

Cleaner®

FOR DRAIN AND PIPE CLEANING,
INSPECTION AND REHABILITATION
PROFESSIONALS

BUILT WITH INTEGRITY

CUSTOMER SERVICE
DRIVES SEWER EXPERTS'
SUCCESS / 36

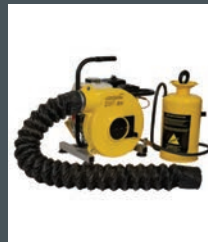
FINDING TRUE NORTH

NORTHSTAR ENVIRONMENTAL GROUP
GAINS CUSTOMER TRUST WITH
HIGHLY TRAINED TECHNICIANS
AND RELIABLE SERVICE / 14

VERSATILE
VACUUM
TRUCKS
/ 30

PRODUCT FOCUS

LOCATION AND LEAK DETECTION, DRAINLINE TV INSPECTION / 52



BIG TRAILER FEATURES IN A SMALLER PACKAGE



JM-2512 Typhoon®

General's JM-2512 Typhoon trailer jet is packed with big trailer features, including electric brakes, a safety strobe light, rear stabilizer jacks and more. Plus, it has an anti-freeze system to protect the unit from freeze damage.

The Typhoon takes clogged drains by storm and blows away blockages in big lines and long runs. With a 200-gallon holding tank and heavy-duty 2500 psi, 12 gpm triplex pump with Vibra-Pulse®, the Typhoon offers big cleaning power and clears big lines or remote jobs far from a water source.

To learn more, call the Drain Brains at 800-245-6200, or visit drainbrain.com/jets



MADE IN USA © 2021 General Wire Spring

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

“IT WAS EASY TO GET STARTED!”

PROFILE

NuFlow Certified Contractor

When Chris McNulty joined his family's plumbing company, he was eager to add new technology, like pipe lining, to their list of services. He considered many other pipe lining companies before choosing NuFlow.

“We chose NuFlow because their technology was far better - they were the first company to talk about how to properly clean cast iron and I really liked that we can start and stop anywhere in the system.”

After signing up, Chris quickly realized the benefits of adding pipe lining and he continues to reinvest in NuFlow to grow his business.

“It was easy to get started! We were already doing sewer repair and investigation work, so once we added pipe lining, it just took off. The more lining we did, the more I reinvested in the equipment.”

“In 2016, we closed the plumbing company and opened NuFlow St Louis to focus completely on pipe lining. NuFlow's training and commitment to staying at the forefront of technology is what helps make us successful.”



Chris McNulty - NuFlow St Louis
Sewer and drain repair and replacement experts
serving the Greater St. Louis area.
www.nuflowstlouis.com

nuflow
WE FIX PIPES

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

VISIT US AT



**Live Demos and New Product
Announcements!**

CONTENTS

JUNE 2021

14 COVER STORY: FINDING TRUE NORTH

Northstar Environmental Group gains customer trust with highly trained technicians and reliable service. // By Giles Lambertson

FEATURES

- 36 PROFILE: BUILT WITH INTEGRITY**
Marisa Beaver is growing a sewer rehab empire by treating customers fairly and employees like family. // By Ken Wysocky

DEPARTMENTS

- 8 FROM THE EDITOR: BRUSH IT OFF**
Don't falter over roadblocks on the path to your goals. // By Kim Peterson

- 12 @CLEANER.COM**
Be sure to check out our exclusive online content.

- 24 MONEY MANAGER:
LOOK BEFORE YOU LEAP**
A low-interest loan can help you expand your business in multiple ways, but there are always risks to consider. // By Joan Koehne

- 30 BEHIND THE GEAR:
A TRUCK FOR ANY APPLICATION**
Super Products builds versatile multiuse vacuum trucks capable of tackling any situation. // By Kim Peterson

- 44 MONEY MACHINES:
GOING WITH THE FLOW**
Floatation device allows for bypass-free inspection of high-flow sewers. // By Ken Wysocky

- 48 TECH PERSPECTIVE:
CLEAN MORE IN LESS TIME**
High-efficiency jetter nozzles conserve water and clean better. // By Dennis Farhat

- 52 PRODUCT FOCUS:
LOCATION & LEAK DETECTION,
DRAINLINE TV INSPECTION
EQUIPMENT** // By Craig Mandli

- 58 CASE STUDIES:
LOCATION & LEAK DETECTION,
DRAINLINE TV INSPECTION
EQUIPMENT** // By Craig Mandli

- 60 INDUSTRY NEWS**

- 62 PRODUCT NEWS**
Spotlight: Profiler provides a complete picture of a pipeline // By Craig Mandli



ON THE COVER // Northstar Environmental Group kept growing last year when many of its rival firms were experiencing downsizing and loss. The key to its success was continuing to offer services competing companies couldn't provide, while relying on highly trained technicians and reliable equipment to build customer trust. The quality of their work and open communication with customers keeps clients loyal and earns Northstar repeat business. (Photography by Colby McLemore)



36



48



44

coming next month: July 2021
focus: Annual Buyer's Guide

Better Business: Setting clear expectations for employees // Safety First: Preventing a trench collapse // Money Machines: Robotic cutter reinstates laterals faster

MOBILIZE WITH CONFIDENCE

With Envirosight sewer inspection trucks, your crews can tackle any challenge, get more done and stay safe.

More Capable, More Productive

With an Envirosight truck, you can inspect sewer lines from 6" to 120", do lateral launch, and even perform side scanning and laser profiling. Each truck features the industry-leading ROVVER X crawler system, which lets you maneuver through pipe, code defects, generate reports and wirelessly upload results to the cloud for secure sharing—all from a touchscreen interface. Get ready to mobilize with confidence.



Request Our **FREE Illustrated Guide to Sewer Inspection Trucks**. Learn about the critical considerations for selecting your next truck.



Scan code or visit
envirosight.com/truckguide

(866) 936-8476 • envirosight.com/trucks

©2020 Envirosight. All rights reserved. Features/specifications subject to change.



ADVERTISER INDEX

ALLAN J. COLEMAN

ALLAN J. COLEMAN
SINCE 1969
Allan J. Coleman Co. 19, 63
Cable Center, The..... 27, 47



Cam Spray 10



Central Oklahoma Winnelson..... 34

CLOVERLEAF Tool Co.

Cloverleaf Tool Co..... 59



Coast Manufacturing..... 69



CUES..... 70



DCD..... 29



DURACABLE
Duracable Manufacturing Co..... 11



Easy-Kleen Pressure Systems Ltd. 47

ENVIROSIGHT

Envirosight, LLC..... 5



Enz USA, Inc. 34



EPL Solutions, Inc. 6

Forbest Products Co. 21



GapVax, Inc. 71



General Pipe Cleaners/div. of
General Wire Spring..... 2

GI INDUSTRIES

GI Industries, Inc. 17



Gorlitz Sewer & Drain, Inc..... 41



GP Sewer LLC 33

Hermann Sewerin GmbH 21

Hurco Technologies, Inc. 10



IPP Solutions, LLC 45

Jack Doheny Company 22



KEG Technologies, Inc..... 28



Ken-Way Corporation 59



Lansas Mfg. by Vanderlans 38-39



Milwaukee Rubber Products, Inc. 26



MyTana LLC..... 13

NozzTeq, Inc. 7



Nu Flow Technologies..... 3



Pearpoint (USA)..... 57

Petersen Products..... 59



Picote Solutions..... 51



Pipe Lining Supply..... 8

Pipeline Renewal Technologies 25



Ratech Electronics, Ltd..... 28



RIDGID 9



RODDIE, Inc..... 32



Root Rat..... 69



SECON 67



Southland Tool Mfg. Inc..... 23



Spartan Tool, LLC 72

SubSurface Locators, Inc..... 22

Super Products

Super Products LLC..... 35



T&T Tools, Inc..... 50



The Sewer Camera Center..... 60

The Sewer Camera Connection..... 51



Ultra Shore..... 51

USB-USA LLC..... 67



Vivax-Metrotech Corp. 22

WEQ Fair..... 61



Westmoor Ltd. 28

WWETT Show 64-65

Classifieds..... 66-67

Marketplace..... 68-69

Cleaner

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

Published monthly by COLE Publishing, Inc.

1720 Maple Lake Dam Rd., PO Box 220, Three Lakes, WI 54562

Call toll-free 800-257-7222 | Outside of U.S. or Canada call 715-546-3346

Mon- Fri., 7:30 a.m.-5 p.m. CST

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

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

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

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

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

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

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

© 2021 COLE PUBLISHING INC.

No part may be reproduced without permission of the publisher.



KAYLA BISNETTE

JIM KOSHUTA

Thinking Ahead

Gvision Mini Camera System

150' Flexible Push Cable
(Pushes further than most leading brands)

Durable

Compact

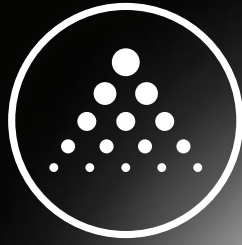
Color Camera

"Always-On" 512Hz Sonde

Daylight-Viewable Monitor

2-6" Lines

Made in U.S.A. 714.453.9760 | www.EPLS-USA.com



NozzTeq[®]

TAKING SCIENCE TO THE SEWER[®]



— We are back and in a new location —

Same great products you have come to love.

Under New Management

PERU, IL | 866.350.0624 | info@nozztequsa.com | www.NozzTeqUSA.com



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

BRUSH IT OFF

Don't falter over roadblocks on the path to your goals

AS WE REACH THE MIDPOINT of another year, it's a good time to check in on your goals, dust off your business plan if you've been neglecting it, and make any adjustments you need to keep moving forward.

This past spring, I set a short-term personal challenge for myself as part of a larger goal I hope to achieve this year. I laid out a plan to follow, breaking it down into small weekly milestones to shoot for, and got to work.

The first several weeks were very successful. I stuck to my planned schedule, and it felt great to hit all those milestones and know I was on my way to where I wanted to be. I felt more motivated as time went by, because those small wins were adding up.

But as often happens, I eventually hit a roadblock that derailed my progress for a few days. While this goal is only important to me, personally, and doesn't affect my bank account or employees or customers, my motivation and confidence took a hit. I tried not to beat myself up about it. I just gave myself a day to reset and then tried to get right back on track.

It took longer than I expected to recover. But I didn't let myself quit or move the goalpost. A setback doesn't mean the goal is out of reach, or too difficult to achieve. It just means the plan might need to shift a bit, sometimes even only temporarily.

The goals you set each year for your business — and your plans to achieve them — are your path to continued growth and success. Being a business owner is never easy, but a lot comes down to having the right mindset and never giving up.

What do you do when your progress falters or you're hit with a setback? Do you scrap it and give up, or just keep plowing along? Or do you re-evaluate and change your plan?

How you approach a setback will have a big impact on whether you're able to overcome it. Look at it for what it is: a setback — a bump in the road — nothing more. It doesn't have to ruin everything. You can change your route, update the plan, or even modify the goal if it really did become unrealistic. Just don't give up.

Hopefully your hard work is paying off and you're well on your way to achieving your goals for the year. But if it's not going quite as planned, now is the perfect time to take some time to evaluate how you're going to change things in order to keep moving forward.

I hope you enjoy this month's issue. **c**

THE ULTIMATE PIPE COATING PACKAGE
QUIK-COATING SYSTEM
FOR DRAIN, WASTE AND VENT PIPES

RESTORE YOUR PIPES TO LIKE NEW CONDITION
PERFECT FOR 2"-16" PIPES

RENSSI HIGH-SPEED DRAIN CLEANING MACHINE
The perfect match for our Quik-Coating System, excellent for cleaning & prepping pipes.

3-CHAIN CHAIN KNOCKER
TOP CHOICE for Plumbers/Drain Cleaners.

100' INSPECTION CAMERA
This affordable inspection camera is portable, flexible and GREAT on smaller diameter pipes.

QUICK DRY
5 MIN
BETWEEN COATS

PIPE LINING SUPPLY

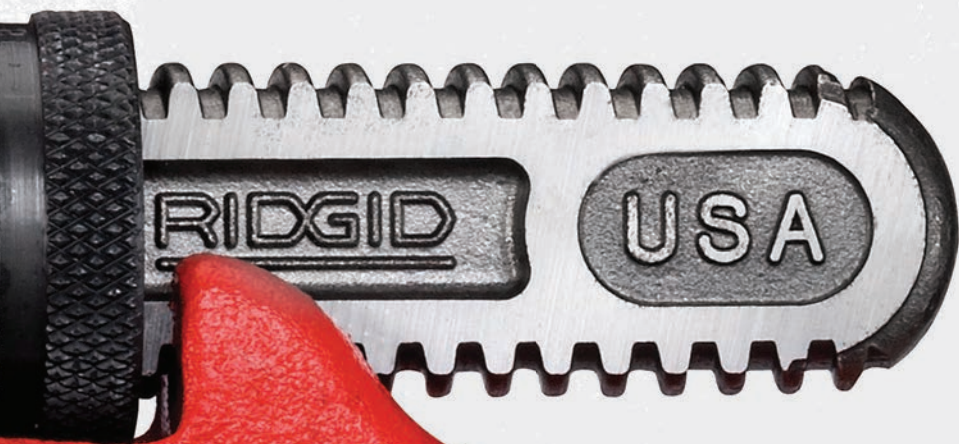
www.PipeLiningSupply.com | **PHONE 888-354-6464**

Drop Us a Line

Have a comment about an article you've seen in *Cleaner*? An experience from a job that you'd like to share? *Cleaner* would love to hear from you. Email comments and photos to editor@cleaner.com

AN AMERICAN ORIGINAL.

SINCE 1923



©2011 Ridgid Tool Company. All rights reserved.

RIDGID

USA



WORKING WELL UNDER PRESSURE

Building Drain and Sewer Equipment since 1981.

NEW



4008H Power Unit

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

Just Add A Tank!

\$9,199

3012H Power Unit

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

\$9,499

4008H Compact Skid

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

(100 GALLON TANK)

\$9,949

3012H Compact Skid

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

(100 GALLON TANK)

\$10,249

NEW



NEW



RCJ4008H

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

\$5,919

NEW



LJ4008H

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

(NARROW DESIGN)

\$5,999



VM4007H

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

\$8,995



CV4007H-HOT

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

\$15,299

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

Pressure Washers & Drain Jetting Equipment

We Build Electric, Gas and Diesel powered models up to 4000 psi, flows up to 40 gallons per minute.

Don't see exactly what you want...

We will custom build exactly what you want!

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



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

DURACABLE DALE



WORDS OF WISDOM

MEASURE A MAN NOT BY THE LINES

ON HIS FACE BUT BY THE

CRUD

ON HIS BOOTS.



===== RIGHT IN THERE WITH YOU. =====

YOU CAN COUNT ON DURACABLE TO GET YOU THE RIGHT PRODUCTS, RECOMMEND A SOLUTION OR TALK YOU THROUGH A TIGHT SPOT. FROM RELIABLE DRAIN CARE TO QUALITY-TESTED & WARRANTY-BACKED MACHINES AND CABLES **WE'VE GOT YOUR BACK.**

DURACABLE.COM



DURACABLE
— MANUFACTURING CO —

800-247-4081

YOU BET WE'LL BE AT  VISIT US AT BOOTH #5724.



@Cleaner.com

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



SERVICE MENU

Why Should You Offer Customers Pipe Rehab?

In this online exclusive, John Heisler, owner of Pipe Lining Supply and Quik-Lining Systems, makes the case for giving clients a pipe rehab option, even if regular drain cleaning jobs for those clients are providing a lot of stable work. >> cleaner.com/featured



CUSTOMER CARE

Charging Call-Out Fees for Estimates

Some customers won't budge from their expectation that estimates should be provided for free, but you should never be afraid about properly valuing your time. This online exclusive discusses the issue more.

>> cleaner.com/featured



KING CLOG

Contractor Discovers Anaconda-Sized Root Growth

Everyone in this industry has stories about clearing roots out of pipes. One such story that made the

rounds earlier this year involved a root growth notable for its sheer size. The plumber who removed it described it as an "anaconda" and the worst root infestation in a pipe he's seen in 40 years. Check it out in this online exclusive.

>> cleaner.com/featured

OVERHEARD ONLINE

"Change is not always treacherous. Another word for change is innovation. Change can lead to an evolution of your company, expand your horizons, and bolster your profits. The real risk is total complacency."

