FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS (B)

OCTOBER 2020 CLEANER.COM

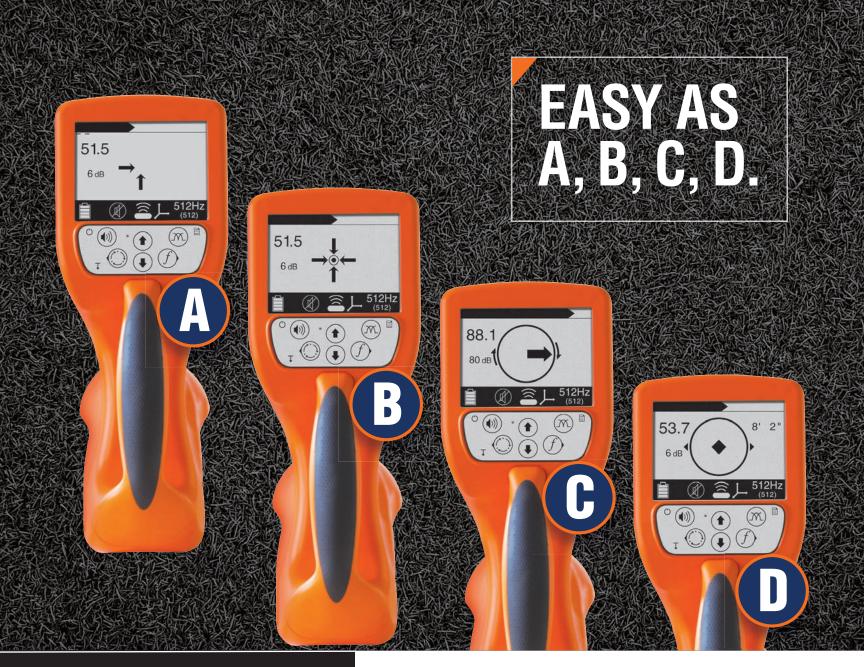
SAFETY FIRST / 24

MONEY MANAGER / 42

INDUSTRY NEWS / 70

GROWTH FOR GPRS / 12





Hot Spot®Pipe Locator



MADE IN U.S.A. © 2020 General Wire Spring

The Gen-Eye Hot-Spot® pipe locator makes locating easy. Its total field antenna array and on-screen icons lead you right to your target, without the long learning curve.

Whether you're an experienced pro or a first time user, you can quickly locate inspection cameras, sondes, active power lines and utility lines with pinpoint accuracy.

The Hot Spot is the industry's most rugged locator. It's dust and dirt proof, water resistant and never too "delicate" to get the job done.

Call the Drain Brains® at 800-245-6200, or visit **www.drainbrain.com/hotspot**













ON THE COVER

Dustin Schlachter, co-owner of Advanced Rehabilitation Technology, thrives on challenging, unique jobs. But he is equally devoted to the customers hiring ART for more routine pipeline inspection and repair projects. His company makes it a priority to be honest and fair with its customers, and strives to continue growing its presence in all the states it currently serves. (Photography by Amy Voigt)

COMING IN NOVEMBER

Hydroexcavation & Industrial Jet/Vac Services, Sewer Nozzles

MONEY MANAGER: Prosper even during a crisis

TECH PERSPECTIVE: Aggressive jetting can damage pipes

MONEY MACHINES: Lining vertical stack pipes in Hawaii condos

CONTENTS October 2020

FEATURES

12 Profile:

Plan of Attack

GPRS continues adding inspection services to empower project managers and further growth. By Olivia Singer

30 Profile:

A Quick Cure

Ohio's Advanced Rehabilitation Technology leverages high-tech lining materials to win bids for unusual projects.

By Mary Shafer

38 PIPELINE REPAIR AND REHABILITATION DIRECTORY

45 >> SPECIAL SECTION << Rehab & Relining

DEPARTMENTS

8 From the Editor:

Taking Stock

It's important to check in with your business – and yourself – to see if adjustments need to be made. By Kim Peterson

10 @cleaner.com

Be sure to check out our exclusive online content.

20 Money Machines:

Built to Last

With good maintenance practices, Speedrooter drain machines keep on performing for Modern Plumbing. By Ken Wysocky

24 Safety First:

Use the Right Tools

Neglecting to use basic small tools and PPE the proper way can cause just as much injury as more obvious work hazards.

By Giles Lambertson

42 Money Manager:

Fleet Protection

Commercial vehicle insurance is getting more difficult to obtain, but it's important to put in the work to insure your fleet.

By Joan Koehne

64 Best of the Decade

Better Business: 5 Marketing Trends You Need to Know In the ever-changing world of marketing, several current trends could have a positive impact on your sewer and drain business.

By Judy Kneiszel

66 Product News

Product Spotlight: Combination truck's water recycling capabilities keep crews on the job By Craig Mandli

70 Industry News







Extreme Versatility

Launch from mains 6-80" in diameter-just swap wheels and launch tubes tool-free.

Pushing Power

Patent-pending belt-drive is easy to clean and won't shred your push rod.



Octraction™

Navigate past obstacles with steerable 8-wheel drive to reach distant launch sites.



Enhanced Visibility

Get the full picture with three cameras: pan/tilt/zoom aim, pan/tilt launch, and rear-view.

LATERAL LAUNCH

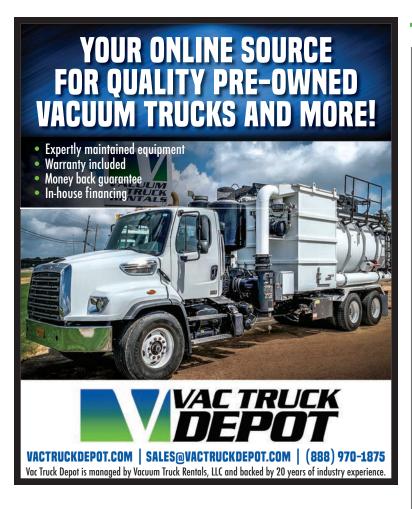
Whether you're locating cross bores, doing pre-acceptance inspection or finding illicit flows, lateral launch is all about pushing past obstacles to maximize productivity.

Meet the redesigned ROVVER X SAT II, built to give you every performance edge while maximizing your uptime and ROI.

crawl launch **98**fpm **23**fpm speed 984 distance

(866) 936-8476 • www.envirosight.com/sat





FOR DRAIN AND PIPE CLEANING INSPECTION AND BEHABILITATION 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.

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

 $\ensuremath{\texttt{©}}$ 2020 COLE Publishing Inc.

No part may be reproduced without permission of the publisher.

ADVERTISER INDEX - October 2020

ALLAN J. COLEMAN SINCE 1905
Allan J. Coleman Co
Cable Center, The22, 43
CAM
Cam Spray16
CENTRAL OKLAHOMA Winnelson
Central Oklahoma Winnelson28
S. Rection
Coast Manufacturing77
CUSTOM TRUCK ONE SOURCE.
Custom Truck One Source
CUES 🦏
CUES
O DRAINCABLES direct
Draincables Direct
DURACABLE Duracable Manufacturing Co35
EASY-KLEEN
Easy Kleen Pressure Systems Ltd
Elliott Equipment Co
E (p)virosight
Envirosight, LLC5
enz usa inc.
Enz USA, Inc
Forbest Products Co
GapVax
GapVax, Inc79
General Control of the Control of th
General Pipe Cleaners/General Wire Spring
GI INDUSTRIES
Gl Industries, Inc
Gorlitz Sewer & Drain, Inc23
HammerHead Trenchless53
Hy-Flex Corporation
V
Ken-Way Corporation69
Logiball, Inc57, 61
MAXLINER
MaxLiner USA51
MRP
Milwaukee Rubber Products, Inc77

MyTona
MyTana LLC21
nuflow
Nu Flow Technologies
△ PARAMOUNT
Paramount Pipe Lining Products LLC
PEARPOINT 测
Pearpoint (USA)
Petersen Products
PICOTE LIFE FOR PIPES
Picote Solutions
PIOEURING
LSUPPLY
Pipe Lining Supply
Pow-R Mole Trenchless Solutions
Kalech
Ratech Electronics, Ltd
RFI Construction Products
RIDGID
RIDGID9
RODDIE, Inc
NOZZLES
Root Rat
SEWER EQUIPMENT
SECON
OOL Mrs. Inc
Southland Tool Mfg. Inc71
Spartan Tool, LLC80
THY TOOLS
T&T Tools, Inc
the
Sewer
The Sewer Camera Center41
ultra SHORE
Ultra Shore
Vactor Manufacturing11 Vacuum Truck Rentals
VACUUII IIUCK KEIICAIS
Vivax-Metrotech Corp17
Warrior Trenchless Solutions
Conde
Westmoor Ltd
Classifieds74-76
Marketplace72-73



- f facebook.com/CleanerMag

- in linkedin.com/company/cleaner-magazine

"ONLY GREAT SUCCESS!"

PROfile

NuFlow Certified Contractor Randy Behle has been a NuFlow Certified Contractor since 1997.

"As soon as I got the first lining job done, the same project called with another location that was even bigger. We more than doubled our initial investment in just two jobs."

"I've got 15 guys and lining is a major piece of our overall business."

"We got to know the NuFlow Team well over the years. We can talk to them about upcoming jobs and walk through all of the steps. They give us regular support."

Randy picked up a NuCure Cold Cure UV startup kit at the 2020 WWETT Show, featuring curing times in as little as 10 minutes.

"No more worries about the epoxy cooking off before we get the liner in place. And no more waste on resin or liner materials. Only great success!"



nuflow

WE FIX PIPES

www.nuflowtechnologies.com 800.834.9597

1412_NFT
© 2020 Nu Flow Technologies. All rights reserved.

nu cure Cold Cure UV

- · Cures In Minutes
- Minimize Risk
- · Wet Out On Or Off-Site
- Better ROI

See why NuCure is the superior UV solution at www.nuflowtechnologies.com/nucure





Taking Stock

It's important to check in with your business — and yourself — to see if adjustments need to be made

ctober might not seem like the best month to take a look at your goals and how your business is progressing. It's nearing the end of the year, but not close enough to necessarily be planning out 2021.

And not to be dramatic, but this year has been varying levels of awful since February. So it feels a little bit weird to be trying to assess the progress of the past few months and making sure the last quarter of the year is a successful one.

I have a few small goals I want to reach in order to end this year on a more positive note. Most of these are tied to my personal life,

RESTORE YOUR
PIPES TO LIKE
NEW CONDITION

Solution

Sol

www.PipeLiningSupply.com
CONTACT US info@pipeliningsupply.com or call 888-354-6464



but I also want to make a few improvements in my work. Adjusting to working from home went better than I anticipated, but I still have some areas I could improve.

Your work environment probably hasn't changed much. Most people in the industry who I have talked with lately are staying busy, and some have more work than ever. If that's the case for you, that's great news. But being busier sometimes makes it difficult to keep up with all of your other responsibilities.

It may seem pointless to assess your goals, finances and the health of your company now when you'll be doing similar year-end tasks soon enough. But there are still three more months before we say goodbye to 2020, and it should be more clear than ever that a lot can change in three months. It also gives you time to correct anything that isn't working.

Even simply making a list of what is and isn't going well can get you on track to make small changes and end the year on a good note. You can have your employees do the same, and then hold a quick meeting to get everyone on the same page. It might be smart to implement a few tweaks now before the holidays and end of the year are upon us.

It's also a good time to assess how you're taking care of yourself. Everything may be going great professionally, but if you're running yourself ragged to achieve that, you'll eventually suffer burnout and won't be able to enjoy your success.

This year has served us all a lesson about how the only things you can truly control are your own thoughts and how you respond to what is going on around you. It can be a struggle to remain positive when a lot of what you encounter on a daily basis is negative — the news, the divisiveness of the current political climate, social media and maybe even disagreements with your own friends and family if you don't see eye to eye on those things.

So take stock of not only how things are going, but also how you're feeling. Take some time to make note of what's going well and what you can change about what isn't going well. And take a little time for yourself, too.

I hope you enjoy this month's issue. c

GIVE US FEEDBACK! We want to know your thoughts about Cleane

We want to know your thoughts about *Cleaner* What's your favorite section? How can we improve? Email us at editor@cleaner.com.



INTRODUCING RELIABLE STREAMING & CAMERA CONTROL WITH RIDGID® SEESNAKE® CSX VIA™

Dock in the new CSx Via Wi-Fi control device to unlock a world of flexibility, convenience and camera operations with just your mobile screen. Remotely control all functions and features of your camera reel, including TruSense*, distance counter, sonde and more. CSx Via provides reliable connectivity to stream directly to any iOS*, Android*, or Windows device, and is multi-reel compatible. Use the free RIDGID HQx* Live app to capture and share superior inspection images and videos.





Cleaner.com

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

TEAMWORK

How Leaders Can Improve Workplace Communication

There are many problems that can be solved simply through better communication. It translates into more productivity and fewer tasks



slipping through the cracks, and prevents morale-killing resentment from festering among team members. This online exclusive covers some guidelines to keep in mind if you feel like your company's communication isn't as strong as it could be. >cleaner.com/featured

OVERHEARD ONLINE

"Employees who leave usually aren't the negative ones, so the irony is that by not acting on the problem, you end up keeping only the complainers and whiners."

> — How to Handle Toxic Employees >>cleaner.com/featured



CIPP METHODS

Installing Liner Using Inversion vs. Pull-In-Place

Both inversion and pull-in-place are acceptable methods of installing CIPP liner that meet industry standards, but the particulars of your lining job will determine which one is the best fit. This online exclusive provides some insight about how to go about making the right decision. >>cleaner.com/featured



FINDING SOLUTIONS

Pipe Descaling Key for Company's Pacific Coast Service Area

Colepepper Plumbing & Drains of San Diego was featured in the July issue. In the company's service area, thick rust and scale are prevalent in cast iron pipes of homes near the ocean. The ability to effectively and efficiently descale pipes is important. In this online exclusive, read about the solution that Colepepper relies on.

>>cleaner.com/featured



Emails and Alerts

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

Join the Discussion



facebook.com/CleanerMag



twitter.com/CleanerMagazine

VACTOR 2100i



It's that Simple.





Also standard on these Vactor products:



See how easy the IntuiTouch is to operate at vactor.com/technology



ATTAGR

GPRS continues adding inspection services to empower project managers and further growth

By Olivia Singer

Photos courtesy of Ground Penetrating Radar Systems

round Penetrating Radar Systems started like most construction service companies: relatively small, based out of a single region, providing services just to customers within reach, and with high hopes of growing over time.

They certainly turned those hopes into a reality over the past two decades, burgeoning into a nationwide company with offices in every major market across the U.S. Along with an expanded footprint has come added services, something GPRS says has been done strategically, which has contributed to its overall success.

As the name suggests, GPRS started in 2001 as a concrete scanning company using ground-penetrating radar, focused primarily in Toledo, Ohio, and Detroit. Matt Aston, president and CEO of GPRS, started the company after his father — the owner of a concrete core drilling company — showed him a magazine article introducing the idea of a new tool at the time, GPR.

"Matt decided to buy a system with the intent of helping his father's company avoid cutting and coring through dangerous conduits and cables underground," says Jason Schaff, GPRS's vice president of sales and marketing. "Matt never had any



data for a map in Aurora, Colorado. Every technician at the company is a project manager, responsible for sales, proposals, completing each job and delivering reports.

intention of taking his services beyond that, but he saw the demand from all over the region and ultimately the country. The phone rang off the hook, so he decided to start growing his company."

Roughly five years after its inception, GPRS added utility locating services to meet the demand it was seeing from customers. Noticing an opening in the market and a need for these services nationwide, Aston decided to take a leap of faith and start expanding across the U.S.



"This was a make-it-or-break-it turning point for GPRS," Schaff says of Aston's decision.

It began to grow by opening offices in Dallas; Los Angeles; Denver; Washington, D.C.; Charlotte, North Carolina; Orlando, Florida; and Chicago. Today GPRS has 410 employees. The company completed 70,000 individual projects from coast to coast in 2019, with an accuracy rate above 99%.

STRATEGIC GROWTH

The vertical growth of GPRS has happened both organically and systematically, as the business acquired several smaller companies over the years to reach into existing markets and offer additional services.

Early in 2018, GPRS acquired Encompass Inspections, based out of Phoenix; Structural Radar Imaging of Seattle; and National GPR Service in Minneapolis. A year later, it acquired Master Locators, based in Pennsylvania. These acquisitions led GPRS into the world of pipe inspection services, allowing crews to do more for its customers, Schaff says.

With each new service the company has added during the past 20 years, the company takes the

Ground Penetrating Radar Systems

HEADQUARTERS LOCATION: Toledo, Ohio

OWNER: Private equity owned: Matt Aston, president and CEO

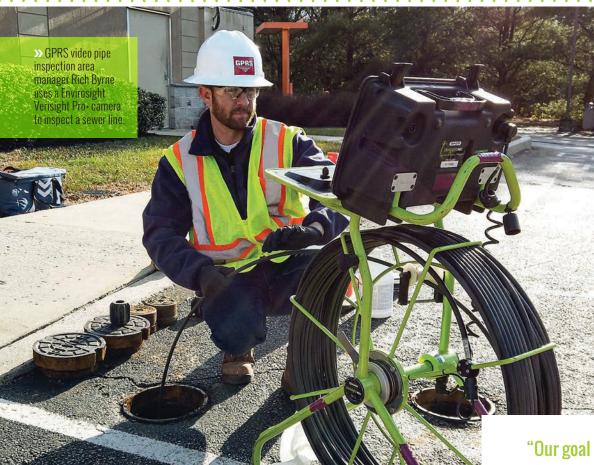
FOUNDED: 2001

EMPLOYEES: 410

SERVICES: Utility locating, concrete scanning, video pipeline inspection, reporting and mapping

SERVICE AREA: Nationwide

WEBSITE: www.gp-radar.com





"Our goal is to go above and beyond to meet customer needs. For example, I'm out on a job right now in the middle of the woods in Texas that our competitors couldn't do because they've got big trucks and can't get their equipment out there."

Kyle Humphreys

"We will make whichever decision will best service our client," Schaff says.

same strategic approach with implementing it, he says. GPRS first conservatively purchases equipment and hires and trains crews in the cities it sees the greatest demand. From there, it expands into new markets where it finds enough requests for the service.

