

PAID ADVERTISEMENT

Cleaner®

FOR DRAIN AND PIPE CLEANING,
INSPECTION AND REHABILITATION
PROFESSIONALS



**ROAD-READY
JETTERS:**
THE VM4008H
MOUNTS EASILY TO
YOUR VAN FOR
ON-THE-GO USE



MADE WITH PRIDE
WE CREATE AND TEST
OUR PRODUCTS THE
OLD-FASHIONED WAY:
ONE AT A TIME

VAN MOUNT GAS POWERED 8.2
GPM, 4000 PSI COLD WATER
SEWER AND DRAIN JETTER



VISIT OUR WEBSITE FOR MORE
INNOVATIVE SOLUTIONS:
WWW.CAMSPRAY.COM

PRSTD STD
U.S. POSTAGE
PAID
COLE
PUBLISHING INC

ELECTRONIC SERVICE REQUESTED

COLE PUBLISHING INC., PO BOX 220, THREE LAKES WI 54662



WORKING WELL UNDER PRESSURE

Building Drain and Sewer Equipment since 1981.

PRICES GOOD THROUGH MARCH 1ST OR WHILE QUANTITIES LAST



4008H Power Unit
 »8.2 gpm @ 4000 psi »400' x 3/8" Jet Hose
 »800 cc EFI Honda Engine on DC Powered Reel
Just Add A Tank! **\$12,719 plus freight**

3012H Power Unit
 »12 gpm @ 3000 psi »400' x 1/2" Jet Hose
 »800 cc EFI Honda Engine on DC Powered Reel
\$13,159 plus freight

4008H Compact Skid
 »8.2 gpm @ 4000 psi »400' x 3/8" Jet Hose
 »800 cc EFI Honda Engine on DC Powered Reel
 (100 GALLON TANK) **\$14,129 plus freight**

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) **\$14,579 plus freight**



RCJ4008H
 »8.2 gpm @ 4000 psi »200' x 3/8" Jet Hose
 »800 cc EFI Honda Engine on Manual Reel
 (30 GALLON TANK) **\$8,539 plus freight**



LJ4008H
 »8.2 gpm @ 4000 psi »200' x 3/8" Jet Hose
 »800 cc EFI Honda Engine on Manual Reel
 (30 GALLON TANK) **\$8,399 plus freight**



VM4008H
 »8.2 gpm @ 4000 psi »50' x 3/8" Washdown
 »690 cc Honda Engine Hose on DC Reel
 (130 GALLON TANK) **\$13,399 plus freight**



VM3012H
 »12 gpm @ 3000 psi »400' x 1/2" Jet Hose
 »800 cc EFI Honda Engine on DC Reel
 (130 GALLON TANK) **\$13,899 plus freight**



STB3012H
 »12 gpm @ 3000 psi »400' x 1/2" Jet Hose
 »800 cc EFI Honda Engine on DC Reel
\$22,899 Plus Freight



STB4008H
 »8.2 gpm @ 4000 psi »50' x 3/8" Washdown
 »690 cc Honda Engine Hose on DC Reel
\$22,299 Plus Freight

TRAILER MODELS AVAILABLE
 through 25 gpm @ 4000 psi

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

Cleaner®

FOR DRAIN AND PIPE CLEANING,
INSPECTION AND REHABILITATION
PROFESSIONALS

TECH
PERSPECTIVE
/ 40

APART FROM THE CROWD

HIGH 5 PLUMBING WORKS HARD TO DISTINGUISH ITSELF
IN A CROWDED DENVER SERVICE AREA / 14

HITTING RESET

AFTER WORKING FOR THREE DECADES,
MIAMI PLUMBER PREPARES FOR
ANOTHER SERVICE SHIFT / 24

PRODUCT FOCUS

MANHOLE INSPECTION AND REHABILITATION / 52





“ I ABSOLUTELY LOVE THE JM-2900 JETTER! IT’S A DEFINITE GAME CHANGER FOR DRAIN CLEANING!”

**- Mary-Anne Bowcott,
Westcom Plumbing and Gas Ltd.,
The Lady Plumber**

JM-2900™

- Economical gas jet is great for maintenance work
- 389 cc (13 hp) engine with low oil shut off
- 3000 psi, 4 gpm pump with Vibra-pulse®
- 200 ft. capacity hose reel with reel brake
- Rides on two flat-free foam core tires and heavy-duty frame

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

Visit us at WWETT Booth #6561



© 2024 General Wire Spring

The toughest tools down the line.™

General
PIPE CLEANERS

“WE’VE GROWN EXPONENTIALLY BY ADDING PIPE LINING TO OUR TOOLBOX.”

PROfile NuFlow Certified Contractor

According to Christian and Lindsey Rushing of Peerless Plumbing/NuDrain Phoenix, “Pipe lining not only saves people’s homes, but it saves them money and their sanity.”

“We grew our revenue during a downturn in the economy. Pipe lining and sewer repair are always needed.”

As a NuFlow Certified Contractor, they take advantage of trainings for their team.

“We send all our technicians to on-site training. They gain an in-depth understanding and they always come back with new tips and tricks to share with the rest of the team.”

NuFlow’s ongoing support has also been a valuable resource for their company.

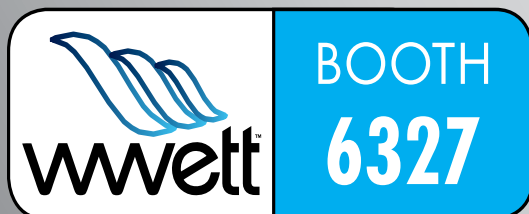
“Honestly, their support is the most valuable resource for us... I’m not just saying that. NuFlow is always there to help us.”

Lindsey highly recommends adding pipe lining with NuFlow Technologies to your list of services.

“100% do it and don’t look back!”

Christian and Lindsey Rushing,
Peerless Plumbing, Phoenix, AZ

SEE WHAT SETS NUFLOW APART.



LIVE DEMOS: Full System Rehabilitation,
Pull in Place Installation, & UV Lining
NEW PRODUCTS & EQUIPMENT

nuflow
WE FIX PIPES

www.nuflow.com
866-430-2134

CONTENTS

14 COVER STORY: APART FROM THE CROWD

High 5 Plumbing works hard to distinguish itself in a crowded Denver service area. // By Ken Wysocky

FEATURES

24 PROFILE: HITTING RESET

Joe Jaremko's three-decade career in the trades has taken him in many different directions, and he remains as committed as ever as he prepares his company for another service shift. // By Giles Lambertson

DEPARTMENTS

8 FROM THE EDITOR: LOSING FAITH

Statistics show more young people are questioning the value of college, creating an opportunity to showcase the benefits of a trades career. // By Kyle Rogers

10 @CLEANER.COM

Be sure to check out our exclusive online content.

32 BETTER BUSINESS: HEALTHY CULTURE

Consider these five lessons — through the lens of the Titanic disaster — about maintaining employees' well-being. // By Diane O'Connell

36 MONEY MACHINES: POWER SURGE

Vacuum-boosting device helps Texas contractor tackle deep, vertical cleaning jobs. // By Ken Wysocky

40 TECH PERSPECTIVE: EASY POWER

Advanced lightweight aluminum skids and nozzles provide superior cleaning with significantly less power, psi and water requirements. // By Del Williams

48 SAFETY FIRST: COLD AND CONFINED

Dangers to watch out for and how to stay safe when cleaning confined spaces in freezing conditions. // By Rick Pedley

52 PRODUCT FOCUS: MANHOLE INSPECTION AND REHABILITATION

// By Craig Mandli

58 CASE STUDIES: MANHOLE INSPECTION AND REHABILITATION

// By Craig Mandli

60 PRODUCT NEWS

Spotlight: UV curing system gives operator complete control. // By Craig Mandli

63 INDUSTRY NEWS

JANUARY 2024



ON THE COVER // It's not easy to stand out in a service area like Denver, Colorado, with more than 1,800 registered plumbers, but High 5 Plumbing is trying its best to do so and largely succeeding. After starting in 2012 with five full-time employees, the company is now up to a staff of 42 and for 2023 was on pace to reach nearly \$10 million in sales. "We're not your traditional plumbing company," says owner Levi Torres. "If everyone does things one way, we tend to do it another way. I need to make sure people notice us and choose High 5 Plumbing." (Photography by Carl Scofield)



36



40



24

coming next month: February 2024
focus: WWETT Show Issue, Field and Office Technology

Profile: The Family Plumber in Los Alamitos, California // Money Machines: A jetter for difficult access areas
// Money Manager: Tax credits to pursue

INSPECT SMARTER

Overwhelmed by your sewer inspection workload? Don't be. Our platform boosts productivity, automates workflows, and delivers world-class decision support.



DOUBLE DOWN ON YOUR INSIGHT



Envirosight inspection systems integrate seamlessly with WinCan, the world leader in sewer asset management, analytics and AI. Together, Envirosight and WinCan deliver an assessment technology platform with innovative capabilities and enhanced workflows that bridge the gaps between inspection crews, data experts and managers.



Part of the  iPEK solutions platform

See how our solutions work together. Schedule a field demo by scanning the code or visiting envirosight.com/demo
















Ad-9-15-ES-WC-US-0002



















(888) 936-8476



©2023 Envirosight

ADVERTISER INDEX

| | |
|--|--------|
|  NORTH AMERICA When Quality Matters | |
| A.R. North America, Inc..... | 30 |
| ALLAN J. COLEMAN SINCE 1905 | |
| Allan J. Coleman Co..... | 35, 47 |
| American Jetter | 62 |
| Arctic Blaster, Inc..... | 62 |
| ARIES | |
| Aries Industries..... | 27 |
| BLACKHAWK | |
| Blackhawk Tech..... | 61 |
|  CAM SPRAY | |
| Cam Spray..... | 29 |
|  WINNELSON CENTRAL OKLAHOMA | |
| Central Oklahoma Winnelson...59 | |
|  COAST MANUFACTURING | |
| Coast Manufacturing..... | 22 |
|  CUES | |
| CUES, Inc. | 37 |
|  DURACABLE | |
| Duracable Manufacturing Co....31 | |
| Dynamic Repairs | 62 |
|  EASY-KLEEN PRESSURE SYSTEMS LTD. MANUFACTURER OF HIGH PRESSURE CLEANING EQUIPMENT | |
| Easy-Kleen Pressure Systems Ltd. | 57 |
|  ENVIROSIGHT | |
| Envirosight LLC..... | 5 |
|  EPL SOLUTIONS Thinking Ahead | |
| EPL Solutions, Inc. | 49 |
| Flow Expo Trade Show | 55 |
|  FORBEST | |
| Forbest Products Co..... | 57 |
|  GAPVAX | |
| GapVax, Inc..... | 67 |
|  GENERAL PIPE CLEANERS | |
| General Pipe Cleaners, div. of General Wire Spring..... | 2 |
|  HOTJET USA | |
| HotJet USA..... | 62 |
| Hurco Technologies, Inc..... | 46 |

| | |
|--|---------|
|  IPP | |
| IPP Solutions, LLC | 45 |
|  KEN-WAY | |
| Ken-Way Corporation..... | 30 |
|  LANSAS PRODUCTS | |
| Lansas Mfg. by Vanderlans & Sons Inc..... | 18 & 19 |
| Masterliner Incorporated..... | 33 |
| MRP | |
| Milwaukee Rubber Products, Inc. | 44 |
|  MyTana | |
| MyTana LLC..... | 43 |
|  nuflow | |
| NuFlow Technologies..... | 3 |
| OBIC..... | 41 |
|  PEARPOINT | |
| Pearpoint (USA) | 23 |
|  PICOTE | |
| Picote Solutions..... | 49 |
| Pipeline Renewal Technologies..... | 17 |
|  RATECH | |
| Ratech Electronics, Ltd. | 47 |
| RauschUSA..... | 11 |
| Reline America..... | 13 |
| RNV A DIVISION OF TRUEBITE, INC..... | 30 |
|  RODDIE | |
| Roddie Inc..... | 22 |
|  ROOT RAT NOZZLES | |
| Root Rat..... | 61 |
|  ROOTX | |
| RootX..... | 8 |
|  SPARTAN TOOL | |
| Spartan Tool LLC..... | 68 |
|  FIT TOOLS | |
| T&T Tools, Inc..... | 59, 62 |

| | |
|---|--------|
|  THE CABLE CENTER | |
| The Cable Center | 39, 55 |
| Triton HydroTools, LLC..... | 42 |
|  TROJAN WORLDWIDE INC. | |
| TROJAN WORLDWIDE INC..... | 51 |
| TruGrit Traction Inc..... | 62 |
| USB-USA..... | 38 |
|  VAC-CON www.vac-con.com | |
| Vac-Con, Inc. | 9 |

| | |
|---|------------|
| Vector Manufacturing..... | 21 |
|  VIVAX METROTECH | |
| Vivax-Metrotech Corp..... | 51 |
|  WinCan | |
| WinCan | 7 |
| WWETT Show | 12, 34, 66 |
| Classifieds | 64-65 |

Cleaner

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

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

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

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

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

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

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

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

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

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

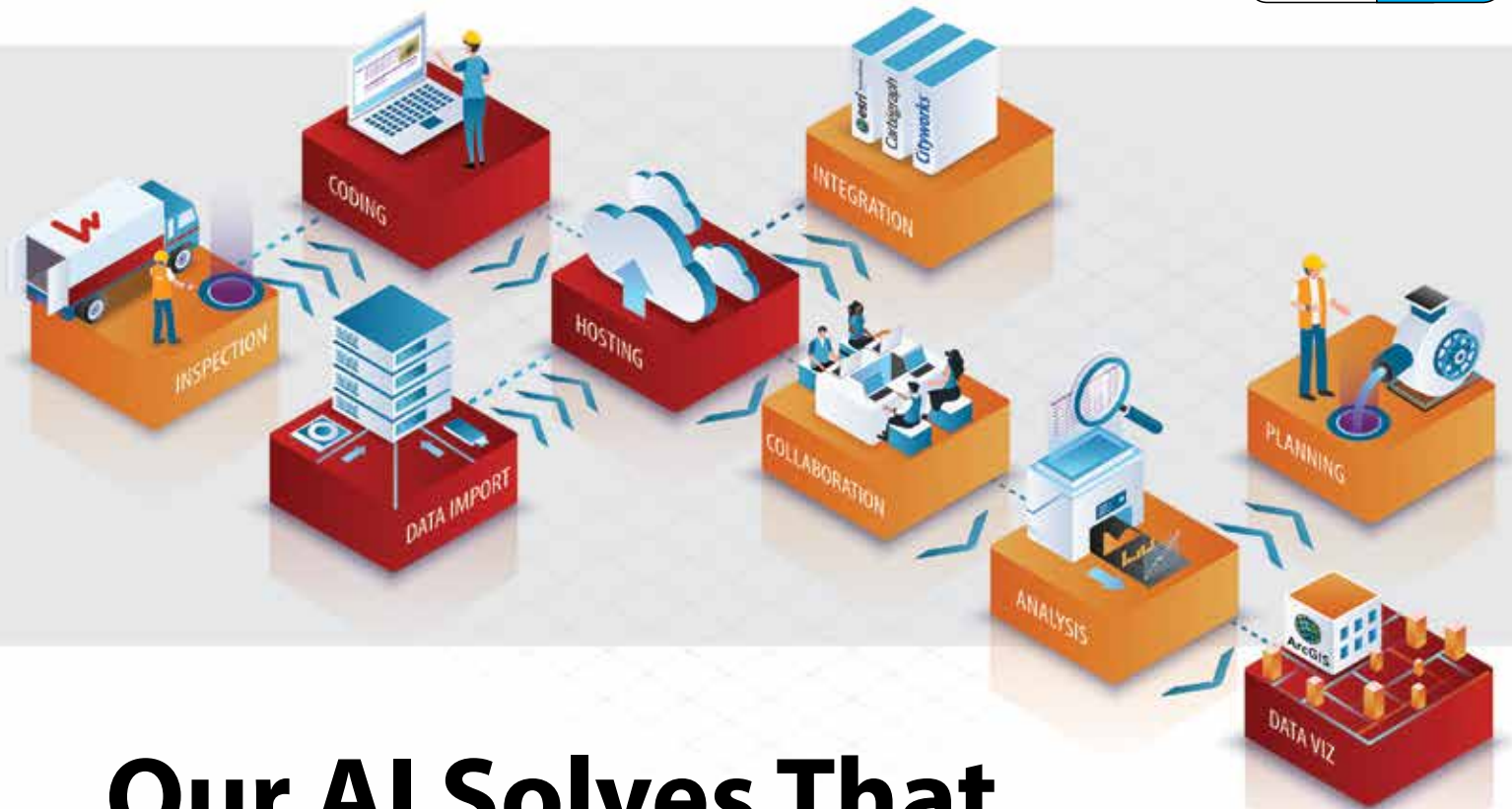
© 2024 COLE PUBLISHING INC.
No part may be reproduced without permission of the publisher.