— *An Ever-Evolving Company is a Successful Company*
>> 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

- + INSPECTION SYSTEMS
- + CABLE MACHINES
- + JETTERS
- + LOCATORS
- + PARTS



Rugged and Versatile Drain Tools That Mean Business

Your reputation—it's on the line with every service call. Trust MyTana equipment to find and fix tough problems quickly, the first time. Our pro-grade cameras, jetters, cable machines and accessories prepare you for any challenge, and come backed by our legendary service team.



YOURS FREE!*

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

*no purchase necessary



(866) 948-7576
www.mytana.com





FINDING TRUE NORTH

NORTHSTAR ENVIRONMENTAL GROUP GAINS CUSTOMER TRUST WITH HIGHLY TRAINED TECHNICIANS AND RELIABLE SERVICE

// By Giles Lambertson



« Northstar Environmental Group VP of Projects James Kutzer helps his crew clean a storm drain.

Northstar Environmental Group offers a wide variety of services: cleaning oil from water, industrial and commercial waste from holding tanks, sediment from stormwater systems, and even brush from pastures.

And the Gallatin, Tennessee-based company is continuing to grow its business, during a time when some rival firms are experiencing downsizing and loss. Its success can be partially explained this way: The company kept offering services when competing companies didn't.

"We are growing, absolutely," says company President Colby Phillips. "We'll expand another 10-15% this year. Our growth last year was partly because some of our competition scaled back and stopped for a while because of the virus, but we decided to keep operating. So, when clients of other companies couldn't get immediate service, we were available. We captured a lot of that business."



^ James Kutzer positions the vac hose while vacuum truck operator James Robinson stands ready.



Photography by Colby McLemore

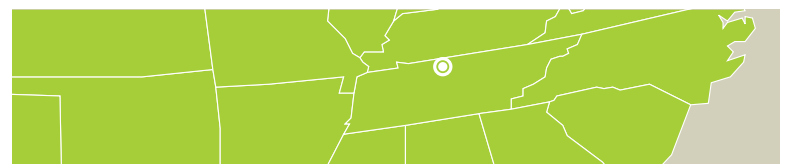
Northstar's enlarged customer base didn't come at the expense of public health. "We've been blessed," Phillips says. "We take our protocols seriously and have had only a couple of mild cases."

Before it was a group, the fledgling company was solely a supplier of anaerobic digester bugs, the organisms that break down organic matter to produce methane. Customers included chemical companies and livestock feedlots in Tennessee.

Two years after Northstar's launch in 1991, however, one customer asked if the company could also periodically clean the customer's impoundment facilities. Company founder Don Drayton Sr. said, "Sure," bought a vacuum rig and just that quick diversified his company. Within a couple years, the bug end of the business was dropped.

NEW TERRITORY

Today, Northstar is cleaning facilities of national and local clients located in all contiguous 48 states. The bulk of its work is in



Northstar Environmental Group

GALLATIN, TENNESSEE

OWNER Donald Drayton Jr.

PRESIDENT Colby Phillips

FOUNDED 1991

EMPLOYEES 45

SERVICES Stormwater compliance, vacuum truck services, oil-water separator cleaning, pond management, land clearing

SERVICE AREA 48 contiguous states, with concentration east of the Mississippi River

WEBSITE www.northstarenv.com

mid-Atlantic states and the Southeast, but company trucks are heavily involved across the Midwest and into Texas. In addition, it manages stormwater cleanup in some provinces in Canada using Canadian vendors.

To do all this, Northstar sends out vac units from its Gallatin headquarters as well as from seven satellite offices scattered from Hartford, Connecticut, to Las Vegas to Tampa. Some 45 employees and their equipment are strategically situated across this company footprint, producing \$10 million in annual revenue.

The multistate character of the operation means it runs into varying jurisdictional regulations. “That is one of the reasons I don’t have hair anymore,” Phillips says. “In the beginning, it was a struggle to keep up with regulations, from the state all the way down to city and township levels. Today, the bureaucracy still is there but we deal with it a lot better. With all the permit stickers showing, some of our trucks look like NASCAR racers.”



BUILDING CUSTOMER TRUST

There’s a star positioned above the North Pole that shines bright and true and assured navigators where north lay. Many companies over the years have seized upon this imagery of a trustworthy beacon and named themselves “North Star.”

“When the Drayton family was starting its business in Tennessee 30 years ago, it wanted a name that suggested stability and trust,” says Colby Phillips, president of Northstar Environmental Group. “The family decided on Southern Cross but learned that name was taken. It went with Northstar.”

At stormwater industry trade shows, he occasionally runs into representatives of companies with the same or a similar name. “But as far as I know, we were the first, or one of the first, to call ourselves Northstar.”

The Gallatin, Tennessee, firm has built a reputation over three decades as a company worthy of customer trust. Phillips attributes some of the company’s good standing to a training program that strives to make technicians the best they can be.

“Our training program is extremely complex, I am sorry to say. We spend an inordinate amount of time and expense looking for the right people and training them,” he says. “We make a tremendous effort to ensure that a person will fit our philosophy of company service and fit our culture. A bad apple can ruin a company.”

On its website, the company describes itself as *a single-vendor, one-stop-shop for all your environmental needs*. This sweeping characterization of its services requires commensurate training of staff. “Techs spend two or three months in training, working with senior technicians. Before they are assigned a vac truck, we make sure they know what we do and how we do it and can comfortably operate our equipment.”

The company’s 45 employees — a growing number; some were hired in early 2021 — are spread across much of the United States. Phillips monitors their performance from Tennessee. “I see every one of them two or three times a year. My fleet manager, Caleb Harper, sees them at least once a quarter.”

Phillips describes the company’s territorial expansion as “opportunistic more than anything else.” He recalls how, in the early 1990s, two oil company convenience store accounts contracted with the company to service oil-water separator units at their stores. The chain stores and Northstar subsequently grew in tandem, into Florida and up into the mid-Atlantic states.

“Using that service as a base,” Phillips says, “we began to seek out local carwashes to localize our cleaning business in the different markets, which helped us expand into cities like Atlanta and Houston.” The convenience store accounts carried Northstar clear across the U.S.

SUCCESSFUL PARTNERSHIPS

In 1995, a client referral landed Northstar another national account. “It was one of the largest truck stop



« One of the Northstar service teams includes (from left) vacuum truck operator James Robinson, VP of Projects James Kutzer, and equipment operator David Kutzer.

“PREVENTIVE MAINTENANCE ELIMINATES A PROBLEM BEFORE IT HAPPENS. THE DIFFERENCE TO A CUSTOMER IS THREE OR FOUR SMALL SERVICE CHARGES INSTEAD OF ONE BIG BILL WHEN A CLOGGED DRAIN BACKS UP AND IMPACTS THE BUSINESS.”

COLBY PHILLIPS

companies and we followed it around the country,” Phillips says. The truck stop chain is still a Northstar client and that’s the other key to the company’s successful expansion: Northstar clients stay loyal.

“We have an extremely high customer retention rate,” Phillips says. “Our quality of work and customer communication help us. Paying attention to customer service is our focus. All of our clients have my cellphone number — and when Don Drayton Jr. was running it, they had his direct line.” Phillips has been company president for two years.

“If any of our clients need something, they always can reach me or anyone else they need, day or night. There’s only one thing we can sell and that’s service. Our clients are our partners. When they succeed, we succeed. Without them, we are out of business.”

Another strong component of the company’s business is its contractual partnership with a national package-delivery company. Keeping that client’s stormwater drains clear is critical. “The cardinal sin is for one of the client’s centers to flood after

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.

“WE HAVE AN EXTREMELY HIGH CUSTOMER RETENTION RATE. ... PAYING ATTENTION TO CUSTOMER SERVICE IS OUR FOCUS.”

COLBY PHILLIPS

a storm causing delays in package sorting and loading. That company is in the business of moving packages. Our business is ensuring its stormwater drains don't affect its business.”

Northstar ensures that outcome through regular preventive maintenance cleaning, which depending on circumstances could be weekly, annually or some interval in between. A drain that is cleaned on a timely schedule is far less apt to fail in a crunch. “Preventive maintenance eliminates a problem before it happens,” Phillips says. “The difference to a customer is three or four small service charges instead of one big bill when a clogged drain backs up and impacts the business. We try to help our clients understand the difference.”

A FULL FLEET

Northstar Environmental Group relies on a Canadian manufacturer for its heavy vacuum equipment. Ontario-based Presvac Systems custom-builds a preferred hydrovac unit with 95-barrel capacity. The rig has 4,000-gallon dual compartments so that operators can handle liquid and solid debris separately.

“We can pull the liquids and the petroleum into one tank and then vacuum the solids into another compartment. Running blowers, we can get it loaded without the slurry,” Phillips says. “This saves our customers disposal costs — solids disposed of at one rate, liquids at another.”

Northstar has 16 of these trucks in its fleet, including more than one “floater” — a unit that has reached its seven years of optimum performance and is placed in a reserve capacity for less intense service runs. “We keep reserve capacity because stuff happens,” Phillips says. “We recycle trucks out of our daily fleet and use them as backup units. We sometimes use them on our West Coast ‘milk runs’ where trucks float all over eight Western states.”

For smaller clean-out jobs or close-quarters situations, the company calls on US Jetting trailer units. The company mostly does vacuum cleaning and jetting — fully 90% of its business is traditional vac and stormwater work. However, the company also will undertake, in the president's words, “anything in the realm of stormwater.”

This includes stormwater pond management, construction of stormwater structures, and underground retention systems. “A few years ago, we thought there



David Kutzer mans the controls of the team's US Jetting 3025 jetter, using a 1/2-inch hose and sand nozzle.

was a good overlap between the two services: maintaining stormwater systems and creating them. That was when we started pushing the stormwater services side. We have a division that handles the work.” About 15-20% of its business activity falls under the stormwater umbrella, either vacuum or construction work.

For this extra dimension of stormwater services, Northstar has Bobcat mini-excavators and skid-steer loaders in the equipment yards. When heavier dirt-moving equipment is required, it is leased.

The Bobcat compact equipment is called upon for yet another auxiliary service: land clearing. Rehabbing stormwater systems can mean cleaning up surrounding overgrown property, which is accomplished by attaching brush-cutting forestry equipment to the compact loaders. “The need was there, and we had the skid-steers so, why not? It's another revenue source.”

Several of these facets of the business came into play recently when its package-delivery client experienced

CONTINUED >>

ALLAN J. COLEMAN

SINCE 1905

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

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

info@allanjcoleman.com • www.allanjcoleman.com

OLDEST NAME IN THE BUSINESS — OVER 115 YEARS OLD

RIDGID

CSx)) VIA™

Wi-Fi Control Device

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



CS(2x)) Monitor

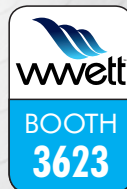
- Wi-Fi and Bluetooth
- Large High Resolution 12.1" display
- Dual Battery Power – two batteries can be installed for maximum runtime
- Capture images and video directly to a USB drive
- Stream or Record to an iOS or Android phone or tablet



CS(6x)) 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



FLEXSHAFT, K9-102

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



FLEXSHAFT, K9-204

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

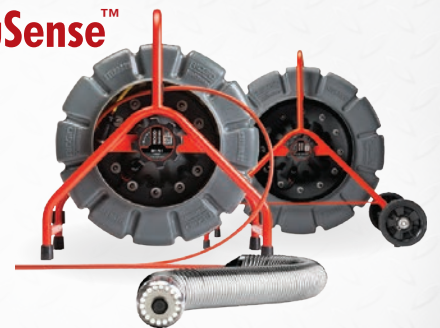


FLEXSHAFT, K9-306

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

SeeSnake® TruSense™ Camera Reel

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



SeekTech® SR-20



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

NaviTrack® Scout®

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



We Have RIDGID Parts!

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

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



Buy Online at
 AllanJColeman.com



« James Robinson runs a PresVac vacuum truck with an NVE 4307 blower on an industrial cleaning job.

“IN MY OPINION, IT IS A GOOD TIME TO OFFER THE SERVICES WE DO.”

COLBY PHILLIPS

flooding on a Friday night at a Florida facility. Its stormwater system had failed from lack of maintenance — it hadn’t contracted for Northstar’s preventive service.

“We dispatched crews and patched up enough of the water system by 11 o’clock Saturday morning for the company to go back to work. From there, we refurbished the entire system,” Phillips says. The problem was diagnosed — a neighboring railroad company had crushed a stormwater line during a work project — and a new line was laid. The elevation of the system was re-engineered and the 20-year-old facility left in better condition than it had been before the flooding.

Phillips credits company owner Don Drayton Jr., son of the founder, with instituting this holistic approach to stormwater service. “He followed his entrepreneurial instincts. He saw opportunities and took them.” Northstar also undertakes stormwater projects for municipalities, bidding and contracting them individually. Its stormwater division currently is building a “pretty massive” retention pond in Gallatin for the city’s industrial park.

One client the company does not pursue is the homeowner. While Northstar does have contracts with homeowner associations, Phillips says individual property owners are “not on our radar. It is easier to work with businesses.”

GOING STRONG

The 50-year-old company executive hired on at Northstar 25 years ago when it still was in its infancy. Having grown up on a dairy farm, Phillips was familiar with machinery and hard work. When he finished up an enlistment in the Army, he applied to be a technician at the company and was hired. “I might have embellished my capabilities,” he jokes, looking back, but worked his way up while subsequently completing various industry-specific and business management courses.

Phillips sees a bright future for Northstar. “In my opinion, it is a good time to offer the services we do.”

He is less sanguine about government regulations. “Regulations help and hurt us. The federal Clean Water Act and city and state rules set some strong requirements for environmental conditions. That helps us.” The company website stipulates that *Northstar is dedicated to ensuring our clients stay in compliance with all regulatory authorities pertaining to stormwater management.*

“But then you have the 400-pound gorilla that tells us we must do this and we must do that. The regulations begin to take away some of our sales opportunities,” he says. “As prices increase for work in the field and DOT regulations increase, a company can reach a tipping point where it simply cannot recover its costs.

“Anyway, it all goes back to the economy. When the economy is going well, we are doing well.” c

FEATURED EQUIPMENT

BOBCAT CORPORATE
800-743-4340
www.bobcat.com

PRESVAC SYSTEMS
800-387-7763
www.presvac.com

US JETTING
800-538-8464
www.usjetting.com

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



- 1950 -



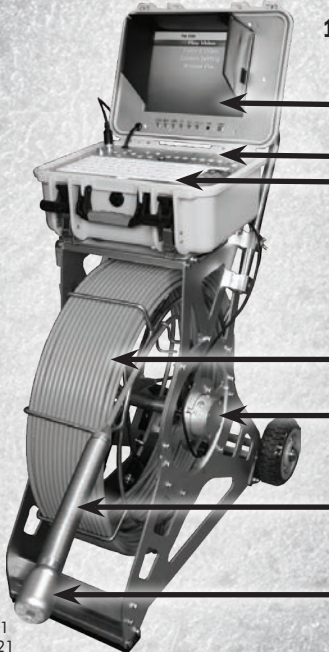
- 2021 -

AQUAPHON® A 200
 Experience – Quality – Success

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



FORBEST PRODUCTS CO.



1.5" Color Camera / Pan-Tilt Color Camera
 Model: FB-PIC3388ET-200-MF

10" LCD Screen

Built-in USB & SD
 Typing & Editing

8mm 200'
 Cable & Reel

Footage (Meter)
 Counter

Detachable Spring Kit
 with or without Built-in
 512 Hz Sonde

Pan-Tilt
 Color Camera

**HUGE
 DISCOUNT ON
 REFURBISHED
 ITEMS!**

Call 510-226-7988
 for details.

**1 YEAR
 WARRANTY**

NEW ITEMS

Reel Drip Bags

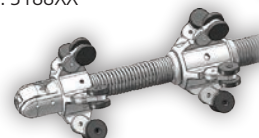
Model: 4188XX



Model: 3188XX



Model: 3388



Pan-Tilt Color Camera
 Model: CHD-P-C28



**16mm Color Camera
 W/ 512Hz transmitter**
 Model: CHD-T-C16B



JUNE 30, 2021
 TO JULY 2, 2021



Western USA:

44130 Old Warm Springs Blvd, Fremont, CA 94538

TF: 1 877 369 1199 P: 510 226 7988

Eastern USA:

701 Dawson Dr, Newark, DE 19713

TF: 1 877 369 1199 P: 510 226 7988

Canada:

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

TF: 1 877 369 1199 P: 905 709 6226

www.forbestgroup.com



**VIVAX
METROTECH**

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

- Full-featured
- Simple to operate
- Local training and support



Visit our YouTube channel to see actual videos.



Wi-fi
Capture images and video on a tablet or smartphone.



