

Cleaner®

FOR DRAIN AND PIPE CLEANING,
INSPECTION AND REHABILITATION
PROFESSIONALS

TECH
PERSPECTIVE
/ 42

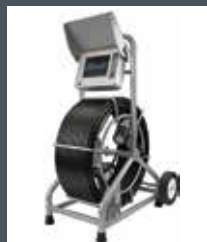
WORKHORSE

JOSH BURRIS PUTS IN THE TIME — AND SOMETIMES THE
DRIVING MILEAGE — TO GROW HIS 2-YEAR-OLD DRAIN
CLEANING VENTURE IN NORTH DAKOTA / 12

THINKING BIG
KANSAS' A-1 PUMP & JET
SHIES AWAY FROM
RESIDENTIAL JOBS TO
FOCUS ON MAJOR
CONTRACT WORK / 22

LOCATION AND LEAK DETECTION,
DRAINLINE TV INSPECTION / 46

PRODUCT FOCUS





**WHEN YOU
NEED AN
EXTRA HAND**

The Power-Vee®



MADE IN USA © 2022 General Wire Spring

When a drain cleaning job puts you in a tight spot, using the Power-Vee is like having an extra hand. Just squeeze the feed lever and the Flexicore® cable spins into the line at up to 16 feet per minute. Retracting the cable is just as easy.

An indispensable tool for any Pro, the Power-Vee, with its quick-change cable cartridge system, durable metal and Dyna-thrust bearings, easily clears sinks, tubs and laundry drains.

Upgrade from manual feed machines. Have a Power-Vee ready for your next tight spot. It puts power in the palm of your hand.

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

The toughest tools down the line.™

General
PIPE CLEANERS

“THE PROFITABILITY OF PIPE LINING HAS BEEN A HUGE PART OF OUR SUCCESS.”

Profile NuFlow Certified Contractor

When Greg Copas and Spencer Drake opened Big Cat Plumbing, they wanted to run things differently than their previous employer. One of those differences was adding pipe lining to their list of services, so they called NuFlow.

“The biggest reason why we went with Nuflow is because of the support that we got from the very beginning.”

Now entering their third year in business, the duo couldn't be happier with their choice.

“The profitability of pipe lining has been a huge part of our success. It's allowed us to invest in more equipment and hire more people.”

While adding pipe lining was a great tool to add to their portfolio, they agree that choosing the right partner was also an important factor.

“Absolutely do it, but make sure you do it with a company like NuFlow because of the support they offer. We wouldn't have landed some of the bigger jobs and wouldn't be as successful getting the projects done if it wasn't for their support. The most valuable thing about NuFlow is contacting someone directly and getting a response right away.”



Greg Copas and Spencer Drake,
Big Cat Plumbing, Southern Colorado

nuflow
WE FIX PIPES

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

SCAN ME



CONTENTS

JUNE 2023

12 COVER STORY: WORKHORSE

Josh Burris puts in the time — and sometimes the driving mileage — to grow his 2-year-old drain cleaning venture in North Dakota. // By Giles Lambertson

FEATURES

22 PROFILE: THINKING BIG

Kansas' A-1 Pump & Jet Services has transformed from a small septic pumping outfit into a diversified company taking on multiple federal government contracts. // By Ken Wysocky

DEPARTMENTS

8 FROM THE EDITOR: NO RIGHT WAY

The pathway to business success takes many forms. // By Kyle Rogers

10 @CLEANER.COM

Be sure to check out our exclusive online content.

30 BETTER BUSINESS: MAKING CONNECTIONS

Thousands of workers are using BoomNation, a technology platform geared specifically to the skilled trades and aiding networking efforts. // By Joan Koehne

36 MONEY MACHINES: UNDERGROUND EFFICIENCY

Piercing tools boost productivity for Utah drain cleaner on waterline installs. // By Ken Wysocky

42 TECH PERSPECTIVE: A LASTING REPAIR

Pipe bursting and manhole rehab complement one another to produce a sound trenchless solution for sewer systems. // By Brent Keller

46 PRODUCT FOCUS: LOCATION AND LEAK DETECTION, DRAINLINE TV INSPECTION

By Craig Mandli

54 PRODUCT NEWS

Spotlight: Lining system uses LED technology to speed up pipe repairs // By Craig Mandli

61 INDUSTRY NEWS



ON THE COVER // Josh Burris has family roots in plumbing and drain cleaning. His grandfather opened a plumbing business in Menlo, Iowa, in 1949. But his own path to the same entrepreneurship destination was more circuitous, including stops like oil field work and maintenance at a retirement center. Finally, in 2021, Burris decided to take his diversified skill set fully in-house and started Unplugged Drain Cleaning & Drain Camera in Dickinson, North Dakota. (Photography by Kyle Martin)



22



36



42

coming next month: July 2023
focus: Annual Buyer's Guide

Money Machines: Easier manhole inspection // Safety First: Common jet/vac operating mistakes // Money Manager: Succession planning

INSIGHTS DELIVERED INSTANTLY

QUICKVIEW

GET THE BIG PICTURE

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

Ready for a demo? Scan here:

Learn more at envirosight.com/quickview



PRECISE

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



WIRELESS

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



PORTABLE

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



(866) 936-8476

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

©2021 Envirosight

ADVERTISER INDEX



NORTH AMERICA
When Quality Matters
A.R. North America, Inc. 40
ALLAN J. COLEMAN
SINCE 1985
Allan J. Coleman Co. 37, 41
American Jetter 59



Apex CIPP Solutions 19
BLACKHAWK
Blackhawk Tech 44



Cam Spray 49



Central Oklahoma Winnelson 55

CLOVERLEAF Tool Co. 57



Coast Manufacturing 49

Cua Claws for Resurfacing

Camera Wheels 59



CUES, Inc. 39



Duracable Manufacturing Co. 45

Dynamic Repairs 59

EASY-KLEEN
PRESSURE SYSTEMS LTD.
MANUFACTURER OF HIGH PRESSURE CLEANING EQUIPMENT

Easy-Kleen Pressure

Systems Ltd. 59

EasyCAM

EasyCAM 8

ENVIROSIGHT

Envirosight LLC 5

FORBEST

Forbest Products Co. 51

GapVax

GapVax, Inc. 63

General
PIPE CLEANERS

General Pipe Cleaners,

div. of General Wire Spring 2

GI INDUSTRIES

GI Industries Inc. 15

Hermann Sewerin GmbH 43

HotJetusa

HotJet USA 59

Hurco Technologies, Inc. 20

ipp

Solutions, LLC

IPP Solutions, LLC 9

K

Ken-Way Corporation 51

LANSAS PRODUCTS

Lansas Mfg. by

Vanderlans & Sons Inc. 26 & 27

MRP

Milwaukee Rubber Products, Inc. 40

MyTana

MyTana LLC 33

nuflow

NuFlow Technologies 3

PEARPOINT

Pearpoint (USA) 11

PICOTE

Picote Solutions 32

Pipeline Renewal Technologies 25

ROOTERMAN
TO THE RESCUE

Premium Service Brands -

RooterMan 31

Pro-Built Tools, Inc. 17

Ratech
ELECTRONICS

Ratech Electronics, Ltd. 29

River Business 7

RODDIE

RODDIE, Inc. 20

ROOT RAT
NOZZLES

Root Rat 57

ROOTX

RootX 51

SEWER EQUIPMENT

SECON 44

SPARTAN

Spartan Tool LLC 64

Superior
SMOKE

Superior Signal Company LLC 59

TEST TIGER

T&T Tools, Inc. 55, 59

THE CABLE CENTER

The Cable Center 21, 53

THE SEWER

The Sewer Camera Connection 34

The Utility Expo 62

TruGrit Traction Inc. 59

USB-USA 29

VIVAX
METROTECH

Vivax-Metrotech Corp. 35

Western Drain Supply 38

Westmoor

Westmoor Ltd. 38

Classifieds 60-61

Cleaner

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

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

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

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

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

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

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

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

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

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

© 2023 COLE PUBLISHING INC.

No part may be reproduced without permission of the publisher.



KAYLA BISNETTE



JIM KOSHRUTA

GET YOUR NOZZLES ONLINE

- **PRICE COMPETITIVE** NOZZLES
- DELIVERY WITHIN **24 - 48 HOURS**
- ALL NOZZLES CALIBRATED WITH **CERAMIC INSERTS** ACCORDING TO YOUR JETTER SPECS

FACTORY DIRECT PRICES



TARANTULAS



GRENADES



BREAKERS



**NOZZLES
WORLD.COM**

VISIT OUR ONLINE SHOP

www.nozzlesworld.com

Get in touch!

info@nozzlesworld.com

239-491-4787

DO YOU HAVE A SEWER CAMERA?

DO YOU OFTEN NEED A CRAWLER FOR PIPE INSPECTIONS BUT THE OPTIONS AREN'T PROFITABLE?

THE NUMBER ONE IN DRAIN INSPECTIONS



Remote control

In-house Software

Small communities/towns

6-11" pipes

Small and medium enterprises

- **EUROPEAN QUALITY AT COMPETITIVE PRICES**
- MASS MANUFACTURING AND ROBOT ASSEMBLY
- **IN-HOUSE REPAIR SERVICE** WITH COST-EFFECTIVE STANDARD COMPONENTS

ALPHA 200
4.910 USD

ALPHA 300
6.385 USD

River Business

Get in touch!

info@usarobot.net

484-521-1062

52 Mayfield Ave, Edison, NJ 08837, USA



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

NO RIGHT WAY

The pathway to business success takes many forms

THERE ARE A LOT OF DIFFERENT WAYS to build a business in this industry. Case in point, the two companies profiled in this month's issue.

Josh Burris owns Unplugged Drain Cleaning & Drain Camera in Dickinson, North Dakota. He's only two years into running his operation and is still a one-man show, focusing largely on residential work — about 90% of his customer base by his estimates. But in the coming years he's hoping to add a few employees and expand that base, taking on more municipal jobs. Whatever happens though, Burris says he still expects to remain heavy into residential.

The other company featured in this issue is on the exact opposite end of the spectrum in many ways. Yes, Kansas' A-1 Pump & Jet Services has more employees and is a little more established than Unplugged, but a primary difference that sticks out is that the company has basically foregone all residential work. A-1 co-owner Ronald McCoy says the company refers most residential service calls to other contractors in the area, only taking on a job if it happens to be more than what those contractors can handle with their equipment. Instead A-1 focuses almost exclusively on commercial jobs and various government contract work.

The approaches are different, but both companies have the same basic goals. They want to continue their growth trend and be successful in their respective areas. There's no one right way to do it. You have to find what best fits and works for you.

That may even evolve over time. I recently wrote a profile for another COLE Publishing title, *Portable Restroom Operator* magazine, about a West Virginia-based company that had completely overhauled its portable sanitation operations. For years, coal mining was the company's core market. But as the coal industry declined, the company had to adapt. The coal side is now essentially nonexistent. The company's efforts are instead focused on special events and other tourism endeavors in the area. The portable sanitation business is doing about as well as it always has. The "how" has just changed.

Success, whatever shape that may take, is of course the common theme for the companies featured in this magazine each month. We're not looking to highlight bad companies. But the ways to achieve that success are varied, and every company has a story all their own.

Contact me at editor@cleaner.com or 715-350-8442 if you'd ever be interested in sharing your company's story in a future issue of *Cleaner*. I'm always on the lookout for potential profile candidates, and a journalism professor ingrained in me long ago that everyone has an interesting story in them somewhere if you pose the right questions to flesh it out. I'd love to hear yours and potentially share it with other *Cleaner* readers.

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

EasyCAM

SEWER CAMERAS

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

EasyCAM IT JUST MAKES SENSE!

www.EasyCAMLLC.com
239.260.2056

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

PipeCaster™ Pro

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

NEW RESIN PipeCast Flex Aqua

The fastest curing epoxy resin in the industry.

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

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



Equipment and resin made
in USA, ready to ship today



CONTACT US

🌐 www.ipp solutions.com

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

📞 **+1.970.444.5655**

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

📞 **+1.714.410 0707**

ipp
Solutions, LLC

@Cleaner.com

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

DRAIN ARTIST

The Nuances of Cable Machine Operation

What is the best way to describe the proper approach to operating a cable machine? Slam it in and out and get moving? No. As he describes in this online exclusive, regular contributor Anthony Pacilla thinks of it as a smooth and subtle art. Over time drain cleaners can develop a good “feel” for what the rods on a cable machine are encountering down pipe. >> cleaner.com/featured



OVERHEARD ONLINE

“Missed or unreturned calls and emails. Failure to provide the estimate as promised. Forgetting to follow up. Long wait times. Poor communication. The opportunities we lose all on our own far outweigh the loss of a job or two to another company.”

— Stop Being the Roadblock to Your Own Business Success
>> cleaner.com/featured



LIGHTS, CAMERA, ACTION

Company Takes on Comedian's Plumbing Movie Parody Challenge

Austin, Texas-based Radiant Plumbing & Air Conditioning has become known in its community for its various pun-heavy and satirical marketing materials, from radio spots to window displays. A main attraction, though, is its 30-second TV ads, which are typically movie-themed. This caught the attention of comedian John Oliver back in March, as he dedicated a short segment to it on his HBO show. He ultimately challenged the company to do a parody of a movie of his choosing, and Radiant Plumbing delivered.

>> cleaner.com/featured



SCAN ME

WEB SURFING

Sharing the Best Content

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

from Australian plumber Oliver Parker, who likes to share his work on YouTube. Be sure to sign up for *Cleaner* e-newsletters if you haven't already. >> cleaner.com/featured

EMAILS AND ALERTS



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

JOIN THE DISCUSSION



facebook.com/CleanerMag



twitter.com/CleanerMagazine

flexiprobe™ P540c



PEARPOINT®

www.pearpoint.com | 800.688.8094

CUES

Simple. Fast. Smart.



WORKHORSE

JOSH BURRIS PUTS IN THE TIME
— AND SOMETIMES THE DRIVING MILEAGE —
TO GROW HIS 2-YEAR-OLD DRAIN
CLEANING VENTURE IN NORTH DAKOTA

// By Giles Lambertson

« Josh Burris, owner of Unplugged Drain Cleaning & Drain Camera, is a one-man operation but is hoping to grow in the next few years into a four-person crew that can handle plenty of both residential and municipal work.



Photography by Kyle Martin



BEING AN ENTREPRENEUR CAN LEAVE A PERSON FRAUGHT WITH ANXIETY. Starting a business is risky. And even when a venture is successful and a company is established, owning and running a small company is plain old hard work.