Over the past year, growing its pipeline inspection services has been a major focus for GPRS as it works toward adding those capabilities and equipment to each branch already offering locating. But this time around, GPRS didn't need to search the market for the right equipment to get the new service up and running.

Before the acquisition, Master Locators had been relying on Envirosight equipment for years, with three ROVVER X mainline crawlers and one ROVVER X SAT lateral launch system in its fleet. It was equipment the company could already trust, and the crew at GPRS was quickly pleased with its performance level and capabilities. Since then, GPRS has purchased more trucks equipped with the ROVVER X inspection crawler for its locations in cities including New York City, Philadelphia, Boston, Atlanta, Chicago, Houston, Toledo and Indianapolis, as well as in Southern California.

"We are strategically placing them across the U.S., and then as the jobs come in, staff at whichever city is closest to travel with the equipment to the job," says Richard Byrne, pipeline inspection area manager for the Eastern U.S. "Once we see enough requests coming in from a certain area, then we consider adding another vehicle in that location. So we either move a truck or purchase a truck."

BROADENING CAPABILITIES

Byrne says the inspection equipment has proven to be a great fit for the company's needs.

"I find Envirosight's equipment to be much better for what we do," he says. "Equipment I've used previously didn't give us the option to take it out of the truck and be portable with it. It's user-friendly and portable to take out and locate and inspect sewer lines that may be running through wooded areas or in areas where you don't have access to pull a vehicle up to."

Kyle Humphreys, pipeline inspection manager for the Western U.S., says using Envirosight's equipment for inspection services has allowed the crew to deliver at the high level they like to achieve.

"I like it for the functionality and ease of use," Humphreys says. "The overall quality of the system is great, not only the video, but also the equipment itself. Along with that is the deliverable we are able to provide our customer with. I think all of those combined made the choice to stick with Envirosight an easy one."





≈ GPRS project manager Stamatis Eleftheriouis views a live pipe inspection feed on an Envirosight VC200 controller.

An Envirosight ROVVER X camera system is lowered into a manhole for a sewer line inspection.

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



>>> Ground Penetrating Radar Systems project managers locate and mark utilities in Aurora, Colorado.

"We feel like we're giving something that the industry doesn't offer: a complete package with the service while communicating with one person. Each project manager is running their own little business for that market.'





EXCEEDING EXPECTATIONS

Both managers say the portability of the equipment has allowed GPRS to take on diverse jobs its competitors can't.

"Our goal is to go above and beyond to meet customer needs," Humphreys says. "For example, I'm out on a job right now in the middle of the woods in Texas that our competitors couldn't do because they've got big trucks and can't get their equipment out there. We rented a Jeep, put our equipment in the back and are trekking through mud to get to these manholes. Currently we are inspecting about 17,000 linear feet for this part of the project. We did about 10,000 prior to this for the same customer, and we got called back because no one else can do this. We did it in a timely manner, and the customer was pleased with the deliverable."

Similarly, Byrne and his crew were called to a job to inspect the sanitary lines on Fire Island in New York.

"We put our inspection equipment on a golf cart with a generator and took the ferry across to the island to inspect the island's lines, which — needless to say — were not in good shape being underwater," he says.

Without the portable equipment, GPRS wouldn't be able to complete the number of jobs they do and take on the more unique ones competitors are challenged with.

Along with portability, the regional support and service from Envirosight has been crucial to a company that provides service all over the country, Schaff says. The crews rely on Envirosight's sales partners, including Haaker Equipment, Green Equipment and A&H Equipment to provide support and service to maximize uptime.

GPRS depends on a suite of tools for concrete scanning and utility locating, Schaff says. The company uses Geophysical Survey Systems Inc. (GSSI) and Proceq GPR scanners; Vivax-Metrotech and Radiodetection electromagnetic locating devices; Schonstedt Instrument magnetometers; and Jameson traceable rodders.

To ensure compliance and consistency, the company follows the Subsurface Investigation Methodology for utility locating, Schaff says.

"SIM is broken into three categories, and it stipulates the different tools we need to use, the amount of training needed, and the methodology by which we do the scanning so that our results are repeatable," he says. "So while GPR makes up a large portion of what we do, we would say we follow SIM specification more than anything. We are able to see that 99% accuracy rating because of SIM."

STANDING OUT

Beyond its far-reaching net, there are several factors that GPRS believes make it unique in the industry and have contributed to its





A GPRS video pipe inspection team lowers a ROVVER X into an exposed section of pipe to perform an inspection.



success, including using an ownership model with its staff.

"We call our technicians project managers," Schaff says. "Each project manager is responsible for sales, proposals, completing the job and delivering the report. We call them project managers because we find value for our clients when the technician is able to take a consultative approach. They're able to answer the call, qualify questions, write a proposal and take them through the actual project with a site walk. We feel like we're giving something that the industry doesn't offer: a complete package with the service while communicating with one person. Each project manager is running their own little business for that market."

Another factor that helps GPRS stand out from its competitors is its deliverable using WinCan software, Humphreys says.

"I've seen some from other companies, and our reports are topnotch," he says. "Customers love the deliverable that we hand them and the customer service they receive. We prioritize taking care of our customers."

That commitment level has helped GPRS grow organically, oftentimes finding that word-of-mouth has helped the company generate more new customers across the country. And being able to combine services, like GPR and pipeline inspection, helps the crew provide its customers with more information than its competitors could during a single job.

"We can combine different services to give our customers a detailed deliverable," Schaff says. "We can map out their whole sewer or pipe system based on the tools we have."

REACHING FARTHER

Like concrete scanning and utility locating, GPRS plans to continue developing its inspection services by moving into every major market, based on the needs it sees.

"We'll dictate our growth based on the existing systems we have in place now," Schaff says. "Where are we traveling to the most? Where are we getting the most phone calls? How can we best service our clients and satisfy demands? But our plan is to more aggressively grow on this vertical path than we did with other services. We aren't going to wait; we are going to act. Nationally, there's a big opportunity for someone like us to come in and create a name in this industry." **c**

featured equipment

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

GEOPHYSICAL SURVEY SYSTEMS, INC. (GSSI) 800-524-3011

www.geophysical.com

HAAKER EQUIPMENT CO. 800-200-3432 www.haaker.com

800-346-1956 www.jamesonllc.com RADIODETECTION CORPORATION

www.spx.com/en/radiodetection

SCHONSTEDT INSTRUMENT

800-999-8280 www.schonstedt.com

VIVAX-METROTECH CORP.

www.vivax-metrotech.com (See ad page 17)

WINCAN 877-626-8386 www.wincan.com



Thermoform

A unique PVC-Alloy pipe lining system for trenchless rehabilitation

- Inert, shelf stable and non-toxic
- Expands and forms tightly to the contours of a host pipe including any changes in shape or dimension
- Structurally sound and provides a tight fit that prevents infiltration and ingress of tree roots
- Environmentally friendly
- Comes in a range of diameters
- All installers have to be accredited and audited to ensure consistency, quality and accuracy



A Simple Solution



Delivery



Expand with steam



Molds to host pipe shape



Provides a seamless new pipe



Contact us today!

T 716 601 7760

E info@thermoformliner.com

W thermoformliner.com



Built to Last

With good maintenance practices, Speedrooter drain machines keep on performing for Modern Plumbing

By Ken Wysocky

hen Mike Jackson established Modern Plumbing in Avon, Indiana, in 2004, he decided that drain cleaning would be an essential part of his plan to grow the business. So he invested roughly \$1,000 each on two Speedrooter 91 cable drain machines, built by General Pipe Cleaners.

The business grew as he expected; the company now has six employees, runs five service vehicles and serves the Indianapolis metro area. But what he didn't expect was that the two Speedrooters would still be running today, 16 years after he bought them. And with the original cables still intact, no less. (One machine holds 100 feet of 5/8-inch-diameter cable, and the other carries 100 feet of 3/4-inch-diameter cable.)

"Those machines provided a good 30% to 40% of my revenue when I first started out," says Jackson, whose company now does trenchless pipe rehab work in addition to residential and commercial drain cleaning and service and repair plumbing. "They gave me a good foothold in my market.

"I needed to maximize my ability to make money and minimize my expenses, which is why I bought these two machines. I've probably cleaned more than 50 miles of drains between those two machines. And I can still get parts for them, too.

"I don't have the truck I originally started out with, but I still have these two Speedrooters."

Aside from their performance, Jackson opted for the Speedrooters because their compact size makes them easier to load and unload from service vehicles, not to mention transporting them up and down stairs and maneuvering in tight quarters.

"I worked by myself for the first six years, so I had to have machines that were easy to move around," he says.

MAINTENANCE MATTERS

Jackson's experience with the Speedrooters (the newest iteration of the machines now is called the Speedrooter 92) underscores two points: The benefits of regular maintenance and the value of buying



durable machines that provide excellent returns on investment.

To ensure cable longevity, Jackson faithfully drains the cable drum after every job by partially loading the machine into a service vehicle, letting the lone "loading wheel" (one of three wheels on the attached dolly) rest on the truck bed. Then he tilts the unit down to about a 45-degree angle so water can drain from a weep hole.

"Then I let it fully dry overnight," he says. "The next morning, I spray a little Snake-Oil onto the cable and spin the

drum for a minute or two." (Also made by General Pipe Cleaners, Snake-Oil lubricates while applying a rust-resistant coating.)

OWNER: Mike Jackson

diameter drainlines

EQUIPMENT: General Pipe Cleaners Speedrooter 91 cable drain machine

FUNCTION: Cleaning 3- to 10-inch-

FEATURES: The current Speedrooter

92 model weighs 115 pounds without

cable: measures 26 inches deep, 41 inches tall and 22 inches wide; holds 100 feet of heat-treated 3/4-

or 5/8-inch-diameter Flexicore

cable, wrapped inside a spring tube to minimize kinking; 1/2 hp electric

motor; variable-speed power cable feed drives and retrieves cable

at up to 20 feet per minute; two

heavy-duty stair-climbing belts;

pneumatic foot switch

COST: Around \$2,200

10-inch-diameter ball-bearing tires;

CONTINUED >>



- 1 reel
- + 2 camera heads
- = inspection in 11/2" to 6" lines

(866) 948-7576 www.mytana.com

Capability That Means Business.

Your reputation—it's on the line with every service call. Trust MyTana drain tools to find and fix tough problems quickly, the first time.

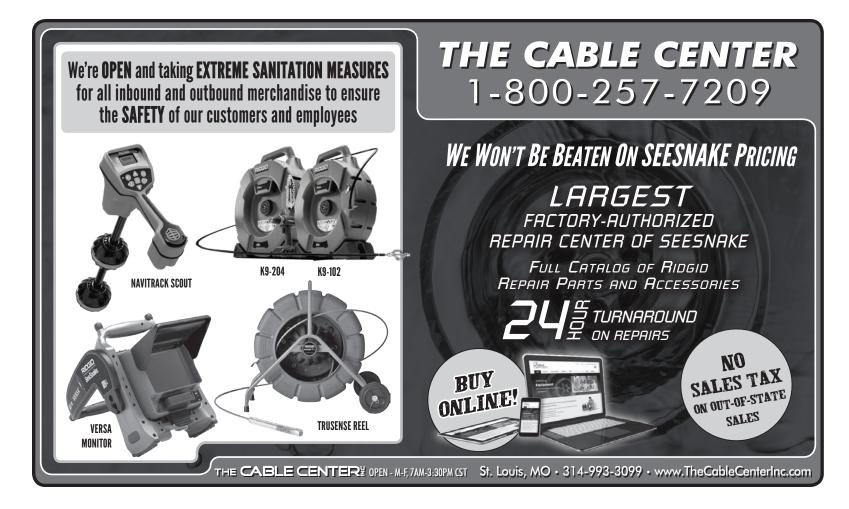
Our pro-grade equipment and accessories prepare you for any challenge, and come backed by our legendary service team.

YOURS FREE!

50-pg drain service notepad, request at: mytana.com/notepad



*no purchase necessary



"As long as the cables stay dry and are well lubricated, they should last a long time."

The secret to equipment longevity "all comes back to the user," he says. "If you take care of things, they'll take care of you."

"I've probably cleaned more than 50 miles of drains between those two machines....

I don't have the truck I originally started out with. but I still have these two Speedrooters."

Mike Jackson

PRIMO INVESTMENTS

Buying the machines, designed to clean lines from 3 to 10 inches in diameter, was a great investment for Jackson because many area plumbers weren't interested in drain cleaning. As such, they often hired him to do drain work, primarily on 3-, 4- and 6-inchdiameter commercial and residential lateral lines, he says.

Since then, Jackson has invested in more General Pipe Cleaners equipment, including a JM-2900 and a JM-3080 portable water jetter (3,000 psi at 4 gpm and 3,000 psi at 8 gpm, respectively); Gen-Eye Micro-Scope2 pipeline inspection camera; two Mini-Rooter Pros; and one Mini-Rooter XP.

The company also owns a RIDGID SeeSnake camera; Traveler 2.0 camera system made by Spartan Tool; pipe milling and drain cleaning machines built by Picote Solutions; and a 30-amp Honda generator for jobs where electric power isn't readily available to run the unit's 1/2 hp motor.

Modern Plumbing's service vehicles include a Ford Connect van, two Chevrolet cutaway vans (an E-250 and E-350) with 15-foot

box bodies made by Unicell Body Co. and two Dodge Ram pickup trucks.

VERSATILE REVENUE GENERATORS

Over the years, the Speedrooters have more than proved their versatility. If Jackson encounters drain clogs more than 100 feet

out, for instance, he runs the 5/8-inch cable all the way out, then "chases it" with the 3/4-inch cable.

"I can get out to 120 to 140 feet OK," he says. "But more than that and the machine doesn't like it as much. It's hard for a motor that size to run cable when it's that far out."

Jackson says he'd highly recommend the Speedrooter for any plumber or drain cleaner who's in the same position he was 16 years ago - someone who needs to "make money fast without a large investment," as he puts it.

Does Jackson feel like he got his money's worth out of the two machines? "Maybe if I get a few more years out of them," he quips.

"I'm just kidding — they've paid for themselves a million times over. I don't think they'll ever die." c

To nominate your vehicle for a feature in this column, send an email to editor@cleaner.com. Tell us briefly but specifically what features make it a great producer. And send a picture – because appearance counts. We look forward to seeing your Money Machine.



Fax: (562) 944-7630

Email: sales@gorlitz.com GORLITZ on Facebook









Use the Right Tools

Neglecting to use basic small tools and PPE the proper way can cause just as much injury as more obvious work hazards

By Giles Lambertson

iscussions of safety in confined spaces and other dangerous environments often center on protecting employees from toxic gases, falls or other big health hazards in the workplace. Sometimes overlooked are the small things — small tools like a hammer or drill that are handled pretty much without thinking about it — or the seemingly small risks taken when an employee fails to use fundamental personal protective equipment.



Here's the thing: Small is relative. Losing a finger or sight in one eye is not as horrific as losing a limb or one's life, but it is disabling nonetheless and oftentimes is avoidable. Word to the wise: Think small — like good company safety managers do.

One starting place to explore the subject of working safely with small tools is the U.S. Department of Labor's succinct guidelines. In short, always use a correct tool that is in good working condition, and operate it as recommended by the manufacturer while wearing the correct PPE.

In more detail, those guidelines include:

• Use the right tool for the job.

A screwdriver is not a chisel, nor a Crescent wrench a hammer. One hand tool can be used to mimic another, but they usually are poor substitutes. The screwdriver lacks a chisel's tempered and sharpened edge. The adjustable wrench is without a hardened, flat surface designed for a percussive strike. Misusing a tool, therefore, is not only ineffective in most cases, but also unsafe. The unhardened edge can shatter, sending shards toward your eyes; the rounded surface of the wrench can slip off and strike your hand instead.

"I've been there and done that. Everyone has," says John Flanagan, safety manager of North American Pipeline Services. "Usually it is using a wrench instead of a hammer or a hammer as a pry bar — the right idea, the wrong tool. When we see something like that, we ought to say, 'Billy, are you going to do that? Why don't you take a minute and go get the right tool."

• Examine each tool for damage before use, and do not use a damaged tool.

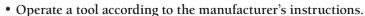
If the handle of a tool, whether plastic, wood or metal, is cracked or burred, tag it as damaged and ask your supervisor for a replacement. Why? The cracked handle is in danger of fracturing when pressure is applied, possibly injuring the user. The temptation is to attempt to repair a handle in that condition by, perhaps, wrapping it in duct tape. Unfortunately, that not only doesn't restore the complete strength of the handle, but it also imparts false confidence in the tool's integrity. Both conditions are potentially unsafe.

• Provide and properly use the correct PPE.

Let's face it: Until a fleck of steel tossed up by a drill bit enters an eye or a protruding piece of steel strikes a person's head when he or she stands up, the safety glasses or hard hat you're supposed to

be wearing seems like a lot of trouble. But the fact is that some of your work environments contain hazards that can only be mitigated by wearing glasses or a hat.

Failure to don PPE when using hand tools is mostly a consequence of complacency. "When an employee has done something a million times, there is a complacency risk," says Chris Ravenscroft, owner of Koberlein Environmental. He says the risk is increased by the fact that jobs in the field, versus in a factory, present a variety of unique situations and conditions. However, the hand tools remain the same in every case, and protective gear is designed to work in all those situations and conditions.



For example, if a drill job has the potential to penetrate a live electric circuit, safety rules require that an insulated drill be used to protect the user against a shock. Wrapping the handle of an uninsulated drill in electrical tape does not insulate it. Some timepressed workers do it anyway for psychological comfort. These are often the same employees who can be seen passing a drill from one level to another by dangling it from its cord, a mishandling that can lead to damage of the tool or injury of another worker.

While the Labor Department guidelines are helpful, they hardly cover every contingency. How about falling hand tools, for instance? If a falling wrench doesn't strike and injure someone working below, the tool's fall at least requires a worker to descend to a lower level and retrieve it.

"A lot of times a worker doesn't attach a tool to a tether, uses the tool, and then goes on working and the tool falls out of his pocket or hands. And there you go," says Kyle Irwin, founder of Irwin's Safety, a Canadian safety management firm. "In most cases, if they are tied off, then the tools do not become a hazard. The problem is, you don't see that tying-off happening enough."

Injuries from small tools may vary in particulars from one employer to another. And while bad habits generally are universal in nature, local conditions can produce one error of judgment over another. For example, working in a northern climate might mean bulkier clothing is worn for warmth, increasing the chance of clothes being snagged by a rotating machine or catching fire if unknowingly pressed against a hot drill bit.