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



Locatable Pushrod
Trace the path of the pipe.



1080p High Definition
Capture and record in crisp detailed HD.



9.7" Anti-Glare Display
Daylight viewable display with touch screen option.



Multiple Media Choices
Built-in 1Tb Hard Drive with USB and SD transfer ports.



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



Multiple Power Options
4 to 6-hours from internal Li-ion battery.
Supports AC/DC operation and charging.



Inspect from 3" to 14" lines
D34-HD Camera – up to 8"
D46-HD Camera – up to 14"
Optional Adjustable Rolling Skid



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

Vivax-Metrotech Corporation

3251 Olcott Street,
Santa Clara, CA 95054, USA

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

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



ADVANCED WATER LEAK DETECTOR

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

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

SubSurface Locators™
(408) 249-4673
www.subsurfaceleak.com



CUTTING-EDGE TECHNOLOGY

TIER 1 EQUIPMENT

Custom Inspection Build Outs

- Custom Engineered Inspection Build Outs
- OEM Equipped Testing & Service Centers
- Expertly Trained & Certified Technicians
- Industry Leading Parts Inventory

Largest inspection dealer in North America.

Certified Technicians



TRUSTED • PROFESSIONAL
DOHENY KNOW-HOW™

Rigorous training, certifications, and comprehensive knowledge of more than 300,000 parts. Jack's got your back for product information and service. **Contact us today!**

DOHENYCOMPANY.COM | 888.936.4369



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



S903K-1 Tiger Tooth Lateral Kit

Our new Tiger Tooth Motor has more HP for tougher jobs in smaller lateral lines. It is rated up to maximum 410 (lbf-in) torque. Pressures from 2500 - 4000 psi and flows 18 - 80 gpm. Each individually painted. The S903T Kit comes with Tiger Tooth Motor; 5/8" Saw Blade Hub; 4", 6", 8" HD Concave Saw Blades; 4", 6", 8" Skids

"ST-PRO CAM" JET CAMERA NOZZLE

Self-leveling GO-PRO 7 CAMERA • Superior illumination



Stainless steel enclosure • 6"-8" adjustable skids, nylon wheels (up to 18")
Mini SDI card and card reader, App readable
Rear 1" thrust nozzle with 8 jets (plugs included for lower gpm)
3 adjustable 1600 lumen LEDS, 3 extra batteries
Wi-Fi integrated wireless, downloadable to phone app



SHYK-1 NEW Puma Standard Kit

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



S-906M1-AK Advance Kinetics Root Cutter Motor For Recyclers

This motor is built for the same platform as the standard S-906M motor but has an infusion process at the cellular level applied to the internal parts that make it silky smooth to turn and ideal for recycler units, which improves hydraulic performance and almost eliminates internal corrosion it also reduces drag, saves water and increases productivity. Designed for flow 40 - 170 gpm and pressure to 3000 psi. The motor is rated to 288 lbs. of torque and 220 lbs. continuous.



SRRK-1H Super Red Hot Kit

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



SRRK-1 Super Green Meanie Green Kit

The round profile allows the cutter to enter sewer lines 4" and up. Motor handles flows from 40 - 80 GPM and pressures 2000 - 3000 PSI. Rated up to 235 ftlb. of torque, and 175 ftlb. of continuous torque. Kit comes with SRRK-1P Super Green Motor; 1" Saw Blade Hub; 6", 8", 10", 12" HD Concave Saw Blade; 6", 8" Cage Skid Single Size; Set Of 10" & 12" Fins. Motor fits Green wheeled skids you may have.



SRRK-4-15W Super Green Meanie Citizen Kit

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

- Pipeline Inspection • Manhole Tools • Debris Baskets • Vac-Traps • Root Saws • Calcium Cutters • Sewer Rods • Handy Clams • Nozzle Extensions •
- Deep Vac Tube Holder • Grabbers Claws and Hooks • Diamond Tap Cutters • Fiberglass Poles • Hydraulic Cutters • Top Manhole Rollers •
- Sewer Spoons • Continuous Rod • Carbide Saws • Vacuum Coupling • Reducers • Hydro Excavation •



1430 N. Hundley St
Anaheim, CA 92806

ph: 714.632.8198
fax: 714.632.8228

YouTube
www.SouthlandTool.com

LOOK BEFORE YOU LEAP

A low-interest loan can help you expand your business in multiple ways, but there are always risks to consider // By Joan Koehne

THE COMPLEXITIES OF operating a business can leave you scratching your head. As ideas churn in your mind for new equipment, business expansion or hiring more employees, the bottom line is always: How will you pay for it?

If cash is short, a low-interest business loan may be the way to go. While many small businesses are averse to debt, being debt-free actually can restrict business growth or even cause a business to collapse. Without the necessary funds, a business will remain at a standstill or fold. The old adage ‘you need to spend money to make money’ rings true.

Even businesses that never took out a loan before may want to apply for financing now because interest rates are historically low. Rates are expected to remain low for years, as the country recovers from a pandemic-induced economic downturn. Despite the uncertain economy, now may be a good time to take out a loan. There are many good reasons to apply for a business loan, but that doesn’t mean you should rush out and apply without carefully considering your options.

“Be really sure you need the loan,” advises Dave Kaster, principal at Fidelis LLC, a business advisory practice in Green Bay, Wisconsin. “Unless you’re in a very stable business with a regular type of income, you have to think harder about getting a loan.”

Savvy business owners don’t go into debt for just any old reason. They have a clear vision of how they’ll successfully grow their business. Focusing on this vision, they’re willing to step out of their comfort zone and pursue financing options.

“If you decide you are willing to take the risk, contact your SBA (Small Business Administration) rep and see what your options are. Then, go to a banker that you feel you have the best relationship with and start talking,” Kaster says.

Dig into plans for the loan and how you’ll pay it back. Be honest with yourself and your ability to repay the loan. Ask questions like: What happens if I miss a payment? What happens if I can’t pay off the loan when the time comes? Know the answers to these questions before you sign.

“MAKE SURE THAT YOUR OPERATIONS AND YOUR MARKETING PLAN ARE LINED UP IN SUCH A WAY THAT YOU’LL START GETTING THE INCOME YOU NEED TO PAY OFF THAT LOAN.”

DAVE KASTER

WEIGH YOUR RISK

Once you understand the terms and conditions of a loan, consult with someone you depend on for business advice — an accountant, business advisor, spouse or colleague. Lastly, make sure your business plan syncs with the requirements of the new loan. A solid business plan includes carefully prepared financial projections, budgets and cost analyses. Lenders will look at your operational methods to project the rate of return on their investment.

To measure the risk of taking out a loan, consider how you will repay it. For example, you may decide to borrow money for equipment. Consequently, the equipment you purchase becomes a fixed asset.

“The loan on that fixed asset becomes a fixed cost. You have to pay that every single month,” Kaster says. Before you invest in the equipment, estimate the income you’ll earn by using that equipment.

“Can the money that fixed asset generates make the payments for you?” Kaster says.

In addition to purchasing equipment, you also may decide to expand through acquisition. Business acquisition can breathe new life into an organization but comes with some challenges. When businesses expand, cash can get tight. Taking out a loan will only defer the problem of tight cash until the loan has to be repaid. In this scenario, Kaster tells business owners to plan ahead.

“Make sure that your operations and your marketing plan are lined up in such a way that you’ll start getting the income you need to pay off that loan. If you’re adding a new territory or acquiring a business, it’s going to take a while before you’ll see the cash flow off of that business.”

DUCKS IN A ROW

Cash flow is an issue that businesses deal with every day. A high-level business plan can help you determine how much cash you need and what you can afford to repay, says Aaron Faulkner, senior vice president at Bank First, Green Bay. He offers a number of tips geared to business owners considering applying for commercial lending.

First, he encourages owners to have their personal finances in order. You may think that your business credit and personal credit are two separate things, but they're not. Commercial lenders often base their decisions on how individuals handle their personal finances. A solid credit history shows you paid your bills in the past and are likely to pay your bills in the future. Lenders evaluate you as a business owner to project how you'll handle your business finances, especially during the tough times.

Next, businesses should be ready to contribute equity. Lenders don't want to be the only player in a business venture. For example, if you want to borrow \$100,000, a lender may ask you to contribute \$20,000 to \$25,000 of cash, equity in your home, a gift from your family, or a combination of these. Showing a capacity to contribute equity is important because it signals that you are committed to the project.

Likewise, a commercial lender commonly will ask you to pledge collateral to cover your financial obligations if there's a shortfall. Collateral could be the assets in your home, a personal vehicle, vacation property, investment accounts or cash. Be aware that personal and business assets are closely related for small businesses. When you obtain a commercial loan, you sign a personal guarantee. When the loan comes due, the lender isn't simply looking at the business for repayment, it's looking at the owner, too. If the business can't repay the loan, the business owner will be held responsible instead.

Lastly, if you're purchasing property, make sure you understand commercial mortgages. A commercial mortgage is different than a home mortgage. Commercial mortgages have

shorter amortization, closer to 20-25 years, not 30 years. Typically, commercial mortgages are three- to seven-year notes that end with a balloon payment. In most cases, a business can renegotiate the

CONTINUED >>



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

MONEY MANAGER



All The Safety GEAR You Need



MRP
MILWAUKEE RUBBER PRODUCTS

Call Toll-Free
1.800.325.3730
www.MilwaukeeRubber.com

loan when it comes due, if the business doesn't have the funds to pay it off.

EQUITY OPTIONS

Compared to residential mortgages, commercial mortgages usually have a higher down payment. The minimum down payment will probably be 10%. Sometimes, the financial institution will lend you that 10% from a home equity loan or some other capital you have.

Additionally, lenders work with municipalities and the property sellers to carry some of the debt as well. Equity doesn't have to come exclusively from the buyer; sometimes it comes from other sources. A trusted lender can walk you through the various scenarios.

There are many things to consider regarding commercial lending. Looking at the big picture, the question isn't just "Should I take out a loan?" Instead, ask yourself, "How will I repay the loan?" and "What will I use the money for?"

Will you purchase a truck or equipment? Buy out a competitor? Construct, buy or lease a building to expand your territory? Hire more employees? Of course, one big question mark is the COVID-19 pandemic and how it will affect your business.

"With economic times being somewhat uncertain with the pandemic, consulting your banker can be a huge value add," Faulkner says. "Many government programs are offering reduced or no fees, as well as offering assistance with making payments for several months on loans. This, coupled with a low interest rate environment, is certainly a reason to connect with your bank to see what type of options are available." c

Want More Stories?

Get more news, information and features
with our exclusive online content.

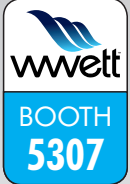
Check out **Online Exclusives** at
www.Cleaner.com/online_exclusives

THE CABLE CENTER • 1-800-257-7209



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

SPECIAL PRICING AVAILABLE



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

\$865



**General Wire
DRZ-PH-B**

FREE

5/8" x 100' cable

\$890



**General Wire
JM-1000**

FREE

1/8" x 50' hose

\$530



**General Wire
PV-B-WC**

FREE

3/8" x 25' cable



**BUY
ONLINE!**

TheCableCenterInc.com

**Largest Factory-Authorized
Camera Repair Center with
24-Hour Turnaround -
FULL CATALOG OF
GENERAL WIRE SPRING
PARTS AND ACCESSORIES**

THE
CABLE
CENTER

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

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

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



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.



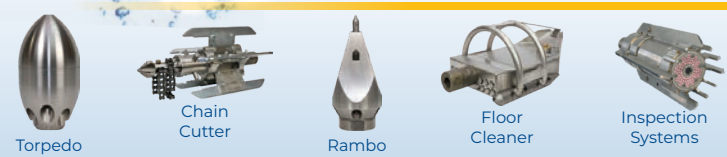
KEG Technologies, Inc.
6220 North Pinnacle Drive
Spartanburg, SC 29303
Toll Free: 866-595-0515

DARE TO COMPARE

It's What's Inside That Counts!

- Look inside a KEG Nozzle to see why we outperform the rest.
- Authentic KEG Fluid Mechanics create more power with less water to get the job done faster.

Call today for an on-site demonstration. We want to earn your business.
Toll Free: 866-595-0515



Sales@kegtechnologies.net · www.kegtechnologies.net

Performance by Design



PRO V A C

Sales & Service
1-800-367-0972
orders@westmoorltd.com



www.westmoorltd.com
Westmoor Ltd.



Industrial Pumpout
Rugged & Reliable
Built to Last!

QUALITY CABLES ARE JUST PART OF OUR STORY.



From quality cables to drain cleaning machines and jettors, DCD has it all. With thousands of items available, we carry everything for your drain cleaning and plumbing needs.

We also provide replacement parts, blades, cutters as well as jetter hoses and nozzles. What we don't have can be ordered and shipped in just a few days. DCD: one-stop convenience.

Experience the difference of DCD.

AMERICAN MADE. AMERICAN PROUD.

 **DRAINCABLES**
direct

DCD

855.SHOP.DCD | DCDdrain.com

Follow us on:    YouTube

A TRUCK FOR ANY APPLICATION

Super Products builds versatile multiuse vacuum trucks capable of tackling any situation

// By Kim Peterson

SUPER PRODUCTS HAS BEEN a leading manufacturer of vacuum trucks since 1972, engineering units to serve a wide variety of applications and needs. Its trucks are designed with the operator in mind, and the company strives to produce innovative options like wastewater recycling capabilities to provide its customers with the best sewer cleaning technology available.

Cleaner recently spoke with Mike Drott, vice president of municipal sales for Super Products, about the company's line of vacuum trucks, finding the right vehicle whether new or used, and what's to come in the sewer cleaning industry.

CLEANER: Tell us a little about the history of Super Products.

Drott: Super Products was founded in 1972 by Lionel Moore (marketing sales), Chuck O'Bryan (manufacturing) and Tom Flinn (engineering). The first units produced were the Supersuckers, followed by the first Camel in 1976.

The company was sold to Inductotherm in 1981 and then to Specialized Industries LP in 2005. In 2014, Super Products was acquired by the Alamo Group from ELB. The first Super Products manufacturing plant



MIKE DROTT

VP of Municipal Sales

YEARS IN THE INDUSTRY: 33

YEARS WITH COMPANY: 29

« The Camel combination units are what Super Products Vice President of Municipal Sales Mike Drott calls the "Swiss army knife of the vacuum world." The units service the drain cleaning and hydroexcavation industry and one model has wastewater recycling capabilities, making it an even more versatile option.

was in West Allis, Wisconsin, and then it moved to New Berlin, Wisconsin. In 2019, Super Products built a new state-of-the-art headquarters factory that we call home today in Mukwonago, Wisconsin.

CLEANER: What differentiates your vacuum trucks and sewer cleaners from the competition?

Drott: In the case of the sewer cleaners, we offer an ejector plate for dewatering and unloading the debris tank. This exclusive feature makes the unloading of the debris safer, fast and cleaner. The Camel wastewater recycling system is among the most proven in the U.S., with over 40 years of U.S. operation.

The Mud Dog is U.S.-manufactured with a worming compartment for the operators and their tools. The Mud Dog is a vacuum excavator with an ejector for unloading —the safest, fastest and cleanest way to unload.

The Supersucker is an industry leader in capacity, baghouse efficacy and unloading ease. The modular design makes it easy to repair and maintain over unibody designs. KISS is what the Supersucker is.

Ejector off-loading, Superpac and wastewater recycling are the most popular features on the Camel. The ability to dewater before driving to the dump site helps reduce weight and increase payload. With wastewater recycling, the ability to fill with water once and work all day increases line cleaning by 40%.

CLEANER: What sort of needs do they address? Tell us about your vacuum truck offerings and what applications they best serve.

Drott: Camel combination units service the drain cleaning industry and the hydroexcavation industry. It is the Swiss army knife of the vacuum world.

Mud Dogs are often the No. 1 choice of high-production vacuum excavation contractors. The ability to dig with air and water makes the Mud Dog the choice of the discerning contractor.

“AT THE END OF THE DAY, FIND A SUPPLIER THAT IS WELL RESPECTED IN THE INDUSTRY, WHERE THE EQUIPMENT YOU ARE BUYING IS THEIR PRIMARY INTEREST.”

MIKE DROTT



Super Products combo trucks are designed with operator safety in mind and loaded with a plethora of safety features. The Camel units are also designed to withstand the harshest environments and applications.

CLEANER: What are some recommendations for customers shopping for a vacuum excavator or sewer cleaner?

Drott: If you are looking for the most reliable and versatile equipment, the only choice is Camel and Mud Dog.