Josh Burris has experienced all of the above — though anxiety doesn't seem to be much of an issue for the congenial business owner. His company Unplugged Drain Cleaning & Drain Camera in Dickinson, North Dakota, is 2 years old and thriving thanks to lots of hard work.

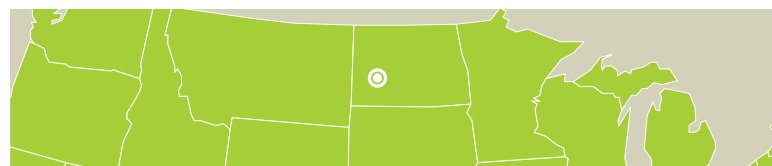
Burris grew up around water pipes, laying and repairing them, and installing water appliances. His grandfather, Wayne O'Brien, opened a plumbing shop in Menlo, Iowa, in 1949. O'Brien had worked for another plumber before getting the itch to be his own boss, working out of his garage and later opening a store in the middle of town and branching off into electrical and refrigeration service as well.

"He did a little bit of everything," Burris recalls.

A son, Denny, took over the enterprise and a teenage Burris was introduced to water pipes working for his uncle in the plumbing shop. In the summer, Burris would put in a day of plumbing — sometimes operating a Ditch Witch trencher to lay new pipe — and then go home to clean up before heading over to a restaurant located right across the street from the plumbing shop. His stepfather and mother operated the eatery, and the young Burris would work there into the night, washing dishes and sometimes helping at the grill.

Burris' father, Joe, went to work for O'Brien as well, eventually becoming a union plumber before opening his own shop. Burris had already left Iowa by then but could have returned and worked for his father.

» Burris inspects some of his jetting equipment.



Unplugged Drain Cleaning & Drain Camera

DICKINSON, NORTH DAKOTA

OWNER Josh Burris

FOUNDED 2021

SERVICES Drain cleaning, grease trap service and camera inspection

SERVICE AREA Dickinson and surrounding areas, including parts of South Dakota and Montana

WEBSITE www.unpluggeddrains.com

"But I was already up in North Dakota working in the oil fields making money like crazy and I wasn't about to go back to Iowa making \$10 an hour working for my dad," he says.

In other words, Burris was exposed early on to entrepreneurship and to hard work. Yet it would be another 25 years before he opened his own business.

GETTING STARTED

Dickinson, North Dakota, is in Stark County in the lower left quadrant of the state, a community of about 30,000 people, according to the latest census. Dickinson is situated in an open, sometimes windy landscape and is



« Burris prepares to jet a storm drain. He uses jetting equipment from Jetters Northwest and Mongoose Jetters.

» Burris uses an Insta-Flo product to help unclog a bathroom drain.

“I LOVE DOING THIS WORK. I DIDN’T START THE COMPANY TO GET RICH. I STARTED IT TO HELP PEOPLE WHEN THEY’RE IN NEED.”

JOSH BURRIS

home to both the Badlands Dinosaur Museum and Dickinson State University. It is also the home of Burris’ wife Heather, a schoolteacher who Burris first met when he visited the state during wheat-harvesting season as part of a custom combine crew.

After Burris followed his heart to Dickinson, he went to work for a plumber briefly before jumping into oil field work where the money was plentiful. After seven years working in the oil industry, Burris and his wife settled back in Dickinson where, as a municipal employee, Burris built out his knowledge of water and sewer line maintenance, lagoons and wet stations. He next signed on to work with a sanitation company maintaining septic tanks, and then with a retirement center as a maintenance worker.

All of the vagabond work experience burnished a skill set that Burris finally decided to take fully in-house.

“I was lying in bed one morning and got to thinking, ‘You know, I bet I have \$60,000 in my 401K. I’m going to cash it out,’” Burris says.

He did just that and became a self-employed drain cleaner.

With the money, Burris bought a Jetters Northwest Brute jetter, a 3,000 psi model that can produce 12 gpm. It had sufficient capacity for the residential property work he was targeting. To figure out what



» Burris cleans his company trailer at his shop in Dickinson.

brand of cable equipment he should buy, he went online to watch YouTube demonstrations and weighed brand against brand.

Burris ended up buying Picote Mini Miller and Mini Cleaner units with 50-foot reach and a Super Midi with a thicker shaft and a 65-foot range. He also settled on a RIDGID K9-306 FlexShaft drain cleaning machine that can clean 3- to 6-inch pipe up to 125 feet long. Then he opted for a RIDGID camera for inspections.

The gear went into his utility van or onto a trailer behind it and Burris was in business.

"I started out doing it as a part-time job because I was still working at the retirement center," he says. "But within two weeks, I was drain cleaning full time. That was two years ago and it hasn't slowed."

ARRAY OF CUSTOMERS

Service calls are primarily to residences inside Dickinson, though there are occasional runs to ranch homes or farm homes in the county. Burris also ventured into cleaning larger municipal sewers when he undertook a solitary job in nearby Dunn Center, a town of about 200 residents. Burris was using his Brute jetter and struggled with the task.

"I talked to the city people and said, 'You give me the whole town and I'll go buy a jetter that can handle this kind of work.'"

The city agreed and Burris purchased a Mongoose unit that can pump 18 gpm at 4,000 psi. Residential pipes in Dickinson are typically 3 to 6 inches in diameter and most of the municipal pipe is 6 to 8 inches, with some 12-inchers here and there. Between the two jetters, Burris says he can handle whatever type of job comes up.

But Burris' customer base is still 90% residential, partly by design. He says he is in the business as much for the people as for the money.

"I love doing this work," he says. "I didn't start the company to get rich. I started it to help people when they're in need. I'm a friendly person and sometimes will just sit and shoot the bull for 30 minutes."

Burris does have some commercial customers, including a restaurant he regularly visits to clean out grease traps and lines.



Still using a drill to power your drain cleaning?



Jetter meets cable machine... end of story.

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

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

Contractor's Package
Part Number - TCM-6001

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

Freight Included
Package \$7,380.15

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



▲ Burris uses a sledgehammer and crowbar to loosen a storm drain prior to jetting it. The drain had become clogged with ice so Burris used boiler-heated water to clear the blockage.

“They seem to have a lot of grease from that kitchen for some reason,” he says.

Another restaurant is an institutional client, the restaurant at Dickinson State University, which operates seven days a week.

Yet residential properties remain a constant focus for Unplugged Drain Cleaning & Drain Camera, though Burris does want to build out the municipal side of the business, too. At this point, his business plan seems to be working.

“My accountant says that, in his experience, he has never seen a company grow as fast as this company has.”

HITTING THE ROAD

To expand his business, the 43-year-old Burris is willing to travel to wherever

the work is. He has made service runs into Montana, and as far south as Bison, South Dakota, some 110 miles away from Dickinson. He charges for mileage, in and out of town, so the distance is not a negative, except for vehicle wear and tear. Burris bought a 2021 Dodge Ram last June and already has put nearly 30,000 miles on it.

“I cover the whole state, I don’t care. I’ll go clear to Grand Forks (360 miles) as long as I’m charging mileage.”

Wherever he ends up cleaning a sewer or drain, Burris says he always tries to make it back home at the end of the day. No overnight layovers.

“The longest day I ever put in was 20 hours, but that’s unusual. I try to be done by 5 p.m.,” he says.

CONTINUED >>

READY FOR A CLOSE-UP

Drain cleaning and plumbing companies tout themselves in any number of ways. Long-running classified ads or periodic one-eighth-page display ads. Sponsoring a Little League team with the company name across the back of the jersey. Facebook. Instagram.

Josh Burris opted for television to promote his company Unplugged Drain Cleaning & Drain Camera in Dickinson, North Dakota. He runs TV commercials on two local channels. One a cable-TV channel featuring sports and travel, the other a local CBS affiliate.

“They show me at work doing different things,” Burris says. “I remember the guy videotaping it said, ‘Now, don’t look at the camera.’ I said, ‘What do you mean, don’t look at the camera?’”

Despite his lack of on-camera experience, the commercials have worked well for Burris, even if he receives some good-natured razzing for being a “TV star.”

“A municipal employee I once worked with gives me lots of grief about the TV stuff all the time,” Burris says.

He says it’s time for him to cut a new commercial. For one thing, he’s changed his company logo since the commercials first aired.

“And I had a pretty good beard on me at that time and don’t now,” Burris says.

He continues to think of other ideas to promote his company and build name recognition. One thing he’s been considering is getting personalized license plates. Maybe something like — UNPLGGD.



Pro-Built Tools

4002 W MILLER RD STE 100 GARLAND, TX 75041

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

SEWER CAMERAS

A Variety of Models to Choose From

WIFI PB2000ES SERIES

100' - 150'



STARTING AT \$1999

SEWER CAMERA JETTER PACKAGE



2 Sewer Cameras - 1 Control Box - 1 Jetter - 1 Locator

STARTING AT \$8999

PB2000 ULTRA ELITE SERIES

100' - 150'



STARTING AT \$2699

MYCRO ULTRA ELITE SERIES

100' - 150'



STARTING AT \$3148

PB2400ES SERIES

200' - 275'



STARTING AT \$1979

PB3600ES SERIES

300' - 500'



STARTING AT \$3479

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

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

OTHER SEWER PRODUCTS

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



EXPEDITED SHIPPING AVAILABLE

CALL FOR DETAILS (214) 503-0402

www.probuilttools.com

» Burris feeds a jetter hose into an ice-clogged storm drain.

THE RIGHT PRICE

What to charge for his services has been a learning experience for Burris. He looks back on that first municipal sewer jetting job at Dunn Center, for example, and realizes he didn't charge enough.

"But I was just starting out," he says.

Burris had peers tell him that he wasn't charging correctly for his work. Now, after two years, he says he has figured out the value of his work and charges accordingly.

Friends in the industry have done more than just advise Burris on how much to ask for his labor. They have also helped him find work, sometimes because they didn't want it for themselves.

"SOME PEOPLE THINK I'LL MOVE AWAY FROM RESIDENTIAL CUSTOMERS, BUT I WON'T. RESIDENTIAL WAS HOW I BUILT MY BUSINESS."

JOSH BURRIS

"I told some plumbing friends I was going to start drain cleaning and they said, 'Great. We don't want to do that anymore,'" Burris says. Guess where they send their customers who need a pipe unplugged?

Another friend does relining and always calls Burris to jet the pipes before lining. During summer months, the friend will send Burris five or six jetting jobs each month. Consequently, Unplugged Drain Cleaning is regularly running its jetters.

As for camera inspections, Burris does them mostly in conjunction with his cleaning jobs. The camera shows a Dickinson underground infrastructure that is aging. Some houses in the city date to the early 1900s and pipes are cast iron and clay, for the most part.

"I see a lot of cracks," Burris says.

LOOKING AHEAD

What does Burris see for his one-man company in the next five years? To put it simply, growth. He is ready to parlay his work ethic and expertise into a two-division, four-person firm, with another tech joining him on the residential side and two more techs cleaning municipal lines.

"Some people think I'll move away from residential customers, but I won't," Burris says. "Residential was how I built my business."

He is working on winning contractual cleaning jobs and the steady revenue such work produces. He says he currently does very few standalone camera inspections of lines for real estate agents and property owners and hopes to change that.

As for equipment, Burris likes the jetting units he has, but he is also now in the market for a combo vac truck to up the scale of that kind of cleaning. Burris is also eyeing an EnviroSight Rover X camera to build out his company's capacity to inspect sewer lines.



Whatever growth and expansion lies ahead, Burris knows that ultimately his company's success sits with the reputation he has with customers. Why would Unplugged Drain Cleaning & Drain Camera get the call instead of a rival company? Burris speculates it's because he always takes time to educate customers and explain what they can do to keep their drains clean.

"I don't exactly know what my reputation is, but I do know I have 67 friendly Google reviews of the company and only one bad one," he says.

That's a pretty good start on a reputation. **c**

FEATURED EQUIPMENT

DITCH WITCH

580-336-4402
www.ditchwitch.com

ENVIROSIGHT LLC

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

JETTERS NORTHWEST

877-901-1936
www.jettersnorthwest.com

MONGOOSE JETTERS BY SEWER EQUIPMENT

877-735-4640
www.sewerequipment.com/mongoosejetters/

PICOTE SOLUTIONS

864-940-0088
www.picotegroup.com
(See ad page 32)

RIDGID

800-474-3443
www.RIDGID.com



APEX CIPP

APEXCIPP.COM 941-300-0441

ELECTRO FOGGER

**High performance
sewer gas leak detection**

- Indoor/outdoor use
- Oil & petroleum free
- Pleasant scent
- No residue
- Safe for pets
- Easy set up

**Finally
Back In
Stock!**



**Our #1 Highest
Reviewed Item!**

ehle

**"We've had tremendous
success. Extremely
reliable and works great
indoors. Our company
strongly recommends it!"**

Jim Harper
PSI Plumbing Systems
Edwards, CO



dancutter usa

PIPE REHAB ROBOTICS

DC SUPER FLEX ROBOTIC CUTTER 82' OR 164' LENGTH

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

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

24/7 Ordering
DANCUTTERUSA.COM



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



HPV HEADSET



ROBOTIC
CUTTING ARM

**Unbeatable Navigation
& Reliability**

**Legendary Service
855.997.0524**

PIPE DRAGGIN'

RODDIE inc.

*Trenchless
Pipe Installation
System*



**3/4" to 1-1/2"
Steel Pipes**

**REPLACE STEEL PIPES
WITH THIS TUGGER**

Specifications...

- *Crush Force 20 Tons*
- *Pull Force 15 Tons*
- *Weight: 211 lbs.*
- *Dimensions: 24" x 15" Wide*

See it Work!

 **YouTube**
Pipe Draggin'

Phone: 888-406-3821

RoddieUnderground.com
Columbia Falls, Montana


HURCO
TECHNOLOGIES, INC.



The Solution

CAN'T FIND A LEAK?

**POWER
SMOKER™**



- Quickly and safely locate leaks in indoor plumbing systems. Model available for sewer line testing.
- Uses the ONLY tested safe smoke on the market

NEED A VAC THAT DOES IT ALL?

VAC 250



- 250 or 500 gallon units with compact configuration creates easy access to places large hydro excavation systems can't reach.
- Ideal for cleaning out catch basins, potholing, exposing buried utilities, and miscellaneous jobs on property that requires extra care, such as parks and golf courses.
- Years of dependable use provided by top of the line components, including Cat® diesel or Kohler® gas engines, Gardner Denver® blowers, and Giant® pumps.

