto-upgrade to the latest capabilities, maximize uptime with self-diagnostics and easily measure observations.



(866) 936-8476

ENVIROSIGHT.COM

ADVERTISER

ALLAN J. COLEMAN SINCE 1805
Allan J. Coleman Co41, 63
BRAVVO SYSTEMS
BRAWO SYSTEMS GmbH73
Bucher Municipal North America57
THE CARLE
CABLE CENTER:
Cable Center, The11, 77
CAM
Cam Spray 62
Winnelson
Central Oklahoma Winnelson 34
Adistr.
COURT COURT
Coast Manufacturing26
CUES 🤻
CUES82
DCD9
മര
DURACABLE
Duracable Manufacturing Co 45
EASY-KLEEN
Easy-Kleen Pressure Systems Ltd 44
Electric Eel28
V ENVIROSIGHT
Envirosight, LLC5
enz usa inc.
Enz USA, Inc34
ePIPE / ACE DuraFlo32
FORBEST .
Forbest Products Co48
CapVax
GapVax, Inc 83
General POPE CLEANIES
General Pipe Cleaners/div. of

GI INDUSTRIES GI Industries, Inc
Gorlitz Sewer & Drain, Inc17 Hammelmann81
HammerHead Trenchless7
Hannay Reels* The reel leader.
Hannay Reels31
وول
IPP Solutions, LLC29
Ken-Way Corporation48
PRODUCTS
Lansas Mfg. by Vanderlans 38, 39
MAXLINER
MaxLiner USA
MKP
Milwaukee Rubber Products, Inc 56
Milwaukee Tool23 Minicam Ltd33
Millican Ltd
MONGOOSE JETTERS TOWNERS
Mongoose Jetters by Sewer Equip 49
MyTana
MyTana LLC21
Navitas Credit Corp28 NTS (National Trench Safety)22
nuflow
Nu Flow Technologies
. a.a. at a a man Equipment of Repull III 00

JOI	N
THE CONVERS	ATION.
THE CAMARA	DERIE.
THE COMMU	INITY.

- Year Table

The Sewer Camera Center	44
Camera Connection	8
TR Worldwide, Inc	55
Vac-CoN Vac-Con, Inc	61
Vacall VacallVactor Manufacturing	
Vivax-Metrotech Corp	
Western Drain Supply	22
PRO-VAC Westmoor Ltd	44
Classifieds78	
Marketplace7	6, 77

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

Published monthly by COLE Publishing, Inc. 1720 Maple Lake Dam Rd., PO Box 220, Three Lakes, WI 54562

Call toll-free 800-257-7222 | Outside of U.S. or Canada call 715-546-3346 Mon- Fri., 7:30 a.m.-5 p.m. CST

Website: www.cleaner.com | Email: info@cleaner.com | Fax: 715-546-3786

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.





REPRINTS AND BACK ISSUES: Visit www.cleaner.com for options and pricing. To order reprints, call Jeff Lane at 800-257-7222 (715-350-8447) or email jeff.lane@colepublishing.com. To order back issues, call Holly at 800-257-7222 (715-350-8424) or email holly.gensler@colepublishing.com.

 $\textbf{CONTROLLED CIRCULATION:}\ 21,\!500\ per\ month. This figure\ includes\ both\ U.S.\ and\ international\ distribution.$

© 2022 COLE PUBLISHING INC.

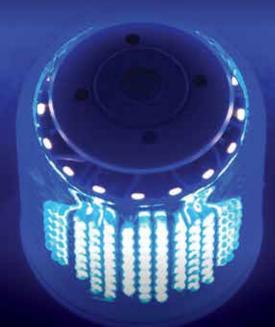
No part may be reproduced without permission of the publisher.

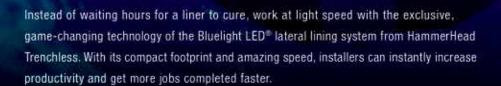
General Wire Spring.



LIGHT YEARS AHEAD

THE NEXT GEN
BLUELIGHT LED*
CURES UP TO
5X FASTER
THAN OTHER
CIPP CURING
METHODS.





The Bluelight system's enhanced features include intuitive touch screen interface, three light-head options, interchangeable reels, state-of-the art software, automated quality assurance, superior resin stability and more. Experience the next generation of lateral CIPP with Bluelight LED® only from HammerHead.





REHAB & REPLACEMENT. REDEFINED

Learn more: hammerheadtrenchless.com/bluelight

FROM THE EDITOR

// Kim Peterson

RECOGNITION **YOU DESERVE**

The skilled trades don't always get the respect they should, but that's changing

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

HE FIRST WEDNESDAY in May is designated National Skilled Trades Day — this year on May 4 — to serve as a day to bring attention to and recognize those workers. I have long been aware that most people do not place enough value on the trades. The expectation to earn a four-year degree immediately after high school is still largely prevalent, although with rising costs of education and a little bit of a shift in attitudes, I think that other options are finally gaining more respect again.

The National Day Calendar website sums it up nicely: "Our society has a hard time accepting the skilled trades route as a valuable

Fast Shipping Call For a Quote Today! iera Connection Live Tech Support - Parts & Lecessories - Troubleshooting **Available for All Brands** nch Fee No Diagnosis Fee tionwide 718)477-1425 thesewercameraconnection.com career path. National Skilled Trades Day aims to raise awareness and help show America the value of skilled trades. If we are going to create growth in our country, we must celebrate the critical jobs that fall under skilled trades. ... The skilled trades community holds the country together."

Nothing has taught me that better than the nine years I have spent at COLE Publishing, working on publications that serve many of those trades: drain cleaning, plumbing, portable sanitation, septic pumping, onsite septic installation, and water and wastewater utilities.

But most people do not have the benefit of learning firsthand how important your jobs are by reading your stories every day. Though you probably have some advocates like your friends and family and satisfied customers who understand and appreciate your skills, it mostly falls to you to show others how much you contribute. It's one of the reasons I love it whenever someone featured in the magazine tells me that a poster of their article or cover hangs in their office. Even if only you and your employees see it, it's a reminder that your work is valued, acknowledged and something to take pride in.

When it comes to getting the word out about the growing need for people to consider a trade as a career (and view the trades with more respect), the National Day Calendar website has some suggestions:

- Get the word out about the need for skilled trades workers and the benefits of learning a trade. Contact local radio and television stations and newspapers. The community needs to hear you are looking for skilled trades workers.
- Host an open house at your business.
- Highlight your employees on social media: Why did they pick a career in the drain cleaning or plumbing? What life lessons have they learned in their years working in a trade?
- Share your trade with someone you know.
- Post on social media using #NationalSkilledTradesDay.
- Volunteer to speak at a career fair.

I'll be thinking about all of our readers on May 4. I hope you can take a little time to spread the word that your skills deserve respect.

Happy National Skilled Trades Day. I hope you enjoy this month's issue. c

AMERICA WAS BUILT ON COURAGE, **ON IMAGINATION** & AN UNBEATABLE DETERMINATION TO DO THE JOB AT HAND - PRESIDENT HARRY S. TRUMAN



At DCD, we believe that the raw materials we use define who we are. In a world where products wear out easily, we go against the mold. Our drum machines and sewer cables are produced with the highest quality materials and American manufacturing.

It's a difference that's **#DISTINCTLYAMERICAN.**



855.SHOP.DCD DCDdrain.com

Follow us on:







o Cleaner.com

VISIT THE SITE DAILY FOR NEW, EXCLUSIVE CONTENT. READ OUR BLOGS, FIND RESOURCES AND GET THE MOST OUT OF CLEANER MAGAZINE.



OVFRHFARD ONLINE

"Don't sell your company like you would a car by giving your successor the keys and heading off. Train them and ensure they are ready to do the job before you formally step back."

- Implementing a Successful Succession Plan For Your Company

>> cleaner.com/featured

KEEPING THE FAITH

Earning Customers' Total Trust

"We're a necessary evil," says Jordan Bowles, owner of Drain Savers in Grand Forks, North Dakota, which was featured in the February 2022 issue. "No one wants a clogged drain at 2 a.m. And no one wants to call a drain cleaner and spend money. So we can't afford to treat people any less than the best." In this business of delivering bad — and sometimes expensive — news to homeowners, it's vital to have their confidence first or risk losing their loyalty. Check out this overview of tactics for earning and maintaining the trust of your clientele. >> cleaner.com/featured



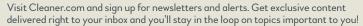
PROTECTING PROFITS

Do You Need a Fuel Surcharge?

Don't let rising diesel and gas prices due to inflation woes, oil production interruptions and chaos in the world upend your profitability. Here's some

advice on how to handle this key operating expense so that it doesn't have too much of a detrimental effect on your bottom line. >> cleaner.com/featured

FMAILS AND ALERTS



JOIN THE DISCUSSION







PIPE REHAR

PFAS Water Contamination Concerns

There is not anything to be worried about at the moment, but as the pipe rehab industry innovates with new resin and dry tube combinations, PFAS impact on water quality and treatability must be considered. In this online exclusive, a member of the NASSCO Technical Advisory Council provides an overview of what you should know currently about PFAS in relation to pipe rehab.

>> cleaner.com/featured

THE CABLE CENTER • 1-800-257-7209

WE'RE OPEN AND TAKING EXTREME SANITATION MEASURES FOR ALL INBOUND AND OUTBOUND MERCHANDISE TO ENSURE THE SAFETY OF OUR CUSTOMERS AND EMPLOYEES







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







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

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

MAXI MILLER



PROFESSIONAL'S CHOICE FOR WIDEST RANGE OF JOBS



- ✓ CLEAN & DESCALE 3 10" PIPES
- ✓ REINSTATE 3-8" PIPES
- ✓ BRUSH COATING 3 12" PIPES
- **CONCRETE REMOVAL**
- ✓ COLLAPSED LINER REMOVAL
- ✓ ROOT REMOVAL





WWW.PICOTESOLUTIONS.COM/RESELLERS

864-940-0088 | sales@picotesolutions.com





BUILT TO WORK, BUILT TO LAST







Engineered and Manufactured with Long-term Quality in Mind

Vacall's combination sewer cleaners, built by Gradall, are ready to work and keep working long after the others have rusted through. With lifetime warranties on water tanks and the new galvanized debris tank with supreme finish, All|etVac models lead the industry in delivering a rugged machine designed to withstand the test of time.

Kick that old, rusty can down the road and replace it with a machine that's built to work and built to last.

www.vacall.com 800-382-8302











READY TO RESPOND

POWERVAC IS COMMITTED TO IMMEDIATE SERVICE AND MEETING ANY CUSTOMER NEED

// By Ken Wysocky



rom its roots as a one-employee operation, PowerVac has morphed into a large company with different divisions serving multiple markets and employing more than 100 people.

At any given time these days, the company field technicians might be scouring a large-diameter induction furnace and descaling pipes at a metallurgical products manufacturer; removing a defective commercial boiler and installing a new one; inspecting and cleaning lines in a major hospital's sanitary sewer system; removing debris from catch basins for a local municipality; potholing underground utility and fiber-optic lines for a natural gas utility; or pumping out grease traps.

In fact, the company — based in Novi, Michigan, about 30 miles northwest of downtown Detroit — eventually became so big that it required additional capital and managerial resources. So in 2019, the company took on two private equity partners, with founder David Janks remaining on board as PowerVac's chief executive officer.

So how did the company evolve from a one-man band, with Janks basically working out of the trunk of his car, into a multimillion-dollar-a-year company that does virtually everything its customers need, including plumbing, mechanical and electrical work?





The transformation essentially boils down to a fourpronged strategy: Provide a variety of services in order to become an invaluable one-stop shop for customers. Invest in productivity- and profitability-enhancing equipment and technology. Make strategic acquisitions that provide additional entry into new markets. And treat every customer's problem as a top priority, every day, says Jon Korotko, field superintendent at PowerVac.

QUICK RESPONSE

"It's all about keeping customers happy — really appreciating and knowing that when they call, their world is upside-down," says Korotko, who also is a master plumber, a certified camera technician and a department manager at ServicePro, one of the company's service divisions.

"So we want to be able to address everyone as the most important customer of the day. It's a challenge, but we pride



ourselves on doing it for all of our customers, big or small."

The company ups the ante on that service philosophy by guaranteeing its customers a 90-minute response time. That forces the company to be nimble and flexible, as well as ensure sufficient levels of staffing and equipment.



≪ Service Pro technician Sean O'Keefe uses a Spartan Tool drain machine to clear a drainline at a restaurant in Northville, Michigan.

➤ The PowerVac fleet includes eight Vactor HXX hydroexcavating trucks equipped with 15-cubic-yard debris boxes, and 15 combination sewer trucks, among other vehicles.

"WHEN THERE'S A NEED FOR IT, WE DON'T HOLD BACK. WE HAVE TO KEEP UP WITH OUR CUSTOMERS' NEEDS AND WANTS, SO WE HAVE TO KEEP INVESTING IN EQUIPMENT."

JON KOROTKO

"Sometimes when we show up within 90 minutes, customers ask us if work is slow," Korotko says. "But the fact is we work in controlled chaos; we're very good at manipulating our schedules to accommodate customers.

"We're a can-do company with a strong boots-on-the-ground mentality. Even though we've become a large company, we still truly care about our customers. We always want to be able to fulfill their needs."

HUMBLE ROOTS

A chemical engineer by trade, Janks established the company in 2002. Organic growth followed as one service led to another and another.

Initially, he sold chemicals and an injection system designed to break down grease particles and prevent them from solidifying. Then, in a portend of things to come, he diversified by cleaning grease traps inside restaurants, too — by hand, Korotko says.

An astute entrepreneur, Janks then saw an unfilled market niche: cleaning much larger exterior grease traps. That prompted him to invest in a combination sewer truck. That, in turn, opened the door to even more business from other customers that needed vacuum services, such as grocery store chains, hospitals and school districts.

Along the way, Janks also established plumbing, electrical and mechanical divisions under the ServicePro brand name to become even more of a one-stop shop for customers attracted by the convenience this business model provides. Each of these additional services was established through acquisitions of smaller mom-and-pop shops in the various trades.

ORGANIC GROWTH

Later, Janks acquired a small vacuum-services company that did work for one of the state's largest electric utilities. That led to providing hydroexcavation and vacuum services for other utilities, which now is one of the company's core markets and revenue generators.

"The growth was rather amazing," Korotko says. "And a lot of it came about by being a one-stop shop.

"That always was the big goal. You clean a catch basin, for

instance, and find out it's failing. So you can bring in your plumbers, who are trained to rebuild them. We do jobs from start to finish, without the delays that often come from using subcontractors."

PowerVac also works for other contractors that can't do certain jobs because the work requires significant investments in specialized equipment. A good example is hydroexcavation trucks, which can cost around \$450,000 — a price tag that can stand as a barrier to market entry, Korotko says.

As an example of a specialized job, Korotko cites an instance about six years ago when two lift station pumps failed at a veterans' hospital in downtown Detroit. The pumps had to be removed, rebuilt and reinstalled, leaving the hospital with a potentially disastrous problem: no sewage-treatment service.

So PowerVac brought in multiple vacuum trucks to handle the flow of sewage discharge from the hospital, something few contractors are equipped to do, he points out.

"We had about four Vactor trucks working around the clock for two weeks. When the pit was full, we'd suck it empty. And when a truck was full, we always had another one on standby to take its place."

PowerVac tends to specialize in niche installation or repair projects — difficult scenarios that either are too small for large companies to handle or too big for small companies, Korotko explains.

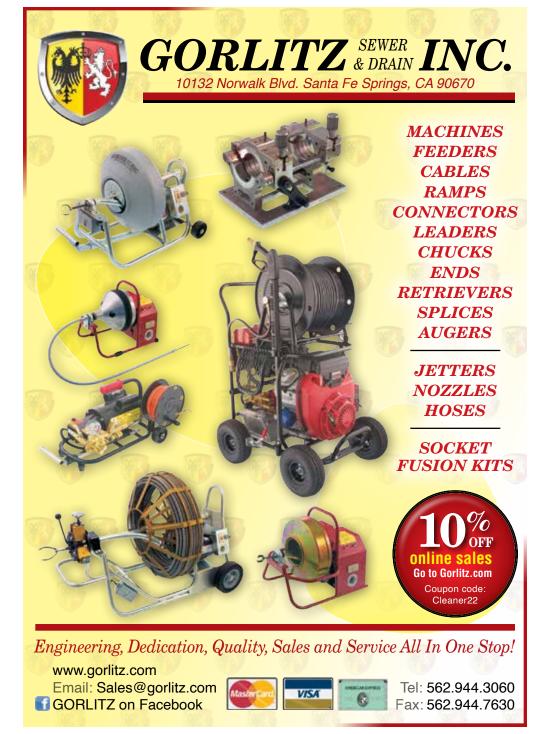
"We're the company that other companies call when they struggle to resolve issues. We're the kind of company that never says, 'No, we can't do that.' We always figure out a way to handle customers' problems."

CAPITAL INVESTMENTS

Providing so many services requires a sizeable fleet of equipment.

"WE'RE THE KIND OF COMPANY THAT NEVER SAYS, 'NO, WE CAN'T DO THAT.' WE ALWAYS FIGURE OUT A WAY TO HANDLE CUSTOMERS' PROBLEMS."

JON KOROTKO





 Multiple divisions and 130-plus workers provide a variety of services to make PowerVac a one-stop shop for customers.

"When there's a need for it, we don't hold back," Korotko says. "We have to keep up with our customers' needs and wants, so we have to keep investing in equipment.

"If you don't have the equipment, you can't do the work. It's just that simple. And it's been a very successful approach, especially with our 90-minute response guarantee, which helps keep us in business and on our toes.

