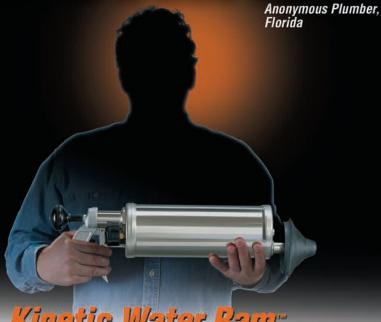


"The Ram is so good I don't want my competition to know about it."



Kinetic Water Ram. The best kept secret for over 50 years.

Thousands of satisfied professionals have learned the secret: If you've ever tried to wrestle a snake through a drum trap or a series of tight bends to reach a stoppage, you'll be amazed how quick and easy it is to do the job with a Kinetic Water Ram.

"The Water Ram is easy, convenient and handles 90% of my drain jobs."

Jim Wolters, Jim's Refrigeration & Appliance Repair, Virginia

The Ram uses a burst of compressed air that drives a shock wave (kinetic energy) through the water to break up the stoppage. You get instant impact with no pressure build-up. Cleaner than snakes – safer than chemicals.

"We get more jobs done faster with Kinetic Water Ram. It's clean and efficient. And it brings us business."

Alain Breton, Pro-Tech Drains, Quebec

This compact, rugged, all-metal tool handles clogged sinks, slow draining tubs, toilets, and more in lines up to 4" in diameter. Just pump it up, insert it into the drain and snap the trigger. It's that quick!

"It takes longer to write up the bill than to unclog a drain with that tool."

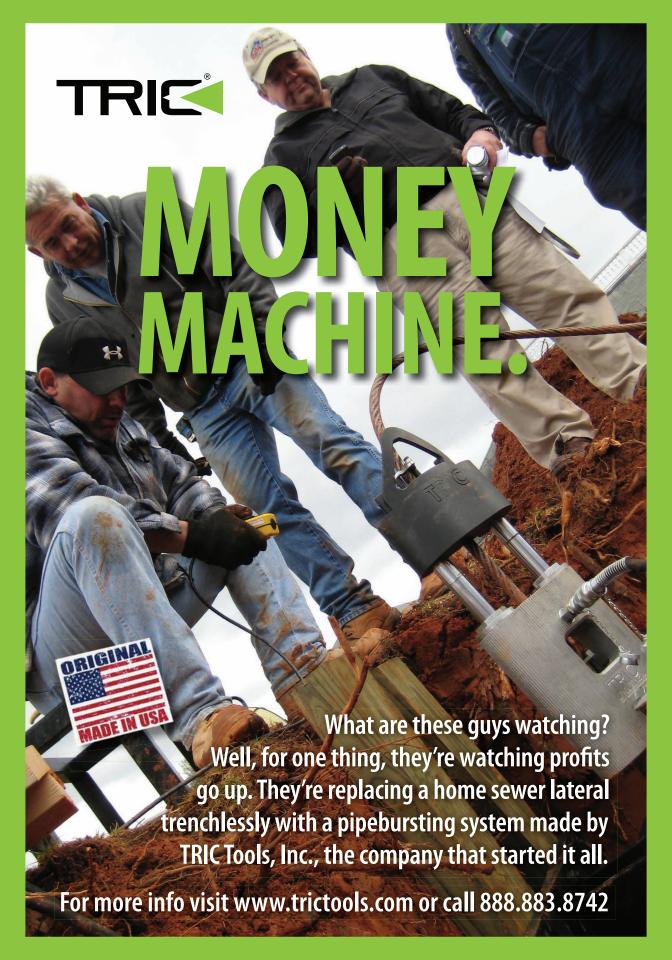
Dale Smith, D. Smith Plumbing Services, Mississippi

Want to know more?

Visit www.drainbrain.com/ram to see the Kinetic Water Ram in action and read success stories of contractors who have become heroes! Or call the Drain Brains® at 800-245-6200.

www.drainbrain.com/ram







n the ROAD

Back Support

Portable drum machine lightens technicians' loads while amping up efficiency — all without power cords.

- By Ken Wysocky



On the Cover

Ryan Colgan, Pacific Drain & Plumbing service technician, preps a new Defender water heater (Bradford White Water Heaters) for installation while on a job site in San Diego. The company, based in Vista, was founded in 1975 as Pacific Drain & Plumbing but expanded to plumbing services in 2012 and has grown significantly.

Photography by Collin Chappelle

Coming Next Month -Hydronic Heating Systems, HVAC

- ✓ Plumber Profile: Milestone Plumbing (Wauwatosa, Wisconsin)
- Industry Insider: Randy Lorge
- Preview: AHR Expo

From the Editor:

Are You Ready for the New Year?

Planning should have started awhile ago, but it's still not too late to get a start on 2019.

- By Cory Dellenbach

10 aplumbermag.com

Check out our exclusive online content.

12 Profile: A New Course

Addition of plumbing and underground utility services spurs big growth for California drain cleaning company.

- By Marian Bond

26 Industry Insider: Warning: Slow Down

Don't be in a hurry to grow your business; taking your time could benefit your company even more.

- By Anthony Pacilla

Smart Business: Are You Paying Employees the Right Wages?

Finding the compensation sweet spot will retain great workers without breaking the bank, but getting there can be a major research challenge for small-business owners.

- By Erik Gunn

32 In the Shop: Wrapping It Up

Vehicle wraps can be a good, long-lasting investment for your plumbing business.

- By Suzanne Kearns

34 First Responder: Serving the Veterans

Nebraska contractor takes pride in helping housing complex for veterans resolve plumbing issues.

- By Giles Lambertson

36 Product News:

Product Spotlight: Outdoor valve provides tempered water in cold climates

- By Craig Mandli

40 Product Focus: Green Plumbing Products

- By Craig Mandli

50 Case Studies: Green Plumbing Products

- By Craig Mandli

Industry News

54 Calendar





CABLE MACHINES | VIDEO INSPECTION | HYDRO JETTERS

SHOP ONLINE SPARTANTOOL.COM OR BY PHONE 800.435.3866

1506 W DIVISION ST MENDOTA, IL 61342

WSMEN* OWNED

ADVERTISER INDEX

ALLAN J. COLEMAN SINCE 1905
Allan J. Coleman Co
American Jetter57
Arctic Blasters, Inc
BRIGHT DYES - Division of Kingscote Chemicals57
CAM
Cam Spray
Winnelson
Central Oklahoma Winnelson15, 35
DURACABLE.
Duracable Manufacturing Company .19
Electric Eel Mfg 24
FastEST, Inc
ו עסונטו, ווונ
Fluidmaster
⊕
Fluidmaster.
Fluidmaster. 55
Fluidmaster. 55 Fluidmaster. 55 FIRE CLEANERS General Pipe Cleaners/
Fluidmaster. Fluidmaster
Fluidmaster. 55 Fluidmaster. 55 FIDE CLEANERS General Pipe Cleaners/ General Wire Spring 2 HammerHead Trenchless 25
Fluidmaster. 55 Fluidmaster. 55 FIDER CLEANERS General Pipe Cleaners/ General Wire Spring 2 HammerHead Trenchless 25 Hot Jet USA 58
Fluidmaster. 55 Fluidmaster. 55 FROM PARTIE CLEANERS General Pipe Cleaners/ General Wire Spring. 2 HammerHead Trenchless 25 Hot Jet USA 58
Fluidmaster. 55 Fluidmaster. 55 FINITE CLEANERS General Pipe Cleaners/ General Wire Spring2 HammerHead Trenchless25 Hot Jet USA

PICOTE No for phices
Picote Solutions 30
O DE LINING SUPPLY
Pipe Lining Supply 59
FINELITY
PrimeLine Products, Inc27
Pulsar 2000, Inc 20
RIDGID11
ServiceMaster Restore
Shark Bite, a Reliance Worldwide Corp. (RWC) 17
SPARTAN Spartan Tool5
Superior Signal Company LLC57
Texas Truck Racks 24
The Home Depot
TRIC Tools, Inc
ultraSHORE PRODUCTS
Ultra Shore33
WATER GANNON
Water Cannon, Inc MWBE7, 57
WWETT Show 56
Classifieds48

What you learn on these pages could be worth \$1,000s. It's all yours for FREE Subscribe today.



Plumber

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

Call toll-free 800-257-7222 Outside of U.S. or Canada call 715-546-3346 Mon.- Fri., 7:30 a.m.-5 p.m. CST Website: www.plumbermag.com Email: info@plumbermag.com | Fax: 715-546-3786

SUBSCRIPTION INFORMATION: A one-year (12-issue) subscription to Plumber 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.plumbermag.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 Nicole at nicolel@colepublishing.com.

CLASSIFIED ADVERTISING: 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 that in its opinion is misleading, unfair or incompatible with the character of the publication.





REPRINTS AND BACK ISSUES: Visit www.plumbermag.com for options and pricing. To order reprints, call Jeff Lane at 800-257-7222 (715-546-3346) or email jeff.lane@ colepublishing.com. To order back issues, call Nicole at 800-257-7222 (715-546-3346) or email nicole.labeau@colepublishing.com

CIRCULATION: Circulation averages 27,746 copies per month. This figure includes both U.S. and international distribution.

© 2018 COLE PUBLISHING INC.

No part may be reproduced without permission of the publisher.

- f facebook.com/PlumberMag
- twitter.com/PlumberMag
- youtube.com/PlumberMagazine
- linkedin.com/company/plumber-magazine

RMA-LTM

Perma-Liner Industries. LLC 60

DUSTRIES,

ALL PRESSURE WASHERS

Delivered Price - Quantity Discounts

ONE STOP SHOPPING

Pressure Pro, Simpson, Water Cannon, Easy-Kleen, Hydro Tek

AllPressureWashers.com

1.800.363-9855



Mobile Wash





Rental Duty – No Tip Frames



Diesel Portable

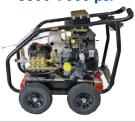


Skid – Slide-in Units

Indoor Electric Powered 7000 psi



Roll Cage Series 3600-7000 psi



Hot Water Portable

Diesel Powered 7000 psi



Jetter Package Trail-



Gas, Electric & Diesel 15000 psi



Hot Gas, Electric & Diesel 15000 psi



Hot Water Up to 12 gpm



Hot Water Diesel 11500 psi



FROM THE EDITOR



Cory Dellenbach

Are You Ready for the New Year?

Planning should have started awhile ago, but it's still not too late to get a start on 2019



nother year is drawing to a close and that means it's time to take a step back, look at what you accomplished this year and plan ahead for 2019.

Hopefully you've already started. If you haven't, you're off to a late start. According to financial advisers, the best time to start planning for the coming year is after your third-quarter results are in. At the very latest, it should start before the Thanksgiving holiday.

Try to predict what will happen next year. Look at which products or services performed the best for your plumbing company.

One of the first things you need to do is look at your income and expenses for the year. Review your budget and see where things differed from what you initially projected. Try to predict what will happen next year. Look at which products or services performed the best for your plumbing company.

In addition to reviewing the numbers, talk with your managers or technicians and get their thoughts on why the business performed the way it did.

THE NEXT STEPS

After you do that, you're ready to start planning for the year ahead. Even before you create a budget, the first step should be creating projections for your company. Review the chances that your customers will buy more or less from you, whether you think your expenses will increase or decrease, and if competitors, customer preferences, or new technologies will change your marketplace.

Once you've projected your sales and expenses for the year ahead, create a detailed master budget that includes your income and expenses projections. Look at your estimated year-end profit and determine if it's what you want it to be or if you need to lower your costs, reduce debt, or increase sales targets.

After you've reviewed your past performance, made your projections, created your budget, and discussed options for new business development, it is finally time to create your plan for the coming year. Create benchmarks that warn you when you're underperforming to give you the chance to adjust, such as reducing spending, arranging for more credit, or exiting failed marketing strategies.

HOLIDAY SHOPPING

The days are getting fewer before the gift-giving season is upon us. Are you still looking for a gift to give to your employees, or even yourself?

Check out the Product Focus feature this month. It's several pages full of tools and fixtures and anything else a plumber might want. If there isn't enough there for you, then head over to the Product News feature where you'll see the newest products on the market.

PLANS FOR THE NEW YEAR

Have you started to set goals for 2019? Are you planning on growing your business by adding technicians or services? Let us know what's ahead for next year. You can email me at editor@plumbermag.com or call 800-257-7222. I look forward to hearing from you.

Enjoy this issue!



drain tools built to prevail

Capability That Means Business.

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

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



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

* no purchase necessary







plumbermag.com

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



TRUCK TALES

Former Ambulance Converted to Valuable Plumbing Tool

About eight years ago, Kent Morton purchased a used ambulance for \$15,000 for his business. He continues to use it as an emergency responder but these days it is equipped for emergencies of a different variety — drain cleaning emergencies. Check out this online exclusive to see how Morton configured the ambulance to handle any drain job that comes the company's way.

plumbermag.com/featured



Improve Your Customer Communication Game

Your technical skills might be excellent, but if you can't master the art of customer communication, you'll ultimately be hurting your business. This online exclusive provides tips on how to improve that aspect of your business skill set. / plumbermag.com/featured

OVERHEARD ONLINE

"Instead of 'talking to' your employees, ask questions and listen to their ideas. They may have a better idea or convince you the problem isn't as dire as you assumed."

- Don't Be a Business Owner Who Wastes Employees' Time
- ✓ olumbermag.com/featured

WORDS TO AVOID

Don't Use These Common Phrases Around Employees

How often do clichéd phrases like "Work smarter, not harder," or "Failure is not an option," crop up in your conversations with employees? It's a problem if you're a boss hoping to communicate effectively or be taken seriously.



Learn more about why it's important to avoid certain words and phrases and what to say instead. 🖊 plumbermag.com/featured



NEWS & ALERTS



Visit Plumbermag.com and sign up for newsletters and alerts. Get exclusive content delivered right to your inbox on topics important to you!