Ravenscroft mentions two small tools that in his experience have proven the most problematic for workers. One is a device that spins



"Making sure PPE is available and comfortable

is as important as the expectation that employees will use it."

Chris Ravenscroft

wire cable to scour clogged pipes. "It requires hands-on operation, and that requires a level of awareness. It calls for the right kind of gloves that don't catch the material and cause it to twist," he says.

"The other tool is an Arctic Blaster, which uses hot water and steam to thaw pipes through a hose. It's very efficient, but it's a personal burn hazard and a fire hazard. Techs know when they take these tools off the truck that they represent real danger." To offset the intrinsic danger of the thawing tool, its use is addressed in annual training and the process of working with the tool is reviewed regularly.

A sometimes-unspoken issue in respect to wearing PPE is comfort. Is discomfort a reasonable excuse for not donning a hard hat or bulky gloves?

"Yes and no," Irwin says. "There definitely is ill-fitting equipment. But there are so many pieces of equipment manufactured: Find one that will work. The larger problem is avoiding manufacturers' recommendations. When using a respirator or dust mask, it should be a good fit, but a lot of people just grab a mask. That can give you false security that you're being protected.

"Do what the manufacturers say you should do. It is the responsibility of an employer to see that employees follow the recommendations. It all boils down to everyone in a program taking some responsibility for himself."

CONTINUED >>

SPECIAL

PRICING

'07 Sterling Acterra Vactor Sewer Cleaner

50075E



Mercedes 250 HP diesel, Allison 3000 automatic trans, single axle chassis. Vactor model 2110 combination sewer cleaner, John Deere 135 HP auxiliary engine, 9 cu yd dump style debris body, front mount hose reel with 800' of 1" hose, single stage fan vacuum system, 60 GPM @ 2000 psi Vactor single piston water pump, 1,000 gallon water tanks, telescoping boom, arrow board, excellent condition, city owned with only 37,000 miles and 6,800 hours.

'04 International 7400 Vac-Con Sewer Cleaner



DT530 275 HP diesel, Allison MD3060 automatic trans, tandem axle. Vac-Con Model V312LHAE dual engine combination sewer cleaner, 12 cu yd debris body, front mount hose reel with 600' of 3/4" hose, 3 stage fan vacuum, 50gpm@3000psi FMC water pump, 1,500 gallon poly water tanks, winter recirculation, 10' telescoping boom, hydrostatic drive, strobe lights, arrow board, about 14,500 miles and about 11,150 chassis engine hours, 110 HP auxiliary diesel engine with about 3,800 hours.

'98 Ford Louisville Vac-Con Sewer Cleaner



Cummins 8.3L 250 HP diesel, Allison MD3060 automatic trans, single axle chassis. Vac-Con Combination sewer cleaner, 9 cu yd dump style debris body, John Deere auxiliary engine, front mount hose reel with 600' of 3/4" hose, 3 stage fan vacuum system, 50gpm@3000psi triplex water pump, 1,000 gallon poly water tanks, telescoping boom, hydrostatic drive, arrow stick. VIN: 1FDYN80E8WVA07722.

'97 Sewer Equipment Company of America Trailer Jet



SPECIAL PRICING

Model 747 tandem axle trailer jet with Perkins 100 HP diesel engine, 40GPM@2000PSI FMC water pump, 700 gallon poly water tank, about 600' of 3/4" hose, rotating hose reel, good condition with only 1,330 hours.



Flanagan acknowledges that equipment can be uncomfortable. "They are hard hats. I was in the service and had to wear a helmet. It wasn't the most comfortable thing." On the other hand, as safety manager, Flanagan says he tries to provide PPE that will be used. "I go out and order a couple dozen pair of gloves and say, 'Here, try them out. Let me know how you like them. If you say it doesn't work for you, OK, we'll try something else.' I try to accommodate each crew."

Ravenscroft acknowledges that comfort "sometimes is an issue. So, making sure PPE is available and comfortable is as important as the expectation that employees will use it. We try to be understanding. Safety committee members are close to operations, and they know that safety glasses fog up and what can be done in that environment. We try to find the best glasses we can. The best might cost twice as much, but we're not going to save a couple dollars and provide PPE that doesn't work for our employees. It's a balancing act."

Seemingly small decisions like these by safety committees and managers are vital. They have a large impact on the lives of employees working in potentially dangerous situations. c



If it inspects, protects and clears, it's here.

With thousands of drain products available, DCD offers everything from replacement drain cables and accessories for nearly every machine, to sewer cameras and jetters. We also have our American-made VALOR series drain cleaning machines, designed with speed, strength and capacity in mind. With VALOR, you can handle even the toughest obstructions. Call to inquire about our repair centers for your drain cleaning equipment.

Draincables Direct: one-stop convenience.





TAT TOOLS T&T Tools, Inc.

Fax: 800.521.3260 Email: sales@mightyprobe.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

YOUR SOURCE FOR



SeeSnake® TruSense™ **Camera Reel**



SeeSnake® Compact M40 **Camera System**



microDrain Reel



Flexshaft K9-102, K9-204



SeeSnake® **MAX rM200 Camera System**



CS12x Digital 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



flexitrax C550@

PORTABLE SEWER & STORM MAINLINE CONDITION ASSESSMENT





AQUICK CURE

Ohio's Advanced Rehabilitation Technology leverages high-tech lining materials to win bids for unusual projects

By Mary Shafer // Photography by Amy Voigt

ustin Schlachter, co-owner of Advanced Rehabilitation Technology (ART), loves to take on unique, challenging projects. "[Customers] call upon us because we're the experts, and that's flattering and it makes it fun."

Those types of projects don't come along all that often, he says. "We need those day-to-day jobs. And even though those other projects are fun, I still love our regular customers. But I would love to do more industrial or public works, specialty-type jobs."

It seems likely he'll get his wish, as ART, based in Bryan, Ohio, moves forward with a proven track record and willingness to adapt to whatever is required. That agility and forwardlooking vision has served the company well.

Gary Mock, ART's vice president of sales and marketing, lays out the immediate forecast: "This year looks like it's going to be really good, believe it or not. But it's hard to tell what next year will bring, as far as growth goes. Our goal is growth in all of the states (where we work). We probably have a 15% market penetration. Of the polymers, epoxies and polyurethanes, we think we have a pretty good lead on most of them. I would love to see that market penetration be above 25% and possibly 30%. Fifty percent of the market is plain cement in the wastewater manhole rehabilitation industry."

The company has its work cut out for it as a provider of environmentally sound, cured-in-place pipe repair technologies for a wide variety of surfaces, mechanical requirements and operating conditions.

ART runs two Vac-Con combination trucks and two Envirosight mainline CCTV trucks equipped with standard mainline camera crawler combinations and a lift for inspection of sanitary mainlines, as well as largediameter trunk lines or storm drains. The rigs share a single lateral-launch camera for lateral line inspection.



⇒ Technician Colton Roelfs monitors the progress of an Envirosight ROVVER X camera during a sanitary sewer line inspection.



APART FROM THE CROWD

ART specializes in high-quality flexible liner systems that have proven to be a cost-effective, no-dig alternative to the replacement of water, sewer, wastewater

and holding systems, including manholes, vaults and other components. Its go-to solutions are polyurea-based spray-applied liners, including flexible, high-build and multilayer coatings that provide new surface integrity while strengthening existing infrastructure. These coatings may also be used on newly installed structures to proactively prevent future deterioration.

Advanced **Rehabilitation** Technology Ltd.

LOCATION: Bryan, Ohio

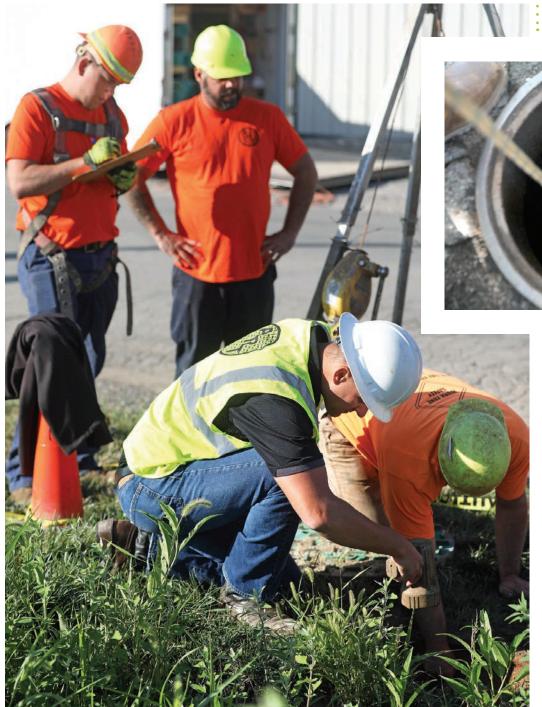
CO-OWNERS: Dustin Schlachter and Tod Schlachter

EMPLOYEES: 30

SERVICES: CCTV inspection: pipeline cleaning and preventive maintenance: spray-applied structural rehabilitation: trenchless boring and directional drilling

SERVICE AREA: Ohio, Michigan, Indiana, Illinois, Pennsylvania, Maryland, New York, New Jersey, Delaware, West Virginia, Virginia

WEBSITE: www.artcoatingtech.com



An Envirosight ROVVER X inspection crawler is lowered into a manhole to inspect a 24-inch sanitary sewer line.

W Dustin Schlachter (kneeling, left), owner of Advanced Rehabilitation Technology, and technician Mitch Heart visually inspect a manhole prior to a rehabilitation project.

"[Customers] call upon us because we're the experts, and that's flattering and it makes it fun."

Dustin Schlachter

The adoption of such no-dig lining technologies was no accident. ART always does its due diligence when adding products and services, and it's not something the company does often. The process is approached seriously because ART knows any new introductions will have to be worth the disruption they will cause in a streamlined production process.

"When you're vetting the market, you're looking at what's out there. Will somebody use this service? And, of course, we've grown up in this bid world for municipal work, so we look at that," Mock says. "We look at the competitors; then we go on to vet the equipment. That process includes reviews from others we know in the industry, as well as product reps coming in and describing their service and equipment. And occasionally we'll demo some of the equipment [before making a purchase decision]."

and waterlines

OBIC 1200 Culvert Armor – frequently used to repair damage

The company uses the OBIC family of environmentally friendly

• OBIC 1000 liner system – a tough, flexible polymer that is

easily applied and fast curing; a solution for repairing and

preventing damage to municipal and industrial sewer lines

products that creates a seamless, monolithic coating, including:

• OBIC 1100PW – a long-lasting, fast-set solution designed specifically for applications that must be U.S. Department of Agriculture food and beverage compliant; an ANSI 61-approved barrier material for potable water

UNUSUAL PROJECTS

Schlachter and Mock both enjoy going after projects that aren't run-of-the-mill, because they enjoy the challenges involved. Often,

30

to partially deteriorated culverts

figuring out how to safely and effectively apply their infrastructure rehabilitation products is at least as taxing as the application itself. Project location, terrain, climate, deadline and duration are all factors they must navigate to successfully complete each job.

Schlachter explains that oftentimes the company becomes the chosen contractor due to one particular characteristic of ART's coating system: "It's a quick cure. With polyureas, the liner is tack-free

within 10 to 15 seconds. When a client has a complicated project where it's critical to turn off bypass immediately, our product doesn't require the cure time others do."

Recently, ART did a project on a Michigan golf course. "It was a 'hurry up, we need your help' kind of thing," Mock says. The general contractor was in a time frame dilemma and needed to avoid the liquidated damages contract clause that would have been activated by missing the project deadline.

The golf course's sanitary sewer system mainline was being rehabilitated by Insituform Technologies, and ART was lining the manholes

operating a sewer cleaner.

as a subcontractor. The company had already committed to working through the weekend to beat the deadline, when a long, heavy rainstorm struck.

A large bypass system had already been set up, with large pumps and more than a mile of large pipe. Nevertheless, ART still had to complete its part of the job in just three days, a process that would normally take 10.





ART was able to help the contractor finish the job on time and also saved him money by allowing the bypass pumps to be turned off quicker since the curing time for the polyurea system doesn't need hours or days. The system was back in service quickly.

Large mats were placed across the golf course so the contractors' trucks wouldn't cause damage to the carefully manicured sod on the greens. The rain continued through the weekend and was so heavy that the mats floated away. Water was coming up so fast that one of ART's trucks barely got across the green in time. It was just another day of on-the-fly problem-solving for the ART crews.

Bay City, Michigan, was the site of another challenging rehabilitation project. A sewage receiving structure had a large manhole — 55 feet deep and 8 feet across — that trucks use to dump their loads into the sanitary system. The structure was corroded, and the city chose ART's liner because it wanted something that would provide many years of service so that it wouldn't have to tackle the project again anytime soon.

With the size of the structure and the preparation involved, Mock recalls, "We needed to have a big safety plan. The opening on top wasn't such that we could get a large, manned basket down in there with a crane to get the work done. One had to be purchased that was more like a mine rescue basket, so some extremely special safety equipment was needed." The team also had to come up with a design for the equipment and how to operate it. "We worked in conjunction with the owner to come up with a plan that safely allowed manned entry to get that liner system installed."

Schlachter adds: "Once we got started, it was only a four-day project. Part of that was due to the engineering and the days we spent on site preparing for [the actual liner application]." CONTINUED>>

Marketing in the time of COVID-19

As vice president of sales and marketing, Gary Mock has given a great deal of thought to how the company will move forward with promotional outreach during periods of social distancing.

"We've discussed how we're going to work in this new era," he says. "One of the things that's difficult for me — because I'm an old man — is the part about that physical connection and putting the product in prospects' hands. For the most part, the most successful thing for us has been to actually go out and knock on doors and meet people.

"It may sound inefficient, right?" he asks. "If I'm going to buy an advertisement, how productive is that compared to going out and knocking on a door and showing up with this material that's difficult to explain in a picture? It's much easier to put it in someone's hands and let them twist it and try to tear it and discover how tough it is, even while retaining this flexibility. So our biggest marketing effort is actually to go out and meet with people, make cold calls or be at industry events and trade shows.

"We've discovered that many times, when we make a telephone call ... it's easy for someone to say, 'Well, tell me about it now. We're on the phone,' or 'I don't know if I have time. Why don't you call me again another time?'

"Whereas most people — at least in the past, before the coronavirus — are nice. For most, if you show up with a smile and say, 'Hi, can I speak to you for just a few minutes?' will give you the time of day. And if they're not the right person, they'll direct you to whoever is. That's been successful for us."

Trade shows were also a way to get the product physically in people's hands, making it easier to explain its benefits.

"Most people don't know what polyurea is. You can explain it as a spray-applied truck bed liner, and many guys will get that. But when you show it to them on a brick that you broke with a hammer and it's all held together by the liner because the stuff is so tough and then you compare that to hitting another product with a hammer, they really get it and like it. So the trade shows were a big [part of our successful marketing]."

But Mock knows that now ART will have to adjust, like everyone else. "We're going to need to come up with some better print and videos that show (the product). If you look at YouTube and some of the polyurea things out there (e.g., blast mitigation, when you set up an explosive device in front of a concrete block wall, blast it, and blow it up, but the wall stays together because of the polyurea on there), it's pretty impressive. I don't know if we can make a video like that, but we need to make something that provides that shock and awe and shows the benefit of this product compared to anything else that's out there."

Regardless the actual outreach tactics, one of the firm's partners, Dustin Schlachter, believes part of the success isn't just the message or the medium, but who's delivering it. "We're industry guys. We're not just sales guys who are going out and meeting the end users, the municipal guys. I think they respect guys who are from the industry, who are providing a long-term service."



- WHEN YOU'RE ON SITE -

MINIMUM CAN HAPPEN. W

AND WHEN IT DOES, WE'VE GOT YOUR BACK.





CABLES

BLADES -

MACHINES -

- DRAIN CARE

DURACABLE.COM -----



- >> Technician Tanner Smith uses OBIC lining products to rehabilitate a 4-foot-diameter, 25-foot manhole.
- Owner Dustin Schlachter's goal is to continue growing ART's presence in all the states it currently serves.



"We want to make a fair profit, but we don't gouge, and I think that's the biggest key to our success – being honest with people.

They can read you. They respect you for being honest."

Gary Mock

VISIBILITY AND RESPONSIBILITY

Probably one of the most memorable projects in ART's portfolio was the rehabilitation (nearly an entire structural rebuild) of an iconic water fountain in the historic Union Terminal complex in Cincinnati. Being awarded such a high-visibility project is certainly a feather in any contractor's cap, but when it's for a much-beloved and culturally significant structure as this, it can also be a nerve-wracking feat to complete.

A fountain was located in the courtyard of the complex, central to all other buildings. It was built over the top of an underground children's museum. Leakage in the fountain's catchment pan was discovered through ceiling seepage into the museum below.

Because so much of the fountain structure involved vertical wall surfaces, other contractors shied away. The terminal's grant funding for the rehabilitation hinged on the contractor using historically correct materials or as close to them as was currently available. No one had been able to imagine a waterproofing membrane that would both do the job of preventing seepage into the inevitable cracks in the basic concrete form foundation and allow the surface application of the historical grainy finish.

All contractors and engineers consulted had predicted that there was no such material that wouldn't either creep or eventually separate from the top finish coats. It was just the sort of challenge ART is known for and that Schlachter and his crews relish. They worked with another engineer who believed a polyurea might be able to do the job, and they did several on-site application tests over several months during a brutal Cincinnati winter.

The end result was that the spray-applied membrane worked but required that the entire structure be laser-measured, completely deconstructed and rebuilt, literally from the ground up. But it paid off, with ART's dedication and skill being recognized by the city for saving the iconic landmark.

LOOKING AHEAD

Both Schlachter and Mock agree that they expect to carry ART successfully into the future with more of what they've always done.

"What I do to help try to grow our business is let customers know we have something that can help, and we are honest with people about how it can help them," Mock says. "We're fair in our pricing. We want to make a fair profit, but we don't gouge, and I think that's the biggest

key to our success — being honest with people. They can read you. They respect you for being honest."