HURCOTECH.COM
800-888-1436

THE CABLE CENTER • 1-800-257-7209



END OF THE YEAR LIQUIDATION. CALL FOR USED EQUIPMENT

\$7,400



SL-GXP-E

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

Free Delivery

\$6,800



SL-GXP-A

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

Free Delivery

\$6,400



SL-GPW-E

200' Standard GenEye WiFi Pod

Free Delivery

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

\$1,800



**Speedroooter
S92-Basic**

No Cable, No Cutters.
Call for complete kit availability

\$1,700



T-4-Basic

No cable, No cutters.
Call for
complete kit availability

\$8,800



JM-3080-Basic

No Hose, No Nozzles
Call for complete kit availability

**THE
CABLE
CENTER**

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

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

» A-1 Pump & Jet owners Ronald and Judith McCoy have grown the company considerably since starting it in 2014 off the assets of an old septic pumping company.



THINKING BIG

KANSAS' A-1 PUMP & JET SERVICES HAS TRANSFORMED FROM A SMALL SEPTIC PUMPING OUTFIT INTO A DIVERSIFIED COMPANY TAKING ON MULTIPLE FEDERAL GOVERNMENT CONTRACTS

// By Ken Wysocky

Operating a business can be a bit like inspecting and cleaning pipelines — it's all about negotiating unexpected twists and turns.

A good case in point is A-1 Pump & Jet Services of Emporia, Kansas, which started out as a septic pumping company but quickly morphed into something quite different: a company that cleans and inspects both food-processing lines at factories and sewer lines for municipalities; handles government contracts for cleaning sewer lines at military facilities; and hauls away and land-applies food-processing waste.



“In the nine years since we started out, I don’t think we’ve pumped out more than a dozen septic tanks,” says Ronald McCoy, who co-owns the company with wife Judith, the majority owner. “We almost immediately transitioned from septic pumping jobs to commercial work for municipalities and food-processing companies.”

The McCoy’s journey underscores the importance of providing top-notch customer service, the value of word-of-mouth referrals and the benefits of taking calculated risks in order to capitalize on unexpected business opportunities. Those traits have served the company well since its inception in 2014, when the McCoy’s purchased the assets of a longtime septic pumping company. Since then, A-1’s fleet of equipment has expanded significantly and its gross revenue nearly hit \$5 million in 2022.

“We’re 25 times the size we were when we started,” McCoy says. “And in all honesty, we expect to double in size again during the next three years. We even doubled the size of our business during the pandemic because we always did whatever we could to keep our customers’ systems up and running. It all boils down to investing

» A-1 Pump & Jet employee Kenny Gieber works a job using one of the company’s 12 vacuum units — four trucks and eight trailers — used primarily for cleaning wet wells, lift stations and sewer lines and hauling food-processing waste.

“IF THERE’S ONE THING I’VE LEARNED ABOUT BUSINESS, IT’S THAT YOU CAN TALK YOUR WAY INTO A LOT OF THINGS, BUT ONCE YOU DO SO, YOU HAVE TO FIGURE OUT HOW TO DELIVER.”

RONALD MCCOY

in good equipment and providing great customer service. If you’re willing to do whatever it takes to keep customers’ plants running, they’ll appreciate your commitment and will stay with you as long as you keep charging a fair price.”

VARIED CAREER PATH

McCoy took a decidedly roundabout path to commercial and municipal drain cleaning. After spending 10 years as a hospital administrator,



A-1 Pump & Jet Services

EMPORIA, KANSAS

OWNERS	Judith and Ronald McCoy
FOUNDED	2014
EMPLOYEES	20
CORE SERVICES	Cleaning/maintaining municipal and commercial pipelines, hauling/disposing of food-processing waste
SERVICE AREA	300-mile radius around Emporia
WEBSITE	www.a1pumpjet.com



« A-1 Pump & Jet co-owner Ronald McCoy (left, in the background) looks on as employees Kelly Kimberlin and Kenny Gieber work a job.

he went back to school and earned a master's degree in business administration from Emporia State University, where he also taught undergraduate classes in business.

After graduating from the master's program, McCoy switched gears and bought a refrigerated trucking business that he ended up running for 20 years. Eager to try something else, he and his wife then bought the assets of a septic pumping company, which included an old water jetter made by O'Brien (Hi-Vac Corp.).

A former customer from his refrigerated-trucking days helped McCoy land his first major client, a meat-packing plant in Emporia, which is about 105 miles southwest of Kansas City in southeastern Kansas. As luck would have it, the plant had just fired a contractor who cleaned the processing pipelines at the facility. McCoy was hired on the spot.

"It was just dumb luck," he says. "But the harder I work, the luckier I get."

What did McCoy know about running a water jetter and cleaning pipelines? Not one thing in the beginning, he admits.

"But I became a hospital administrator at age 24 and I'd never been in a hospital before in my life," he says. "If there's one thing I've learned about business, it's that you can talk your way into a lot of things, but once you do so, you have to figure out how to deliver. So we went out and figured out how to operate a water jetter."

McCoy says he listens to a lot of motivational talks on YouTube and one overall theme he encounters is that hard work works.

"You just have to get in there and apply yourself, do a good job and charge a fair price," he says. "Determination and persistence will carry you a long way."

GROWTH FOLLOWS GREAT SERVICE

Providing good customer service to the meat-packing plant enabled McCoy to parlay the connection into something much bigger. That company owned dozens of other plants around the country, including one in western Kansas and one in western Nebraska. They hired A-1 based on the reputation established on the Emporia plant job.

"Most of our customers are Fortune 500 companies with 15 to 20 plants," McCoy says. "So if you start with one and do a good job, they just might ask you to work at another plant, say, six months down the road. One of the first things I learned at business school is that the easiest way to grow a business is to do more business with the customers you have, and that formula has worked very well for us. If one plant engineer has good things to say about you, he'll recommend you to other plant engineers."

In 2019, business had grown substantially enough to warrant A-1 opening a second location in Holcomb, a small town about 300



« A-1 employee Kadin Anliker (left) and co-owner Ronald McCoy talk at the company's office and shop in Emporia, Kansas.

“THE EASIEST WAY TO GROW A BUSINESS IS TO DO MORE BUSINESS WITH THE CUSTOMERS YOU HAVE, AND THAT FORMULA HAS WORKED VERY WELL FOR US.”

RONALD MCCOY

miles west of Emporia in southwestern Kansas. Once again, providing great customer service played a role in expansion, McCoy says.

For example, he cites a company that called A-1 for emergency work, even though it was a 300-mile drive away.

“They called us at 10 at night and said we needed to hurry,” McCoy recalls. “After we solved their problem and did a few other things while we were out there, I asked the plant engineer why he called us, given that there had to be a local contractor that could do the same work. He told me there was another contractor, but the company was too busy to take the job. So they called us, and the plant engineer guaranteed me they’d never call that other contractor again. Since then, we’ve greatly expanded the work we do at that plant.”

A-1 has also diversified by expanding into sewer cleaning work for military bases, which opened the McCoy's eyes to the potential of federal government contracts. Such contracts now generate about one-third of the company's revenue, McCoy says.

GOVERNMENT CONTRACTS PAY OFF

Some contractors avoid bidding on federal contracts, which have developed a reputation for being a hassle and involving too much red tape and paperwork. Sure, bidding on federal contracts requires dotting a lot of i's and crossing

SpeedyLight+ is LED-based

Light Cure

Cures Faster, Relines Bends, No Styrene or Mixing

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

PRT
Pipeline Renewal Technologies

www.pipelinert.com • 866.936.8476



▲ A-1 Pump & Jet co-owner Ronald McCoy talks with employee Kenny Gieber at a job site in Americus, Kansas.

a lot of t's, but on the other hand, there's often less competition than a contractor might expect because so many companies don't want to bid on federal projects. Plus there often aren't enough qualified small businesses submitting bids, McCoy notes.

That leaves the door open a little wider for companies like A-1, which took its first step into government work in 2017 by cleaning out a waste lagoon operated by the U.S. Army Corps of Engineers at a reservoir in Iowa.

"From that one job, we then won a contract the following year to maintain oil-and-water separators in a half-dozen states for U.S. Army Reserve centers," McCoy says. "And the next year, we won a contract to maintain sanitary sewer lines at a U.S. Air Force base in Boston."

The company is currently working under five federal contracts for inspecting and cleaning sewer lines for the Air Force, the Army Corps of Engineers, the U.S. Army and the National Park Service. The keys to success? Get thoroughly familiar with how the bidding system works, plus a healthy dose of sheer determination, McCoy says.

The first step for bidding on federal contracts is getting listed in the System for Award Management, a government-wide registry for vendors that obtain certification to do business with the federal government. After a company is registered, it must renew its registration annually.

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



**"We Just Made The
BEST Test Plugs
Better!"**

SAM has regional offices with staff that help business owners walk through the registration process, which can take a bit of persistence, McCoy says.

"I'd always heard that government work is a hassle and that it's all rigged," he says. "But on an annual basis, the government awards billions of dollars worth of contracts set aside for small businesses. And many times there aren't enough small businesses competing for those competitive-bid projects. We even compete head-to-head against the big boys and win contracts. Too many small companies think they just can't work through it. But as a smaller company, we're more flexible and responsive than some big competitors. It can be daunting going up against big companies with seemingly endless resources, but you have to focus on your strengths. You have to want it and be willing to put in the work to learn how to do it. And once you do, there's huge potential out there."

There's another benefit to government contracts: Many run for five years, so once a company wins a contract, there's guaranteed income for a set period of time.

"So you're not out there constantly trying to generate more business," McCoy says.

McCoy recommends that companies start out small

DIFFERENTIATION THROUGH LAND APPLICATION

Being responsive to customers' needs for other related services has been a key factor in A-1 Pump & Jet Services' growth.

For example, about one-third of the company's revenue now comes from hauling food-processing waste from plants and land-applying it on either 320 acres of farmland the company owns or other acreage that it leases, says Ronald McCoy, who owns A-1 with wife Judith.

"We noticed that many companies these days want to recycle waste and achieve zero-landfill status as part of their 'green' corporate goals," he says. "We can bring added value by land-applying waste instead of taking it to landfills. It's more expensive to land-apply the waste. But we've actually helped a couple of our customers reach zero-landfill status, which also leads to word-of-mouth referrals."

Finding properties to lease for land-applying waste can be challenging, especially because land-application can sometimes have a bad reputation due to bad application practices. It's also time-consuming. Soil must be tilled before applying waste and there's a lot of record-keeping required by local and/or state agencies.

But it is an environmentally friendly process and it differentiates A-1 from competitors, which "can tip things in our favor," McCoy notes.

"Even though it costs more (than landfilling waste), that recycling-waste aspect is a game-changer for many of our customers," he says.

PIPE PLUGS & PIPELINE TESTING EQUIPMENT



NUCA
We Dig America



Lodi, California
800.452.4902 • 209.334.4115

www.lansas.com

LODI • ATLANTA • HOUSTON • CHICAGO

» A-1 owners Judith and Ronald McCoy have grown the company 25 times the size it was when they bought it and are working toward doubling in size again within the next few years.

and build up from there, bidding on bigger and bigger projects as their capabilities and resources — equipment, employees and so forth — increase. For example, A-1 started out bidding on contracts worth around \$100,000 and now is considering competing for million-dollar contracts.

“Never bite off more than you can chew,” McCoy advises. “It’s always tempting to take on a really big contract. But if you do and you don’t perform, you’ll get sued into submission. So we always make sure we bid on projects that we can handle.”

Furthermore, every job gets a written assessment from a contract officer, and companies that consistently earn good ratings get invited to bid on other contracts.



“NEVER BITE OFF MORE THAN YOU CAN CHEW. IT’S ALWAYS TEMPTING TO TAKE ON A REALLY BIG CONTRACT. BUT IF YOU DO AND YOU DON’T PERFORM, YOU’LL GET SUED INTO SUBMISSION.”

RONALD MCCOY

“If you do good work, earn good ratings and charge a competitive price, I guarantee you can get government work,” McCoy says. “It can be hard to get your foot in the door, but you take baby steps. Start with a smaller project and do a good job with it. You get one, then another. We have built a good reputation, and now we’ll sometimes get a heads up about bids opening on a job, telling us they’d like us to submit a bid.”

MORE CUSTOMERS, MORE EQUIPMENT

As A-1 has grown, so has its fleet of equipment. Today the company owns four vacuum trucks, used primarily for cleaning wet wells, lift stations and sewer lines. Two of the trucks were built by local fabricators, one by Garsite and one by FlowMark. They feature Freightliner and International chassis, 1,500- to 4,700-gallon debris tanks and Masport pumps.

A-1 also owns eight vacuum trailers built by Dragon Products and used mainly for hauling food-processing waste. They’re pulled by Kenworth, Freightliner and International tractor cabs. The trailers feature aluminum tanks ranging from 6,300 to 7,000 gallons and Masport or National Vacuum Equipment pumps.

The company has also invested in two trailer-mounted water jetters from O’Brien (a brand owned by Hi-Vac Corp.) equipped with 750-gallon water tanks and Myers (a brand owned by Pentair) that generate pressure of 2,000 psi and flow of up to 35 gpm. It also owns a US Jetting jetter (4,000 psi at 35 gpm) that features two 350-gallon water tanks.

The company relies on two truck-mounted jetters built by Sewer Equipment CO. of America (2,000 psi at up to 50 gpm) with 1,500-gallon water tanks. The units, mostly used for cleaning sanitary sewer lines, are carried by Freightliner trucks.

To inspect pipelines, the company owns one wheeled Rovver pipeline inspection camera and a push camera, both from EnviroSight.

How did the company handle the financial burden of buying so much expensive equipment in a relatively short amount of time? By purchasing used — but still quality — equipment until the business could afford newer equipment, McCoy says.

MORE GROWTH EXPECTED

Looking back, McCoy says he never could’ve imagined years ago that he’d be in the pipeline cleaning business and that he and his wife would be running a multi-million-dollar-a-year company.

“I’m basically just a white-collar guy that got into a real dirty job,” he says.

The McCoysexpectfurthergrowth,asevidencedbythecompany’s recent move to a larger facility that includes a 12,000-square-foot building and a 10,000-square-foot building for housing trucks and performing repairs and maintenance.

McCoy says he expects municipal work to dominate for the next two to three years, due to the billions of dollars in federal funding available for infrastructure projects, including pipe lining projects

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

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

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

Ratech
ELECTRONICS

Video Pipeline Inspection Systems



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



Control unit
can be
mounted
to reel.