VISIT US AT AHR BOOTH #B2219

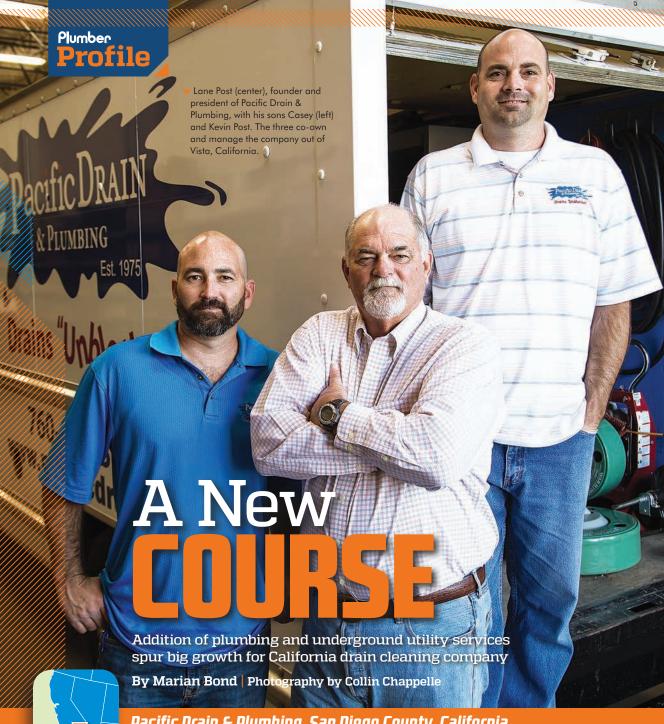


FIRST IN PRESSING. #1 ON THE JOB.

RIDGID® has been the industry leader in pressing for nearly 20 years. Confident performance and unmatched durability you trust that's RIDGID pressing.

©2018, RIDGID, Inc. The RIDGID logo is a registered trademark of RIDGID, Inc. in the U.S. and other countries. All other trademarks belong to their respective holders.

RIDGID.COM/Pressing



Pacific Drain & Plumbing, San Diego County, California

OWNER Family owned; Lane Post, founder and president

ESTABLISHED

1975

EMPLOYEES

48

SERVICES

Plumbing, drain cleaning, lining, pipe bursting to residential,

commercial, and municipal clients

SERVICE AREA

100-mile radius of San Diego

WEBSITE

www.pacificdrain.com

ane Post, Pacific Drain & Plumbing founder and president, had been working in conjunction with local plumbing contractors for years when he and his staff realized the situation was more than lopsided.

In 1975, Post established his drain cleaning business, taking care of residential and small commercial clients. When there was a need for a plumber, he referred the customer to a network of plumbing contractors. In return, those professionals sent their drain work to Pacific Drain & Plumbing. Too often, the business exchange generated a 4-to-1 or greater referral rate with Post's company on the short side. The management team soon realized it was time to include plumbing on their growing menu of services.

It made sense since the company's loyal customer base had been requesting plumbing services for years.

Post was not averse to branching out in other directions when opportunities presented themselves. His son, Kevin Post, joined the firm in 1995, and his younger son, Casey Post, came on board in 2001. Lane Post had been a drain cleaner for 27 years, but the business had to expand in order to support three families. At that time, there

66 We came to believe that we were where the market wanted us to be. We saw more and more opportunities that we just could not pass up. We hired a pipeline foreman who had experience. It just seemed like natural growth for us."

Lane Post

were nine on the staff, and they were doing up to 70 drain jobs per day.

"I wanted to secure the future for all of our people," Post says. "Over the years in the business, we would see problems, often minor, that needed to be fixed — a need for someone to dig down a few feet and make a repair. It wasn't always easy to find the right company to call on for our customer. I saw that as an opportunity for us. We needed to do more."



Agan Colgan, service technician, attaches the gas line on a new Defender water heater (Bradford White Water Heaters) in a driveway prior to installation at a client's home in San Diego.



- ▲ Technicians Alex Hernandez, left, and Tyler McNeil, center, of Pacific Drain & Plumbing's Arrow Pipeline Repair division, join supervisor Chad Gaines to start the inversion process to reline a customer's pipes from a small access pit in the driveway.
- ▼ Colgan puts a valve on a new drain pan for a residential water heater installation.



66 We like to refer to employees as business. partners — associates. We want them to have an allegiance to the company and the customer." Tom Holland

EXPANDING SERVICES

The company — with several divisions providing drain cleaning, relining, pipe bursting, jetting, CCTV inspection, lateral cutting, sewer and septic, service lateral connection dig and replace — made the wise decision to include plumbing in 2012. The result has proven to be an astounding success and put the company in a dominant position in a major market.

"All those years when I was providing drain service to my customers, they couldn't understand why I would call in a plumber to fix the faucet or install a water heater," Post says. "I was constantly explaining, 'Gosh, we don't do that. I'm not a plumber.' So we kept giving that business away.

"Adding plumbing has been a fantastic opportunity, and we have seen this phenomenal growth."

Starting with one service van and one plumber, the plumbing division grew to nine service and repair vans within 18 months, traversing a 50-mile radius with more than 20 cities and small towns and a combined population of approximately 1 million.

The company's nine journeyman plumbers handle all plumbing-related services, and drain cleaning is the responsibility of a separate group of seven drain technicians. In addition, Arrow Pipeline Repair — the division that handles underground utility work, including jetting and pipe rehabilitation — has another 14 vehicles serving its diverse clientele.

"This turned out to be a fantastic opportunity for our company," Post says. "Because of our reputation in the industry, we were able to find qualified technicians who wanted to be a part of our venture. We looked for personality as well as experience in our plumbers. We went to the local supply houses and began asking about people who would fit our profile. One name kept coming up. Eventually we were able to secure an interview with that individual, and we were so impressed we put an offer on the table that very day. This guy, Dave Angelo, who goes by the moniker 'Boston Dave,' has become our lead plumber, and we give him credit as being extremely valuable in the growth of our plumbing division. He knew and was in contact with other plumbers, and as word got out, we had qualified people knocking on our door."

He says that they have a policy that all field technicians and plumbers are familiar with all the equipment and processes used in all departments. This has proven helpful in better serving the client, but also in promoting the company and the many facets they are equipped to address.

He says that over the years, he often considered adding plumbing before finally taking the leap. "I never imagined this would happen to this degree," says Post, who adds he is not a plumber but still a drain cleaner. "Now I know I am in the market that wanted me. The opportunity was there all the time."

PUTTING IT ALL TOGETHER

Post is particularly proud that the company has grown from nine employees in 2001 to 48 today. During those years, the company continued to expand, adding new people and equipment despite the down economy. Emergency work became a focus.

"We came to believe that we were where the market wanted us to be," Post says. "We saw more and more opportunities that we just could not pass up. We hired a



rofil



▲ Colgan searches for the wall studs while preparing to install a new water heater for a residential client after the old heater's tank failed. Colgan updated all aspects of the new water heater and its installation to the new plumbing codes including a drain pan, straps and fittings.

pipeline foreman who had experience. It just seemed like natural growth for us."

The growth continued as Post hired Tom Holland as a consultant in marketing and business development and hired Roy Gallegos as general manager. His sons took on vice president posts. Post credits Holland for his wisdom in realizing their best potential plumbing customers would come from their existing client list. These were people who had been requesting their services for years.

"They knew us and liked us," Holland says. "We had the key to finding plumbers who could represent the company and solve the problems. We like to refer to employees as business partners — associates. We want them to have an allegiance to the company and the customer.

Never settle for less

Lane Post, owner of Pacific Drain & Plumbing, took the first important step toward expansion in 2002 by creating a new division, Arrow Pipeline Repair.

He acquired his C-36 plumbing license and Class A General Engineering Contractor license, which allowed the company to move into underground utility work, including jetting and pipe rehabilitation.

The collections systems in Pacific Drain & Plumbing's service area were built primarily with cast iron, clay and Orangeburg pipe. They have their share of roots, offsets, corrosion and bellies.

Many of the neighborhoods are comprised of housing tracks with as many as 200 homes that are basically identical in terms of water and sewer lines, which are the responsibility of the property owner. So for repair and maintenance, the resident or smallbusiness owner foots the bill all the way out to the sewer connection in the middle of the street. Pipe bursting and relining have become the trend over digand-replace jobs.

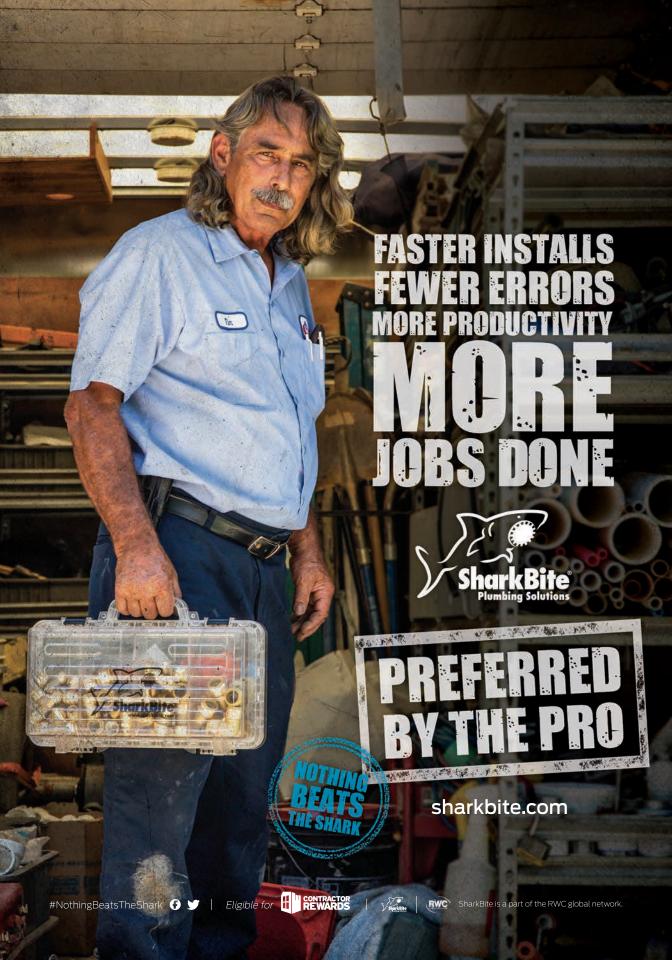
Post notes that his company is the only San Diego operator that holds the C-36 and active Class A license, which gives them far greater capacity than the average plumber or contractor to handle this type of work.

With so much capability, Arrow Pipeline Repair is also serving many of the smaller municipalities for emergency repairs, such as water main and sewer line breaks, and removing blockages. They can take care of concrete, rebar, roots, tar and protruding laterals and can also handle reinstatement.

"Our goal in the industry is to be the go-to professional," Post says.

"We did not do mailings. We turned to social media, added a website and kept it enhanced. We encouraged clients to put up a comment on Yelp. This was a tremendous asset. This site is not just for restaurant reviews, but plumbing companies and other service-oriented providers. This became a powerful source of outreach for us."

Holland says they also did a database/customer analysis that was helpful as they expanded into plumbing. They wanted to gain a better understanding of their customer base and marketplace. With 60 percent residential and 40 percent commercial, including property management and apartment complexes, it was important to understand their particular region and possibilities for outreach. Continued ▶



Profile

The leadership staff at Pacific Drain & Plumbing in their shop in San Diego are (from left) Kevin Post, vice president; Roy Gallegos, general manager; David Angelo, plumbing manager; Lane Post, founder and president; and Casey Post, vice president.

INVENTORY AT HAND

The plumbing division operates with a fleet of nine 12-foot box vans. Each van carries from \$20,000 to \$30,000 of equipment and inventory, which allows technicians to handle many home emergencies and general repairs without running to a supply house. This includes a full complement of drain cleaning equipment, for which there are frequent calls.

Drain cleaning tools include trailer jetters from US Jetting (4,000 psi/18 gpm) and Harben (4,000 psi/18 gpm) and one truckmounted unit from Harben (4,000 psi/14 gpm). Cable machines are from Spartan Tool and Gorlitz Sewer & Drain.

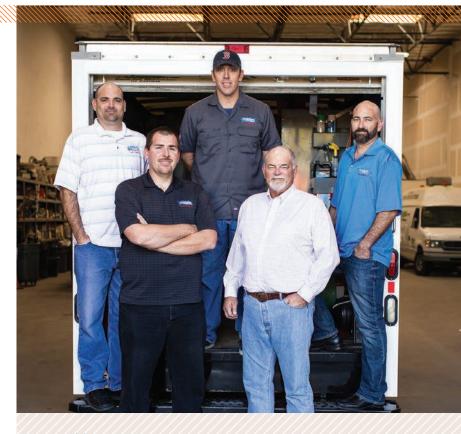
On the rehabilitation side, the company uses HammerHead Trenchless pipe bursting equipment, along with several other distributors for relining materials. High-speed robotic cutting and reinstatement cutters are from I.S.T. Services, including the PC 150 and PC 200.

The company is headquartered in Vista, California, where they have a 10,000-square-foot office and warehouse facility. The plumbing division has paired up with a national supplier and has inventory on a consignment basis to draw from at home base.

Gallegos estimates the value of the consigned inventory, which is primarily for plumbing, at a six-digit figure. The plumbing division's sales represent a multimillion-dollar figure, and double-digit growth is projected.

Having these materials at hand has been an asset for Pacific Drain & Plumbing, as they have the inventory available without the initial investment. Service technicians are responsible for the equipment on their service vans and for maintaining an inventory track.

At their weekly meetings, they stress to plumbers the importance of their role in maintaining their equipment



66 I'm old school, but I wanted fresh ideas, I didn't want to come across as having all this experience and not needing additional eyes on what we were going to be doing."