Customers should be looking at companies with long track records for building the equipment they are looking for — good, solid manufacturers and dealers offering superior service, companies that are keeping up with the latest technology for operations and components. Chassis and all the components used are changing yearly. You want to match the units to the chassis when possible. Most manufacturers have commonly used chassis that have all the components and holes laid out and included when the chassis comes from the factory. This can also reduce cost of the end product.

At the end of the day, find a supplier that is well respected in the industry, where the equipment you are buying is their primary interest — not a company that got into building a vacuum excavator because it is the new fad.

BEHIND THE GEAR



Pipe Shark[®]
Pipe Splitting System
Up to 2" Pipes
125 lbs.

Water Line Replacement
Cover all Underground Water Pipe Replacement jobs

1. Lead
2. Copper
3. Galvanized
4. Plastic

See it Work!
YouTube
RODDIE, Inc.



Basement Buddy[®]
Directional Drill
Blaze your own trail
Up to 2"
200 lbs.
Use it in a basement or an excavated pit

888-406-3821
Patent Pending • RoddieUnderground.com

vwett BOOTH 3431

CLEANER: You offer rentals and used vehicles too. When might those options be a better fit than a new vehicle? How should contractors decide what route to go?

Drott: Many contractors may be building their business or getting into a new market. So renting can be the best short-term solution. With no long-term commitment, it is a great way to get started.

Used equipment can be an option for mature markets where competitive pricing pressure can make it necessary to have reduced equipment costs. The contractor must look at the long-term strategy of the market the used equipment is going to service.

Many times the reduced cost is not worth the lack of warranty and not knowing the full history of the equipment. Equipment purchase cost does not affect your hourly operating cost much whether you buy new or used. Typically, maintenance costs are higher on used equipment. Your hourly cost of operation is affected by fuel, operator wages and overhead more than the difference in the equipment cost.

CLEANER: How do you see the drain and sewer cleaning industry evolving?

Drott: I see wastewater recycling as the biggest change to the industry. If you look at the cost increase compared to the production increase the payback can be as little as two years. Also, using the proper nozzles and tools for the end of the hose is so important. I still see contractors using \$100 nozzles on a \$500,000 machine.

CLEANER: What's new for Super Products in 2021? What can customers expect out of Super Products in the future?

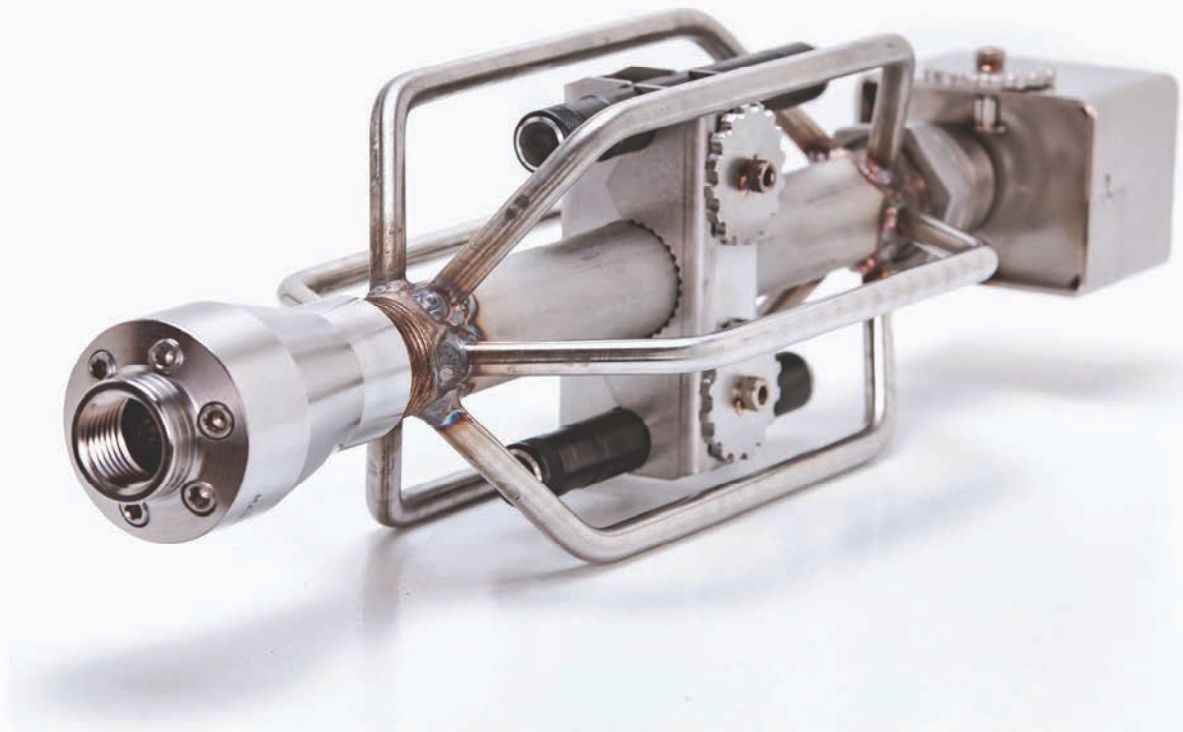
Drott: There are several things coming in 2021. Customer service in all areas of our company is number one. We have started a customer service and customer experience group. E-commerce is also coming in 2021. This will allow our customers the ability to purchase parts online, with parts breakdowns and drawings provided online.

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

Drott: No. 1 in the industry for the customer experience, from the purchase to the end of the equipment's life.

Innovative and highly engineered products are what we manufacture. Super Products is just like any manufacturer with four walls — it's what is inside that makes the difference. **c**

Turn your jetter into a camera truck!



- * Simple operation with integrated GoPro camera
- * Jetter hose adapter supplied with each unit
- * Works in standard pipe diameters of 6" to 18"
- * Made in the USA
- * 2 Year Warranty



GP
SEWER CAM
MADE IN THE USA



Visit us at: Gpsewercam.com

Call with any questions (310) 774-9468

LESS WATER. MORE POWER.

A Trio of Chain Scrapers Using Low Flow for High Powered Cleaning

- Low Flow
- Less Water Usage
- High Torque
- Works with Clean & Recycled Water
- Masters 90° Bends in 4" Pipe*

Application Range: 1.5" - 12"



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



Plumber Friendly!

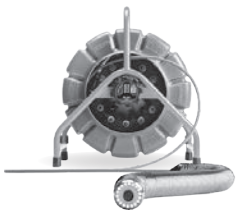
- Low Flow
- Clean Small Pipes
- Uses Clean Water



enz®  **usa inc.**

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

YOUR SOURCE FOR **RIDGID**



**SeeSnake® TruSense™
Camera Reel**



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



**CS12x Digital
Reporting Monitor***



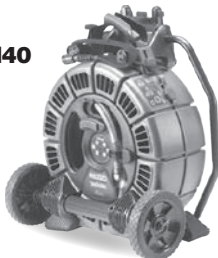
**SeeSnake® Compact M40
Camera System**



**CS65x Digital
Reporting Monitor***



microDrain Reel



**SeeSnake®
MAX rM200
Camera System**



**CS6xVersa Digital
Recording Monitor***
*With Wi-Fi

CENTRAL OKLAHOMA **Winnelson** COMPANY

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

CALL TOLL FREE: 888-947-8761

5037 NW 10th • Oklahoma City, OK 73127

www.centralwinnelson.com



Camel[®] MAX SERIES COMBINATION SEWER CLEANERS



THE
2021
EDITION

YOU ASKED. WE LISTENED.

THE ONLY WAY TO DUMP SAFELY INTO A CONTAINER

Call Today to Request a Demo



Super Products, an Alamo Group Company, is a leading manufacturer of vacuum trucks for a wide variety of applications.
800.837.9711 | info@superproducts.com | www.superproducts.com

BUILT WITH

MARISA BEAVER IS GROWING A SEWER REHAB EMPIRE BY TREATING CUSTOMERS FAIRLY AND EMPLOYEES LIKE FAMILY

// By Ken Wysocky //

MARISA BEAVER IS USED TO BEING an outlier in the world of trenchless sewer line replacement and repair, but she turns her differences into strengths.

First, the co-owner of Sewer Experts is a woman in an industry that's almost completely dominated by men — not exactly an easy path to tread.

"Many times I answer calls from people who ask me to transfer their call to someone who can help them with their sewer line," she says. "I've even had a customer say, 'I need to speak to a man.'"

"We (Beaver and her business partner Kara Wasserburger) definitely have to hide behind our crew most times, especially when it comes to marketing. It's strange and uncomfortable to deal with the discrimination we get when we meet some clients on site. They expect to see someone more 'plumber-ish.' We've lost work and some contracts because of our looks."

Furthermore, Beaver entered the field of sewer-line rehab without a lot of specific experience, although she had worked in construction demolition and other kinds of sewer work.

Then there were the financial challenges that come with starting a business with no deep-pocketed financial backer.

Despite those challenges, a lot has gone right for Sewer Experts.

A DIFFERENT APPROACH

The company generated more than \$2 million in revenue in 2020, just three years after Beaver and a silent partner established it in Commerce City, a northern suburb of Denver. Moreover, that's about 10 times more than the company's revenue in 2019, she says.



📍 Sewer Experts co-owners Kara Wasserburger (left) and Marisa Beaver started the company in 2017 and now have seven employees.

Sewer Experts
(a division of Mustard Seed Construction)
COMMERCE CITY, COLORADO

OWNERS	Marisa Beaver and Kara Wasserburger
FOUNDED	2017
EMPLOYEES	7
SERVICES	Commercial and residential pipe bursting, pipe lining, pipeline inspections, sewer cleaning, water and sewer line replacement
SERVICE AREA	50-mile radius around Denver
WEBSITE	www.sewerex.com

INTEGRITY



Photography by Skye Braxel

⚡ Sewer Experts technicians Jose Pacheco Luna (left) and Luis Castelar Trulljo set up HammerHead Trenchless pipe bursting equipment on a job site.



Technicians (from left) Anthony Ibarra, Luis Castelar Trulljo and Kirino Pacheco Luna watch as Jose Pacheco Luna makes an adjustment to the pipe bursting machine in the pit.

“THE MAIN REASON I’M IN BUSINESS IS WORD-OF-MOUTH REFERRALS AND OUR CUSTOMER SERVICE. ... I’M ALWAYS ACCESSIBLE AND AVAILABLE TO EXPLAIN THINGS TO CUSTOMERS.”

MARISA BEAVER

Then there’s the high level of customer satisfaction. Sewer Experts consistently gets five-star ratings on platforms like Google, Yelp and Angie’s List. Between that and word-of-mouth referrals, the company doesn’t need to spend a lot of money on marketing.

“The main reason I’m in business is word-of-mouth referrals and our customer service,” she says. “I’m on my phone 24/7. I’m always accessible and available to explain things to customers. And I go to every single job site in person and meet customers face to face. It’s all about building relationships.”

Beaver is convinced that this personal touch differentiates Sewer Experts from the area’s many competitors.

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



*Custom Designs
Are Always™ Available*



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



» Jose Pacheco Luna excavates an access pit at a residential job site.

Before she established the company, the entrepreneur did her own bit of market research by calling 30-some companies for a quote on replacing a residential sewer line. All she got was automated responses or requests to submit an email, she says.

“Not one person was interested in carrying on any kind of conversation. Therefore, I felt we had to take a different approach.”

Another key to success: Beaver has carefully built a team of motivated field workers that share her values when it comes to customer service and doing quality work.

Beaver takes a little bit of a contrarian approach to running a business. “We’re not like anyone else,” she says. “We do things differently.”

Other factors include the company’s strategy for hiring employees and an emphasis on plowing profits back into the company in the form of productivity-enhancing equipment. That not only increases profit margins, it also makes work easier for employees and serves as a retention tool.

And last but not least, there’s that large chip on her shoulder, the result of shoddy treatment by some previous employers, she says. “That’s a huge motivator. I’ve eaten dirt and then some to get



where I’m at. I love to prove people wrong when they say I can’t do something.

“A former colleague once told me I’d never get a demolition license,” she adds. “Now I’m the only woman with a demolition license in Colorado and the only woman with 27 different drain-layer’s licenses.”

The Lansas 5-Line



PROUD MEMBER OF
NUCA
We Dig America



1320 South Sacramento Street
Lodi, California 95240
800.452.4902 • 209.334-4115
www.lansas.com

LODI • ATLANTA • HOUSTON • CHICAGO



David Mendez uses a Pit Bull pipe-fusion machine to fuse sections of HDPE.

HAVE FAITH

Beaver took a roundabout path to her current career. She actually intended to become a schoolteacher, but changed her mind just a semester away from earning an early-childhood education degree, she says.

After that, she got a job as a project coordinator for an architectural firm in Denver and then worked in the architecture department for a large national restaurant chain. There she learned about the design and construction process, from blueprints to completed buildings.

From there, Beaver became a project coordinator for a giant global civil-construction company, followed by stints with a women-owned engineering firm and then a demolition company. Tired of not getting credit for her accomplishments, she eventually struck out on her own, forming a demolition-oriented company called Mustard Seed Construction.

“I was tired of helping others build their empires, so I decided to invest in myself and build my own,” Beaver says. “My husband

THE RIGHT KIND OF CREW

owner Marisa Beaver points to her employees as a primary reason for the success of Sewer Experts, her sewer-line replacement and rehab company based in suburban Denver.

“Sometimes they work 14 hours and come back at 6 a.m. the next day and they never complain,” she says. “That’s the No. 1 key to our success.”

But the converse to that is the company has to hire, and retain, the right kind of people in order to create that kind of culture. And Beaver says she does that with a different approach to job interviews, plus offering higher-than-usual pay — a minimum of \$21 an hour.

The company also periodically pays cash bonuses when they work long hours and offers other perks, like celebrating birthdays with an unusual gift: lottery tickets, with the number of tickets matching the person’s age.

Moreover, the fact that Beaver is a woman in a male-dominated industry creates a challenging dynamic.

“We have to find people who are willing to work for women and take direction from a woman,” she says. “If a guy is willing to take direction from a woman, right there you can tell they’re different than the norm.”

It’s sometimes difficult to judge, but it becomes evident when they don’t return for a second job interview or quit after one day of work. She also asks a lot of questions during job interviews about candidates’ personal lives and what they can expect if they get hired.

“I try to have an off-the-cuff conversation to find out what they’re all about as a person,” she says. “I also want to know about their aspirations. If they want to own a house, then we’ll help them get to the right place to get a house, even if it means going to my personal banker to fix or establish credit.”

Beaver also tells prospective employees that she runs a tight ship, but also believes in over-communication. And if employees have issues with co-workers, they’re going to come into the office for a talk.

“If someone takes a certain tone of voice with a co-worker, I bring them in and talk about their feelings. We’ve even paid for counseling services for crew members who are going through things. This is more of a family than it is a place to work, and we’re looking for people to become a part of that family.

“I tell them that when we rise up (as a company), you’ll rise up as well.”

Beaver also says that investing in reliable, advanced equipment is another good employee-retention tool. She says that for nearly a year, she and her business partner took only a \$500-a-week salary and invested the rest of what would normally be her pay in tools, equipment and PPE.

So far, her efforts have paid off. “We’ve been able to build the exact kind of crew I wanted,” she says. “They work together like a well-oiled machine — you’d think they’ve been working together for many years. That’s what happens when you put the right people with the right temperaments together.”

said I’d better have the faith of a mustard seed, which is the smallest seed in the world and grows into an enormous tree. So that’s how the company got its name.”

Within three months, Beaver says the company landed a contract to handle sewer and water disconnects and some demolition work on a \$1.2 billion project to enlarge a section of I-70 on the northeast side of Denver.