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

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

MANUFACTURING SEWER CAMERAS SINCE 1981.

for which A-1 would perform pre-lining inspections and cleaning.

"We won't be tapping on the brakes," he says. "This business is largely recession proof and there's more and more new (trenchless pipeline renewal) technology coming out. I believe there's unlimited opportunity in this industry. All you have to do is get out there and put in the work. After that, the sky's the limit." c

FEATURED EQUIPMENT

DRAGON PRODUCTS, LTD.

800-231-8198
www.dragonproducts.com

ENVIROSIGHT LLC

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

FLOWMARK VACUUM TRUCKS

833-653-8100
www.flowmark.com

HI-VAC CORPORATION

800-752-2400
www.hi-vac.com

MASPORT, INC.

800-228-4510
www.masportpump.com

NATIONAL VACUUM EQUIPMENT, INC.

800-253-5500
www.natvac.com

PENTAIR

888-416-9513
www.femyers.com

SEWER EQUIPMENT CO. OF AMERICA BY SEWER EQUIPMENT

888-477-7611
www.sewerequipment.com

US JETTING

800-538-8464
www.usjetting.com



USB-USA's TURBO CHAIN CUTTERS ARE POWERFUL, TOUGH AND FLEXIBLE!



- Turn the rear to adjust the cutter for different size pipes
- Adjustable to navigate over offsets
- Adjustable to 1/16th of an inch within the operating range
- Attachments for cutting protruding taps
- Turbine technology
- Low maintenance
- User friendly

Contact Us Today! 1-844-285-5770 | Fax: 678-649-1766
info@usb-usa.com | www.usb-usa.com



Joan Koehne

MAKING CONNECTIONS

Thousands of workers are using BoomNation, a technology platform geared specifically to the skilled trades and aiding networking efforts // By Joan Koehne

FINDING AND RETAINING SKILLED workers is an ongoing issue in the industry. But a new platform is trying to make it easier for employers to connect with qualified talent as well as for workers in the trades to connect with one another.

Scaled nationally in 2022, BoomNation is a modern technology platform not only for employment, but also for community building and communication among people in the skilled trades. With more than 100,000 workers using BoomNation, the platform's quick growth signifies tradespeople's desire for a social channel all their own, says Brent Flavin, co-founder and co-CEO of BoomNation. The platform was built specifically for skilled workers.

"Our vision is to do everything through the lens of the skilled worker journey. Make it simple and intuitive. The real focus is to build a platform that skilled workers actually use," Flavin says.

"They feel like, for the first time, someone has created a community, in this day and age, with the technological tools they're using, on a platform that's meaningful to them."

Headquartered in Baton Rouge, Louisiana, BoomNation is fast becoming a go-to place for workers to engage with one another and find jobs in their field. While BoomNation's base is in the Southeast, skilled workers and employers across the country are engaging with the platform, Flavin says. The platform is available for download everywhere in the U.S. (www.boomnation.com), and jobs currently are posted in 48 states — Delaware and Vermont being the only exceptions.

DOCUMENTING THE WORKDAY

The platform has three main features. First, the BoomNation newsfeed allows users to share videos, post pictures and add comments about their work, projects and careers. Workers share their job site pictures and videos to tell stories about their successes and struggles, presenting the trades as they really are.

"Many of them are almost documenting their day," Flavin says. "They're posting a video or picture of a sunrise, a picture of them on the different equipment and doing their job, and video of the sunset leaving the job."

Michael Ewing, 51, is a welder who works in industrial maintenance for Leech Fab Worx LLC in Mississippi. A frequent

CONTINUED >>

« One feature of the BoomNation app is a real-time information-sharing portal where employees can have a single source for things like project-specific navigation pins, gate codes, personal protective equipment requirements, and emergency phone numbers.



ALIGN WITH A NATIONALLY RECOGNIZED BRAND.



Convert your plumbing & drain cleaning business today.

- Low cost initial and ongoing investment
- Turnkey marketing & lead generation
- Dedicated software support
- Brand recognition
- Best-in-class software

Entrepreneur

20⁺

Years as #1 in Category

ROOTERMAN
"TO THE RESCUE"

Contact us today, and secure your future with RooterMan!

(434) 218-4598 rootermanfrandev@premiumservicebrands.com

contributor to BoomNation, he's on the platform every day, posting videos of his work, plus welding tips and general knowledge he's gained during his career.

"I share a lot of the stuff that got me where I am today," he says.

He says the platform really hit home for him, and he hopes it resonates with others in the trades as well as for individuals curious about careers in the skilled trades.

"There are high school kids on the platform looking to forge their way into the trades, and they're seeing a lot more opportunities than what they have at home," Ewing says. "People are excited to find something they're truly looking for and make a career out of it, not just a job."

He says the platform speaks the language of skilled workers, using technology they're accustomed to. Plus, users can see what workers do day-to-day, ask questions, and seek advice from peers.

"There's a network of people waiting to help you," Ewing says.

"THERE ARE HIGH SCHOOL KIDS ON THE PLATFORM LOOKING TO FORGE THEIR WAY INTO THE TRADES, AND THEY'RE SEEING A LOT MORE OPPORTUNITIES THAN WHAT THEY HAVE AT HOME."

MICHAEL EWING

CONNECTING EMPLOYERS AND JOB SEEKERS

The second feature of the platform makes it easier for employers to hire workers and vice versa — for workers to find jobs faster. Instead of relying on word-of-mouth or traditional job search methods, job seekers can download BoomNation for free in the App Store or Google Play and create their own profiles to showcase their skills and credentials. People in the skilled trades typically don't want to spend their after-hours networking or filling out job applications. Plus, project-based workers consistently work themselves out of a job.

"Historically, they work until the project ends, and then it takes time to find the next work," Flavin says.

CONTINUED >>



MAXI MILLER

PROFESSIONAL'S CHOICE FOR WIDEST RANGE OF JOBS



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





POWER THRU™


Sewer & drain tools
built to prevail.



MS11-NG2
Inspection
System



M224
Flexible
Shaft
Cleaner



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

www.MyTana.com ■ (866) 948-7576



MyTana

INSPECTION SYSTEMS CABLE MACHINES FLEXIBLE SHAFT CLEANER JETTERS
CABLE ATTACHMENTS NOZZLES HOSE PARTS TOOLS FACTORY DIRECT SUPPORT

BETTER BUSINESS

BoomNation attempts to minimize the time it takes for experienced workers to land the next project or transition to a different company. Additionally, BoomNation helps newcomers enter the trades to find meaningful work.

By the end of 2022, BoomNation had processed nearly 10,000 job applications through the platform, Flavin says. For a monthly fee, employers can post jobs, review applications and communicate directly with applicants. Employers can select between two plans, either \$500/month for 10 job posts or \$1,000/month for unlimited job posts, discounted 20% for paying annually. Using BoomNation, employers can find and connect with workers in minutes. The self-service hiring platform enables them to get candidates hired quickly.

“There’s engagement right on the platform for the employer and worker communicating and understanding what that worker might really be able to do and what the real job description is,” Flavin says.

Hundreds of jobs are posted on BoomNation at any given time.

Alysa Lyle, projects and service coordinator at Hale’s Mechanical in the Kansas City, Missouri area, says the company had a good experience

hiring an HVAC service technician from a BoomNation posting.

“He has been one of our most reliable hires and has been with the company for 10 months now,” Lyle says. “He is stepping into more leadership roles, and we couldn’t be happier with our hire.”

INFORMATION SHARING

The third feature of BoomNation is the February 2023 launch of WorkOn, a real-time information-sharing portal. WorkOn reduces the confusion about things like a project’s location, what parking lot to use, and what gate to enter. Instead of bombarding the foreman with phone calls, employees have a single source where they can find project-specific navigation pins, gate codes, personal protective equipment requirements, emergency phone numbers, etc. Once they’re on the project, they can access a bulletin board that illustrates corporate culture, recognizes safety awards and posts announcements.

A variety of trade industries are represented on the BoomNation platform, including construction, utilities, manufacturing, oil and gas, transportation and warehousing. Skilled laborers join a community where they can post real-time content, network with one another, apply for jobs and promote craftsmanship and skills.

In addition to the regular platform, BoomNation also publishes a weekly newsletter, *The Trench*. With humor and a lighthearted approach, *The Trench* features stories and case studies that are meaningful and motivating to people working in the trades or considering careers in the trades.

“The stories that are in these industries and these trades are absolutely incredible. It’s all over the map,” Flavin says.

BoomNation also hosts a podcast, “Long Live the Trades,” every two weeks. “Long Live the Trades” covers stories from job sites, advice about getting started and working in the trades, financial tips and other blue-collar topics.

A group of friends with experience in the blue-collar trades created BoomNation. Flavin, Jeremy Hankins and the other BoomNation co-founders perceived a need for a streamlined way for skilled tradespeople to connect with one another and with employers. They sought help from Chris Meaux, founder of Waitr, a food ordering and delivery company, to implement the technology and business strategies needed to grow the business. Meaux is chairman and co-CEO of BoomNation.

BoomNation brings the skilled workforce community together in one place. The platform gives workers a place all their own where they can tell their stories, engage with content and post or apply for jobs.

“Come check us out,” Flavin says. “Come join the community and get a sense of what it’s like.” **c**

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

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

Inspection Cameras Starting at \$1999

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

We Repair All Brands

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

Gas Powered HydroJetters Starting at \$2799

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

Nationwide Sales

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

Available Cordless Ask us About Custom Colors

East Coast Sewer Equipment Service

(718)477-1425 thesewercameraconnection.com



VIVAX
METROTECH

vCam-6
3 to 10-inch lines



vCamDrain
1.5 to 3-inch lines



vCamMX-2
2 to 4-inch lines



vCam Inspection Cameras

— *The Clear Choice for Video Inspection* —



vLoc3-Cam Sonde Locator

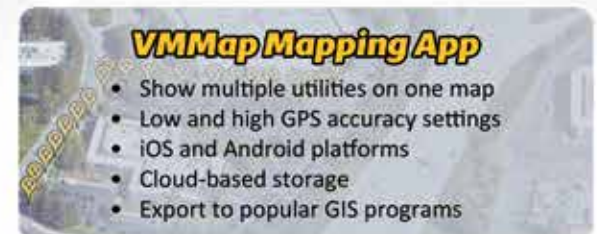
- Directional arrow guidance
- Locates sondes and pushrod
- Graphical user interface
- Optional Bluetooth connectivity
- 4.3" Full-color display



**vCam Mobile
Controller App**



**VMap
Mapping App**



Call us for a no-obligation on-site demonstration!

1-800-446-3392



Vivax-Metrotech Corporation

3251 Olcott Street, Santa Clara, CA 95054, USA

SalesUSA@vxmt.com

+1-408-734-1400

www.vivax-metrotech.com

UNDERGROUND EFFICIENCY

Piercing tools boost productivity for Utah drain cleaner on waterline installs

// By Ken Wysocky

A **S A FORMER BUSINESS COACH** and co-owner of Utah-based Valley Plumbing and Drain Cleaning, a company that racks up more than \$10 million a year in revenue, Lawrence Snow is a big advocate of efficiencies that drive better profitability.

That mentality is reflected in the four pneumatic Mole Active Head piercing tools the company purchased from HammerHead Trenchless (a Charles Machine Works Co.). Crews at Valley Plumbing use them to install new residential waterlines.

The company, based in West Jordan, a southern suburb of Salt Lake City, employs 70 people and runs about two dozen service vehicles. Snow founded it in 2010 with his son, Rob. The company owners now include Snow's other son, Corry, and a son-in-law, Brett Reeves.

The HammerHead piercing tools epitomize efficiency. They give Valley Plumbing the ability to perform trenchless service line replacements roughly two to three times faster than conventional open-trench replacements.

"Installing service lines used to take us a full day," Snow says. "Then you also have to worry about repairing any irrigation-sprinkler lines that were damaged, plus when you backfill the trench it usually leaves either a hump or a dip. It was a big hassle. But now we can do two to three installations a day as long as soil conditions are good and there aren't any utility lines in the way. And there's virtually no disruption to customers' yards. In fact, I've had customers call and ask me, 'Weren't you supposed to come here to replace my waterline today?' And I tell them, 'Yes, it's already done.'"

In addition, the trenchless line replacement technique generates great profit margins.

"Quite frankly, people will pay a premium price to not have their yards messed up," Snow says.

DIVERSE SERVICES

Plumbing services generate about half of the company's revenue, with drain cleaning and trenchless pipeline rehab contributing the balance.

To that end, Valley Plumbing owns dozens of cable drain machines made by General Pipe Cleaners (a division of General Wire Spring Co.); six HotJet USA water jetters (two trailer-mounted and four truck-mounted); a liner-inversion machine made by Perma-Liner Industries and a Quik-Shot lateral lining system from Quik Lining Systems and sold by Pipe Lining Supply (now both owned by Waterline Renewal Technologies); about 28 RIDGID SeeSnake Mini pipeline inspection cameras; and 28 RIDGID NaviTrack Scout line locators.

As for the Moles, the company owns three 2-inch-diameter models and one 3-inch-diameter model. They look like small torpedoes. Valley Plumbing technicians call them "missiles."

VALLEY PLUMBING AND DRAIN CLEANING

WEST JORDAN, UTAH

OWNERS Lawrence, Rob and Corry Snow and Brett Reeves

TOOLS Mole Active Head piercing tools from HammerHead Trenchless

FUNCTION Boring holes for replacing water service lines

FEATURES One-piece body made of heat-treated alloy steel; reciprocating head with double-strike system for more impact force; replaceable bore heads and wear rings; can bore holes from 2 to 3 inches in diameter; 2-inch model is 30 inches long, weighs 19 pounds and delivers 714 blows per minute; 3-inch model is about 52 1/2 inches long, weighs 67 pounds, and delivers 370 blows per minute; a quarter-turn of the tool locks it in either forward or reverse, preventing accidental direction changes during boring.

COST About \$3,500 each

WEBSITE www.valleyplumbing.com

» Rob Snow, co-owner and general manager of Valley Plumbing and Drain Cleaning in suburban Salt Lake City, holds two Mole Active Head piercing tools, made by HammerHead Trenchless (a Charles Machine Works Co.).



Snow invested in the company's first Mole piercing tool about nine years ago after watching a cable-TV company use one to install a new line under his 45-foot-wide driveway without disturbing the yard.

"I thought that was pretty cool," Snow says.