Lane Post

and the responsibility they are given. And even more importantly, that the customer is always king.

"We want them to be personable, but also to educate the customer," Gallegos says. "We are not there to sell, but to serve. We want and need those good reviews on social media.

"We also stress safety at every opportunity."

TIMING AND COMMUNICATION

The plumbing division has been driven by good communication through social media and through Angelo's efforts to get the word out and represent the team in the field.

"He is the guy who comes to us and says 'I need more plumbers. I need another service van," Post says. "This is the way it has been for us in this division. The plumbing opportunities have been sitting there, just waiting for the taking."

Post believes his years in the industry have been extremely helpful in guiding the company's growth, but he also finds himself at a bit of a crossroads.



WHEN YOU'RE ON SITE ANY THINGS

..... CAN HAPPEN_.....

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









CABLES

BLADES

MACHINES -

DRAIN CARE PRODUCTS

DURACABLE.COM



877 244 0826

"I believed it was important to listen to the 'Young Turks' - my sons, Roy Gallegos, and of course Tom Holland. I saw that I had taken things about as far as I was capable of and needed help both with the technical side and with the social media — the internet and computer. I'm old school, but I wanted fresh ideas. I didn't want to come across as having all this experience and not needing additional eyes on what we were going to be doing.

"Our bottom line has increased tenfold in 10 years," he says.

Post finds the growth on the plumbing side to be very satisfying. "Look what we've done in such a short period of time. I have always felt there were opportunities out there, and this proves that you have to move forward when the time seems right. Still, you must do things wisely. I like to think that the past 40 years in business have not been in vain and that we've built a strong name that is recognized in the region. That we stand for honesty and good service and ethical treatment of customers. It all comes together and is apparent in the rapid growth of the plumbing division. It was not something we had to sell. It was like a fast passenger train coming out of the terminal. We honestly had trouble keeping up with the demand from our customer base."

Holland describes his view in terms of opportunity for growth, which he claims never stops.

"This company has been and will continue to be

involved in mergers and acquisitions," he says. "Arrow Pipeline has over the last several years acquired several related companies that have experienced problems, but their addition for us has complemented the Arrow Pipeline position. So in terms of looking at where things are going to occur, we want to be ahead of the curve when we are looking at investing in another company."

Featured Equipment

Bradford White Water Heaters

215-641-9400 www.bradfordwhite.com

Gorlitz Sewer & Drain, Inc.

562-944-3060 www.gorlitz.com

HammerHead Trenchless

800-331-6653 hammerheadtrenchless.com Ad on page 25

Harben, Inc.

800-327-5387 www.harben.com

I.S.T. Services. Inc.

858-997-0004 www.shopistamerica.com

Spartan Tool

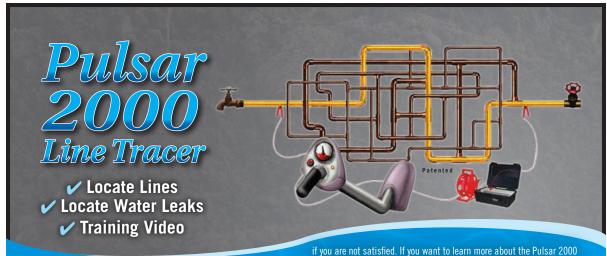
800-435-3866 www.spartantool.com Ad on page 5

US Jetting

800-538-8464 www.usjetting.com

Yelo

415-908-3828 www.yelp.com



The Pulsar 2000 line tracer is designed primarily to locate metallic pipes. The Pulsar 2000 is a directional line tracer. Connect the Pulsar's powerful and unique transmitter to your target pipe and locate only that pipe. Locating can be accomplished under floors, in walls and in ceilings. The Pulsar 2000 does not require grounding.

Leak detection personnel... The Pulsar 2000 is a must have locator. Now you can quickly identify the pipe location, thereby reducing the search area of the leak.

100% satisfaction guarantee... We are so sure that you will see the time saving benefit of the Pulsar 2000, we will let you return it for a full refund

and our leak locating equipment, please call 1-888-752-5463 or e-mail jsmll@aol.com for a free demonstration video or CD and references of satisfied customers.

We have been using the Pulsar 2000 along with the XL2 fluid detector and Geophones since January 1989 in our leak locating business. Our leak locates are accurate 95% of the time, but I can honestly say, the line we trace is always there. Our equipment is user-friendly and requires very little training, as you will see on the video. Purchase the Pulsar 2000 line tracer, XL2 fluid detector and Geophones, and start locating leaks immediately.

It's a jumble out there. www.Pulsar2000.com





Every CIPP installation is different. That's why MaxLiner provides precision Cured-in-Place equipment and so much more. Our quality-controlled liners—designed to accommodate changes in diameter, easily negotiate bends and resist unwanted longitudinal stretch—are used with the highest performing resins available to meet your unique needs. With our ongoing support, together we can attack even your toughest installation. MaxLinerUSA.com



DOWNLOAD THE MAXLINER MOBILE APP















Back Support

Portable drum machine lightens technicians' loads while amping up efficiency - all without power cords Bv Ken Wvsockv

here are a lot of things that Mario Sparto likes about the new M18 FUEL SWITCH PACK sectional drum machine from Milwaukee Tool. But chief among them is the battery-powered unit's backpack-style portability.

"It takes up a very small footprint in my van," says Sparto, a technician at Andersen Plumbing and Heating in Aurora, Illinois. "I can hang it on the bulkhead and keep one on every truck. This allows me to do a service call for, say, a clogged kitchen sink at the drop of a hat instead of going back to our shop for a larger drum machine.

"We charge \$195 for a rodding call, and if someone calls and I'm already in the field and I have a one-hour gap in my schedule, I can say yes to the call — even if I don't have our larger rodding machine with me. We're in a society where everyone wants things right away, so this machine's portability is huge."

PORTABLE POWER

The SWITCH PACK measures 15 inches wide by 17 3/4 inches tall and weighs about 28 pounds. Its size and weight makes it a cinch to transport up and down stairs — not to mention easier to access stack pipes on rooftops or work in crawl spaces. "It's lightweight and powerful — that's what's so awesome about it," Sparto reports. "You can throw it on your back and go up on a roof. With other machines, that's a nightmare."

Sparto estimates the unit's portability saves him 10 to 15 minutes per service call because he can start jobs faster and reduce back-and-forth trips to his service van. "With the machine on my back, I have hands free to still carry my tool bucket," he explains. "It's nice to have your hands free and not have to drag something up and down stairs. That adds up to a lot of time saved over a year. It's amazing how it all adds up.

"We have one customer that owns a 1-million-squarefoot warehouse with bathrooms and drains all over the



▲ The M18 FUEL SWITCH PACK is demonstrated here on a vent pipe. The pack can easily be carried up ladders. (Photo courtesy of Milwaukee Tool)

Aurora, li COMPANY Andersen Plumbing and Heating, Aurora, Illinois MACHINE M18 FUEL SWITCH PACK portable drain-cleaning machine FUNCTION Cleaning 1/4- to 4-inch-diameter drainlines FEATURES Backpack straps; 18-volt battery; brushless electric motor; interchangeable cable drums, no tools required; integrated brake; foot-pedal operation; cable-spin speed of 250 rpm; accommodates 50 feet of either 5/16-, 1/2- or 5/8-inch cable and 35 feet of 3/8-inch cable WEBSITE www.andersenph.com

COST About \$800

- Technician Mario Sparto carries a SWITCH PACK to a customer's home. (Photo courtesy of Andersen Plumbing and Heating)
- The M18 FUEL SWITCH PACK sectional drum machine from Milwaukee Tool. (Photo courtesy of Milwaukee Tool)



place," he adds. "I put the SWITCH PACK on my back, carry in my tool bucket and get to work."

Moreover, the machine also saves time because there's no need to search for electrical outlets, which can be difficult in basements and older homes. In addition, the unit's 18-volt battery doesn't require frequent charging. "I've done four or five kitchen sinks on one battery charge and still had three bars (of power) left," he says.

A CLOSER LOOK

The SWITCH PACK relies on a brushless electric motor that generates spin speed of 250 rpms. The unit's size belies its power; Sparto says he has no problem plowing through soft blockages. (It's designed for pipes ranging in size from 1 1/4 to 4 inches in diameter, but not for clearing roots). "You hit the foot pedal and it's got plenty of torque — no issues there," he says.

The unit can carry 50 feet of either 3/8-, 1/2- or 5/8inch cable and 75 feet of 5/16-inch cable. Cable drums can easily be switched out without tools, and technicians also can connect two drums together for up to 100 feet of coverage.

Sparto says the integrated brake is a helpful feature because it quickly stops the cable from spinning when needed. Larger drain machines with heavier drums keep running longer because of the sheer physics of centrifugal force. "As soon as I let off the (foot-activated) pedal on the SWITCH PACK, it slows down quickly," he points out. "It doesn't come to a screeching halt, but it slows down fast."

The SWITCH PACK costs about \$800, which makes it affordable enough to equip more than one van (the company owns a 2017 Nissan NV3500, a 2015 Ford Transit



ult's lightweight and powerful that's what's so awesome about it. You can throw it on your back and go up on a roof. With other machines, that's a nightmare." Mario Sparto

250, and 2004 and 2005 Chevrolet 3500 cargo vans). The company, which owner Chad Andersen bought and renamed in 2011, employs four technicians and focuses primarily on residential and commercial repair and service work in about a 20-mile radius around Aurora. "The machine pays for itself with four sink calls," Sparto says. "After that, it's all profit."

TACKLING TIGHT SPACES

Another advantage is the SWITCH PACK's ability to clean smaller drainlines. Sparto says he can remove the pop-up assembly in a sink drain and work a cable through the trap and into the piping in a wall. That helps him avoid taking apart the trap assembly and other sections of plumbing, which can be risky business in older homes.





"Things can snowball in a hurry," he notes. "You come in to remove a hair clog in a customer's sink and then suddenly have to pull the sink off the wall. The bill then goes from, say, \$200 to \$600, and no customer is thrilled when the bill is so much larger than expected."

"The SWITCH PACK's cables are so flexible that we don't have to take anything apart," he continues. "It's such a big benefit if we can keep a job simple and not have it snowball into something bigger and more expensive."

Sparto says the company owns more than \$100,000 in drain cleaning equipment, including units made by Spartan Tool, Milwaukee Tool and Jetters Northwest, plus three SeeSnake inspection cameras made by RIDGID. The SWITCH PACK can't handle every kind of drain cleaning job, but it fills a definite niche in the company's services.

"The market lacked a portable and low-cost machine," he concludes. "Milwaukee Tool came in and blew away that neglected niche."





UPFRONT ONLINE PRICING, NO SURPRISES



To us, 'customer service' means not only providing you with technical support and expertise, but also making sure you have the quality supplies and equipment you need to get the job done. That's why we've made purchasing trenchless solutions easier than ever. Our industry-leading online store offers CIPP lining equipment and supplies, point repair solutions, cleaning and reinstatement tools, and other trenchless solutions, all available at your convenience with honest, upfront pricing. Get what you need, when you need it. www.hammerheadshop.com.

YOUR SINGLE SOURCE FOR TRENCHLESS REHABILITATION & REPLACEMENT.

visit hammerheadtrenchless.com or call 800.331.6653





Anthony Pacilla

Warning: Slow Down

Don't be in a hurry to grow your business; taking your time could benefit your company even more By Anthony Pacilla

n the challenging and frustrating plumbing industry, it would be blasphemy to say that busy is a bad I thing; but most owners agree that there is a difference between "good busy" and "too busy."

You have seen the conversation around supply houses that go something like "You guys busy?" "Oh yeah! We are so busy we could hire 50 more people and still have too much work to do." If you ask any experienced owner who has decades of time as an owner under his or her belt, they will agree that being too busy can at times be a detriment.

A well-run business will make a large percentage profit on lower sales than a mismanaged business with extremely high sales.

INEXPERIENCED BUSINESS OWNERS

Many new business owners brag about how busy they are and will talk about how they just don't have enough time in the day. They run around from job to job, selling more and more, working six to seven days a week, and hiring more men to get more work done.

They tend to focus on the amount of work they have coming in, and they love the fact that they are working their butts off. It is a great feeling to be busy and a source of pride when talking about how busy your new business is. So why then do most of these companies not make it past the first few years in business? They forgot the magic word — profit.

They get so caught up in the hustle of slamming work in the door that they stop paying attention to everything else. They are focused on outdoing the competition and jacking up the sales number they see on the sales report.

They will take any work that comes their way, from new construction homes to parts of the construction trade that aren't part of the piping trades. At some point, two things happen: They don't get paid by a general contractor (or get severely delayed payments), or they start to question their pricing when they don't make a profit.

The entire point of being in business is to make a profit. Occasionally during a bid-type project, you will see the "uh-oh" look when they realize their price is half of what everyone else's was. They realize that the high sales number is meaningless if you aren't turning a profit. There is no point banging your head against the wall and hustling seven days a week, 11 hours a day if you aren't making any real money. The owner, technicians, helpers, laborers and office staff are fatigued and have been run into the ground; and worse yet, the money is scarce.

THE BEGINNING OF THE END

Naturally once these plumbers realize that they are not charging enough, the initial reaction is to cut costs. But they can't charge what the "big boys" charge because the company is marketed as the cheaper alternative. They can't cut labor or material costs, so they cut things like professional services, lawyers, insurance coverage, and accountants. Now not only are they working twice as hard, but now they are doing their own accounting and operating at too high of risk with their cut-rate insurance coverage.

The plumbers start to take low-margin, high-volume work to keep everyone busy, and the holes in the paperwork that come from being so busy lead to payment discrepancies from the general contractor. The general contractors are professionals at playing this game and will run this guy into the ground with payments, paperwork and deadlines.