"We're always one phone call away from the day's schedule totally changing, yet we still have to maintain the current jobs. We wouldn't be able to do that if we didn't continually reinvest in equipment."

To get jobs done, PowerVac owns 15 Vactor combination sewer trucks, which feature 10-to 15-cubic-yard debris boxes, 2,500-gallon water tanks and blowers built by Roots (a brand owned by Howden).

The company also has invested in eight Vactor HXX hydroexcavating trucks, equipped with 15-cubic-yard debris boxes, 1,200-gallon water tanks and blowers from Roots and Hibon (a division of Ingersoll Rand); and one Guzzler

owerVac prides itself on being a company that can handle all aspects of the infrastructure emergencies its customers face on a daily basis. A good example is a project the company tackled about five years ago at a Detroit-area high school, says Jon Korotko, a field superintendent.

The problem: Chronic flooding in a utility service tunnel that runs under the high school and houses its mechanical systems.

"They tried other solutions before we got there," Korotko says. "They basically spent years Band-Aiding the problem."

So when PowerVac finally got the call, it solved the problem by deploying what's become the company's calling card after 20 years in business: years of infrastructure repair experience backed up by a large array of equipment that allowed its technicians to do all the work — no subcontractors required.

The problem centered on drain tiles located about 5 feet under the service tunnel. An inspection performed with a camera system made by Envirosight revealed that the 6-inch-diameter cast iron drain tiles were failing, which caused flooding in the service tunnel and adjacent branch tunnels.

'We tried to clear obstructions in the pipe with our water jetter and one of our Vactor vacuum trucks, but the pipe were too far gone for that to work," Korotko says.

The only viable alternative was to replace about 500 feet of drain tile — no easy task in a cramped tunnel.

The first step was cutting the tunnel's concrete floor into roughly 2-by-3-foot slabs. Those were then moved on a dolly to an air shaft that keeps the tunnel well-ventilated and full of clean air. From there, the slabs were removed by a hoist via the shaft, he says.

The micro-mini-excavator was lowered through the shaft and into the tunnel, where it was used to expose the drain tiles. In areas where the excavator wouldn't fit, the Vactor hydroexcavation trucks did the excavating, he says.

PowerVac technicians then installed new PVC pipe, backfilled the trench and poured new concrete for the floor. The job took about three months to complete, Korotko says.

"We still service that school district to this day and the people there still talk about it when we go there. That project really exemplified our capabilities."



The 2100i employs advanced technology that not only enhances the performance of the equipment but the individuals who operate it. Less fatigue. More comfort. Push button operation. Greater precision. Superior power and performance. Controls that truly put the operator in control. All of this in a system designed to be the ultimate in ruggedness, reliability, simplicity and value.

Vactor has proudly been dedicated to continuously improving combination sewer cleaners for over fifty years. Our team is looking forward to showing you the latest innovations. More than a manufacturer, Vactor offers you customized solutions featuring unmatched quality and backed by powerful support. Vactor is the brand you can trust.

Features:

- The revolutionary IntuiTouch® control system
- Low-maintenance Jet Rodder® water pump
- Exclusive Modul-Flex design

TO SEE OUR FULL LINE **OR REQUEST A DEMO**



© 2022 Vactor Manufacturing, LLC













"IF WATER RUNS THROUGH, IN OR AROUND SOMETHING, WE SERVICE IT. SO THERE'S A LOT OF VARIETY."

JON KOROTKO

hydroexcavating truck, featuring a 12-cubic-yard debris box, two 300-gallon water tanks and a Hibon blower. They're primarily used for exposing underground pipelines for utilities as well as for cleaning catch basins, sewer lines for commercial businesses, schools, hospitals and housing complexes, to name a few.

"We also clean process pipes, waste collection pits and wastewater treatment systems for facilities," Korotko adds.

The vac trucks use jetting nozzles from KEG Technologies, Enz USA and Hydra-Flex.

The company's equipment roster also includes a Spartan Warrior trailer-mounted jetter (4,000 psi at 18 gpm); push cameras from Envirosight, MyTana and Hathorn; one Envirosight Jetscan camera; an Envirosight pole camera; and mainline crawler cameras made by RST Technologies and Envirosight.

The company also relies on technology like the Service Trade mobile app, a cloud-based platform that creates digital work orders, invoices and records. It also puts customer work histories at technicians' fingertips and allows them to add digital notes and photos to those histories, Korotko says.

"It takes a lot of the guesswork out of things and makes us much more efficient."

EMPLOYEE RETENTION

Investments in new equipment also serve as a technician-retention too. And so does the wide variety of work technicians do, Korotko says.

"We're a very unique company to work for — there's nothing cookie-cutter about what we do," he explains. "We're not out there stamping bumpers, doing the same tasks over and over, day in and day out.

«O'Keefe snakes a drainline at a commercial job site.

"Technicians often work for the same customers, but it can be a different scenario each time. They're not just out there snaking drains. Plumbers are out there working with electricians to replace broken pumps and pump controls.

"Every day offers a little different view of the infrastructure world. If water runs through, in or around something, we service it. So there's a lot of variety."

Looking ahead, Korotko envisions following a similar path to the one that's made PowerVac so successful: substantial yet controlled growth that enables the company to still maintain quality control and provide great customer service.

The company also could expand into regions outside of just southeastern Michigan, he says.

"I see our future growth as constantly evolving. We're not going to tap on the brakes any time soon.

"We all know that our infrastructure is crumbling. Most of it was installed before World War II, so it's in great need of maintenance or replacement. And when it fails, our customers' businesses stop.

"And it's our job to keep them open — keep those businesses in business." c

FEATURED EQUIPMENT

ENVIROSIGHT LLC

866-936-8476 www.envirosight.com (See ad page 5)

ENZ USA INC.

877-369-8721 www.enz.com (See ad page 34)

GOSERVICEPRO

800-950-4276 www.goservicepro.com

GUZZLER MANUFACTURING

815-672-3171 www.guzzler.com

HIBON - INGERSOLL RAND

888-704-4266 www.ingersollrand.com

HYDRA-FLEX, INC.

952-808-3640 www.hydraflexinc.com

HATHORN INSPECTION CAMERAS

866-428-4676 www.hathorncorp.com

HOWDEN WATER TECHNOLOGY, INC.

866-740-3025 www.howden.com

KEG TECHNOLOGIES, INC.

866-595-0515 www.kegtechnologies.net

MYTANA LLC

800-328-8170 www.mytana.com (See ad page 21)

SPARTAN TOOL LLC

800-435-3866 www.spartantool.com (See ad page 84)

VACTOR

815-672-3171 www.vactor.com



POWER THRU













Trust MyTana equipment to find and fix tough problems quickly. Our pro-grade cameras, jetters, cable machines and accessories prepare you for any challenge.

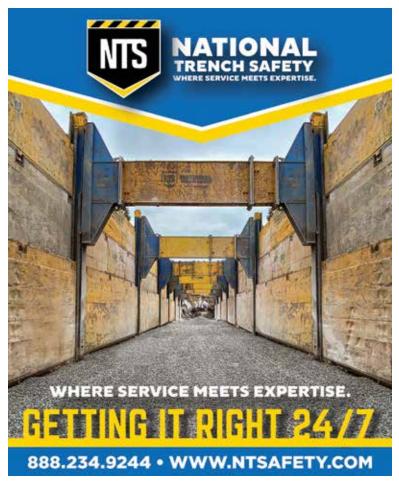
And everything comes backed by our legendary service team.

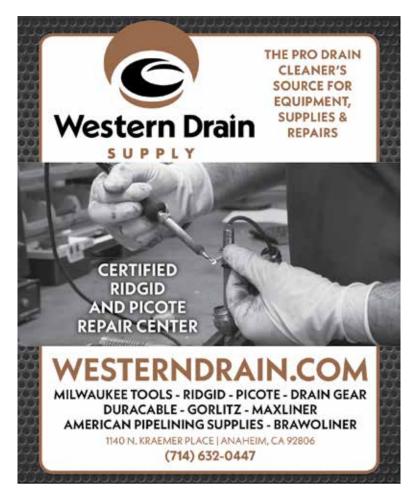
www.MyTana.com • (866) 948-7576

INSPECTION SYSTEMS CABLE MACHINES JETTERS LOCATORS



MANUFACTURING SEWER CAMERAS SINCE 1981.







DRIVEN TO OUTPERFORM.



POWER TO CLEAR ROOTS AT 200' CABLEDRIVE AUTOMATIC FEED & RETRACT

EASIEST SET-UP & TRANSPORT

M18 FUEL[™] is engineered for the most demanding tradesmen in the world. M18 FUEL[™] delivers unrivaled performance in a compact structure and features three MILWAUKEE[™] exclusive innovations — the POWERSTATE[™] Brushless Motor, REDLITHIUM[™] Battery Pack and REDLINK PLUS[™] Intelligence Hardware and Software — that deliver unmatched power, run-time and durability. Simply put, M18 FUEL[™] is best-in-class, full-circle technology that drives, protects and powers your cordless power tools beyond the rest.

LEARN MORE



or visit https://gr.mke.tl/2562y





MONEY

LOW-PRESSURE LINING

The camera feed and simplified curing process of the Bluelight LED system took the pain out of lining for Matt Porretta // By Tim Dobbins

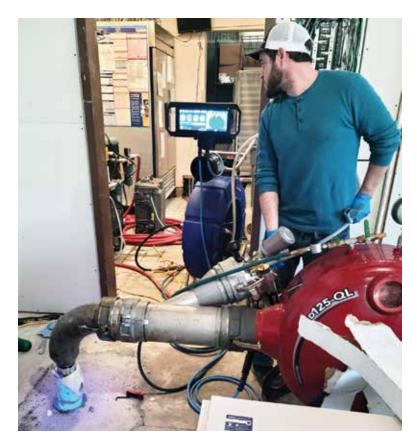
ATT PORRETTA WAS READY to give up CIPP lining. It was frustrating, time consuming and discouraging.

Fortunately, he and his team found that the Bluelight LED CIPP system from HammerHead Trenchless relieved the pressure they once faced lining pipes.

"I had a really hard time inverting and installing liners," says Porretta, owner of Underground Pipe Co. in Canandaigua, New York. "When you're mixing resins and trying to get it in place in time before it starts cooking and getting hot — well, I don't do well under pressure and lining wasn't enjoyable for me. I was stressed out."

After a handful of frustrating experiences with his previous lining equipment, Porretta was finished wasting his time, energy and money. "I had a job that I lost a 120-foot liner in the drum that I couldn't get in in time," he says. "That was a lightbulb moment; I knew I had to do something different."

UNDERGROUND PIPE CO. OWNER Matt Porretta TOOL HammerHead Trenchless Bluelight LED FUNCTION CIPP lining for pipes 3 to 10 inches in diameter FEATURES A lightweight frame for easy maneuverability; a large touchscreen interface with various mounting options for ideal viewing position; resin that only cures under blue light providing extended working time; automated pullback speed based on job parameters capable of capable of curing five times faster than other methods; integrated camera to monitor progress and inspect lines Approximately \$100,000 www.pipeninja.com



Underground Pipe Co. lining technician Richard Schneider monitors the HammerHead Trenchless Bluelight LED system as it cures a sewer liner.

In another scenario, Porretta had lined a big job only to find out the prep work supposedly done before he arrived was not completed and he had to redo the lining. That situation could have been avoided using the Bluelight technology.

"After that, I stopped lining until I got the Bluelight," Porretta says. He reached out to HammerHead and ordered their newest Bluelight LED CIPP lining system. "I pushed off all my jobs for a couple months until it was released and when I got it, we hit the ground running."

OPENING NEW AVENUES

Underground Pipe Co. has been busy since. "If I had to guess I'd say we've done about 70 jobs with the Bluelight since getting it around August," Porretta says. "I tried to take some time off around Christmas but ended up working the whole time with emergency calls, and I'm not complaining. Business is great."

The Bluelight LED curing system uses compressed air to invert the Bluelight liner into pipes from 3 to 10 inches. Once the liner is in place against the pipe walls, a control unit directs an LED light with live camera feed through the pipe to ensure there are no obstructions or flaws in the liner. The resin only cures under LED light in the blue light spectrum; so when the Bluelight LED is pulled back through the pipe, it cures the liner at rates up to 5 times faster than other methods.

The lining system really shines for Porretta and his team on the jobs where inverting is difficult. "It's the jobs where I don't want to dig the floor out and I can invert through a clean-out," he says.

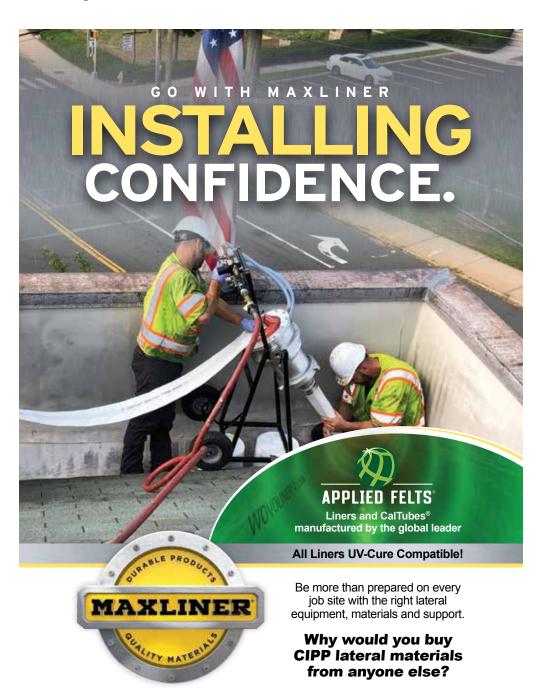
On one occasion at a local high school, it took almost five hours to get the liner out of the drum and invert. Though a challenge in its own sense, taking that time to do it right was possible because he didn't have to worry about resin curing in the drum. It has taken out the time pressures of traditional curing methods.

TIME SAVER

"The cure times are incredible. I can cure most of my shots in 45 minutes, and that's to cure the entire drain or sewer line," Porretta says. "I get a lot of calls for shorter shots like 15 to 20 feet and I can cure that with my Bluelight in 10 minutes. I'd say it's at least twice as fast as using traditional methods."

Along with quicker cure times, Underground Pipe Co. has not had to double back on jobs thanks to the built-in camera attachment

on the LED light which allows a visual on anything potentially problematic before curing starts. "I have not had a single failed shot since



877.426.5948 | MAXLINERUSA.COM





MONEY

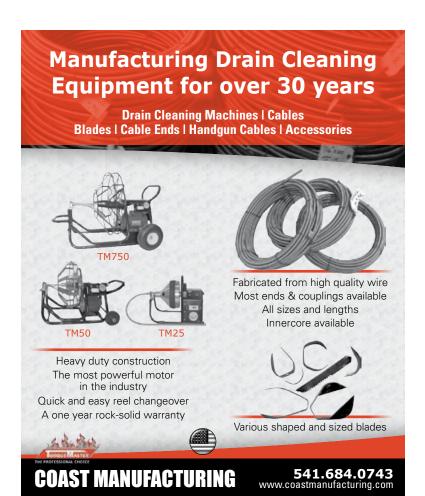
>> The HammerHead Bluelight LED system cures only under blue light, which means there's no worry about resin curing in the drum. The system is also highly automated. Once the liner is in place, Schneider just monitors the system to make sure everything is progressing well.

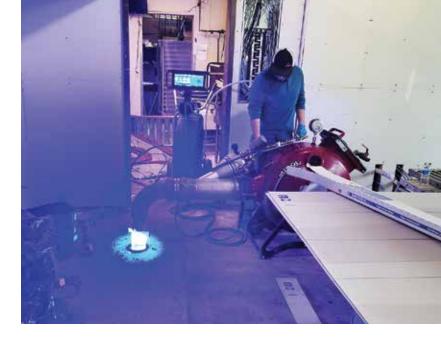
we've got this thing," Porretta says. "Honestly, I don't know how you could fail unless you purposely make a decision to not care."

The Bluelight features a large touchscreen interface where users can view pipes with the camera feature and can input specific job specs. After the information is programmed, the onboard computer sets and controls an automated pullback speed, removing the human error of pulling it back too fast or too slow.

Porretta has noticed significant time savings from less prep work and repair as well. "Pretty much all I do now are clean-out shots. I don't break floor out anymore," Porretta says. "If it takes an extra 20 or 30 minutes to invert, that's fine. It's still faster than breaking out concrete."

His customers also like how quickly jobs are getting done as it means less downtime that they can't use their sewers or drains.





"I'D SAY A THIRD OF MY JOBS I WOULD NOT BE ABLE TO DO WITHOUT THE HAMMERHEAD BLUELIGHT. I WOULD NOT HAVE THE APPROPRIATE AMOUNT OF WORK TIME."

MATT PORRETTA

"I'd say a third of my jobs I would not be able to do without the HammerHead Bluelight," he says. "I would not have the appropriate amount of work time."

STANDOUT SERVICE

Reliable customer service is something else Porretta is adamant about. The people behind the machine are just as important to him as the machine itself.

"We hadn't even bought anything from HammerHead yet, but when we called and reached out the first time, a couple of their guys actually flew out to a job site we were on, helped us invert and shoot liner and they had no vested interested at that time," Porretta says. "When I actually bought one, they had one of their guys come out and unbox it with us and train us on how to use it."

That training made an easy transition for Porretta and his crew and gave them the confidence to start tackling jobs almost immediately after receiving the Bluelight. "Their trainers are ridiculously knowledgeable. They have been around it a long time so if you have an issue, these guys will know some way to help you get through it," he says. "It's about customer service for me, and I've never had a bad experience with HammerHead."