KAYLA BISNETTE JIM KOSHUTA

cleaner.com

Sewer Insight Can Be Complicated.



Our AI Solves That.

Sewermatics applies powerful AI to the biggest challenges in sewer inspection and rehab. It works seamlessly with the WinCan ecosystem you know and trust—delivering AI-powered results and actionable insights that integrate with your team and processes.

Sewer upkeep is full of challenges. Our AI solves more of them.



Automatic Coding. Upload pipe and manhole footage, get back coded inspections. It's that simple. And WinCan has the world's largest user base, so our AI can grow faster.



Team Collaboration. Different jobs, different departments, one goal. Using AI, Sewermatics optimizes team scheduling and workflow hand-offs so you get more done.



Data Translation. Data siloed across different applications, formats and standards? Let our AI fix that. With merged data, you'll get broader insights.



Map-based Visualization. More data, more headaches? Not with AI from Sewermatics. View real-time heatmaps, spot hidden trends, and drill down to root causes.



Rehab Planning. Save days of effort and guesswork. Our AI builds smart, system-wide rehab plans that factor in defect type, proximity, severity, criticality and repair cost.



Sewermatics

wincan.com/sewermatics



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

LOSING FAITH

Statistics show more young people are questioning the value of college, creating an opportunity to showcase the benefits of a trades career

A **MERICANS ARE LOSING FAITH** in the value of college.

That was the headline of an article I read recently in *New York Times Magazine*. There were many different angles to it, but something that stood out to me in particular were the results of various polls cited in the article. In the early 2010s, public opinion polls largely showed a positive feeling about college. In one survey, 74% of young adults said a college education was “very important.”

That has since shifted. That same poll now has 41% of young adults saying a college education is “very important.” The trend is reflected

in the number of students attending college as well. According to the article, in 2009, 70% of that year’s class of high school graduates went straight to college, the highest percentage ever. It stayed at that level for a while. As recently as 2016, 70% of high school graduates were still going straight to college. That number has now dipped to 62%.

A major factor is the burden of the cost of college. The article states that since 1992, the price has almost doubled for four-year private colleges and more than doubled for four-year public institutions, even after accounting for inflation. More students have had to use loans to cover those rising costs. In 2007, total student debt was at \$500 billion. Today it stands at \$1.6 trillion.

I lead with all this to make comment on the workforce issues in the trades, which I’ve written about in the past. The challenge of finding quality workers and reaching the younger generations is regularly talked about by companies in trades industries, like plumbing and drain cleaning. Often talked about alongside that is the public perception of such jobs as lesser “dirty” work with four-year college being the better career path.

But what these statistics tell me is that four-year college is no longer on a pedestal for people as the ideal pursuit following high school. More people are questioning its value and perhaps considering alternative options. That is basically the origin story for Levi Torres, owner of High 5 Plumbing in the Denver area, one of the companies featured in this month’s issue. Torres grew up around the industry, working for his father’s plumbing company as a teenager, so he had early exposure. Still, after high school he decided to attend college. Torres lasted one semester.

“I saw how much money I was paying to go to college compared to how much I could make as a plumber and realized that it would be much more beneficial to become a plumber,” Torres says.

He returned to working for his father, then another company, and eventually established High 5 Plumbing. Now he’s a successful entrepreneur.

There’s opportunity here for companies in the trades struggling to produce a reliable pipeline of potential employees. If you can find ways to get into high schools and show students the possibilities of a trades career, they are maybe more open to it than ever before. College and the financial burden it can bring isn’t as attractive. Today’s students are considering more options.

Enjoy this month’s issue. **c**

vwvett BOOTH 4162

ROOTX® GREASE-X®

GET THE F.R.O.G. OUT
[FATS. ROOTS. OIL. GREASE]

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

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

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

ROOTX

THE RIGHT SOLUTION. RIGHT NOW.



VAC·CON

www.vac-con.com

At Vac·Con we believe in providing our customers quality, reliable machinery for their municipal, industrial, and utility markets worldwide.

From day one, our mission has been to design and build the most powerful and reliable machines in the industry, pushing the envelope year after year with unrivaled innovation. Stop by our booth and see why this year will be no different.

JAN 25-27 • 2024



BOOTH
1637

@Cleaner.com

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



RESEARCH

German Institute Publishes New CIPP Findings

More than two decades of research and tests are behind a new paper about CIPP recently released by IKT - Institute for Underground Infrastructure in Germany. A comprehensive look at the barriers and difficulties that may arise during CIPP sewer rehabilitation work and ideas to reduce those obstacles and risks, the paper is free to download.

>> cleaner.com/featured

OVERHEARD ONLINE

“Pick an event that sees you as a partner, not just a business writing a check.”

— *Have You Considered Sponsoring a Local Event to Boost Exposure?*

>> cleaner.com/featured

THAT SMELL

Conquering Sewer Odor Service Calls

In this online exclusive, regular contributor Anthony Pacilla provides some guidance for confidently tackling sewer odor issues and ensuring the comfort and satisfaction of your customers. >> cleaner.com/featured



GOOD REP

Managing Your Company's Online Review Profile

In the digital age, a company's online reputation matters more than ever. If you are guessing and not paying attention, that reputation can change on one review. Potential customers frequently turn to the internet to research plumbing and drain cleaning services. It can take only a few bad reviews to turn them off. In this online exclusive, regular contributors Carter Harkins and Taylor Hill discuss how to control your online reviews to maximum benefit. >> 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

 instagram.com/cleanermag

Owl Vision Systems

360° Manhole Camera With HD-4K Video

Flat View or 360° Video of the Manhole
Distance Encoder Records Depth



A Stable Video Platform

Descends up to 21 feet

Manual Cable Lowering Option Available

Descends up to 300 feet

Specially Designed
MACP Interface by



minCAM

Compact Push Cameras With Advanced Features

Models Designed for the Smallest Entries
to the Biggest Jobs



minCord 5
1/2 to 3 inches
50 feet of cable



mc50
3 to 16 inches
200 feet of cable



mc30
1.5 to 8 inches
100 feet of cable



mc80
3 to 16 inches
400 feet of cable



minCAM360
4 to 16 inches
300 feet of cable



Rausch Electronics USA
1686 Opportunity Ave
Chambersburg, PA 17201

Phone: 717 709 1005
Toll Free: 877 Rauschl
Email: sales@rauschusa.com

Sourcewell Contract # 120721-RAU

rausch_{USA}

www.rauschusa.com



Conference: **January 24-26**
Expo Hall: **January 25-27**
Indiana Convention Center



Welcome to the Water & Wastewater Equipment, Treatment & Transport (WWETT) Show! The largest, most immersive showcase of the latest innovations within the wastewater industry. Every year, we bring together industry experts, cutting-edge technologies, and game-changing services all under one roof.

Join us for 90+ expert-led courses, live show demonstrations, hundreds of interactive booths, engaging networking opportunities, and celebrate with thousands of your industry peers!

Prepare to be blown away as you explore the sprawling exhibition floor, where leading companies unveil their groundbreaking equipment, state-of-the-art machinery, and revolutionary solutions. Witness live demonstrations that will leave you in awe as powerful machines tackle the toughest wastewater challenges with ease, pushing the boundaries of what's possible.

But the excitement doesn't stop there! Engage in thrilling discussions with industry experts and thought leaders who are at the forefront of driving change in wastewater management. Uncover insights, exchange ideas, and discover the future of the industry through captivating presentations, panel discussions, and educational sessions.

Networking takes on a whole new dimension at the WWETT Show. Connect with like-minded professionals, forge new alliances, and tap into a vibrant community of wastewater enthusiasts from around the globe. Share stories, challenges, and successes while building relationships that will propel your career and business to new heights.



EXCLUSIVE
DISCOUNT CODE
CST18



EVERYTHING YOU NEED - UNDER ONE ROOF

It's no secret that using multiple vendors inevitably slows a project down. It's simple logistics: the more moving parts, the more chance for distraction, delay, and derailment. That's what sets us apart from all our peers in UV GRP asset renewal: you'll find everything you need from one source.

Successful rehab projects are just **ONE call away!**

866.998.0808



DESIGN + ENGINEER + MANUFACTURE

From concept to creation to delivery, Reline America's US manufacturing facility is your home for all things UV GRP



LINERS + SYSTEMS + EQUIPMENT

One source for materials, installation tech and accessories for higher productivity, efficiency, accountability and less risk



SUCCESS TRAINING + 24/7 SUPPORT

Just one call away whenever you need it, because things requiring help don't always happen during normal business hours



relineamerica.com



116 Battleground Ave | Saltville VA USA

 #4142

APART FROM THE CROWD

HIGH 5 PLUMBING WORKS HARD TO DISTINGUISH ITSELF
IN A CROWDED DENVER SERVICE AREA

// By Ken Wysocky



» John Peloquin and Dominick Calvo of High 5 Plumbing wheel in a new water heater during a service call.

Photography by Carl Scofield

Whether it's technicians giving customers "high-fives" after service calls, hiring a business coach, offering technicians online and virtual reality training, or technician uniforms that look like baseball jerseys, High 5 Plumbing is not your run-of-the-mill plumbing company.

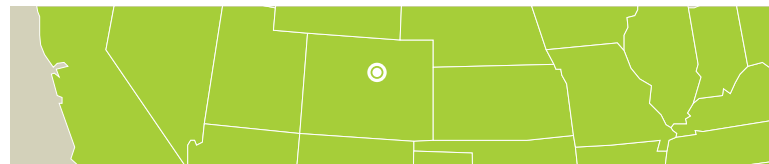
"We're not your traditional plumbing company," says Levi Torres, who established the company in 2012 in Golden, Colorado, a far western suburb of Denver. "If everyone does things one way, we tend to do it another way. The bottom line is that there are more than 1,800 registered plumbers in the Denver area. I need to make sure people notice us and choose High 5 Plumbing."

If the numbers are any indication, plenty of customers are doing just that. By 2016, the company generated around \$1.1 million in gross revenue. By 2022, revenue jumped to around \$7.1 million. And for 2023, the company was on pace to reach nearly \$10 million in sales, Torres says.

Furthermore, the company started out with five full-time employees and now employs 42 people. And the growth is even more impressive when one considers that the company's innovative marketing and branding tactics, a big factor in its success, were developed by Torres and his wife, Cassi, despite neither having any formal marketing training.

"We definitely feel like it's something we're pretty good at," Torres says. "We have a pretty good eye for branding."

That creative spark is reflected in the company's name. During a brainstorming session, Cassi came up with a name that Torres liked.



High 5 Plumbing

GOLDEN, COLORADO

OWNER Levi Torres

FOUNDED 2012

EMPLOYEES 42

SERVICES Residential service/repair plumbing, drain cleaning, jetting, camera inspections

SERVICE AREA Metro Denver area

WEBSITE www.high5plumbing.com

"I told her, 'That's a good one — give me a high-five,'" he recalls. "Then we both thought, 'Wait a minute — how about High 5 Plumbing?'"

That also led to the company's slogan: "Every call ends with a high-five."

Technicians also ask customers for permission to take selfie photos of them getting high-fives from customers; the company posts the photos on social media platforms.

"We have thousands of photos of our technicians giving customers high-fives," Torres says.

✓ High 5 Plumbing owner Levi Torres says maintaining a team-centric culture at the company is important to him. "If everyone is sold on your company's mission, they'll tend to do the right things for the business because they believe the business will take care of them in the long run."

GAMING INTO TRAINING

Virtual-reality training for plumbing technicians sounds about as plausible as clogproof toilets.

But at High 5 Plumbing, it's a reality as apprentices don headsets every week and learn how to make plumbing repairs — even though they're nowhere near a kitchen or a bathroom.

About two years ago, the company invested roughly \$2,000 in a virtual-reality software program called Interplay Learning. Coupled with headsets from Meta, it makes training more like gaming — something fun that technicians actually look forward to, says owner Levi Torres.

The bottom-line benefits: Significantly shortened training time. Plumbers make more money earlier in their careers, which boosts overall company revenue — and employee retention. And better technician engagement during training.

"We can get someone with zero plumbing experience and give them a headset that takes them into a fake bathroom, where they can figure out why a toilet is making an odd noise, for example," Torres explains. "The nice thing is they can get trained without breaking a toilet or flooding someone's bathroom. Furthermore, they can log into the cloud-based app at home and do training there instead of on business hours. It has drastically changed how we train our technicians. It's like a video game to them."

Torres says that the program helps him produce licensed residential plumbers in about 18 months, which is about six months faster than usual.

"If I have, say, three people in the program now, I know I'll have three licensed plumbers producing revenue by the end of a year," he says. "They'll start making good money significantly faster if they're truly committed to the program."

While virtual training doesn't completely replace in-the-field training, it speeds up the learning process because when apprentices ride with technicians, they run into problems they've probably already handled during the virtual training, Torres says.

However, it takes a while for the training to yield financial benefits, Torres warns, noting it took about a year before he saw results.

"You have to realize it's an investment," he says.

The company gives apprentices six to 10 hours of paid virtual training per week, which motivates them to get trained faster. And they only get access to virtual training after they complete a stint as a warehouse apprentice, which involves pulling and delivering repair parts, and then graduate to being a field apprentice.

"After that, the only thing that slows them down from advancing is lack of knowledge," Torres says. "The ultimate goal is to graduate to an installer, because then they can earn performance bonuses. And the more Interplay Learning you do, the better your chance is of advancing faster. Some guys go from being a field apprentice to an installer in as little as 60 days. If you give people the right tools, they'll use them to succeed."



⚡ Dakota Nesruth in his Ford Transit van, organizing tools and gear for the day's jobs. Each High 5 Plumbing team member has their own van that they are responsible for.

GETTING STARTED

Torres has deep roots in plumbing. As a teenager, he worked for his father, Leonard Torres, who owns Torres Plumbing & Heating in Alamosa, Colorado. After attending college for one semester, he decided to work for his father instead.

"I saw how much money I was paying to go to college compared to how much I could make as a plumber and realized that it would be much more beneficial to become a plumber," Torres explains.

"I SAW HOW MUCH MONEY I WAS PAYING TO GO TO COLLEGE COMPARED TO HOW MUCH I COULD MAKE AS A PLUMBER AND REALIZED THAT IT WOULD BE MUCH MORE BENEFICIAL TO BECOME A PLUMBER."

LEVI TORRES

At around age 27, Torres went to work for another plumbing company. And after a couple years there, he left to establish High 5 Plumbing after he wasn't allowed to take a day off.

"They wouldn't let me take a day off because I didn't have any personal days left, so I quit," he says. "After that, it seemed like starting my own

business was the next natural step in my career.”

The company initially focused on plumbing for new construction and remodeling projects, working primarily for general contractors. But in late 2015, Torres decided to head in a different direction because the company had accumulated more than \$300,000 in past-due invoices for work already completed.