Now the plumber's office staff is overworked, underpaid, and making mistakes because of the large volume of calls, callbacks and loose ends. The technicians are overworked, underpaid and piling up the mistakes because they are in such a hurry. And the owner is overworked, with no profit to take home and no personal life. This is not why he got in business.

TAKING YOUR TIME

Take advice from the more experienced owners. You might have a great attitude to go out there and light the world on fire, but experience has shown that slow and steady wins this race.

A well-run business will make a large percentage profit on lower sales than a mismanaged business with extremely high sales. Be fiscally conservative and calm in your decision-making process. Try not to make large purchases on a whim.

The advantage always goes to the business that is out to be in business a very long time and make reasonable profits — outfits that have the strength to turn down sketchy, high-risk projects and focus on the quality of work itself.

Focusing on slow and steady growth, making reasonable profits, and doing work that is quality and lasts a lifetime is the proven way to make a great living for you and your family.

Anthony Pacilla has been in the trades since he was 9 years old (family business). He started cleaning toilets, mopping floors and putting fittings away in the warehouse. As he picked up skills, he would add becoming a ground man and laborer. When he was ready, Pacilla became an apprentice and then a journeyman plumber. He graduated college with a business and economics degree and immediately wanted to come back to work in the family business. A few years ago, Pacilla become a licensed master plumber. To contact Pacilla, email editor@plumbermag.com



877-409-7888 407-772-8131





Erik Gunn

Are You Paying **Employees the Right Wages?**

Finding the compensation sweet spot will retain great workers without breaking the bank, but getting there can be a major research challenge for small-business owners By Erik Gunn

our business is growing and it's clear you'll need to hire another employee or two by next spring. Have the wages you're offering kept up with what people expect? Or are you unwittingly paying a lot more than the market rate?

Knowing the appropriate pay rate for the people whose jobs are at the core of your business — service technicians, plumbers, and even the clerical staff who answer the phone, keep the books, and send out the bills — can be a significant challenge.

So how do you set pay rates? There are ways to arrive at the right answer systematically.

PEOPLE PHILOSOPHY

Lisa Bazzoni is compensation director for MRA-The Management Association, an employers association based in Wisconsin and with offices in Illinois, Minnesota and Iowa.

"The first thing a business owner needs to do is really determine what his or her people philosophy is," Bazzoni says. "A lot of people skip this step, but it really provides a lot of clarity for the rest of the process."

There's a range of such viewpoints. Some companies view workers as an expendable resource — the proverbial "warm body" who has a specific set of tasks to fulfill and can be replaced when necessary.

To be clear, Bazzoni isn't recommending that approach. But more than a few businesses operate just that way.

"At the other extreme," Bazzoni says, "there are employers who will say of their employees: 'This human being is an asset, and I want that asset to be with me for the long haul."

Whether you're trying to live by that approach, its opposite, or something in between, she says, "A lot of pay

If I am viewing my humans who are working for me as an asset, then maybe I'm going to pay a little higher than everyone else does, provide milestones for people and skill-based pay programs."

Lisa Bazzoni

decisions — and a lot of other people decisions — are going to play into whatever the philosophy is."

Bazzoni continues, "If I am viewing my humans who are working for me as an asset, then maybe I'm going to pay a little higher than everyone else does, provide milestones for people and skill-based pay programs" that allow them to increase wages over time based on measurable and consistent metrics.

GATHERING DATA

Figuring out those market rates — whether your aim is to match them or consciously exceed them — is the next step.

Sure, you can surf the internet and probably find a lot of isolated examples, not to mention every opinion under the sun, for free. Even at that price, though, it's probably not worth what you're paying for it.

"It's not very reliable," Bazzoni warns. "Reliable data has a price tag on it." Reliable, she says, means "data that we can track to the source and verify its accuracy."

Most likely you will get the best information if you turn to a consulting firm or an employers group like MRA - and if the data you get is compiled from sound methodology. Typically it will be collected from highly detailed surveys, anonymous so the employers participating can provide more candid answers. Ideally they will be answered by those employers' human resources departments.

Solid data will be validated to reflect geographic differences and also different ways companies may define particular jobs.

"Job titles can be meaningless," Bazzoni observes. Good research will drill down beyond those to enumerate the different skill sets and responsibilities employers may assign to a particular position "so that your 'computer operator' is the same as my 'computer operator."

BY THE NUMBERS

In these days of low unemployment, such data is likely to change often. "We typically recommend businesses look at this data annually," she says. "When unemployment was higher, companies could get away with every three or four years."

If you're able to get solid data in hand, you need to look back where we began with your fundamental human resources approach. "If the market says the going rate is \$20 an hour" for a particular job, Bazzoni explains, "what you're going to want to do is establish a range around that."

For instance, do you know you want to pay above market as part of a strategy that builds long-term loyalty and commitment to the business? Consider setting the wage in that context a few dollars an hour higher. Are you deliberately paying under market rates knowing that you'll probably experience more turnover? Perhaps you'll go down to \$17.50 an hour.

And you'll probably want to structure more complex wage systems, with bands for various titles and skill levels and then metrics for choosing where a given worker fits in those bands.

So where do you find that kind of information? Searching for compensation consultants and making sure they're in your business field is one option. And employers associations are found in most parts of the country; consider checking out what they have to offer and whether it would benefit your business to join one.

Still, even the best quality sources can have some limitations. If you're in a rural area, the data is less rich because the labor pool is smaller, making it hard to establish the actual market price for particular skill sets.

And what if where you are there aren't any resources of that kind? Or what if the price tag is steeper than you feel you can afford? There are other options for information. Some may have drawbacks, but they might be better than nothing.

SEEKING ALTERNATIVES

The U.S. Bureau of Labor Statistics publishes lists of occupations and their pay rates by regions. You can find it by starting here on the bureau's website (www.bls.gov/ bls/blswage.htm) and then check listings by state or by metro area.

While reliable, it's also likely to be a year old or more because of the time that passes between when it's collected and when it is published. "Your labor market might have changed in that period of time," Bazzoni points out.

There might be some data closer to home than you are aware of. Check your local chamber of commerce to see if it has conducted a compensation survey of its members, for example.

Still another source may be public-sector pay scales for people in the trades you're employing. As public information, those should be relatively available. But they also come with limitations: government wages may be higher or lower than their private sector counterparts.

"I did a proposal for somebody who said, 'We don't want to compete with county employees — their salaries are very low, and we're drawing our people from the private sector," Bazzoni recalls. In other geographic areas, the opposite may be true: that government scales are higher than private sector ones.

EMPLOYER OF CHOICE

Sometimes businesses rely on wage data from other locations, then factor in local cost-of-living data to adjust their own pay rates. That can be tricky, though. "Cost of living and cost of labor are two different issues," she says. "For some jobs, you may have to pay more just to attract someone to your area."

Having established your basic structure, Bazzoni advises, "You really have to keep your ear to the ground." Casual employee chitchat, requests from job applicants for a particular pay level — none of these have the authority





and reliability of a carefully conducted survey. But they do provide insight on people's expectations in your industry and geographic area.

To be sure, pay alone won't keep good workers or attract applicants, and pay alone might not be why people turn you down. Even if that's what they tell you.

"When people turn down your offer, they're always going to say it's about money," Bazzoni observes. And if they do — and if that happens repeatedly — take it seriously.

But be aware that might just be an excuse for something else, including a bad reputation as an employer for other reasons: management style, poor communication, a lack of opportunity for advancement, and many others.

"Are you an employer of choice?" she asks. "If you're not training people well, if you're not treating them well, no amount of money is going to help you."



PICOTE JOB DONE



Use with your Picote Mini or Maxi Miller for:

APARTMENTS, HIGH-RISE, RESIDENTIAL, COMMERCIAL. INDUSTRIAL. NUCLEAR. POOLS. DAMS.

Call: 708 267 6366 Email: sales@picotesolutions.com www.picotebrushcoating.com



JOIN THE COMPANY WHERE THE TOP DISASTER RESTORATION FRANCHISEES HAD AVERAGE ANNUAL GROSS SALES OVER \$1.27 MILLION OVER THE PAST THREE YEARS.**

Expand your services, leverage your customer base.

As a plumber, you're already onsite after disasters strike — putting you in a great position to become a ServiceMaster Restore® franchise owner. And we've got the tools and training to get you started.

INTERESTED?

CALL 833.766.5193

or go to **smrestorefranchise.com** to get more information.

The franchise sales information in this communication does not constitute an offer to sell a franchise. The offer of a franchise can only be made through the delivery of a Franchise Disclosure Document. Certain states require that we register the franchise disclosure document in those states before offering and selling a franchise in that jurisdiction. NY NOTE: This Advertisement is not an offering. An offering can only be made by a prospectus filed first with the Department of Law of the State of New York. Such filing does not constitute approval by the Department of Law. Moreover, we will not offer or sell franchises in those states until we have registered the franchise (or obtained an applicable exemption from registration) and delivered the franchise disclosure document to the prospective franchisee in compliance with law. ServiceMaster Residential/Commercial Services L.P., 150 Peabody Place, SMC-7000, Memphis, Tennessee 38103-3720.

Financing is available through The ServiceMaster Acceptance Company L.P. ("SMAC"), a ServiceMaster company, to credit qualified individuals.

^{*\$15.5} billion in 2014 property & casualty insurance industry catastrophes losses: Insurance Information Institute 2016 Fact Book

^{**}Based on average annual gross sales during the three-year period 2015-2017 for disaster restoration Ownership Groups who have been in business for at least three calendar years, as stated in the 2018 ServiceMaster Franchise Disclosure Document.



Wrapping It Up

Vehicle wraps can be a good, long-lasting investment for your plumbing business **By Suzanne Kearns**

f you've seen vehicle wraps in your area advertising other local businesses, you may have wondered if it makes sense for your company. If you ask Todd Stuart, president of SignZoo, he'll most likely say, "Definitely."

In fact, the Outdoor Advertising Association of America says that more than 95 percent of Americans are reached by media targeting vehicle drivers and passengers. Here's what you need to know before investing in this unique form of advertising.

LARGE OR SMALL

A vehicle wrap is a digitally printed mobile billboard that is professionally installed on your vehicle. Wraps can encompass the entire vehicle or a portion of it, including the windows, and are printed in full color with eye-catching graphics. They are made from heavy-duty vinyl and typically last three to five years.

Stuart says vehicle advertising is good for any size business and that some small-business owners feel it legitimizes their company by getting their brand and logo out where potential customers can see them.

When a smaller business uses vehicle wraps, he says, it puts them on the same playing field as franchises and companies that are large enough to maintain vehicle fleets.

Rich Swanger, employee of Backlund Plumbing in Omaha, Nebraska, uses his phone near one of the company's trucks in the shop. The company's trucks are outfitted with a wrap showing the company's name and contact information on the sides. On the back, the company highlights its use of natural gas. (Photo by Matt Ryerson)

THE COST

Any size vehicle can be wrapped, though Stuart says the amount of coverage and the type of vehicle determine pricing. The average investment typically falls between \$1,500 and \$3,000. That includes the wrap material and professional installation.

COMPARING ADVERTISING

The Outdoor Advertising Association of America says that mobile advertising can be the most effective and efficient form of out-of-home advertising, reaching more consumers at a lower cost per thousand impressions than any other form of advertising.

Stuart agrees and estimates that a wrap costs around 4 cents per thousand impressions, while other forms of advertising cost significantly more. For instance, it's



estimated that outdoor signs cost \$3.56 per thousand impressions and newspaper ads cost \$19.70 for that number of impressions. He also says one wrapped vehicle will net between 30,000 and 80,000 impressions per day, depending on how far and where the car is driven. All in all, he estimates the cost to be less than \$44 per million impressions.

The Outdoor Advertising Association of America says that more than 95 percent of Americans are reached by media targeting vehicle drivers and passengers. people have set up shop, so it's a good idea to check a wrap provider's credentials and workmanship.

For instance, wraps should not damage a vehicle's paint job, though if done incorrectly, they can result in the images bleeding through the wrap onto the paint, or the paint being scratched or chipped. That's why, Stuart says, you should invest in your design and use an experienced company to produce and install the wrap. Finally, he says you should always ask for a warranty in writing.

LET'S SEE YOUR WRAP

Do you have a plumbing service vehicle that is wrapped that you want to brag about? Send a high-resolution photo to editor@plumbermag.com and we'll share it with our readers. Be sure to include your name, company name and a contact number in case we have questions.

THE AVERAGE RETURN?

"We hear stories from customers on a daily basis about how their business increased after wrapping their vehicles," Stuart says. "Some tell us that they gained new customers before they even got home with their newly wrapped car, while others literally took an order as soon as they left our offices. One of our customers tracks his job leads and says his sales shot up from \$42,000 to \$219,000 in 10 months due to his wrapped trucks."

Stuart says there is no average return on investment for vehicle wraps because it will depend on the type of company you have, where and when the vehicle is driven, and the effectiveness of the wrap design. But there are ways you can measure your return.

First, you can provide a separate phone number, such as an 800 number, that is only advertised on the wraps. Then keep track of the calls that come in through it.

Next, advertise a special discount or deal only on the wrapped vehicle, and keep track of those calls, too.

Finally, you can create a special landing page for your website and put that URL on the wrap. Be sure to keep it simple so potential customers can remember it.

A WORD OF CAUTION

Stuart says that because printing technology is better than ever, wrap installations are easier and less likely to fail. But as a result of these advancements, some inexperienced





Serving the Veterans

Nebraska contractor takes pride in helping housing complex for veterans resolve plumbing issues By Giles Lambertson

very successful company looks back on one significant project or another with extra pride. Such experiences not only make money, they bring satisfaction to company owners because of how well a crew performed or how effectively a community was served. Of such are good memories made.