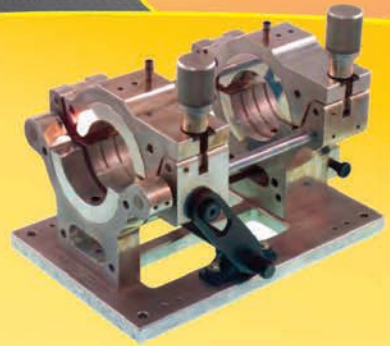
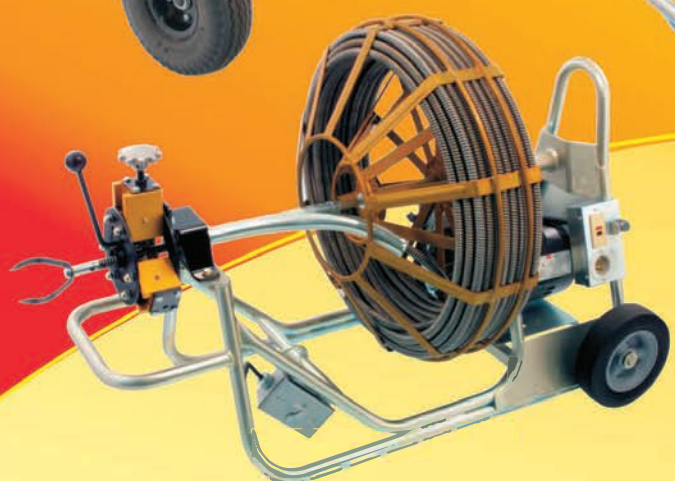
But because demolition/construction work is cyclical and volatile, Beaver eventually decided to focus on pipeline repair and rehab, and formed Sewer Experts as a division of Mustard Seed. The

CONTINUED >>



GORLITZ SEWER & DRAIN INC.

10132 Norwalk Blvd. Santa Fe Springs, Ca. 90670

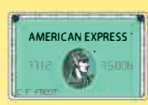


10% OFF
online sales
Go to Gorlitz.com
Coupon code:
Cleaner21

- MACHINES
- FEEDERS
- CABLES
- RAMPS
- CONNECTORS
- LEADERS
- CHUCKS
- ENDS
- RETRIEVERS
- SPLICES
- AUGERS
- JETTERS
- NOZZLES
- HOSES
- TRENCHLESS PIPE SYSTEMS
- SOCKET FUSION KITS

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

www.gorlitz.com
Email: sales@gorlitz.com
f GORLITZ on Facebook



Tel: (562) 944-3060
Fax: (562) 944-7630



◀ David Mendez adjusts the bursting head while Jose Pacheco Luna (left) and Kirino Pacheco Luna wait to get started on a bursting job.

✔ Kirino Pacheco Luna, Anthony Ibarra and David Mendez (from left) guide Jose Pacheco Luna while excavating an access pit.



Beaver didn't find the prospect of learning an entirely new business daunting. In fact, she enjoyed it and still loves to put on work boots and work in the field. "When you're truly passionate about something, you just want to learn how to do everything."

OPERATING WITH INTEGRITY

One way Sewer Experts operates differently than many similar companies is it hires a subcontractor, Certified Sewer Inspections, to handle sewer line cleaning and inspections. Beaver believes that customers feel more confident about paying for expensive sewer repairs if they first receive an objective, third-party analysis of their problem.

"We hear from a lot of customers that call for a routine (line) jetting and then are told they need a \$20,000 or \$30,000 repair that isn't really necessary," she explains. "So we made an executive decision to refer all line cleaning and inspections to a company that we trust. So if we're quoting the cost of a new line to a customer, we know that an expert verified the line is broken.

"This adds integrity and credibility to the process. At the end of the day, customers see we're being honest and not just trying to upsell them something. It also helps us provide more accurate quotes.

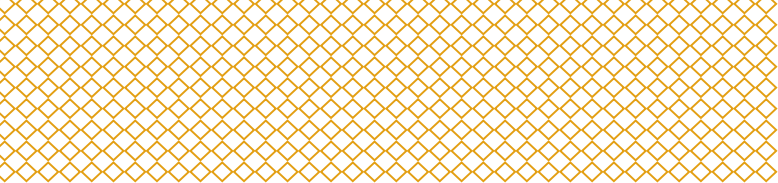
"WHEN YOU'RE TRULY PASSIONATE ABOUT SOMETHING, YOU JUST WANT TO LEARN HOW TO DO EVERYTHING."

MARISA BEAVER

company's main focus is replacing and rehabbing commercial and residential lateral lines.

She learned the sewer-repair business from the ground up, she says.

"I had to learn my craft literally from the field all the way to the office. I got up at 6 a.m. every day to work as a laborer. I had to learn how to do it all so that I could tell clients exactly what's going on. It took about six months before it all started to click — how to put pipes and gaskets together and so on."



» Co-owner Marisa Beaver learned the sewer-repair business from the ground up, and still likes to get out in the field.

“It’s huge for our customers and they’re thankful that we save them a lot of headaches and are completely honest from the get-go.”

Sewer Experts pays \$160 for each inspection and eats the cost, which comes to about \$3,000 to \$5,000 a month. “But one job more than pays for that,” she says.

The inspection includes a line cleaning, a camera inspection, a soil-density test, a survey, pipe locating and a final report. But she only provides the report to customers if they pay for it because too many customers use

the report to get quotes from other line-repair companies, she says.

In the past, Sewer Experts hired salespeople to sell repair jobs, but they all wanted commission-based pay, which creates an incentive to sell jobs that weren’t really necessary.

“Everyone we hired was trained to upsell,” Beaver says. “You can try to teach them to sell the right way, but we just didn’t have the time and the resources to do that.

“We had one guy who sold an unneeded full pipe replacement job and I told him that’s not how we operate. He told me we’d never succeed operating that way — that in this industry, you have to sell, sell, sell. But I told him we’re going to be different.”

Beaver believes customers appreciate the honesty and says it’s reflected in the company’s consistent five-star ratings on social-media platforms. “It just proves that honesty always is the best policy.”

EQUIPPED FOR THE FUTURE

To do pipe bursting, Sewer Experts relies on a PortaBurst PB30G2 system built by HammerHead Trenchless Equipment. Powered by a PortaPower 13 generator, also made by Hammerhead, the unit offers 30 tons of pulling force to replace 2- to 6-inch-diameter pipes. In conjunction with the PB30GS, the company also uses a Pit Bull pipe fusion machine made by McElroy Mfg.

The company does not line entire pipes, but does perform sectional point repairs, using PipePatch technology from Source One



“I’VE EATEN DIRT AND THEN SOME TO GET WHERE I’M AT. I LOVE TO PROVE PEOPLE WRONG WHEN THEY SAY I CAN’T DO SOMETHING.”

MARISA BEAVER

Environmental. The company also invested in two RIDGID SeeSnake pipeline inspection cameras, a Caterpillar backhoe, a Bobcat mini-excavator, a Ford dump truck and various kinds of trailers made by Load King, Diamond Cargo Trailer and Doolittle Trailer Mfg.

Beaver says she doesn’t anticipate rapid, exponential growth, which too often comes at the expense of quality control and customer satisfaction.

And while she’ll have to hire more people in order to handle a three-year, \$1.5 million contract to provide sewer and drainline cleaning services for 400 housing units owned by the Denver Housing Authority, she doesn’t want many more employees at this point, either.

“At one point, I was managing 17 employees and it was very, very hard,” she says.

Beaver also wants to keep building a great reputation for honesty, which leads to word-of-mouth referrals. “We’re not going to pad our pockets. We’re here to help people. We built this business on relationships and I plan to keep doing that.” c

FEATURED EQUIPMENT

HAMMERHEAD TRENCHLESS
800-331-6653
www.hammerheadtrenchless.com

MCELROY MANUFACTURING, INC.
918-836-8611
www.mcelroy.com

RIDGID
800-474-3443
www.RIDGID.com
(See ad page 9)

SOURCE ONE ENVIRONMENTAL
810-412-4740
www.s1eonline.com

GOING WITH THE FLOW

Flotation device allows for bypass-free inspection of high-flow sewers

// By Ken Wysocky

WHEN THE WATER LEVEL in a partially surcharged sewer is too high for a tractor-mounted camera to perform inspections, the conventional solution is a costly, time-consuming and disruptive sewer bypass.

But Pipetek Infrastructure Services, a Michigan company that cleans and inspects sewer lines and locates and maps utility lines, sails through such situations with a Proteus flotation raft made by Mini-Cam InPipe Innovation. The device reduces customers' costs and minimizes confined-space entry, says Mike Hagan, operations manager for the company, based in Livonia, a western suburb of Detroit.

The company pairs the raft with a Proteus CAM028L camera head, he says.

The company invested about \$12,000 in the raft to solve a problem encountered while inspecting an approximately 1-mile-long section of a large-diameter interceptor line that runs under Woodward Avenue in downtown Detroit, known locally as "Detroit's Main Street."

The more than 80-year-old line, which ranged from 72 to 108 inches in diameter, was at high flow. And bypassing it wasn't a good option, Hagan says.

"We weren't quite sure how we could inspect this pipe. Woodward Avenue is a very busy road, so it would've been difficult to bypass the sewer line.

"There also was some debris under the water line, which would challenge a tractor-mounted camera. Plus the water was 2 to 3 feet deep in some places."

But equipped with the raft, the Pipetek crew was able to inspect to perform the inspection in about two days.

FLOATING PROFIT CENTER

Made from durable, impact-resistant polyethylene, the device is just more than 2 feet long and about 1 1/2 feet wide, so it fits through a standard manhole. It weighs 12.7 pounds and features a built-in cable loop for lowering it in and pulling it out of manholes.

CONTINUED >>



>> Pipetek Infrastructure Services uses a Proteus flotation raft to inspect an 80-plus-year-old brick interceptor line that runs under Woodward Avenue, a major thoroughfare in Detroit, making it a poor candidate for a sewer bypass.

Redefining Pipe Rehabilitation



SIPP (Sprayed In Place Pipelining) casting system presents a cost-effective solution compared to European products. Through direct application of the resin, no need to use liners - No need for any reinstatements. Can be used through existing access points in the structure.

We Offer the Best Training and Support in the Business

- 100% polyurea
- Chemical resistant
- ASTM tested, 60 sec cure time (compared to competitors 10 min to 2 hrs.)
- 5 year warranty
- Long shelf life
- Made in USA
- High quality standard
- ISO 9001
- Easy to apply

Leading Edge in Sprayed In Place Pipeline Technology

**Not ready to buy?
Rentals Available!**

Small Sprayhead
1½" - 6"
Pipe diameter



Large Sprayhead
6" - 20"
Pipe diameter



**Equipment and resin made in USA,
ready to ship today no lead time.**



+1.970.444.5655



www.ipp solutions.com

ipp
Solutions, LLC

PIPETEK INFRASTRUCTURE SERVICES

LIVONIA, MICHIGAN

OWNER Kyle Dehne

DEVICE Proteus inspection-camera float raft from Mini-Cam InPipe Innovations

FUNCTION Transporting inspection cameras through partially surcharged sewer lines

FEATURES Made from impact-resistant polyethylene; measures roughly 2 feet long by 1 1/2 feet wide; weighs 12.7 pounds; three ultrabright light modules; built-in cable loop for lowering/raising; stabilizing flotation plate

COST \$12,000

www.pipetekservices.com

A so-called “flotation plate” keeps it balanced and eliminates bobbing and rolling.

The unit also features three ultrabright light modules that provide enough illumination even in pipes larger than 80 inches in diameter.

The CAM028L camera head features 10x optical zoom by 12x digital zoom, for a total of 120:1 zoom capability; six built-in LED lights for better video clarity; twin lasers for taking measurements; a side-distance sensor for measuring pipe diameter; and pan-and-tilt capability. The camera cable plugs into the rear of a camera-adaptor device on the float.

To use the device in manhole-to-manhole inspections, Pipetek stations one of its dozen combination sewer vacuum trucks (made by Vactor, Hi-Vac Corp., Super Products and Vacall Industries) by the downstream manhole. Then employees use a jetting nozzle to transport a rope to the upstream manhole, where it gets tied to the raft.

After that, an employee at the downstream manhole pulls the raft from the upstream manhole, rather than relying on flowing water. Manually pulling the raft keeps the line taut in order to get accurate reel measurements, Hagan explains.

HEADING DOWNSTREAM

“We always pull it downstream,” he says. “We try to stay at the industry standard of 30 feet per minute, which is the maximum recommended speed from the National Association of Sewer Service Cos. But we typically don’t even go that fast because we’re usually stopping every few feet to take pictures and code defects.”

“SEEING HOW IT PERFORMED ON THE DETROIT INTERCEPTOR LINE OPENED OUR EYES TO OTHER APPLICATIONS WHERE IT’S DIFFICULT TO GET A CONVENTIONAL CAMERA TRACTOR THROUGH A LINE.”

MIKE HAGAN

If a company doesn’t own a vacuum truck, Hagan recommends tying a roll of rope to a 2-liter soda bottle, floating it from an upstream manhole to a downstream manhole, then cutting the rope at the upstream manhole and tying it to the raft. Then the downstream crew can remove the rope from the bottle and pull the raft.

To halt the raft or even pull it backward, just stop the camera-cable reel or retrieve a little cable, he says.

There’s no problem with choppy video because keeping a taut line stabilizes the raft. “We even have let it just flow on its own because there was no downstream manhole, but it’s a lot harder to control that way.”

The unit is durable and user-friendly, Hagan says, noting it has performed 30,000 to 40,000 feet worth of inspections with no issues.

NO BYPASS

Pipetek primarily uses the Proteus raft/camera combo — purchased from Visual Imaging Resources, the official North American distributor for Proteus equipment — for inspecting larger municipal sewer lines, usually 36 inches in diameter or larger. The company also owns several camera trucks that carry inspection cameras made by Proteus and IBAK Helmut Hunger GmbH & Co. KG.

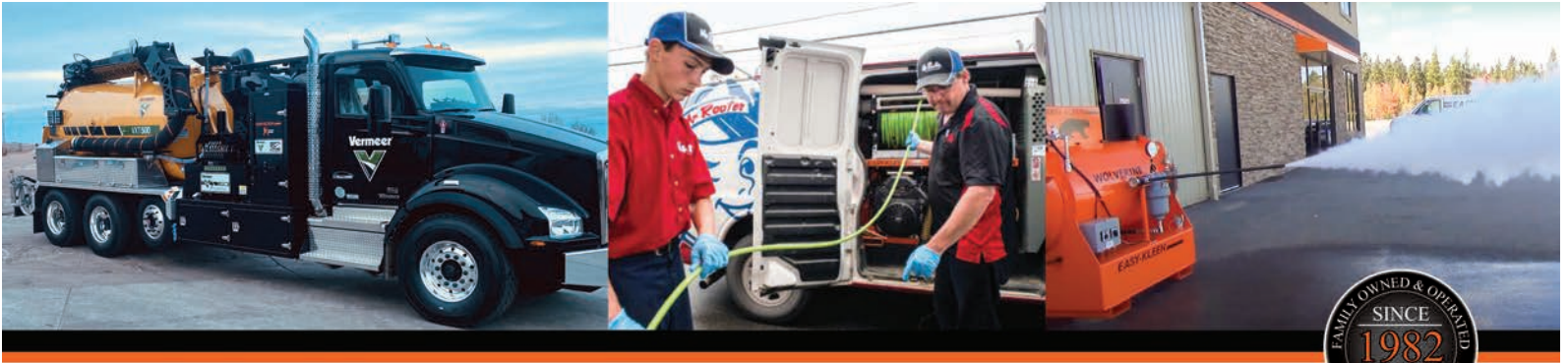
“Seeing how it performed on the Detroit interceptor line opened our eyes to other applications where it’s difficult to get a conventional camera tractor through a line,” Hagan says.

For example, in September 2019, the company inspected roughly 3,200 feet of 48-inch-diameter stormwater sewer lines in Portage. At the time, the water levels in local lakes were unusually high, so the lines were partially surcharged, he says.

“It would’ve been impossible to dewater those lines. We couldn’t see the entire pipe because of the high water levels, but we got a good look at their structural integrity.

“Overall, the flotation raft makes us money by allowing us to complete jobs we normally wouldn’t be able to do. So now when an engineer comes to us and needs a partially surcharged pipe inspected but doesn’t want to spend the extra money to bypass it, we have a solution to offer.

“It’s another tool in our box to get the job done for our customers.” **c**



YOUR COMPLETE SOURCE OF HIGH PRESSURE JETTING AND CLEANING EQUIPMENT

Install Ready For Vacuum & Hydro Vac Trucks



- Heaters**
- Heaters up to 10,000 PSI
 - 20 to 80 GPM
- \$5,495 USD**
EZO440VCB-12V
• 440,000 BTUs
- Dry Steam Generators**
- 20/30/40/50 BHP
- \$11,995 USD**
20 BHP
- \$19,995 USD**
50 BHP



GROUNDHOG JETTERS

Van Pack Jetter

- \$16,900 USD**
EZJ3512G-R
- 35 HP Vanguard Gas Engine
 - General Pump – Gearbox Driven
 - 12 GPM @ 3,500 PSI
 - 200 Gallon Poly Water Tank
 - 12 Volt Hose Reel
 - 300' of 3/8" Jetter Hose

IN STOCK NOW!