“We spent the last three months or so of 2015 essentially being bill collectors,” he says. “Then in 2016, we switched to doing only service and repair plumbing. We essentially started a new company.”

Torres says he “fired” all of the general contractors the company worked with except for five businesses that paid on time. Those five companies helped High 5 maintain some cash flow until the company was more firmly established in its new market.

“It was nerve-wracking because we gave up a lot of revenue,” Torres says. “But it didn’t take us long to see great results. I wasn’t that worried because I was very confident in my abilities.”

MAN WITH A PLAN

Along with the new business focus, Torres decided to invest in some business coaching from the Blue Collar Success Group, a training and business development organization.

“I wanted to restructure the ‘new’ business the right way, from the very beginning,” he says. “That way, we’d have systems and processes in place so we wouldn’t be overwhelmed by rapid growth. A lot of times when companies grow, headaches come along with it. But when you have processes and procedures in place, you can avoid those headaches.”

The BCSG provided guidance for things such as office and field operations, inventory management and employee training. For example, it provided an operations manual that spells out exactly what technicians need to do in order to be successful.

“The result is there are no gray areas — no one wonders what they need to do to succeed,” Torres says. “It’s the same for our staff that takes phone calls and dispatchers. Pretty much everyone has an operations manual for their position.”



High 5 Plumbing runs mostly Ford Transit service vans outfitted by Mastercraft Truck Equipment (a company owned by the Reading Truck Group) with Adrian Steel trade shelving systems.

The industry leading system for lateral and mainline CIPP

SpeedyLight+

- LED-based UV light cures faster with less energy
- Relines verticals, transitions, and 90° bends
- No styrene, mixing or working time considerations
- Interchangeable heads for 2"-24" lines, 328' reach



**Pipeline
Renewal**
TECHNOLOGIES™

Complete training and support • Unmatched knowledge base

We Help You Fix Pipes www.PipelineRT.com • (866) 936-8476



ONLINE TRAINING

Through the BCSG, Torres also learned about Trainual, an online tutorial program. Technicians can watch repair videos, take quizzes and find answers to plumbing questions. It also contains tutorials for office staff.

“It’s basically an online depository that offers a way to rapidly train employees,” he says. “If technicians run into problems, they can search Trainual and find answers. As a result, our managers aren’t putting out brush fires all day because techs can lean on the software for answers. This gives our managers more time to pay attention to more important things, like profitability and employee retention.”

Blue Collar worked with Torres to develop the customized training manuals. Employees can either learn by watching, listening or reading.

« Dominick Calvo solders copper fittings to the flexible intake and outflow waterlines for a new water heater installation at a residential property.

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



“We Just Made The BEST Test Plugs Better!”

"It's a really cool system," Torres says. "Not everyone learns the same way, so we've found that if we can hit all three ways that people learn, then we can ensure everyone gets trained."

The company pays about \$4,500 a year for the program, which is a subscription service with fees based on the number of employees who use the system. But Torres says it's worth the expense because employees get trained much quicker.

"It gets them doing things the High 5 way much faster, so it's money well spent," he says. "If an experienced plumber comes in, it takes only about five days before they're out in the field generating revenue. Before we had Trainual for techs, it was a 10- to 14-day training period."

FOR THE TEAM

To create a team-centric culture, Torres posts copies of the company's mission statement and "vital values" all over the company's office so everyone is on the same page.

"If everyone is sold on your company's mission, they'll tend to do the right things for the business because they believe the business will take care of them in the long run," Torres says. "If you invest time and energy into your people to train them and make them better employees, you'll always get a better outcome. If they keep getting better, they'll stick with you."

"A LOT OF TIMES WHEN COMPANIES GROW, HEADACHES COME ALONG WITH IT. BUT WHEN YOU HAVE PROCESSES AND PROCEDURES IN PLACE, YOU CAN AVOID THOSE HEADACHES."

LEVI TORRES

Good equipment also helps support employee-retention efforts. The company runs mostly Ford Transit service vans outfitted by Mastercraft Truck Equipment (a company owned by the Reading Truck Group) with Adrian Steel trade shelving systems.

Trucks carry SeeSnake Mini, MicroReel and standard pipeline inspection cameras from RIDGID; Spartan Tool 100 and 300 cable drum drain machines; Spartan 717 cart-mounted jettors; and Spartan Cadet portable "suitcase" jettors.

UNIFORM APPROACH TO BRANDING

The uniforms that High 5 technicians wear help brand the company and differentiate it from competitors. Each technician gets to design a baseball jersey in three colors: gray for "home" jerseys, black for "away" jerseys and white with pinstripes for an "alternate" jersey.

PIPE PLUGS & PIPELINE TESTING EQUIPMENT



NUCA
We Dig America



Lodi, California
800.452.4902 • 209.334.4115

www.lansas.com

LODI • ATLANTA • HOUSTON • CHICAGO





« Some of the High 5 Plumbing team at company headquarters in Golden, Colorado. The company started with five full-time employees in 2012 and now is up to 42.

“IF YOU INVEST TIME AND ENERGY INTO YOUR PEOPLE TO TRAIN THEM AND MAKE THEM BETTER EMPLOYEES, YOU’LL ALWAYS GET A BETTER OUTCOME. IF THEY KEEP GETTING BETTER, THEY’LL STICK WITH YOU.”

LEVI TORRES

The company name is embroidered on the front of the jersey and the company logo appears on the back.

“It allows them to show their personalities a little bit, plus they don’t have to wear the same thing every day,” Torres says. “They’ve been an absolute hit. And whenever we bring in new technicians and they see the jerseys, they absolutely love it, too.”

To extend the theme, technicians’ business cards look like baseball cards; each technician gets to design their own card.

“One of our guys held a plunger like a baseball bat for his photo,” Torres says. “Those baseball cards are the talk of the town.”

Technicians used to wear typical uniforms: gray button-down shirts with a technician’s name embroidered on the left chest, the company logo on the right chest, and an American flag on the shoulder.

But in 2019, Torres and his wife were watching a Colorado Rockies baseball game and noted how when players lined up on the field during the singing of the national anthem, they looked so professional — like a team.

“So I bought her a couple of Rockies jerseys,” Torres says. “And they looked so good that we thought we might as well use them for our company uniforms.”

The popularity of the jerseys led the company to create High 5 clothing for technicians, from T-shirts to hoodies. The only words on the clothing are “High 5” — no reference to plumbing.

When customers started asking where they could buy High 5

merchandise, the company created a small line of merchandise that it sells on a website separate from the company website. All proceeds go to various nonprofit organizations affiliated with the company’s High 5 Cares charitable-giving program.

“We’ve sold more than 2,300 articles of clothing in 22 states and Canada,” Torres says. “It’s just a cool, uplifting brand.”

BRIGHT PROSPECTS

Looking ahead, Torres envisions more growth for the company, both financially and geographically.

“Within the next 18 months, we plan to open another facility in Colorado and open new facilities in multiple states within the next five years,” he says.

While the plan may sound ambitious, Torres believes it’s totally doable.

“I don’t want to sound cocky, but we have a great track record of setting goals and then hitting them,” he says. “We’re big on vision. Even if we don’t hit our goals within the desired timeline, it’s just a matter of time before we’ll actually achieve them.” **c**

FEATURED EQUIPMENT

ADRIAN STEEL CO.

800-677-2726
www.adriansteel.com

THE BLUE COLLAR SUCCESS GROUP

970-201-2201
www.thebluecollarsuccessgroup.com

INTERPLAY LEARNING

www.interplaylearning.com

READING TRUCK GROUP

800-458-2226
www.readingbody.com

RIDGID

800-474-3443
www.ridgid.com

SPARTAN TOOL LLC

800-435-3866
www.spartantool.com
(See ad page 68)

WATER RECYCLING

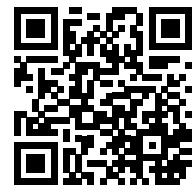

wwett24
BOOTH 4625



**Great for the environment
and for the bottom line**

- Saves thousands of gallons of water in every shift
- Increases productivity by up to **100%**
- Eliminates the need for crews to break down and refill

*See why we are
the superior
combination
sewer cleaner*



©2023 Vactor Manufacturing

VACTOR
2100i

VACTOR.COM





R-8[®]

Pipe Bursting System



See it Work!



RODDIE inc.

- Unit slides apart quickly into two components for easy handling and can be set up vertically or horizontally.
- Puller weight 65lbs. Pulley base 55lbs.
- Hydraulically powered by your tractor, or power unit.
- 1" - 8" pipe replacement,

DIMENSIONS:
14" long by 12" wide
22" high set vertically

50 Sizes of cutting blades
Pipe bursting system

Range: 50'+

Pipe Ram[®]

Cross under Sidewalks & Driveways



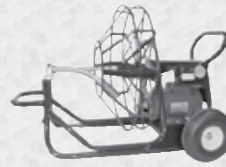
1" - 4" Pipes

888-406-3821

Patent Pending • RoddieUnderground.com

Manufacturing Drain Cleaning Equipment for over 30 years

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



TM750



TM50



TM25

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

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



Various shaped and sized blades



COAST MANUFACTURING

541.684.0743
www.coastmanufacturing.com

"YOU CAN INVEST IN
ALL THE GOOD EQUIPMENT YOU WANT,
BUT AT THE END OF THE DAY,
IT COMES DOWN TO THE
TECHNICIANS WHO OPERATE IT."

JASON KORAN, OWNER
Pipe Masters LLC
HONOLULU (OAHU), HAWAII

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

Subscribe for FREE at cleaner.com



PEARPOINT 

Simple. Fast. Smart.



BOOTH
4504

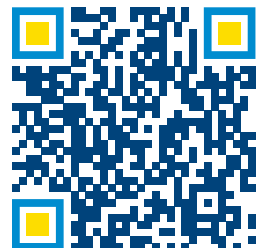


flexiprobe™ P540c
PORTABLE VIDEO INSPECTION EQUIPMENT

www.pearpoint.com

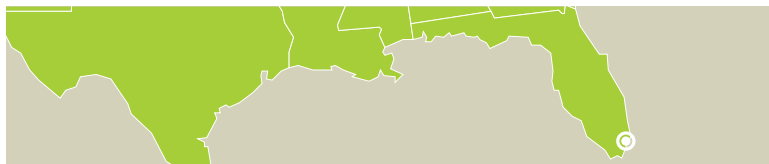
+800.688.8094

pearpoint.sales.us@spx.com





» Joe Jaremko, owner of Arko Plumbing in Miami, at his company shop with two of his work vehicles.



Arko Plumbing

MIAMI, FLORIDA

OWNER Joe Jaremko

FOUNDED 1988

EMPLOYEES 15

SERVICES Drain cleaning, pipe inspection, water fixture installation and repair, water and natural gas pipe installation and repair, hydrostatic tests, backflow prevention, pipe locating, expert testimony

SERVICE AREA Miami metro area

WEBSITE arkoplumbing.com

JOE JAREMKO HAS HAD A VARIED TRADES CAREER, EXPERIENCING BOTH UPS AND DOWNS.

“Always making money, though,” says Jaremko, 62, owner of Arko Plumbing in Miami.

He started plumbing reluctantly, became a journeyman plumber, opened a shop of his own and finally became a court-recognized “expert” in the field. Now he’s sort of starting over once again but is determined to be on top of his game even better than before.

“A year ago, I sat down and made a decision,” Jaremko says. “Should I retire or keep working? I decided I couldn’t part with the company. I get too much satisfaction out of the work. I don’t have to work. I want to work and I’m in a position now that I feel like a parent to my employees.”

The businessman has opened another chapter in his plumbing career.



HITTING RESET

JOE JAREMKO'S THREE-DECADE CAREER IN THE TRADES HAS TAKEN HIM IN MANY DIFFERENT DIRECTIONS, AND HE REMAINS AS COMMITTED AS EVER AS HE PREPARES HIS COMPANY FOR ANOTHER SERVICE SHIFT

// By Giles Lambertson

Photography by Chris Tilley

LEARNING THE TRADE

The Florida native grew up around the trades. Jaremko's father was a general contractor and Jaremko loved to visit job sites, often where four-plex residences were being constructed. Other extended family members were brick masons and electricians. Jaremko liked working with his hands, too, and believed auto mechanics was his calling.

One day his father questioned his son's mechanics focus, drove him down to a structured plumbing apprenticeship program and enrolled him. Jaremko liked it well enough to excel in the program — his father must have known his son pretty well — and he now looks back with satisfaction at the experience of learning from master plumbers. He was a union apprentice and an eager one.

"Every time I learned something I'd look forward to using the skill and learning something else," Jaremko says.

The work was mostly in high-rise buildings, but Jaremko

ultimately gravitated to residential subdivision work, helping build custom and tract homes in the Miami area. Then he moved to service work as a plumber for General Plumbing.

"I used to think I was a plumber until I went to work for a service company," Jaremko says.

In 1988, after three years of "learning a lot" on service calls, Jaremko was ready to take the plunge and open his own business. The move rather surprised him.

"I didn't realize I had an entrepreneurial bug in me, but

"I GET TOO MUCH SATISFACTION OUT OF THE WORK. I DON'T HAVE TO WORK. I WANT TO WORK AND I'M IN A POSITION NOW THAT I FEEL LIKE A PARENT TO MY EMPLOYEES."

JOE JAREMKO



there was just something that would not let me be satisfied working for other people,” he says.

His exit from the service company was not particularly sweet. His employer tried to discourage him from leaving.

“You think it will be easy working for yourself?” he told me. “You’ll find out it isn’t. You won’t last six months.’ Well, here it is 36 years later and I’m doing fine. It was his pushback that challenged me.”

A bit of serendipity came into play at that moment, too. As Jaremko was weighing whether to start a business or not, a celebrity death helped resolve the situation. A high-profile Miami personality, Don Aronow, who built the Cigarette Racing boats and raced them in venues around the world, was murdered.

“After Aronow died, my partner and I went to snake out the drainlines at Aronow’s house,” Jaremko says. “We found a huge diamond ring in the drain.”

◀ Arko Plumbing is proactive about theft prevention measures. Tools that might be taken in a theft are locked in RIDGID containers bolted to the floor of service vehicles.

✓ The team at Arko Plumbing includes, from left, Alejandro Naranjo, head plumber; Juan Carlos Alonzo, plumber helper; Medardo Huerta, plumber; Guillermo Lazo, plumber; Joe Jaremko, owner; Ryan Hayes, manager; and Mark Garcia, plumber helper.



They turned it over to Aronow's widow, who said it wasn't hers.

"I guess this was Don's gift to you,' she said and gave back the stone. The diamond was appraised at about \$25,000," Jaremko recalls.

It was timely seed money for a new company. The company was dubbed Arko Plumbing. Jaremko wanted the company to be one of the first ones listed in the Yellow Pages and his mother came up with the name. Arko was a one-or-two-person operation at first, with his wife answering the phone. For a couple of years, Jaremko survived, mostly on word-of-mouth referrals.

Business was up and down, mostly up, according to Jaremko, but progress was interrupted by the unexpected passing of his wife.

"Life happens," Jaremko says, looking back. He pressed on.

DIFFERENT PATHWAYS TO SUCCESS

During the past three decades, Arko Plumbing has continued to experience success, but it has been a fluctuating success story. As a young business, the company was "stuck" for a while operating with four service trucks, Jaremko says, then grew to as many as 20 trucks. Then it scaled back to three or four trucks again, where it remains today.

One growth factor during the period of expansion was the abundance of cast iron drainpipes in the area, which "are failing at an alarming rate," according to Jaremko. Vintage waterlines mostly are copper or galvanized steel and largely are still intact. "The drainpipe deterioration might be partly from soil conditions, but mostly the problem is they were engineered to last a hundred years in the ground but only are lasting 30 or 40," he says.

At one point, Arko Plumbing advertised "cast iron colonoscopies," that is, inspection and replacement of cast iron infrastructure.