It's been almost a year now since Underground Pipe Co. has been lining with the Bluelight, something that for a while Porretta wasn't sure he'd be doing anymore. This tool is something he would recommend to anyone who wants to start lining or is looking for a different method. "Lining became fun for me when I got the Bluelight system," he says. "And it wasn't fun for me before." **c**







The most powerful and intuitive Controller



welcome to the "flexi-world"

Visit pearpoint.com/en-us or call 800.688.8094 for more information.







AFFORDABLE TRUCK FINANCING



- Same Day Credit Decisions
- Affordable Repayment Plans
- No Age or Mileage Restrictions Simple Documentation
- Seasonal Payments Available
- Deferred Payments

Call To Apply By Phone In Less Than 60 Seconds

800-422-1844



NAVITAS

SPECIALTY VEHICLES & EQUIPMENT A UNITED COMMUNITY BANK COMPANY



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



www.ippsolutions.com

o Colorado

P.O. Box 3879 Avon, CO 81620

+1.970.444.5655

5192 Bolsa Avenue, Ste 5 Huntington Beach, CA 81620

Solutions, LLC

+1.714.410 0707



Tech Perspective looks at technology-related issues and provides information and advice that cleaning professionals can apply to equipment selection and to their daily work in the field. Industry members are welcome to offer ideas for this column.

Please direct them to editor Kim Peterson, editor@cleaner.com.

A NEW STANDARD

The ASTM International published a new standard practice for cleaning vitrified clay pipelines // By Jeff Boschert

NTIL NOW, THERE was not a governing standard applicable to a collections system after it was placed in service. Early sewers depended on infiltration and other forms of flushing to dilute sewage. This infiltration was originally seen as a benefit and was the primary method of "cleaning" the sewer. Factory-manufactured joints to eliminate infiltration weren't a requested feature of clay pipe until the 1960s. Common practice was to clean pipe only when a backup made it necessary. Cleaning methods most commonly used through the mid-20th century were either mechanical tools (some form of rodding or bucket machines) or a rudimentary flushing procedure (including godevils).

In December 2021, ASTM International published the first international standard

ever to specify accepted practices for cleaning vitrified clay pipe in accordance with OSHA, Department of Transportation, CDC and Environmental Protection Agency standards (including capacity, management, operation & maintenance specifications). This industry-first standard establishes a requirement to return a cleaned pipe to at least 95% of its original design capacity.

ASTM C1920-21 Standard Practice for Cleaning of Vitrified Clay Sanitary Sewer Pipelines was developed and approved in accordance with ASTM's consensus balloting procedures, including requiring 90% approval from the members of C04 Committee on Vitrified Clay Pipe, which consists of contractors, owners, engineers and pipe manufacturers.

In the first 118 years of ASTM standards for VCP, many technical standards were developed that covered all aspects of manufacturing, quality control, testing, installation, jointing, bearing strength,



↑ The new ASTM C-1920 incorporates existing and new safety standards for municipal workers and

chemical resistance and field acceptance testing. Many of these standards were industry firsts and are still in use today.

Some pipe cleaners today, both municipal employees and contractors, consider a pipe clean once a hydro-jet nozzle has successfully traveled through the length of the pipe run. Cleaning by length traveled, without a set level of cleanliness, can result in significant levels of deposits, debris and FOG remaining within the pipe. In any pipe, the continuous presence of these materials can build up on the inside of pipe walls, solidify and coagulate with similar particles. The end result can be a partial or complete blockage of a pipeline that could lead to a sanitary sewer overflow.

A governing standard was needed in part to establish a benchmark defining a clean pipe, and in part because of evolving

EPA directives. The introduction of many newer and more powerful cleaning tools also made the development of a standard necessary. To address these concerns, Section 7.1 of the new standard plainly states, "The standard operational procedure of high-velocity cleaning a vitrified clay pipe is to safely remove all obstructions and deposits from the pipeline and restore the pipe to a minimum of 95% of operational design capacity."

"Returning pipe to this level of performance is the primary method for ensuring that an installed pipeline will perform as designed for the duration of its service life," according to Kent Carlson of the National Clay Pipe Institute. "We demonstrated that a return to 95% of operational capacity significantly reduced overflows while I was with the city of Los Angeles. That practice has saved the city tens of millions of dollars over the past several years."

The standard also clearly defines the differences between several types of nozzles:

The nature of the tools and the environment in which wastewater professionals operate make safety a necessary part of the new

C O N T | N U E D >>

- Static
- Cleaning
- Flushing
- Dredging
- Stoppage
- Rotational
- Governed rotational
- Free spinning rotational

Mechanical and hydromechanical tools are also specifically permitted under this standard, including the following:

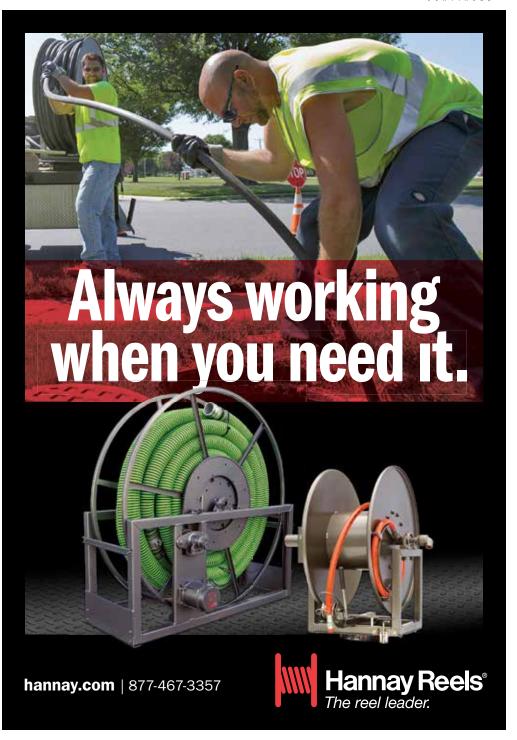
- Hydraulic cutters
- Tap cutters
- Chain/cable flails
- Rodders
- Power rodders
- Bucket cleaning machines

ALLOWA	BLE C	LEANIN	G METH	IODS
For V	itrified	Clay Pi	pelines1	.2

Hydro-Jetting Parameters		
Safe Hydro Pressure (psi)	5,000	
Jet Angle Range (degrees)	6 – 90	
Max. Nozzle Weight	125 lbs.	
Min. Jet Standoff from Pipe Wall	1/4 in.	
Jet Stationary Position	5 min.	

Mechanical Cleaning Methods

Mechanical/Power Rodders	Yes
Bucket Machines	Yes
Brushes	Yes
Chain Flails	Yes
Cable Flails	Yes
Grinders	Yes
Root Saws	Yes
Tap/Can Cutters	Yes
Hydraulic Root Saws	Yes



TECH **PERSPECTIVE**

standard. Worker safety is a focus, including defining the activities required to mitigate hazards during the sewer cleaning process. Safety standards from OSHA, CDC, DOT and EPA are an important part of the procedures established in C1920. The standard reinforces the personal responsibility of each employee and employer on any job site.

"While the procedures and the 95% minimum can be applied to any pipe material, some of the tools are not appropriate for flexible pipe materials," Carlson says.

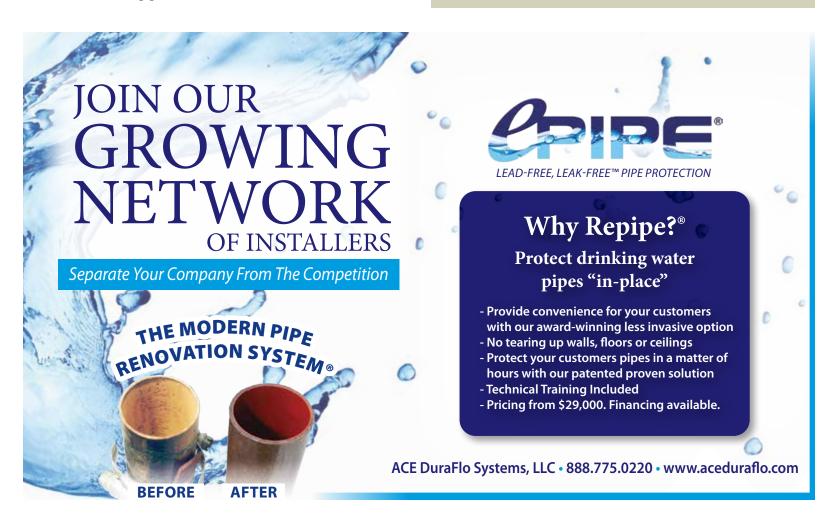
Because of the different material properties of pipe, the specific jetting pressures and mechanical tools in this standard can only be used for VCP. While the basic procedures are sound for any pipe cleaning operation, other pipe materials require greater care. They have lower jetting limits and do not permit mechanical cleaning methods. For example, the term "high-pressure waterjetting" in the VCP standard specifically refers to pressures of 2,000 psi and above. This is beyond the recommended pressure for other pipe materials. Check with your pipe manufacturer to determine the appropriate limitations for other pipe materials.

While the standard was still in review by the committee, some municipalities began to adopt this new standard as the benchmark for their cleaning contracts. The new standard creates a reasonable, uniform and consistent specification for any cleaning plan.

Scheduled cleaning reduces sanitary sewer overflows and increases the service life of any sewer while ensuring that design capacity is maintained. With the acceptance of this new standard, VCP became the only pipe material that has specific ASTM guidelines for cleaning pipe as part of the plan for long-term operation and maintenance of pipelines.

The new standard (ASTM C1920-21) is available from ASTM International (www.astm.org/c1920-21.html). c

Jeff Boschert is the president of the National Clay Pipe Institute. The NCPI is a nonprofit organization dedicated to research, education and leadership in the vitrified clay pipe sanitary sewer industry. For more information, visit ncpi.org.







MAXIMUM PRODUCTIVITY. MINIMUM FUSS.



At Minicam, we've utilized our 30 years' experience in the sewer inspection industry to bring you the innovative, expertly engineered Proteus crawler system. The simple, quick and reliable way to operate lateral pipe inspections.

Easy to use

Designed with your team in mind, quick and easy training means you can get maximum performance with minimal downtime.

Easy to adjust

Simple and swift to deploy, the easily adjustable system offers maximum flexibility with minimal fuss.

Easy to service

Increase your productive underground time with simpler servicing, this is maximum independence with minimum hassle.



Book your free demo today

minicam.us/lat150 or call (734) 744-5557

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

YOUR SOURCE FOR



Camera Reel



SeeSnake® Compact M40 **Camera System**



microDrain Reel



Flexshaft K9-102, K9-204



SeeSnake® MAX rM200 Camera System



Reporting Monitor*



CS65x Digital Reporting Monitor*



CS6xVersa Digital Recording Monitor*

CENTRAL OKLAHOMA

8% ONE YEAR FINANCING AVAILABLE! Longer lease rates also available. Call Keith for details.

BUYING A SEESNAKE?

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

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

5037 NW 10th • Oklahoma City, OK 73127

www.centralwinnelson.com

CALL 888-947-8761



SEWER CAMERA PUSH RODS



Patriot - Micro

Polypropylene ush Rod Interior: Fiberglass Push Rod Diameter: .27" Conductor Wires: 6 or Wire Size: 28 AWG Length: 100'

Patriot - Mini

Polypropylene Diameter: .37" ctor Wires: 6 20 AWG Lengths: 100', 200'

Patriot - Standard

Polypropylene sh Rod Interior: Fiberglass 20 AWG Lengths: 200', 325'

SERVICE REPAIR CENTER



Broken / Kinked Push Rods & Camera Head Rebuild & Replacement



Kinked Drain Cable / Cable Replacement & Motor Issues



Preventative Maintenance & **Pump Rebuilds**



A NEW BREED OF HYDRO JETTERS™

Motor: 23 hp Briggs & Stratton V-Twin

Fuel: Gas / Propane

Pump / Pressure: 11 GPM Pump @ 3,600 PSI

Frame & Reel: 100% Stainless Steel

Hose: 300' of 3/8" Piranha Jetter Hose -

(5K PSI Max, 12K Burst)



Patriot Sewer Equipment & Repair

6390 COLUMBUS ST., RIVERSIDE CA

888-318-9888 | www.patriot.us













LIMITLESS OPPORTUNITY

PIPEVIEW SERVICES IS ON A PATH TO OFFER EXPANDED SERVICES TO A GROWING CUSTOMER BASE

// By Giles Lambertson

THE HISTORY OF PIPEVIEW SERVICES IS A TALE OF TOO MUCH OR TOO LITTLE GROWTH.

Since 2015, owners of the Lehi, Utah, company have wrestled with how rapidly to expand the organization and its customer base. Current owner Joseph Turley now has settled on a multifaceted plan for steady growth.

The company expansion is keyed to new marketing, more services and greater customer loyalty. It's a formula for longevity as well as growth.

SEEING POTENTIAL

The company was started in 2015 by a trio of investors already involved in the construction industry in northern Utah. The principal owner, Brett Johnson, saw a need for a pipe inspection and cleaning company in fast-growing Lehi. He and his partners bought an old Vac-Con hydrovac truck and a used CUES sewer inspection camera and hung out their shingle.

Unfortunately, the shingle attracted too much business. "They wanted to keep the company small, work it as a side business," Turley says of the original company owners. "It started getting a little bigger and then got too big for them. We saw the potential for the company to grow way bigger than it was and purchased it."

"We" in this case was Joseph and his younger brother, Justin. They also were in the construction industry in 2018 when they took over PipeView Services, operating a construction cleanup firm in Twin Falls, Idaho. Today, 34-year-old Justin runs the Idaho enterprise and Joseph, 40, operates the Utah company. They collaborate on marketing and have a common strategic vision, but otherwise individually focus on managing their respective companies.

Lehi, Utah, is a burgeoning community. Its population jumped to 75,000 in 2020 from 47,000 the previous census. Technology companies like Microsoft and Adobe have supplanted the former agricultural economy. Situated south of Salt Lake City nearer Provo, Lehi is part of the bustling Salt Lake Valley ecosystem.

"Utah County is exploding right now," Turley says. "Eighty-five percent of our work is in southern Salt Lake and Utah counties, within 30 to 40 miles of Lehi." His trucks have also made runs to Logan in northern Utah and south to St. George, Utah, for example, and frequently are in and out of Park City, but Lehi remains the business core.









"Ninety-nine percent of Lehi's growth is positive," Turley says of the population boom. "It leads to more construction projects, which is more work for us. The only negative is the traffic. It takes us longer now to get from job to job."

Most of those jobs are with general contractors, some of whom are working to construct freeway lanes to handle all the valley traffic. One such project is the Mountain View Corridor, which eventually will be a 35-mile freeway in the valley, south from I-80. For Turley's company, that project means miles and miles of new roadway with numerous storm drains bisecting them, all of which need cleaning and inspection.

While such a concentration of work bodes well for the company, Turley is working to diversify his customer base. Specifically, he is targeting the valley's municipalities. To that end, the company has partnered with a Georgia firm offering the Echologics leak detection system, which can find pipe leakage early on before a pipe bursts. "We're the Utah contractor for Echologics now and specialize in leak detection on water lines."

NEW SERVICES

Other growth strategies include promotion of the brand. The original owners relied on word of mouth, but Turley started a

"THE WORK PROBABLY WAS THERE ALL ALONG, BUT WE DIDN'T HAVE THE RIGHT EQUIPMENT BEFORE. AS SOON AS WE DID, A LOT MORE COMPANIES STARTED ASKING FOR [POTHOLING]."

JOSEPH TURLEY

marketing campaign to "get the name out there. We're getting a lot more small companies that didn't even know we existed before. We had two main customers when we took over, but we have seven now and more than 50 smaller contractors that don't have the volume of work to use us as often but are good customers."

He's trying to convert some frequent users of his services into preferred customers, with exclusivity agreements that incorporate a price break for the customer. The approach is gaining traction, Turley says. "We've increased the loyalty of our customers."

The final component in the company's growth strategy is expansion of services. The pipe cleaning and inspection company first expanded into pressure testing, a natural extension of its original work. Manhole inspection, cleaning and air testing followed. Point repairs in pipelines were next up along with chemical grouting rehab work on manholes.

"They are all based on our inspection and testing work," Turley says. "They are all complementary services. When we found a





 ☐ Technician Adam Stevenson jets a sewer line before a camera inspection.

cracked pipe, for example, we wanted to be able to fix it for the customer. We want to be a one-stop shop."

Customers only need point repair work two or three times a month, Turley says, but PipeView Services crews can do it when needed. The repairs are all patches, so typically pipes aren't excavated and replaced. "Our repairs are more minimalist, like a crack along a joint." The usual repair method is insertion of a Source One Environmental or NuFlow CIP sleeve.

Another new service that has taken off is potholing. "That has really gotten big for us in the last 10 months or so, as soon as we got the right equipment to do it," Turley says. "The work probably was there all along, but we didn't have the right equipment before. As soon as we did, a lot more companies started asking for it."

Gone is the old Vac-Con rig. The "right equipment" turned out to be a pair of Vactor 2100 trucks, with 10-yard and 12-yard debris bodies and 1,500-gallon water tanks. More recently, the company bought a Vacall combo truck, configured similarly and more automated, "and we really, really like it."

The other primary pieces of equipment for inspection work are Envirosight cameras. Turley has two ROVVER X models. He swears by the camera's optics and maneuverability, but also likes the fact they are easier to manhandle than the camera system they replaced. "They're a lightweight camera, weighing maybe 30 or 40

C O N T | N U E D >>

STRONG VALUES

ipeView Services is built on values that seem foundational. Nothing fly-by-night in its core principles. A sense of permanence is conveyed, which is unusual for a 7-year-old company. Much of this is a reflection of company owner Joseph Turley.