Jetter Skid

- \$39,995 USD**
EZJ4020 - SKID
- 58 HP Kubota Diesel Engine
 - General Pump – Belt Driven
 - 20 GPM @ 4,000 PSI
 - 525 Gallon Poly Water Tank
 - Hydraulic Driven Hose Reel
 - 300' of 1/2" Jetter Hose



IN STOCK NOW!



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



1-800-315-5533

easyklean.com
sales@easyklean.com

AWAITING EVALUATION

PENDING QUOTE APPROVAL



THE CABLE CENTER

1-800-257-7209

WE WON'T BE BEATEN ON SEESNAKE PRICING

LARGEST FACTORY-AUTHORIZED REPAIR CENTER OF SEESNAKE

FULL CATALOG OF RIDGID REPAIR PARTS AND ACCESSORIES

24 HOURS TURNAROUND ON REPAIRS

NO SALES TAX ON OUT-OF-STATE SALES

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

CLEAN MORE IN LESS TIME

High-efficiency jetter nozzles conserve water and clean better // By Dennis Farhat

IN SEWER, STORM AND SANITARY line cleaning, hose nozzles are an essential tool that directs pressurized water to clear out obstructions such as silt, sludge, grease, mineral buildup and tree roots, as part of required maintenance or to prepare pipes for relining. In this way, the nozzle is like a gun and water like bullets that must be precisely directed with force to the target.

While there are many nozzle options available in a variety of configurations, the standard nozzles that typically are supplied with the purchase of a sewer truck are only rated as 50-60% efficient. Although these nozzles can handle some blockages, many sewer crews are opting for the highest performance nozzles to make short work of even the most challenging jobs.

Utilizing such high-performance nozzles has benefits that go far beyond conserving water to protect the environment. Reducing water use also minimizes trips to refill the sewer truck water tank and keeps crews effectively cleaning to expedite work completion. By decreasing unnecessary travel, the approach also reduces the cost of vehicle fuel and maintenance, which further boosts profitability.

OPTIMIZING EFFICIENCY

As is known throughout the industry, nozzles are rated for water efficiency. Low-efficiency nozzles are about 30% efficient. Mid-level nozzles are about 50-60% efficient.

High-efficiency nozzles can be 75% all the way up to 98% efficient. Although they cost less, low-efficiency nozzles tend to utilize only 30% of the available energy, wasting 70% due to excessive turbulence or otherwise lack necessary precision to clear obstructions. Mid-level nozzles are more efficient but are still not adequate to tackle tougher jobs or perform with anywhere near the efficiency offered by more sophisticated units.

In contrast, the most effective nozzles have tight water patterns that efficiently clean the pipe wall and create a powerful water stream to move debris long distances and propel the nozzle. Crucially, these



High-efficiency nozzles, like the OMG twin penetrating nozzle (top) and the Aqua Power 700 nozzle (right) from KEG Technologies, reduce water use, decrease trips to refill the water tank, and clean more effectively because of their tight water patterns.

nozzles provide efficient fluid mechanics to prevent the wasteful use of water (gpm) and operating pressure (psi).

However, even within the high-efficiency category there are significant differences in levels of efficiency. Opting for the lower end, high-efficiency nozzle with 75% efficiency could still lead to additional trips to refill. Additionally, such units may not remove restrictive sewer buildup or blockages in a timely manner.

Consequently, to proactively improve operations sewer truck and accessory dealers and contractors are turning to the most efficient nozzles. This is enabling sewer maintenance work crews to clean better and faster while conserving water and achieving dramatically more between each water tank refill. This approach also substantially reduces labor and machine hours to clean lines, along with equipment wear and tear, and can save approximately 9 to 17% in vehicle fuel costs, including travel to refill water tanks and run equipment.

» Customers watch a demonstration of the power of the KEG Technologies OMG penetrating nozzle.



“Today, operators want to conserve water use to be more productive with their trucks and work crews. Water is an important natural resource, and usually drinking water is used,” says Matthew Woods, vice president of sales and marketing at Haaker Equipment, a dealer of sewer cleaners, pipe inspection equipment and parking lot sweepers for the contractor, municipal and industrial sectors in California, Nevada and Arizona.

SAVING WATER

In the case of Haaker Equipment, Woods says that high-efficiency nozzles are frequently recommended, although the dealer also carries other nozzle types as well.

According to Woods, refilling the sewer truck tank with water can take 30 minutes to an hour, depending on the hydrant location.

“Typically, the highest operating cost over the life of the vehicle isn’t the truck or the nozzle: it’s the operator’s labor, and that is saved tremendously by using an ultra-efficient nozzle. If an operator can avoid two water tank fill cycles a day by using the most efficient nozzles, they can save an hour a day, 20 hours a month, and 140 hours annually, which is a great boost to productivity.”

Woods says the difference between using a mid-level nozzle and a top high-efficiency nozzle can be cleaning about 30% to 50% more sewer line with the same amount of water. Also, efficient water use reduces vehicle fuel as well as wear and tear by requiring fewer trips to the hydrant.

In addition, while municipal water is usually free locally, the ability to conserve water can minimize potential water use charges for contractors who use water from a county line.

What sets the most efficient nozzles apart from others in the category is fluid mechanics engineering on par with the aerodynamics of race cars or jet fighters.

In the case of top-notch nozzles that provide up to 98% efficiency, the high-performance fluid mechanics design leaves little room for power losses and excessive turbulence. After exiting the jetter hose, water travels into the body of the nozzle before moving through smooth, curved channels. This design enables the

“TYPICALLY, THE HIGHEST OPERATING COST OVER THE LIFE OF THE VEHICLE ISN’T THE TRUCK OR THE NOZZLE: IT’S THE OPERATOR’S LABOR, AND THAT IS SAVED TREMENDOUSLY BY USING AN ULTRA-EFFICIENT NOZZLE.”

MATTHEW WOODS

water to maintain its power and speed before entering the nozzle’s replaceable titanium ceramic inserts. Next, the water is funneled from a short conical shape to a larger, longer cylindrical shape, allowing a tight water pattern to emerge.

The internal workings of the nozzle, including the way the water gets turned, redirects the energy of the high-pressure water entering the nozzle as efficiently as possible. This results in what is needed for the task: more thrust and power using less water.

“There is tremendous force and pressure created in an extremely efficient nozzle. It is often what is needed to get the most out of the Vactor sewer trucks we represent, which are considered the ‘Ferrari’ of the industry. To extend the analogy, you cannot go 200 mph in a Ferrari with the cheapest tires available,” Woods says.

While Woods does not insist that such a high-efficiency nozzle is necessary for every job, he does recommend it as an essential tool for the sewer crew’s toolbox.

FIND THE RIGHT FIT

Troy Whitton is a parts and service sales specialist at Vimar Equipment, a British Columbia, Canada-based dealer of sewer and street vehicles and equipment for the contractor and municipal markets. Whitton, who has been a dealer for 20 years and is the startup demonstration trainer for the equipment that Vimar sells, also recommends utilizing highly efficient nozzles.

TECH PERSPECTIVE

“With the most efficient design, operators get the greatest efficiency out of their water, which provides the most power to clean the pipe and pull the hose. Because it is so efficient, operators typically achieve more than they ever could before with a lot less water,” he says.

According to Whitton, as a dealer it is important to educate contractors and municipal managers to help them understand how they can achieve the greatest value with their equipment. As a dealer, he wants Vimar Equipment’s customers to understand the importance of using the highest quality nozzle on the hose to get the cleaning job done safely, quickly and efficiently.

Additionally, he suggests that choosing the best tool for the job can resolve the most difficult cleaning challenges, when a less powerful or precise nozzle may not be sufficient to do the job in a timely way.

“Selling the best nozzle for the job goes hand-in-hand with selling vac trucks because the nozzles do the work. The nozzles are essentially the ‘tip of the spear’ so you need the right nozzle for the job,” Whitton says.

While he acknowledges that lesser nozzles may cost less at first, he says that such units ultimately end up costing considerably more in less efficient work performance on the job.

“Compared to a mid-level nozzle, a high-efficiency nozzle will cost a little more initially, but can pay off rather quickly because you can get the job done in much less time.”

While dealers, contractors and municipal supervisors have long accepted the status quo in sewer, storm and sanitary line cleaning, better approaches now exist in the form of ultra-efficient water conserving nozzles that can enable work crews to perform significantly more in less time. Ultimately, this helps to cost-effectively boost both service ratings and profitability. **c**

ABOUT THE AUTHOR

Dennis Farhat is general manager of KEG Technologies, a manufacturer of sewer and storm lines products including high-performing nozzles, chain cutters, floor cleaners and camera nozzle systems. The Spartanburg, South Carolina-based company is a member of the National Association of Sewer Service Cos.



T&T Tools, Inc.
 Fax: 800.521.3260
 Email: sales@mightyprobe.com

800.521.6893
www.MightyProbe.com

Call for a FREE Catalog



HOOKS...

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



BOOTH 3000

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

Call for a FREE Catalog

MAXI POWER +

THE LARGEST AND MOST POWERFUL MILLER



USE WITH A RANGE OF HEAVY DUTY TOOLS FOR THE TOUGHEST OF JOBS

- 3 PHASE POWER
- CLEANING & CUTTING 3-12" PIPES
- CONCRETE & ROCK REMOVAL IN 6-9" PIPES
- MAX RANGE: 132 FEET WITH EXTENSIONS



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

ultra ultra ultra
LIGHT – VERSATILE – SAFE

ultraSHORE

PRODUCTS

Quick to Install.
As light as 130lbs.

Roll Your Own.
Optional wheel kit.

Stacks easily with
2' & 4' high panels.

This is What Aluminum Shoring Was Meant to be!

1-800-SHORING

CALL TOLL-FREE NATIONWIDE • 1-800-746-7464

www.shoring.com

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

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

We Repair All Brands

Nationwide Sales

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

Available Cordless Ask us About Custom Colors

(718)477-1425 thesewercameraconnection.com

Fast Shipping Call For a Quote Today!

Inspection Cameras Starting at \$1999

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

Gas Powered HydroJetters Starting at \$2799

East Coast Sewer Equipment Service

LOCATION AND LEAK DETECTION, DRAINLINE TV INSPECTION EQUIPMENT

By Craig Mandli

» ELECTRONIC LEAK DETECTOR

1 // HERMANN SEWERIN GMBH SECORRPHON AC 200

The SeCorrPhon AC 200 from Hermann Sewerin GmbH combines the characteristics of a correlator with acoustic water leak detection, offering prelocation, pinpointing and correlation in one single system. It is based on the tried and tested housing and hardware concept of the AQUAPHON A 200 by Sewerin. Each is ideal for use for leak detection across all sections, materials, diameters and lengths of pipelines. Numerous additional functions are also available for complex location scenarios. 888-592-9916; www.sewerin.com



» ELECTRONIC LINE LOCATORS

2 // SUBSITE ELECTRONICS UTILIGUARD 2

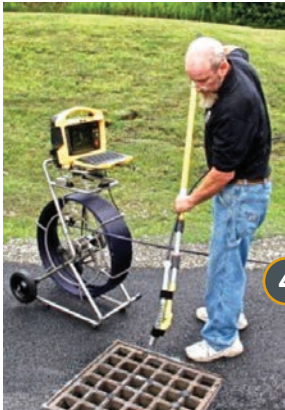
The Subsite Electronics UtiliGuard 2 is a multifrequency utility locator that takes the features of the original UtiliGuard and adds a user interface, integrated data capture and GPS positioning. The user interface has simplified graphics that are easier and faster to interpret. Operators will notice a change in screen layout when directly over a utility locate, providing positive confirmation. Screen graphics deliver increased operator confidence, locate consistency and operational performance. It automatically captures data without altering the operator's normal workflow. This data can be used to verify performance and demonstrate quality and process compliance in the field. Supervisors can also track performance, compare it with benchmarks and enable actionable outcomes to be implemented. This reporting and auditing capability helps increase quality, reduce cable strikes and increase productivity across multiple crews. 800-846-2713; www.subsite.com



3 // VIVAX-METROTECH VLOC3-PRO

The vLoc3-Pro utility locator from Vivax-Metrotech includes two sets of 3D antennas, helping signal distortion to be easily detected and displayed on the color display. Along with classic locate screens, it offers vector locate screens for automatic non-walkover locating; transverse graph showing peak and null simultaneously, providing an immediate measurement of signal distortion; plan view showing the orientation of the cable at any angle; and a graphical sonde screen with guidance arrows leading to the sonde location even when it is vertical. The user-configurable locator has eight passive modes, fault-find, SD (showing the direction of outgoing current), and a range of configurable frequencies from 16Hz to 200 kHz. Audio and mechanical vibration alerts can be configured by the user providing warnings for shallow depth, overload, overhead cables, and excessive swinging. 800-446-3392; www.vivax-metrotech.com





» PUSH TV CAMERA SYSTEMS

4 // CPI PRODUCTS POLECAT

Sometimes push inspection cameras are hard to control when not in a pipe and trying to look into a ground-level space. It can be dangerous to kneel down and stick your head in these places, and in some areas that violates safety rules. When you need to look into a septic tank or other opening, inspectors often resort to improvising ways to control their inspection camera. The PoleCat from CPI Products is designed and made for this application. Simply strap an inspection camera to it with the preinstalled Velcro, loosen the lock nut, turn to the angle desired, attach any standard broomstick threaded extension pole and it's ready. It fits any push inspection camera and installs in minutes. 413-443-0925; www.cplproducts.com



5 // CUES MPLUS+ XL

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



6 // ENVIROSIGHT VERISIGHT PRO+

The Verisight Pro+ from EnviroSight includes a stainless self-leveling camera with shadowless, variable LED illumination to capture crisp video footage, regardless of pipe material. With supplied centering devices, it inspects lines 2 inches and up, and snakes through multiple bends for maximum range. An integral tri-band sonde (33 kHz, 512 Hz, 640 Hz) works with most any locator. Its rugged welded-steel coiler comes with 130, 200 or 330 feet of pushrod. The entire system runs continuously for six hours off internal rechargeable lithium-ion batteries, or off mains or vehicle power. Its multilanguage controller displays footage on an 8-inch TFT LCD screen and captures up to 90 hours of MPEG 4 video on an SD/SDHC card (up to 32 GB) or USB stick (up to 128 GB). It lets you zoom 3X and capture images in JPEG format from both live and recorded video, and offers a 16-page text-writer with full-QWERTY keyboard. 866-838-3763; www.envirosight.com



7 // EPL SOLUTIONS GVISION

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

PRODUCT FOCUS

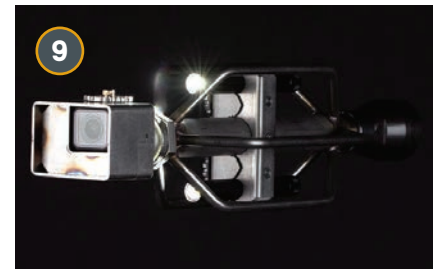
8 // FORBEST PRODUCTS FB-PIC3388MT-200

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



9 // GP SEWER CAM

The GP Sewer Cam is made to be dropped. The heart of the jet-powered system is its durable and simple-to-use GoPro Hero 7 Black camera. Not only is GoPro camera technology affordable, but its durability guarantee has made it the go-to camera to document extreme sports, where it takes a physical beating. The skid unit is compatible with 6- to 18-inch pipe and is constructed from Type 304 stainless steel. Custom skids are available for larger pipe. GP Sewer Cam has teamed up with Arthur Products so every GP Sewer Cam comes with a custom-drilled (to buyer's jetting specs) nozzle. The unit is 4 1/2 pounds, has three screws and one moving part, and is completely made in the U.S. 310-774-9468; www.gpsewercam.com



10 // INSPECTORCAMERAS.COM TVBTECH-USA MODEL 3499FB

The TVBTech-USA Model 3499FB, distributed by INSPECTORCAMERAS.COM, is a rugged yet compact sewer inspection camera that is easy to use and is supplied with a 1-inch self-level color camera head, 512 Hz Sonde transmitter, distance/foot counter, time and date stamp, on-screen text writing capability and video recording with snapshot picture function. The 115-foot heavy-duty pushrod cable provides a nice blend of flexibility and stiffness to allow use in a variety of pipes and conditions. The camera controls are fully self-contained inside an easily removable control case for use in confined or restricted spaces. 603-267-0400; www.inspectorcameras.com



11 // ELECTRIC EEL ECAM ACE 2 SL

The eCAM Ace 2 SL from Electric Eel includes a built-in battery cradle that accepts a Milwaukee M18 or equivalent battery, adding convenience for the operator and allowing easy access to power for remote fieldwork or where electricity is not available. Battery life is six to seven hours. The unit includes a self-leveling color camera, one-touch USB recording, an on-screen footage counter, and wheels for easy transport and maneuverability. A rugged stainless steel-housed 1.68-inch-diameter self-leveling color camera inspects 3- to 10-inch lines. It has a sapphire lens with 20-LED light ring and high-resolution CCD element. The flexible camera spring is designed to navigate 3-inch P-traps. Its auto iris adjusts lighting automatically. It comes with an industry-standard 512 Hz sonde, a 5.4-inch LCD monitor with AR film for optimal viewing, a protective acrylic, antiglare monitor shield, a video output jack for the recording option, and comes standard with 200 feet of braided fiberglass premium 1/2-inch-diameter pushrod. 800-833-1212; www.electriceel.com





12 // MYTANA INSPECT & LOCATE PACKAGE

Designed for full 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 daylight-readable monitor delivers high-clarity footage, and all-digital recording lets the user 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, the user can trace a signal on drainlines or find buried utilities. 800-328-8170; www.mytana.com



13 // PEARPOINT P540C

The Pearpoint P540c offers an intuitive graphical user interface with built-in user manual, a full-size QWERTY keyboard and a choice of six different languages at launch. Context-sensitive, ATM-style buttons on both sides of the display provide access to the easy-to-use menus while an additional seven buttons offer direct control of the most-used functions. It has the capability to use the newly designed command module with any reel system. This will provide contractors the flexibility of having multiple rods for different uses while only needing one command module. 800-688-8094; www.pearpoint.com



14 // RAPIDVIEW IBAK NORTH AMERICA MICROLITE PUSHROD SYSTEM

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



15 // RATECH ELECTRONICS PLUMBER'S HELPER JR.