Schlachter agrees and adds, "Two of the key personal core values for me are being in business with people we trust and doing good for the kingdom and quality work. I try to incorporate my faith into building the business, to make sure we're doing business for the right reasons and with the right people, and allowing that to be a guiding factor for me. We like to be businessminded but purpose-driven." **c**



ALLAN J. COLEMAN SINCE 1905 -

Call us today! **Chicago 77/3-728-2400** 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

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
- · Stream or Record to an iOS or Android phone or tablet

FLEXSHAFT, K9-306

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

FLEXSHAFT, K9-204

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

FLEXSHAFT, K9-102

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





CS/Zx)) 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



SeeSnake® TruSense" Camera Reel

 High dynamic range (HDR) offers bright, clear inpipe imaging

 TiltSense displays the pitch in a pipe





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

Scout®

SR-24 Line Locator with Bluetooth® and GPS

- Omnidirectional antennas
- Large display Built-In GPS
- Bluetooth® technology
- Smartphone/Tablet App
- Can trace any frequency from 10 Hz to 35,000 Hz



SeekTech®

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

We Have RIDGID Parts!

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

2020 Cleaner PIPELINE REPAIR



	BILITATION										
DIRECT	UKY	RELINING	UVCIPP	BURSTING	LATERAL REHABILITATION	MANHOLE REHABILITATION	SEALING/ SPOT REPAIR	REINSTATEMENT CUTTERS	GROUTING		
american pipe & plastics	AMERICAN PIPE & PLASTICS, INC. PO Box 577, Binghampton, NY 13902 607-775-4340 • (f) 607-775-2707 www.ampipe.com • ampipe@ampipe.com	~									
ARIES	ARIES INDUSTRIES, INC. 550 Elizabeth St., Waukesha, WI 53186 800-234-7205 www.ariesindustries.com • sales@ariesindustries.com				>			V	•		
see ad on page 29	CUES, INC. 3600 Rio Vista Ave., Orlando, FL 32805 800-327-7791 • 407-849-0190 • (f) 407-425-1569 www.cuesinc.com • salesinfo@cuesinc.com				V	V	~	V	~		
THE SHOOTER	EMAGINEERED SOLUTIONS, INC. 527 NW Elm Ave., Ste. 3-405, Redmond, OR 97756 541-504-0416 x6 www.theshootercipp.com • ray.i@emagineered.com	•									
enz®see ad on page 58	ENZ USA INC. 1585 Beverly Ct., Unit 115, Aurora, IL 60502 877-362-8721 • 630-692-7880 • (f) 630-692-7885 www.enz.com • salesusa@enz.com							V			
see ads on pages 59,72	EASY KLEEN PRESSURE SYSTEMS 41 Earnhardt Rd., Sussex Corner, AB E4E 6A1 CANADA 800-315-5533 • 506-433-3393 www.easykleen.com • sales@easykleen.com	•									
FAST PRE LINING INC. FINE USING PRODUCTS INC. CIPP most rust as toron see ad on page 60	FAST PIPE LINING INC. 6 PIPEVISION PRODUCTS, INC. 320 Raccuglia Dr., La Salle, IL 61301 815-220-1919 sales@fastpipelininginc.com	•			V	>		•			
see ad on page 69	FORBEST PRODUCTS CO. 44130 Old Warm Springs Blvd., Fremont, CA 94538 877-369-1199 www.forbestusa.net • sales@forbestusa.net	~				>	~				
	FORMADRAIN, INC. 10121 Parkway, Montreal, QC H1J 1P7 CANADA 888-337-6764 • 514-352-6911 www.formadrain.com • info@formadrain.com	•			~		V				

see ad on page 23

GORLITZ SEWER & DRAIN, INC.

www.gorlitz.com · sales@gorlitz.com

10132 Norwalk Blvd., Santa Fe Springs, CA 90670 562-944-3060 • (f) 562-944-7630

		RELINING	UV CIPP	BURSTING	LATERAL REHABILITATION	MANHOLE REHABILITATION	SEALING/ SPOT REPAIR	REINSTATEMENT CUTTERS	GROUTING	
see ad on page 53	HAMMERHEAD TRENCHLESS 500 S C.P. Ave., Lake Mills, WI 53551 800-331-6653 • 920-648-4848 • (f) 920-648-1781 www.hammerheadtrenchless.com	~	~	~	>		>	V		
Ee ad on page 63	HY-FLEX CORPORATION 8774 S State Rd. 109, Knightstown, IN 46148 866-849-6246 • 765-571-5125 www.hyflexcorp.com customerservicepumps@hyflexcorp.com	~				V			~	
AFFASTRUCTUAL PROPERTY OF THE	INFRASTRUCTURE REPAIR SYSTEMS, INC. 4301 34th St. N, St. Petersburg, FL 33714 727-327-4216 (f) 727-327-4118 www.irsi.net • irsi@irsi.net				>	>	>			
see ad on page 72	INSPECTORCAMERS.COM 34 Douglas Dr., Candia, NH 03034 603-267-0400 www.inspectorcameras.com sales@inspectorcameras.com	~	>		٧		>			
PRODUCTS Manufactured by Vanderlans & Sons, Inc.	LANSAS MFG. BY VANDERLANS & SONS INC. 1320 S Sacramento St., Lodi, CA 95240 800-452-4902 • 209-334-4115 • (f) 209-339-8260 www.lansas.com • info@lansas.com	V			>	>	V			
see ads on pages 57, 61	LOGIBALL, INC. 440 Papin St., Quebec, QC G1P 3T9 CANADA 800-246-5988 • 418-656-9767 • (f) 418-653-5746 www.logiball.com • info@logiball.com	~			>	>	>		>	
MAXLINER see ad on page 51	MAXLINER USA 450 College Dr., Martinsville, VA 24112 877-426-5948 • 276-656-1225 • (f) 276-656-0419 www.maxlinerusa.com • info@maxlinerusa.com	~			>			V		
MILLER PIPELINE AN ARTERA COMPANY	MILLER PIPELINE 8850 Crawfordsville Rd., Indianapolis, IN 46234 317-293-0278 www.millerpipeline.com • info@millerpipeline.com	V	~			>	V			
see ad on page 7	NuFLow Technologies 7/10 Kenamar Ct., San Diego, CA 92121 800-834-9597 • (f) 619-275-7110 www.nuflowtechnologies.com • info@nuflowtech.com		~		V		V	V		
PARAMOUNT see ad on page 3	PARAMOUNT PIPE LINING PRODUCTS LLC 12190 44th St. N, Clearwater, FL 33762 833-ONE-CIPP • 833-663-2477 www.paramountcipp.com • sales@paramountcipp.com	V	~		V	V	V	V	V	
PARSON	PARSON ENVIRONMENTAL PRODUCTS, INC. PO Box 25 Wernersville, PA 19565 800-356-9023 610-582-6060 www.parsonenvironmental.com info@parsonenvironmental.com	~				V				
	PE EQUIPMENT 485 Ash Rd., Kalispell, MT 59901 406-499-8136 www.pe-equipment.com • adam@preeng.com			~	V					

PIPELINE R	EPAIR AND REHABILITATION	RELINING	UV CIPP	BURSTING	LATERAL REHABILITATION	MANHOLE REHABILITATION	SEALING/ SPOT REPAIR	REINSTATEMENT CUTTERS	GROUTING	
see ad on page 76	PETERSEN PRODUCTS CO. 421 Wheeler St., Fredonia, WI 53021 800-926-1926-262-692-3100 (f) 262-692-2418 www.petersenproducts.com sales@petersenproducts.com	>		>	ζ.	<	V		~	
PICOTE LIFE FOR PIPES see ad on page 56	PICOTE SOLUTIONS 8350 Dancing Waters Ln., St. John, IN 46373 708-267-6366 www.picotesolutions.com • tony@picotesolutions.com	~			V			V		
Pipeline Renewal TECHNOLOGIES	PIPELINE RENEWAL TECHNOLOGIES 111 - B3 Canfield Ave., Randolph, NJ 07869 973-252-6700 mail@pipelinert.com	~	V				~	~		
PIPEUNING See ad on page 8	PIPE LINING SUPPLY 2970 E La Palma Ave., Anaheim, CA 92806 888-354-6464 www.pipeliningsupply.com • info@pipeliningsupply.com	~			>		~	~		
POW-R MOLE TRENCHLESS SOLUTIONS see ad on page 73	Pow-R Mole Sales LLC 1400 Commerce Pkwy., Lancaster, NY 14086 800-344-6653 • 716-683-2486 www.powrmole.com			~	V					
FIMELIA	PRIMELINE PRODUCTS, INC. 309 Altamonte Commerce Blvd., Ste. 1518, Altamonte Springs, FL 32714 877-409-7888 • 407-772-8131 • (f) 407-786-8131 www.primelineproducts.com • andy@prime-line.net	~			V	V	~			
PROGRESSIVE PIPELINE THE INFRASTRUCTURE RENEWAL SPECIALISTS	PROGRESSIVE PIPELINE MANAGEMENT 101 Linden St., Wenonah NJ 08090-1641 856-579-4525 • (f) 856-579-4526 www.progressivepipe.com • info@progressivepipe.com	~								
Rapid	RAPIDVIEW IBAK NORTH AMERICA 1828 W. Olson Rd, Rochester, IN 46975 800-656-4225 574-224-5426 (f) 574-223-7953 www.rapidview.com sales@rapidview.com							>		
see ad on page 67	RATECH ELECTRONICS, LTD. 260-7 Spinnaker Way, Concord, ON L4K 4P9 CANADA 800-461-9200 • 905-660-7072 • (f) 905-660-1519 www.ratech-electronics.com sales@ratech-electronics.com						~			
RELÎDE AMERICA see ad on page 55	RELINE AMERICA, INC. 116 Battleground Ave., Saltville, VA 24370 800-998-0808 • 276-498-4000 www.relineamerica.com • info@relineamerica.com	~	V							
RFI construction see ad on page 69	RFI CONSTRUCTION PRODUCTS 495 Smith St., Farmingdale, NY 11735 631-752-8899 • (f) 631-454-9155 www.rficonstructionproducts.com • rficp@optonline.net	~				~			V	
see ad on page 62	RODDIE INC. 4457 Trumble Creek Rd., Columbia Falls, MT 59912 406-730-1565 • (f) 888-406-8282 www.roddieunderground.com • rod@roddieunderground.com			~						

PIPELINE R	EPAIR AND REHABILITATION	RELINING	UVCIPP	BURSTING	LATERAL REHABILITATION	MANHOLE REHABILITATION	SEALING/ SPOT REPAIR	REINSTATEMENT CUTTERS	Grouting	
	SEALING SYSTEMS, INC. 9350 County Rd. 19, Loretto, MN 55357 800-478-2054 763-478-2057 www.ssisealingsystems.com • pam@ssisealingsystems.com					~				
SIE ON	SOURCE ONE ENVIRONMENTAL 300 S Dayton St., Davison, MI 48423 810-412-4740 info@sleonline.com	~	>		>	V	>	~	V	
S PARTAN see ad on page 80	SPARTAN TOOL 1618 Terminal Dr., Niles, MI 49120 800-435-3866 www.spartantool.com • customerservice@spartantool.com			•	V			~		
Strong Company	THE STRONG COMPANY 4505 Emmett Sanders Rd., Pine Bluff, AR 71601 800-982-8009 • 870-535-7617 • (f) 870-850-6933 www.strongseal.com • info@strongseal.com					V				
breaking tradition.™	TRIC TOOLS, INC. 1350 S Loop Rd., Ste. 104, Alameda, CA 94502 888-883-8742 • 510-629-4167 • (f) 510-217-9493 www.trictools.com • info@trictools.com			V	~					
see ad on page 73	TRUGRIT TRACTION, INC. PO Box 2084, Winter Park, FL 32790 407-900-1091 www.TruGritTraction.com • tomr@trugrittraction.com	~		•	V		V	~	V	
Thermoform see ad on page 19	WARRIOR TRENCHLESS SOLUTIONS 1400 Commerce Pkwy., Lancaster, NY 14086 716-601-7760 www.thermoformliner.com	V			V					

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

FREE SUBSCRIPTION Claim yours today at www.cleaner.com





Fleet Protection

Commercial vehicle insurance is getting more difficult to obtain, but it's important to put in the work to insure your fleet

By Joan Koehne

nsuring your fleet of trucks is one major requirement of operating a drain cleaning business. Accidents can happen at any time, and the right commercial auto insurance reduces the risk of paying high out-of-pocket expenses if an accident occurs.

"It's a cost of being in business," says Hugh McLaughlin, owner of 88 Drain in Tucson, Arizona. "You need to have it, because without it, you could lose everything."

Commercial auto insurance coverage comes in a variety of forms. The two main types are liability and physical damage. Liability covers injuries, damages and lawsuits if an employee is at fault in an accident. Physical damage covers the cost to repair a vehicle.

Commercial vehicle plans can be complex, and insurance rates vary. In general, rates are based on driving records, age and value of the vehicle (and equipment), use of the vehicle, and radius of operation.

In recent years, the dynamics of commercial auto insurance have changed, according to Mark Friedlander of the Insurance Information Institute, a national association that helps the public understand insurance.

One of the major changes relates to profitability. The commercial auto market has not achieved an underwriting profit since 2010, according to Friedlander. The insurance sector has been unable to keep pace with losses after years of inadequate pricing and underestimating what it will pay for claims.

"Sustained negative financial results have led carriers to take steps to reduce their exposures by nonrenewing commercial auto customers throughout all business sectors," Friedlander says.

FEWER OPTIONS

A smaller pool of insurance carriers means fewer options for businesses shopping for commercial auto insurance.

"It's an ugly situation. The options that are available are limited," says Mark Herring, senior vice president of Heffernan Insurance Brokers in Portland, Oregon.

"It's grueling to wrap your head around all the language the insurance companies use, but I find it's really important –

> if someone comes in with different rates to compare apples to apples."

> > Hugh McLaughlin

Heffernan insures about 220 portable restroom companies in a program it's offered for the past 27 years.

Herring has worked with countless septic and drain cleaning companies in his 22 years at Heffernan. He's witnessed various trends in commercial auto insurance, but 2020 stands out. Major insurance carriers are exiting the market, and the repercussions are alarming,

"It's simply supply and demand," Herring says. Contractors have fewer options and are paying more for insurance coverage.

"I only know of one national preferred insurer now writing in this industry," he says. "This doesn't take into account the insurers that would not write in this industry in the first place."

A representative of SeptiCover confirmed the closure of its septic program and reported the company did not have a replacement carrier. In years past, SeptiCover's property and casualty insurance program was endorsed by the National Association of Wastewater Technicians.

Representatives of other insurance carriers were contacted but declined to comment regarding an exit from the commercial auto insurance market.

ACCIDENTS ON THE RISE

Herring attributes the shrinking provider list to an increase in traffic crashes, which lowers profitability margins. He points to four reasons for the increase. First, smartphones and distracted driving cause more accidents. Second, when an crash occurs, it costs more to repair today's high-tech cars than older models. Third, medical costs and jury awards are up significantly.

"Jury verdicts are so crazy. There's even a new term out there: It's called a 'nuclear verdict,' and that's a verdict over \$10 million," Herring says.

Lastly, traffic has increased.

"It's a fact that if more people are driving on the road, there's going to be more accidents," Herring says.

Friedlander agreed that more vehicles are on the roads. In addition, more commercial vehicles are on the roads due to the growth of the U.S. economy, particularly in the online shopping market.

"As companies face labor shortages, they are hiring more inexperienced truck and van drivers who have a higher rate of

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



















accidents," he says. With all of these factors, profitability has decreased for commercial auto insurance carriers.

"It could take just one or two fluke accidents to wipe out a lot of profit of an insurance carrier," Herring says. "Auto and truck insurers just want to reduce their exposure to auto claims."

FINDING A COMPETITIVE PRICE

Not only are fewer insurance companies offering commercial insurance, but finding a competitive price isn't as easy today. According to the Insurance Information Institute, commercial auto rates have increased for all business sectors since 2016. In the fourth quarter of 2019, premium rates increased 8% over the previous quarter. Early this year, rates were forecast to rise 6% to 12% across the U.S.

Contractors who file claims put themselves at risk to pay much more for commercial auto insurance, Herring says.

"I've had several people call me and say, 'I've got a problem. My agent said he can't find insurance except for a 200% increase," he says.

Finding the right coverage at a competitive price is not as easy today. To get the best insurance rates, Herring tells contractors to avoid filing claims, carefully screen and hire employees, be financially stable and focus on safety.

"They need to do everything they can to keep their company looking good to the insurance company."

WORKING WITH AN INDEPENDENT AGENT

Friedlander recommends shopping around for the best policy. Independent agents write nearly 90% of commercial auto policies, so talking to an independent agent is a good first step, he advises.

"An independent agent can provide companies with quotes from multiple national and regional carriers," Friedlander says.

Ben Smith, owner of Marvel Sewer and Drain in the Minneapolis area, has worked with the same independent agent for the past five years. Referred by a friend in the septic business, the agent is based in the Midwest and knows the sewer and drain industry. He provides the options and personalized insurance Smith was looking for.

"We found a product that worked really well for us at a good rate," Smith says. Working with an agent you like and trust is important.

"Make sure they have your best interest in mind and they have the right coverage so you're not overpaying."

EMPHASIS ON SAFETY

To keep insurance expenses in check, Marvel Sewer and Drain doesn't file many insurance claims and uses a GPS-tracking system in the vehicles to record driving habits.

"If I have bad drivers, they're not going to work here," Smith says. Dashcams and backup cameras are a must, he adds.

Safe-driver training adds another layer of protection. At 88 Drain, a new employee orientation program includes riding with the boss.

"I ride with them to see how they drive," McLaughlin says. "If we have an aggressive or assertive driver, I have a talk with that person. It's not a good marketing strategy when you have billboards on the side of your vehicle."

COMPARE RATES

A good understanding of insurance jargon takes the guesswork out of choosing the right policy.

"It's grueling to wrap your head around all the language the insurance companies use, but I find it's really important — if someone comes in with different rates — to compare apples to apples. Sometimes these lower rates come in, but they're omitting coverage that you think you have," McLaughlin says.

GETTING THE BEST DEAL

Finding the right commercial auto coverage at a competitive price may not be as easy as it once was. Fewer insurance carriers offer the insurance in 2020, and premiums are increasing. Contractors who take proactive measures can get their best deal.

"You have to be on top of it," McLaughlin says. "Like everything else in your business, you have to evaluate what you're spending and what percentage of your overhead is going toward that particular area. Look at it to see if you can make it more efficient."

Insuring a fleet of trucks won't be on the "Things I Love About My Job" list, but it's important to protect your business. **c**

Cleaner is FREE!