For American Rooter Plumbing, based in Omaha, Nebraska, a particularly memorable success involved clearing clogged lines in a housing complex for American veterans. The facility is located in Norfolk, a retail community of 25,000 people in northeast Nebraska, some 110 miles northwest of Omaha. One of four centers operated by the Nebraska Department of Veterans' Affairs, it is a nursing home and rehabilitation center for 150 vets.

46 That was my proudest moment on a job. We were proud because we had been able to help out our veterans."

Bradd Conn

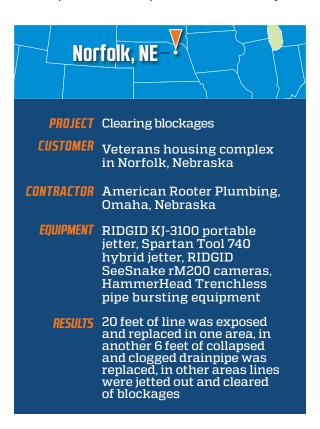
In early 2017, the center experienced drain problems. In one area of the complex, lines were being snaked repeatedly every day. After American Rooter Plumbing was called, Bradd Conn, the company owner, examined the drains with an inspection camera, found obstructions, and hydrojetted the clogged line. One year later, that line has not required additional cleaning.

Conn used his company's RIDGID KJ-3100 portable jetter with 3,000 psi working pressure, along with a Spartan Tool 740 hybrid jetter that produces 4,000 psi, and five pipeline inspection cameras.

"Every sewer or drain cleaning job begins with camera work," Conn says. "Every time we go to a main drain, we want to be able to leave the property with the drain fully open. Also, we want to educate our customers about what's going on with their lines. With the cameras, we can show them."

Portable RIDGID SeeSnake rM200 cameras are also assigned to each truck and operator.

However, in another wing of the housing complex, a more severe blockage was found. Residents in that wing were moved, and Conn subcontracted out hydroexcavation work to uncover a bad line. It was buried 7 feet below a hallway floor. Eventually, 20 feet of line was exposed





Bradd Conn, master plumber and owner of American Rooter Plumbing, uses a Spartan Tool 740 Water Jet to unclog a sewer line for a client in Omaha, Nebraska. (Photography by Matt Ryerson)

44 Every time we go to a main drain, we want to be able to leave the property with the drain fully open." Bradd Conn

> and replaced. In yet another area of the facility, a second obstructed drainline was discovered. Once again, Conn brought in a hydroexcavation crew, this time removing 8 feet of soil so he could replace 6 feet of collapsed and clogged drainpipe.

> For pipe bursting work, the company uses Hammer-Head Trenchless equipment.

> "We stayed out there and worked endlessly," Conn recalls. Hallways were covered with plywood and kept as clean as possible. He was especially gratified that the work was completed without interrupting services in other wings of the facility. "That was my proudest moment on a job. We were proud because we had been able to help out our veterans."





Product Spotlight

Outdoor valve provides tempered water in cold climates By Craig Mandli

utdoor faucets are a convenient addition for many homeowners, but those in cold climates are often limited in their valve choices. Outdoors valves that offer both hot and cold water are even more rare. Now, though, homeowners have an option with the TrueTemp, an outdoor single-handle hot and cold valve.



The valve from PRIER Products

provides a year-round source of tempered water to areas of structures that are subject to freezing temperatures. The hydrant valve is connected to the supply piping in the heated portion of the structure, reducing the possibility of freezing. The temperature is controlled by the dial inset on the handle, while the handle itself controls the flow of water. The new valve combines the time-tested success of PRIER Products' frost-proof hydrants with cutting-edge technology, providing tempered water for any use outside of the home. Homeowners can now wash their cars any time of year, bathe their dogs in comfort or tackle outdoor cleaning with ease.

"This is a premium product comparable to the finest design-build interior kitchen faucets," says Nick Manning, president at PRIER Products. "However, this valve is designed to be installed outside in the elements, and that's what differentiates it from so many other products."

Designed with the stylish homeowner in mind, the TrueTemp is available in two finishes: satin nickel plated and oil-rubbed bronze. Both options begin with a heavy, cast brass base, and then are given high-quality finishes and rubber grip handle to complete the highend look.

"We are thrilled with the feedback we've received from our reps and customers who have seen this product," says Scott Livingston, national sales manager of PRIER Products. "We're already hearing from people in the field about the TrueTemp. They love the way it looks, the easy installation and how it is unique to this industry."

The valve is equipped with an anti-siphon vacuum breaker with backflow check valve, internal checks to prevent thermal migration, and a solid brass body, valve stem cap, seat and stem ends. It is held together with durable stainless steel screws and comes with a stainless steel mounting bracket with screws. O-ring seals and an ergonomic rubber grip handle provide easy turning. It provides positive shut-off of hot water during cold flow. 800-362-9055; www.prier.com.

Mobile payments app and card reader from TransNational Payments

The "invoice-and-wait" era is over. Accept credit card payments on the go and check product inventory in real time with TransNational



Payments' mobile payments app for Apple and Android mobile devices. Pair the app with a mobile card reader, which connects to a phone or tablet via audio jack or Bluetooth, and accept NFC (mobile wallets), EMV (chip card), and traditional swipe credit cards. With a single affordable account, multiple users can bill customers, accept signatures or tips, and send e-receipts on the spot. Same-day payments could be in the palm of your hand. 888-998-6224; www.gotnpayments.com.

Dallas Specialty Acre Ring

The Acre Ring from Dallas Specialty & Mfg. ensures toilet flanges are stabilized if the area surrounding the original flange



has rotted away. It is easy to install, ensures the flange is sealed, and eliminates the need to cut out or replace plywood around the flange, preventing the toilet from rocking. The ring has six tabs with screw holes for securing to the floor, and cutout slots for closet bolts. Both screws and bolts are included. It also has inner screw holes for mounting to the flange. 800-222-5644; www.dallasspecialty.com.

Warrior Trenchless Thermoform pipe lining system

Thermoform pipeline rehabilitation products from Warrior Trenchless



Solutions is a PVC-A pipe lining system designed for the rehabilitation of existing underground pipes. There are no harmful emissions and it does not rely on any chemical reaction during installation. The factory-controlled production process creates a unique, patented PVC alloy compound. The highly flexible material allows it to expand and fit tightly into the host pipe regardless of any imperfections in the pipe. Available sizes range from 4 to 36 inches in diameter. Warrior also provides technical and product support to Thermoform installers. 800-344-6653; www.warriornodig.com.



Ranger Design Max Step van step

The Max Step from Ranger Design is a van step that attaches to the frame of the vehicle in the back.

providing easy access to the cargo space or roof rack. Made with anti-slip tread plates, the Max Step is built to provide a rugged grip in any type of climate. A line of reflective tape across each step also ensures visibility, day and night. It is manufactured to TUV standards and protected by an anticorrosive finish to guard against weathering and early deterioration. It has a 300-pound weight capacity and can be quickly fastened to vans without factory steps. 800-565-5321; www.rangerdesign.com.



Phylrich Stria faucet collection

The Stria faucet collection from Phylrich has a minimalist design of

angular lines defined by intricate parallel ridgelines on the spout and handles that lend it a contemporary industrial appeal. The slim depth and generous height of the spout create a finesse that's elevated by the square base plates where both spout and handles rest. The line comes with three handle options: blade, lever or cube. The collection also includes wall-mount faucets, has bath and shower sets and accessories, and is available in 16 finishes. 714-361-4830; www.phylrich.com.

Milwaukee Tool 10L pipe wrench

The 10L pipe wrench from Milwaukee Tool has a 17-inch POWERLENGTH extended-length handle, providing additional leverage when working at awkward angles or in tight spots. The wrench has an OVERBITE JAW with additional teeth, delivering a large grip surface to keep the material centered in the jaws in challenging pipe and fitting configurations. The slim jaw profile, paired with its extended length, helps in tight spaces. It also features a dual-coil spring design for longer tool life and a handle with a comfortable fit for extended use. 800-729-3878: www.milwaukeetool.com.



LSP Products Group - part of NCH Corp. One Stop Box combination box

The One Stop Box from LSP Products Group - part of NCH Corp. is a small, universal combination valve, condensate and drain box that

accommodates 1/2- or 3/4-inch pipe, has water direct funnels to prevent splash and can be installed during the rough-in while still allowing for testing. The replaceable valves are fast and easy to use, and there's no need to cut into drywall. A reversible design accommodates water supply lines from the top or bottom, and a drip guard retains slow leaks. The integrated mounting system provides installation flexibility: screws or nails can be used to attach to a wall stud, or hyco straps can be used to support between studs. 972-438-0660; www.lspproducts.com.

J.C. Whitlam Talon anaerobic PTFF thread sealant

Talon anaerobic PTFE thread sealant from J.C. Whitlam is specially formulated for use on all types of metal threaded connections. It provides an instant seal with limited hand



tightening. After curing, the sealing capacity is normally up to the burst rating of the pipe. The low locking strength and shear strength also allows for easy disassembly. The



thixotropic sealant can be readjusted prior to a complete cure, making it useful for prefab applications. 800-321-8358; www.jcwhitlam.com.

Matco-Norca lead-free domestic water meter coupling

Matco-Norca's lead-free domestic water meter coupling is American Water Works Association C800 compliant, connects a water meter to



a valve or house piping, and can be used for both new construction or replacement. Available in five sizes ranging from 1/2-inch MIP by 2 1/4 inch up to 2-inch MIP by 3 inch, the 433 DLF coupling is manufactured with brass ingot C89833 and complies with the Safe Drinking Water Act as lead-free. Its gasket is comprised of NBR SN-719F rubber. 800-431-2082; www.matco-norca.com.



Taco Comfort Solutions LeakBreaker water heater shut-off with eLink

The LeakBreaker water heater leak protection device from Taco Comfort Solutions is now available

with eLink wireless technology. The unit consists of a control unit, a valve with actuator, a sensor and Wi-Fi capability, enabling status alerts to be sent directly to a mobile device whenever a change occurs. The device can be reset and tested, and it can be installed on any style water heater to shut off incoming water supply, preventing additional water flow to a damaged water heater. Alerts can be sent via text or email, and components are prewired to simplify installation. 401-942-8000; www.tacocomfortsolutions.com.





Keenev Mfg. No Crimp PEX valves

No Crimp PEX valves from Keeney Mfg. are push-on quarter-turn valves with a compression sleeve that allows for a quick and secure connection that can be created with hand tools. As the sleeve compresses, a split ring and internal barb keep the pipe in round along with a double O-ring seal to create a durable, leak-free connection. The valves have Keeney Mfg.'s quarter-turn ball valve technology and are available in straight or angle configurations in two sizes. 800-243-0526; www.keeneymfg.com.

Water Cannon Inc. - MWBE two-wheel commercial ietter trailer

The two-wheel commercial ietter trailer from Water Cannon Inc. - MWBE is road-ready. It has an electric-rewind, high-capacity,



500-foot-by-3/8-inch or 350-foot-by-1/2-inch hose reel and 200-gallon tank with float valve. The jetter has a Kohler CH 740 27 hp electric start, and the trailer has lights, a front jack with wheel, safety chains and aluminum fenders. It has a TSF Series General Triplex plunger pump rated to 10 gpm and 3,000 psi. 800-333-9274; www.watercannon.com.

Blue Collar Lists mobile app

The members-only mobile app from Blue Collar Lists is designed for contractors to rate customers in a unique forum. It helps contractors discover and control hidden costs associated with doing their job while providing a place



to value good clients. Contractors can search by property address to see reviews written by other contractors to help when bidding the next job. They can also see bid activity anonymously sorted by trade to see how many are bidding the job and write reviews based on past or recently completed jobs. 781-591-4422; www.bluecollarlists.com.



SAVE ON BULK ORDERS OF SELECT PVC, ABS & COPPER PIPES

20% OFF WHEN YOU BUY 10 OR MORE | JOB LOT QUANTITIES | BUY ONLINE, DELIVERED FROM STORE





Green Plumbing Products

By Craig Mandli

ADEY Innovation MagnaClean DRX

The MagnaClean DRX magnetic dirt filter from **ADEY Innovation** provides a highly compact and cost-



effective solution for removing debris and iron oxide sludge from commercial hydronic heating systems. It consists of an external magnetic belt containing high-performing neodymium magnets wrapped around a precision-engineered, stainless steel canister. As system water passes through the canister, iron oxide is captured by the intense magnetic field. Magnets remain outside the flow, so there are no internal sleeves or components that must be removed and cleaned. A thermal jacket is available to insulate the filter, retaining heat levels and reducing energy consumption, costs and carbon emissions. It is available in 2-inch (with 48 magnets), 3-inch (64), and 4-inch (80) pipe dimensions, with the multiple magnets ensuring effective magnetite capture through the canister's wall. 412-406-8292; www.adey.com.

Amerec Steam and Sauna AK Series

AK Series steam generators from Amerec Steam and Sauna are designed for home use, transforming a shower or bathing room into a sauna. The generator uses full power to quickly heat up



the steam room to its preset temperature, then cuts power by a third or two-thirds of its heating elements. The result is a more consistent flow of soft steam and more stable temperature — ideal conditions for relaxing and recharging. They install in attic, vanity, or closet and use the home's current water supply while pulling electricity from the panel. They use only the current shower space, providing the health benefits of steam. 800-331-0349; www.amerec.com.



American Standard Town Square S Collection

The Town Square S Collection from American Standard offers a comprehensive selection of bathroom sink

and shower faucets in various configurations. These Water-Sense-certified bathroom sink faucets use a water-conserving 1.2 gpm, providing 45 percent more water savings over standard 2.2 gpm models. Designed to reduce installation while improving the user experience, the monoblock faucet model incorporates an easy-to-use pop-up drain with fewer parts than a standard drain. All faucet styles are available in a choice of four attractive, long-lasting finishes: polished chrome, polished nickel, brushed nickel and legacy bronze. 800-442-1902; www.americanstandard-us.com.