The Idaho native began his post-high school years in Brazil, where beginning at age 19 he served two years as a missionary for the Church of Jesus Christ of Latter-day Saints. His service there was impacted in September 2001 when terrorists attacked the United States. Turley immediately decided what his next mission would be — as a soldier.

Two weeks after his return home from Brazil, the young man in early 2003 enlisted in the U.S. Army, eventually becoming a member of the elite 10th Special Forces Group. For the next six years, Sgt. Turley served in both Iraq and Afghanistan.

With similar zeal, he later pursued a quest to own a company. To prepare himself, he earned a business degree at Florida Institute of Technology while working in that state and, more recently, completed a Master of Business Administration degree from Brigham Young University.

When PipeView Services became available, he and his brother Justin purchased the company. The 40-year-old company owner's life experience is shaping his company is quite unsubtle ways. Turley is transplanting to PipeView Services crews the nononsense set of values that characterized his formative

"I am trying to create the culture here that I experienced in the military," he says. "Values training is a part of it." Values he's trying to inculcate include clear and honest communication with customers, respect for and adherence to safety rules, constant striving to achieve a high level of accuracy in all their services and being sensitive to the time requirements of clients.

"I teach the employees that when I was in the Army we did really, really difficult things, but we wanted them to be difficult to prove that we were better than anyone else at what we did. That's the attitude I want my guys to have. We want to be the go-to people for customers because we are better than anyone else at what we do. We are part of a solution. We find answers."

Turley says he feels very loyal to his employees and vice versa. Everyone adopting the attitude of "we are the best" has created the kind of bonding that he sought. "A person's job doesn't define a person, but our jobs are such a big part of our lives. My employees took the challenge personally and internalized the can-do attitude."

ALLAN J. COLEMAN SINCE 1905 -

Call us today!
Chiago 778-728-2400 Phoenix 602-638-0600

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

info@allanjcoleman.com • www.allanjcoleman.com

OLDEST NAME IN THE BUSINESS — OVER 115 YEARS OLD



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

Monitor

- · Wi-Fi and Bluetooth
- Large High Resolution 12.1" display
- Dual Battery Power two batteries can be installed for maximum runtime
- Capture images and video directly to a USB drive
- Stream or Record to an iOS or Android phone or tablet



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

FLEXSHAFT, K9-204

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

FLEXSHAFT, K9-306

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





8

CS(x)) 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

We Have RIDGID Parts!



SeeSnake® TruSense **Camera Reel**

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

SeekTech **SR-20**

SeekTech uses omnidirectional antennas, guidance arrows and an easy to read mapping display.



NaviTrack Scout®

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



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

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



Buy Online at AllanJColeman.com



pounds versus the 120 pounds of the old camera. They're just a whole lot easier to get into a pipe, into a manhole."

All the pieces of Turley's strategy have worked well enough to triple business volume in the last three years, with quadrupling almost a reality.

EMBRACING OPPORTUNITIES

In July 2021 in Salt Lake City, PipeView Services was called to check the sewer system at Rice-Eccles Stadium on the campus of the University of Utah.

A Garth Brooks Stadium Tour performance was scheduled on a Friday. Turley's crew showed up on Monday of that week to make sure the stadium's sewer lines were ready to handle the crowd. They weren't.

"We found some sewer lines that were unknown to exist at that time. They were completely blocked," he recalls. The crew spent the next three days clearing them. Tens of thousands of country music fans never knew how close they came to having their fun flushed right down the drain. "We saved the concert, and nobody knows it!" Turley says.

The company is small at this moment, with eight employees. They are a young team — most in their 20s and 30s — yet several crew members have five or six years of

↑ Joseph Turley (left) and Justin Turley are business partners as well as brothers. They collaborate on marketing and strategy, but Joseph primarily operates PipeView Services while Justin focuses on the construction cleanup firm in Idaho.

>> Allred (left) and Stevenson wrap up the inspection of a new residential pipeline.

"YOU HAVE TO HAVE
A FINANCIAL PLAN TO
GROW SUCCESSFULLY;
OTHERWISE YOU WILL
GROW YOURSELF OUT
OF BUSINESS."

JOSEPH TURLEY



experience. Morale is high, Turley says, with fast growth, new machinery, profit sharing in the works and limitless opportunity stretching out ahead.

The company is highly certified, with all operators credentialed for pipeline, manhole and lateral assessment work as well as concrete coating. "All of that means we know how to find solutions some other companies don't know how to find," Turley says.

The brothers have a plan — actually, one-, five- and 10-year plans — for building out PipeView Services into a regional company also serving parts of Idaho, Nevada and Arizona. "Once we settle in where we are happy with what we offer, we'll expand," Turley says.

In the interim, that means continuing to instill in company personnel the critical need to clearly communicate with customers at all times and master the growing suite of services. It's all about keeping a handle on the day-to-day and managing success. With a pair of business degrees under his belt, Turley feels up to the task.

"Growth is expensive. You have to have a financial plan to grow successfully; otherwise you will grow yourself out of business. It is so

FEATURED EQUIPMENT

CUES. INC. 800-327-7791

www.s1eonline.com

VACALL

800-382-8302

www.vacall.com

(See ad page 13)

904-284-4200

(See ad page 61)

www.vac-con.com

VAC-CON, INC.

easy to run out of money when you are trying to grow and expand," he says. "Financial planning is critical. Sometimes you don't even realize a financial dip is there until it's too late to react. With a good financial plan, you can see three or four months in advance and can prepare for a dip." c



www.cuesinc.com (See ad page 82) **ECHOLOGICS** 866-324-6564 www.echologics.com **ENVIROSIGHT LLC** 866-936-8476 www.envirosight.com (See ad page 5) **NUFLOW TECHNOLOGIES** 866-430-2134 www.nuflow.com (See ad page 3) **SOURCE ONE ENVIRONMENTAL** 877-450-3701





WOLVERINE

- 20/30/40/50 BHP
- Up To 2,000,000 BTUs
- Cleaning & Restoring
- Thawing & Melting
- Sterilization
- Degreasing





In 1982, a salesman decided the brand of pressure washers he was selling was substandard and knew he could build something better. Forty years later, Easy-Kleen is still producing rugged, easy-toservice machines.

Our **Dry Steam Generators** are used for a wide variety of applications. From curing, thawing, degreasing, and melting to cleaning, prepping, degassing and weed control.









1-800-315-5533 easykleen.com sales@easykleen.com

Industrial Pumpout System Pro Vac

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



IT'S NOT TOO MUCH TO ASH FOR



DRAIN CLEANING MACHINES

DURACABLE DELIVERS



unumunumunumunimunumunum







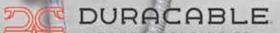
DM125

THE PROPERTY OF THE PERSON ASSESSMENT OF THE P

FOR 11/4" TO 2" LINES INCLUDES 1/4" X 37' CABLE

DURACABLE.COM

MINIMULE PROPERTY AND ASSESSED FOR THE PROPERTY ASSESSED FOR THE PROPERTY AND ASSESSED FOR THE PROPERTY ASSESSED F



ининия Зининининининининининини

800-247-4081

BUSINESS



Jason Barger

5 TIPS FOR A POSITIVE CULTURE

Create the future workplace culture you want instead of focusing on things you can't control // By Jason Barger

UCH IN THE WORLD often seems out of our We experience rapid change, political and economic uncertainty, employee shifts and the war for talent, and the "future of work" that everyone is forecasting is still being created. A lot is out of our control. However, even in the midst of all that is swirling around us, there is so much that every leader, team and organization has right in front of them that is fully within their control.

Most teams and companies just need to step back and acknowledge it. In fact, one of the greatest mental exercises for all of us these days is to recognize and name all the things that are within our control. When we can't control the weather, the economy or the latest media scandal, we still have a decision about what we will choose to give our energy to. There is always a response or action that is within our control. Every time we shift our thinking from

PRACTICE WORKING THROUGH CHALLENGES AND OBSTACLES PERSONALLY AND AS A TEAM. EVERY TIME YOU FLEX THOSE MUSCLES AND MOVE THROUGH DISCOMFORT, YOU GET STRONGER.

reactionary finger pointing, making excuses or feeling sorry for ourselves, and direct our focus and energy to solutions, gratitude and ownership over our next actions, positive ripples are felt by all around us. It models a different spirit for the path forward.

The best leaders and teams understand their role is to help positively influence the mindsets of their people in ways that give energy, hope and clarity to the path forward.

At a time when nine out of 10 employees say they would take a pay cut to work for a more meaningful culture, it's way past time for all of us to think about the role we all play in creating these meaningful cultures. The mindsets, actions and behaviors that we choose will send ripples to everyone around us.

The best leaders and cultures are intentionally co-creating their future culture together. The mindsets they fuel and the actions they take determine the direction they head.

5 AGREEMENTS TO MAKE FOR YOUR FUTURE CULTURE

- 1. Breathe Practice breathing in gratitude, appreciation and joy each day rather than the toxic air of blame, gossip, negativity and excuse making. How you begin your day often sends your mind and your actions in a particular direction. Which air do you want to breathe?
- 2. Share clear messages We all need and want clarity. Share clear messages about the direction you're heading and what you want for the road ahead. Is your mission clear? Is your vision clear? Are the values for how your team is committed to travel clear? Is your strategy for the next priorities clear? If not, your team may get trapped focusing on all that is out of their control.
- 3. Develop an intentional strategy Do you and your team or organization have a clear and intentional strategy for the future culture you are trying to create? Can you articulate the desired culture you want? Do you have support and a guide to help keep you all moving in the same direction? If not, agree to develop an intentional strategy.
- 4. Flex your muscles Practice working through challenges and obstacles personally and as a team. Every time you flex those muscles and move through discomfort, you get stronger. Resolve plus toughness is critical to help people navigate their way through obstacles, challenges, negativity, finger pointing and division. Leaders help their people and learn through adversity. Toughness isn't about being physically stronger than others, it is about being able to be vulnerable with your people and still have the resolve to find solutions together.

AROUT THE AUTHOR

5. Take ownership — Be accountable for your words, your actions, and your physical, mental and spiritual well-

being. The best leaders connect the things they say they will do with positive accountability and action. Accountability isn't a negative word; it's a positive mantra that everyone should take ownership of. The best cultures empower everyone involved to be an owner and an ambassador for the future culture they are creating.

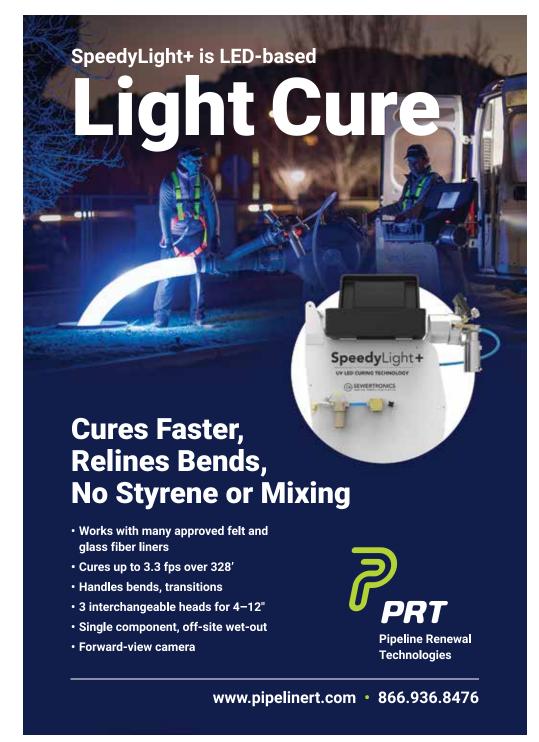
Your future culture is being created right now. It's either being dictated by all that is outside of your control or it is being intentionally led by leaders who are focused on everything within their control. The mindset, actions and agreements you make to yourself and others will dictate the path you walk.

The best cultures proactively help their people breathe and navigate through obstacles together. They make agreements to themselves and others to choose to inhale positivity and exhale negativity, blame, gossip and division. The agreements they make dictate the quality of the culture for all. The ecosystem of their culture is grown, developed, cultivated and led with intentionality, one agreement at a time.

The process for developing high-performing and engaged teams never stops and the best leaders, teams and organizations make agreements to lead an intentional strategy for how they hire, onboard, do performance evaluations, develop emerging leaders and recognize excellence. The best leaders invest in their teams and the mindsets they cultivate together.

If you're experiencing a lack of clarity, energy, passion or hope for the road ahead, it may be time to make some new agreements to yourself and with those on the journey with you. c

Jason Barger is the author of Thermostat Cultures, ReMember, Step Back from the Baggage Claim and Breathing Oxygen, as well as the host of The Thermostat podcast. As founder of Step Back Leadership Consulting, he is also a keynote speaker, leadership coach and organizational consultant. Learn more at Jason V Barger.com.









SERIOUS MACHINES FOR A SERIOUS BUSINESS







TRUCK, TRAILER AND VAN PACK **SEWER JETTERS**

- OPEN/ENCLOSED TRUCK, VAN-MOUNTED, & TRAILER-MOUNTED OPTIONS
- 12-25 GPM @ 2000-4000 PSI
- **GAS AND DIESEL ENGINES AVAILABLE**
- WATER TANK CAPACITIES 200-600 GALLONS
- ROTATIONAL HOSE REEL WITH CAPACITIES UP TO 500' OF 1/2" OR 5/8" HOSE
- 400,000 BTU BOILER & INSULATED PACKAGES AVAILABLE
- WEATHERPROOF NEMA 4 CONTROL BOX
- **DUAL REEL OPTIONS AVAILABLE**

QUALITY, SIMPLICITY, AND RELIABILITY IN ONE MACHINE



LEARN MORE ABOUT US:

GAPPELLOTTIO

by SEWER EQUIPMENT







SALES@SEWEREQUIPMENT.com. 1.877.735.4640 . WWW.SEWEREQUIPMENT.COM

2022 Cleaner

PORTABLE JETTER & CABLE MACHINE COMPANY DIRECTORY

JETTER MANUFACTURERS	MANUFACTURER MODEL	MAX PIPELINE CAPACITY	PRESSURE (PSI)	FLOW (GPM)	MOTOR/ ENGINE		ORTA TINA/HSNd	.BILI1	MOUNTED A	HOSE REEL CAPACITY	WIRELESS REMOTE CAPABILITY	HOT WATER JETTING
AMERICAN JETTER 6908 Pine Grove Rd., Knoxville, TN 37914 866-944-3569 • 865-524-4647 • (f) 865-247-5105 www.americanjetter.com andy@americanjetter.com See ad on page 77	AJ51T1840 AJ51T2040 AJ58S1140 AJ51T3040 AJ51T1850	20" 24" 12" 30" 20"	4000 4000 4000 4000 5000	18 20 11 30 18	65HP Kohler 74HP Kohler 37HP Kohler 111HP Kohler 97.5HP Kohler			X X X X		500′ 500′ 500′ 500′ 500′	YES YES YES YES	YES YES YES YES
BUCHER municipal BUCHER MUNICIPAL NORTH AMERICA 105 Motorsports Rd., Mooresville, NC 28115 704-658-1333 www.buchermunicipal.com/us/en See ad on page 57	Bucher Remote Reel								х			
CAM SPRAY 520 Brooks Rd., Iowa Falls, IA 50126 800-648-5011 • 641-648-5011 • (f) 641-648-5013 www.camspray.com • sales@camspray.com See ad on page 62	RCJ4008H LJ4008H VM4008H VM3012 TM3012H Compact 3012 SKID STB3012H STB4008H STB3012H-HOT	6" 6" 8" 8" 10" 10" 8"	4000 4000 4000 4000 4000 4000 3000 4000 3000	8 8 8 8 8 12 8 12	Honda 800CC efi Honda 800CC efi			X X X	X X X X X	200' 200' 400' 400' 400' 400' 400' 400'		YES
CENTRAL OKLAHOMA WINNELSON 5037 NW 10th St., Oklahoma City, OK 73127 888-947-8761 • 405-947-8761 • (f) 405-947-1934 www.centralwinnelson.com krjones@winnelson.com See ad on page 34	KJ-1350 KJ-1750 KJ-2200 KJ-3100	4" 4" 6" 10"	1350 1750 2200 3000	1.4 1.4 2.4 5.5			X X X			200' 200' 200' 300'		
PRESURE SYSTEMS LTD. EASY-KLEEN PRESSURE SYSTEMS LTD. 41 Earnhardt Rd., Sussex Corners, NB E4E 6A1 CANADA 800-315-5533 • 506-433-3393 www.easykleen.com • sales@easykleen.com See ad on page 44, 76	EZJ3512G-R EZJ2040D-MOBILE EZJ3820G-2-MOBILE EZJ4018	4" to 8" 8" to 20" 8" to 18" 8" to 18"	3500 2000 3850 4000	12 40 20 20	35HP Vanguard Gasoline 58HP Kubota Diesel 38 HP Kohler 58HP Kubota Diesel			X X	x	300' Up to 500' 300' Up to 500'	YES YES YES YES	
ELECTRIC EEL MFG. 501 W Leffel Ln., Springfield, OH 45506 800-833-1212 • 937-323-4644 • (f) 937-323-3767 www.electriceel.com • msperanza@electriceel.com See ad on page 28	EJ-1500 EJ-3000	4" 8"	1500 3000	1.7 4.7	1 1/2HP Motor 13HP Engine	х	X			150' x 1/4" 300'		