Subscribe/renew online at cleaner.com



Cleaner REHAB & RELINING

Contractors in the pipe rehabilitation and relining industry demand quality products.

See how these partnerships ensure success in this special Cleaner Rehab & Relining section.



Easy Kleen Pressure Systems Ltd	59
Envirosight LLC	46
Enz USA Inc	58
Fast Pipe Lining Inc. &	
Pipevision Products, Inc	60
HammerHead Trenchless	52
Hy-Flex Corporation	63
Logiball, Inc57,	61
MaxLiner USA	50
NuFlow Technologies	47
Paramount Pipe Lining Products LLC	49
Picote Solutions	56
Pipe Lining Supply	65
Reline America	54
RIDGID	48
RODDIE, Inc.	62





Sewer Authority Advances With Lateral Launch Crawlers

he ROVVER X SAT II lateral launch crawler from Envirosight allows the Pittsburgh Water & Sewer Authority to traverse steep pipe inclines with ease, which previously posed challenges for the team in its inspection, maintenance and rehab planning efforts.

"We are constantly trying to climb hills with our equipment, which we used to find difficult," says Jason Auge, CCTV specialist and 13-year-veteran at the authority. "Since purchasing the SAT II systems, we are doing it effortlessly."

The authority is responsible for the entire city of Pittsburgh's sewer system, roughly 12,000 miles of mostly combined sanitary and storm sewer lines. And there are countless slopes around the historic city.

"The biggest differences we've noticed with this system are the improved climbing capability and push power," Auge says. "Eightwheel drive instead of six and the new belt drive have made a big difference."

TACKLING UNIQUE OBSTACLES

The authority faces several other challenges in the city's system, including increased debris from the combined system, frequent pipe junctions and sinkholes.

"The number of lines that run junction to junction in our system is a unique challenge for us," Auge says. "There is often no manhole to gain access, but with the lateral launch on the SAT II, we are able to drive up one sewer main and launch the camera into other mains running perpendicular."

Operators rely on the launch camera's pan-and-tilt capabilities to investigate defects and navigate bends. And twin sonde transmitters make the crawler and lateral launch camera locatable from street level for accurate marking and digging.

ADDRESSING NEEDS SWIFTLY

The system has also proven useful in determining the source of sinkholes and resolving them faster.

"We first do dye tests on the sinkhole to determine where the issue is coming from," Auge says. "If it's the lateral, we confirm which home and then we launch the SAT II up their line and determine what's broken and what they need to do to repair it. The push power



going up these laterals is way better than before, so we're addressing needs quickly."

The SAT II's new push drive mechanism offers increased power while minimizing wear on the push rod. And it's designed for easy cleaning and toolless belt changes in the field.

DRIVING PRODUCTIVITY

With a SAT II system in each of its three inspection vehicles, the authority has already seen improved productivity.

"There's definitely been an increase in efficiency with the SAT II," Auge says. "We are getting more done. It's crawling faster and we're getting to our problem spots quicker. The technology has improved significantly."

RELIABLE SUPPORT, SERVICE

A long-time Envirosight customer, the authority has relied on sales partner A&H Equipment for many years. "The team at A&H is great," Auge says. "Anytime I need something, they're quick to get me fixed up and answer any question. They helped us get up and running with this new equipment right away."

And the A&H crew is pleased to see its loyal customer satisfied with the new equipment.

"Pittsburgh has some challenging sewer infrastructure," says Perry Ohm, territory sales manager at A&H. "We knew if the new ROVVER X SAT II impressed them, it would succeed anywhere."



ROVVER X SAT II is just one of many innovative sewer inspection solutions offered by **Envirosight**, which designs equipment to

serve the needs of municipalities, contractors, departments of transportation and civil/ environmental engineers. Envirosight is a full-service manufacturer of robotic sewer inspection crawlers, zoom cameras, push cameras, inspection reporting and asset management software, and inspection vehicles. Envirosight is committed to ongoing innovation, delivering products that enhance user productivity and inspection detail. Envirosight serves customers through a trained network of regional sales partners who deliver localized support and expertise with rapid turnaround.

866-838-3763 mail@envirosight.com www.envirosight.com

The Superior UV Solution

uFlow's NuCure Cold Cure UV system turns hours into minutes, making lining companies more productive and more profitable. Combining Pro-Kanal's Double Helix light core technology with NuFlow's cold cure UV resins has resulted in an evolutionary leap in light curing technology.

WHAT MAKES NUFLOW'S UV-CURED LINING BETTER?

Double Helix light core assembly

NuFlow's unique Double Helix CCUV technology ensures light penetrates the entire surface of the liner. The Double Helix design entwines multiple LED light ropes into 3-, 10- and 30-foot CCUV light cores to cure the CCUV resins while creating a redundancy to ensure there are no disruptions during the process. The liners are also available as wyes and tees for lining branch connections, allowing for the full structural rehabilitation of a piping system. As much as 120 feet can be lined in a single push or pull.

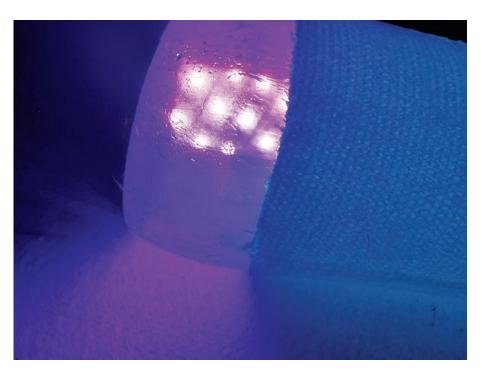
The LED light emitters significantly lower thermal emissions and are more efficient than the phosphorus bulbs used in large-diameter light trains. Reducing the thermal emissions is a key factor in eliminating the need for a larger footprint and additional equipment such as high cubic-feet-perminute ventilation and air drying.

Cold cure resin technology

NuCure CCUV resin offers many advantages over legacy CIPP resins. These resins are shelf stable, allowing the contractor to wet-out on or off site, providing a longer pot life and enabling exceptionally fast UV cure times. CCUV resins cure densely in as little as 10 minutes, drastically reducing installation times and limiting the duration of thermal energy release. The low temperatures and shorter durations mean CCUV liners can be installed within thin-walled plastic pipes, which could not be lined with other CIPP technologies. In addition, the resins have zero VOC, avoiding nuisance odors and resident concerns at the job site.

NuCure GRP Liner Tubes

NuFlow's NuCure GRP Liner Tubes are engineered for performance. These seamless, radially expandable ECR fiberglass tubes are engineered to conform to bends and size transitions. The ECR glass features corrosion resistance, while the fiberglass



reinforcement provides a thin-wall, high-strength structure. The Resin Protection System consists of an integral polyurethane outer coating that offers high thermal stability and a removable inner calibration bladder that helps to contain and evenly distribute the resin. This protects the resin from excessive bleed-out, blowout, washout and emulsification and helps prevent resin slugs.

Precision PIP installation

Utilizing NuFlow's signature Precision PIP (push- or pullin-place) installation methods enables NuCure CCUV to achieve reliably accurate placement without any expensive inversion equipment or complex robotics.



New to UV? Not a problem. **NuFlow's** certified contractors are trained with apprentice, journeyman and master level courses. The NuFlow team offers on-site and virtual training through its learning management system and true 24/7 job support. NuFlow equipment and liners are backed by a manufacturer's warranty and include customer support from its North American Equipment Maintenance Center.

800-834-9597 info@nuflowtechnologies.com www.nuflowtechnologies.com

Company Finds Additional Applications for Drain Cleaning Machine

offmann Brothers Heating, Air Conditioning, Plumbing, Electrical and Appliance Repair in St. Louis has added RIDGID FlexShaft drain cleaning machines to every new plumbing service truck it outfits after having experienced the tool's versatility and timesaving benefit.

"It's definitely a timesaver. Just loading and unloading it, going from heavier machines to lighter, more compact machines saves time right there; then add speed and cleanliness on top of that," says Christian Telford, master plumber/drainlayer and field operation manager at Hoffmann Brothers.

The company primarily uses the FlexShaft K9-306 designed for 3- to 6-inch-diameter drainlines up to 125 feet, but the drain cleaning machines are also available in two smaller models – K9-102 and K9-204 – for cleaning 1 1/4- to 4-inch residential and commercial pipes up to 70 feet.

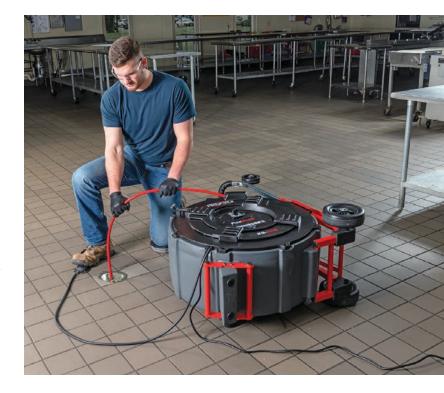
"You also can't get the thorough cleaning with standard equipment like you can with FlexShaft," Telford says. "The ability of the expanding chains to maximize the pipe size allows for a full pipe cleaning. Coupled with how clean the machine itself stays, you provide the client with an overall better experience."

Telford notes that the FlexShaft is 10% to 25% faster at cleaning drains, and for a flat-rate fee company, that means saved labor costs and the opportunity to complete more jobs in a day.

In business for more than 40 years, the team at Hoffmann Brothers prides itself on the quality and integrity it brings to every job. That means not only providing the best customer service to clients, but also staying on top of the latest technology and equipment to be at the top of the industry.

One of the impressive uses the Hoffmann Brothers team has found for FlexShaft is root clearing.

"We were pleased at how well it did with roots without binding up too much," Telford says. "We've had heavy balls of roots that our sectional and drum machines usually have to make several passes for. With FlexShaft, you may have to make one additional pass for a final polishing while running water. By this point, you have again saved time and given the client a thorough cleaning, which is a huge win for both parties."



Employees are also using FlexShaft on descaling job sites after running the K9-306 through the course to see if it could meet their lining work quality standards and allow them to use it for their prequalification process.

"Not only did it meet our expectations, but we decided to also take it a step further and try to use it with reinstatements, which puts some heavy pressure on the equipment. It met the challenge," Telford says.

Telford says this was a great testament to the K9-306, as this was not why they originally purchased the machine. However, it opened the door for their specialized technicians who do the lining process to be able to not only perform their daily jobs with clients, but also perform prequalifications on perhaps the same visits – a great gain for the company and the client.

Hoffmann Brothers is now using the FlexShaft for residential, light commercial, descaling, milling and reinstatement jobs. To purchase or learn more about FlexShaft machines or other drain cleaning solutions, contact your local distributor for an inperson demo.



RIDGID provides certainty and efficiency to the expert trades by delivering innovative products that anticipate and exceed the demanding expectations of customers.

800-474-3443 info@ridgid.com www.ridgid.com

Company launches premium CIPP and SIPP solutions

aramount Pipe Lining Products continues to innovate with the introduction of the Green Machine inversion equipment. A safe and efficient air inversion system, the Green Machine is produced in three sizes to accommodate all installation types.

Efficiency is provided by Auto-Lubricating and Stream Ring technology, allowing technicians a safe loading and curing operation. The Auto-Lubricating technology eliminates the need to manually lubricate the CIPP liner and/or calibration tube during the loading process. It is a pressurized system designed to lubricate the CIPP liner and calibration tube during the inversion process.

Steam Ring technology is integrated into the Green Machine, providing the ability to direct steam into the CIPP liner or calibration tube without losing pressure or detaching

components. The technology is safe and eliminates possible failure during installations.

RESINTECHNOLOGY

Paramount offers formulations for epoxies that include 2-1, 3-1 and 4-1 ratios, as well as high-temperature-resistant epoxy resins. The formulations offer a range of hardeners that provide fast, medium or slow curing times, depending on the constraints and requirements of a project. No other supplier in North America provides such a comprehensive CIPP resin inventory for applicators to purchase.

CIPP LINER

The liner range has solutions for vertical, horizontal, vent stacks, and drainage pipes inside and outside building structures, as well as city collections systems. Paramount's scrim-reinforced liner provides an advantage to eliminate stretch. The flexible liner offerings negotiate bends and adapt to changes in dimensions with limited or no wrinkling. The liners are available in inversion and pull in place.

INSTALLATION EQUIPMENT

Specially designed for portability and accessibility, the installation equipment offers lightweight and compact systems for pipeline



rehabilitation so everything you need can be quickly and easily transported, taking you from one job to the next with efficiency and ease. Ready-To-Work packages include trailers and trucks, as well as individual custom purchases.

SIPP (SPRAY-IN-PLACE PIPE)

Paramount's SprayCoating equipment introduces a dynamic alternative for the coatings industry. The technology provides a damp-proof, corrosion-resistant, wear-resistant and noncorrosive semistructural coating.

The Midi SprayCoater is the industry's first brush- and spray-enabled coating system. Paramount has developed a series of highbuild multicolored epoxies, fast-curing polyureas and iFill chemical grouts. All chemicals can be applied using ParaPack cartridges and the SprayCoating Machine.

Paramount's Midi SprayCoater is truly a versatile piece of equipment for internal pipe repair. The system eliminates epoxy waste by utilizing dual hose delivery combined with static tip mixing technology. The range of pipes renovation is 1 1/2 to 6 inches, in lengths up to 65 feet.

TRAINING/SUPPORT

The training program developed by Paramount focuses on the installation of many types of CIPP liners and SIPP resins, and it has been a major success in North America. The company has a team of experienced trainers dedicated to teaching clients to repair existing sewer lines using the lining systems. Installations are taught using classroom and hands-on training by experienced training technicians.



At **Paramount Pipe Lining Products**, you'll find innovative products for rehabilitating existing pipelines using trenchless technology. Paramount provides CIPP and SIPP equipment, materials and training for rehabilitating 11/2- to 54-inch diameters. The company has more than 50 years' experience in developing CIPP liners, resin and installation equipment. If

you're in the pipe relining business or intend to start a business, contact Paramount first!

833-663-2477 | sales@paramountcipp.com | www.paramountcipp.com

Introducing Our Inversion Drum and Electric Calibration Roller to MAXimize Your Installation Efficiencies on the Job Site

ax LinerDrum aluminum inversion drums from MaxLiner are for those who prefer the drum over the Liner-Gun. Each install option functions perfectly within the parameters of the Max System. The drum is lightweight, easy to transport, holds the most liner capacity in its class and is suitable for air, water, UV and steam installations. The unique 700 Model was designed with our customers' input from the field:

- A width of only 23.2 inches lets it easily pass through the narrowest doorways.
- The detachable wheelbase and extendable carrying handles allow it to be carried up and down stairs with ease.
- It has a combined height of 44.9 inches (37.8 inches detached), is 130 pounds (110 pounds detached) and is capable of holding 135 feet of 4-inch liner, making it ideal for in-building use.

When more capacity is needed, choose the 900 Model, holding 250 feet of 4-inch liner. It is also compact for its class at 32.3 inches wide, 47.2 inches long and 50.4 inches high and weighing 176 pounds.

Maxliner cuts down the weight and size without cutting corners. Each unit is tested for safety and quality. The larger spindle wheel and access port location allow for more control during the loading and inversion. Both models are equipped with:

- Pressure manometer
- Safety valve
- Adjustable angle lock
- Water circulation
- Inversion heads, available from 2 to 8 inches with camlock fittings

The ergonomically designed drums will improve efficiencies no matter what the application demands are. Whether you prefer our new inversion drum or our LinerGun, each MAXimizes our industry-leading selection of liners and CalTubes to tackle any installation!

The Max E-Roller is a compact electric calibration roller that can be mounted to a table or easily transported closer to the work site by unlocking it from the detachable baseplate. It is ideal for a small



crew wetting out longer liners with a diameter range up to 12 inches. This 48 pound, 110-volt-powered unit operates with a foot peddle, allowing for hands-free operation. Additional innovations include:

- Built-in gap setting display
- Adjustable speed
- Directional switch
- Pressure limit safety
- Emergency stop

Say goodbye to bulky roller tables and stationary units, and MAXimize your efficiencies with our new calibration roller.



MaxLiner offers the industry's most portable CIPP system available to restore lateral and vertical pipes with minimal disruption or cost. The company offers the world's largest selection of liners, CalTubes and other essential lining materials. MaxLiner's quality felt liners are specifically developed for optimal results in a variety of applications and pipe configurations, compatible with steam and most UV systems. Our hands-on training and ongoing support is second to none.

877-426-5948 info@maxlinerusa.com www.maxlinerusa.com



THE WORLD'S LARGEST SELECTION OF LINERS, CALTUBES AND OTHER ESSENTIAL LINING MATERIALS.



NEVER HEAD DOWN A HOLE ALONE.

Source only the highest quality CIPP liners and CalTubes™ from MaxLiner® and be more than prepared on each and every jobsite with the right lateral equipment, materials and support.









MAXLINERUSA.COM







GO WITH MAXLINER: 877.426.5948

Source your next job with a knowledgeable MaxLiner professional.

Pipe Extraction System Designed for Replacing Steel Gas Services

ammerHead Trenchless, a leading manufacturer of trenchless installation, rehabilitation and replacement solutions for underground utility infrastructure, has added to its award-winning line of Same Path technology: the SLX1300 trenchless pipe extraction system for small-diameter steel natural gas services.

Pipe extraction using the SLX1300 is a new method of replacing coated and bare steel gas service lines 0.5 to 1.25 inches in diameter and up to 100 feet in length. The hydraulically powered unit produces up to 13.3 tons of pulling force to extract the pipe from the ground while simultaneously pulling new HDPE or MDPE pipe into the same location as the existing pipe, reducing risk to surrounding utilities.

"HammerHead has a strong track record of working closely with crews in the field to find cost-effective solutions for addressing deteriorating gas pipelines," says Josh Hood, HammerHead senior product manager. "A gas company approached us about finding a trenchless way to replace bare steel, and our engineering team applied operator feedback to design the SLX1300 to meet needs unique to the gas market. The final design includes innovative features to minimize excavation and reduce operating requirements."

One feature is the unit's onboard pipe shear that the operator engages to cut the pipe material, as it is extracted, into manageable segments for easy disposal.

The pipe extraction process requires two access points: a machine pit located where the service connects to the main and an access point opposite the machine from which to pull in the new pipe. A cable is fed from the machine through the pipe and attached to the new pipe at the other end. The machine's jaws clamp the steel pipe and the cable within it, and the machine is then engaged to pull the pipe from the ground. The jaws release and the machine cycles forward to clamp and pull another segment. The pipe shear located behind the machine's clamping jaw can be engaged at the operator's discretion to segment the extracted pipe into any length as space allows.