AguaMotion AMRe

The AMRe ECM technology heating circulator from AquaMotion features all-metal construction, with a stainless steel replaceable cartridge with IRON GUARD. Its efficient circulator with permanent magnet



rotor uses only 45 watts with a high-performance 18 gpm. The Iron Guard Design protects against black iron oxide and contaminants. An iron filter is not required. It offers fully automatic operation, with no programming, no buttons to push, and no speed setting, with an LED light and watt display, 10-foot detachable line cord and cord connector, flange with nut capture, and a built-in check valve. 401-785-3000; www.aquamotionhvac.com.

Arcan Enterprises Septic-Scrub

Septic-Scrub chemical additive from Arcan Enterprises is designed to help remove sludge that builds up and sticks to the stone in a drainfield, pit or sand mound to rejuvenate the drainfield. According to the maker, it works in the first 24 hours after application. It can serve



as part of a maintenance program. It works with all types of systems, is safe to handle and is environmentally friendly. 888-352-7226; www.arcan.com.

Asahi/America Asahitec

The Asahitec PP-RCT piping system from Asahi/ America is environmentally friendly, energy-



efficient and cost-effective. Polypropylene is inherently not susceptible to corrosion, scaling and abrasion, giving it a projected life of 100 years in some cases. With internal smoothness and high velocity limits, PP-RCT piping systems can offer greater flow, resulting in a reduction in overall pump power consumption. These savings can directly lower a building's operating cost and environmental impact. The system can be implemented in a variety of building systems while contributing to multiple LEED credits. 800-343-3618; www.asahi-america.com.

BainUltra Illuzio

Illuzio from BainUltra is an integrated and seamless chromatherapy system with LED lights that are cleverly tucked away inside the struc-



ture of the bath so they are invisible when the bath is not in operation. The bathtub's inner shell is completely intact and void of any evidence of the chromatherapy system. Otherwise naked to the eye, the system unveils itself when the chromatherapy lights are activated. The six concealed, oval-shaped lights glow through the translucent acrylic shell to deliver the chromatherapy bathing experience. The benefits of chromatherapy are numerous and can aid with reducing stress, helping with insomnia, energizing the body, and supporting changes in physical, mental and emotional states. 800-463-2187; www.bainultra.com.

Bradford White Water Heaters AeroTherm

The **AeroTherm** heat-pump water heater from Bradford White Water Heaters uses both heat-pump technology and backup electric heating elements to heat water. This integrated system drives economical and efficient operation to provide considerable energy while greatly reducing the cost of water heating. During heat pump operation, a fan draws heat from the air into a



compressor and evaporator to heat refrigerant. Once heated, the refrigerant travels through a coil that fully surrounds the water storage tank. It is Energy Star certified and eligible for most U.S. rebate programs and efficiencies up to 3.48 UEF. It has first-hour delivery ratings up to 87 gallons, ultraquiet operation and four different operating modes. It offers top water connections and convenient height and weight for quick and easy replacements and installations. 215-641-9400; www.bradfordwhite.com.

Caleffi North America PLUMBVENT

The PLUMBVENT from Caleffi North America is a space-saving, low-lead automatic air vent designed to vent air from water at high points in plumbing and domestic hot-water system piping. Common applications include air elimination on domestic hot-water storage tanks, at the top of plumbing risers and near the inlet of a hot-water recirculation pump



to reduce the potential for air lock. It offers a space-saving, compact size of less than 4 inches tall and is made of lowlead DZR Ecobrass. It complies with NSF/ANSI 372, Drinking Water System Components - Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874 (AB1953), and Vermont S152. Its hygroscopic vent cap prevents potential dripping if/when the vent linkage gets dirty from scale buildup or debris. It has a 1/2inch male NPT connection, 414-238-2360; www.caleffi.com.



Centrotherm Eco Systems BlitzFlex

Designed to handle offsets, BlitzFlex from Centrotherm Eco **Systems** allows for a continuous run of the air-intake system for any residential heating appliance.



Made from flexible polymer, it comes in an easy-to-dispense BlitzPack master carton. It can be dispensed from its master carton as needed at the point of use, eliminating a bulky and unwieldy coil. A single carton provides enough air-intake conduit to complete three to five standard residential systems. Available in 2-, 3- and 4-inch diameters, it can save time and money on installations. 518-434-3400; www.centrotherm.us.com.



Den Hartog Industries AST-0750-1R

AST-0750-1R pump tanks from Den Hartog Industries are costeffective, economical and environmentally friendly alternatives to the company's original septic tank line. They are the same strength

and quality, built from the same mold, but are manufactured using reclaimed polyethylene, with equivalent mechanical strength to that of virgin materials. They offer up to a 30 percent cost-savings and serve as a direct replacement for expanding existing or for future septic product installations. 712-752-8432; www.denhartogindustries.com.

DynaQuip Controls WaterCop

WaterCop from DynaQuip Controls is a complete line of water leak detection and automatic shut-off systems that help effectively reduce plumbing-related water damage in residential and commercial buildings. Using



a network of sensors located where leaks and low temperatures are known to occur, it detects water and low temperatures and quickly closes the main water supply valve. Systems offer valves for 1/2- to 12-inch waterlines. They are equipped with auxiliary input/output contacts for integration with security or building automation systems. Z-Wave compatible systems are also available. SmartConnect devices and mobile apps work with most systems by providing system status notifications and open/close control from a smartphone or tablet. This allows for 24/7 remote monitoring of a home, vacation home or office property. 800-545-3636; www.watercop.com.

Elien Prefabricated Drainage System

Eljen's PDS is a nonaggregate drainage system made from recycled materials that can be used for surface and subsurface drainage. It features a plastic core material, which provides hydraulic conductivity, enveloped in geotextile fabric, which protects the



drain from clogging over time. PDS panels come in various sizes to meet an individual site's needs and can be assembled and positioned into trenches from the surface, reducing site impact and increasing safety on the job site. 800-444-1359; www.eljen.com.

Electric Eel eCAM ACE 2

The eCAM ACE 2 pipeline inspection camera system from Electric Eel has one-touch USB recording, an on-screen footage counter, a wheel kit for easy transport and maneuverability, a rugged stainless steel-housed 1.68-inch-diameter color camera with sapphire lens, 20 LED light ring and high-resolution



CCD element (optional self-leveling color camera available), 200 feet of braided fiberglass premium 1/2-inch diameter pushrod, an industry standard 512 Hz sonde, 5.4-inch LCD monitor with AR film for optimal viewing in sunlight encased in an anodized aluminum housing mounted to the reel, a protective acrylic anti-glare monitor shield, a heavy-duty screen cover that closes to protect the monitor when in transit or storage and flips up to act as a sun shield for viewing in bright sunlight, a video output jack for recording option, flexible camera spring to navigate 3-inch P-traps, a rugged and portable powder-coated steel frame, a secure-locking reel brake and a centering skid. 800-833-1212; www.electriceel.com.

Emagineered Solutions THE SHOOTER

THE SHOOTER from Emagineered Solutions is a continuous air-inversion machine for CIPP. Two fast and reliable models are available: the mobile SHOOTER 12 with built-in lubrication system and knife gate for after the



tail passes for 6- to 12-inch pipe, and the trailer-mounted SHOOTER 24 for 15- to 24-inch lines. An optional conversion kit for the SHOOTER 12 inverts 15-inch liner, and one for the SHOOTER 24 inverts 6- to 12-inch liners using the larger machine. A water-cure flange is also available. The new lubrication system includes an oil overspray guard that keeps operators dry. The fully adjustable, structurally reinforced LIPs are robust and are available in 4 through 24 inches. 541-504-0416; www.theshootercipp.com.

Flow-Liner Systems Neofit+

Neofit+ from Flow-Liner Systems is an environmentally friendly pipe lining system that helps maintain the life expectancy of the existing



service pipe. Designed for 1/2- to 2-inch-diameter pipe in up to 300-foot sections, it is made from a strong and durable virgin PET. The NSF 61 approved liner keeps drinking water pure and out of contact with the host pipe, such as lead or copper, and can rehabilitate pipes by sealing pinholes, cracks and small defects. It is a trenchless technology, thus its installation procedure avoids the risk of damage to other services since there is no disturbance of the ground around the pipe. Because it is a no-dig system, the surrounding environment is protected; therefore, it eliminates both the possibility of ground contamination and harm to existing plant and animal life. 800-348-0020; www.flow-liner.com.



Fluidmaster 400A Universal Fill Valve

Fluidmaster's 400A Universal Fill Valve has an ergonomic adjustment screw, preinstalled components and an easy-to-follow booklet of stepby-step instructions. In less than five minutes, homeowners can repair the toilet fill valve, which saves time and money. The end result is a quieter tank that fills up faster. It is best for toilets that date prior to 1994 with flush volumes between 3.5 and 7 gallons per flush. The easy-to-install valve fits all brands, is made from corrosion-resistant materials and has an anti-siphon design. 949-728-2000; www.fluidmaster.com.



Franke Kitchen Systems StillPure Filtration System

The StillPure Filtration System from Franke Kitchen Systems monitors water usage via Bluetooth technology. Linked to a smartphone app, it tracks how many filtered

gallons of water a household consumes and conveniently alerts users when it's time to change the filter. The system also improves the taste, odor and color of water by removing harmful bacteria, parasites and cysts, chlorine, and lead allowing users to enjoy naturally fresh water directly from the kitchen faucet. The system is compatible with any Franke point-of-use faucet, including single-source models and three-in-one faucets that produce hot, cold and filtered water all from one spout. 800-626-5771; www.frankeksd.com.

General Pipe Cleaners/ General Wire Spring Kinetic **Water Ram**

The **Kinetic Water Ram** from General Pipe Cleaners/General Wire Spring quickly and cleanly clears clogged drains with green power. Just pump it up, insert in the drain and snap the trigger.



It's that quick. The environmentally safe tool uses compressed air to generate a shock wave that pulverizes the stoppage instantly. The shock wave bypasses vents and goes around bends to reach the stoppage with only 2 percent loss of power. The built-in pump and pressure gauge let the operator select the right amount of force for each job. The lightweight, compact tool is cleaner than snakes, safer than chemicals, and uses no electrical power or carbon dioxide. An optional toilet attachment screws onto the front to turn it into a powerful plunger. 800-245-6200; www.drainbrain.com.





GROHE Lineare

The GROHE Lineare bath and shower faucet collection delivers superior ergonomics and improved comfort while bringing soft, minimalist style to contemporary bathrooms. QuickFix reduces product complexity and the number of parts required, cutting installation time by 40 percent. Physical Vapor Deposition Technology produces

a surface three times harder than stainless steel finishes and 10 times more scratch-resistant. EcoJoy technology saves water and energy. The collection offers the slimmest faucet body available from GROHE in a broad range of styles: extra small-, small- and large-size center-set lavatory faucets; a widespread faucet; pressure balance trim; shower trim combination, floor standing tub filler; and Roman tub filler with hand shower. 800-444-7643; www.groheamerica.com.

Helix Laboratories DrainScrub

DrainScrub from Helix Laboratories is an enzyme drain cleaner suitable for tackling tough organic blockages and odors without the side effects of harsh chemicals. Simply mix the powder with water and pour billions of microbes



down the drain. The diverse blend of enzymes attack grease, fats, oil, soap scum and grime in the drain. Using a green product while yielding excellent results, the technician can feel good knowing the homeowner will not exposed to harsh chemicals that are bad for the environment. 877-444-3549; www.drainscrub.com.

Kohler Corbelle

The Kohler Corbelle toilet includes CleanCoat technology and Revolution 360 swirl flush. The swirling motion of the flush platform completely rinses the entire bowl surface, keeping it cleaner longer. This technology increases the effectiveness and power of each flush by ensuring water flows

out of the tank at 360 degrees. The interior of the toilet bowl includes a CleanCoat surface technology to prevent bacteria, mildew, and hard water mineral deposit from forming. The two-piece toilet's skirted trapway allows for a seamless, effortless clean, helping to encourage a healthy environment. 800-456-4537; www.us.kohler.com.

McElroy Hornet

The McElroy Hornet is an all-in-one outlet fusion tool for polypropylene pipe that provides an alternative to manual outlet fusion. Its design allows it to selfalign on the center of the pipe, while a guided carriage facilitates the drilling of the outlet hole and



fusion of the fitting for perfect alignment without repositioning the machine. A quick-change drill and fitting adapters keep the outlet hole and fitting aligned throughout the entire process for a more accurate fusion. With a small footprint and weighing just 11 pounds, it performs outlet fusions in any orientation - making it suitable for overhead and vertical fusions in tight spaces. It works with all McElroy socket heaters and fusion outlet adapters. An integrated ratchet strap allows it to attach to a wide range of main sizes from 40 to 630 mm while installing outlets for 20- to 63-mm branches. 918-831-9236; www.mcelroy.com.

Milwaukee Tool M12 FUEL 3-inch Compact Cut Off Tool

The M12 FUEL 3-inch Compact Cut Off Tool from Milwaukee Tool delivers multimaterial cutting capability in an ergonomic package, optimized for one-handed use.



Spinning at 20,000 rpm and featuring a POWERSTATE brushless motor, this tool delivers fast and accurate cutting performance in a wide range of materials. The reversible blade rotation feature provides users ultimate control over material removal, along with the ability to select their desired blade rotation for the direction they need to cut. 800-729-3878; www.milwaukeetool.com.



Moen M-Power

Moen's M-Power sensor-operated lavatory faucets offer increased water savings, less routine maintenance, and all-around cleanliness without sacrificing performance. The improved sensor operation offers a field-enabled sentinel flow option to flush standing

water in the supply lines and eliminate water-harboring Legionella. The hands-free feature helps decrease the spread of bacteria while providing an ease of use. The extended eight-year battery life using standard AA batteries reduces the need for maintenance over the long run. The sensor faucets can also be programmed with a metering flow time to fit any market, from a minimum of 10 seconds. The faucets have a modern design with coordinating hands-free soap dispensers. 877-663-6776; www.moen.com.