"We did hundreds of cast iron replacements," Jaremko says. "The insurance companies would pay for it and the jobs just kept coming in. The average ticket was about \$4,500."

Eventually, Jaremko became immersed in a tangential facet of the industry. One of the insurance company people working with him on

"I DIDN'T REALIZE I HAD AN ENTREPRENEURIAL BUG IN ME, BUT THERE WAS JUST SOMETHING THAT WOULD NOT LET ME BE SATISFIED WORKING FOR OTHER PEOPLE."

JOE JAREMKO

PIPELINE INSPECTION SYSTEMS



Complete mainline inspections with unmatched accuracy & efficiency

- ✓ Detailed HD video capture
- ✓ Fits 6"-48" mainlines
- ✓ Instantaneous crawler & camera response
- ✓ Easy operation

See the Voyager at
WWETT
Jan 24-26, 2024
Booth #6140

ARIES

Waukesha, WI 53186 USA 800-234-7205 ariesindustries.com

raising the bar UNDERGROUND





▲ Ryan Hayes, sitting, manager of Arko Plumbing, displays the BrickHouse Security System installed on all work vehicles for owner Joe Jaremko in their office in Miami. The software can tell Jaremko where trucks are at all times.

"I'M A PEOPLE PERSON AND SALESMAN AND I LOVE HELPING PEOPLE SOLVE PROBLEMS. IT'S NOT JUST MONEY. I'VE WRITTEN OFF JOBS, DONE THEM FOR NOTHING. IT'S ABOUT HELPING PEOPLE."

JOE JAREMKO

the cast iron infrastructure situation referred Jaremko to Morgan & Morgan, one of the largest injury law firms in the country. It is an aggressive outfit, declaring on its website that "we have the resources to take on the biggest bullies in America." Jaremko was hired by Morgan & Morgan to give testimony in plumbing cases.

"They asked me to come work for them as a trial expert. They offered me the kind of pay I couldn't ignore," he says.

To put a number on it, Arko Plumbing — through Jaremko's testimony — has for the past four years averaged \$3 million in testimony billing.

Unfortunately, the bloom has come off that rose. After the Florida Legislature nullified some of the financial opportunities for law firms in injury cases, Morgan & Morgan pulled back. As recently as April 2023, 80% of Arko Plumbing's revenue stream was from expert testimony. That has fallen to 50%, so Jaremko says he is going "back to my roots" by building out his drain cleaning business.

Fifteen years ago, Jaremko remarried and, perhaps coincidentally, the business found new stability. His office manager has been with Arko for all of those 15 years as have three of his crew members. "They all have stayed with me through thick and thin," he says.

His service crews work in and around Miami, with most out-of-town work being camera inspections and hydrostatic testing of residential systems. All of Arko Plumbing's customers today are homeowners and other residential property owners.

BIG GOALS

Arko Plumbing operates with four new Nissan service vans loaded with Milwaukee battery-powered tools, RIDGID cameras and drain cleaning equipment, and Picote milling machines. The company subs out any excavation work needed to replace a line, so there isn't a mini-excavator in the fleet of equipment.

THEFT DETERRENT

One of the costs of doing business in Miami is crime, says Joe Jaremko, owner of Arko Plumbing. He has firsthand experience with it.

"There is nothing like seeing your vehicle being stolen on a video cam," Jaremko says. "I watched on a housing camera. The guy was in the truck faster than if he'd had a key!"

Jaremko searched for the truck and came close to finding it before the police did. "I got the truck back in perfect condition, but all the equipment was gone."

The equipment carried by service plumbers in work vans includes fairly high-end items — battery-powered tools, inspection cameras and other modern tools of the trade. So a work van wrapped brightly with logos and other branding art can be a beacon to a thief wanting to make some quick money.

To frustrate such theft, Jaremko doesn't have anything on the sides of his Nissan 2500 vans that identify them as work vans. Plain Jane. They don't have ladder racks on them either. This not only makes it harder for thieves to target his equipment, it also lets Jaremko's crew members park their work trucks at their homes without running into Dade County officials who object to work trucks being parked in residential neighborhoods.

He has also outfitted his vans with three hidden GPS units, one of them hardwired.

"I know where the trucks are at any time," Jaremko says.

Tools that might be taken in a theft are locked in a gang box that's bolted to the floor.

Eleven years ago, Jaremko was the victim of theft that occurred right outside his home. He had a brand-new 2012 pickup truck at the time and, one week after the purchase, a neighbor knocked on his door and told him he'd been robbed.

Jaremko walked outside and found his truck still sitting there. Unfortunately, it sat on blocks. The rims and tires of the vehicle had been removed. He didn't recover them, of course. In response to that incident, Jaremko installed a camera on his property that scans the front of his house and immediate neighborhood.

"That's Miami," he says.



Joe Jaremko explains the steps he has taken to combat theft while operating a business in a larger city like Miami. For example, all vehicles are unmarked, with no logos or other branding art, so as not to be a beacon to a thief wanting to make quick money.

Nowadays, Jaremko doesn't get to dirty his hands often repairing or installing a pipe or fixture. Instead, he shows up to a job site in his pickup to chat with a customer. "I still could do just about any plumbing task I need to working from my pickup. I just choose not to. It doesn't pay for me to do that."

Did he have a favorite task when he was handling tools every day? "It was helping the people," Jaremko says. "I got the most satisfaction from helping someone. I'm a people person and salesman and I love helping people solve problems. It's not just money. I've written off jobs, done them for nothing. It's about helping people."

The future of Arko Plumbing is bright, partly because the market in Miami is strong, partly because Jaremko still has goals he wants his company to meet. He has it all laid out, from daily and monthly plans all the way to a 10-year vision of the operation.


"I'm still hungry," Jaremko says. "I was just writing my mission statement and vision statement. I want to create a multi-million-dollar business and create opportunities for my employees. I have seen how to do that." c

FEATURED EQUIPMENT

MILWAUKEE TOOL
800-729-3878
www.milwaukeetool.com

PICOTE SOLUTIONS
864-940-0088
www.picotegroup.com
(See ad page 49)

RIDGID
800-474-3443
www.ridgid.com




WORKING WELL UNDER PRESSURE

Building Drain and Sewer Equipment since 1981.

PRICES GOOD THROUGH MARCH 1ST OR WHILE QUANTITIES LAST

NEW




| | |
|------------------------------|-----------------------|
| 4008H Power Unit | |
| »8.2 gpm @ 4000 psi | »400' x 3/8" Jet Hose |
| »800 cc EFI Honda Engine | on DC Powered Reel |
| Just Add A Tank! | |
| \$12,719 plus freight | |

3012H Power Unit

| | |
|------------------------------|-----------------------|
| »12 gpm @ 3000 psi | »400' x 1/2" Jet Hose |
| »800 cc EFI Honda Engine | on DC Powered Reel |
| \$13,159 plus freight | |

NEW




| | |
|------------------------------|-----------------------|
| 4008H Compact Skid | |
| »8.2 gpm @ 4000 psi | »400' x 3/8" Jet Hose |
| »800 cc EFI Honda Engine | on DC Powered Reel |
| (100 GALLON TANK) | |
| \$14,129 plus freight | |

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) | |
| \$14,579 plus freight | |

NEW




| | |
|-----------------------------|-----------------------|
| RCJ4008H | |
| »8.2 gpm @ 4000 psi | »200' x 3/8" Jet Hose |
| »800 cc EFI Honda Engine | on Manual Reel |
| (30 GALLON TANK) | |
| \$8,539 plus freight | |


NEW



| | |
|-----------------------------|-----------------------|
| LJ4008H | |
| »8.2 gpm @ 4000 psi | »200' x 3/8" Jet Hose |
| »800 cc EFI Honda Engine | on Manual Reel |
| (30 GALLON TANK) | |
| \$8,399 plus freight | |



| | |
|------------------------------|----------------------|
| VM4008H | |
| »8.2 gpm @ 4000 psi | »50' x 3/8" Washdown |
| »690 cc Honda Engine | Hose on DC Reel |
| (130 GALLON TANK) | |
| \$13,399 plus freight | |



| | |
|------------------------------|-----------------------|
| VM3012H | |
| »12 gpm @ 3000 psi | »400' x 1/2" Jet Hose |
| »800 cc EFI Honda Engine | on DC Reel |
| (130 GALLON TANK) | |
| \$13,899 plus freight | |

TRAILER MODELS AVAILABLE
through 25 gpm @ 4000 psi

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

THE FUTURE OF INDUSTRIAL PUMPS BROUGHT TO YOU BY



**ANNOVI
REVERBERI**
The Power of Experience



BOOTH
6652



RTD



Industrial

140° F - Max Water Temp
1 1/2" - Inlet Thread
1" - Discharge Thread
110 oz - Oil Capacity

RTD 1000 RPM N VERSION SOLID SHAFT 35MM

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

SX - 180° Rotated Shaft Configuration
H - Nickel Plated



RTX



Industrial

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

RTD 1450 RPM N VERSION 30 x 80MM SOLID SHAFT

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

*HW - includes Hot Water Kit

"What's That!"

BOOTH
#4228

A powerful and portable vacuum for construction and professional plumbers



Order online: www.RNVac.com
sales@RNVac.com ■ (607) 786-2139



WHEELBARROW
NOT INCLUDED

Receive 50% OFF shipping (order over \$1,000): coupon MSW23A

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

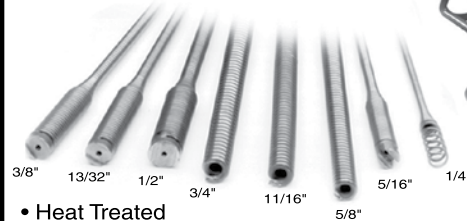
And they have for over 50 years

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

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

For
More
Information
Contact

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

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

Follow Cleaner on



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



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



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

DURACABLE DALE



WORDS OF WISDOM

QUALITY MATERIALS.

RIGOROUS TESTING.

BEST CABLE

ON THE MARKET.



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.**

VISIT US AT THE WWETT SHOW!

BOOTH # 1204

DURACABLE.COM



DURACABLE®

— MANUFACTURING CO —

800.247.4081

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



Diane O'Connell

HEALTHY CULTURE

Consider these five lessons — through the lens of the Titanic disaster — about maintaining employees' well-being // By Diane O'Connell

THE SINKING OF THE TITANIC stands as a tragic and haunting reminder of human fallibility. Surprisingly, the parallels between the Titanic disaster and today's workplace well-being cultures are striking.

The Titanic, once deemed “unsinkable,” faced unforeseen challenges, inadequate preparation, and communication breakdowns — all factors that bear an uncanny resemblance to issues plaguing today's workplaces.

Let's explore the correlation between history's most infamous shipwreck and the ever-evolving landscape of workplace wellness.

LACK OF VISION (MENTAL HEALTH)

The Titanic had binoculars hidden away in a locked cabinet. Yet, these crucial tools remained untouched throughout the voyage. The reason? A lack of confidence and the fear of consequences, because the ship was brand new, prevented the crew from breaking the glass cabinet to access them. Not feeling empowered to make the decision left them with severely limited vision, so they didn't see the iceberg until it was too late.

Just as the Titanic's fate could have been different with better vision, business leaders today should heed this lesson and equip their talent with the necessary tools and insights to ensure forward vision and the confidence to take action. It's not enough to thrive in the present. Leaders must prepare for the future, recognizing that employees' mental well-being directly impacts productivity, which

directly impacts profits. This proactive approach guarantees that well-being programs and benefits remain effective and adaptable, capable of meeting the ever-evolving demands of the modern workplace.

COMMUNICATION BREAKDOWN (SETTING EXPECTATIONS)

Just as poor communication protocols and delayed response played significant roles in the Titanic disaster, within an organization, they can have a ripple effect that deteriorates the workplace culture.

In the absence of clear communication channels, information isn't adequately disseminated and feedback mechanisms fail, so employees' access to vital support and resources becomes compromised. This can lead to a decline in overall productivity.

Much like the Titanic crew needed clear communication protocols to navigate expectations and obstacles, modern organizations must foster an environment of open and honest communication, where expectations are well-defined and readily accessible so employees can be fully engaged. In doing so, leaders not only enhance employee satisfaction, mental health and productivity but also safeguard their profits from potential disasters on the horizon.

NEGLECTING WARNING SIGNS (LEADERSHIP)

The Titanic crew received several warnings about icebergs in its path, which were not adequately heeded because they prioritized sending messages for the first-class passengers. Similarly, poor workplace cultures may neglect warning signs of employee distress, such as high attrition, increased absenteeism or declining productivity because it is focusing attention on the wrong areas. When leadership fails to recognize and address these signals, the repercussions can be profound, impacting employee satisfaction and overall well-being which can lead to disengagement.

By actively recognizing and addressing signs of employee distress, you not only enhance well-being but also safeguard the overall health and success of the organization. In this era where leadership and employee well-being are intrinsically linked, astute and empathetic leadership can make all the difference.

THE TITANIC WAS DESIGNED WITH LIMITED LIFEBOATS, A SHORT-SIGHTED AND ARROGANT APPROACH THAT PRIORITIZED PROFITS OVER PASSENGER SAFETY. SIMILARLY, INADEQUATE RESOURCES AND SUPPORT ALLOCATED TO WORKPLACE WELL-BEING PROGRAMS CAN HINDER THEIR EFFECTIVENESS.

INADEQUATE PLANNING (CRISIS/RISK MANAGEMENT)

The Titanic's sinking was partly attributed to insufficient planning and failure to account for potential risks, such as iceberg collisions. Inadequate workplace well-being programs often stem from a lack of strategic planning and risk assessment. Neglecting to anticipate and address employee well-being issues can set the stage for increased stress, burnout, disengagement, and physical and mental illnesses which increase the risk of attrition, injuries, employee-driven lawsuits, costly mistakes and eventually customer dissatisfaction.

The Titanic serves as a sobering reminder that crisis and risk management are essential. Organizations can proactively identify and mitigate risks by safeguarding not only the health and happiness of their workforce but also their own stability and success in an ever-changing and challenging business environment. In this era where well-being and risk management are intertwined, foresight and preparedness can make all the difference.

INSUFFICIENT RESOURCES AND SUPPORT (PROFITS)

The Titanic was designed with limited life-boats, a short-sighted and arrogant approach that prioritized profits over passenger safety. Similarly, inadequate resources and support allocated to workplace well-being programs can hinder their effectiveness. When organizations cut corners with insufficient funding, lack of dedicated staff or inadequate training, they risk limiting the program's ability to address the pressing needs of their employees.

In today's workplace landscape, organizations must recognize that investing in comprehensive programs not only benefits their employees but also contributes to their long-term prosperity. Organizations must understand that neglecting employee well-being can lead to negative outcomes, impacting both their people and their bottom line. A holistic and comprehensive commitment to employee welfare is a wise and forward-thinking strategy that ensures lasting success and sustainability.

Don't make the titanic error of neglecting workplace well-being as a "nice to have" initiative. Instead, chart a course toward a healthier, more prosperous and resilient future by prioritizing the well-being of your organization's greatest asset — its employees. **c**

ABOUT THE AUTHOR

Diane O'Connell is an author, speaker, coach, workplace culture reinvention strategist, and attorney and mediator. After being diagnosed with generalized anxiety disorder, O'Connell left the practice of law to focus on helping businesses create measurable success, reduce risk and improve profitability with a workplace culture of well-being that works. For more information, visit sortingitout.co.

MASTERLINER

THE LEADING PROVIDER IN PIPE LINING PRODUCTS

- **Manufacturer of Liners from 3"-96"**
- **Wetout Facility Capable of Handling up to 72" Liners**
- **Polyester, Vinylester & Styrene-Free Resins**
- **5,000 foot Continuous Runs Available**
- **Over 30 Years in Business**

Delivery Available for All Sizes

VISIT US AT



[masterlinerusa](https://www.instagram.com/masterlinerusa) [masterliner](https://www.linkedin.com/company/masterliner)

1-888-DIG-FREE
www.masterliner.com



Sponsored By:




wwett Presents...