The compact size of the unit requires a working pit approximately 4 feet wide by 4 feet long, and the entire system can be transported in the back of a standard pickup truck, reducing costs associated with extensive excavation and support equipment needs.



"The U.S. DOT reports that there are more than 1.5 million feet of bare steel services still in operation in the U.S., and the lack of a protective coating can cause the steel to corrode and deteriorate faster than other materials. Having efficient and cost-effective replacement methods for these kinds of pipes is critical," Hood says. "Operators across the country have observed the cost savings and benefits of trenchless construction methods, so we're proud to introduce a new trenchless technology that facilitates rapid replacement of at-risk steel gas pipes."

The HammerHead line of Same Path technology also includes a pipe slitting system used for the trenchless replacement of plastic gas services. The SLX1300 is designed for steel pipe, but preliminary field testing on additional pipe materials is underway.



HammerHead Trenchless of Lake Mills, Wisconsin, manufactures and delivers a unique combination of rehabilitation, replacement and installation equipment and consumables for the underground construction market. Besides being a full solutions provider in rehabilitation and replacement, HammerHead also offers unmatched field support and project consultation to its customers worldwide. HammerHead products are proudly made

in the U.S.A. and sold and serviced in more than 63 countries.

800-331-6653 info@hammerheadmole.com www.hammerheadtrenchless.com



YOUR SINGLE SOURCE FOR TRENCHLESS REHAB & REPLACEMENT.



HammerHead Trenchless provides precision-manufactured equipment, comprehensive trenchless materials and supplies, and all the training and support you need to attack anything standing between you and rehabilitated pipes. Offering only the best and most innovative technologies available, our responsive team is by your side throughout the life of your quality HammerHead equipment – no matter how down and dirty your trenchless needs may be.



TOUGH EQUIPMENT. TRUSTED SUPPORT.

visit hammerheadtrenchless.com or call 800.331.6653

CIPP Liner Efficiently Rehabilitates Failing Storm Drain

o avoid a consent decree order handed down by the Environmental Protection Agency, utility owners have had to focus their attention and financial resources on resolving inflow and infiltration problems related to their sanitary sewer systems while neglecting their storm drain systems. A new trend gaining traction has asset owners taking a close look at their storm systems and establishing long-range plans to address areas of concern.



One of the oldest counties in the U.S., dating back to the 1600s, has spent the last several years doing just this. While original culverts in their county were made of wood, newer technologies led to the use of steel and metal products in pipe culvert manufacturing. These products are known to deteriorate due to naturally occurring chemicals in water and soils. Many of these installations are now at the end of their life span.

One example of this challenge came to light recently during preinspections for a paving project, when staff of the county's department of public works discovered a failing storm drain culvert measuring 200 linear feet of 72-inch corrugated metal pipe within a flood plain and natural stream. As with many CMP installations, the pipe was failing. The bottom of the pipe was deteriorated and signs of decay on other parts of the structure were present.

Open excavation of this culvert, located under 27 feet of fill embankment, would have involved removal and replacement of 15,000

cubic yards of dirt, impact to wetlands, permitting and limited ingress and egress for homeowners. The project would have taken up to nine months to permit, with construction estimated to take five weeks in normal weather conditions. The overall cost was estimated at more than \$520,000.

The department of public works had experience with a variety of different pipe rehabilitation technologies. They had already determined that they wanted to use glass-reinforced pipe

lining that's cured using UV light after having success with previously installing the first-in-the-nation 60-inch-diameter UV light-cured Alphaliner CIPP liner as manufactured by Reline America. The county's staff collaborated with Pleasants Construction, a Maryland-based installer for Reline America, to plan the 72-inch-diameter lining project. This would be another first for this particular department in that they would be the first to install a 72-inch-diameter UV GRP liner by Reline America in the U.S.

Following its procurement processes, the county chose to proceed with using the Alphaliner lining solution due to its economic value, limited disturbance of soils and wetlands, delays in permitting due to open excavation and disruption to the community. Permits for the project were obtained in two weeks, with construction lasting just three days from preparation work to stabilization. The Alphaliner installation took just one day. By utilizing UV GRP lining, they saved more than 50% compared opencut.

The Alphaliner technology allowed project completion with fewer impact to the public, the environment and the county budget.



Reline America is the only manufacturing company in North America that specializes in making both UV GRP liners and the equipment required to cure it. Being a single-source manufacturer and a highly experienced support team providing 24/7 customer support sets the company apart from the competition. With a curing unit capable of producing 24,000 watts of UV output, Reline America is not only able to cure thicker liners, but also reduce the amount of time needed to cure, saving both time and money.

276-496-4000 info@relineamerica.com www.relineamerica.com

are you asking the right questions?



POWER

Curing speed 30% faster than others resulting in job cost savings

Curing systems have up to 24,000 watts of output allowing for curing of thicker liners (over 24mm)



VERSATILITY

Able to cure 6" to 72" diameter pipe liners with a single unit

Ability to cure odd shaped pipes such as ovoid, arch, rectangular and special cross-sections

Call or visit us online for more details

RELIABILITY

QC is assured by Quality Tracker System™

Manufactured in the USA in an ISO 9001:2015 facility

> Backed by USA based support and service

866.998.0808 relineamerica.com

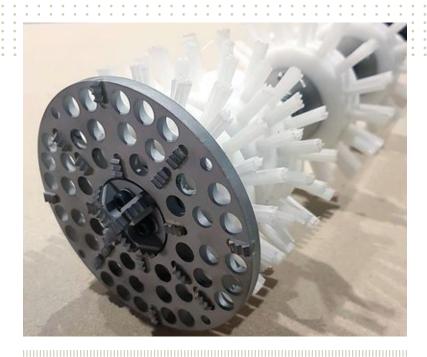
REHAB & RELINING

Drill Chains Prove the Link to Success

icote Solutions now offers its new Tiger Drill Chains. These new chains are an advanced solution that are equipped with an integrated front drill head to help you push through tree roots, hard and soft blockages, and lightly collapsed liners.

Once through the blockage, its three links will continue to open up while it grinds away any rust, scale and deposits to bring the pipe back to its full diameter. The integrated front drill head is manufactured with uniquely hardened carbides for maximum aggression and efficiency to tackle even the toughest jobs.

These newly designed chains are manufactured from high-quality 3.5 mm and 4.5 mm stainless steel links. They are used exclusively with the Picote Miller lineup for 3- to 10-inch pipes. These chains will make quick, efficient work of unblocking, cleaning and descaling cast iron, clay and concrete pipes.





Picote Solutions is a global innovator and manufacturer of high-speed drain cleaning, trenchless tools and brush coating equipment for small-diameter pipes 11/4 to 12 inches. As a

contractor at heart, the company works to advance the industry through innovation and education. Picote has a worldwide team for sales, marketing, production, export, training and technical support, with facilities in Finland, the United Kingdom and the U.S.

708-267-6366 | sales@picotesolutions.com | www.picotesolutions.com

GET IT DONE WITH THE MAXI MILLER



3" TO 10" PIPES
HIGH-SPEED CLEANING
DESCALING
ROOTS
REINSTATEMENTS
REMOVE: CONCRETE
FAILED LINERS AND
FAT, OILS & GREASE

708 267 6366 | sales@picotesolutions.com WWW.PICOTESOLUTIONS.COM/RESELLERS



Sleeve Installers Enable the Installation of CIPP Sectional Liners

ogiball manufactures a complete line of sleeve installers for the installation of CIPP sectional liners in laterals and mainlines.

Available for the installation over bends for 4- or 6-inch pipes, the Logiball Bendy Carriers conform to the bends. An optional slide-through option to slide in a 3/8-inch fiberglass push rod to push the installer from the front end versus back end greatly helps in pushing and positioning the sleeve installer.

For standard installations, sleeve installers for 3-, 4- and 6-inch pipes in different lengths and configurations are available.



Logiball Inc. is a leading manufacturer of trenchless pipe rehabilitation equipment. Its inflatable pipe plugs and test-and-seal injection packers are used for the maintenance and trenchless rehabilitation of collections systems and gravity pipes compromised by groundwater intrusion. Logiball's test-and-seal injection packers confine and apply grouts for the repair of points of water ingress and egress from pipes, such as leaking joints or cracks.

800-246-5988 info@logiball.com www.logiball.com



Milling Cutter and Cutting Ball Technology

he Enz milling cutter and cutting ball offers a complete line of cutting solutions for the toughest projects.

The milling cutters are designed to remove the hardest deposits, such as limescale and concrete. They work with a percussion system of 600 to 3,000 impulses per minute and up to 15 tons of impact force. Enz recommends using carbide teeth for limescale and diamond teeth for concrete. You can use it in pipes ranging from 1.2 inches with the ML28 (13.028N) up to 24 inches. Most of the milling cutters work with recycling water. In many cases, the use of a percussion milling cutter is the only alternative to digging up pipes under foundations or roads. By adding the diamond crown cutter, you can even remove protruding laterals.

In addition to the milling cutters, the cutting ball family can remove hard deposits in pipes with bends and curves due to its spherical shape. The side blades are self-sharpening and maintain



their sharpness over their entire service life. The cutting ball's area of application is diverse; it's not only good for removing roots, but it can also remove lime deposits by adding the vibration mode. The cutting ball is leakage free and can be operated with recycling water.



Enz has brought innovations to the sewer cleaning market since 1985. Constantly in dialogue with customers from municipalities and industrial firms, the company sets top quality standards. This extensive communication has made

Enz the international market leader with representative offices on all continents. The company offers a suitable tool for every application. Manufactured 100% in Switzerland, its high-tech products are unsurpassed when it comes to workmanship quality and effectiveness.

877-362-8721 salesusa@enz.com www.enz.com



Save Time and Money When Pipe Relining With Dry Steam Generator



asy-Kleen Dry Steam Generators are used for a wide variety of applications, such as thawing, degreasing, cleaning, weed control, CIPP lining and prepping surfaces for paint. They are available in 20, 30 and 50 bhp. These units have an oilfired burner and are powered by a 2 hp, 110-volt motor that can be plugged into a generator, maximizing portability. They include allwelded powder-coated frames, as well as heavy-duty triplex plunger pumps, complete with adjustable thermostats. Safety features include electronic thermostats with deviation control, a safety valve and flow control. They are available in horizontal or vertical frames, skid-mounted with 225-gallon water tank units and with trailer package options.

Josh Frank from A-1 Sewer from South Dakota is one happy Easy-Kleen customer. "I would take this Easy-Kleen Dry Steam Generator over my previous one any day," he says. "I'm running my 375 cfm Ingersoll compressor, my Easy-Kleen Dry Steam Generator and truck off 125 gallons of fuel a day. My previous truck took over 300 gallons a day. This Easy-Kleen is a badass steamer." This is a testament to the efficiency and quick temperature rise of the unit, saving on fuel cost and reducing downtime.

Your job site needs an Easy-Kleen machine! Call today to see what Easy-Kleen can do to solve your toughest cleaning jobs.

EASY-KLEEN

Family-owned and -operated since 1982, Easy-Kleen MS LTD.

Sure Cleaning Equipment has more than 38 years of experience manufacturing

high-pressure cleaning equipment. Easy-Kleen does things differently. It has equipment in the field that has been in use for more than 30 years due to its rugged, dependable and serviceable design. The Wolverine Series, our complete line of dry steam generators, are designed and manufactured in an 80,000-square-foot, state-of-the-art facility.

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



Trenchless Technology at Its Best

ast Pipe Lining Inc.'s Inversion Units make Cured-In-Place-Pipe (CIPP) liner installation easy and problem free. Fast Pipe inversion Units enable lining technicians to install any inversion liner at the lowest possible pressure without releasing the air pressure. These inversion units can shoot from 4- up to 120-inch CIPP liners.

Silicate and Fiberglass Patch Kits are made 100% in the USA. They can be used to patch 2- to 60-inch pipe. Patch plug sales and rental are also available. Ask about special discounts on the FAST Pipe Patch Kit.



Call Fast Pipe Lining and learn how the company can help you with your pipe restoration project.



Fast Pipe Lining is dedicated to rehabilitating any type of pipelines with long-lasting, quality materials that are cost-effective while keeping your project in mind and helping you work with the right tools. The company is always committed to great customer service, getting you a quality product at a great price. Its four-company consortium can help with all your CIPP lining needs, CIPP management/project training, crew training and installation assistance. They offer training; are top sellers in resins, epoxies, liners, calibration tubes, point repair kits, packers and end seals: and have an array of

CIPP lining equipment from CCTV cameras, robotic cutter systems, shooters, steam units to CIPP liner trucks and trailers, and many more pieces of equipment that are for purchase, lease and rent. Let Fast Pipe Lining help you with all your CIPP lining needs. **815-220-1919** | sales@fastpipelining.com | www.fastpipelining.com



Flexible Grouting **Packers Used to Seal Pipe**

ogiball's Long Span Flexible Grouting Packers were recently used by Florida contractor TeleVac South to seal longitudinal cracks in 8-inch vitrified clay pipe. TeleVac South's work consisted of reducing groundwater infiltration prior to CIPP lining. The mainline joints were grouted with standard packers, only to have the groundwater infiltration move to the longitudinal cracks and other defects in the sewer pipe section.

Kevin Beyer, TeleVac South general manager, contacted Logiball, who suggested the Long Span Flexible Grouting Packers approach. Four successful grouting interventions were performed in one day to stop the inflow and infiltration through the longitudinal cracks in the 8-inch VCP. Under regular circumstances, these pipe sections would have needed to be dug up and repaired prior to CIPP lining.

This approach allowed the CIPP contractor to stay on schedule and reduce his costs.



Logiball Inc. is a leading manufacturer of trenchless pipe rehabilitation equipment. Its inflatable pipe plugs

and test-and-seal injection packers are used for the maintenance and trenchless rehabilitation of collections systems and gravity pipes compromised by groundwater intrusion. Logiball's test-and-seal injection packers confine and apply grouts for the repair of points of water ingress and egress from pipes, such as leaking joints or cracks.

800-246-5988 info@logiball.com www.logiball.com



Groundwater Infiltration in Gravity Systems?





We have the Expertise & the Packers for Testing & Sealing



Man Entry Test & 9 Laterals coming in













REHAB & RELINING



Pipe Bursting System Works Both Horizontally and Vertically

he RODDIE R8 30-ton pipe bursting system can burst pipes 3/4, 1, 2, 3, 4, 6 and 8 inches in size, and it now comes standard with lightweight cribbing. Different diameter cables can also be used.

All R8s slide apart into two components that are less than 75 pounds each and can be set up vertically or horizontally. The option to use the R8 vertically or horizontally is ideal for when unforeseen utilities are in the way. The pulling rate is 8 feet per minute when powered by most tractors.

Patented articulating bursting heads allow for easy entry and smooth bursting through 45-degree bends. The Hydra Control wireless remote can be hooked up to any hydraulic power source. See it work on YouTube by searching "RODDIE R8."



RODDIE Inc. is an original equipment manufacturer based in northwest Montana. It specializes in the design and manufacture of industry-leading trenchless pipe bursting equipment and horizontal directional drills. RODDIE Inc. began as an underground contractor in San Jose, California. Originally called H&H Co., it developed the first static pipe bursting machine on a project for Siemens Corp. in the early 1990s. Over the years, this machine has evolved into what you see today. In 2011, the company opened its doors to the world as a manufacturer of trenchless equipment, continually developing other cutting-edge trade secret tools for the trenchless industry. Its goal is to help customers increase their profit margins as a contractor in the same way that their pipe bursting system and HDD drills have done for their contracting divisions in California and Montana.

888-406-3821 rod@roddieunderground.com www.roddieunderground.com

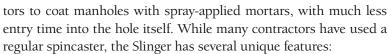
REHAB & RELINING

Hy-Flex Shares a Unique Spin on Manhole Repair Projects

ot every manhole repair project is the same. However, there are fundamental considerations that today's contractors must consider. Safety, productivity, equipment efficiency and return on investment are essential for every job. With the help of the Hy-Flex Slinger, you're covered!

Hy-Flex Slinger spincaster features and benefits

The Slinger is a productivity tool that allows wastewater contrac-



- The variable-speed electric motor allows smooth speed control of the spinning plate and more torque to evenly apply thick mortars.
- Its angled spinning plate has replaceable hardened blades that allow the Slinger to evenly apply material outward and upward at a 30-degree angle. This also allows material to be applied effectively under the ring and along the chimney.
- The electric winch allows the Slinger to be moved smoothly and steadily to give a controlled pass each and every time.
- The aluminum case construction and nylon slinging cavity allow cleanup with minimal effort.

The Slinger provides a fast ROI and improved team safety by:

- Minimizing the time your team is in the hole
- Decreasing hand application time for improved productivity and reduced material usage
- Reducing time to coat the hole
- Improving the uniformity of application without material

For more information, contact Hy-Flex's knowledgeable team today or see the Slinger in action and learn more about all Hy-Flex's wastewater equipment on the company's website.

Hy-Flex is a leading manufacturer of pumps, mixers and sprayers. Reliable, powerful and American-made, its products

can handle many jobs in various industries including wastewater, fireproofing, waterproofing, stucco/plaster, exterior insulation and finishing system, and infrastructure repair.

866-849-6246 | customerservicepumps@hyflexcorp.com | www.hyflexcorp.com

INCREASED SAFETY AND ROI



RELIABLE. POWERFUL. AMERICAN-MADE.

Built tough and easy to operate, the Slinger spincaster applies cement linings to manholes with limited entry, reducing risk to personnel. This is a go-to product for your wastewater rehabilitation projects.

Limited entry time

Reduced hand application

Improved uniformity

See our full line of Wastewater Equipment at hyflexcorp.com/wastewater



BEST OF THE DECADE

2019

EDITOR'S NOTE: This month's "Best of the Decade" first appeared in the January 2018 issue of Cleaner and has since been one of the most-read Better Business articles on Cleaner.com.





5 Marketing Trends You Need to Know

In the ever-changing world of marketing, several current trends could have a positive impact on vour sewer and drain business

By Judy Kneiszel

nce upon a time, a drain cleaner could place an ad in the Yellow Pages, slap a logo and phone number on the side of the company trucks and call it a marketing plan. Today, new marketing opportunities abound. Here are some trending marketing practices that might be worth adopting to give your business a boost:

1. Mobile first. The number of web searches done on mobile devices is at least 50% and growing, according to Google. Optimize websites and other digital content to be viewed on mobile devices. Make sure content can be viewed and performs equally well across all devices — desktop computers, laptops, tablets and smartphones — by hiring a web developer who can optimize your website and emails for mobile devices first, and then consider other platforms.