Navien NPE-S

At 0.99 EF/0.97 UEF, Navien's NPE-S series condensing tankless water heaters are extremely efficient. They supply maximum inputs from 150,000 to 199,900 Btu/h and efficient outputs from 148,500 to 197,900 Btu/h. Maximum flow rates are from 8.4 to 11.1 gpm. They have 1/2inch gas pipe capability up to 24 feet,



2-inch PVC venting up to 60 feet, dual stainless steel heat exchangers, field gas convertibility and cascade up to 16 units without an external control box. 800-519-8794; www.tanklessmadesimple.com.



Novanni Stainless stainless steel sink

Stainless steel sinks from Novanni Stainless are made from 90 percent recycled North American

stainless steel and at the end of their life cycle are 100 percent recyclable. The company operates an extensive recycling program and recently received the CIPEC Leader Award from Natural Resources Canada for its commitment to support Canada's goal of reducing greenhouse gas emissions and air pollution. Their sinks have a carbon footprint that is up to 44 times less than an imported sink. 800-361-2176; www.novanni.ca.

Patterson-Kelley HiDRA

The HiDRA instantaneous condensing water heater from **Patterson-Kelley** offers up to 97 percent efficiency. With a fire tube design and equipped with the NURO control system, it is available in 800 MBtu and 1,000 MBtu configurations. Its compact design makes suitable for domestic hot-water retrofits or new construction projects, specifically for hospitals, hotels, schools and universities. 877-728-5351; www.harscopk.com.



Pipe Lining Supply AIPPR Standard IGC351-18

Environmentally friendly AIPPR Standard IGC351-18 from Pipe Lining Supply provides for the noninvasive rehabilitation of drain, waste and vent piping in sizes of 1.5through 15-inch-diameter pipe. The process uses non-VOC polyurea resin applied to cast iron, galvanized,



clay, PVC, and ABS piping to seal leaks, prevent future scale from forming, and restore the pipe to a new 50-year design life. The resin is applied by brushes that serve two purposes: to mix the resin where it is delivered in the pipe and to spread it over the surface of the pipe by applying a 1/2 mm of material per coat, allowing the applicator to build to a design thickness to achieve the quantity needed for the rehabilitation. A 50-linear-foot line can be coated to a 3 mm thickness in about an hour from start to finish. 888-354-6464; www.pipeliningsupply.com.

Real-Tite Plugs expansion clean-out plugs

Expansion clean-out plugs from Real-Tite Plugs are reusable due to their neoprene gasket composition that retains



its memory over time. They eliminate the need for an extra fitting or adapter. Plugs come packaged in used plastic wrap from furniture companies and boxes are relabeled and put back into use. Plugs are available in sizes ranging from 1.5 to 4 inches. 952-938-0600; www.real-titeplugs.com.



REHAU. Building Solutions Division. EVERLOC+

Designed for use with RAUPEX UV shield PEXa pipe in potable water applications,



the EVERLOC+ compression-sleeve fitting system from REHAU, Building Solutions Division, features both polymer and lead-free brass fittings in diameters up to 2 inches, as well as the EVERLOC+ power tool, powered by the DEWALT 12-volt battery platform. Connections are made using a twostep expansion and compression process, both performed by the EVERLOC+ power tool, specifically designed for assembling EVERLOC+ fittings. First, the pipe is expanded, then the sleeve is actively compressed over the pipe and fitting for a secure connection that is immediately ready for pressure testing. The fitting system includes couplings, tees, elbows, transition fittings, multiport tees and accessories in sizes from 3/8 through 2 inches. 800-247-9445; www.everlocplus.com.

RIDGID thermal imagers

RIDGID thermal imagers offer easy-to-use interfaces to predict problems before they happen and prevent costly



downtime, including diagnosing HVAC failures, finding hidden moisture in walls, and locating pipe blockages. The product line includes four thermal imagers — RT-3, RT-5x, RT-7x and RT-9x — that range from providing 160 x 120- to 320 x 240-pixel thermal images. All models include SuperResolution that effectively doubles the resolution of the camera for saved images for greater detail to detect anomalies. Select models also show a digital camera image alongside the thermal image and include e-Assist and the RIDGID Thermal app. With e-Assist, the imager can recognize a placed reference sticker, determine emissivity and reflected temperature, and set both automatically. The app allows users to view, edit and analyze captured images from the thermal imager directly on a mobile device. 800-769-7743; www.ridgid.com.



Saniflo - part of SFA Group **SANICOMPACT**

Offering a reliable green solution that saves both water and floor space in a residential bathroom application, the SANICOMPACT toilet from Saniflo - part of SFA Group installs quickly and easily anywhere in the home, with no venting required. In addition to handling toilet waste, the toilet can also pump water away from a nearby sink. Operating with only 1 gallon of water per flush, the self-contained unit uses approximately 38 percent less water than a standard 1.6 gpf toilet. 800-571-8191; www.saniflo.com.

Shark Bite EvoPEX

The Shark Bite EvoPEX system is a step in providing an advanced potable water system for safe and efficient water delivery throughout the home.



It is designed to improve efficiency and enable plumbing contractors to optimize install time, ensuring jobs are finished on time, or even ahead of schedule. Technicians can plumb an entire home without needing special tools, crimping, solder, or glue for cleaner installations, less potential leaks from install errors, and more productivity on the job. A green visual indicator on each fitting ensures the pipe seal has been permanently engaged and the connection is sound. The system extends beyond traditional pipe-and-fitting solutions to include fittings, PEX pipe, outlet boxes, valves and other accessories needed to install a complete potable water plumbing system. 877-700-4242; www.sharkbite.com.

SJE Rhombus Tank Alert Solar

The Tank Alert Solar alarm from SJE Rhombus warns of potentially threatening liquid levels in water and wastewater applications by utilizing a solar panel with battery backup. It's a suitable solution for seasonal homes, cabins in remote locations or retrofitting existing systems. The alarm is powered by a rechargeable battery via a 12-volts



DC, 10-watt solar panel. Lithium-ion batteries provide backup power. The unit must be installed in a location with adequate sunlight. When an alarm condition occurs, the beacon will illuminate and the horn will activate. The horn can be silenced with the test/silence push-button. Once the condition is cleared, the alarm will automatically reset. In full alarm, the unit will run for approximately 24 hours. An idle unit without any solar charging will run for approximately five days. 888-342-5753; www.sjerhombus.com.

Sump Alarm SludgeBoss Float Switch

The SludgeBoss Float Switch from Sump Alarm is self-orienting and mercury-free. It can hang freely into a septic tank (or be tethered) and will orient automatically when the water level rises. It is rated up to 250-



volts operations at up to 13 amps or 1/2 hp. It is suitable for 20 degrees below zero to 140 degree F conditions and is offered in piggyback and wire lead versions. 314-787-8059; www.sumpalarm.com.

Superior Signal 5E Electric Smoker

The 5E Electric Smoker from Superior Signal offers a cost-effective and green solution to find difficult leaks and odors in residential and commercial plumbing systems.



Connect the blower to any plumbing clean-out or vent, with the appropriate size smoke candle to force smoke through faults and cracks, easily identifying sources of odor and hard-to-find leaks. Smoke candles produce a highly visible, nontoxic smoke and are completely biodegradable. They are manufactured with zero-waste stream and include labels printed with vegetable-based ink on recycled paper as well as biodegradable, recycled paperboard tubes. The unit does not generate any harmful exhaust gases and handles all residential and commercial smoke testing applications. Smoke tests take just minutes to perform and see immediate results. The unit comes with an 8-foot industrial-grade flex hose, weighs just 8 pounds and requires no maintenance. 800-945-8378; www.superiorsignal.com.



Taco Comfort Solutions Hot-LinkPlus-e

The Hot-LinkPlus-e recirculation system from Taco Comfort Solutions offers highefficiency, intelligent domestic

hot-water recirculation ideal for retrofit applications. A dedicated return line is not required. It combines a 006e3 ECM hot-water circulator with a Hot-Link Valve and SmartPlug Instant Hot Water Control in one easily installed package. The Hot-Link Valve, installed at the building's farthest water fixture, sends cooled water back to the water heater so hotwater lines remain hot. The circulator that comes in the package uses up to 85 percent less electricity than a conventional circulator. It has three performance curves to best match the application and a setting selection guide to make the choice simple. The Smart Plug learns hot-water usage patterns and delivers hot water when it's needed, reducing energy use and extending the life of the water heater. 401-942-8000; www.tacocomfort.com.



Weil-McLain Agua Pro

Aqua Pro indirect-fired water heaters from Weil-McLain have a nonmetallic, corrosion-resistant design that delivers high first hour ratings and recovery. The AHRIcertified units are available in four sizes — 30, 55, 80 or 119 gallons - making them flexible for a broad range of applications.

The unit's lightweight, nonmetallic tank design allows for easy maneuverability and installation in basements, storage rooms or other tight spaces. They include convenient top connections for easy access, a digital temperature control ensuring accurate delivery temperature for optimal comfort, and no anode to check, which eliminates annual maintenance. 855-248-1777; www.weil-mclain.com.



Wilo USA Wilo-Stratos GIGA

Wilo USA offers an extended range of models for the Wilo-Stratos GIGA line of centrifugal pumps to include 3- and 4-inch models, bringing the total offering to 28 models. The GIGA is a class IE5 spacesaving in-line circulator with ECM

technology, with a motor-powerhead combination that provides optimal control over the pump, up to 9 hp. The control range is up to three times as high as conventional electronically controlled pumps, and there are multiple control modules available for integration with building management systems. With heads up to 167 feet and flows to 550 gpm, it has high corrosion protection due to its cataphoretic coating, high-efficiency EC motor, optimized hydraulic design and the ability to self-adjust to system demands. 888-945-6872; www.wilo-usa.com.



FEATURE IN AN ARTICLE?

MAKE THE MOST OF IT!

Reprints available: Hard copy color reprints Electronic reprints

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





Woodford Manufacturing Co. Model 22

Woodford Manufacturing Co. Model 22 and the V22 (vertical version) freezeless hot and cold faucets



allow homeowners to have hot and cold water outside. These faucets are an easy upgrade, allowing homeowners to fill kiddie pools, wash dogs, clean garages, windows and more. Both are maintenance-free and include a pressure relief valve that prevents the faucet tubes from bursting in freezing conditions, even with a hose attached. They can be mounted outside or inside the garage using the PC/ABS Woodford Drywall Mounting Plate. 800-621-6032; www.woodfordmfg.com.



Join over 10,700 of your colleagues who already get great content delivered right to their inbox with the Plumber e-newsletter.

ww.plumbermag.com/newsletter



BUSINESSES

Relocate to Amarillo, Texas! 35year old plumbing business with over 1,400 repeat service customers on QuickBooks, Business appraised, real estate appraised. \$700,000 received on new commercial work in 2016. Will stay short time for transition. Contact Bobby Hollabaugh 806-236-0727; hhplumbing1@sbcglobal.net

EOUIPMENT & TOOLS

2004 Freightliner, Vactor Ram Jet, runs and works great. 65 GPM. Asking \$25,000. Septic company for sale also, \$100,000 with equipment & license for 3 years. Call 786-379-6333 or email allpumpingservices@ gmail.com.

Spartan Model 2001 sewer machine, good working condition, 100' Magnum cable. \$1,200 OBO. Email mitch@a-1sewerkc.com

2017 Alkota 630.000 BTU dry steam unit, diesel driven. Only used twice. 240v electric water pump, Includes 200 ft. of hose and manifold, \$10,000 CDN. Email gp@cpltech.com (C12) Bosch Brute hammer drill with cart irons. The Cable Center: 800-257-7209 (CBM)

RIDGID model #300 with stand. RIDGID tri-stand vises, RP 330 Pro-Press kit. The Cable Center: 800-257-7209 (CBM)

SERVICE/REPAIR

Dynamic Repairs - Inspection Camera Repairs: 48-hour turnaround time. General Wire. Ratech. RIDGID. Electric Eel Mfg, 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)

TV INSPECTION

Used SeeSnake Camera Systems in all sizes; Used General Wire Spring Camera Systems in all sizes; The Cable Center: 800-257-7209.

Used and rebuilt camera kits in stock: RIDGID Mini Compact, Mini Color, Standard Self-Leveling, General Gen-Eye I, II and III, Aries Seeker, and SRECO kits. The Cable Center: 800-257-7209. (CBM)

ALLAN J. COLEMAN

SINCE 1905 -

Call us today!

5725 North Ravenswood Avenue • Chicago, IL 60660 • info@allanjcoleman.com • www.allanjcoleman.com

OLDEST NAME IN THE BUSINESS — Over 100 YEARS OLD



RP 340 Press Tool

- 31% longer service interval (up to 42,000 cycles) maximizes uptime*
- · More than 400 presses per charge using Advanced Lithium 4 Battery
- · LED-light for continued operations in no or low-light environments
 - Capacity ½" to 4" for Copper and Stainless Steel, ½" to 2" for PEX

*Versus RP 330-B

MegaPress® Jaws And Rings

- Press connections can be made on a "wet" system
- Flameless system eliminates the need for hot work permits
- Join 1/2" to 2" commercially available black iron pipe schedules 5 through 40



PEX-One™ 12V Battery PEX Tool



RP 241 Press Tool

- Multiple-Size Connections, 1/2"-1"
- · Operates at full power through 150+ crimps

Standard Series **ProPress®** XL-C™ Rings



- Patented ring design to make pressed connections for 2 ½" -4" copper or stainless steel tube
 - XL-C Rings and V2 Actuator Jaw include patented swiveling feature that allows the tool to connect to the ring at any angle relative to the tubing be placed +/- 90°, relative to the tubing being pressed, allowing greater access in tight spaces
 - · Designed in conjunction with the ProPress XL-C fittings, ensuring total system compatibility
 - · Compatible only with RIDGID® Standard Series pressing tools
 - · V2 Actuator Jaw features new jaw identification clips, for fast, easy identification of the appropriate pressing jaw

• Multiple Size & System - RIDGID has the only compact press tool that can go up to 1 ¼" on Copper & Stainless Steel; up to 1 ½" on PEX tubing; and up to ¾" Iron Pipe

- · Bluetooth Connectivity Connect to your tool through your phone and manage important information like cycle count and battery life
- New 12V Lithium-Ion Battery Over 140 crimps per charge
- · Jaw Capacities Copper and Stainless Steel Capacity: ½" - 1 ¼", Pex Capacity: ½" - 1 ½", Steel Capacity: ½" - 34"

Authorized PROPRESS Service Center

TURN AROUND TIME ON MOST TOOLS SERVICED IS 48 HOURS OR LESS!