The WWETT 2024 Welcome Party

Grand Hall at Historic Union Station
Thursday, January 25th from 5:00pm-8:00pm

Use promo code:

CST18

When you register today
at www.wwettshow.com



123 W. Louisiana St., Indianapolis, IN 46225

Live Music | Food & Drinks | Beach Party Games | Raffle Prizes

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

Come listen to the **WWETT Keynote Presentation** on **Jan 25 at 8am** in **Sagamore Ballroom** sponsored by *Allan J Coleman*



RIDGID

CS6x)) VERSA Digital Recording Monitor With Wi-Fi



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



Digital Self-Leveling Mini Pro

- Digital self-leveling
- High dynamic range (HDR) offers bright, clear in-pipe imaging
- TiltSense displays the pitch in a pipe
- 25 mm camera head

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



FLEXSHAFT, K9-306

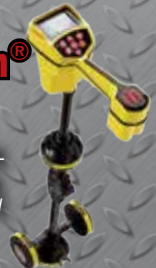
- 3" - 6" Pipes
- Includes: 125' of 3/8" cable and kit
- Faster setup and cleanup, quick cleaning

NaviTrack® Scout®



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

SeekTech® SR-20



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



FLEXSHAFT, K9-204

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

FLEXSHAFT, K9-102

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

Pipe Patch Kits

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



We Have RIDGID Parts!



Buy Online at
AllanJColeman.com

Authorized SeeSnake Repair Center

THE BEST SERVICE AND FAST TURN AROUND!

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

POWER SURGE

Vacuum-boosting device helps Texas contractor tackle deep, vertical cleaning jobs // By Ken Wysocky

DUMAS PUMPING SERVICE employees used to struggle vacuuming out deep lift stations, vaults at wastewater treatment plants and other jobs that required long, vertical hose runs.

But that changed dramatically after the company invested in a Power Booster from Pressure Lift Corp., a vacuum-assisted pumping nozzle that significantly amps up vacuum power, says Jason Purcell, shop foreman at the company owned by his parents, Ray and Stephanie Purcell.

The company pumps out septic tanks and cleans sewers and related municipal infrastructure. It's based in Dumas, a small town about 40 miles north of Amarillo in the Texas Panhandle.

The Power Booster lived up to its billing the first time the company deployed it about a decade ago to clean a 35-foot-deep vault at a wastewater treatment plant. The vault was packed with sludge and the company's vacuum truck was struggling to remove it despite being equipped with two 500 cfm vacuum pumps, Purcell says.



Jason Purcell, shop foreman for Dumas Pumping Service, displays the Power Booster nozzle from Pressure Lift Corp. that he says has greatly expanded the types of jobs the company is able to take on.

“When you get that far down, you lose head pressure and the vacuum can’t pull up the sludge,” he says.

But things changed after attaching the Power Booster to the end of the vacuum hose and using an air hose to connect the device to the truck’s trailer service air valve. About 30 minutes later, the truck had pumped out thousands of gallons of sludge.

GOING DEEP

The Power Booster also helps employees more easily clean sludge from 35-foot-deep lift stations, Purcell says.

“Our trucks used to quit pulling on jobs like that,” he says. “The sludge in those lift stations is about the consistency of toothpaste — it’s pretty thick. But with the Power Booster, we can remove about 1,500 gallons of sludge in about 30 to 45 minutes. It’s pretty impressive. It makes our jobs a lot easier, for sure.”

CONTINUED >>

DUMAS PUMPING SERVICE

DUMAS, TEXAS

OWNERS Ray and Stephanie Purcell

MACHINE Power Booster from Pressure Lift Corp.

FUNCTION Boosts vacuum power to perform long-distance and/or deep vacuuming jobs

FEATURES Lightweight aluminum construction; no moving parts; powered by air or water pressure; male camlock fittings on each end; 3-inch model weighs about 12 pounds and measures about 1-foot long; also available in 2-, 4-, 6- and 8-inch diameters

COST About \$2,500

WEBSITE dumaspumping.com

TESTED

to endure the harshest pipeline conditions.

TRUSTED

by industry experts for reliability.

PROVEN

to deliver unparalleled performance.



**CAN YOU TAKE
ON THE CUES
CHALLENGE?**

STOP BY AND WIN YOUR PRIZE!

VISIT BOOTH #4504



Experience the confidence of precision and durability with our cutting-edge CCTV pipeline inspection equipment & software solutions. With a track record of rigorous testing and a reputation built on trust, our equipment stands as the industry's proven solution for ensuring pipeline integrity and safety.



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

Purcell admits he was somewhat skeptical when the company purchased the first Power Booster.

“It made sense to me that it would work,” he recalls. “But I wasn’t sure if the trucks would be able to keep up with the air [pressure] required to operate it. But it hasn’t been an issue at all.”

Purcell says the company’s two vacuum trucks are equipped with trailer service air. But since the trucks don’t tow trailers, the trailer service air valve is available to provide air pressure for the Power Booster.

USER-FRIENDLY DEVICE

Contractors can run the Power Booster with air pressure from a truck’s air-brake system. They can also use a trailer-mounted air compressor (160 to 180 cfm) or even water pressure, using a pressure washer or a water jetter. The device is equipped with a male camlock fitting on each end and attaches to hoses in seconds.

“It’s very easy to use,” Purcell says. “You just hook it up to the end of the vacuum hose, plug in the air line that feeds it and you’re

“... WITH THE POWER BOOSTER, WE CAN REMOVE ABOUT 1,500 GALLONS OF SLUDGE IN ABOUT 30 TO 45 MINUTES. IT’S PRETTY IMPRESSIVE. IT MAKES OUR JOBS A LOT EASIER, FOR SURE.”

JASON PURCELL

good to go in a matter of minutes.”

When properly hooked up (either at the end of a vacuum hose or in-line), the device can pump a variety of materials — wastewater and drilling mud to heavy sludges and oils, for example — from depths or distances up to 300 feet, according to manufacturer Pressure Lift.

The specially designed nozzle uses the principles of vacuum pumps and air pressure to seamlessly convey fluids. Made in the United States, the unit can also be used in reverse to agitate thick liquids prior to pumping.

Dumas Pumping Service owns 3-inch-diameter Power Boosters. They also come in 2-, 4-, 6- and 8-inch-diameter models. The 3-inch model is about a foot long, weighs about 12 pounds and is made out of lightweight aluminum for easier handling. It contains no moving parts, which adds to its durability.

VALUABLE TOOL

Over the years, Dumas Pumping Service has found other ways to utilize the Power Booster, including cleaning out clarifiers at wastewater treatment plants.

“It’s almost like trying to pump mud,” Purcell says. “It took us about two days to pump out about 50,000 gallons of sludge and grease — a little bit of everything. Without the Power Boosters, there’s no way we could pull stuff that thick.”

The company even has used the device to clean out 50- to 60-foot-deep grain elevator “legs,” filled with water-soaked corn kernels, to allow the owners to perform routine maintenance.

“It’s a really nasty mess, but we’ve sucked out a bunch of those, too,” Purcell says. “That’s about the deepest we’ve ever gone while using the Power Boosters.”

The bottom line: The company owns two Power Boosters, which sell for about \$2,500. And the units have boosted revenue and profitability by enabling the business to do jobs it otherwise couldn’t tackle.

“Without the Power Boosters, we wouldn’t be able to help out some of our customers,” Purcell says. “We’d have to pack up and go on down the road. They’re definitely worth every penny.” **c**

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

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

wwelt
BOOTH 5200

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

THE CABLE CENTER • 1-800-257-7209



CALL FOR USED EQUIPMENT



\$665



MiniRouter Pro-Basic

No Cable, No Cutters. Call for complete kit availability.

\$1,000



JM-1000

No Hose, No Nozzles.
Call for complete kit availability.

Free Delivery

\$6,400



SL-GPW-E

200' Standard GenEye
WiFi Pod

Free Delivery

\$2,375



Speedrouter S92-Basic

No Cable, No Cutters.
Call for complete kit availability.

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

\$1,700



T-4 Basic

No Cable, No Cutters.
Call for complete kit availability.

\$8,800



JM-3080

No Hose, No Nozzles
Call for complete kit availability.

\$24,711



Kit

1/2" x 400' Hose
Nozzle Set



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

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

EASY POWER

Advanced lightweight aluminum skids and nozzles provide superior cleaning with significantly less power, psi and water requirements // By Del Williams

FOR MUNICIPALITIES and contractors who clean endless miles of sewer lines, the goal is always to clean more with less effort and fewer resources.

Making that goal attainable is innovation in lightweight skid nozzle stabilizing attachments, enabling cleaning crews to move through lines more easily than ever without getting caught on obstructions such as protruding taps, offsets and deflections.

Today's advancements in skid design can substantially improve the balance and maneuverability of nozzles and hoses to speed up sewer cleaning. When used in conjunction with high-performance nozzles, the combination provides faster cleaning that uses less power, pressure and water. The approach not only eases operator workloads but also reduces the cost of vacuum truck fuel, water use and mechanical wear and tear.

LESS FLOW, SAME POWER

To maintain stability with high-volume jetting, operators typically use nozzle skid attachments to keep the nozzle and hose centered within the sewer pipe. Today, some designs go far beyond this basic function and can significantly improve safety and performance.

"More advanced skids with holes are designed to balance the nozzle inside the pipe and prevent the nozzle from becoming airborne and coming out of the manhole," says Dan Story, operations manager at KEG Technologies, a manufacturer of sewer products including Tier 1 to Tier 3 nozzles, chain cutters, floor cleaners and camera nozzle systems. "Providing additional holes allows the user to secure the nozzle on the skid while inside the pipe."

The challenge is that traditional skids are often constructed of steel, which adds weight and reduces maneuverability within the sewer line.

In response to these challenges, Story says he sought to ease cleaning sewer lines. Through testing and experimentation, he discovered a specific technology that could have major implications for municipalities and contractors tasked with cleaning more lines with fewer resources.

"I DISCOVERED THAT IF I USED A HIGH-PERFORMANCE ALUMINUM NOZZLE WITH AN ALUMINUM SKID, I COULD GAIN APPROXIMATELY 30% MORE POWER THAN TYPICALLY AVAILABLE THROUGH CONVENTIONAL OPTIONS. ... I COULD LOWER THE NOZZLE FLOW AND PRESSURE AND STILL HAVE ALL THE CLEANING POWER I HAD BEFORE."

DAN STORY

"I discovered that if I used a high-performance aluminum nozzle with an aluminum skid, I could gain approximately 30% more power than typically available through conventional options," he says. "That meant I could lower the nozzle flow and pressure and still have all the cleaning power I had before."

ADDITIONAL DESIGN TWEAKS

Story has further refined the skid design after doing additional research, development and testing. The new skid design uses a lightweight aluminum pipe core with protruding plastic fins to provide nozzle stability without the weight of heavier steel skids. The skid design resembles the shape of a football to reduce the risk of snagging on sewer pipe obstructions.

"The design lowers the weight and drag of the skid and nozzle in the pipe. The lighter the weight, the easier it is to propel up the line," Story says. "The football shape and the slick plastic fins also reduce friction, allowing the skid to pass over common sewer pipe obstructions, such as protruding taps, offsets and deflections. If it hits a deflection in a pipe, for instance, it will climb on top of the next step and keep on going."

The approach enables superior sewer line cleaning with significantly less power, psi and water, which translates into important advantages in the field.

IS YOUR MONEY GOING **DOWN THE DRAIN**

(Well, at least being cycled through your wastewater facility?)



Treating wastewater is expensive, so eliminating additional flow from I&I is crucial. Fortunately, OBIC products offer an alternative to costly and disruptive reconstruction.

Our lining systems cure in minutes, requiring minimal disruption to service.

We are so confident in the quality of our professionally installed multi-layer system and OBIC Armor system that we offer a 10-year warranty.



To learn more about **OBIC** visit www.obicproducts.com

CONTACT US:
866-636-4854
info@obicproducts.com

TECH PERSPECTIVE

» Using a high-performance aluminum nozzle with an aluminum skid can provide approximately 30% more power than typically available through conventional options.

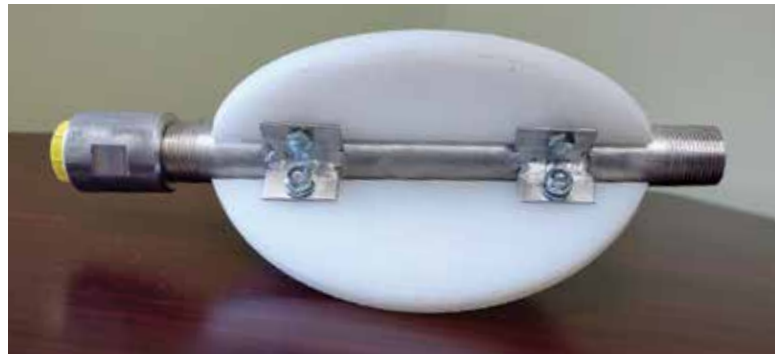
STAYING CENTERED

Cleaning sewer lines at lower pressure reduces the load on vacuum trucks. Toward this end, using a lightweight aluminum skid improves nozzle maneuverability to keep the jetted water stream centered within the pipe and focused where it needs to clean.

When used with a high-performance aluminum nozzle, the combination can produce at least 30% more cleaning power than traditional options because it keeps the jetted water stream centered within the pipe and focused where it needs to clean. This reduces pressure and water use while still achieving efficient cleaning. Just as important, it allows the operator to lower the vacuum truck's rpm, allowing for better conservation of the vehicle's fuel use as well as decreased mechanical wear and tear.

"Operators can essentially run the vacuum truck at idle if they are using an aluminum skid and nozzle. They do not have to crank up the truck's rpm," Story says. "Instead, they can effectively clean sewers with as little as 1,000 psi at 35 gallons a minute. It's a game-changer for cities."

CONTINUED >>



» Newer skid designs use a lightweight aluminum pipe core with protruding plastic fins to provide nozzle stability without the weight of heavier steel skids.

THE CLASSICS YOU LOVE WITH THE COMMITMENT YOU DESERVE

TRITON HYDROTOOLS HAS REVIVED A TRUSTED MADE-IN-USA ORIGINAL. WE ARE MAKING THEM BETTER, WE ARE MAKING THEM FASTER, AND WE ARE STILL MAKING THEM RIGHT HERE IN THE USA.

SHAMROCK NOZZLES BY TRITON HYDROTOOLS

800-633-7696 SALES@TRITONHYDROTOOLS.COM

WWW.SHAMROCKTOOLS.COM



BOOTH
6348



MV84 Dual Cart Jetter

8 gpm @ 4,000 psi
remote operation



**POWER
THRU™**



RELIABLE PERFORMANCE.

Trust MyTana's rugged cameras, flexible shaft cleaner, cable machines and jettors to deliver high performance to tackle any job. Our legendary service and support teams to give you the power to stay productive.

www.MyTana.com ■ (866) 948-7576



Financing available, visit mytana.com/leasing-information

MyTana LLC 746 Selby Avenue St. Paul, MN 55104 | email: mytana@idexcorp.com

Another benefit of sewer cleaning at lower psi is reducing the risk of blown toilets, which can leave sewer material on the floor and toilet seat, upsetting homeowners. A blown toilet typically occurs when an operator rushes up the sewer line with minimal cleaning on the first

pass. This results in excessive debris on the return trip through the same stretch of sewer line. Airflow from the nozzle then compresses between the nozzle and the debris, creating significant positive pressure. When the debris passes by a home's service line, the pressurized air blasts up and out of the service line, causing a blown toilet.

"When sewer cleaning, lowering the pressure involved reduces the risk of a blown toilet, and can be particularly effective when cleaning shallow manholes, which are more prone to the issue," Story says.