IETTED	MANUEACTURER	MAY	DDECCUDE	FI OW	MOTOR/ENGINE	PORTABILITY		HOSE REEL WIRELESS HOT		LIOT		
JETTER MANUFACTURERS	MANUFACTURER MODEL	MAX PIPELINE CAPACITY	PRESSURE (PSI)	(GPM)	MOTOR/ENGINE	CARRY	PUSH/PULL	MOT	MOUNTED	CAPACITY	REMOTE CAPABILITY	WATER
GENERAL PIPE CLEANERS, DIV OF GENERAL WIRE SPRING CO. 1101 Thompson Ave., Mc Kees Rocks, PA 15136 800-245-6200 • 412-771-6300 www.drainbrain.com • info@drainbrain.com See ad on page 2	JM-1000 JM-1450 JM-2900 JM-3055 JM-3080 JM-2512 Typhoon	3" 4" 8" 8" 8" 10"	1500 1500 3000 3000 3000 2500	1.4 1.7 4 5.5 8 12	1.2HP 1.5HP 13HP 16HP 20HP 24HP	х	X X X	x		150' X 1/4" 200' X 3/8" 300' X 3/8" 300' X 3/8" 400' x 1/2"		
GORLITZ SEWER & DRAIN, INC. 10132 Norwalk Blvd., Santa Fe Springs, CA 90670 877-446-7548 • 562-944-3060 (f) 562-944-7630 www.gorlitz.com • sales@gorlitz.com See ad on page 17	GO 4000 GO 3500 GO 3000 GO 1500A	10" 10" 8" 3"	4000 3500 3000 1500	8 5.5 4.5 2.1	Honda GX630 Gasoline Engine Honda GX630 Gasoline Engine Honda GX630 Gasoline Engine 2HP 110 Volt Electric Motor	x	X X X			300' 300' 300'		
HOTJET USA 14773 Heritage Crest Way, Riverton, UT 84065 800-624-8186 www.hotjetusa.com sales@powerlineindustries.com See ad on page 76	HotJet II HotJet III HotJet II Diesel XtremeFlow II XtremeFlow III	12" 24" 12" 12" 24"	4000 4000 4000 4000 4000	10 18 9.5 10 18	35HP Vanguard 70HP Vanguard (twin) 24.8HP Kubota 35HP Vanguard 70HP Vanguard (twin)			X X X X		300′ 500′ 300′ 300′ 500′	YES YES YES YES YES	YES YES YES
JETTERS NORTHWEST 16750 Woodinville-Redmond Rd. NE, Ste. C-101 Woodinville, WA 98072 877-901-1936 • 206-283-5252 www.jettersnorthwest.com info@jettersnorthwest.com	Brute 4009 CART or SKID Brute 3012 SKID or CART EAGLE-200/4010-DWR EAGLE-200/3012-DWR EAGLE-300/ 4020-SW-DWR	10" 12" 10" 12" 24"	4000 3000 4000 3000 4000	9 12 10 12 20	Fuel-Injected (EFI) Gas Kohler CH749 or Honda iGX800 Kawasaki EFI Gas 31-HP Kawasaki EFI Gas 31-HP Kawasaki EFI Gas 62-HP (31x2)		x	X X X	x	400′ 400′ 400′ 400′	OPTIONAL YES YES YES YES	Auxiliary Option Auxiliary Option Optional Optional
MONGOOSE JETTERS BY SEWER EQUIPMENT 1590 Dutch Rd., Dixon, IL 61021 877-735-4640 www.sewerequipment.com sales@mongoosejetters.com See ad on page 49	Model 123 Model 184 Model 254 Model 402 Model 747-FR2000 ECO	6" 12" 24" 36" 48"	3000 4000 4000 2000 2000	12 18 25 40 65	Gas/Diesel Options Gas/Diesel Options Gas/Diesel Options Gas/Diesel Options Gas/Diesel Options			X X X X	X X X X	200' 500' 500' 500' 1000'	YES YES YES YES	YES YES
MYTANA LLC 746 Selby Ave., St. Paul, MN 55104 800-328-8170 www.mytana.com • mytana@mytana.com See ad on page 21	M20T M20 M30 MV84	2" 4" 6" 10"	1500 1500 3000 4000	2 2 4.5 8	2HP Electric 2HP Electric 390cc Gas 800cc Gas	X	X X X			50' x 1/8" 115' x 1/4" 200' x 3/8" 250' x 3/8"		YES
PATRIOT SEWER EQUIPMENT & REPAIR 6390 Columbus St., Riverside, CA 92504 888-318-9888 www.patriot.us • service@patriot.us See ad on page 35	Patriot 1776 Heavy Duty Hydro Jetter Patriot 1776 Standard Hydro Jetter Patriot Mini Jet	8" 6" 3"	3500 4000 3000	11 6 1.4	23HP Briggs 23HP Briggs 15Amp / 110 Volt Brushless Motor	x	x x			300′	YES YES	

JETTER MANUFACTURERS	MANUFACTURER MODEL	MAX PIPELINE CAPACITY	PRESSURE (PSI)	FLOW (GPM)	MOTOR/ENGINE	CARRY	RTAB TIND/HSnd	ILITY AD	MOUNTED	HOSE REEL CAPACITY	WIRELESS REMOTE CAPABILITY	HOT WATER JETTING
SECON 6000 S Eastern Ave., Ste. 2C, Las Vegas, NV 89119 702-527-5100 sewerequipmentcompanyofnv@gmail.com See ad on page 12	SECON-Extreme Jet	8″	4000	4.4	13HP		х	X	х	250′		
SPARTAN SPARTAN TOOL 1618 Terminal Rd., Niles, MI 49120 800-435-3866 www.SpartanTool.com JShoemaker@SpartanTool.com See ad on page 84	717 727 738 Cadet	1 1/4" to 6" 1 1/4" to 6" 3" to 12" 1 1/4" to 3"	1500 3000 2000 1500	2.2 4 12 1.4	2HP Electric Gas Gas w/electric start 1.5HP Electric	х	X	х	х	115' 200' 250' 30'		
TROJAN WORLDWIDE, INC. 3306 Ella Blvd Warehouse C, Houston, TX 77018 800-392-4902 • 713-692-1140 • (f) 713-692-1053 www.trojanworldwide.com info@trojanworldwide.com See ad on page 55	C1500 C4300 TWW2000 TWW3012 TWW3034	2" 4" 6" 8" 12"	1500 4000 3000 2200 2200	2 4 10 13 23	2HP Electric 13HP Honda w/ Electic Start 29HP Kawasaki Liquid Cooled 31HP Kawasaki Liquid Cooled 50HP Cat Diesel		X	X X X		150' 300' 400' 500' 800'		YES YES YES

JETTER DISTRIBUTORS

ALLAN J. COLEMAN

5725 N Ravenswood Ave., Chicago, IL 60660 | 773-728-2400 | (f) 773-728-2499 www.allanjcoleman.com • info@allanjcoleman.com

See ad on page 41, 63

Distributor of: General Pipe Cleaners, Jetters Northwest, RIDGID

CENTRAL OKLAHOMA WINNELSON

5037 NW 10th St., Oklahoma City, OK 73127 | 888-947-8761 | 405-947-8761 | (f) 405-947-1934 www.centralwinnelson.com • krjones@winnelson.com See ad on page 34

Distributor of: RIDGID



1703 Tollgate Dr., Maumee, OH 43537 | 855-746-7323 | (f) 330-556-6688 www.dcddrain.com See ad on page 9

Distributor of: VALOR EJet and GJet



DURACABLE MANUFACTURING

300 Ashworth Rd., West Des Moines, IA 50265 | 800-247-4081 www.duracable.com • sales@duracable.com

See ad on page 45

Distributor of: RIDGID



EPL SOLUTIONS. INC.

1330 W Colins Ave., Orange, CA 92867 | 714-453-9760 www.epls-usa.com • sales@epls-usa.com

Distributor of: General Pipe Cleaners, Jetters Northwest, Spartan Tool



746 Selby Ave., St. Paul, MN 55104 | 800-328-8170

www.mytana.com • mytana@mytana.com

See ad on page 21

Distributor of: ROM



PATRIOT SEWER EQUIPMENT & REPAIR

6390 Columbus St., Riverside, CA 92504 | 888-318-9888

www.patriot.us • service@patriot.us

See ad on page 35

Distributor of: Mongoose, Harben

THE CABLE CENTER, INC.

8318 Olive Blvd., Saint Louis, MO 63132 | 800-257-7209 | 314-993-3099 | (f) 314-432-8024 www.thecablecenterinc.com • thecablecenterinc@gmail.com

See ad on page 11, 77

Distributor of: General Pipe Cleaners, RIDGID, Spartan Tool

WESTERN DRAIN SUPPLY

1140 N Kraemer Pl., Anaheim, CA 92806 | 714-632-0447 www.westerndrain.com • saleswd@westerndrain.com See ad on page 22

Distributor of: RIDGID, Gorlitz, Warthog, Piranha

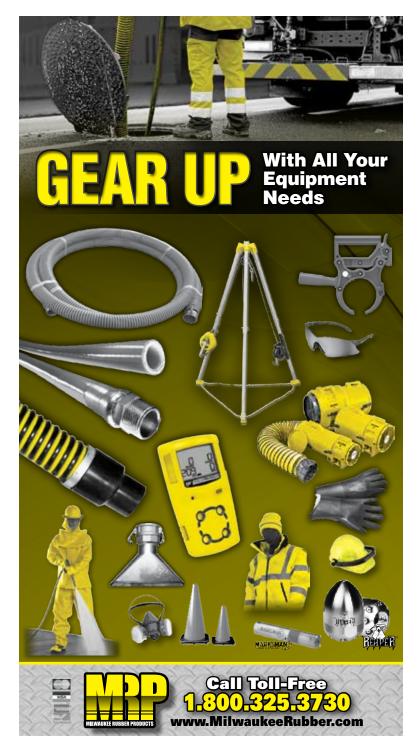
CABLE MACHINE MANUFACTURER/DISTRIBUTOR	MANUFACTURER MODEL	DRUM CAPACITY	PIPE DIAMETER	DISTRIBUTOR OF
ALLAN J. COLEMAN CO. 5725 N Ravenswood Ave., Chicago, IL 60660 773-728-2400 • (f) 773-728-2499 www.allanjcoleman.com • info@allanjcoleman.com See ad on page 41, 63				Duracable Manufacturing, Electric Eel Mfg., General Pipe Cleaners, RIDGID, Spartan Tool
CENTRAL OKLAHOMA WINNELSON 5037 NW 10th St., Oklahoma City, OK 73127 888-947-8761 ◆ 405-947-8761 ◆ (f) 405-947-1934 www.centralwinnelson.com ◆ krjones@winnelson.com See ad on page 34	K-3800 K-400 K-7500 K-50 K-60SP	100' Max 100' Max 250' Max 100' Max 150' Max	3/4" to 4" 1 1/4" to 4" 3" to 10" 3/4" to 4" 1 1/4" to 4"	RIDGID
COAST MANUFACTURING 29250 Meadowview Rd., Juction City, OR 97448 541-684-0743 www.coastmanufacturing.com sales@coastmanufacturing.com See ad on page 26	TM750 TM5800 TM50 TM38 TM25	11/16" x 150' or 3/4" x 150' 11/16" x 120' or 1/2" x 80' or 3/8" x 90' 1/2" x 120' 3/8" x 75' 1/4" x 50'	3" to 10" 3" to 8" 1 1/2" to 3" 1 1/2" to 3" 1 1/4" to 2"	
DCD 1703 Tollgate Dr., Maumee, OH 43537 855-746-7323 • (f) 330-556-6688 www.dcddrain.com See ad on page 9	The VALOR The VALOR Extreme	Up to 100' 132' x .55 double wound or 107' x 5/8"	1 1/4" to 4" 3" to 6"	
DURACABLE MANUFACTURING 300 Ashworth Rd., West Des Moines, IA 50265 800-247-4081 www.duracable.com • sales@duracable.com See ad on page 45	DM125 DM138 J-Maxx DM30 DM55 DM162 DM175 DM150	1/4" x 37' 1/4" x 37' or 3/8" x 90' 3/8" x 75' or 1/2" x 75' 11/16" x 150'	1 1/4" to 2" 1 1/4" to 3" 1 1/4" to 4" 2" to 10" 3" to 10"	RIDGID, Picote
ELECTRIC EEL MFG. 501 W Leffel Ln., Springfield, OH 45506 800-833-1212 • 937-323-4644 • (f) 937-323-3767 www.electriceel.com • msperanza@electriceel.com See ad on page 28	Model C D-5	Sectional/No Drum 100'	3" - 10" up to 200' 3" to 10"	
Thinking Anead EPL SOLUTIONS, INC. 1330 W Colins Ave., Orange, CA 92867 714-453-9760 www.epls-usa.com • sales@epls-usa.com				Duracable Manufacturing, General Pipe Cleaners, Spartan Tool
GENERAL PIPE CLEANERS 1101 Thompson Ave., Mc Kees Rocks, PA 15136-3818 800-245-6200 • 412-771-6300 www.drainbrain.com • info@drainbrain.com See ad on page 2	Super-Vee Mini-Rooter XP Power-Vee Speedrooter92 Maxi-Rooter Mini-Rooter Pro Sewerooter T-4 Speedrooter XL	50' x 1/4" or 5/16', 35' x 3/8" 75' x 3/8", 50' x 1/2" 50' x 1/4" or 5/16', 35' x 3/8" 100' x 3/4" or 5/6" 125' x 3/4" or 150' x 5/8" 75' x 3/8", 50' x 1/2" 100' x 9/16", 75' x 5/8" 100' x 3/4" or 5/8"	1 1/4" to 3" 1 1/4" to 4" 1 1/4" to 3" 3" to 10" 3" to 10" 1 1/4" to 4" 3" to 6" 3" to 10"	

CABLE MACHINE MANUFACTURER/DISTRIBUTOR	MANUFACTURER MODEL	DRUM CAPACITY	PIPE DIAMETER	DISTRIBUTOR OF
GI INDUSTRIES INC. 525 Fan Hill Rd., Monroe, CT 06468 800-724-1944 • 203-452-1944 • (f) 203-452-1943 www.giind.com • sales@giind.com See ad on page 43	Warlock (High Torque) Merlin (High Speed) Little Wizard (Portable-high speed)	Up to 150' Up to 150' Up to 150'	1/2" to 24" 1/2" to 24" 1/2" to 24"	
GORLITZ SEWER & DRAIN, INC. 10132 Norwalk Blvd., Santa Fe Springs, CA 90670 877-446-7548 ● 562-944-3060 ● (f) 562-944-7630 www.gorlitz.com ● sales@gorlitz.com See ad on page 17	GO 68HD GO 68 GO 62A HD GO 50A GO 15A	11/16" x 150' 11/16" x 150' 5/8" x 100' 3/8" x 90' 1/4" x 50'	3" to 10" 3" to 10" 3" to 4" 1 1/2" - 3" 1 1/4" to 2"	
KEN-WAY CORPORATION 930 Roberts Rd., Sparta, WI 54656 800-533-0551 ● 608-269-3752 ● (f) 608-269-8129 www.ken-way.com ● keith@ken-way.com See ad on page 48	Ken-Way Junior KEN-WAY 400	3/8 x 75′ 3/4″ x 100′	11/4" to 2" 6"	
MYTANA LLC 746 Selby Ave., St. Paul, MN 55104 800-328-8170 www.mytana.com • mytana@mytana.com See ad on page 21	M500 M661 M745 M81 M888	50° 100° 100° 125° 125°	1" to 2" 1 1/2" to 4" 1 1/2" to 6" 3" to 10" 3" to 10"	
PATRIOT SEWER EQUIPMENT & REPAIR 6390 Columbus St., Riverside, CA 92504 888-318-9888 www.patriot.us • service@patriot.us See ad on page 35				Gorlitz, General Pipe Cleaners, Trojan Worldwide, Spartan Tool
PICOTE LIFE FOR PIPES PICOTE SOLUTIONS 777 W Pinnacle Peak Rd., St. B-108, Phoenix, AZ 85027 864-940-0088 www.picotegroup.com • sales@picotesolutions.com See ad on page 12	Mini Cleaner Midi Cleaner Mini Miller Super Midi Maxi Miller	50' 107' w/ extension 82' w/ extension 97' w/ extension 132' w/extension	1 1/4" to 3" 2" to 8" 2" to 6" 3" to 8" 3" to 12"	

CABLE MACHINE MANUFACTURER/DISTRIBUTOR	MANUFACTURER MODEL	DRUM CAPACITY	PIPE DIAMETER	DISTRIBUTOR OF
SPARTAN SPARTAN TOOL 1618 Terminal Rd., Niles, MI 49120 800-435-3866 www.SpartanTool.com • JShoemaker@SpartanTool.com See ad on page 84	718 81 100 300 1065	35° 50° 100° 107° 250°	1 1/4" to 2 1/2" 1 1/4" to 3" 1 1/4" to 4" 3" to 6" 3" to 10"	
THE CABLE CENTER, INC. 8318 Olive Blvd., Saint Louis, M0 63132 800-257-7209 • 314-993-3099 • (f) 314-432-8024 www.thecablecenterinc.com thecablecenterinc@gmail.com See ad on page 11, 77				Electric Eel Mfg., General Pipe Cleaners, RIDGID, Spartan Tool
TROJAN WORLDWIDE INC. 3306 Ella Blvd Warehouse C, Houston, TX 77018 800-392-4902 ● 713-692-1140 ● (f) 713-692-1053 www.trojanworldwide.com info@trojanworldwide.com See ad on page 55	Trojan Stallion Trojan Pony Trojan Colt Trojan DC Colt DT188 Drill Machine	162' 110' 105' 105' 45'	3" to 10" 2" to 6" 1 1/2" to 4" 1 1/2" to 4" 1 1/2" to 2"	
WESTERN DRAIN SUPPLY 1140 N Kraemer PI., Anaheim, CA 92806 714-632-0447 www.westerndrain.com ● saleswd@westerndrain.com See ad on page 22				RIDGID, Milwaukee, Duracable, Gorlitz, Picote









THINGS YOU MUST KNOW BEFORE BUYING SEWER CLEANING TRUCK AND EQUIPMENT





SCAN THE QR CODE TO FIND OUT!