Optimizing content for mobile devices means understanding the conditions under which people use their smartphones and devices. Consider, for example, how long it takes under average conditions to load a page over a mobile network. Insist that when your information is viewed on a mobile device, the viewer can call your company with a single click.

In general, personal computers are used for research, but mobile devices are used for action. If someone asks Apple's Siri for a drain cleaning companies in their area, odds are they are serious about finding one and will take action, so make it easy for them. And if you really want to get into mobile marketing, the next step may be location-based marketing, which uses technology to determine where your customers are so you can connect and interact with them on their mobile devices in real time.

2. Live video. Facebook has made live video streaming simple for anyone to do. How can you go live to market your company? Let's say you're helping clean up after a local disaster and stream a go live video on Facebook from the scene that shows your crew chipping in to help the community.

What do you accomplish? You've reminded your Facebook followers about the services you provide and given them a look at your work. Plus, you've impressed your Facebook followers with the knowledge that your company is doing its part to serve the community. It's also an ego boost for your employees to know you're bragging about their hard work.

Be sure to zoom in on the company logo and phone number on your trucks. Why take the time to go live? Because you have nothing to lose — all of this trendy marketing is absolutely free.

3. Personalized marketing. It's easy for consumers to get lost in the sea of marketing messages they encounter every minute of every day. That's why marketers are increasing their use of data collection, analysis and automation technology to provide individualized content to potential customers. That may not be possible for a small company lacking in IT staff, but don't underestimate the personalized touches you are able to provide.

If customers have trusted your company enough to share contact information, they will appreciate individual attention,

This is what it would look like if we printed cleaner.com thousands of stories, products and ideas Get access to everything we can't fit in the magazine. Additional stories, videos, news briefs and other great information that lets you get the most out of Cleaner.

REHAB & RELINING

Offering the Best Selection of **Lining and Coating Materials**



hen it comes to lateral sewer lining or pipe coating of drain, waste and vent piping, no one offers more options for differing applications than Pipe Lining Supply. In addition to six types of resin systems, each formulated for specific jobs, it also offers eight different lining tube materials to cover any lateral lining project. Whether its inversion CIPP or pullin-place CIPP, Pipe Lining Supply has got you covered.

The company's most popular product is a liner containing scrim to dampen stretching when trying to hit a mark without ending up in the sewer main. It comes in a choice of coating that will work with epoxies and esters. The newest addition is a vinyl, epoxy, poly (VEP) material designed for use with any of the company's resins. Pipe Lining Supply also offers flexible liners that will negotiate turns that dampen wrinkling, as well as stretch for pipe diameter changes.



Pipe Lining Supply is a leader in the sewer pipe repair industry, offering stateof-the-art-equipment, performing resins and quality customer support. 888-354-6464 info@pipeliningsupply.com | www.pipeliningsupply.com

which can inspire or deepen loyalty. Ironically, in this age of sophisticated, data-driven digital marketing, personalized or oneto-one marketing like a direct phone call, an email addressing an individual decision-maker by name, or a face-to-face meeting can be a refreshing, memorable marketing tool.

4. Purpose-driven marketing. Have you noticed there are more ads today that tell a story? These ads don't just describe the product or service being promoted; they tell why a company does what it does or how it makes the world a better place. Attempting to establish an identity as a business with a conscience is sometimes called purpose-driven marketing.

Young people especially want to do business with companies that give back. While consumers can spot a phony message a mile off, you may benefit from a well-crafted message touting company efforts to be environmentally responsible or actively supportive of the community.

5. Increased voice searching. Voice assistants like Amazon Alexa, Apple Siri, Microsoft Cortana and Google Assistant get asked a lot of questions these days. According to Google, 20% of searches done on mobile devices are voice searches, and the number of voice searches on all devices is growing. As people see and hear their peers talking to devices with more frequency, they feel less silly doing it themselves, so the number of voice searches will continue to increase.

Make sure your website content includes key words and phrases that answer questions potential customers would ask to find a portable restroom company. How are voice searches different? Consider this: If you wanted to know the name of the tallest U.S. president and you were at your desktop computer, you'd probably type, "tallest U.S. president." If you were asking Siri, however, you'd likely say, "Who was the tallest U.S. president?" The difference may seem negligible, but it can actually make a difference in search results.

UPDATE THE MENU

Not every marketing technique works for everyone. What's most effective varies from day to day, company to company and customer to customer. Marketing is constantly evolving, and if you want your company to remain relevant and grow, it's in your best interest to keep up on the trends. Don't abandon the tried-andtrue, but occasionally review your marketing plan and implement some fresh ideas. After all, if no one ever upgraded their marketing efforts, consumers would still be getting all their information from cave paintings. c

product NEWS

SPOTLIGHT

Combination truck's water recycling capabilities keep crews on the job

By Craig Mandli

The use of recycled water isn't just a positive public relations talking point anymore. The ability to recycle water in a combination sewer cleaner can be a huge money saver and timesaver for



utility service crews, as not only do fewer tanks of freshwater need to be purchased to run through the unit, but also crews no longer need to leave the work site for refills. Vac-Con's Recycler combination machine brings those abilities to the utility landscape.

Vac-Con has integrated its proven combination machine technology with a recycling system that includes a two-stage water filtration system with stainless steel first-stage filter for removal of large particulates. The second-stage filter is self-cleaning and features a high-pressure backflush at 2,000 psi.

"The recycling system creates a massive reduction in freshwater usage and increased time on the work site, with not having to constantly stop to go get water," says James Dolan, a sales technician with Vac-Con. "To give you an idea of the numbers, it's 3% of your standard usage."

The Recycler boasts water flows of 50 to 80 gpm. Water pressure can be activated or deactivated, regardless of system revolutions per minute, due to a hydraulic control located at the control panel. During recycling, water is used from the debris tank directly and doesn't enter the freshwater system. Freshwater and recycled water are completely separate and isolated from one another. "The unit doesn't have to filter down the recycled water as fine, so there's less chance of clogging," Dolan says.

The Recycler can operate as a traditional combination machine by turning the recycling feature off, which gives the unit a wide range of applications. It is available in a dual- or single-engine configuration. The debris tank is offered in 11-, 12- or 16-yard options. Freshwater capacity is offered up to 1,000 gallons.

"The Recycler is the machine that operators have been waiting for," says Todd Masley, Vac-Con's executive vice president. "We began this product design by first understanding what the customers in the field required and, consequently, what other recycling machines on the market lacked. The timesavings and efficiencies the recycling feature produces will bring year-round savings." 904-284-4200; www.vac-con.com.







MILWAUKEE TOOL MX FUEL SEWER DRUM MACHINE

Milwaukee Tool's MX FUEL sewer drum machine has POW-ERTREDZ lift-assist technology, which makes it easier for one person to transport the machine up and down stairs and in and out of service vans. The machine has the power to clear roots 200 feet out while containing the mess with a fully enclosed drum. The POWERSTATE brushless motor provides full power at the maximum capacity of the machine, the REDLINK PLUS intelligence improves control with an integrated drum brake, and the MX FUEL REDLITHIUM battery pack can power through multiple jobs on a single charge, delivering the easiest setup and transport. 800-729-3878; www.milwaukeetool.com.

SEWER EOUIPMENT MODEL 900 ECO COMBO TRUCK

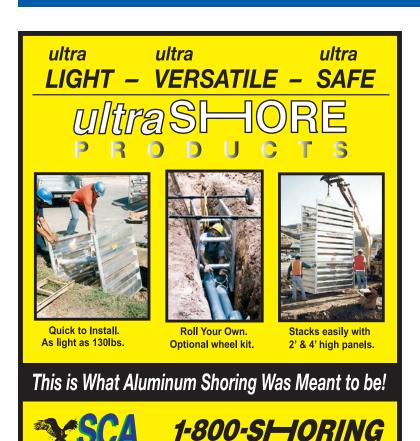
The Model 900 ECO combination sewer cleaner from Sewer Equipment has a Hydro Drive powertrain system that eliminates the need for a transfer case, allowing the truck to operate in neutral for operator safety. Twelve-volt electrical switches and relays throughout the truck allow for easy field diagnostics. Offering both single-piston and triplex pump options at 55 to 80 gpm at 2,000 to 3,000 psi and a 4,400 to 5,000 cfm blower at 18 inches Hg on an 8-inch system, the truck provides water and vacuum solutions for any situation. The 900 ECO is available in 6- to 15-cubic-yard debris body capacities, and it is equipped with standard Duraprolene water tanks carrying 900 to 2,100 gallons of onboard water. 800-323-1604; www.sewerequipment.com.

ELECTRIC EEL ECAM PRO 2 CAMERA BATTERY CRADLE

The eCAM Pro 2 pipeline inspection camera system from Electric Eel now offers a built-in battery cradle as standard. The system accepts a Milwaukee Tool M18 or equivalent battery, allowing for operation in remote locations or where electricity is not available. 800-833-1212; www.electriceel.com.



MANUFACTURING SEWER CAMERAS SINCE 1981.



<mark>1-800-683-8837</mark>

www.shoring.com

CUSTOM TRUCK (1) SOURCE



CUSTOM TRUCK ONE SOURCE PROVIDES HYDRO EXCAVATION. ENVIRONMENTAL, INDUSTRIAL, AND SEWER CLEANING VACUUM TRUCKS FROM TOP MANUFACTURERS, INCLUDING

TORNADO GLOBAL HYDRO, X-VAC, AQUATECH,

AND DOT CODE UNITS

OUR UNITS ARE BACKED BY:

24/7 CALL-CENTER SERVICE AND SUPPORT

NATIONWIDE LOCATIONS

CALL US FOR MORE INFORMATION: 888-524-3115

WWW.CUSTOMTRUCK.COM









COXREELS STAINLESS STEEL REELS

COXREELS offers various stainless steel reels and powder-coated steel reels with stainless steel fluid paths. Both 316 and 304 grades of stainless steel are available for fluid paths on many reel types to best match the necessary corrosion resistance of the reel, depending on the application. The stainless steel reel spools and frames remain 302 and 304 grade stainless and are optionally available in an electropolished finish for additional corrosion resistance. 800-269-7335; www.coxreels.com.

VACALL ALLIETVAC P SERIES COMBO SEWER CLEANERS

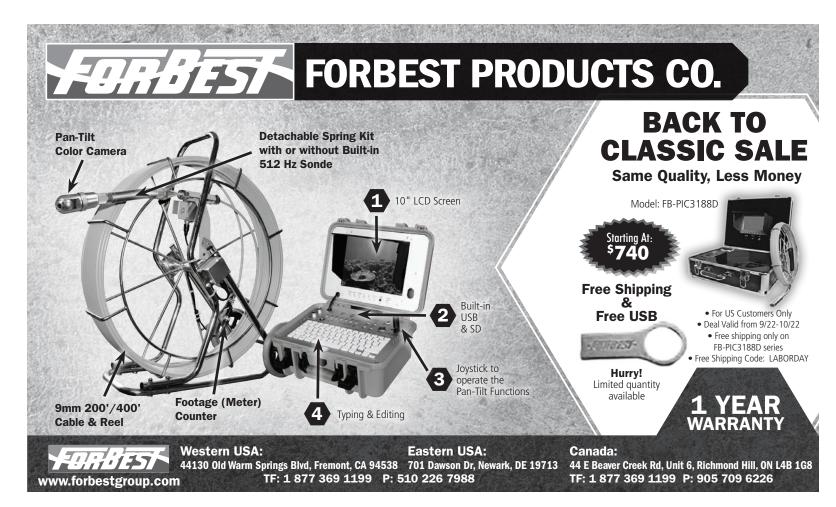
Vacall AllJetVac P Series combination sewer cleaners use a positive displacement blower system to create reliable jetting and vacuum forces while efficiently opening and maintaining critical lines. The models have a blower system that is powered by the chassis engine, reducing fuel consumption and service time and also eliminating extra harmful emissions. The AllSmartFlow CANbus control system is standard;

this allows for management of vacuum forces and water flow, reducing unnecessary refill trips. Also standard are aluminum water tanks. Galvanized debris tanks are optional. P Series models have a front-mounted, pivoting hose reel and an 8-foot-6-inch extending boom with 180-degree rotation. 800-382-8302; www.vacall.com.

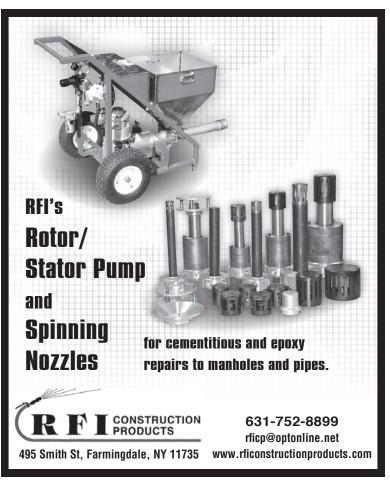
CONTINENTAL AIR AND WATER INDUSTRIAL HOSES

Continental partnered with COXREELS to develop a custom-built hose reel assembly called the P Series, to be used with Continental's premium rubber and hybrid air and water hose. The hose and reel package comes with a hybrid air and water hose, as well as a professional-grade rubber air hose. The reel will accommodate a 3/8-inch-by-50-foot hybrid and rubber hose with 300 psi. There is also a reel for a 1/4-inch, 300 psi rubber hose. The P Series reel is made with a 1/4-inch steel base and has solid, one-piece construction with heavy-grade steel and no welds. 800-235-4632; www.contitech.com. **c**











Kaiser Premier announces partnership with Hathorn

Kaiser Premier announced a dealer/distributor and authorized service center partnership with Hathorn for its line of pipeline inspection camera solutions covering the West Coast of the U.S. Kaiser will be selling Hathorn's DuraScope line of standard and Wi-Fi camera reels. The reels come fitted with the DuraCAM line of camera heads, command modules featuring VividHDTM and complete inspection camera systems.

Vacuworx welcomes senior director of sales

Vacuworx welcomed Charlie Cunningham to the North America sales and leadership teams as senior director of sales. Cunningham brings more than two decades of experience in sales, marketing and business development activities. He recently spent 15 years with Astec Industries as vice president of sales.



Charlie Cunningham

With Astec Underground and GEFCO, he led the development of initiatives to identify potential markets, new products, and sales and marketing domestically and internationally.

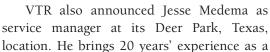
COMPUSTE PARTS & SERVICE WE DIAGNOSE & SERVICE ALL BRANDS made in the • Fast Shipping SA · Call Us For A Quote NO BENCH FEE FREE DIAGNOSIS LIVE TECH SUPPORT . PARTS & ACCESSORIES AVAILABLE FOR ALL EQUIPMENT WWW.SECONV.COM GAS ENGINE PORTABLE JETTERS PRICES STARTING AT SECON-EXTREME CORDLESS ASK ABOUT QUANTITY DISCOUNTS SEWER CAMERA & LOCATOR PACKAGES AVAILABLE DON'T SEE SOMETHING YOU REQUIRE FOR A JOB? ASK US!! SECON-4000T WWW.SECONV.COM

Total Equipment expands Vermeer industrial representation

Total Equipment acquired the rights from Vermeer Caribbean to represent the Vermeer industrial product line in the U.S. Virgin Islands, Haiti and the Dominican Republic. Under the leadership of Charles de Armas, Total Equipment has represented Vermeer Corp.'s sales, service and parts in Puerto Rico since 2014. With this acquisition, the dealership will now operate under the Vermeer Total Equipment brand. Company headquarters will remain in Puerto Rico while the dealership offers the full line of Vermeer industrial equipment and full-service operations on the island of St. Thomas, U.S. Virgin Islands and a commercial office in the Dominican Republic.

Vacuum Truck Rentals announces new hires, certification

Vacuum Truck Rentals announced Kevin Shepard as the newest member of its sales team. He will serve the Merrillville, Indiana, region and brings more than 34 years' experience in the vacuum truck and heavy-equipment industry. Shepard began his career as a laborer working in waterblasting and as a vacuum truck operator before moving into management and executive roles. He is a graduate of Indiana State University with a degree in business administration.





Kevin Shepard



Jesse Medema

mechanic to the company, with 17 years exclusively in the vacuum truck industry. He began his career as a mechanic's assistant before moving into the vacuum truck and industrial equipment sector. He began as a service technician where he gained key skills and knowledge of vacuum trucks before transitioning to a service manager role.

The company also announced it is now a certified "R" Stamp Tank Repair Facility, having completed the necessary requirements set forth by the National Board of Boiler and Pressure Vessel Inspectors. As a certified facility, VTR is required to maintain high standards in all of its procedures when performing repairs including materials, technician skills and quality control procedures. The quality control system also requires documentation of all repair procedures and maintaining an inspection agreement. **c**



SOLUTIONS TO SEWER CLEANING THROUGH:

CONCEPT DESIGN PRODUCTION

THE ONE STOP SHOP FOR HYDRAULIC ROOT CUTTER KITS FROM 3" TO 30"



S903K-1 Tiger Tooth Lateral Kit

Our new Tiger Tooth Motor has more HP for tougher jobs in smaller lateral lines. It is rated up to maximum 410 (lbf-in) torque.

Pressures from 2500 - 4000 psi and flows 18 - 80 gpm.

Each individually painted. The S903T Kit comes with Tiger Tooth Motor; 5/8" Saw Blade Hub; 4", 6", 8" HD Concave Saw Blades;

4", 6", 8" Skids



SRRK-1H Super Red Hot Kit

New improved larger front steel bearing on the Red Hot Motor increases life, reduces maintenance and makes this motor able to withstand the shock produced by heavy cleaning. Round profile of this cutter allows it to enter lines from 4" and up. 40 - 80 GPM and pressures 2000 - 3000 PSI. Produces 225 ftlb. of torque, and 175 ftlb. continuous. Kit comes with SRRC-1H Red Hot Motor; 1" Saw Blade Hub; 6", 8", 10", 12" HD Concave

Saw Blade; 6", 8" Cage Skid Single Size; new Set of 10" & 12" Fins



S-906M1-AK Advance Kinetics For Recyclers

Designed for flow 40 - 170 gpm and pressures to 3000 psi. The motor is rated to 288 lbs. of torque and 220 lbs. continuous.