According to Story, he was able to demonstrate the effectiveness of this technique when a West Coast city invited him to do a demonstration for them.

"Previously, the city was challenged with a blown toilet problem at a home that occurred virtually every time they cleaned a certain line," Story says. "They asked, 'How can we fix this?' We went in at 1,000 psi with an aluminum nozzle and skid and cleaned the entire sewer line without blowing the person's toilet."

Alternatively, the approach can provide more cleaning power on tough jobs such as accumulated grease at restaurants.

"The sewer line on a street with a fast food restaurant was full of grease," Story recalls. "A municipal supervisor doubted the cleaning effectiveness of using an aluminum skid and nozzle. He couldn't believe his eyes when the technique quickly liquified the grease."

A RANGE OF OPTIONS

To accommodate the range of sewer pipes in the field, KEG Technologies offers aluminum skids in 6-, 8-, 10- and 12-inch sizes for use with aluminum Tier 3 nozzles. There are several tiers of nozzles, rated for water efficiency — Tier 1 (about 30% efficient), Tier 2 (50-60% efficient) and Tier 3 (75-98% efficient).

What sets the most efficient Tier 3 nozzles apart from others in the category is fluid mechanics engineering on a par with the aerodynamics of race cars or fighter jets. In the case of KEG's aluminum Tier 3 nozzles, such as the Royal, Cleaning Torpedo and Aluminum Traction, the high-performance fluid mechanics design leaves little room for power losses and excessive turbulence, says Story.

"By more effectively containing, controlling and directing high-pressure water with less turbulence, an aluminum Tier 3 nozzle can deliver more cleaning power at lower psi," Story says. "This eliminates the need for operators to compensate for the lack of power from Tier 1 or 2 nozzles by increasing the pressure to higher psi on the way back through the line. Ultimately, less psi — with a better, faster result — facilitates safer, more efficient sewer cleaning that complements the use of an aluminum skid." c

HOOK UP
With All Your Equipment Needs

Call Toll-Free
1.800.325.3730
www.MilwaukeeRubber.com

Shorten the relining process & save time and money

We have the right tools needed for a
successful relining project

- Descalers
- Inspection cameras
- Knocker chains
- Flexible steel shafts
- Spot repair kits



PipeCaster™ Pro

SIPP (Sprayed-in-Place-Pipelining)
Injection casting system for pipe rehabilitation

SCAN QR CODE
TO LEARN MORE

- Cost-Effective
- Plug and play
- No Reinstatement
- Resin cures within minutes
- Ready to ship today



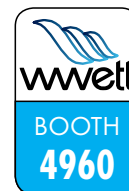
Colorado

P.O. Box 4160
Gypsum, CO 81637

California

5192 Bolsa Avenue, Ste 5
Huntington Beach, CA 92649

714-410-0707 ext. 1
info@ippsolutions.com
www.ippsolutions.com





The Solution

CAN'T FIND A LEAK?



POWER SMOKER™
2

- 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.

HURCO TECH.com
800-888-1436



FEATURED IN AN ARTICLE?

Make the most of it!

Digital reprints available
visit cleaner.com
for articles and pricing



OLDEST NAME IN THE BUSINESS — Over 115 YEARS OLD

info@allancoleman.com • www.allancoleman.com

Come listen to the **WWETT Keynote Presentation** on Jan 25 at 8am in **Sagamore Ballroom** sponsored by **Allan J Coleman**



Products
Manufactured By



Eagle 300 Trailer Jetter

20 GPM @ 4000 PSI



PICOTE Stocking In
Both Locations

Products
Manufactured By



Mountable or Portable - Skid/Cart



9 gpm @ 4000 psi



**DIRECT
HIT**

The C38rs

The safest way to enter
an unknown blockage

Repair Center for:

RIDGID ProPress & SeeSnake, Gen-Eye,
Electric Eel, and Hathorn cameras

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

**We Have
RIDGID Parts!**



LIGHTS, CAMERA, ACTION: THE HD ERA IS HERE



Plumber's Elite
2" - 10" drainlines



Plumber's Helper Jr.
1" - 6" drainlines

MAKE YOUR PIPELINE INSPECTIONS CRYSTAL CLEAR WITH
THE NEW **RATECH HD SEWER PIPE INSPECTION CAMERAS**

- ✓ 1080p HD self-leveling camera (1.375" dia.), TRUE HD
- ✓ Bright and clear Hi-res in-pipe imaging
- ✓ MP4 recording format
- ✓ Built-in battery cradle for external power using power-tool batteries
- ✓ USB recorder with hard-drive
- ✓ 10.4" HD sunlight-readable LCD
- ✓ Wi-Fi connectivity
- ✓ 100'-400' Premium Gel Rod™ Push cable
- ✓ Keyboard, footage counter, 512Hz sonde
- ✓ Authorized service centers nation-wide
- ✓ 5/8" and 3/4" Hi-res micro camera compatible

Ratech
ELECTRONICS
Video Pipeline Inspection Systems



Proudly Serving Customers Like You Since 1980

1-800-461-9200 • WWW.RATECH-ELECTRONICS.COM

COLD AND CONFINED

Dangers to watch out for and how to stay safe when cleaning confined spaces in freezing conditions /// By Rick Pedley

WORKING IN PITS to clean or reline pipes and other confined spaces during the colder months can bring new sets of challenges for many workers.

They must stay warm while mitigating the hazards of only one point of entry. Getting trapped inside a tunnel or crawl space becomes even more dangerous when it's cold due to the risk of hypothermia. Working in lower temperatures can also reduce productivity and response times to emerging threats. Workers can never be too careful when occupying these areas.

Avoid these dangers to stay safe in freezing confined spaces.

HYPOTHERMIA, FROSTBITE AND COLD STRESS

Exposure to the cold can lead to a range of health complications, some of which can be fatal.



Wearing the proper personal protective equipment is the best defense against the cold.

WEARING THE PROPER PPE IS THE BEST DEFENSE AGAINST THE COLD. ... IT STARTS WITH A LIGHTWEIGHT, MOISTURE-WICKING, BREATHABLE UNDERLAYER.

Hypothermia sets in when the body temperature drops below 95 degrees Fahrenheit. When it gets cold, the blood thins out along the extremities to keep the core warm. Those affected may shiver or stomp the ground to generate heat until the shivering eventually stops. They may feel warm or need to remove some of their clothes as the condition gets worse.

Frostbite occurs when the skin freezes, damaging the underlying tissue. The body may start to itch or tingle before turning blue.

Cold stress can lead to hypothermia in extreme situations and can also make workers less efficient. The body needs more energy to generate heat in the cold, which burns more calories. Workers may feel sluggish or lightheaded, their pulse will slow, and their muscles will lose strength and become rigid. Performing physical labor in a cold environment will only make the problem worse.

The longer workers are exposed to extreme conditions, the higher the risk. The worker should be able to exit the confined space when the cold becomes too much to bear. If the staff is underground, their colleagues can use a fall protection retrieval system, including tripods and winches, to quickly bring them to the surface.

Some individuals may suffer from pre-existing health conditions that make them more susceptible to the cold, including heart issues that limit circulation. These symptoms can occur in temperatures as warm as 40 degrees Fahrenheit. It all depends on a person's personal comfort level and tolerance for the cold.

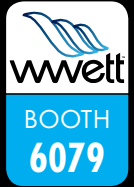
Workers should limit their time in the cold environment by taking regular breaks. Everyone occupying these areas should be aware of the risks and speak up when they notice the warning signs.

CONTINUED >>

PICOTE XPRESS COATING SYSTEM

NEW SYSTEM FOR COATING 1 ¼ - 12" PIPES

- AS LITTLE AS ONE HOUR CURE TIME
- BATTERY OPERATED PUMP SYSTEM
- NEW SUPERIOR RESIN MIXED AT END OF DELIVERY HOSE
- REUSABLE HOSE ELIMINATES WASTE AND SETUP TIME
- USE IN CONJUNCTION WITH PICOTE MILLERS
- MAX RANGE OF 132 FEET
- NOW AVAILABLE TO ORDER!



NEW!



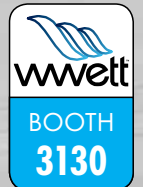
864-940-0088 | sales@picotesolutions.com

PICOTEGROUP.COM/RESELLERS

PICOTEINSTITUTE.COM

Next Generation Tools Designed for You

EPL SOLUTIONS Inc.
Thinking Ahead



- SpeedCut® Patented Design • Built-in Oiler • Speed Connector for quick tool changes • 2"-8" Pipes
- Clutchless 0-3200 RPM DC Brushless Motor • Gvision® Camera System with Gvision® Connect

Call us for a quote today!

714.453.9760 • sales@epls-usa.com • www.epls-usa.com



Gvision Connect
Available on the App Store

Wearing the proper personal protective equipment is the best defense against the cold. Workers should dress in warm, insulating layers that can be added or removed based on their body temperature. It starts with a lightweight, moisture-wicking, breathable underlayer. There should be enough space between each layer to let the air pass through. Keeping these layers clean is important, as dust and dirt can block air movement through the clothing, making it harder for the sweat to dry. This gear should be comfortable and properly fitted. Tight-fitting garments can restrict movement on the job, and loose-fitting garments can risk getting caught in equipment. Workers should wash their clothes regularly based on the manufacturer's guidelines, and replace items that are damaged or no longer fit correctly.

It's best to use thermal, insulated gloves with reinforced palms that make it easy to grip objects and surfaces. Workers must be able to use their fingers fully without too much fabric getting in the way. Hypothermia causes the hands to go numb, making it easy for workers to ignore potential injuries. You should stop working when you can no longer feel your hands and use cut-resistant thermal gloves when working around sharp objects. Insulated boots with up to 500 grams of Thinsulate can keep feet warm and moisture-wicking socks keep feet dry.

Wet clothing can quickly freeze while increasing the risk of hypothermia. If someone gets their clothes wet, they should leave the space for a warmer environment and hang their clothes out to dry.

Every business should have a plan in place for responding to cold-stress emergencies. They can keep blankets, warm sweetened drinks and heat packs or hand warmers on hand to quickly increase a person's body temperature.

SLIPS, TRIPS AND FALLS

The temperature inside a confined space will likely fluctuate as workers come in and out. Warm air can spread condensation and cause frozen liquids to melt, increasing the risk of slips, trips and falls. Workers should be sensitive to the changing temperature in terms of how it might affect their surroundings. Everyone should look out for wet areas on the floor as they move around a space. Managers should install signs in hazardous areas or those most likely to thaw to remind workers to go slow. Boots should have a slip resistance rating to increase traction.

GAS AND CHEMICAL LEAKS

Confined spaces can be a hazard regardless of how cold they are due to a lack of ventilation. If the space isn't designed for prolonged human occupation, the crew will need to test the air for toxic gases before entering.



⚠️ The longer workers are exposed to extreme conditions, the higher the risk, so it's important that they be able to exit a confined space when the cold becomes too much to bear.

Certain equipment, including forklifts, expel dangerous fumes into the air, which linger in the space without proper airflow. Industrial chemicals typically contain toxic fumes that cause workers to feel dizzy or short of breath in enclosed spaces.

Workers can install a fixed gas monitor or wear portable gas detectors to test the air while they occupy the space. If the air is unfit to breathe, workers can wear respirators that supply oxygen to avoid damaging their lungs. Once a hazard has been detected, the alarm should vibrate and be visual and audible to get workers' attention.

If a person is cleaning a confined space, they should use ventilation, wear proper respiratory protection, and when possible, switch to nontoxic cleaning supplies to reduce the risk of injury.

A FINAL WORD

Occupying any type of confined space can be hazardous. Low temperatures only increase the risk by slowing down the body's reaction to potential threats. Crews can stay safe on the job by wearing the proper PPE, limiting their time in the cold and regularly checking spaces for toxic gases. **c**

ABOUT THE AUTHOR

Rick Pedley, PK Safety's president and CEO, joined the family business in 1979. PK Safety, a supplier of occupational safety and personal protective equipment, has been operating since 1947. Visit pksafety.com.



vCam Mobile Controller App



vCam-6 HD Inspection System



vCamMX-2 Mini Inspection System



vCam Inspection Cameras the clear choice for video inspection

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



Visit our YouTube channel to see actual videos

Vivax-Metrotech Corporation

3251 Olcott Street, Santa Clara, CA 95054, USA

+1-408-734-1400

SalesUSA@vxmt.com

www.vivax-metrotech.com



THE PROFESSIONAL'S CHOICE

TROJAN

WORLDWIDE INC.™

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



C100-512SL



TWW2000 TRAILER JETTER



COLT



PONY



STALLION



DIGITAL LOCATOR

VISION-HD 1080P

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

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



REPAIR CENTER

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

-Free quotes

-Fast turnaround

800-392-4902

TrojanWorldwide.com

3306-C Ella Blvd, Houston, TX 77018

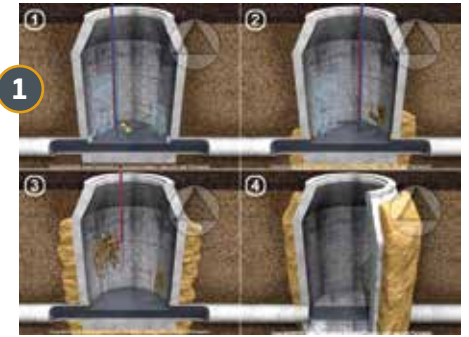
MANHOLE INSPECTION AND REHABILITATION

By Craig Mandli

» CHEMICAL GROUTS

1 // AVANTI INTERNATIONAL INJECTION GROUTS

Infiltration enters underground systems every day through defects or faulty joints in manholes, causing system capacity issues, overload at treatment plants and possible injury to the community. **Avanti International** injection grouts have historically proven to be an economic and long-term solution to combating infiltration entering all areas of a collections system, including manholes. Injection grouts are engineered to stop leaks, stabilize soil and control groundwater, and be used in precast barrel joints, brick and concrete masonry units, pipe penetrations, vertical or horizontal cracks, void fill and pinholes. Each technique enables the technician to stop several leaks at once and helps to extend the life of the structure. 800-877-2570; www.avantigrout.com



» EPOXIES

2 // INFRASTRUCTURE REPAIR SYSTEMS INFRAGARD

Infragard concrete and manhole rehabilitation products from **Infrastructure Repair Systems** include Top Coat and Chim-Coat, which are nonhazardous ambient-cure epoxy systems for a small patch, entire manhole or retaining wall. This cost-effective solution requires no expensive equipment as it has an easy trowel-on application. They are corrosion-resistant and high strength, with an impermeable structural bond to the substrate or to almost any concrete or metal surface. Chim-Coat is engineered with a flexible feature that maintains adhesion while expanding or contracting with changing temperatures and traffic loads. 877-327-4216; www.irsi.net



3 // SOURCE ONE ENVIRONMENTAL QUADEX STRUCTURE GUARD

Quadex Structure Guard, distributed by **Source One Environmental**, is a high-build epoxy coating formulated to provide long-term corrosion protection and structural enhancement for manholes, pump stations, treatment plants or any wastewater infrastructure subject to high levels of corrosion and/or abrasion in both municipal and industrial applications. It is also suitable for invert repairs. It can be trowel- and/or spray-applied, and is a 100% solids material with no VOCs and a fast set time. 877-450-3701; www.s1eonline.com



» LEAK LOCATION

4 // INFOSENSE SL-DOG

The **Sewer Line Data Organizer (SL-DOG)** from **InfoSense** includes a mobile app with a subscription to the SL-DOG ecosystem and is supported by both Android and iOS. It allows operators to enhance their field data in real time while conducting acoustic assessments. The data automatically syncs to the portal and helps build a comprehensive dataset to streamline and support the information generated by your Sewer Line Rapid Assessment Tool program. Users have five customizable user fields that can be used to track identifiable pipe characteristics such as a pipe segment number. The notes section can include observations, such as manhole condition, traffic levels or location hazards. The systems allow for easy export to common file formats like Excel, Google Earth or SHP. Hundreds of utilities use the app to enhance their SL-RAT measurements, allowing them to better streamline collections system maintenance operations. 877-747-3245; www.infosense.com