WE DON'T JUST SELL SEWER TANKERS

WESELL CLEAN STREETS!

BUCHER municipal

Tel. 704-658-1333
WWW.BUCHERMUNICIPAL.COM









THE GEAR

CRITICAL CARE

Pearpoint is dedicated to helping its customers inspect and maintain vital infrastructure // By Kim Peterson

T CAN BE A CHALLENGE to find the right pipeline inspection system for your operation.

If you're looking for a system with a wide range of features and capabilities, Pearpoint might have your answer. Its fully modular range of inspection systems are designed to work in the most treacherous terrain of storm and sewer infrastructure, delivering condition assessment in pipelines from 1 1/4 up to 60 inches in diameter.

George Milkowski has been with CUES for 10 years, currently serving as director of the Portable Products Group for the Americas (Pearpoint and CUES are both brands under SPX Corpora-

tion). With 20 years of hands-on experience in entrepreneurial and leadership roles including strategic planning, business development and product management, Milkowski's role now includes sales, marketing strategy, communication and business development.

Cleaner spoke with Milkowski about Pearpoint's history, its development of high-quality inspection systems, and the

≪ The new Pearpoint flexiprobe P540c inspection system integrates survey reporting, video titling, digital recording and portability in an easy-touse and intuitive package.

company's dedication to supporting its customers in working to improve and maintain the nation's infrastructure.

CLEANER: Tell us a little about the history of Pearpoint.

Milkowski: Our history spans over 30 years in the municipal, industrial, manufacturing, petrochemical and residential pipeline inspection markets. We currently have our headquarters and manufacturing located in Orlando, Florida, with over 70,000 square feet of dedicated production capacity and over 400 employees worldwide to serve and support customers. Additional facilities include Bristol, England, with stocking warehouses and service personnel in California, Georgia, Wisconsin, Oregon, New Jersey and Toronto.

CLEANER: What differentiates your pipeline inspection systems from the competition?

Milkowski: The new and advanced Pearpoint flexiprobe P540c system stands out by integrating all of the most sought-after features, including survey reporting, video titling, digital recording and portability in an easy to use and intuitive package.

The controller features a high-definition 10.1-inch TFT display, intuitive user interface and onboard Wi-Fi that allows you to share your reports via email or Dropbox. The 128 GB internal memory allows for more than two months' video recording in typical usage. The ruggedized, IP55 rated controller with built-in rechargeable battery provides reliability and usability in the most challenging environments.

EACH SYSTEM SERVES UNIQUE APPLICATIONS, BUT THE LINE COVERS A MAJORITY OF INSPECTION NEEDS WITHIN THE SEWER INDUSTRY TODAY, FROM 11/2-INCH PIPE UP TO 16-INCH PIPE.

GEORGE MILKOWSKI

>> The Pearpoint flexiprobe P540c system controller features a high-definition 10.1-inch TFT display, intuitive user interface, and onboard Wi-Fi that allows you to share your reports via email or Dropbox.

The Pearpoint flexiprobe P540c series push systems consists of the P541 plumber reels, P541 mini reel, P542 reel and the P543 reel system with two different cameras to choose from, rated for withstanding water pressure of approximately 160 psi or over 300 feet underwater. Each system serves unique applications, but the line covers a majority of inspection needs within the sewer industry today, from 1 1/2-inch pipe up to 16-inch pipe.

CLEANER: What's the philosophy behind development and innovation at Pearpoint?

Milkowski: Our focus on serving and supporting our worldwide customers started decades ago and continues today. This relentless pursuit to provide our customers with the most advanced pipeline inspection systems on the market delivers value for our customers daily. Our customers in the municipal, industrial, manufacturing, petrochemical and residential pipeline inspection markets have trusted Pearpoint to deliver best-in-class products for over 30 years.

CLEANER: Tell us about the inspection cameras and what applications they best serve.

Milkowski: We offer a fully modular range to meet all of our customers' applications. Systems have been designed to work in the most treacherous terrain of storm and sewer infrastructure, delivering condition assessment capabilities from 1 1/4- up to 60-inch pipelines.

CLEANER: What are some recommendations for customers shopping for pipeline inspection equipment?

Milkowski: We encourage customers shopping for pipeline inspection equipment to reach out to companies and request a field demonstration. We feel we have the best team in the industry to demonstrate the equipment, and customers always leave impressed by the extensive list of standard features and the value the equipment provides to allow them to do their work better and more efficiently.

CLEANER: What type of post-sale support or training do you offer your customers?

Milkowski: We understand that our customers work on the front lines supporting our critical infrastructure needs throughout



the world. When equipment goes down, our team is here to help make sure they get back up and running as soon as possible. With one of the largest service and repair teams in the industry backed by an unmatched parts inventory, we able to deliver with shorter lead times, which means less downtime for you.

CLEANER: How has pipeline inspection advanced? How do you see the industry evolving?

Milkowski: The critical nature of water and wastewater infrastructure and the growing environmental awareness of infrastructure management have created an industry with rapidly changing needs. This constantly and quickly evolving industry creates a dynamic environment requiring companies to become acutely aware and heavily engaged with customers and their critical needs. We at Pearpoint have the focus and determination to find those solutions for our customers' needs in a rapidly evolving environment.

CLEANER: What's new for Pearpoint in 2022? What can customers expect out of Pearpoint in the future?

Milkowski: As we continue to focus on our customers' needs, we remain dedicated today and into the future to ensuring our systems provide the deliverables for the needs of the rapidly changing infrastructure market. We have the most advanced condition assessment reporting to give our customers the competitive edge. Data transportability is the key to successful condition assessment and damage prevention programs.

CLEANER: What do you want your customers to think of when they hear the name Pearpoint?

Milkowski: Customer service. Customer service is our top priority. With the most dedicated sales and support teams in the industry, we will be there to support you through the life of your product — no matter what. **c**

COMPANIES NEED FICE OF IT.

Trying to handle all of that on your own can be daunting.

That's why you need COLE Media.

Useful, organized, cross-platform content is the key to a successful marketing strategy. Our content generation team specializes in custom-built, affordable solutions exclusively tailored to fit your needs.

Digital & Print Media

- » Website content «
- » Blog posts & customer education materials «
- » Press materials products, industry, personnel «
 - » Social media management & marketing «
 - » Email marketing «
- » Hired professional photography & videography «

Creative Content

- » Logo & business card design «
- » Outside creative (advertisements, billboards, digital) «
 - » Catalogs & brochures «
 - » Video editing «



800.257.7222

www.cole-media.com | info@cole-media.com

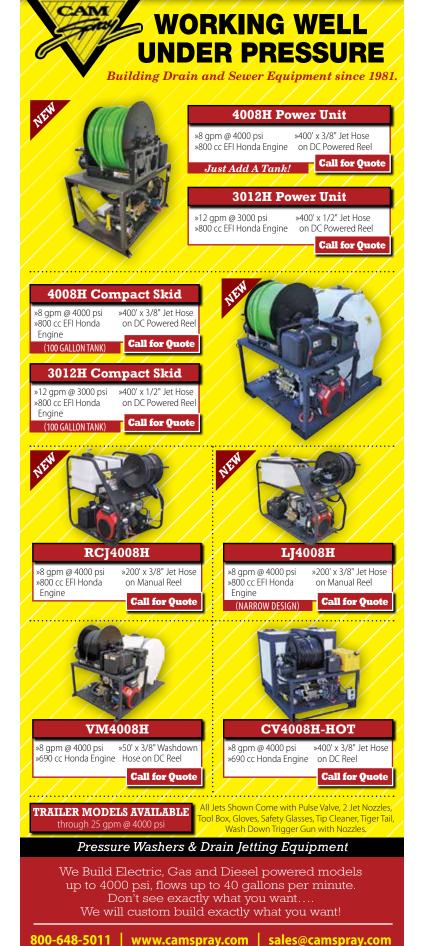


www.vac-con.com

Our Vac-Con VJ Series Jetters are powerful and simple to operate. Available in both truck and trailer-mounted applications, our jetters are built with the operator in mind. With a hydraulically driven rotating hose reel up to 800-ft in capacity and a tier 4 diesel engine all built into a low-profile for safety, there is no doubt the VJ Series has the jetter you need for your next job.

Learn more about our VJ Series Jetters online and schedule your demo today.





INDUSTRY **NEWS**

Virginia Rubber Corp. Founder Harry Ronald Selfe Dies at 86

Harry Ronald Selfe of Clifton, Virginia, founder of Virginia Rubber Corp., died at Arden Courts Memory Care unit Jan. 14, 2022, at the age of 86.

Selfe began his career in the industry as a salesman at Industrial Rubber in Maryland. In June of 1974, he left Industrial Rubber to form Virginia Rubber Corp., selling industrial hose and supplies. Working with two salesmen, he grew the business and interacted with many vendors, creating long-lasting relationships that survive today.

When his son Ron took over in 2007, Selfe came to work daily, attending the Pumper trade shows and meeting with vendors. As his memory declined and the business grew, he would still come to work daily, helping out as best he could. Cars and biking were his passions and he spent much of his time with his beloved employees talking about them.

He is survived by his wife Judy, sons Ron and Brian, Brian's wife Andy, and granddaughter Tori.

Aries awarded Sourcewell contract

Aries Industries has been awarded a cooperative purchasing contract by Sourcewell. Sourcewell is a self-sustaining government organization offering a cooperative purchasing program with more than 400 competitively solicited contracts to government, education and nonprofit entities throughout North America.

15 Neighborly brands ranked among top franchises

Neighborly brands Aire Serv, Five Star Painting, The Grounds Guys, HouseMaster, Glass Doctor, Molly Maid, Mosquito Joe, Mr. Appliance, Mr. Electric, Mr. Handyman, Mr. Rooter, Precision Door Service, Rainbow International, Real Property Management and ShelfGenie were all included among the top 500 franchises in Entrepreneur's Franchise 500. Each franchise is given a cumulative score based on an analysis of more than 150 data points, and the 500 franchises with the highest cumulative scores become the Franchise 500 in ranking order. c

HAVE A STOTZY IDEA?

Email us at editor@cleaner.com

ALLAN J. COLEMAN

SINCE 1905

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

Chicago 77/3-7/28-2400 Phoenix 602-638-0600

info@allanjcoleman.com•www.allanjcoleman.com



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

we Have RIDGID Parts!



Buy Online at AllanJColeman.com



800.521.6893 www.MightyProbe.com



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

PRODUCT FOCUS



RESIDENTIAL AND COMMERCIAL **SEWER AND PIPE MAINTENANCE**

By Craig Mandli

>> CABLE MACHINES

1 // DCD VALOR

The VALOR series of drain machines from DCD comes complete with a 1/12 hp motor and an independent inner drum that helps prevent cable kinking. It is suitable for 5/16-, 3/8-, 13/32- and 1/2-inch drain cables. The VALOR Extreme midsized machine is ideal for 3- to 6-inch drainlines, with a large drum capacity that handles up to 125 feet of drain cable with a heavyduty power feed and a gearbox mated to the motor for maximum torque output. 855-746-7323; www.dcddrain.com

2 // DURACABLE DM162

Built on a classic design, Duracable's DM162 is the upright drain cleaning machine that gives drain technicians the versatility to tackle a variety of jobs. It can be customized for work on 2- to 6-inch residential and light commercial drainlines. Driven by a 1/2 hp motor, the 10-1 gearbox ratio delivers the torque to power through the toughest obstructions. A built-in power cable feed and return, air foot pedal and ergonomic features for easy mobility make it userfriendly. The standard package comes with 80 feet of 5/8-inch hollow-core cable in an 18-inch polyethylene drum, but it's easy to swap out the reel on this machine thanks to quick-change swing bolts and a sturdy steel head bearing. 800-247-4081; www.duracable.com

3 // ELECTRIC EEL MODEL N

An enlarged drum on the Model N drain cleaning machine from Electric Eel holds 75 feet of Dualmatic or 100 feet of continuous cable. Cable is available in convenient 5-foot Dualmatic sections with self-feeding action for maximum flexibility and lower maintenance, or 1/2-inchdiameter certified music wire with genuine galvanized aircraft-wire inner core for longer life. It has a built-in slip clutch consisting of dual-fiber discs, providing overload protection for cable and cleaning tools. A cast aluminum inner drum and cable guide eliminates tangling in the drum. Its heavy-duty frame permits it to operate from either a 45-degree or horizontal position. A 1/3 hp motor delivers plenty of speed cleaning power. It is available with an optional two-wheel cart for easy transport, 10-inch-diameter wheels and an adjustable handle. It can be used to clean household drains, industrial waste lines, vents and downspouts from 1 1/4 to 3 inches in diameter. 800-833-1212; www.electriceel.com

4 // GENERAL PIPE CLEANERS POWER-VEE

General Pipe Cleaners' Power-Vee drain cleaner with automatic feed makes clearing small drainlines fast and easy. The simplified feeding system gives plumbing, drain cleaning and maintenance pros an extra hand in tight places. Just squeeze the lever and cable feeds at up to 16 feet per minute. It easily unclogs sinks, tubs and laundry drains from 1 1/4 to 3 inches in diameter, up to 50 feet long. Its automatic feed quickly adjusts to Flexicore cable diameters from 1/4 to 3/8 inch without special tools. The compact unit features quick-change cable cartridges

















for fast cable changing or cleaning. The Dyna-Thrust bearing system helps extend tool life by reducing bearing wear. Flexicore cable offers superior kinking resistance and strength with the right amount of flexibility. 800-245-6200; www.drainbrain.com

5 // GORLITZ SEWER & DRAIN MODEL GO 62HD SERIES

The Model GO 62HD Series machine from Gorlitz Sewer & Drain is a mirror image of the larger Model GO 68HD. Its smaller size, low profile and lighter weight make it suitable for getting into tight spaces or through narrow doorways and basements. It is available in a variety of reel and/or drum combinations. With a quick turn of an Allen wrench, the machine can be broken down into separate frame and reel components for easy transportation or adding an additional cable reel for extended reach. It includes a ball bearing 1/3 hp reversible motor and aluminum gearbox that develops approximately 100 pounds of torque and cleans sewer lines and drainlines from 2 to 4 inches in diameter up to 200 feet long. The machine comes equipped with a standard hollow-core 5/8-inch-diameter cable with slip-joint connectors. An electric foot switch is provided for safe operation of the machine. 877-446-7548; www.gorlitz.com

6 // MYTANA M224 HIGH-SPEED FLEXIBLE SHAFT CLEANER

MyTana's M224 High-Speed Flexible Shaft Cleaner quickly powers through blockages in 2- to 4-inch lines. It has a durable internal drive so the tech can have two-handed control of the cable and completely focus on the resistance coming from the blockage while starting or stopping the machine with the foot pedal. The SmartDrive electronic controller auto-adjusts the torque limit to the obstruction in the line. The flexible shaft cable is 75 feet long and has a slip-joint fitting so it can accept a variety of attachments. Quickly change sizes of cutting blades or attach specialized tools like the company's one-piece chain-knocker sets. A universal whip allows the user to add a tool of their choice. Transporting is easy thanks to a luggage-style handle that telescopes to 43 inches, easy tilt and wide stance wheels. The quiet unit is powered by standard household current. 800-328-8170; www.mytana.com

7 // RAPIDVIEW IBAK NORTH AMERICA MICROLITE PUSHROD SYSTEM

The MicroLite Pushrod System from RapidView IBAK North America is a lightweight, small-diameter push system with durable steel-frame construction that delivers a high-quality image for all contractors and plumbers. Fitted with 100 feet of push cable, powerful LED lighting and an auto-uprighting camera, it is designed to inspect pipelines 2 to 4 inches in diameter. The entire system is powered by rechargeable batteries and is equipped with the positionable MicroLite Command Console, which includes a 10-inch touchscreen monitor, full Windows operating system, two USB connections and recording software. 800-656-4225; www.rapidview.com

8 // RATECH ELECTRONICS PLUMBER'S HELPER JR.