S906K-1 Hi-Torque "Contractor" Kit

Flagship "Contractor Duty" Motor is absolutely the best. Holds up to continuous use in heavy-duty cleaning environments 6" - 30".

Flows 40 - 170 GPM and pressures 1500 - 3000 PSI. hose form ¾" to 1.50" It is rated up to 288 ftlb. of torque, and 220 ftlb. of continuous torque. Kit includes: S906-1 Hi-Torque Motor; 1" Hub; 6", 8", 10", 12" HD Concave Saw Blades; 6", 8" Cage Skid Single Size; New Set 0f 10" and 12" Fins



SRRK-1 Super Green Meanie Green Kit

The round profile allows the cutter to enter sewer lines 4" and up.

Motor handles flows from 40 - 80 GPM and pressures 2000 - 3000 PSI.

Rated up to 235 ftlb. of torque, and 175 ftlb. of continuous torque.

Kit comes with SRRC-1P Super Green Motor; 1" Saw Blade Hub;
6", 8", 10", 12" HD Concave Saw Blade; 6", 8" Cage Skid Single Size;
Set 0f 10" & 12" Fins. Motor fits Green wheeled skids you may have.



SHYK-1 NEW Puma Standard Kit

Puma Kit comes with HD 3/16" thick concave saws and skids for 6" - 12" lines. Cutter holds flows 40 - 80 GPM and pressures 1500 - 3000 PSI. It is rated up to 225 ftlb. of torque, and 195 ftlb. of continuous torque. Kit comes with SHYM-1 Puma Motor; 1" Hub; 6", 8", 10", 12" HD Concave Saw Blade; 6", 8" Cage Skid Single Size; New Set 0f 10" and 12" Fin



SRRK-4-15W Super Green Meanie Citizen Kit

Large Range Kit gives you saws and skids for 4" to 15" pipe sizes.
Cutter handles flows 40 - 80 GPM and pressures 2000 - 3000 PSI.
Rated up to maximum 235 ftlb. of torque, and 175 ftlb. of continuous
torque. Kit comes with SRRC-1P Super Green Motort; 1" Saw Blade Hub;
4", 6", 8", 10", 12", 15" HD Concave Saw Blade; Set of 4" Steel Rings;
6" Cage Skid; 8"-10" Adjustable Wheel Skid; 12"-15" Adjustable Wheel Skid;
Allen Wrench and Screws

Pipeline Inspection Manhole Tools Debris Baskets Vac-Traps Root Saws Calcium Cutters

Sewer Rods Handy Clams Nozzle Extensions Deep Vac Tube Holder Grabbers Claws and Hooks

Diamond Tap Cutters Fiberglass Poles Hydraulic Cutters Top Manhole Rollers Sewer Spoons

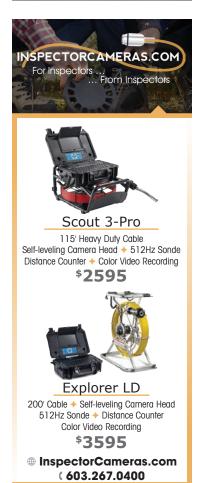
Continuous Rod Carbide Saws Vacuum Coupling Reducers Hydro Excavation

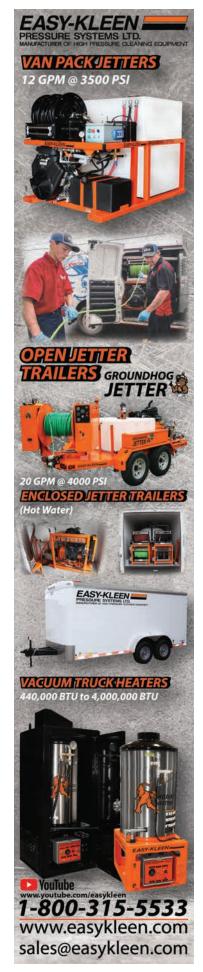


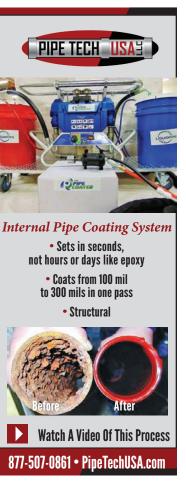
1430 N. Hundley St Anaheim, CA 92806 ph: **714.632.8198** fax: **714.632.8228**

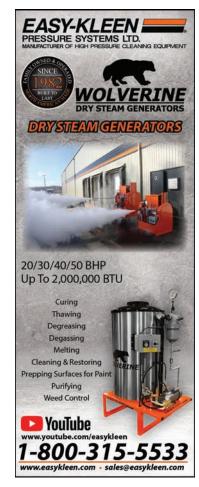
You Tube www.SouthlandTool.com

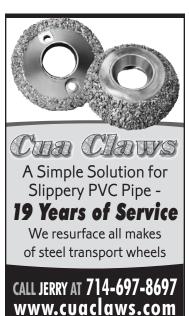














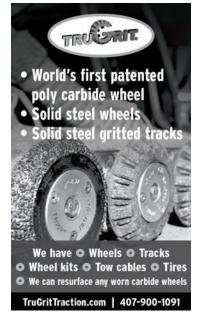


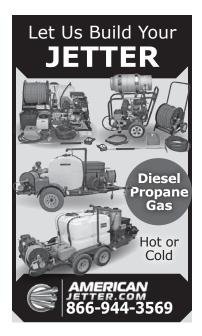
marketplace **ADVERTISING**

















Replaces pipe from 2" - 6" in diameter

Non-slip, cylinderactivated jaws prevent cable damage

60,000 pounds of pulling force and reassembled for manhole and basement applications

Small footprint of only 20" x 20"

FOR INFORMATION CALL: 800-344-6653

STEERABLE • COMPACT • ECONOMICAL • PRODUCTIVE

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 Matt 618-781-3138,IL. matt@midwestvacproducts.com

BUSINESSES

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

COMPUTER SOFTWARE

FreeServiceReminderSoftware.com, FreeServiceDispatchSoftware.com, FreeRouteManagementSoftware.com. (CBM)

DRAIN/SEWER CLEANING EQUIPMENT

QUIK-SHOT lateral lining system, 4 and 6-inch system. Used 6 times. Has water heater. \$14,700. Located in Oregon. 971-261-9383. (C10)

HYDROEXCAVATING EQUIPMENT



2007 GapVax HV56, Volvo VHD, manual trans, Giant hydroexcavation pump, powered 25' boom, Omnex remote, vibrator, lift axle, good tires, new tank liner. \$120,000 OBO

Call 317-773-7996, IN

JET VACS



2011 Aquatech jet vac demo truck built by Aquatech with every extra on it. Only 114,000 miles and low working hours. Your Environments Solution\$109,000

407-426-8803, FL admin@yesmailcenter.com CO1



2005 Vactor Model 2115-824-RCS-18, combination sewer vacuum and high-pressure jet having positive displacement blower and 15 cubic yard debris hopper capacity, mounted on a Sterling chassis. 80 GPM / 2,000 PSI / 1,500-gallon water tank system. 600-foot hose real capacity..........\$62,500

Contact 406-447-5050, MT



2006 Vactor Model 2115-824, combination sewer vacuum and highpressure jet having positive displacement blower and 15 cubic yard debris hopper capacity, mounted on a Sterling chassis. 80 GPM / 2,000 PSI / 1,500-gallon water tank system. 600-foot hose real capacity.\$45,000

Contact 406-447-5050, MT _{C10}



908-203-0009

C10



2006 International, Camel Combination Truck. 10,000 hours, 80,000 miles. With all services records. 13-yard debris body and a pusher plate. Mid Reel with 1,000-ft of 1" hose. Cat C-13, Fuller trans, 100% functional. This one has the biggest water pump camel offers, for cleaning long range and large diameter lines. Debris body and cyclone have rust but both are still workable. Has not been converted to DPF. (unit is removed). Located in Escondido, CA. Can arrange shipping (buyer cost). Asking\$40,000 OBO

Please contact Clark at 760-746-2544 for Inquiries. $_{\mbox{\scriptsize C10}}$



2014 Vactor 2115 Plus Combo (100 gpm @ 2k psi), Roots 824 PD blower, 18" vacuum, 15-yd debris tank, HX package mounted on a Kenworth T800, 450 hp, Allison auto 4500RDS trans; 76k mi, engine hrs 7,150, blower hrs 1,296 - mileage and hrs subject to change, truck still in fleet and regularly maintained, excellent condition. Call 254-760-1510, TX or email info@kleenpipe.com for more pics and detailed build sheet. Serious inquiries only please, asking\$220,000 0B0



1995 Vactor 2115 Detroit/Allison 80 gpm @ 2000 psi \$35,000 OBO or possible trade. Good condition.

Call Kelly 608-835-7767 CBM

2014 Freightliner 114SD with a VacAll AJV1215; 12-yard debris body, 1,500-gallon water, combination vacuum/jetting unit. (Stock# 052R). www.VacuumSalesInc. com (888)VAC-UNIT (822-8648) (CBM)

2007 Volvo with a Vactor 2115 combination unit. (Stock# 5903C). (888) VAC-UNIT (822-8648); www.vsirentalslic.com(CBM)

2011 Vac-Con V390LHA combination cleaning truck. Low miles, great condition. 1998 Vactor 2110-36PD ex-city owned, low miles See details of these units and CCTV inspection trucks at **www.empireequip.com**. Contact Craig at 714-639-8352. (CBM)

JETTERS - TRAILER



The HotJetll® 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 \$32,995 including freight to the lower 48 states, the HotJet II® is American made using nonpropriety parts for affordability and ease in serviceability making its return on investment truly impressive. Financing available.

> 800-624-8186 sales@hotjetusa.com; www.hotjetusa.com

CBM



Call 219-863-4414 buschbrosinc@gmail.com, IN

2016 BruteJet Hydro-Jetter 16 gpm @ 3500 psi Kubota Diesel. 2 axle trailer steel plate, 500-gallon water tank, pressure washer and hose reel. 400 feet 1/2 inch jetter hose. Excellent working Jetter. Contact David, 2 Advanced Septic Service LLC, Citrus Heights Ca. 916-726-5150. Bought new for 35,000, asking \$29,000 firm. (C10)

FMC Dual Axle Trailer Jetter, 4 Cylinder Ford industrial gas engine, 3/4" Hose, 1400 PSI, 40 GPM clean work and ready to go. Jetter: several nozzles. Very nice looking unit. Owner retired. \$6,500. 336-215-1081. North Carolina.

Garage kept, great deal. 2001 Pipe Hunter Boss 6834D, under 1.100 hours. Stored in a garage only, driven short distances. Rarely used. Maintained every 250 hours. Text for info or for pics 239-340-3840. Best offer over \$26k takes it. (C10)

MISCELLANEOUS



Fully self-contained portable handwash station shipped complete and ready to use. Customization offered. \$699 - bulk discount available. If call 800-747-2312. interested. 30-gallon freshwater & greywater tanks. Allows up to 600 uses. Bulk paper towel dispenser. Soap dispenser-uses any bulk liquid soap. Hands-free foot pump. Indoor and outdoor use - UV protected. IN

PIPELINE REHABILITATION

2017 Perma-Liner lining trailer, complete system. The trailer is 18' long and has been used very little. The trailer has an electric roller table and on board generator. A/C. The trailer new from Perma-Liner was \$115k, I'm asking \$75,000. Contact Jeremy 719-237-1787 or email - Utimateexcavation@gmail.com. CO (C10)

POSITIONS AVAILABLE

Wanted: Experienced plumber/drain cleaner who can hit the ground running. Location: beautiful Shenandoah Vallev. Virginia. Excellent pay and benefits. Sign on bonus and moving expenses for right candidate. Call 434-979-5414.

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



Full-Time Sales Associate - Trio-Vision LLC is looking for a full-time sales associate in the Atlanta area. Compensation is base salary + commission. Trio-Vision LLC offers two great lines of sewer inspection equipment, as well as, PACP certified inspection software.

Please send inquires and resumes to corvehrlich@trio-vision.com or call 404-245-2939 C10

PUMPS

Vactor, General, Myers, Giant & others - New & parts also. Cloverleaf Tool Co., Sarasota, Florida. Phone 941-739-0707; Email: sales@cloverleaftool.com. (CBM)

RENTAL EQUIPMENT

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

SERVICE/REPAIR

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

TRUCKS-MISC.



1988 Ford L9000 Guzzler Baghouse, 266,128 miles, dry vacuum, 9 cubic yard tank, A45 Roots blower, hydraulic rear door, 8" boom hose, 10" discharge valve with auger. LTA10 Cummins engine, 9-speed EATON manual transmission, tandem axle. good working condition, extra set of bags. Asking \$39,500 OBO.

Contact Ernie 216-341-2900 or service@advancedplumber.com. Cleveland, Ohio C10

TV INSPECTION



CUES Camera/Cutter Truck. 2011 Ford F550, diesel chassis, 19,500 GVW. Comes with 1 camera, 1 transporter and 1 kangaroo cutter. \$62,500

Contact 406-447-5050, MT



1997 CUES GMC 2500, 4X4, 5.7 liter, automatic, 66,000 miles. Onan 6500 generator.\$29,500 OBO or possible trade.

Call Kelly 608-835-7767

2008 CUES E450 High Cube, diesel, 43,000 miles. Control room has picture window installed to view rear of truck, city owned. Onan generator 7.5KW, 14-ft box. Fitted with CUES OEM installation, 1210 reel with 800-ft cable 1208 PCU, desk controls and monitors included, 1208 PCU, Pro data 2000 K2 upgrade available, Crawler (Pipe Ranger) and camera (OZ 2) optional. Price \$38,000. Photos available. Call Alan Grant 404-915-0063. (C10)

96' Aries Main Line Video Camera Trailer. 700' of cable. Pan & tilt camera. Crawler. DVD & Computer generated reports. Crawler just rebuilt by Aries. Newer 7500watt generator. Many extra parts, camera heads etc. \$10,500. Contact 973-278-1948 or advancedplmbg@aol.com. NJ

Aries pipeline camera system including Badger wheeled transporter and LED pan & tilt zoom camera mounted in a 12' box on a 2001 Ford E350. System is X muni trade and ready to go to work. Onan Generator was replaced two years ago. Chassis has approximately 57,000 miles on it. Asking \$36,000. Contact Dave Bogie @ 262-951-8979 for pictures and more information. WI (C10)

2008 E450 Diesel HiCube 14 ft box, Cues OEM installation. 43,000 miles, City owned, 7.5 Onan Diesel Generator, 800 ft Gold Cable Terminated K2 Option available, Pipe Ranger to 24 or Shorty with OZ2 camera. For pricing and possible spec options, call Alan Grant 404-915-0063. GA

USED Envirosight ROVVER Sewer Inspection Crawler: Overhauled with new parts and ready to run. Includes automatic cable reel, pan/tilt/zoom camera, steerable 6-wheel-drive tractor with various wheel sets, controls, and accessories. Call for pricing 973-252-6700 (CBM)

PEARPOINT — Mainliner buying & selling used equipment. Canada & USA PEAR-POINT MAINLINE EQUIPMENT ONLY. WIII 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)





CLASSIFIEDS see photos in color at www.cleaner.com

TV INSPECTION

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)

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 www.TruGritTraction.com: trugrittraction.com; 407-900-1091(CBM)

VACUUM LOADERS



3 Units available for immediate delivery! 2013 & 2014 HD Peterbilt Super Suckers, Cummins ISX12 motors, double-lined floors inside vacuum body, the largest CFM blowers, professionally maintained, low maintenance design including one-step filter cleaning system, heavy-duty, rugged 1/4" steel construction throughout the body & filter chambers for long life & successful use in extreme conditions, 18 cu.yd. payload capacity for maximum cleanup efficiency. Call for pricing and information!

219-762-1385, IN

C10

WATERBLASTING

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

If you are using an **800 NUMBER**

in your ad, be sure it can be used in all areas nationwide.



THE CONVERSATION.

THE CAMARADERIE.

THE COMMUNITY.

Cleaner









Professional-Grade Drain Cleaning Machines, Cables & Accessories



Drain Cleaning Machines

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

Cables

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





COAST MANUFACTURING

www.coastmanufacturing.com 541.684.0743

"I love to do what people say can't be done ...

Even my dad told me

the world isn't ready for a woman plumber.

I think he did it more to protect me because people can be very harsh and cruel. But he's very proud of me, even though he fought me on it and told me I was making a big mistake"

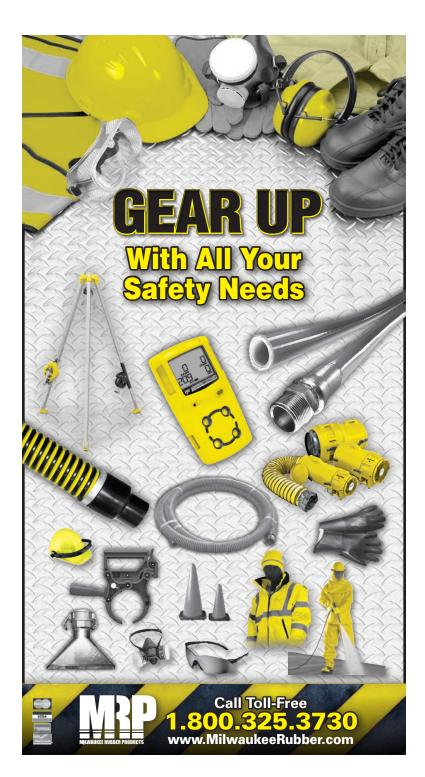
Jessie Cannizzaro, Owner

Milestone Plumbing Wauwatosa, Wisconsin

Read what matters to contractors in every issue of Cleaner.

Subscribe for FREE at cleaner.com







A compact and rugged weatherproof enclosure that can fit into an ATV, van, or pickup truck.



C550c HUNTER Base Station SEWER AND STORM MAINLINE INSPECTION



THERE IS NO DEBATE

GAPVAX HAS THE #BESTTRUCKSINTHEBUSINESS







- QUALITY COMPONENTS
- CUSTOM BUILT
- MANUFACTURED WITH PRIDE
- BUILT TO LAST AND OUTPERFORM
- DESIGNED BY THE OPERATOR FOR THE OPERATOR
- ✓ INDUSTRIAL, MUNICIPAL & SKID MOUNT



OCT. 28 & 29 MIAMI, FL