»» MANHOLE CAMERAS

5 // CUES SPIDER

The CUES SPiDER allows technicians to inspect vertical structures in minutes, helping them make reliable repair decisions. It is flexible enough to inspect structures from 15 inches to 15 feet wide and up to 75 feet deep. It allows for a rapid inspection time with a nonstop rate of descent of 5 feet per minute. Its portable design eliminates excess hardware like cables and footage encoders. Its durable and waterproof solid aluminum design has been field-proven in over 250,000 inspections exhibiting minimal maintenance. The easy process can get the technician started inspecting in minutes out of the case. Lenient technology minimizes the rules to inspect and ensures assessments are done right the first time. Quality control tools are available to the field crew and office staff. It features automated data transfer from the field to the office, with accurate results with sub-inch 3D models and embedded GPS. It is compatible with all NASSCO-certified software. 800-327-7791; www.cuesinc.com



6 // ENZ USA CAMERA NOZZLE

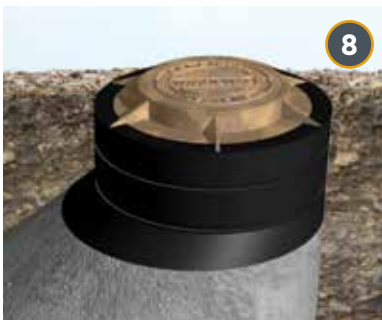
The Enz USA Camera Nozzle has a modular design that allows universal use with all nozzle types, such as the eBomb or the eBulldog, and thus guarantees streak-free all-around cleaning in every application. The HD-ready resolution and 12 high-power LEDs deliver high-resolution video footage for quality control, documentation and preliminary inspection. Data management is fully integrated into the system through the Wi-Fi interface and connection to the Enz Cloud. All manholes and channels are automatically mapped on Google Maps with the videos. The nozzle, which is simple, fast and robust, increases productivity without any negative impact on the cleaning performance or quality. 877-369-8721; www.enz.com



»» MANHOLE LINER

7 // PRIME RESINS PRIMECEM MSM

PrimeCem MSM (Microsilica Mortar) from Prime Resins is a blend of Portland cement, graded silica sand, fibers and silica fume. The mortar may be hand- or spray-applied in a nominal thickness of 1/4 to 2 inches. Thicker applications can be achieved by applying it in successive lifts. Uses include repairing concrete walls, ceilings, lining brick or concrete manholes and lift stations, and horizontal pipe repair. Microsilica Mortar provides an extremely dense matrix and will accept coatings at earlier ages than typical Portland cement repair products. This product contains a migrating corrosion inhibitor. 800-321-7212; www.primeresins.com



»» MANHOLE PARTS AND COMPONENTS

8 // CCI PIPING SYSTEMS WRAPIDSEAL MANHOLE ENCAPSULATION SYSTEM

The WrapidSeal Manhole Encapsulation System from CCI Piping Systems consists of an engineered primer and a wraparound, heat-shrinkable sleeve designed to seal joints and prevent groundwater from entering a collections system. This material has a high-shrink membrane (70% stretch and 40% recovery) designed to shrink around any manhole profile. In addition, the high-tensile strength accommodates structural movement, while the tough backing resists soil stress and provides suitable abrasion resistance. It can be used for new construction or for the rehabilitation of existing manholes to control infiltration through joints and prevent deterioration, thus eliminating costly maintenance repairs and the added expense of treating groundwater. 800-867-2772; www.wrapidseal.com

9 // CHERNE DISC SEALS

Disc Seals from Cherne are designed to block flow or provide bypass flow in underground pipes with low backpressure. Used for pipe construction, rehabilitation, cleaning and testing, the plugs can be separated into two halves to fit through any manhole effortlessly. They are built with two field-replaceable double bladders to ensure a leakproof seal. In addition to being built with lightweight, corrosion-resistant aluminum, the plugs come with handles for easy installation and transport. They are available in sizes ranging from 24 through 96 inches. 800-843-7584; www.cherne.com



10 // CRETEX SPECIALTY PRODUCTS INTERNAL CHIMNEY SEAL

Cretex Specialty Products Internal Chimney Seals are mechanical, so there is no need to worry about surface adhesion or stopping active leaks prior to installation. The seals eliminate and prevent manhole chimney inflow. During wet weather, clear water enters the manhole through deteriorated and broken chimney joints, which may burden the collections system. The chimney seal has a 50-year design life and is available in four widths, allowing complete chimney coverage up to 24 vertical inches with a single seal. 800-345-3764; www.cretexseals.com



11 // MR. MANHOLE COOKIE CUTTER

Using the Cookie Cutter system from Mr. Manhole, the contractor simply drills a 1.25-inch-diameter hole over the affected utility using the included battery-powered drill. They then cut a 74-inch "cookie" through asphalt or concrete in minutes with the cutter that mounts on a skid loader. The operator is protected from silica via the Mr. Mister included on the cutter. The cookie is lifted directly on a waiting truck via the lifter included in the package. A round personnel protection cage is placed in the excavation and vacuum excavating begins. The protective cage slides into place as the excavation is deepened and holds adjacent fill in place. The utility is exposed and repaired as needed. The system is complete with an engineering specification that includes backfill reinstatement guaranteeing a high-quality repair of the road. 833-242-2221; www.mrmanhole.com



12 // USB-USA SPIN-JET

The Spin-Jet from USB-USA is a self-centering, controlled rotating nozzle that is used for cleaning lift stations, barrels and manholes prior to rehabilitation. Available in two different versions, it has driving nozzles that rotate in a 360-degree horizontal plane only. This action eliminates the need to cover the manhole during operation, allowing for constant viewing of the cleaning process. Front jets thoroughly clean any grease, sludge or mud at the bottom. 844-285-5770; www.usb-usa.com



>> SEALANTS

13 // OATEY HERCULES SHUTOUT

Hercules Shutout from Oatey seals and lubricates manhole covers to reduce inflow. It is a safe, job site-ready solution compatible with most manhole installations. It is designed to enhance existing seals by filling voids and defects within the manhole cover and seat. It creates a water barrier between surfaces, reducing the likelihood of corrosion and lubricating the manhole cover to allow for easier and safer removal. It is easy to transport and requires no measurements or pre-planning. It can be applied easily with minimal surface preparation. Monitor inflow to reapply as needed. 800-321-9532; www.oatey.com



CONTINUED >>

THE WESTERN UNITED STATES REGIONAL PLUMBING-HEATING-COOLING INDUSTRY TRADE SHOW

FLOW EXPO '24

March 9th, 2024 Fairplex, Pomona, CA.

Keynote Speaker

Join thousands of Contractors and Technicians
like you at the 2024 Flow Expo!

PHC Industries Largest Brands
Premium Tools and Equipment
Interactive Workshops & Demo's



Roger Wakefield
The Expert Plumber &
Social Media Leader

For info on attending or exhibiting goto
FLOWEXPOUSA.COM

Produced by PHCC Los Angeles, All Right Reserved
The Flow Expo is a non-profit event servicing the PHC industry



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



THE CABLE CENTER

1-800-257-7209

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

FULL CATALOG OF RIDGID
REPAIR PARTS AND ACCESSORIES

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

vwvett BOOTH
6653

**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

PRODUCT FOCUS

14 // SEALING SYSTEMS FLEX-SEAL 2.0

Flex-Seal 2.0 from Sealing Systems is an all-purpose sealant that adheres to many surfaces and has over 800% elongation. It is designed to prevent inflow/infiltration and to provide corrosion protection at the grade adjustment ring section or joint section of manholes and catch basins. It's 100% safe and Prop 65 compliant. The internal seal is manually applied using a paintbrush and the kit is designed to cover 12 vertical inches on a 27-inch-diameter manhole. 800-478-2054; www.ssisealingsystems.com



15 // THE STRONG COMPANY STRONG-SEAL SYSTEM

The Strong-Seal System from The Strong Company offers a variety of cost-effective engineered cementitious products designed to rehabilitate municipal concrete and masonry structures and effectively stop inflow, infiltration and exfiltration. When spray-applied to a minimum of 1/2-inch thickness, the cementitious mortars are an impervious monolithic liner with compressive and flexural strengths exceeding that of the original structure. Both MS-2A and MS-2C are fiber-reinforced spray-applied cementitious mortars. Made with Portland cement, MS-2A is the most cost-effective solution for stopping infiltration and restoring structural integrity. MS-2C provides high early strengths and added corrosion protection in mild sulfide environments. High Performance Mix is a pure-fused calcium aluminate mortar that stops infiltration, restores structural integrity, and protects against microbiologically induced corrosion in sanitary sewer systems with harsh sulfide conditions (pH of 1.0 or greater). 800-982-8009; www.strongseal.com



FILL *a job opening*

BID OUT *an upcoming job*

ANNOUNCE
contracted services offered

SELL *used equipment*

OBTAIN *a position wanted*

FIND IT
IN THE CLASSIFIEDS!

In Cleaner magazine and on the web. Cleaner.com



EASY-KLEEN

PRESSURE SYSTEMS LTD.
MANUFACTURER OF HIGH PRESSURE CLEANING EQUIPMENT



SCAN THIS TO VIEW OUR CATALOG!



"THE BEST VAN PACK IN THE BUSINESS"

- BRAD SIMS, MR. ROOTER

INSTALL READY FOR PICKUP OR VAN



GROUNDHOG JETTER

Dependable, user-friendly, and cost-effective solution for you to easily clear drains, pipes, and culverts.

- ◀ The unit featured is a EZJ3512G.
 - 35 HP Vanguard Gas Engine
 - 12 GPM @ 3500 PSI
 - Heavy Duty Triplex Plunger Pump
 - 10 Gallon Poly Fuel Tank
 - 200 Gallon Poly Water Tank
 - 12 V Hose Reel complete with Hose Guides, Super Swivel & Foot Pedal Control
 - 300' of 3/8" Jetter Hose
 - Remote Control - Standard

ACCESSORIES

ADD ON A HEATER PACK!



- 440,000 BTUs
- Oil Fired Burner

Add hot water to your Sewer Jetter System with a Modular Heater. Increases speed and efficiency when cleaning out ice or grease.

EASY-KLEEN'S STAINLESS STEEL HOSE REEL



Can be mounted on various units. Rated at 5000 PSI

HOS-HR300HP-A-SS-IH



easykleen.com

1-800-315-5533

sales@easykleen.com

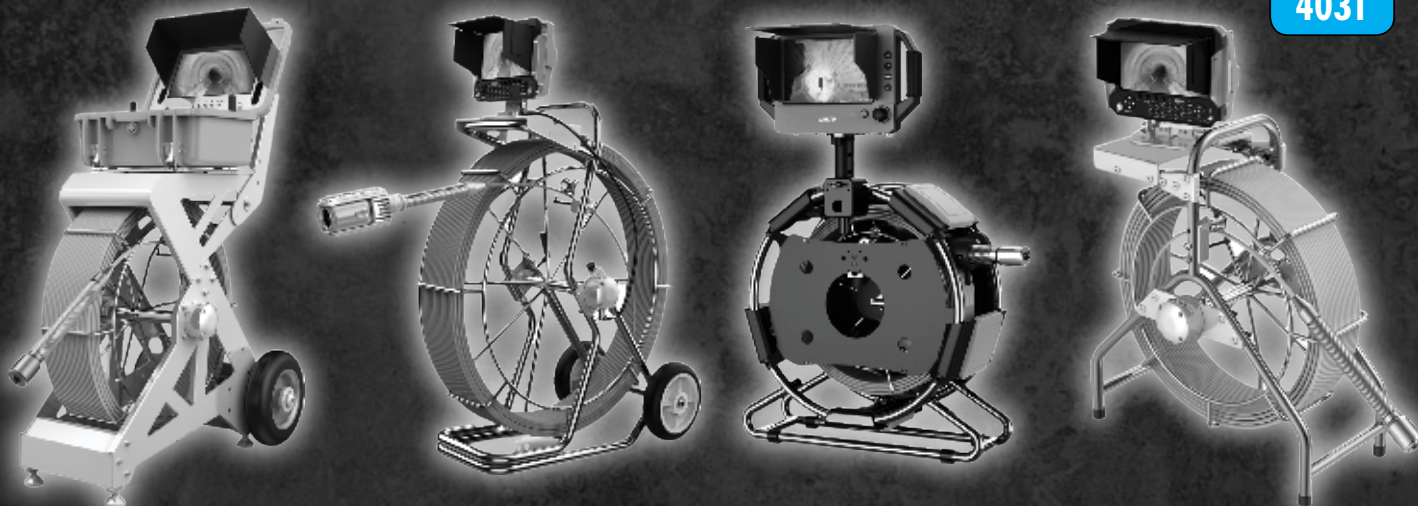
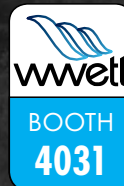


FORBEST

FORBEST PRODUCTS CO.

WELCOME TO THE FORBEST HD ERA

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



Western USA:

44130 Old Warm Springs Blvd, Fremont, CA 94538

www.ForbestUSA.com

Eastern USA:

810 Interchange Blvd, Newark, DE 19711

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

MANHOLE INSPECTION AND REHABILITATION

// By Craig Mandli

CONCRETE MANHOLE BROUGHT BACK UP TO CODE USING LINING SYSTEM



PROBLEM / Due to deterioration caused by inflow and infiltration, a Kansas City, Missouri, concrete manhole needed rehabilitation.

SOLUTION / A week prior to application, Mongan Painting prepared and repaired the substrate. The concrete was abrasive brush blasted, then pressure cleaned, in accordance with SSPC-SP13/NACE No. 6, "Surface Preparation of Concrete." Additionally, patch work was completed, and low-pressure water seepage was plugged using Epoxytec's hydraulic cement, **Hydrxx-3**, which has a cure time of about three to five minutes. A week later, this clean, sound, and profiled concrete was ready for Epoxytec's technical service crew to quickly mobilize, alongside Mongan Painting, to line the structure using **Series 456 CPP Sprayliner** at 200–250 mils. Upon completion, per city requirements, a spark test was completed. The passing results ensured the application was pinhole-free.

RESULT / This concrete manhole was rehabilitated to like-new condition, with the seamless spray-on application as advertised. The crew was in and out within a day and able to move on to the next needy manhole rehabilitation situation. **877-463-7699; www.epoxytec.com**

LINING PROJECT SUCCESSFULLY REHABILITATES DETERIORATED MANHOLES



PROBLEM / In 2020, a project was identified through a Florida-based electric authority's engineering department for seven severely deteriorated manholes in the area. The initial capital improvements-funded project called for these manholes to be conventionally excavated and replaced with new structures. Unfortunately, this work would disrupt the local community for at least six months with heavy construction, bypass pumping and rerouting of residents around the construction site.

SOLUTION / Rather than the conventional dig-and-replace method, Florida-based contractor Engineered Spray Solutions concluded that the project was suitable for structural lining using **Sprayroq's SprayWall** at various thicknesses.

RESULT / The clients accepted the proposal noting the tremendous cost savings and minimal disruption to the community. The project was completed on time, on budget and without a single neighborhood complaint. **205-957-0020; www.sprayroq.com c**

T&T TOOLS

T&T Tools, Inc.

Fax: 800-521-3260

Email: sales@mightyprobe.com



800-521-6893

www.MightyProbe.com

MADE IN THE USA | 30 YEARS OF EXPERIENCE | FAMILY BUSINESS

Call for a **FREE** Catalog



Call for a **FREE** Catalog

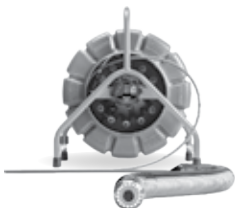
HOOKS...