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



16 // 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 Wi-Fi connection to view and record 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

PRODUCT FOCUS

17 // SPARTAN TOOL EXPLORER

The Explorer modular camera system from Spartan Tool has a control box that is compatible with five different pushrods up to 400 feet in length, letting the user quickly adapt to any environment. Included WinCan software allows the user to map full plumbing systems for future reference, and files can be saved to a WinCan account, the cloud, external USB drives and the system's internal storage. The stainless steel camera head provides a crisp, color picture to the superbright, sunlight-readable LCD. Change out reels to create a system that provides the ability to tackle any size job. 800-435-3866; www.spartantool.com

» TRANSMITTER

18 // RIDGID SEEKTECH ST-305R TRANSMITTER

The RIDGID SeekTech ST-305R Transmitter is a compact yet powerful multifrequency transmitter. It can be used with any SeekTech or NaviTrack receiver to find buried conductors such as pipes, cables and wires. With its battery shoe, it can be powered by a lithium ion 18-volt rechargeable battery or six alkaline or NiMH C-cell batteries. It delivers up to 5 watts of power and transmits two frequencies simultaneously to allow optimal frequency selection. Audio feedback also confirms a good circuit before beginning a trace. 800-474-3443; www.ridgid.com

» SMOKE LOCATORS

19 // 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. It comes with a 5-foot, heavy-duty hose that fits a 4-inch clean-out tee and 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 122cc, 3.5 hp, four-stroke Honda engine provides more than 700 cfm, making it fast, easy and safe to determine plumbing problem areas. Through vibration damping, excess movement and noise are also minimized, creating a smoother and more efficient experience. 800-321-9532; www.oatey.com.brands/cherne

20 // 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

21 // SUPERIOR SIGNAL 5E ELECTRIC SMOKER

When testing laterals and building plumbing, or pumping or inspecting septic tanks, smoke testing is a quick and effective way to find plumbing faults that lead to odors, leaks and inflow. The 5E Electric Smoker from Superior Signal easily connects to any clean-out, port or vent to smoke test the entire system in just a few minutes. It gently pushes smoke throughout the system to find cracks and leaks and quickly identify problems, taking only minutes to set up and seconds to see the results. It comes complete with 8-foot industrial grade hose. Used with Superior Smoke Candles, this cost-effective solution is suitable for hard-to-find odors, leaks and other faults in commercial, residential and municipal facilities. 800-945-8378; www.superiorsignal.com c



PEARPOINT®



flexiprobe™ P540c



The flexiprobe P540c system is managed by the most powerful and intuitive Controller ever designed by Pearpoint.



Visit pearpoint.com or call 800.688.8094 for more information



LOCATION AND LEAK DETECTION, DRAINLINE TV INSPECTION

// By Craig Mandli

LEAK DETECTION SYSTEM SAVES MONEY FOR TEXAS SCHOOL



PROBLEM / A leak beneath Anna Middle School in Anna, Texas, caused water to surface in the parking lot. The problem presented potentially costly demolition and repairs.

SOLUTION / The school called Spencer Plumbing, and a technician used a Gen-Ear LE water leak detection system from General Pipe Cleaners. Compact and lightweight, the unit uses an advanced acoustical leak detection system to quickly and accurately locate leaks in cast iron, copper, steel and PVC lines. The equipment quickly found two distinct problems. “We fixed the small inside leak without major disruption,” says Bryan Spencer, owner of Spencer Plumbing. He then showed how the serious outside leak actually channeled water down a ditch to where it was surfacing in the parking lot.

RESULT / “We pinpointed problems so clearly and quickly that the customer saved thousands in unnecessary demolition and repair work,” Spencer says. And the new equipment’s learning curve proved surprisingly short. “Once we learned to identify different types of leak sounds, we began using the system immediately.” 800-245-6200; www.drainbrain.com

WI-FI CAMERA SYSTEMS USED TO LOCATE A BLOCKAGE CAUSING BACKUPS



PROBLEM / When a customer was experiencing backups in a toilet and tub, they called Hi-Limit Plumbing & Heating of Campbell River, British Columbia, to fix the issue. The team was able to determine that the issue was not from the homeowner’s septic tank but was caused by a problem upstream of the septic tank inlet.

SOLUTION / The team first tried to resolve the situation by accessing the septic inlet. They sent an inspection system upstream in the line to see if the blockage was visible, using the Large Wi-Fi Camera Reel from Hathorn. The blockage was found about 40 feet in, and a sectional cable was used in an attempt to clear it. The cable could not get past the blockage, so they used the roof of the house to clean from the other direction. This was successful in restoring flow. The team used the Micron Wi-Fi Camera Reel on the roof because it’s compact and cordless. It seamlessly streams video conveniently to the team’s phones or iPads. With the inspection system they were able to identify a collapsed/misaligned pipe in the customer’s building sewer that was causing the problem.

RESULT / Hi-Limit Plumbing & Heating identified the problem using Hathorn’s camera systems and were able to restore flow and repair the line so that it is fully operational. 905-604-7040; www.hathorncorp.com c

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

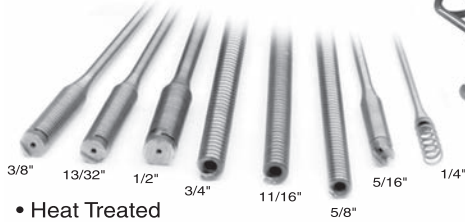
And they have for over 50 years

KEN-WAY CABLE CLEANERS

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



KEN-WAY Exclusive Built Cables



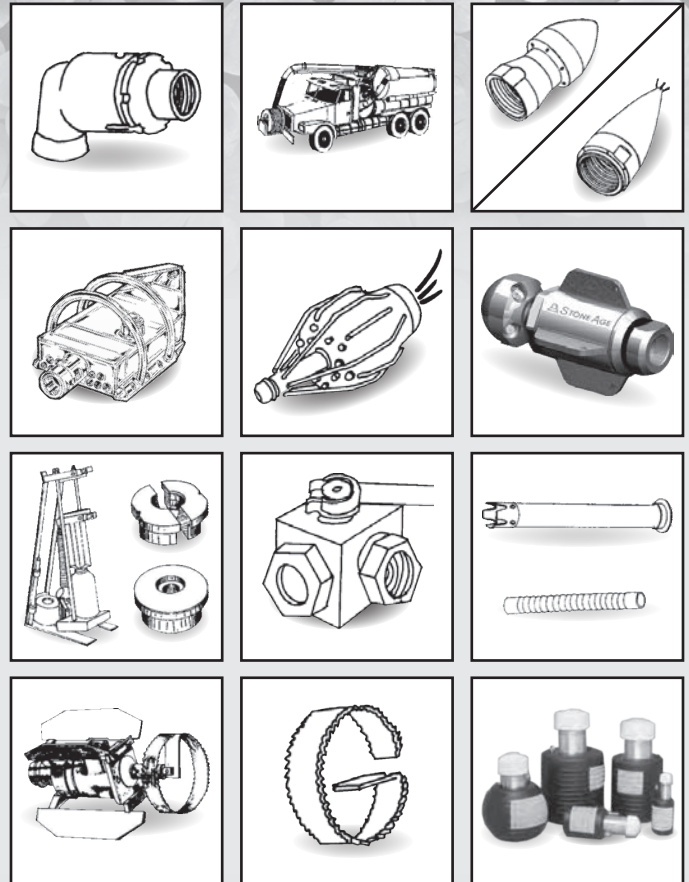
- Heat Treated
- Inner-Core or Non-Core
- Fit Most Other Brands
- Interchangeable with Most Brands
- Coupling or Blade Holding Types



Leasing plans available. Call for details.
1-800-533-0551

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

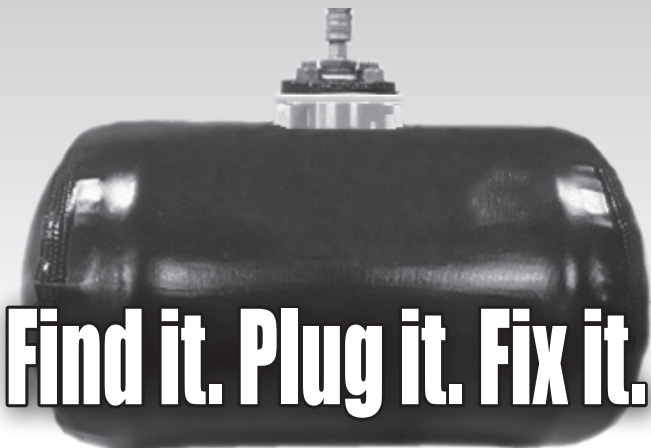
Pipeline/Sewer Cleaning & Maintenance Equipment for Jetters & Jet/Vacs



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

Petersen Products Company

Engineering Solutions



Find it. Plug it. Fix it.

Call now: 1-800-769-4973 www.PetersenProducts.com

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

Ranger Design announces new members of leadership team

Joey Trombino joined Ranger Design and will replace Eric Pesenti as the new chief financial officer.



Joey Trombino



Catalin Caracas

Trombino has 30 years' experience in the financial and accounting fields, and has worked in different sectors, including manufacturing, software and mining. Pesenti will stay with Ranger Design in other capacities. With 18 years' experience in operational and strategic initiatives to enhance revenue growth, Catalin Caracas was named vice president of operations and human resources.

NozzTeq under new management

NozzTeq is under new management at a new location in Peru, Illinois. The company will continue to offer its long-lasting cleaning nozzles and Lumberjack cutters, in addition to providing service.

RIDGID celebrates 25 years in pipe inspection

RIDGID, part of Emerson's Professional Tools portfolio, is celebrating a major milestone in the industry: a quarter century as a leader in pipe inspection systems. RIDGID launched its first line of inspection cameras in 1996, allowing professionals to more easily diagnose in-ground pipe issues.

Champion Plumbing announces NuFlow partnership

Champion Plumbing announced an exclusive partnership with NuFlow Technologies and will be the only certified NuFlow installer and distributor in Oklahoma. Champion Plumbing plans to have three NuFlow-certified technicians available by the end of March 2021.

Neighborly welcomes Roger Chacko as new officer

Neighborly appointed Roger Chacko as its new chief strategy and marketing officer. Chacko brings over 25 years of global brand building, corporate strategy and growth catalyst experiences. Immediately prior to joining Neighborly, Chacko served global fitness chain Planet Fitness as its chief commercial officer. Chacko earned his doctorate degree in management from Oklahoma State University and his master's degree in management from the Massachusetts Institute of Technology.

WJTA releases second edition of best practices

The WaterJet Technology Association released the second edition of *Industry Best Practices for the Use of High Pressure Waterjetting Equipment (WJTA Orange Book)*. The 2021 edition includes extensive revisions and updates to safety practices for the use of manual and robotic high-pressure waterjetting equipment. New, detailed full-color images and photographs have been added to illustrate safety practices, equipment, operations and personal protective equipment.

Link Mfg. acquires assets from Hadley Products

Link Mfg. announced it has finalized an agreement acquiring valve and suspension control product lines and related expertise from Hadley Products. A manufacturer and supplier to commercial truck, bus, RV, military and specialty vehicle markets since the 1940s, Hadley's well-known brands include its SmartValve Electronic Height Control System and Smart Air Management System. As part of Link's investment, several key staff will be transitioning from Hadley to the Link team. Link will also obtain the rights to Hadley's dynamic air suspension control technology that improves aerodynamics, reduces rolling resistance and increases tractive performance by precisely balancing a vehicle's weight at speed. Hadley's entire portfolio of legacy mechanical height control valve business is also being procured by Link in the transaction. **c**



PLUMBING EQUIPMENT

SERVICE/REPAIR & SALES

23011 Moulton Parkway Suite A-3 • Laguna Hills CA 92653

FAST TURN AROUND

949-595-0340

www.thesewercameracenter.com

WE DIAGNOSE YOUR EQUIPMENT FOR FREE

SERVICE & REPAIR ALL BRANDS

- SEWER CAMERAS • LOCATORS
- JETTERS • LEAK DETECTION

NEW SYSTEMS



RIDGID ROD REPLACEMENT



WEQ

WASTEWATER EQUIPMENT FAIR

Outdoor Equipment Demonstrations
York, Pennsylvania
 June 22-23, 2021



**FREE TO QUALIFIED
 INDUSTRY PROFESSIONALS!**

Confirmed York, PA Exhibiting Companies:

A&H Equipment
 Allan J. Coleman Co.
 Bald Eagle Pellet Co.
 BioSafe Systems, LLC
 Bortek Industries, Inc.
 Bucher Municipal North America
 Duracable Manufacturing Co.
 Electric Eel Mfg.
 Enz USA Inc.
 GapVax, Inc.
 General Pipe Cleaners,
 div. of General Wire Spring

Harben, Inc.
 Imperial Industries, Inc.
 ISG Rents
 ITI Trailers & Truck Bodies, Inc.
 KEG Technologies, Inc.
 Keith Huber Corporation
 Logiball, Inc.
 National Vacuum Equipment, Inc.
 Picote Solutions
 Pik Rite, Inc.
 Premier Tech Water and Enviro.
 Prime Resins

Prokasro Services USA, Inc.
 SAERTEX multiCom LP
 Sewer Equipment
 SewerProShop, LLC
 Super Products LLC
 Tri State Environmental Svcs, LLC
 TruGrit Traction Inc.
 TRY TEK Machine Works, Inc.
 Vac-Con, Inc.
 Vivax-Metrotech Corp.
 As of 04/27/21

Future Locations and Dates:



Nashville, TN
 Sept. 14-15, 2021



Jacksonville, FL
 Jan. 12-13, 2022

Register for FREE online at:
weqfair.com

PRODUCT SPOTLIGHT

PROFILER PROVIDES A COMPLETE PICTURE OF A PIPELINE

By Craig Mandli

Camera systems are terrific tools to locate issues in piping systems, but they can't give you a full picture of the inside of a pipe. That's why Aries Industries has introduced the Laser Profiler, a video inspection solution offering speedy diagnoses of the condition and ovality of pipelines.

Able to analyze pipes from 6 to 96 inches, the Laser Profiler connects to Aries Industries' Pathfinder and Badger transporters to inspect and provide immediate video results. Integrating with a variety of Pipeline Assessment Certification Program software, the device quickly verifies the condition of existing, new or relined pipe.

"During the research and development phase, we examined the competition in order to develop a product that would remove the most common measurement errors and provide the most accurate laser profiling," says Jim Kraschinsky, vice president of sales for Aries Industries. "We tested our profiler in various pipe sizes and materials to verify its functionality in all possible conditions."

The Laser Profiler detects and measures ovality, deflection, debris and cavities. Joints, offsets and connections are also detected. When used with advanced data gathering PACP software, the Laser Profiler confirms that installation of new pipe meets ovality specifications.