Made from heat-treated alloy steel and powered by an air compressor, the Mole Active Head tools are designed to install gas, water, cable, irrigation, fiber-optic or electrical lines. The models Valley Plumbing purchased feature reciprocating heads, which deliver a double-strike impact for greater productivity.

The 2-inch model is 30 inches long, weighs 19 pounds and delivers 714 blows per minute, while the 3-inch model is about 52 1/2 inches long, weighs 67 pounds and delivers 370 blows per minute.

There are limits to usage, however. For example, rocky ground is a nonstarter because rocks will deflect the tool off course, Snow says.

ALLAN J. COLEMAN

SINCE 1905

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

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

OLDEST NAME IN THE BUSINESS — Over 115 YEARS OLD

info@allanjcoleman.com • www.allanjcoleman.com



PICOTE Stocking In Both Locations
LIFE FOR RIGS

Warthog® Nozzles



Products Manufactured By **JETTERS** ROTHWELL

Mountable or Portable - Skid/Cart



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

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

We Have RIDGID Parts!



Buy Online at AllanJColeman.com



Pro-Vac
Industrial Pumpout System



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

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



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



Western Drain
SUPPLY

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

**CERTIFIED
RIDGID
AND
PICOTE
REPAIR
CENTER**

WESTERNDRAIN.COM

DRAIN CLEANING MACHINES - CABLE - JETTERS
PIPE LINING - CAMERA INSPECTION - TOOLS

1140 N. KRAEMER PLACE | ANAHEIM, CA 92806

(714) 632-0447

MONEY MACHINES

A BORING PROCESS

Using the Moles typically requires digging a small entrance pit, roughly 3 feet long by 2 feet wide by 3 feet deep. Then the tool is connected to an air compressor and placed in what HammerHead calls a launch cradle. An available aiming sight helps ensure an accurate starting point.

"You basically turn on the air and lean into it," Snow says. "Depending on the soil conditions, we can bore as much as 40 feet in a minute or it might take up to 10 minutes. The more clay there is, the longer it takes. You can walk along with your feet spread and you can hear it, so you know exactly where it's at. The ground vibrates and worms come to the surface because they don't like the vibrations."

In the Salt Lake City area, Snow says technicians usually shoot bores from buried water meters in parkways in front of houses to basements. The compressor hose is only 50 feet long, so boring runs longer than that would require a second entrance pit, Snow adds.

Reversing the tool's direction requires just a quarter-turn in a counterclockwise direction. The quarter-turn feature locks the tool in either forward or reverse and prevents accidental directional changes while boring.

Operating the tool is fairly easy. But learning how to get it to where it needs to go requires a bit of a learning curve, Snow says.

"You learn by the school of hard knocks," he says. "But usually after six or eight shots, technicians are proficient enough to do it by themselves."

GREAT ROI

A piercing tool costs roughly \$3,500. But it also requires a powerful air compressor, which adds considerably to the investment, Snow says. The company owns three 185 cfm compressors made by Kaeser and Vanair Manufacturing that cost around \$24,000.

"The missile is the cheap part," he says.

Nonetheless, the Moles provide a great return on investment in terms of increased productivity, which in turn leads to greater revenue generation and better profitability, Snow says.

"If you include the cost of the generator with the tool, it probably takes about 40 to 45 jobs or so before it pays for itself," he says. "In the end, it's all about increased efficiency." **c**

INSPECT MORE *IN LESS TIME*



INSPECT MAINLINES AND LATERALS WITH ONE INSPECTION RUN

To remedy potential crossbore risks and to protect / locate buried assets and the surrounding environment, use the CUES LAMP II. LAMP II (Lateral and Mainline Probe II) is an inspection tool for identifying infiltration and inflow, potential cross-bores, pipe defects, and structural conditions in lateral services and mainlines. LAMP II offers an optional Micro or Mini Pan & Tilt Camera to inspect laterals. Mainline inspection is accomplished with a pan, tilt, and 40:1 zoom camera. LAMP II can pull 1000 ft. video cable, reducing traffic control expenses while increasing production, and launch 150 ft. or more into the lateral. Contact CUES today for a free demo!



Scan here to request
a FREE demo!



800.327.7791 | salesinfo@cuesinc.com

• • • • • www.cuesinc.com ◀

THE FUTURE OF INDUSTRIAL PUMPS BROUGHT TO YOU BY



**ANNOVI
REVERBERI**
The Power of Experience



RTD 1000 RPM N VERSION SOLID SHAFT 35MM

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

SX - 180° Rotated Shaft Configuration
H - Nickel Plated



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

RTD 1450 RPM N VERSION 30 x 80MM SOLID SHAFT

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

*HW - includes Hot Water Kit



NORTH AMERICA
When Quality Matters

www.arnorthamerica.com
763-398-2008

For
More
Information
Contact

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

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

HOOK UP

With All Your
Equipment
Needs



MRP
MILWAUKEE RUBBER PRODUCTS

Call Toll-Free
1.800.325.3730
www.MilwaukeeRubber.com

Follow Cleaner on



[facebook.com/
CleanerMag](https://facebook.com/CleanerMag)



[youtube.com/
CleanerMagazine](https://youtube.com/CleanerMagazine)



[twitter.com/
CleanerMagazine](https://twitter.com/CleanerMagazine)

ALLAN J. COLEMAN

SINCE 1905

Call us today!

Chicago 773-728-2400

Phoenix 602-638-0600

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

info@allanjcoleman.com • www.allanjcoleman.com

OLDEST NAME IN THE BUSINESS — OVER 115 YEARS OLD

NaviTrack® Scout®

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



SeekTech® SR-20

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



CSx) VIA™ Wi-Fi Control Device

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

Pipe Patch Kits

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



SeeSnake® TruSense™ Camera Reel

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



FLEXSHAFT, K9-306

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

FLEXSHAFT, K9-204

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

FLEXSHAFT, K9-102

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



CS6x) VERSA Digital Recording Monitor With Wi-Fi

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



RIDGID

We Have RIDGID Parts!

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

Buy Online at
AllanJColeman.com



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

A LASTING REPAIR

Pipe bursting and manhole rehab complement one another to produce a sound trenchless solution for sewer systems // By Brent Keller

TRENCHLESS TECHNOLOGY has revolutionized sewer rehabilitation and repair.

One such trenchless method, pipe bursting, is increasingly preferred for small diameter yet large-scale and complex sewer systems, giving old pipes new life without compromising paving or roadway access. But the greatest system rehabilitation results can be achieved when pipe bursting is combined with manhole rehabilitation.

BEST PRACTICES

Sewer systems are subjected to extreme conditions every day. The waste that sewers carry away produces corrosive hydrogen sulfide gas as it deteriorates, eating away at infrastructure and risking the health of anyone exposed to it. This degradation leads to infiltration of groundwater and inflow from stormwater runoff, which severely compromises existing pipes' structural integrity. When the additional complicating factor of soil shifting is added into this process, it further destabilizes pipes.

PERFORMING MANHOLE REHABILITATION SIMULTANEOUSLY WITH PIPE BURSTING ENSURES A WATERTIGHT STRUCTURE AS ALL INFILTRATION ACCESS POINTS ARE ELIMINATED.

Pipe bursting offers significant advantages compared to open-trench pipe replacement. In addition to avoiding paving restoration time and costs as well as roadway closures, it is one of the few trenchless rehabilitation methods that can upsize a pipe. With pipe bursting, a small entry point can be made in a low-impact area rather than paved surfaces and a downstream manhole is established to run a cable through the line. The existing pipe fractures as a new high-density polyethylene pipe is pulled in. This process eliminates the need to trench the entire run of the pipeline.



▲ In addition to avoiding significant paving restoration time and costs as well as roadway closures, pipe bursting is one of the few trenchless rehabilitation methods that can upsize a pipe.

In addition to HDPE pipe's notable advantages, including high H₂S resistance and 50-year design life, this process creates a monolithic pipe as all segments are fused together, which minimizes access points for roots and infiltration. However, without manhole remediation, a risk of leaks at those structures may also remain. As concrete and brick manholes age and the mortar, joints and gaskets deteriorate,

leaks can occur through these penetration points. When these eroded manhole areas are sealed after pipe bursting is performed, all potential points where water could enter the system are eliminated. This best practice method essentially provides a “belt and suspenders” approach to keeping sewer systems running smoothly for the long term.

SAN ANTONIO CASE STUDY

Recently, the city of San Antonio applied this pipe bursting best-practice approach to repair its sewer infrastructure.

San Antonio, the third-largest city in Texas, has nearly 3 million residents and more than 30 million yearly tourists,

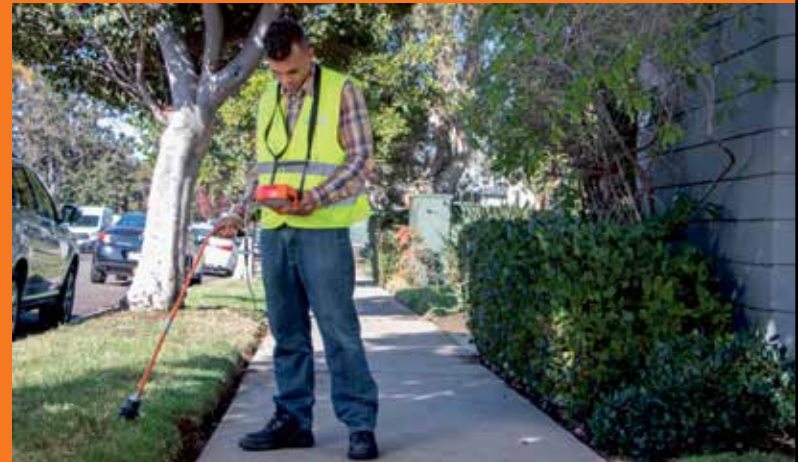


« The city of San Antonio recently used the bursting method to replace 5,500 feet of deteriorating pipe with HDPE.

making it vital that its sewer lines reliably function. The city was dealing with about 5,500 linear feet of pipe in need of repair. The pipe was constructed of multiple materials — not only reinforced concrete and clay, but also truss pipe from the 1970s, which used plastic with a corrugated inner layer and an outside layer of plastic. The truss pipe in the system, chosen for its resistance to H₂S, was very brittle — a result from the clay in the surrounding soil regularly shrinking and swelling, which can cause the material to move and crack. The reinforced concrete and clay pipes, though stronger than the truss pipes, had also developed several intrusions and cracks over the years.



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



SeCorrPhon AC 200 & VARIOTEC® 460 Tracergas
EVERYTHING you need on non-metallic pipes!

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

TECH PERSPECTIVE

Several mitigating factors were taken into consideration for the repair process. The Edwards Aquifer on the northeast side of town provides the majority of the city's drinking water and is vulnerable to environmental disruption. Opencut sewer repair raised the risk of contamination from exposed sewers. The city's tourist business was also at risk from environmental contamination and surface disruptions from sewer repair work.

For these reasons, pipe bursting fit with San Antonio's needs and priorities. HDPE pipe was used with the pipe bursting process to replace existing infrastructure, providing a structure capable of providing high resistance to the instability of the surrounding soil, I&I and H₂S gas. The new pipe allowed improved levels of water flow and eliminated the risk of exposing sewer waste to the environment.

The system's manholes posed a leak risk, however. More than 10 precast manholes had been eroded by H₂S gas, making them prime targets for I&I. The city used Quadex GeoKrete, a corrosion-resistant geopolymer mortar that blocks groundwater infiltration, to restore the manholes to useful life and rebuild culverts. Applied by low-pressure spraying — in one pass — the geopolymer eliminated any potential

leak paths that could result now that the pipe was impenetrable.

From start to finish, the project took four months — less than half the time an opencut replacement would have lasted and without the traffic disruption and environmental impact for residents and tourists. The new pipe system has an expected life of 50 years and is significantly more resistant to I&I, corrosion and ground shifting.

Performing manhole rehabilitation simultaneously with pipe bursting ensures a watertight structure as all infiltration access points are eliminated. As engineers and asset owners seek ways to restore critical sewer infrastructure faster without creating significant pavement repair or disruption, pipe bursting combined with manhole rehabilitation offers the most durable and practical solution. This field-proven best practice offers the reliable and long-lasting performance municipalities demand. **c**

ABOUT THE AUTHOR

Brent Keller is senior regional vice president of the Southwest/Rockies for Vortex Companies. His trenchless technology and field expertise span eight years.

COMPLETE PARTS & SERVICE
WE DIAGNOSE & SERVICE ALL BRANDS

NO BENCH FEE
FREE DIAGNOSIS

POWERED BY DEWALT

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

ASK ABOUT QUANTITY DISCOUNTS
SEWER CAMERA & LOCATOR PACKAGES AVAILABLE

TRAILER JETTERS STARTING AT \$35,999

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

MADE IN THE USA

702-527-5100

WWW.SECONV.COM

made in the • Fast Shipping
USA • Call Us For A Quote

(702) 527-5100

LIVE TECH SUPPORT • PARTS & ACCESSORIES
AVAILABLE FOR ALL EQUIPMENT
WWW.SECONV.COM

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

EXTREME JET

SECON-4000T

BLACKHAWK

Trenchless Superstore

Providing the Best Pricing, Products, Service & Selection.

4"x4' Winter Patch Kit \$225





Pipe Lining Materials

- Epoxy & UV Resins
- Scrim
- 4-D
- SuperFlex
- Flex
- Imperliner
- Transition Liners
- Cal-Tube
- Accessories

Point Repair

- Packers
- Patch Kits
- Bulk Material
- 3P Silicate
- Starter Packages
- Accessories

Pipe Cleaning

- Renssi High-Speed Cable
- Chain Knockers
- Reinstatement Tools
- Machines.

TPU Extend A Liner Material in Stock!
No More Glue Failures!
Strongly Bonds to your PU Felt Liner with a Flat Iron. Remove after Curing with Sandpaper or Chain Knocker.

Call for knowledgeable support and fast shipping!
630-326-9061
BlackhawkTechSupply.com

GET READY TO



DECLARE VICTORY OVER THE DRAIN



WITH DURAFLEX DRAIN CABLE FROM DURACABLE, YOU'VE GOT THIS.



DURACABLE.COM



800-247-4081

RIGHT IN THERE WITH YOU.