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

PRODUCT FOCUS

>>> CLEANING NOZZLES

9 // ENZ USA 37 MM BULLDOG

The 37 mm Bulldog from Enz USA has been redesigned for low-flow jetter units. Operating as low as 5.5 gpm, this nozzle can aggressively remove tree roots, grease and hard deposits. It's suitable for accessing mainline blockages from a 2-inch toilet roof vent and wall clean-out. The small size allows it to easily maneuver pipe bends. An integrated oil-free braking system results in low wear and tear operation, resulting in low upkeep and virtually maintenancefree operation. This nozzle can be used with both fresh and recycled water. Flow rates start at a range from 5.5 gpm, depending on the output of the jetter unit. It is available in 3/8- and 1/2-inch connecting threads. The cleaning pipe diameter range starts from 1.5- to 6-inch pipe. 877-369-8721; www.enz.com



SewerProShop's Blue Star sewer cleaning nozzles are manufactured with optimized 3D Hydro Mechanics by ISO DIN EN 9001-2008 certified manufacturers in Germany. This enables customers to increase productivity and lower operating costs by consuming less time, water and fuel in jetter trucks. The nozzles are neither bonded nor screwed together. Rather, the technology enhances the strength and reduces the chance of failure under pressure for greater safety and optimum performance because the nozzles are made in one piece. They utilize case-hardened steel, stainless steel and ceramic nozzle inserts, providing cleaning efficiency and durability. They can also be used with recycled water. 877-864-9394; www.sewerproshop.com



11 // KURIYAMA OF AMERICA GREASE BANDIT

The Grease Bandit from Kuriyama of America is designed for use with grease traps. It has a polymer liner specially designed to handle repeated exposure to grease without damage. Additionally, it has a highly durable, high-density polyethylene outer cover designed to handle the demands of being repeatedly dragged over rough surfaces, such as parking lots. It's also crush resistant, meaning it will spring back to shape without kinking after being crushed. It has a corrugated cover, with an easy-slide helix for maneuverability, and is extremely lightweight, with a 30-foot hose length weighing 10 pounds. 847-755-0360; www.kuriyama.com

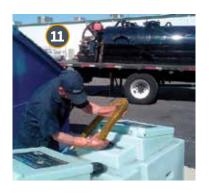
>> HIGH-PRESSURE HOSE

12 // TRANSFER OIL ECOLOGY

Transfer Oil's ECOLOGY line of jetter and mainline sewer cleaning hoses are offered in sizes from 3/16 to 1 1/2 inches and working pressures from 2,500 to 4,000 psi for the cleaning of residential, commercial and industrial sewer lines. They have a tough polyurethane jacket impregnated into braided reinforcement for high resistance to abrasion and fungal attack to increase longevity, while a smooth and seamless inner core increases water flow and reduces backpressure. All hoses have a compact and lightweight construction that allows for easier routing, less friction and increased total reel capacity, maximizing overall pump performance. All hoses are additionally color coded to industry standards as it applies to working pressures. 844-474-6737; www.transferoil.com

















>> HOSE REEL

13 // HANNAY REELS H16-14-16 PORTABLE HOSE REEL

The H16-14-16 Portable Hose Reel from Hannay Reels is lightweight and suitable for residential and light commercial use in pipe cleaning, drain cleaning and high-pressure applications. Its easy-to-use carry handle and manual rewind make it suitable for use in hardto-reach areas. Designed with a quality swivel joint, the reel can accommodate pressures up to 5,000 psi. It includes a tension brake, one twist tie to hold hose and all-steel construction. 877-467-3357; www.hannay.com

>> JET/VAC COMBO UNITS

14 // BUCHER MUNICIPAL NORTH AMERICA CITYFLEX C40

The non-CDL CityFlex C40 combination sewer cleaning truck from Bucher Municipal North America is a compact combination unit solution optimized for the city and tight residential areas. It allows a crew to work with minimum obstruction to traffic. This compact solution is efficient as its larger counterparts but also more cost-effective and easier to maneuver in narrow spaces. It includes a 5-cubic-yard tank, 492-foot jetting hose reel, Jurop RV 360 vacuum pump, and an Uraca P3-10 33.5 gpm at 2,300 psi jetting pump. 704-658-1333; www.buchermunicipal.com

15 // SUPER PRODUCTS CAMEL MAX SERIES

The versatile Camel Max Series combination sewer cleaner from Super Products comes in a variety of model configurations: 900 Dump, 1200 Dump, 1200 Eject and 1200 Wastewater Recycle. All three 1200 models come standard with a high-dump subframe, eliminating the need to back up a ramp for debris removal. The 1200 Eject model allows operators to have the only controlled way to dump safely into a 48-inch container without the need of additional containment products. The 1200 Wastewater Recycle model enables operators to clean sewers without the use of freshwater — capable of cleaning nearly 3,000 feet of sewer pipe per day and saving 60,000 gallons of water per week. Optional features offer increased performance capabilities, such as a hydroexcavation package that allows operators to jet, vacuum and excavate continuously, or a pusher axle that allows for increased legal payload. 800-837-9711; www.superproductsllc.com

16 // VACTOR 2100I

The 2100i combo unit from Vactor has been updated to include improved operator ergonomics and more control of the machine from the operator station. Boom operation has also been improved in both speed and control, easing and reducing setup time. To help manage total cost of ownership service, reminders have been added to the machine as well as a winterization reminder. Nondestructive e-stops protect both the operator and the equipment and one-button operation allows for the simplest engagement process. The unit now includes an alarm and message in the cab if the operator attempts to move the truck with either the boom or body raised, further improving operator safety. 815-672-3171; www.vactor.com

PRODUCT FOCUS

>>> PORTABLE JETTER

17 // PATRIOT SEWER EQUIPMENT & REPAIR 1776 **DOLLY JETTER HEAVY DUTY EDITION**

The 1776 Dolly Jetter Heavy Duty Edition from Patriot Sewer Equipment & Repair was designed to be very compact and easy to load and unload from a work vehicle. Equipped with a Briggs & Stratton 23 hp V-Twin engine, it weighs in at 350 pounds and generates 3,500 psi at 11 gpm. Standard features include 300 feet of 3/8-inch red Piranha jetter hose, a remote start and stop for a one-man operation, a portable 100-gallon water tank with auto-fill valve that allows you to have the volume of water needed to clean 4- to 6-inch pipelines with ease, flat-free nonmarking tires that are made of solid polyurethane foam, and an hour and battery gauge that helps keep track of the health of the battery and keep up with maintenance. 888-318-9888; www.patriot.us



>>> PUSH TV CAMERA SYSTEMS

18 // CUES MPLUS+ XL

The CUES MPlus+ XL push system is designed for easy operation and flexibility with an all-in-one setup and quick removal of the control unit, which can be used separately. It includes a coiler configuration and pan-and-tilt camera for mainline and larger pipeline applications up to 500 feet. It integrates video observation coding, observation coding interface and digital recording. The lightweight system includes large, durable wheels for portability and a balanced footprint for stability. It is manufactured to handle rigorous field use. 800-327-7791; www.cuesinc.com



19 // ENVIROSIGHT VERISIGHT PRO+

Municipalities and contractors alike depend on Envirosight's Verisight Pro+ to complete critical drain and lateral inspections quickly and accurately. Its stainless steel, 3X zoom camera captures up to 90 hours of color footage from pipes 2 inches in diameter and larger, regardless of material. It snakes through multiple bends for maximum range, and an integral tri-band sonde (33 kHz, 512 Hz, 640 Hz) works with almost any locator. The rugged welded-steel coiler comes with 130, 200 or 330 feet of pushrod. The entire system runs for six hours off internal rechargeable lithium-ion batteries, mains or vehicle power. Its controller displays real-time footage on an 8-inch LCD screen, and can operate all camera functions, generate custom text overlays with a full QWERTY keyboard, and easily off-load inspection footage by SD card or USB drive. 866-838-3763; www.envirosight.com



20 // EPL SOLUTIONS GVISION

The Gvision camera system from EPL Solutions offers a rugged, compact solution for inspecting pipelines 3 to 12 inches in diameter. Available with 200, 300 or 400 feet of pushrod, the reel has a stiff yet flexible fiberglass cable that is optimized for farther pushes through turns and bends. The color camera is self-leveling and includes a powerful, convenient, alwayson 512 Hz transmitter for quick and precise area determination. The antiglare LCD monitor delivers a clear, crisp picture even in direct sunlight. To record video inspections, connect a USB storage device directly into the USB port. The DVR outputs HD-quality videos, which can be stored and shared from a mobile device. 714-453-9760; www.epls-usa.com











21 // FORBEST PRODUCTS FB-PIC3388MT-200

The FB-PIC3388MT-200 from Forbest Products has a 1.5-inch self-leveling camera head (512Hz built-in sonde transmitter in the spring kit), 200-foot pushrod and a portable control station with a 10-inch LCD screen. It is suitable for lines from 4 to 8 inches. It has a detachable and interchangeable design that allows the user to easily screw on or off parts for upgrading or repair. 877-369-1199; www.forbestusa.net

22 // HATHORN INSPECTION CAMERAS H12

The H12 control module from Hathorn Inspection Cameras is equipped with a bright 12.1-inch VividHD LCD screen. It is powered by 18V Milwaukee (or equivalent) batteries, and available with PipeStream Wi-Fi technology, which allows the user to directly stream the video inspection to up to four devices at the same time (Apple or Android). This system also comes with a full keyboard, eight pages of text overlay, dimmable light control, record/pause to USB, and sonde control. It is usable in any light condition (including direct sunshine), providing HD picture quality, high contrast and 8X digital pan and zoom technology. Command modules are paired with Hathorn Standard reels which offer nine camera heads (straight view and selfleveling), five different reel sizes, five different rod sizes, and lengths from 100 to 500 feet. 866-428-4676; www.hathorncorp.com

23 // INSPECTORCAMERAS.COM SCOUT 3-PRO RED 35

The Scout 3-Pro Red 35, distributed by INSPECTORCAMERAS.COM, is a rugged yet compact sewer inspection camera that is easy to use and supplied with a 1-inch, self-leveling color camera head. This camera also has a 512 Hz Sonde transmitter, distance/foot counter, time and date stamp, on-screen text writing capability, and MP4 color video recording with snapshot picture function. The 115-foot heavy-duty pushrod cable provides a blend of flexibility and stiffness to allow use in a variety of pipes and conditions. The camera controls are fully selfcontained inside an easily removable control case for confined or restricted spaces. 603-267-0400; www.inspectorcameras.com

24 // MILWAUKEE TOOL M18 PIPELINE INSPECTION SYSTEM

The M18 Pipeline Inspection System from Milwaukee Tool is built around the M18 500 GB Control Hub. The hub powers both the 120- and 200-foot pipeline inspection reels and can easily be swapped between them. Both reels feature a 1080p HD self-leveling camera head and a push cable built to withstand the harsh conditions when navigating through cast iron, clay and PVC pipes. Technicians can digitally zoom and pan up to 4X, making it easier to focus on the point of interest. View, record, edit and share videos from the wireless monitor or the Milwaukee Pipeline Inspection app on a mobile device. The integrated ONE-KEY technology provides the ability to track the tool's location, manage it in inventory and lock out the tool if it is ever lost or stolen. 800-729-3878; www.milwaukeetool.com

PRODUCT FOCUS

25 // RIDGID SEESNAKE COMPACT C40 WITH CS6X VERSA CAMERA SYSTEM

The RIDGID SeeSnake Compact C40 with CS6x Versa Camera System features a 25 mm self-leveling camera head and 131 feet of flexible push cable that is suitable for small/restricted branch lines with tight turns and shorter runs in main laterals. It includes a high dynamic range image sensor, Tiltsense inclinometer and integrated TruSense technology. Its quick-release docking system makes it suitable for pairing with the CS6x Versa digital reporting monitor. An ergonomic, all-in-one solution for capturing media, the monitor has a 5.7-inch daylight-viewable display that provides a crisp, clear in-pipe image. It offers multiple mounting positions with an adjustable kickstand to suit job site conditions and can be tilted to the desired viewing angle while docked or removed for convenient placement. 800-474-3443; www.ridgid.com



26 // VIVAX-METROTECH VCAM-6

The vCam-6 HD inspection system from Vivax-Metrotech includes features such as text writer, voiceover, locatable sonde and traceable pushrod as standard equipment. The standard reel is available with 200, 300 or 400 feet of pushrod and the choice of a 1.3- or 1.8-inch selfleveling HD camera. The system includes a daylight-viewable control module with a 9.7-inch HD LCD monitor, distance counter and internal rechargeable batteries with five-plus hours of battery life. Video recording and JPG format pictures can be saved to the internal 1 TB hard drive. The control module has built-in Wi-Fi to stream live video and snapshots to the vCam Live View Mobile app. 800-446-3392; www.vivax-metrotech.com



27 // WINCAN WEB FLEX

WinCan Web Flex brings the full power of WinCan VX into the cloud, making it accessible from anywhere on any device. Building on the foundation of WinCan Web, Web Flex gives operators increased flexibility to create projects, code defects, score inspections and create custom deliverables directly from any connected laptop, phone or tablet. It's a link between the office and the field, allowing for more effective remote workflows and more productive inspections. It is also a gateway to WinCan artificial intelligence via Sewermatics. Field teams can focus on collection and limit time on roadways as the Sewermatics' AI-powered coding team processes the footage in the Web Flex media bucket. Paired with Sewermatics and WinCan VX, Web Flex ties the WinCan ecosystem together, creating a comprehensive inspection solution designed to get jobs done quickly and safely. 877-626-8386; www.wincan.com



>>> TRUCK/TRAILER JETTERS

28 // AMERICAN JETTER 51T SERIES 4020

The 51T Series 4020 trailer jet from American Jetter offers 40 gpm at 2,200 psi. Consistent power is provided by dual Kohler electronic fuel injection gasoline engines creating 76 hp, saving up to 20% fuel, while avoiding problems associated with carburetor engines. Low water shut-off prevents pump damage if the optional 600- to 800-gallon tanks run low. The main reel holds up to 800 feet of 3/4-inch hose, and speed control allows for precise cleaning in both directions. A long-range wireless remote option allows for water ON/OFF, engine shutdown and hose reel control. The heavy-duty square tubing trailer offers standard electric brakes on both axles. 866-944-3569; www.americanjetter.com











29 // CAM SPRAY CV SERIES

The CV Series cargo van drain jet from Cam Spray offers diesel-fired hot water for added jetting power. Several models are available up to 4,000 psi and 12 gpm. A triplex plunger pump with power pulse valve provides an extra push when needed. Air purge and recirculation to the tank are provided for freeze protection. It comes with a 5-gallon fuel tank, heavily built, powdercoated frame with full deck, a 130-gallon water capacity, a 12-volt DC reel with 2-1 clutch drive allowing for free spooling and a powered hose return. It's controlled by a push button or foot switch. Accessories include a set of four nozzles, storage box, tip cleaner, tiger tail, safety shield, rubber gloves, high-visibility safety vest, 50-foot washdown hose and trigger gun. 800-648-5011; www.camspray.com

30 // EASY KLEEN PRESSURE SYSTEMS GROUNDHOG JETTER

The Groundhog Jetter from Easy Kleen Pressure Systems is designed to blast through clogged pipes with a 35 hp Vanguard engine providing 12 gpm at 3,500 psi. It is compact and can be transported in a pickup truck or van, with trailer options available. It includes a fully welded, powder-coated 2-inch steel tube frame, drilled and tapped, which houses the 200-gallon water tank. It comes with an accessible breather and 10-gallon fuel tank, General Pump with gearbox drive, 12-volt-powered hose reel with 300 feet of 3/8-inch jetter hose, hose guides, a super swivel and foot-pedal control, emergency shut-off valve and hour meter. Optional remote features include hose reel-in, motor off/speed control and pressure on/off. 800-315-5533; www.easykleen.com

31 // GAPVAX G7 JETTER

The G7 Jetter from GapVax is built on a heavy-duty, contractor grade NATM-certified trailer. Several engine choices, including Cummins diesel, are certified and sized appropriately for the water pump combinations. The unit's hose reel is hydraulically powered with a direct-drive gearbox and variable-speed control. The hose reel offers a 3-foot (curbside) articulation from center of bearing, 180-degree rotation and a capacity of 800 feet of 3/4-inch jetter hose. The polyethylene plastic water tank is available in 300-, 500-, 600- or 700-gallon capacities. The water pump is center-fed for optimum performance. The controller is interlocked with safety features that will show low fuel levels and low water, and is capable of a complete engine shutdown in an emergency. 888-442-7829; www.gapvax.com

32 // HOTJET USA DRAIN LINE CLEANING BUSINESS PACKAGE

The HotJet USA Drain Line Cleaning Business Package features the HotJet II jetter that offers 10 gpm at 4,000 psi with a 35 hp Vanguard engine (made by Toyota). Including everything needed to clean drains from 2 to 12 inches with hot or cold water, the package comes with a choice of a handheld or roll-around electric jetter, inspection camera and locator. This package also includes safety and operational training at the company's facility in Salt Lake City. A coldwater drainline cleaning business package is also available. Customized vacuum/jetter combo units and jetting equipment build-outs for trailers, skids, trucks and van installs are also available. 800-624-8186; www.hotjetusa.com

PRODUCT FOCUS

33 // JETTERS NORTHWEST EAGLE-200/4010 MID-SIZE TRAILER-JETTER

The Eagle-200/4010 Mid-Size Trailer-Jetter from Jetters Northwest produces 10 gpm, 4,000 psi performance. It is an up-rated version of the previous 4009 (9 gpm) model. Like the Eagle-200/3012 model (12 gpm and 3,000 psi) the 4010 comes with a Kawasaki 31 hp fuelinjected/liquid-cooled engine, on an industrial-duty trailer with brakes for safety and a beefy A-frame tongue allowing it to be towed when full of water. Flat-top fenders allow for additional mounting surface and standard aluminum wheels give a sharp appearance. The 4010 and the 3012 models both feature a Super-Duty Triplex UDOR U.S.A. pump, 12-volt powered hose-reel (with adjustable reel speed), 200-gallon water tank, large 60-inch lockable tool storage bin, 400foot jetting hose on the main 12-volt reel, 100 feet of 3/4-inch water-supply hose on a second reel, adjustable pulsation control and four jetting nozzles. A wireless remote control is a popular optional upgrade. 877-901-1936; www.jettersnorthwest.com



34 // VAC-CON VJ SERIES

The VJ Series of jetters from Vac-Con is designed to provide operators with an economical, portable and powerful system in two configurations. The VJ375 offers a 375-gallon water capacity on a single-axle trailer. The VJ750 boasts 750-gallon water capacity on a tandem-axle trailer. Standard features include Tier 4 diesel engine, cold-weather recirculation and air purge system, hydraulically driven hose reel and a reel-mounted, weatherproof electronic control panel. Units are available in multiple water pump pressure and flow configurations. Optional features include gas engine, wireless remote and an antifreeze tank system for cold-weather use. 904-284-4200; www.vac-con.com



35 // VACALL ALLJET

Vacall's AllJet truck-mounted jetter is an easy-to-operate, efficient sewer root maintenance machine. The hydraulically powered triplex plunger water pump is capable of 87 gpm at 2,000 psi with other power options available. The hose reel telescopes out 54 inches from a retracted position and swivels 200 degrees to properly direct the 600-foot jetting hose. It uses a single-engine PTO design, and a 1,600-gallon UV-resistant polyethylene water tank. Operator-friendly features include four locking aluminum tool storage cabinets, a rearview camera, roll-up doors and a washdown system, with options including LED lighting packages, an extendable rear canopy and a heating and insulation package inside the allaluminum rear compartment. 800-382-8302; www.vacall.com c



Eat. Sleep. Rehab Pipes. Repeat.