The device's data reporting options can be customized for descriptive and comparative needs. Its LED lighting can be adjusted for video imaging, with a controllable iris to optimize image brightness.



"Aries uses a dedicated wide-angle camera lens that profiles up to 8-foot-diameter pipes with a fixed laser on the end of a carbon tube versus mounting the laser on a skid pulled with a chain on pipes larger than 15 inches using a camera with a smaller field of view," Kraschinsky says. "There is no need to access a second manhole to climb down and mount a skid."

According to Kraschinsky, feedback from those using the Laser Profiler in the field has been positive. "The laser ring is strong and bright, making the pipe deficiencies very clear. The Laser Profiler is easy to use with our existing Aries systems, and the final result is approved by our clients. In addition, the setup is easy and quick." 800-234-7205; www.ariesindustries.com

1 // VAC-CON VJ375 AND VJ750 SEWER JET MODELS

Vac-Con recently released the next generation of trailer-mounted sewer jet units under its VecJet portfolio. The VJ375 and VJ750 feature a low-profile silhouette and various configurations. A choice of a single-axle, 375-gallon water capacity or a tandem-axle, 750-gallon water capacity, is available with either gas or diesel engine. Some of the standard features include a rotating hose reel with 500 feet of sewer hose, hydraulic feed and retract with manual swivel, and an electronic, weather-proof control panel. Models are available at 18 gpm at 4,000 psi, 30 gpm at 3,000 psi, or 40 gpm at 2,000 psi with Tier 4 diesel engines. Other options include a range of gas engine configurations, wireless remote, anti-freeze tank system for cold weather use and various lighting options. 904-284-4200; www.vac-con.com

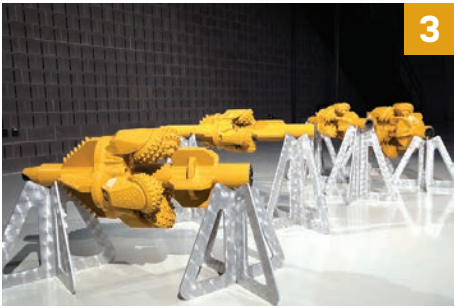




2

2 // MILWAUKEE TOOL MODULAR PIPELINE INSPECTION SYSTEM

The Modular Pipeline Inspection System from Milwaukee Tool features 1080p HD, self-leveling camera heads that can zoom up to four times and pan, making it possible to see more in drainlines than before. The system is built around the M18 500 GB Control Hub, compatible with either the 120- or 200-foot pipeline inspection reels. For viewing, recording, editing and sharing, technicians can choose between the M18 Wireless Monitor for simplicity and maximum durability, or a mobile device with the Milwaukee Pipeline Inspection app for clearer image and faster sharing. Equipped with an 800 x 600 8-inch daylight-readable screen, the M18 Wireless Monitor provides a clear, sharp image whether on a roof or in a basement. 800-729-3878; www.milwaukeetool.com



3

3 // VERMEER ROLLER CONE HOLE OPENERS

Vermeer roller cone hole openers are available in diameters of 8 to 24 inches in 2-inch increments and include a range of customizable options. The cutters feature metal-faced seals similar in style to what is on a dozer or excavator rather than conventional rubber seals. The openers are also built with a precision machining manufacturing process that allows the tool to have equal loading on each cutter. With a wide range of sizes and centralizer options, as well as two different cutter options for hard and medium-hard rock and a multitude of customizable options, Vermeer roller cone hole openers are equipped to meet the specific needs of any job site. 800-837-6337; www.vermeer.com

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

Warthog® Nozzles



WGR SWITCHER

DIRECT HIT®



The C38rs
The safest way to enter an unknown blockage

vwett BOOTH 3623

Visit Us at the **WEO FAIR** YORK, PENNSYLVANIA

Products Manufactured By



Mountable or Portable - Skid/Cart
9 gpm @ 4000 psi

PICOTE Available In Both Locations
LIFE FOR PIPES

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

Buy Online at AllanJColeman.com

We Have RIDGID Parts!

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



You're the lifeline for customers.

The unsung heroes of keeping systems safe and clean so customers can get back to life as usual. Just as you're there to help support your customers, the WWETT Show is here to help and support you and your business...



wwett™ 21

Water & Wastewater Equipment, Treatment & Transport Show

CONFERENCE: **JUNE 29-JULY 1**

MARKETPLACE: **JUNE 30-JULY 2**

INDIANA CONVENTION CENTER

PROUD MEMBER OF:





A STRONGER FUTURE STARTS AT WWETT

✔ Surround yourself with other **wastewater** and **environmental service professionals** who understand your daily challenges

✔ Learn best practices for sustaining and **growing your business** so it can continue to **serve your customers** for generations to come

✔ Uncover the most effective **treatment** processes through educational insights, innovative **tools** and groundbreaking **techniques**

LEARN MORE at wwettshow.com
REGISTRATION IS OPEN

✔ use promo code **AD10**

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

70yr. established sewer & drain cleaning business located in Brooklyn, NY. Consistent volume and repeat service call. Residential and commercial accounts. Exponential potential growth. Equipment included Electric Eel model C, Spartan 300, General Hand Electric, plugs, plates etc. \$550,000. 718-789-0818 (C08)

Underground pipe business for sale in Washington state. Turn-key 4 mini (4k to 15k) excavators, 4 dump trucks, vacuum truck, 5 camera systems, 2 pipe-linings rigs, 1 pipebursting rig, robotic cutter, pipe coating rig, 450 service truck, 2-1 ton service vans, Mini van, Harben jetter, hot water jetter, sonde locators, utility locators, ground penetrating radar system. Been in business 25 years, good reputation, website. Lease option on current location. 253-677-1189. \$650,000 (C06)

Sewer/Drain Cleaning Service company for sale. Turn-key. Strong, loyal customer base for decades. Fast paced. Years of high consistent revenue. Customer list/Warehouse/Office/Service vehicles/Heavy equipment/Supplies included. Option to lease building or buy. Owner retiring. Contact 609-780-4073, please leave message. (C06)

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

COMPUTER SOFTWARE

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

Cleaner
AVERAGE MONTHLY
CIRCULATION REACHES
21,000+
READERS!

DRAIN/SEWER CLEANING EQUIPMENT



2012 Vactor Combo Truck, 2100i Plus, on Mack GU713 chassis. Hydroexcavating and sewer cleaner. New Piranha hose with attachable 3/4 hose for smaller pipe. 101,000 miles, well maintained and serviced.....\$180,000
818-601-6919, AZ C06

JET VACS

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



2005 International Aquatech B-10 Combo Jet-Vac. 1,000-gallon fresh water capacity, 10 cubic yard debris body, 600' of 1" Piranha jetting hose, new boom hose. Roots 624 blower, General Water Pump 80gpm/2000psi. 123,999 miles-truck was used in regular rotation until California emissions halted use. Currently registered "NON-OP" in California, title in hand. 10-speed manual, great tires UNIT IS READY TO WORK!!!\$55,000 OBO
Contact Corey 858-689-4000, CA or corey@affordabledrain.com C06



1996 Ex City, Vac-Con, 12yd, 3 stage fan, work ready, low hours...\$29,980 We can ship worldwide.
800-627-0778 C06

JETTERS – TRAILER



2013 Harben Sewer Jetter Trailer, Kubota diesel engine, 386 hours, 300-gallon tank, 500' of 1/2" hose on hydraulic reel, run dry pump 16gpm/4,000psi, ready to work.\$28,000

Call 219-863-4414, IN or email buschbrosinc@gmail.com C06



The HotJetII® 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. Priced at \$34,995 including freight to the lower 48 states, the HotJet II® is American made using nonproprietary parts for affordability and ease in serviceability making its return on investment truly impressive. Financing available.

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

JETTERS - TRUCK



1996 Ford F800 Pipehunter Workboss 16BP26, 8.3 Cummins, Allison auto, 149k miles, 1,700-gallon poly BEAN PUMP L1118 SC 81 HP, 65 gpm, 2000 psi. 4K hrs.....\$27,500 OBO.
Ken 210-260-1702, TX C06

PIPELINE REHABILITATION



If your looking for a simple CIPP mainline inversion unit, here it is! **"THE TORPEDO"** can handle from 6"-24" liners, load the liner, cuff it on the flange, connect your air supply, and it's on its way, you can load up to 1100 ft of 8" liner or 350 Ft of 24". Mounted on its trailer to go behind your pickup truck. Sold as-is\$35,000 OBO

512-801-8124, TX
check out the YouTube video C06

Complete turn-key Hammerhead pipe-relining equipment in a 2017 Haulmark enclosed 7'x16' trailer. Includes Quicklock drum, wet out table, hot water curing system, vac system, etc. \$33,000. 518-337-9420. NY (C06)



2013 International 7600-Manhole Rehab, 6x4, (41,763 miles, 3,591 hours) - 24' aluminum box body, nose cone inside attic, inside heater for box body, carries 8 pallets of material comfortably, fitted w/35D Spraymate cement mixer and pump by Strong Manufacturing. Additional equipment and accessories which includes: a 1993 trailer mounted 35D Spraymate cement mixer and pump by Strong Manufacturing, a 2009 Hy-Flex trailer mount cement pump and a 2002 sand blaster. This is a self-contained, turn-key operation for manhole/structuring rehab. PRICED TO SELL \$150,000.

Please contact Frank Klima
440-585-5757
frankk@lakecountysewer.com C06

PUMPS

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

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

RENTAL EQUIPMENT

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

SERVICE/REPAIR

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

TOOLS

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

TV INSPECTION



2017 CUES Camera truck with lateral launcher. 1,500 feet of cables. 2 tractors, Lamp II and CPR Pipe Ranger. Only 400 hours on generator. E-450 Van with 16,000 miles, RIDGID sonde locator, very clean no damage.

818-601-6919, AZ C06



CUES CCTV Van Ford E350 Equipco LLC\$55,000 OBO.

360-915-8797, WA
Chad@equipcollc.com
Bruce@ipi-pipe.com C06

Ex-Municipal Equipment for sale. TV inspection units, flusher trucks, vac machines. Too many units to list. Please call or text 1-717-554-1715 for inventory and pricing. PA (C06)

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

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

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)

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)

LIST YOUR EQUIPMENT IN THE PAGES OF **CLEANER!**
www.cleaner.com/classifieds/place-ad

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

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

(702) 527-5100

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

POWERED BY DEWALT

SECON-EXTREME CORDLESS
STARTING AT **\$2,293**

GAS ENGINE PORTABLE
JETTERS PRICES
STARTING AT
\$2,599
EXTREME JET

ASK ABOUT QUANTITY DISCOUNTS
SEWER CAMERA & LOCATOR PACKAGES AVAILABLE

TRAILER JETTERS STARTING AT \$26,999

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

MADE IN THE USA



702-527-5100

WWW.SECONV.COM

NOZZ CAM

STEER • CLEAN • INSPECT • RECORD

CLEAN AND INSPECT WITH THE SAME CREW



- POWERED BY 9 JETS**
- EASY NAVIGATION THRU LATERALS**
- 8" TOUCH DISPLAY**
- 2.5 HOUR BATTERY LIFE**



1-844-285-5770 • USB-USA.COM
INFO@USB-USA.COM

- PLACE YOUR AD ONLINE AT **www.cleaner.com** -

DR DYNAMIC REPAIRS

We Repair:

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

**New & Refurbished Inspection
Equipment For Sale**

Rental Equipment Available
Daily & Weekly Rates

Ask
About
Our
48-Hr.
Turn
Around
Time

**INSPECTION CAMERAS
ARE OUR
ONLY BUSINESS!**

973-478-0893

DYNAMIC REPAIRS

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



Your source for
TVB Products
and Service



3499FB

115' Heavy Duty Cable
Self-leveling Camera Head ♦ 512Hz Sonde
Distance Counter ♦ Color Video Recording
\$2595 Complete

Authorized TVB Tech
Stocking Distributor

InspectorCameras.com
603.267.0400

EASY-KLEEN PRESSURE SYSTEMS LTD.

VANPACK 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



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

Over 30 years building
quality equipment!

HotJetUSA®
OUR MOST VERSATILE JETTER!
FULLY LOADED! PRICE INCLUDES DELIVERY!*

HOTJET II
WITH PAYMENTS
AS LOW AS **\$565.00**
*\$2,995 MSRP SALE PRICE
WITH 20% DOWN O.A.C.

35 HP Vanguard Engine • 10GPM @ 4,000 PSI
Cleans 2-12" Drains with Hot OR Cold Water
*Delivery to lower 48 States Only - CALL FOR DETAILS

1-800-213-3272
www.hotjetusa.com

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

51T Trailer Jetter

20 GPM @ 4000 PSI
76 HP Kohler EFI
FREE
Shipping/Delivery
FREE
Reaper Nozzle

**AMERICAN
JETTER.COM**
866-944-3569

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

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

• 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

LIVE! LOCAL! FREE!
LIVE OUTDOOR DEMONSTRATIONS & EQUIPMENT EXHIBITS

Brought to you by: COLPublishing

866-933-2653 • www.weqfair.com



Cua Claws

A Simple Solution for Slippery PVC Pipe - **20 Years of Service**
We resurface all makes of steel transport wheels

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

Superior[®] SMOKE

Find Leaks & Sources of Odor

Fast • Inexpensive • Easy



Superior 5E Electric Smoker



Smoke Candles SealPacs

SuperiorSignal.com/Cleaner

THE "ORIGINAL" LIQUID SMOKE



Turbo Fog M45:

- Versatile
- Light Weight
- Compact
- Creates Dense Smoke



Use code CLE21 for 10% OFF your next order

www.turbo-fog.com • 1-800-394-0678

Professional-Grade Drain Cleaning Machines, Cables & Accessories



Drain Cleaning Machines

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

Cables

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



COAST MANUFACTURING

www.coastmanufacturing.com
541.684.0743

COMPANIES NEED

Fresh Content

TO STAY RELEVANT...
LOTS OF IT.

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

That's why you need COLE Media.

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

COLEmedia

800.257.7222

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

RAT OUT YOUR ROOT PROBLEMS

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

Interchangeable heads: chain rotor or cable rotor.

Simplified service means extra uptime.

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

ROOT RAT NOZZLES
Patented
Made in USA • www.rootrat.net

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



CUES PRE-BUILT PIPELINE INSPECTION VEHICLES

Does this sound like you?



Piqued your interest?
Scan here to learn more!

 **CUES** 



- Did your current contract expand, requiring you to expand your resources quickly?
- Were you awarded a contract that starts in short order and you need an inspection vehicle now?
- Do you have additional funds at the end of the calendar year and want to reinvest in your CCTV fleet?
- Does the City want to start a new inspection program or increase inspection capability now?
- Does the City have budget money available and need a new pipeline inspection vehicle before the end of the fiscal year?
- With this new urgent job prospect, we need another inspection vehicle now!



800.327.7791

salesinfo@cuesinc.com | www.cuesinc.com 



GapVax[®]

**QUALITY AND
PERFORMANCE
COME STANDARD**

#BESTTRUCKSINTHEBUSINESS

AIR MOVERS

HYDRO EXCAVATORS

JETTERS

COMBO JETVACS

RECYCLE JETVACS

SKID MOUNTED
VAC UNITS

PARTS
& ACCESSORIES

 **PARTSEXPRESS**

NEW G7
JETTER



WEQ
WASTEWATER EQUIPMENT FIRM

JUNE 22-23
YORK, PA

CALL TODAY
FOR A DEMO

888-442-7829
JOHNSTOWN, PA

281-884-8658
LA PORTE, TX

GAPVAX.COM

LET'S GET SOCIAL



MACHINES
AS THAT WORK
HARD
AS YOU DO



THE NEW **TRAVELER 3.0**



UPGRADED
CAMERA HEAD



ROBUST
WATERPROOF
CONNECTORS



MORE
STABLE
WIFI
CONNECTION



SPARTAN TOOL



INTERCHANGEABLE
CAMERA HEADS

STRONGER,
MORE DURABLE
PUSH ROD



NEW
SLIPRING &
ENCODER



IMPROVED WHEELS



The convenience and portability of the Traveler, with newly engineered interior components, push rod, and camera head.
The Spartan team knows you need tools you can depend on. That's why we designed and engineered the Traveler 3.0 inspection camera to meet your needs. We kept the Traveler shape you know, but rebuilt the components to withstand the rigors of the job. With an improved push rod and upgraded interchangeable camera heads, the Traveler 3.0 will be your new favorite tool.

SPARTANTOOL.COM
800.435.3866