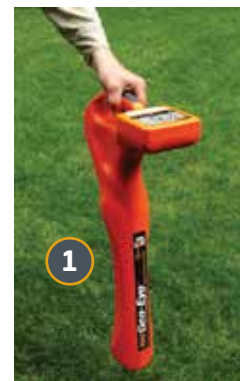
LOCATION AND LEAK DETECTION, DRAINLINE TV INSPECTION

By Craig Mandli

» ELECTRONIC LINE LOCATORS

1 // GENERAL PIPE CLEANERS GEN-EYE HOT SPOT

The **Gen-Eye Hot Spot** pipe locator and transmitter from **General Pipe Cleaners** makes locating pipes and utilities easy. The locator's total field antenna and on-screen icons lead the user right to the target, without a long learning curve. Whether an experienced pro or a first-time user, the user can quickly locate inspection cameras, sondes, active power lines and utility lines with pinpoint accuracy. Rated at IP65, the locator can withstand a 3-foot drop, is dust- and dirt-proof, and water-resistant. The powerful 5-watt Hot Spot transmitter, in tandem with the locator, makes finding buried utilities quick and easy. More power means more signal to locate. Choose one of four frequencies to best suit the application. 800-245-6200; www.drainbrain.com



2 // HERMANN SEWERIN GMBH UT 9200 AND UT 9100

The **UT 9200** and **UT 9100** systems from **Hermann Sewerin GmbH** feature a multitude of frequencies, extremely long battery life, simple operation and versatile functionality. The **UT 9200 R** and **UT 9100 R** receivers are best combined with the **UT 9012 TX** generator, the most powerful transmitter in its class at 12 watts. They allow the user to find the optimal frequency immediately, connect two pipes at the same time or locate very long sections of pipe. They accurately locate pipes in difficult environments and all weathers, or reliably determine the depth of the pipe. Thanks to the inbuilt GNSS module, the **UT 9200 R** receiver can link location data to position data and read it out via the **UT 9200 Com** app — helping the user to work quickly, accurately and economically. 888-592-9916; www.sewerin.com



3 // SUBSITE ELECTRONICS UTILIGUARD 2

The **UtiliGuard 2** from **Subsite Electronics** provides locating crews with integrated data capture, GPS positioning and an intuitive user interface to help operators improve work quality and maximize locate awareness. For increased confidence, locate consistency and operational performance, the user interface features simplified graphics that are easy and fast to interpret. Operators will notice an obvious change in screen layout when directly over a utility locate, providing positive confirmation. The data automatically captured can be used to quickly prove or track performance, compare with benchmarks and provide actionable outcomes to help increase quality and productivity while reducing cable strikes. In addition to data-logging capabilities, it is equipped with integrated GPS positioning, enabling crews to improve activity reporting. 800-846-2713; www.subsite.com





4

» PUSH TV CAMERA SYSTEMS

4 // CUES FLEXIPROBE C540C

The **flexiprobe C540c** portable pipeline inspection system from CUES simplifies operations by automatically creating a survey report, allowing you to concentrate on your inspection tasks. Share your reports quickly and easily via email or the Dropbox file sharing service. Systems consist of six reel configurations with two different cameras to choose from rated for withstanding water pressure of approximately 160 psi or over 300 feet underwater. Each system serves unique applications and a majority of inspection needs within the sewer industry today, from 1 1/2- up to 12-inch pipe. The system is managed by a powerful and intuitive controller with a quick boot-up, an intuitive user interface and a high-definition 10.1-inch TFT display. 800-327-7791; www.cuesinc.com



5

5 // ELECTRIC EEL eCAM ACE 2 SL

The **Electric Eel eCAM Ace 2 SL** offers an upgraded brighter display screen, which is an important factor in the clarity and definition of viewing inspection camera images and data. A brighter screen provides better contrast and visibility of inspection, making it ideal in brightly lit environments like full and direct sunlight. The 1.43-inch self-leveling color camera inspects 3- to 10-inch lines along with other features that include a location on the rear of the monitor for the battery cradle and AC/DC power input. The unit can now handle both 18-volt battery and 12-volt AC/DC adapter inputs (not at the same time). It also has an entirely new operating system and menu navigation, along with improved battery life off a single charge. 800-833-1212; www.electriceel.com



6

6 // ENVIROSIGHT VERISIGHT PRO+

Envirosight's Verisight Pro+ smart push camera can be used to complete drain, lateral and cleanout inspections quickly and accurately. The stainless steel self-leveling camera captures up to 90 hours of color footage from pipes 2 inches in diameter and larger, regardless of material. It can snake through multiple bends for maximum range, and its integral tri-band sonde (33 kHz, 512 Hz, 640 Hz) works with almost any locator. The rugged welded-steel coiler comes with 130, 200 or 330 feet of pushrod. The entire system runs for 6 hours off internal rechargeable lithium-ion batteries, or off mains or vehicle power. Its controller offers an 8-inch LCD screen that displays footage in real-time and a full QWERTY keyboard for recording observations. Easily navigate and review recorded inspections using the thumbnail gallery, then transfer them via SD card or USB drive. 866-838-3763; www.envirosight.com



7

7 // FIBERSCOPE.NET BY MEDIT VIPER PT

The **VIPER PT** pipe camera from **Fiberscope.net** by MEDIT offers a fully portable, all-in-one design making it easy to transport and set up, allowing users to get to work quickly and without any hassle. The miniature pan-and-tilt camera head measures only 1.1 inch in diameter, providing a comprehensive view of the interior of the pipe. The camera features an HD video sensor, which delivers crystal-clear footage. The system comes with a 98-foot insertion push cable with a pre-attached 512 Hz sonde, making it easy to locate and track the camera head as it moves through the pipe. The control unit features a high-resolution, daylight-readable display. Captured data allows users to refer back to the footage at a later time. Adding text notes also makes it easy to keep track of important details and observations during the inspection. 877-613-2210; www.fiberscope.net

8 // HATHORN INSPECTION CAMERAS H12

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



9 // INSPECTORCAMERAS.COM SCOUT 3-PRO PLUS

The Scout 3-Pro PLUS from **INSPECTORCAMERAS.COM** is a lightweight, easy-to-carry, rugged and waterproof inspection camera. Use the 10-inch screen for better viewing and the 130-foot heavy-duty cable for longer pushes. Included is a 23 mm stainless steel camera head that self-levels with a sonde for locating. It can capture high-quality images while recording videos with sound from the built-in microphone. It has a Bluetooth keyboard for typing on the screen, secure internal storage for accessories, and a completely removable control box for limited space areas and easy cleaning. It comes with a set of skids, accessories and two chargers. 603-267-0400; www.inspectorcameras.com



10 // MILWAUKEE TOOL 100-FOOT FLEXIBLE PIPELINE INSPECTION CAMERA

Milwaukee Tool's 100-foot Flexible Pipeline Inspection Camera is part of the M18 Modular Pipeline Inspection System. Providing maneuverability in small lines, the unit has a flexible push cable built to navigate tight bends and traps in 1.5- to 4-inch lines, up to 100 feet. The compact and lightweight design is optimized for high traffic or confined areas and offers portability for easy storage and transport on and off the job site. As the first flexible reel added to the system, it joins the 120- and 200-foot Mid-Stiff, and 200- and 325-foot Stiff reels to provide the versatility needed to fit any situation. The system is built around the M18 500 GB Control Hub, which powers and allows for easy swaps between reels. 800-729-3878; www.milwaukeetool.com



11 // MYTANA INSPECT & LOCATE PACKAGE

Designed for full inspecting and locating capability in lines large and small, MyTana's **Inspect & Locate Package** comes with a single control unit that connects to both a large-diameter camera for inspecting up to 8-inch lines on 200 feet of pushrod, and a small-diameter camera for inspecting 1 1/2- to 3-inch lines on 100 feet of pushrod. The control unit's large, daylight-readable monitor displays high-clarity footage, and all-digital recording lets you save that footage to either the 64 GB internal drive or a removable USB flash drive. Operators can also stream video wirelessly to multiple devices. The multifrequency locator works on all pipes including cast iron. Continual depth readout and directional indicators allow for intuitive operation with audio feedback. With the included transmitter, you can trace a signal on drainlines or find buried utilities. 800-328-8170; www.mytana.com



CONTINUED >>

Manufacturing Drain Cleaning Equipment for over 30 years

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



TM750



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



TM50



TM25

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



Various shaped and sized blades



COAST MANUFACTURING

541.684.0743
www.coastmanufacturing.com

Coming Next Month

Cleaner BUYER'S GUIDE

The July issue of *Cleaner* includes the Annual Buyer's Guide, an extensive list of manufacturers, dealers and distributors of equipment and technology used for sewer and drain cleaning equipment.

WORKING WELL UNDER PRESSURE

Building Drain and Sewer Equipment since 1981.

NEW

4008H Power Unit

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

Just Add A Tank! **Call for Quote**

3012H Power Unit

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

Call for Quote

NEW

4008H Compact Skid

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

(100 GALLON TANK) **Call for Quote**

3012H Compact Skid

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

(100 GALLON TANK) **Call for Quote**

NEW

RCJ4008H

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

Call for Quote

NEW

LJ4008H

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

(NARROW DESIGN) **Call for Quote**

VM4008H

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

Call for Quote

CV4008H-HOT

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

Call for Quote

TRAILER MODELS AVAILABLE
through 25 gpm @ 4000 psi

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

Pressure Washers & Drain Jetting Equipment

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

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

12 // RAPIDVIEW IBAK NORTH AMERICA MICROLITE PUSHROD SYSTEM

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



13 // RATECH ELECTRONICS PLUMBER'S HELPER JR.

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



14 // RIDGID SEESNAKE MINI PRO INSPECTION CAMERA

The **RIDGID SeeSnake Mini Pro Inspection Camera** with **TruSense Technology** provides digital self-leveling without mechanical rotation. The small yet rugged unit is designed to inspect up to 200 feet of 1 1/2- to 8-inch pipe with its mid-flex push cable that can navigate hard 90-degree bends. Its 25 mm digital self-leveling camera always keeps the in-pipe image upright and, when paired with a TruSense enabled monitor, delivers an in-pipe image with superior clarity, detail and fewer blown-out areas and sections of the pipe that are too dark to see. Digital Zoom/Pan provides the ability to focus on a single point of interest, while the TiltSense Inclinometer measures the camera's angle and displays the degree of tilt on the monitor — giving professionals a useful indicator of the pitch of the camera in-pipe. 800-474-3443; www.ridgid.com



15 // SECON EXTREME SERIES

Extreme Series cordless sewer cameras from **SECON** come with two 20-volt DeWALT batteries and a charging station. An 18-volt power supply is included for plug-in operation. They have a Wi-Fi connection to view inspections in real time on personal smart devices. The unit includes a 7-inch color LCD monitor, 512 Hz sonde/transmitter and a stainless steel camera head. They are available with 100 to 300 feet of push cable and are capable of viewing 1 1/2- to 12-inch pipe. 702-527-5100; www.seconv.com



16 // SPARTAN TOOL TRAVELER 3.0

The **Traveler 3.0** is the next generation of **Spartan Tool's** all-in-one sewer inspection system, upgraded for tough customers. It is the same compact, portable size as before but includes completely rebuilt and upgraded interior components. It offers a stronger, more durable pushrod with a removable reel, allowing you to swap reels in the field quickly and easily. An upgraded camera head with high-intensity LEDs comes standard, but a line of easily interchangeable, customizable camera heads is offered for flexibility. The upgraded interior electronic components are built to withstand harsh environments and deliver better resolution and accuracy. 800-435-3866; www.spartantool.com



CONTINUED >>

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

And they have for over 50 years

KEN-WAY CABLE CLEANERS

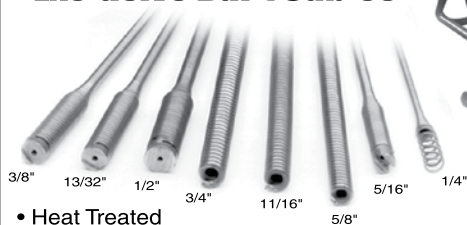
for cleaning sewer, drain or process lines
from one to ten inches, up to 75 feet
with the Junior and up to
a full length of 300 feet
with the Model 400



Junior

Model 400

KEN-WAY Exclusive Built Cables



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



Leasing plans available. Call for details.

1-800-533-0551

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



GET THE F.R.O.G. OUT

[FATS. ROOTS. OIL. GREASE]

With both RootX® and Grease-X® in your toolkit, F.R.O.G. doesn't stand a chance.

From roots, to fats, oils and grease, RootX® has the products to help you keep municipal lines and laterals clear and flowing, guaranteed.

To purchase RootX®, or to learn more, visit www.RootX.com, or talk to your RootX® representative at 1-800-844-4974.



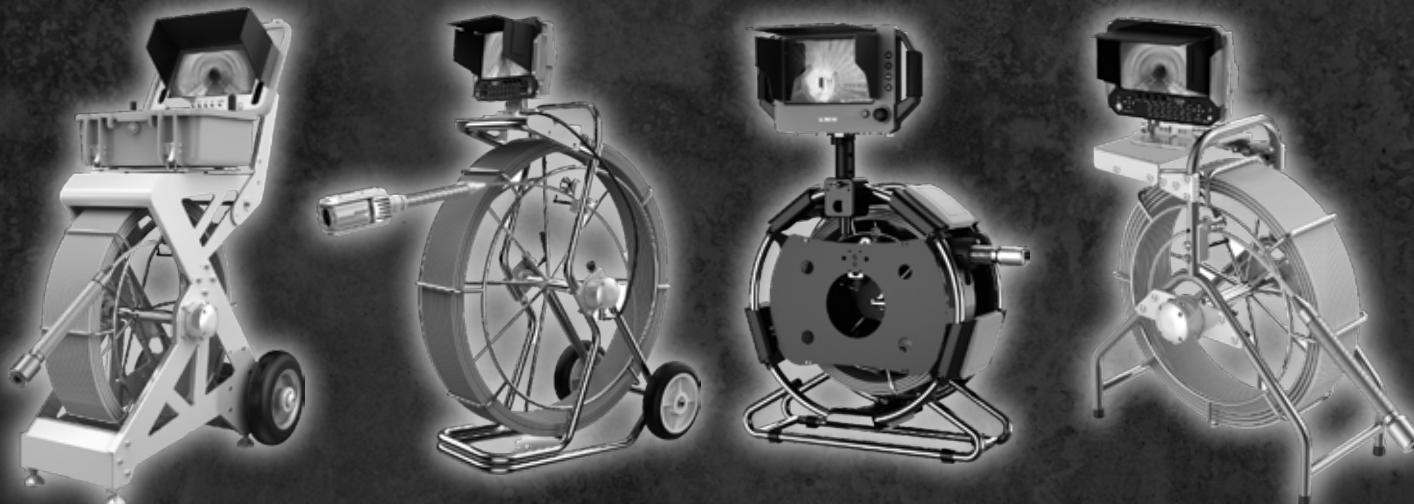
THE RIGHT SOLUTION.
RIGHT NOW.