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

PROBES...

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

YOUR SOURCE FOR RIDGID



SeeSnake® TruSense™
Camera Reel



CS12x Digital
Reporting Monitor*



Flexshaft
K9-102, K9-204



SeeSnake® Compact M40
Camera System



CS65x Digital
Reporting Monitor*



SeeSnake® MAX
rM200 Camera
System
*With Wi-Fi



microDrain Reel



CS6xVersa Digital
Recording Monitor*



CENTRAL OKLAHOMA
Winnelson
PLUMBING • PUMPS • TOOLS
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 - Keith: 405-602-9155
and Weekends - Ryan: 719-243-3539

CALL TOLL FREE: 888-947-8761

5037 NW 10th • Oklahoma City, OK 73127

www.centralwinnelson.com

PRODUCT SPOTLIGHT

UV CURING SYSTEM GIVES OPERATOR COMPLETE CONTROL

By Craig Mandli

Being rushed on a point repair job can lead to mistakes. UV patch curing, however, eliminates the rush to install. Unlike other pipe repair systems where the operator must install the patch quickly before the resin begins to cure, the LightRay LR3 LED UV System provides the time and flexibility to install, then cures in as little as 10 minutes when the light is activated.

The system is a collaboration between Spartan Tool and Waterline Renewal Technologies. The state-of-the-art technology can significantly reduce costs and risks when compared to traditional thermo-setting or ambient-cured CIPP liners, creating new opportunities for drain cleaning contractors, according to Mike Sekach, national sales director for Spartan Tool.

“LightRay LR3’s process is straightforward, and it offers a quick curing time,” he says. “Once the pipe is prepped, the liner is set in place, and the packer is inflated, curing is initiated by activating the light. The simple, stress-free process and quick return on investment make it a no-brainer for our customers.”

LR3’s curing process doesn’t start until the UV light is activated. This gives the operator time to place and readjust the liner in the pipe as needed. While other pipe repair systems use resin that needs to



be measured and mixed precisely, LR3’s non-VOC resin is pre-impregnated into the high-performance fiberglass liner and shipped ready to install, so there’s no mixing or measuring of resin.

“It provides an opportunity for drain cleaning business owners to expand their business and offer their customers a cost-effective, lower-risk, easy-to-install, permanent solution for damaged pipes,” says Sekach. “With LR3, when a drain cleaner uncovers a damaged pipe, they can offer their customer a same-day repair.”

The LightRay LR3 System has multiple applications, according to Sekach. It can be used in interior and exterior lines in residential, commercial, or industrial settings. It can also be used as both a pull-in-place and push-in-place spot repair system, setting it apart from other pipe repair systems.

“We believe the LightRay LR3 System is a great fit for the drain cleaning industry because it is a fast, effective, same-day solution for damaged pipes,” he says. “With the LR3 System, when a drain cleaner responds to a call, they can clear the stoppage and also provide the customer with an on-the-spot repair for a fraction of the cost of other pipe repair methods.” **800-435-3866; www.spartantool.com**

Cleaner
THE CONVERSATION.
—◆—
THE CAMARADERIE.
—◆—
THE COMMUNITY.

JOIN US



RAT OUT YOUR ROOT PROBLEMS



3/4", 1", 1 1/2" nozzles come in kit form.

- 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.



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



www.rootrat.net

MADE IN THE USA

BLACKHAWK

Trenchless Superstore

Since 2013, we've been providing the Best Pricing, Products, Service & Selection.

BlackhawkTechSupply.com ♦ 910 W Wilson St. Batavia, IL 60510



Pipe Lining Materials

- Epoxy & UV Methacrylate Resin
- Stitched Scrim
- 4-D
- SuperFlex
- Flex
- Imperliner
- Scrim Transition Liners
- Cal-Tube
- Remote Start Material
- Accessories



Point Repair

- Packers
- Patch Kits
- Bulk Material
- Premium 3P Silicate in easy to use no-mess bottles
- Starter Packages
- Accessories

Example: 4" x 4' Winter Patch Kit \$225



Pipe Cleaning

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

RENSSI
DRAIN CLEANING EQUIPMENT

SPECIAL:
Free standard shipping on orders over \$5000 (lower 48 states)

Call for knowledgeable support and fast shipping!

630-326-9061

What's Your MONEY Machine?

Do you have a go-to service vehicle or high-tech workhorse tool that conquers many jobsite challenges?

Let us know about it at editor@cleaner.com and we'll consider highlighting your most valuable performer in our Money Machines feature.

Cleaner

OUR BEST SELLING DRAIN LINE JETTER!

HOTJET II

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



TRAINING AND FREE WARTHOG NOZZLE INCLUDED!

OVER 30 YEARS BUILDING QUALITY EQUIPMENT

HotJetUSA

1-800-624-8186
WWW.HOTJETUSA.COM

PRICES SUBJECT TO CHANGE - CALL FOR CURRENT PRICING



AMAZING ARCTIC BLASTER

A PROPANE TORCH, 2 GALLONS OF WATER
THAT'S ALL YOU NEED TO SEE FAST, SAFE AND ECONOMICAL THAWING RESULTS.


- Thaws pipes above & below ground
- Use on plastic, copper or ABS
- Perfect for roof drains & conduit thawing
- Will have the job done before most thawing devices are ready to work.
- Perfect for Public Works, Plumbers, electricians, Septic Pumps, Drain Cleaners

ARCTIC BLASTERS INC.
SUNDRE, ALBERTA
403.638.3934 • ArcticBlaster.com

SEWER CRAWLER PARTS & MANHOLE TOOLS

GRITTED WHEELS
GRITTED TRACKS
PIGTAILS & MOTOR CABLES
FIBERGLASS POLES
JETCAMs & MORE...
FITTING ALL MAJOR BRANDS

TRUGRITTRACTION.COM
407-900-1091



It's your magazine.

Tell us your story.



At Cleaner, we're looking for service companies with interesting stories to tell. If you'd like to share your story, send us a note at editor@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
dynamiccablerepairs@yahoo.com
www.dynamicrepairs.biz

T&T Tools, Inc.

800-521-6893



CALL for a FREE Catalog

Many Styles Available

www.mightyprobe.com

Insulated Soil Probes (for locating)

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

wwett BOOTH 6601

Cleaner



f

t

AMERICAN JETTER.COM

Up to 67% MORE EFFICIENT



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



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

866-944-3569



Receive Email News Alerts At
Cleaner.com/alerts

Cleaner

BUYING SOMETHING? SELLING SOMETHING? LOOKING FOR SOMETHING?

We have **some things** and **more** in the

CLASSIFIEDS.

Check it out in each issue of Cleaner magazine or go to www.cleaner.com/classifieds



PPI releases new technical document, announces new online course

The Plastics Pipe Institute released a new technical document that reports on the association's findings about the compatibility of plastic piping materials with chlorine dioxide when used in hot- and cold-water plumbing distribution systems. Prepared by PPI's Building & Construction Division, *PPI TN-67 Chlorine Dioxide and Plastic Hot- And Cold-Water Plumbing Distribution Pipes* focuses on the application of chlorine dioxide within buildings and its potential effects on plastic hot- and cold-water plumbing distribution pipe materials.

Also, PPI's newest online course, PEX Tubing for Water Service Line Applications, is now available on its PPI eLearn channel. It provides a self-directed learning opportunity for professionals in the plumbing and underground infrastructure industries and CEU credit will be awarded to those completing the ASPE-accredited course. The class is based on requirements of the updated industry standard *AWWA C904-22 Crosslinked Polyethylene Pressure Tube, 1/2 Inch Through 3 Inch for Water Service*, the ANSI-approved standard for PEX tubing intended to deliver potable water into homes and buildings.

Aries Industries adds Colorado dealership

Aries Industries has strengthened its western U.S. market reach with the addition of a Colorado dealership with three locations. Faris Machinery specializes in new and used heavy equipment for municipalities and construction operations. The company provides sales, rentals, service and training from dealerships in Commerce City, Colorado Springs and Grand Junction. **c**

Get new
content
right
to your
inbox!



www.Cleaner.com/alerts

LIKE WHAT YOU SEE?

GO ONLINE TODAY
FOR A **FREE**
SUBSCRIPTION,
CLEANER.COM

COLE Publishing Inc.
800-257-7222



CLASSIFIEDS

see photos in color at www.cleaner.com

BLOWERS

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

BUCKET MACHINES



2013 Sewer Equipment bucket machines, new, never used. Also available 2010 Sewer Equipment truck loader and 2005 puller

Contact usedsewerequip@gmail.com C01

BUSINESSES



Wastewater Management Company on Jamaica's North Coast for Sale.

Services all the major Resort Hotels with several Contracts earning US Dollars. Established in 2001. Seven Vacuum Trucks/Trailers specializing in Grease Disposal, Lift Station Vacuuming, and Sales of S.B.R ChromaFlow Wastewater Systems Producing Tertiary Treated Effluent. Island Rep for Internationally recognized Grease Interceptors and Major Submersible Pump Manufacturers. Owner wants to Retire.

1-876-382-3385 C01

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

DRAIN/SEWER CLEANING EQUIPMENT

CCTV trucks & jet vacs for sale. Prices reduced. Prices reduced for a quick sale.

Go to www.spands.net for details and photos OR call Mark at **708-475-7117** C03

JET VACS



2012 International 7500 Jet/Vac Combo, Vactor, 115,000 miles, Truck Hours - 9539 hours, Blower Hours - 709.3, 600' of hose, 1000 gallon fresh water tanks, 10 cubic yards debris tank, 80 GPM at 2,000 PSI.Listed for \$130,000

Call for more information at **515-434-2248** C01



2017 Vacall AJV1215 Freightliner 108SD 22,000mi, Cummins 370HP, 3500hr, Allison Auto, 12-yard, 1,500-gallon, 87 GPM @ 2000 PSI General pump, Roots 824 18" blower, 850 PSI washdown gun, 2000 PSI hydro excavation kit, tank flush out, galvanized debris body, 715 GPM rear trash pump, 600' 1" sewer hose, wired/wireless remote. Ready to go to work.

Call Brian for pricing **303-898-9475** C01

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

JETTERS - TRAILER

2023 US Jetting 4018-300 Jet Trailer. Stock# 14107. www.vacuumsalesinc.com (888)VAC-UNIT (822-8648) (CBM)

Pre Owned 1995 Shamrock Pipe Tools / Sreco SPT650 trailer, Mounted, sewer jetting unit. www.vacuumsalesinc.com (888) VAC-UNIT (822-8648) (CBM)

Cleaner
AVERAGE MONTHLY
CIRCULATION REACHES

**21,000+
READERS!**



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

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

PIPELINE REHABILITATION



2008 Cues T/V Cutter truck. Ford F-650 XL Super Duty Cummins Diesel. Approx 40,000 miles. VanAir under carriage compressor. Great shape. Also have Cues TV cutter trailer and other rehab and sewer maintenance equipment available. Call For more details.

Kelly (608)835-7767 CBM

PUMPS

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

RENTAL EQUIPMENT

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

SAFETY EQUIPMENT

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

TOOLS

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

TV INSPECTION



2012 RS Technical Subsite camera box truck. Ford E450 53000 miles, gas, generator/MEPS power system, aux AC and heater. Includes two Transtar camera heads, one Trackstar crawler, one Mighty Mini crawler with camera, one steerable storm drain tractor with camera, one mainline reel, one portable reel with controller, one push rod cable 200' with self leveling camera head, one main control unit, and one controller. Vehicle runs and drives equipment is sold as is, this is a former municipal unit taken on trade. Asking \$25,000 OBO

Call Brian **303-898-9475** C01



2009 Chevy Duramax Diesel- CUES/Trio Camera Inspection Truck with 2016 Camera and Transporter, both recently serviced. 1,000ft of camera cable replaced a year ago with little use. Injectors recently replaced in truck. Everything runs great. Inspection system is very basic. Truck is compact and good for getting into tight spots and remote locations. Asking \$32,000 obo.

Contact **267-249-3774** C01

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

END of YEAR MUNICIPAL Equipment SALE, TV Insp, Jetters, Vactors, Text for inventory 1-717-554-1715 (C02)

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)

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)

VACUUM EQUIPMENT



2016 Vactor 2100 on a Western star truck, 108,000 km 1500 Gallon water tanks, 12 yard debris tank, Blower 1700 Hr, truck is in good condition and works daily.\$219,000 US
Call: 613-794-8182 C01

WATERBLASTING

N.L.B Waterblaster Model Number 2020D 7/8. IOS number 3930 Max pressure 20,000 PSI. This blaster was truck mounted and taken off, runs good and pumps upto pressure (axels are not part of machine) \$15,000.00 O.B.O. A class B wrecker can pick up and haul) Also, Jetstream 15K foot box for more info email randyjholmes@outlook.com (C01)

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



JOIN US



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

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

www.cleaner.com



THE PIPELINE TO MORE INNOVATION IS HERE.

Take a glimpse into the future of wastewater innovation at The WWETT Show. Here, you'll uncover a trove of cutting-edge equipment and the latest services revolutionizing the industry.

The Expo Hall will be packed full of everything from high-tech inspection gear and battle-tested safety equipment, to futuristic AI software and world-renowned rental solution providers. Plus, The WWETT Show offers multiple networking opportunities, one of the largest accredited educational programs, and a few surprises you'll just have to be here to experience.

Don't miss your chance to gain the edge and rise above the growing competition. Join us and thousands of other professionals in Indianapolis in 2024!

 **CONFERENCE:** January 24-26
EXPO HALL: January 25-27
Indiana Convention Center

Using promo code
EB45
When you register today
at [wwettshow.com](http://www.wwettshow.com)

NEW YEAR - NEW EQUIPMENT - CALL TODAY!



GapVax®

GapVax custom builds to meet *YOUR* needs. Industrial vacuum equipment built *FOR THE OPERATOR, BY THE OPERATOR*. Air movers, hydro excavators, combination jetvac's, recycle jetvac's, trailer jettors, skid mounted vacuum units, parts and accessories - we've got what you need! Give us a call today to request a demo or speak with a sales manager!

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

281-884-8658
LA PORTE, TX



GAPVAX.COM

888-442-7829
JOHNSTOWN, PA



CONFERENCE: JANUARY 24-26, 2024
EXPO HALL: JANUARY 25-27, 2024

INDIANA CONVENTION CENTER
INDIANAPOLIS, IN

Visit us in Booth 1917

MACHINES
AS THAT WORK
HARD
AS YOU DO

45%

of North American pipes are at or
**PAST THE POINT OF
STRUCTURAL INTEGRITY**

Offer your customers a
**COST-EFFECTIVE
LESS DISRUPTIVE
SAME-DAY
PERMANENT SOLUTION**
for damaged pipes



SOLVE YOUR
CUSTOMERS'
PIPE PROBLEMS

LIGHTRAY[™]
BUILT IN THE USA by SPARTAN TOOL



Grow your business profitably with LightRay LR3 UV pipe repair.

The LightRay LR3 System is the most advanced UV cast-in-place pipe technology that gives the operator complete control of the curing process. The system allows time and flexibility to install the patch, then cures in as little as 10 minutes when the light is activated. This groundbreaking technology provides an opportunity for business owners to expand their business profitably with a cost-effective, lower-risk, easy-to-install solution for repairing damaged pipes.

Get started today with payments as low as \$545 per month.

The LightRay LR3 System gives you an opportunity to expand your business profitably with a cost-effective, lower-risk, easy-to-install solution for repairing damaged pipes. With a low average cost to install, the LR3 System pays for itself with the profit from just one install per month. That's right, if you do one LR3 install per month, the profit from that job will cover the cost of the monthly payment.



SCAN ME

SPARTANTOOL.COM
800.435.3866

VISIT
US AT

wwett24

BOOTH
5105