Cleaner

It's your magazine. Tell your story.

Send your ideas for future articles to editor@cleaner.com









Call (888) 258-9359 www.pipeliningsuppliesusa.com



FEATURED **IN AN ARTICLE?**





Make the most of it!

Reprints available:

Hard copy color reprints Electronic reprints



Visit cleaner.com/order/reprint for articles and pricing

PRODUCT NEWS



PRODUCT SPOTLIGHT

BIG DRAIN CLEANING POWER IN A SMALL PACKAGE

By Craig Mandli

Clearing sink, bathtub and shower drains requires a cable machine with enough power to blast through blockages. However, those drains are often found in tight quarters, which can make maneuvering large cable machines into place especially difficult. That's why Duracable's well known "sink machine," the DM138, is so popular.

The DM138 sits flat on the counter or floor, or can tip back and operate in the vertical position to clear sink lines or bathtubs full of water. According to Jamie Surovy, director of manufacturing with Duracable, it is one of the smallest drain cleaning machines available, but has enough power to cut through any tough clog that is found in residential plumbing lines, most often a sink.

"The front bearing mount and pillow-block-style bearing increase the stability and toughness of the machine, while adding extra stability for the drum and cable," he says. "The front bearing also allows the drum to be self-aligning. The machine can be used vertically or horizontally, and also comes with our guide tube which protects the customers' surfaces while the machine is running."

The DM138 features a 1/4 hp motor which operates at 230 rpm with an air foot pedal. The full package includes two cable drums: a 14-inch enclosed polyethylene reel with 90 feet of 3/8inch drain cable, plus a second 8-inch enclosed polyethylene reel with 37 feet of 1/4-inch cable. It is ideal for cleaning plumbing pipes from 1 to 3 inches in diameter. The two cable reels can quickly be easily switched, making it adaptable for any residential job and



giving operators more flexibility when choosing drain cable size and length. The DM138 measures in at a tidy 20-by-14-by-15.25 inches and weighs 22.5 pounds, making it easy to move around and fit into even the smallest workspace.

Hollow-core drain cable is the standard style included with all machines, but specialty cable can be substituted. Surovy says Duracable's sales reps can talk users through which cables will work best in their machine. DuraFlex cable is known for its longevity and repairability. If the cable kinks or breaks, it's easy to cut out the damaged part and splice the two ends back together.

"We have heard great things about this from the field," Surovy says. "The versatility of this machine, being lightweight and, most important, being durable and tough are what we hear about most." 800-247-4081; www.duracable.com

1 // SPARTAN TOOL VISION APP

Spartan Tool's redesigned Vision app is a user-friendly platform that puts a wide range of options and features at an operator's fingertips. The app is designed to work with Spartan Tool's Traveler series of cameras and delivers the ability to effortlessly control the camera within pipes. Users can manipulate the camera view, and the app also offers several features that allow users to share findings with others. The new PDF Report Builder is optimized for tablet and smartphone use. Reports are easy to customize to user needs and can be quickly completed on site and sent to customers through the app. The Spartan Vision app is available for iOS and Android devices. 800-435-3866; www.spartantool.com











2 // GENERAL PIPE CLEANERS FLEXI-ROOTER 100 DRAIN CLEANER

General Pipe Cleaners' new Flexi-Rooter 100 offers a stronger flexible shaft with the strength to cut through roots in 4-inch lines, yet is flexible enough to negotiate 2-inch lines. An integral variable-speed motor with foot pedal allows for the use of both hands to safely guide the flexible shaft into the line. A two-part cleaning array combines unique ClogChopper cutters with carbide chain cutters for a formidable combination. The shaft spins more than 10 times faster than drum machines. At speeds up to 2,200 rpm, cutters quickly grind up stoppages and scour pipe walls clean. The shaft is safely protected inside a sheath so it's easy to handle, as there are no spinning drums. Flexi-Rooter 100's durable metal frame includes 10-inch wheels and a folding handle to facilitate transport to and from jobs. A safety slip clutch helps protects the field-repairable flexible shaft. 800-245-6200; www.drainbrain.com

3 // MILWAUKEE TOOL PERFORMANCE-DRIVEN APPAREL

Milwaukee Tool enhances its lineup of workwear with the new Hybrid Work Tee, WORKSKIN Performance Fitted Hat, WORKSKIN Performance Neck Gaiter and color expansion of the WORKSKIN Lightweight Performance Shirt. Built to protect against the elements, the Hybrid Work Tee offers UPF 50 protection for those warm days on the job site and moisture-wicking fabric to stay dry while working. The WORKSKIN Performance Fitted Hat prepares users for high activity jobs while drying fast and staying cool. Constructed from a Milwaukee Tool-designed moisture-wicking fabric with an adjustable rear drawstring, the WORKSKIN Performance Neck Gaiter dries fast to keep users cool. 800-729-3878; www.milwaukeetool.com

4 // VAC-CON PRO HOSE REEL

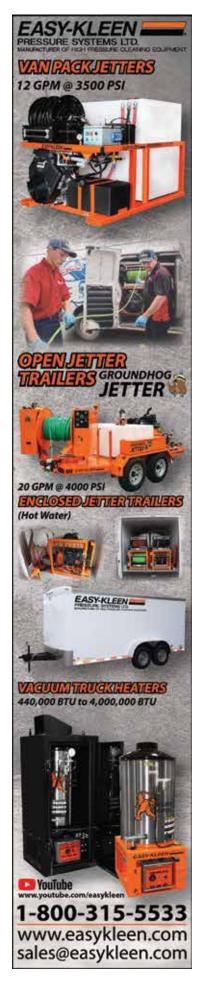
The PRO hose reel from Vac-Con offers 16 feet of traversing motion across the front of the machine and 180-degree articulation for 69.6-square-feet of working coverage. With 115% more coverage than the standard Vac-Con articulating hose reel, this flexibility allows operators access to manhole and lift station locations without having to park the unit precisely over the job site. A front-mounted camera system and companion ARC visual screen provides 180 degrees of visibility to the driver in the cab with a generous range to park the unit and still have access to the manhole. Adjustable motions allow for any operator to comfortably use the system. The control panel features 4 rotational positions, an 8-inch vertical adjustment and an arm rest at the joystick. The PRO Reel can accommodate up to 850 feet of 1-inch hose. 904-284-4200; www.vac-con.com

5 // SUPERIOR 5-E ELECTRIC SMOKE BLOWER FINDS FAULTS, ODORS, LEAKS AND INFLOW

When testing laterals, building plumbing, or pumping or inspecting septic tanks, smoke testing is a quick and effective way to find plumbing faults that lead to odors, leaks and inflow. Superior Signal Company's Superior 5-E Electric Smoke Blower easily connects to any clean-out, port or vent to smoke test the entire system in just a few minutes. The Superior 5-E Electric smoker gently pushes smoke throughout a system to find cracks or leaks and quickly identify problems. Made in the U.S., the durable Superior 5-E Electric smoker is competitively priced and comes complete with 8 feet of industrial grade hose. Used with Superior Smoke Candles, this costeffective solution is ideal for hard-to-find odors, leaks and other faults in commercial, residential and municipal facilities. 732-251-0800; www.superiorsignal.com/CL5 c



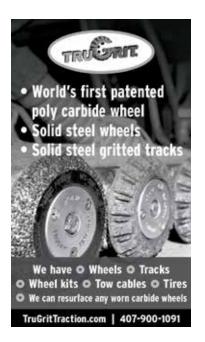
















More Stories at Cleaner.com/featured See what's not in print!













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)

BUCKET MACHINES

2001 & 2012 Sewer Equipment Bucket Machines, Like NEW. Contact: usedsewerequipment@gmail.com (C05)

BUSINESSES

Home-based Handyman Service for sale. Established in 1957.Located in Chester, California. Assets being sold include: 2 service vehicles/all tools/inventory/client list. \$120,000. Call Mark Smith-Summit Business Advisors:775-229-3913. (C05)

Roto-Rooter Franchise for sale in Lubbock Texas. 5 Trucks with drain cleaning equipment, jetters and Inspection cameras. We do plumbing along with the drain cleaning. Been in business for over 30 years. Owner ready to retire. Please contact Steve for more details. Serious inquiries only. 806-548-4885.

Portable toilet business for sale in central Kansas. 3 trucks, holding tanks, 12 handicaps and several trailers. No realestate in included but could buy or rent. Averaging 175 to 225 toilets' out on site year round, plus special events. 250+ toilets and approx. 50 more in need of minor repairs. Average Gross \$300,000.00 which is the price for the business. Call or text 620-664-8004 for more information.

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

1999 International with Vac-Con Combo Cleaner. Well maintained good truck NEW ENGINE in chassis. Working condition John Deere engine on cleaner 8-yard debris body 1,200-gallon water tanks 600' 1" jetting hose- 8" suction near SLC UT 10,494 Hours, 56,756 miles. \$55,000 OBO Brad 307-747-3937. brad@western-precision.com

JET VACS



1995 Ford L8000 2110 Vactor 8.3L Cummins engine manual 5 speed transmission 10 Yard debris body with pump off 1300 gallons of fresh water 600 foot hose reel Fan unit with 3.9L John Deer engine cold weather recirculation. Call Steve with any questions. \$25,000

248-345-5960



2005 Sterling Lt7500 Caterpillar 300hp Allison automatic transmission. 170,157 miles and 3579 Hours. Ex municipal truck 824-18 pd blower unit 15-yard debris body with 1,500-gallons of fresh water 80-gpm 2.500psi, 600-feet of 1 inch hose cold weather recirculation stainless steel micro strainer and accumulator. \$89,000

Call Steve with any questions at 586-344-9718

C05

COS



2015 Freightliner Alison Trans Vac Con 12 Yd. Combo Jet / Vac selling price \$99,999. 600' 1"Jett hose 2500 psi 80 GPM 8" PD Vac System pump off for more information and photos call or email.

> (904) 284-2141 flpipetec@aol.com

2022 Freightliner 108SD cab & chassis with VACALL AJV1215 combination j/vac with 12 cubic yard debris and 1,500-gallons of water with a Roots 824 blower & general MWSR50 water pump. www. VacuumSalesInc.com (888)VAC-UNIT (822-8648) (CBM)

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)

2021 Freightliner 114SD cab & chassis with VACALL AJV1215 combination j/vac with 12 cubic yard debris and 1,500-gallons of water with a Roots 824 blower and general MWSR50 water pump. www. VacuumSalesInc.com (888)VAC-UNIT (822-8648) (CBM)

2007 Vac-Con V390LHAD Combination Cleaning Truck and 2001 Sterling LT7501 Vactor Model 2110-J4F Combination Cleaning Truck. Both trucks in good running condition. See details at www.empireequip.com. Contact Craig at 714-639-8352. (C05)

Pre-owned Vactor 2100 combination jet/ vac unit with PD blower and 10 cubic vard debris tank. Mounted on a 2002 International 7400 cab & chassis.www.Vacuum-SalesInc.com (888)VAC-UNIT (822-8648) (CBM)

JETTERS – TRAILER



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 \$79,000 no tax.

Call Ed at 480-776-9605

CBM



The HotJetil® is a best-selling hotand 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. Priced at \$39,995 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.

> 800-624-818 sales@hotjetusa.com www.hotjetusa.com



Features: 4,000 PSI @ 20 GPM 4,000 PSI - 20 GPM (run dry)only 728 Hours of use 50 HP Deutz Diesel Engine 500' 1/2" Hose with Safety Leader Single Axle Trailer - 6.000 lbs GVW300 Gallon Water Tank Hydraulic Driven Hose Reel Anti-Freeze System Beacon Light A.B.S. Toolbox1 Standard Nozzle Large Storage Compartment

.....\$27,500.00

Please call 704-361-1932 Jay.



Meyers RamJet. 65gpm @ 2,000psi. Meyers pump 579 hours on machine.\$14,000 OBO or possible trade.

608-835-7767

2020 Spartan Soldier Trailer jetter with basic nozzle kit and Warthog. 3000psi 12 GPM 350 1/2" hose 58 hours on unit. \$20,000 obo contact Tyler: relyt150@ gmail.com (C05)

C05

JETTERS - TRUCK



2008 IHC Vactor RamJet. Cummins 385V. Allison 4500RDSP. Stainless Tank. 2,500 Gal. Capacity, Former Municipal Tk, 105,214 Miles.

Auto Wholesalers. Hollidaysburg, PA 814-696-1000 cos

PIPELINE REHABILITATION



Relining UV System. For small diameter pipes. 4 to 8 inch with a reach of 160ft. Works really well. Asking 65000.00 Please call for more info.

Located in SD 605-216-0860

C05

POSITIONS AVAILABLE

Outside Sales Representative for a leading nozzle company, the New England/East Coast and Northern California/Northern Pacific area. Send Resume to info@ nozztequsa.com 866-350-0624 (CBM)

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.vsirentalslic.com (CBM)

SERVICE/REPAIR

Dynamic Repairs - Inspection Camera Repairs: 48-hr. turn-around time. General Wire, Ratech, 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



1997 GMC 2500 4x4. 66,565 miles. 5.7L. 1208 PCU. Pro Data 2000. ONAN 6500 generator. Pan and tilt camera with tracked transporter. \$24,000 OBO or possible trade.

608-835-7767

CBM

USED IBAK Panoramo Equipment Available - Contact: usedsewerequipment@gmail.com (C05)

IBAK PANORAMO SI portable skid. Used. Ready to work. CONTACT: usedsewerequipment@gmail.com (CO5)

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

CAMERA OPERATORS, STOP SPINNING YOUR WHEELS IN GREASY PIPE! Aftermarket 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)



2017 Ford E 450 auto trans gas Envriosight Laser Profiling CCTV WinCam Software AC Heat top air portable 1,000 cable reel tractor lift camera. Selling Price 155,000 for additional info or photos

> email flpipetec@aol.com (904) 284-2141

C05

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)

WANTED

We are looking to purchase Aries Wolverine Gen 1 cutter, or Prokasro Electrical cutter in good working condition. We prefer to have the 1.7 electric self-propelled robot from DN130 - DN400, and the 4.0 electric robot self-propelled from DN200 - DN600. The cutter system should include a Camera, wheels, cutting motors, and all other accessories. Spares and the 4th axis are good to have. We are located in Edmonton, AB, CANADA. Please contact us via email at ha@infrahydro.com, or at 780-667-8702.

(C05)

WATERBLASTING

A Consulting, Designing, and Fabricating Manufacture of Jet Moles, Nozzles, Fittings, Custom drilling for 30 years. Lance Langan 330-391-0246 llangan@zoominternet.net Made in USA. (C05)

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)

THE CONVERSATION.
THE CAMARADERIE.
THE COMMUNITY.

FOLLOW US













"I LET THEM KNOW THAT JUST

BECAUSE THEY DON'T GET A COLLEGE DEGREE

AND WON'T WEAR A SUIT AND TIE DOESN'T MEAN THEY CAN'T MAKE A DARN GOOD LIVING.

LOOK WHAT PLUMBING HAS DONE FOR ME."

JULIUS VOSS

Julius Voss Plumbing & Construction Inc.

CLEVELAND, MISSISSIPPI



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

Subscribe for FREE at cleaner.com









With up to 1,000 hp and the industries greatest range of options, Hammelmann will meet your UHP demands with ease.

Our **sound damped** units improve overall working conditions, minimize damaging noise, and gives you access to the widest range of sites!

Rental equipment available: La Porte, TX – Miamisburg, OH

Contact us about rental options or to configure your perfect system Hammelmann Corp. www.hammelmann.us mail@hammelmann.com Phone: 1-800-783-4935 436 Southpointe Drive Miamisburg, OH 45342

Phone: 1-281-842-9450 402 HWY 146 South La Porte, TX 77571



Call us for a no-obligation on-site demonstration! 1-800-446-3392

vCam Pipe Inspection Cameras, the clear choice for video inspection.

Capture images and video on a tablet or smartphone.



1080p High Definition

detailed HD. (vCam-6)

Capture and record in crisp

Full HD 1080p

Locatable Sonde 512Hz, 640Hz and 33kHz frequencies.



Locatable Pushrod Trace the path of the pipe.



Multiple Media Choices Built-in 1Tb Hard Drive with







Inspect from 2 to 14" lines Mini system - 2 to 4" lines Standard system - 3 to 14" lines



Full-featured

Simple to operate

Local training and support

vCam-6 HD

Standard System vCamMX-2 Mini System

Visit our YouTube channel to see actual videos.

Multiple Viewing Options HDMI Out, Audio and Video out ports. Video in (perfect for pole cameras)











Li-ion battery

Multiple Power Options

4 to 6-hours from internal

3251 Olcott Street

Santa Clara, CA 95054, USA

Tel: +1-408-734-1400 Fax: +1-408-734-1415

Email: SalesUSA@vxmt.com www.vivax-metrotech.com





Call today for a free demo!

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



For the #1 Choice Manufacturer of Custom-Built industrial and municipal vacuum equipment, GapVax has what you need! Air Movers, Jetters, Hydro Vacs, Combo JetVac, Recycle JetVacs, Skidmounted vac units, Parts and accessories & more! Check out gapvax.com for more information and keep up to date with us on social media!