FORBEST PRODUCTS CO.

WELCOME TO THE FORBEST HD ERA

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



www.ForbestUSA.com

Western USA:

44130 Old Warm Springs Blvd, Fremont, CA 94538

TF: 1 877 369 1199 P: 510 226 7988

Eastern USA:

810 Interchange Blvd, Newark, DE 19711

Canada:

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

TF: 1 877 369 1199 P: 905 709 6226

PRODUCT FOCUS

17 // TROJAN WORLDWIDE VISIONHD

The **VISIONHD 1080P** color camera system from **Trojan Worldwide** is a reliable easy-to-operate inspection camera system designed for 1.5- to 4-inch lines. The all-in-one enclosed case features a 1-inch high-definition 1080p self-leveling waterproof color camera head with adjustable LED lights and a built-in 512 Hz sonde transmitter for locating. The system has 100 feet of durable pushrod and a built-in foot counter. The display module has a 10-inch full HD LCD with DVR and is capable of recording to an SD card or USB flash drive up to six hours on a full charge. Other features include a keyboard for text writing and an attachable microphone for voice recording. This system also includes built-in ports to attach larger camera reels to the display module for viewing and recording. Accessories include headphones with a microphone, two skids, charging cord and USB adapter to help center the camera head in the line. 800-392-4902; www.trojanworldwide.com



18 // VIVAX-METROTECH VCAMMX-2

The **vCamMX-2** from **Vivax-Metrotech** is a portable all-in-one camera to inspect pipes between 1 1/2 and 4 inches. The control module's 8-inch daylight-viewable LCD screen shows the distance of pushrod deployed as well as the current time and date. Recordings are made in MP4 video and pictures in JPEG format directly to a USB thumb drive, then instantly backed up to an SD card. The internal microphone allows audio commentary over recorded video. The pushrod is traceable with the use of an external locator transmitter and is available in 100 or 150 feet. The 512 Hz frequency sonde is standard equipment. It comes with two interchangeable camera heads. The smaller D18-MX camera is fixed position and 0.70 inch in diameter, and the D26-MX is self-leveling and 1 inch in diameter. 800-446-3392; www.vivax-metrotech.com



19 // USA BORESCOPES MINI 13

The versatile **Mini 13** compact color camera system from **USA Borescopes** is small, lightweight and ideal for the optical, nondestructive inspection of pipes, cavities, welding seams, turbines, hollow girder and cast parts. With the help of this mini camera system, users can detect firmly bonded deposits, abrasions and deformations in narrow, elbowed, hard approachable and dangerous not illuminated locations without cost intensive disassembling of the parts. Detected damages can be stored as picture and/or as video directly to the SD card. The system with a camera head of only 0.51 inches in outer diameter is small enough to negotiate bends in pipes as small as 1.5 inches. This mini camera system is ideal and designed for plumbers, engineers, maintenance professionals as well as other process piping inspectors for quality control and expertise. The rechargeable battery pack offers hours of trouble-free inspection time. 931-362-3304; www.usaborescopes.com



» SMOKE LOCATORS

20 // CHERNE RESIDENTIAL PLUMBING SMOKE BLOWER

The **Cherne Residential Plumbing Smoke Blower** is a fast and easy leak-detection system. The blower uses long-lasting dense smoke that is pumped into a plumbing system to identify leaks quickly and efficiently. Featuring a 5-foot heavy-duty hose that fits a 4-inch clean-out tee, the blower is lightweight and corrosion-resistant. With exhaust pumped through the plumbing, the blower can be used indoors and easily transported with its top-mounted carrying handle. Its efficient 122 cc, 3.5 hp, four-stroke Honda engine provides more than 700 cfm, making it fast, easy and safe to determine problem areas. Through vibration damping, excess movement and noise are also minimized, creating a smoother and more efficient experience. 800-843-7584; www.cherneind.com





21 // HURCO TECHNOLOGIES POWER SMOKER 2

The Power Smoker 2 from Hurco Technologies quickly locates leaks in new and existing plumbing systems. The machine is connected to a clean-out, and smoke is sent through the system to reveal any problem areas. The system uses LiquiSmoke, a laboratory-tested safe smoke that costs cents per minute to use and has an indefinite shelf life. When the test is complete, the smoke dissipates without leaving an odor or residue. 800-888-1436; www.hurcotech.com



22 // SUPERIOR SIGNAL 5E ELECTRIC SMOKER

The 5E Electric Smoker from Superior Signal offers an efficient solution to find difficult leaks and odors in residential and commercial plumbing systems or septic tanks. Connect the blower to any plumbing clean-out or vent with the appropriate-size smoke candle to force smoke through faults and cracks, easily identifying sources of odor and hard-to-find leaks. Smoke candles produce a highly visible, nontoxic smoke and are biodegradable. They are manufactured with zero waste stream and include labels printed with vegetable-based ink on recycled paper as well as biodegradable, recycled paperboard tubes. The unit does not generate harmful exhaust gases and handles all residential and commercial smoke-testing applications. The unit comes with an 8-foot, industrial-grade flex hose, weighs 8 pounds and requires no maintenance. 800-945-8378; www.superiorsignal.com c

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



THE CABLE CENTER
1-800-257-7209

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

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

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

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

THE CABLE CENTER^{LLC} OPEN - M-F 7AM-3:30PM CST St. Louis, MO • 314-993-3099 • www.TheCableCenterInc.com

PRODUCT SPOTLIGHT

LINING SYSTEM USES LED TECHNOLOGY TO SPEED UP PIPE REPAIRS

By Craig Mandli

Cured-in-place pipe lining is an effective tool, but the process can sometimes be time-consuming. Fortunately, HammerHead Trenchless has a solution to get those needed repairs done fast.

The company's Bluelight LED CIPP lining system is designed for rapid rehabilitation of laterals and small sewer pipes from 3 to 10 inches in diameter. According to Jeff Urbanski, senior manager of marketing and training for HammerHead Trenchless, the technology uses a specially formulated single-part resin that cures under light in the "blue" wavelength, giving installers significantly longer working time between liner wet-out and curing.

"Bluelight is the name but also the type of light used to cure the resin," Urbanski says. "What is unique is that contractors can use conventional inversion equipment. It uses a single-component resin that will only cure with that blue light. It is free of VOCs and conforms to the requirements of ASTM F1216, which lowers environmental impact."

The system includes features such as an intuitive touchscreen interface, interchangeable reels in 131- and 164-foot lengths, three light head sizes, including a 3-inch light head, and a lightweight ergonomic frame for easier maneuverability and portability. Once



installed, the automated curing system pulls the LED light head through the liner, curing the resin as fast as 5.4 feet per minute.

"Lining traditionally mixes two resins together which can cause anxiety on the job site," Urbanski says. "Resin can react before you place the liner into ground, causing the contractor to dig up the pipe and replace it. Using a Bluelight LED system lowers anxiety because the liner can be wet-out offsite, loaded into the inversion drum, and inverted into the pipe without risk of curing, even if you lose pressure or air on site. The liner will not cure until the light head is turned on."

The Bluelight system is capable of navigating and repairing 45- and 90-degree bends and some transitions. According to Urbanski, the speed of repairs using the system has been the biggest benefit.

"A lot of our customers have been able to grow their businesses by twofold," he says. "They can place more liners in the ground more efficiently as the system's automated curing system using the LED light head allows for the resin to cure five times faster than other methods. That feedback has led to multiple improvements with the system to make it the next best thing the market is asking for." 800-331-6653; www.hammerheadtrenchless.com

1 // NEW VACALL AUTOVALVESYSTEM OPTION FOR ALLJETVAC MODELS

The Vacall AutoValveSystem option available on AllJetVac models is designed to improve operator efficiency and simplify switching water functions with the press of a button. The AVS all electrical system option allows operators to switch from jetting to washdown or optional tank flush from the AllSmartFlow control panel. No need to open or close manual water valves. This innovation also includes a new electric switch bank for raising or lowering the debris tank and tailgate and turning on or off the tank vibrator or sludge pump to be mounted anywhere on the truck. The Auto Valve System is compatible with front and rear AJV hose reel configurations and works with the belly pack remote control for operation of all functions. 800-382-8302; www.vacall.com/allsmartflow



CONTINUED >>

YOUR SOURCE FOR RIDGID®



**SeeSnake® TruSense™
Camera Reel**



**CS12x Digital
Reporting Monitor***



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



**SeeSnake® Compact M40
Camera System**



**CS65x Digital
Reporting Monitor***



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



microDrain Reel



**CS6xVersa Digital
Recording Monitor***

CALL TOLL FREE: 888-947-8761



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

BUYING A SEESNAKE?

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

**WE
WILL NOT BE
UNDERSOLD**

**– Call Evenings and Weekends – Keith: 405-602-9155
Ryan: 719-243-3539**

5037 NW 10th • Oklahoma City, OK 73127

www.centralwinnelson.com

T&T TOOLS

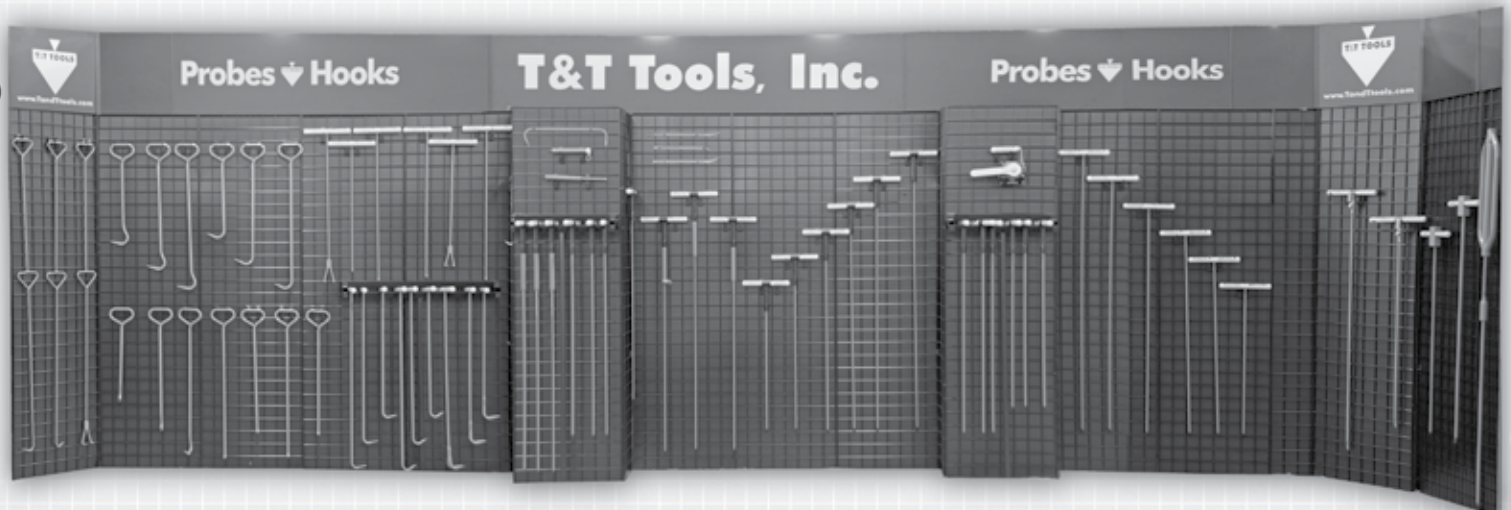
T&T Tools, Inc.

Fax: 800.521.3260

Email: sales@mightyprobe.com

**800.521.6893
www.MightyProbe.com**

Call for a FREE Catalog



Call for a FREE Catalog

HOOKS...

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

PROBES...

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

2 // HYDRA-FLEX REVOLUTION SEWER JETTING NOZZLE

Hydra-Flex's new Revolution by Reaper sewer jetting nozzle features a forceful front rotating stream and powerful back jets to cut and clear the toughest blockages. And it goes a step further than the Reaper with a 360-degree rotating subhead with dual jets that completely clean and descale pipe. The all-in-one tool simultaneously cuts, clears and cleans to work faster and save water and money. The Revolution is built for 6- to 36-inch sewer pipe and can take on the biggest jetting challenges. The nozzle operates between 1,000 and 2,500 psi with a flow range of 40 to 80 gpm. The subhead is designed to maintain consistent speed throughout the nozzle's life, and a stainless steel centralizer is included to ensure the nozzle stays centered within the pipe. 952-808-3640; www.hydrflexinc.com

2



3 // VORTEX IMS UV CURING SYSTEM

Accommodating pipe diameters 6 to 80 inches, Vortex's IMS UV curing systems deploy an ultraviolet light chain and infrared sensors to capture data every 12 inches to ensure a complete cure and improve installation efficiencies. Vortex's new EnviroCure UV liner, developed in partnership with Applied Felts, is pre-impregnated with resin and constructed using a corrosion-resistant, styrene barrier sleeve, nonwicking fiberglass to enhance physical strength while delivering a thinner pipe wall design. Its unique construction enables reinstatements to be performed quickly and correctly the first time with reliable dimpling that clearly identifies junctions between laterals and the mainline. Additionally, the liner is cold and hot weather friendly, and is ideal for environmentally-sensitive locations. 855-949-3441; www.vortexcompanies.com

3



4 // MILWAUKEE TOOL MX FUEL CORDLESS PIPE THREADING MACHINE

The new MX FUEL pipe threading machine from Milwaukee Tool harnesses the power of MX FUEL equipment system's REDLITHIUM batteries to detach operators from power outlets on the job site, allowing threads to be made wherever it's most convenient. For easy transportation to and around the job site, the pipe threading machine features a collapsible cart built with gas springs to assist the tool up to working height, and the integrated wheels allow for easy transport over uneven surfaces. The machine provides the power to thread up to 2-inch black iron pipe, stainless steel, rigid metal conduit and more. When paired with the included XC406 battery packs, the threading machine allows for all-day runtime, delivering up to 140 cut, reamed and threaded 3/4-inch pipe ends per pack. 800-729-3878; www.milwaukeetool.com

4



5 // ISUZU COMMERCIAL TRUCK N-SERIES EV

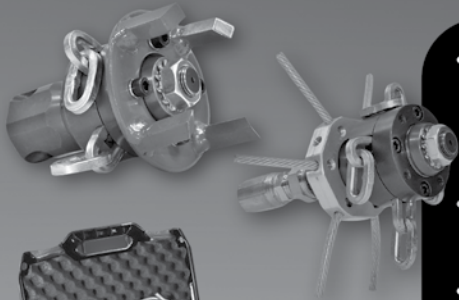
Isuzu Commercial Truck of America announced its first all-electric production model, the N-Series EV. The 2025-model-year Class 5 truck, featuring a full 19,500-pound gross vehicle weight rating, a battery electric platform developed by Isuzu Motors Limited, and an all-new cab design, will be available in the first half of 2024. The trucks will offer wheelbases ranging from 132.5 to 176 inches to accommodate a variety of body lengths, four choices of battery capacity, the largest of which has a range up to 235 miles, DC fast charging and AC (level 2) charging capability, and an optional Advanced Driver Assistance System package designed to improve driver, passenger and pedestrian safety and to help reduce the number and severity of collisions. Every N-Series EV will be powered by a number of 20 kWh, lithium-ion battery packs, and users will be able to choose from three-, five-, seven, and nine-battery-pack models. 866-441-9638; www.isuzucv.com

5



CONTINUED >>

RAT OUT YOUR ROOT PROBLEMS



- Uniquely designed nozzles for big sewer line headaches – roots and encrustations in all sorts of pipe.
- Interchangeable heads: chain rotor or cable rotor.
- Simplified service means extra uptime.

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

Call 330.874.4300

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



www.rootrat.net



MADE IN THE USA

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



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

www.cleaner.com

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



- Jetter Hose, 1/8" – 1-1/2"
- Pipe & Sewer Plugs
- Confined Space Entry Systems
- Hose Reels
- Clamps, Vac Tubes, Debris Hose
- Buehler® Milling Cutters
- Warhog Nozzles

- Hose Reel Swivel Joints
- Valves: Ball, Lever, Piston
- Pressure Relief Valves, Vector® Parts
- Nozzles, Pipe & Sewer
- Tiger Tail® Hose Guides
- Manhole Accessories
- Root Cutters & Saw Blades
- Plus Many Other Items

CLOVERLEAF Tool Co.

"Quality Products at Affordable Prices"

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

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

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

6 // HINO TRUCKS ME AND LE SERIES ELECTRIC MEDIUM-DUTY TRUCKS

Hino Trucks has expanded its product range to include electric vehicles. The electric version of its M- and L- Series medium-duty trucks, branded as Me Series and Le Series, will integrate SEA Electric's SEA-Drive power system. The Hino Class 5 M5e cab over and Class 6 L6e conventional models come equipped with battery capacities of 138 kWh and 220 kWh respectively. To complement the EV transition, Hino Trucks is building infrastructure to support the electric vehicles with Hino INCLUSEV, a portfolio of end-to-end electric vehicle enablement exclusively available through Hino's nationwide dealer network. 248-699-9334; www.hino.com



6

7 // HYPERTHERM ASSOCIATES NESTING SOFTWARE SUBSCRIPTIONS

Hypertherm Associates released ProNest LT 2023 version 15.1 nesting software, which is now available on a low-cost subscription basis for the waterjetting market. ProNest LT subscriptions will support virtually any make or model of jetter, making it easy to insert the nesting component into an existing workflow. There are two waterjet subscription tiers to choose from. ProNest LT OMAX is specifically designed for OMAX waterjet machines. It supports conventional, straight cutting for OMAX machine models including OptiMAX, OMAX, MAXIEM and GlobalMAX. ProNest LT Waterjet Plus is a more comprehensive subscription tier, supporting conventional and straight cutting for virtually any waterjet brand, plus plasma and oxy fuel cutting, all in one package. 800-643-0030; www.hypertherm.com



7



FEATURED IN AN ARTICLE?



Make the most of it!
Digital reprints available
Visit cleaner.com for
articles and pricing



AMERICAN JETTER.COM



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



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

866-944-3569

OUR BEST SELLING DRAIN LINE JETTER!

HOTJET II
10GPM @ 4000 PSI • 35HP VANGUARD
Cleans 2-27" Drains with Hot OR Cold Water



TRAINING AND FREE WARTHOG NOZZLE INCLUDED!

OVER 30 YEARS BUILDING QUALITY EQUIPMENT

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

EASY-KLEEN
PRESSURE SYSTEMS LTD.
MANUFACTURER OF HIGH PRESSURE CLEANING EQUIPMENT

VAN PACK JETTERS
12 GPM @ 3500 PSI




OPEN JETTER TRAILERS GROUNDHOG JETTER



20 GPM @ 4000 PSI

ENCLOSED JETTER TRAILERS (Hot Water)



VACUUM TRUCK HEATERS
440,000 BTU to 4,000,000 BTU



YouTube
www.youtube.com/easyklean
1-800-315-5533
www.easyklean.com
sales@easyklean.com

DYNAMIC REPAIRS

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

New & Refurbished Inspection Equipment For Sale

Rental Equipment Available
Daily & Weekly Rates

Ask About Our 48-Hr. Turn Around Time

INSPECTION CAMERAS ARE OUR ONLY BUSINESS!

973-478-0893

DYNAMIC REPAIRS
40 Arnot St., Unit 20
Lodi, NJ 07644
dynamiccablerepairs@yahoo.com
www.dynamicrepairs.biz

TRUGRIT TRACTION

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



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

TruGritTraction.com | 407-900-1091

Superior SMOKE

5E FLEX
Battery Powered Smoke Blower



5E FLEX with 18-24 V battery adapter



Smoke Candles SealPacs

SuperiorSignal.com/CFLEX

T&T Tools, Inc.
800.521.6893




CALL for a FREE Catalog
Many styles Available

Insulated Soil Probes (for locating)
Heat-Treated Hooks (for covers, lids, etc)

www.mightyprobe.com



Cua Claws
A Simple Solution for Slippery PVC Pipe -
22 Years of Service
We resurface all makes of steel transport wheels

CALL JERRY AT 714-697-8697
www.cuac claws.com

EASY-KLEEN
PRESSURE SYSTEMS LTD.
MANUFACTURER OF HIGH PRESSURE CLEANING EQUIPMENT

WOLVERINE
DRY STEAM GENERATORS

DRY STEAM GENERATORS



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

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



YouTube
www.youtube.com/easyklean
1-800-315-5533
www.easyklean.com • sales@easyklean.com

CLASSIFIEDS

see photos in color at www.cleaner.com

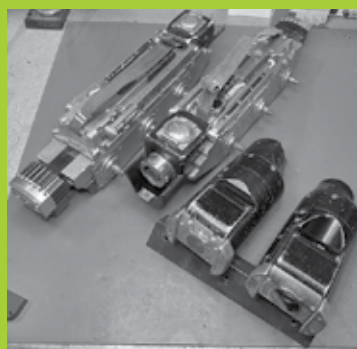
BLOWERS

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

BUSINESSES

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

DRAIN/SEWER CLEANING EQUIPMENT



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

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

C06

JET VACS



2012 Mack Vactor 2100, ex-city, 1,500 water, 12-yd, PD blower, auto, 115k miles, 800' of 1" hose.\$175,000.

Mick 972-754-5279, rehabandmaintenance@yahoo.com

C08



2019 Peterbilt with 2020 GapVax Combination unit, 1,500-gallon water tank, 80 gpm @ 2500 psi, 10-yard debris tank, 12 gpm Hxx 3000 psi, 4000 cfm. 65500 Km.\$398,000.

613-794-8182, Ottawa, ON.

C06



2017 Kenworth Vactor Combo Truck with 1,500-gallon water tank, 15-yard debris tank, 80 gpm @ 2500 psi. 91500KM.\$299,000.

613-794-8182, Ottawa, ON.

C06



Freightliner Vactor 2100 PD Blower, auto, 12-yd, 80 gpm @ 2,000 psi, ex-city. Work ready, can ship worldwide.\$38,900

1-800-627-0778

C06



2009 Sterling Vactor 2100 PD Blower, auto, 80 gpm @ 2,000 psi, 12-yd, ex-city unit. Work ready! Can ship worldwide.\$44,900

1-800-627-0778

C06



2011 International Vac-Con 12yd, PD Blower, EX- city, 53k miles low hours, Auto. Work ready, can assist with shipping world wide. Price \$59,500

1-800-627-0778

C06

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

For Sale - Rebuilt Vactor water pump, ready to install on your unit. Will fit Classic series 2100 models. Call for info. 920-763-2458. (C07)

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

JETTERS – TRAILER

Sewer Equipment Diesel Easement Machine; Sewer Equipment Gas Easement Machine, 2007 Sewer Equipment 747 Jet Trailer CAT Diesel 54GPM@3000PSI, 2012 Sewer Equipment 747 Jet Trailer CAT Diesel 40GPM@2000PSI, EMAIL FOR PICTURES AND MORE INFORMATION: USEDSEWEREQUIPMENT@GMAIL.COM. MO (C07)

1997 Shamrock Sewer Jetter Model SPT 325 Fixed Reel. New Myers C35-20 Pump. Ford 140 CID engine. All parts are available for sale. Email for more info: foods-courier00@icloud.com (C06)



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

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

CBM



2008 US Jet for sale. 4000 psi. 1,740 hours. Asking \$20,000, please contact Ned for any questions

845-252-3000

C06



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

Call Ed at 480-776-9605

CBM



Model 747 SECA trailer jet. LOW hours, excellent shape\$19,000.

Call Kelly for more details.

608-835-7767

(P/CBM)

JETTERS-TRUCK



2005 International truck with Vactor 21000 unit 80 gpm 12 Debris tank. 2842 hrs 167,000 km the truck is located in Ottawa ,Canada\$90,000 USD

613-794-8182

C06

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



2012 Ford F550 Diesel enclosed (heated) Sewer Equipment Mongoose jetter truck. Miles 65373. Hours on jetter 1980. 18 GPM 4000 PSI Udo water pump driven by a 60 HP cat Diesel. Water capacity 300 Gal. 400,000 B.T.U. Boiler. Rotating, telescoping hose reel. Hose reel capacity 500 FT. 1/2 inch hose. Remote control. Wash down gun with retractable reel. Truck, Boiler, water pump, heater, fully serviced and tested ready to go to work. Plenty of room for work bench or camera equipment.

Contact Dave Bruder for pricing at Brown Equipment 1-260-433-0893 or dbruder@brownequipment.net

C06

PIPELINE REHABILITATION



2008 Cues T/V Cutter truck Ford F-650 XL Super Duty Cummins Diesel Van Air Compressor. Other rehab and sewer maintenance equipment available. Call For more details and pictures.

Kelly (608) 835-7767

CBM

POSITIONS AVAILABLE

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

PUMPS

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

RENTAL EQUIPMENT

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

SERVICE/REPAIR

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

TOOLS

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

(CBM)

TV INSPECTION

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

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

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

WATERBLASTING

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

INDUSTRY NEWS

ePIPE expands services in Florida, hires David Baker

ePIPE welcomed David Baker to the ePIPE family. With over 50 years' experience in the plumbing trade in the U.S. and Europe, Baker has been involved in trenchless technology since 1995, conducting investigative services and nondestructive repairs. He is a past president of the Underground Utility and Leak Locators Association and has been a spokesperson and trainer for The Reinforced Concrete Pipe Industry (Florida).



David Baker

Isuzu's Brian Tabel joins NTEA board

Isuzu Commercial Truck of America announced that Brian Tabel, the company's executive director of marketing, has been selected to serve a three-year term on the board of directors of The Association for the Work Truck Industry. Tabel is the first representative of an import chassis brand to be elected to the board in NTEA's 59-year history.



Brian Tabel

Ultimate Linings appoints Rusty Carter as president

Ultimate Linings has appointed Rusty Carter as president. He was business unit leader for Chemtrade Logistics over their Ultrapure Acid and P2S5 businesses. He has held other commercial, product development and management, and research roles of increasing responsibility in companies including Ascend Performance Materials, Invista and Solutia. In addition to electronic grade sulfuric acid and P2S5 development, he led the product and technology development and commercialization of products in the polymer, fibers and textile spaces.

CUES Accurate Mapping Probe used in Project of the Year

RAVAN AIR, alongside its sibling company, Tru-Tek, completed a project installing a natural gas line underneath Chartiers Creek in Washington, Pennsylvania. During the pipeline inspection process, RAVAN AIR located a 70-inch steel wastewater pipe that was unable to be located using traditional means underneath a state road using the CUES Accurate Mapping Probe. This underground mapping method prevented major traffic disruptions and saved considerable time and resources, while also providing the means to safely perform future projects without the possibility of cross-bores or other damage. Chosen as the Gas Distribution Project of the Year, it was honored at the 2023 Underground Construction Awards. **c**

Register now at theutilityexpo.com
and save 20% with code **PARTNER20**



SEPTEMBER 26-28 | 2023 | LOUISVILLE, KY



Where the Utility Industry Goes to Grow

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

1.4 MILLION

square feet
of exhibits

OVER 19,000

attendees

32 ACRES

of equipment
and services

SUPERIOR • VERSATILE • RELIABLE



THERE'S NO TIME FOR DOWN TIME - that's why we build the most reliable equipment, ready for anything AND easy to operate and maintain. GapVax custom builds to meet YOUR needs. Industrial vacuum equipment built FOR THE OPERATOR, BY THE OPERATOR.

Air movers, hydro excavators, combination jetvac, recycle jetvac, trailer jetters, skid mounted vacuum units, parts and accessories - we've got what you need! Give us a call today to request a demo or speak with a sales manager!

Stay up to date with us on social to see where we're going next!

281-884-8658
LA PORTE, TX

GAPVAX.COM
f i y t d

888-442-7829
JOHNSTOWN, PA



SAVE THE DATES
AND
SEE YOU SOON!



LAS VEGAS
AUGUST 7-10

IPW'X
PUBLIC WORKS EXPO
SAN DIEGO
AUGUST 27-30

THE
UTILITY
EXPO

LOUISVILLE, KY
SEPTEMBER 26-28

MACHINES
THAT WORK
AS HARD
AS YOU DO



WE CUT THE CORD
BUT KEPT THE
POWER.



MODEL 718

Clogs don't stand a chance against the Model 718.

The Model 718 is a lightweight, compact, cordless handheld sink machine. We developed the Model 718 to be evenly balanced with a smooth ramp up and ramp down for a comfortable operation. The Model 718 can tackle blockages in 1¼" to 2" lines and hold up to 35' of ¼" or ⅝" cable.



SCAN ME

SPARTANTOOL.COM
800.435.3866