We **Have** RIDGID **Parts!**

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



Green Plumbing Products By Craig Mandli

Drain rehab system allows contractor to save valuable tree



Problem: In Montreal, Stephane Desormier of S. Desormiers Excavation was charged with rehabilitating a sewer drain. He needed to avoid having to cut down a 90-year-old tree that the client wanted to conserve and also avoid breaking a municipal sidewalk.

Solution: Desormier used the CIPP Pipe Rehabilitation System from Drain Rehab Solutions, including the DRS Pipe Patch Repair Kit. The DRS Pipe Patch Repair Kit is a green solution without any volatile compounds or toxic odors. There is an approximate 80 percent reduction in the carbon footprint of a construction site when no trucking, transportation and use of heavy machinery is taken into account.

Result: Desormier was able to rehab the drain without removing the tree and was able to save an estimated 25 to 40 percent comparative to the excavation price. The work was accomplished with a two-man crew to reline the pipes effectively and cleanly. 514-379-3544; www.drainrehabsolutions.com.

High-capacity chambers reduce carbon footprint at biological field station



Problem: Blue Oak Ranch Reserve is a University of California-owned and -operated biological field station and ecological reserve. A proposed renovation of the facilities including new housing construction and a large utility infrastructure building required design of a wastewater treatment system to serve the expansion, protect the surrounding environment, and recharge the aquifer.

Solution: A wastewater recharge system, designed by Biosphere Consulting and installed by Battle Mountain Excavation, accommodates the calculated peak usage design flow of 3,280 gpd and includes 231 Quick4 Plus high-capacity chambers from Infiltrator Water Technologies in a shallow system installation. The chambers were installed in trenches with minimal invasiveness and site disruption. Wastewater is dispersed in two separate leachfields. The first serves the faculty residences and the student cabins and is a combination of gravity flow and pressurized (pump up) trenches. The second is a conventional gravity flow system. The two systems have septic tanks as primary treatment with the soils providing final treatment and polishing of the effluent prior to it returning to the local aquifer.

RESULT The specification of recycled products resulted in a reduced carbon footprint as compared to labor-intensive, mined aggregate, meeting the station's sustainability commitment. The decentralized wastewater treatment system

design also met the goal of completing the water cycle and replenishing the local aquifer. With funding from the California Wildlife Conservation Board, the project exemplifies fullspectrum thinking to achieve water conservation, wastewater treatment, and energy sustainability goals. 800-221-4436; www.infiltratorwater.com.

New approach eliminates lift station pump clogs at large apartment complex



Problem: Villa Mountain Vista North Las Vegas — a 400unit apartment complex — had an on-site lift station plagued with frequent clogs of the sewage pumps. When the wide variety of flushed debris such as wipes, clothing, toothbrushes and superhero toys (to name a few) reached the pumps, they inevitably clogged or damaged the system. Unclogging pumps was labor-intensive, time-consuming and expensive. The solution often involved replacing broken down pumps, at a cost of \$3,000 to \$3,500 each occurrence. Plumbing Enterprises representative Colin Pirrie, the on-site treatment manager of Villa Mountain Vista, needed a new approach.

Solution: Pirrie found **JWC Environmental's 3-HYDRO** sewage grinders and thought it might solve his problem. The low-speed and high-torque two-shafted grinder came preengineered for installation in the wet well. The retrofit of the stainless steel mounting frame and grinders was a one-day job for Pirrie's crew.

Result: In the time since the installation, there's been no need for service. The pump, which was clogging on a weekly basis, hasn't seen a failure. In a 90-day period, approximately \$20,000 was saved — resources typically spent on removing, repairing and reinstalling new pumps. 800-331-2277; www.jwce.com.

Tankless water heater a fit for remodeled home



Problem: When Ben Bogie, owner and general contractor at Built to Last Design & Build, was hired to remodel a 1,300-square-foot, Woodbury, Connecticut, home into a residence that would allow its owner to "age in place," he knew he would have to gut the structure. One of many decisions that had to be made from an energy-efficiency standpoint involved replacing the home's 60-gallon storagetank water heater. "To simply swap it with another storagetank water heater didn't make any sense in the context of our energy-efficient project goals," Bogie says.

Solution: Instead, Bogie immediately identified tankless water heating technology as the preferred solution. "We decided to go with the EZTR75 tankless water heating package, which Noritz America donated to this model remodel project, for a streamlined installation," Bogie says. The EZTR75 is a direct replacement option for 60- and 75-gallon storage-tank water heaters because of its topmount water connections and multiple venting options, which reduce installation costs. The package comes with an EZ 111 tankless water heater, a flex vent conversion kit (with 25 feet of 2-inch flex) and an isolation valve kit. Venting can be accomplished using either dual-pipe or single-pipe (made of PVC or CPVC), as well as the included 2-inch flex, which can be fed through the existing B-Vent. A technician from Lucas Plumbing was able to install the EZ 111 in under three hours. For venting, he ran the 2-inch flex included with the unit up through the existing B-Vent.

RESULT Since the installation, the unit has been tested and forecasted to earn the homeowner significant energy savings once she moves in, especially when considered in the context of the entire remodel. 714-433-2905; www.noritz.com.



Repairing a sewer while saving the trees



Problem: B. Braun, a large producer of medical products, operates a facility and wastewater treatment plant in a woodland park that is part of a delicate regional ecosystem. When a CCTV inspection of the pipeline showed that 1,000 feet of pipeline had been damaged by encroaching tree roots, they sought to rehabilitate the badly damaged wastewater system in a dense forest with steep inclines while preserving natural resources.

Solution: Tkm-Service GmbH oversaw the project and met with an expert from Trelleborg Pipe Seals to find the best solution to deal with the forest's limited access and steep inclines. Trelleborg Pipe Seals suggested the use of its DrainFlexLiner and POX HC120+ resin for hot water curing. The resin's generous pot life allowed the crew over three hours to prepare the liner, carry it down the hill using large wheelbarrows and invert the liner into the manholes. Purpose-built water towers let the steep hill and gravity work to their advantage. The resin's pot life helped maintain efficient workflow.

Result: After the liner cured, a leak test and CCTV inspection was performed. A liner sample was sent to a laboratory for further testing and the findings were positive: The cured liner was 100 percent watertight and the mechanical values exceeded normal requirements. The resin contains no VOCs or styrene, and not a single tree was felled. 800-626-2180; www.trelleborg.com/pipe-seals.

Efficient heating and cooling system installed in massive cathedral



Problem: St. Patrick's Cathedral, located in the heart of New York City, is an international landmark and a source of inspiration to the more than 5 million visitors of every religious denomination welcomed each year. A state-ofthe-art geothermal heating and cooling system replaces its system of steam radiators and works to heat and cool the more than 76,000-square-foot cathedral. Landmark Facilities Group sought updates to the system that were both compact and efficient.

Solution: The **Triangle Tube Prestige 399 Cascade** system is the heart of that system and is located in a tightly packed boiler room under the church's campus. The unit was chosen because of its ease of installation and flexibility, allowing it to adapt to job site conditions. It offers high Btus in a small package, which fits within the small footprint of the project. The common vent system also saved space by combining multiple vents together into one. The system has multiple high-efficiency, fully modulating, low-watercontent boilers, where off cycle losses are substantially reduced and dissipated heat from the stored water is far less than a single large-capacity boiler.

RESULT The technology has reduced the cathedral's carbon footprint and will ensure visitors remain warm for years to come. 856-228-8881; www.triangletube.com.

Contractor seeks tankless water heater with easy installation



Problem: Eric Silva, owner of Silva Mechanical in Walled Lake, Michigan, installed 92 tankless water heating systems last year alone, and he is on track for even more in 2018. He sought a solution that would cut installation time. "Every day we're putting in or servicing a tankless water heater," Silva says. "In doing so, we have to go in, alter the water piping, the gas piping, the venting, everything. You want as little downtime as possible."

Solution: Silva turned to the **Viega ProPress** and **MegaPressG** to install tankless water heaters in many homes. The speed of Viega connections allows him to expedite the process and restore hot water for homeowners as fast as possible. "With Viega, I cut off the old piping, press on down the wall and we're good to go. I've had people call me at night and say, 'My water heater just went out and I'd love to have hot water by morning.' With Viega and tankless systems, we can make that happen." Silva uses ProPress to plumb the on-demand hot-water units and MegaPressG for the gas lines to heat the water.

Result: "You're trying to make everybody happy, and when you can do things in an expedited manner, that sure helps," Silva says. "It is such a no-brainer for me. I don't even carry a torch on my truck anymore! We've found a way to incorporate MegaPressG and ProPress on all our jobs." 800-976-9819; www.viega.us.



Pressure Washers & Drain Jetting **Equipment**

We Custom Build **Machines To Your Specifications!**



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

Van and Truck Mount Models Available See All The Features And Specifications At Camspray.com

STB Series

Trailer-Mounted Drain Jets



- DC-Powered Jet Hose Reel and 4-Nozzle Set
- **Pressure Gauge & Hour Meter**
- **Electric Start with Low Oil** Shutdown
- Pumps Handle Fluids Up To 160°
- Lockable Tool and Storage Boxes
- 150' Garden Hose on Manual Reel
- 300 Gal Tank with Low Water Shut Off
- **Gearbox Drive Triplex Plunger** Pump with Ceramic Plungers and Stainless Valves
- Trailer with Industrial Painted Finish and 15" Aluminum Wheels

STB4012K 8.999

- 12 G.P.M. @ 4000 PSI
- 999 CC Kohler
- 400' x 1/2"Hose

STB3015K

- 15 G.P.M. @ 3000 PSI
- 999 CC Kohler
- 400' x 1/2"Hose

STB2712K

- 11.5 G.P.M. @ 2700 PSI
- 689 CC Honda
- 400' x 1/2"Hose

STB3708K 13.299

- 8 G.P.M. @ 3700 PSI
- 689 CC Honda
- 300' x 3/8"Hose

- 7 G.P.M. @ 4000 PSI
- 689 CC Honda
- 300' x 3/8"Hose

- Produces 25 Gallons Per Minute at 4000 PSI
- Hydraulic Slide Out Swivel Reel with 500' x 5/8" Hose
- 74 HP EPA Tier 4 Final Compliant Hatz Turbo Intercooled Diesel Engine
- Air Purge Valve and 18 Gallon Anti-Freeze Tank and Freeze Protection
- Heavily Constructed Trailer with 2" x 4" Steel Tube Box Frame
- 26 Gal Fuel Tank Gives Hours of Run Time on a Single Fill
- Wireless Remote to Control Throttle Up and Down, Water Valve and More 350 Gallon Tank with 2" Hydrant Fill
- Features 150' Wash Down Hose and Front-mounted & **Over-fender Tool Boxes**

Jan. 14-16

International Air Conditioning, Heating, Refrigerating Exposition (AHR Expo):

Georgia World Congress Center. Atlanta. Visit www.ahrexpo.com.

Feh. 6-9

Minnesota Plumbing Heating Cooling Contractors (PHCC) 123rd Annual Convention and Vendor Show.

Minneapolis Marriott Northwest, Minneapolis. Visit www.mnphcc.org.

Feb. 19-21

The Kitchen & Bath Industry Show (KBIS).

Las Vegas Convention Center, Las Vegas. Visit www.khis.com.

Feb. 19-21

National Association of Home Builders (NAHB) International Builders' Show.

Las Vegas Convention Center, Las Vegas. Visit www.huildersshow.com.

Feb. 20-23

Water & Wastewater Equipment. Treatment & Transport (WWETT) Show.

Indianapolis Convention Center, Indianapolis. Visit www.wwettshow.com.

March 3-7

Mechanical Contractors Association of America (MCAA) Annual Convention.

JW Marriott Desert Ridge, Phoenix, Visit www.mcaa.org.

March 22

Illinois PHCC Expo & Education Dav.

Drury Lane Conference Center. Oakbrook Terrace. Illinois. Visit www.ilphcc.com.

March 23

Flow Expo 2019.

Fairplex. Pomona. California. Visit www.flowexpousa.com. 🙉

Plumber invites organizations and associations to submit details about appearant prouding industry indice shows and conferences (and another canofie yearly). Send information to editor@plumbermag.com.

Bradford White and Ellen Rohr launch video development series

Bradford White and Ellen Rohr have partnered together on the new Ellen's Corner video development series, appearing exclusively on Bradford White's contractor enrichment website, forthepro.bradfordwhite.com. The short video tutorials cover such topics as developing a business plan, imagining and guiding one's ideal life and profitability, and how to price services to assure business success. The For The Pro forum was launched in 2017 and provides training videos, materials to help contractors sell and service their products, and information and tools to strengthen their business.

Electric Eel celebrates 60th ARA Rental Show

Electric Eel will be exhibiting at its 60th annual ARA (American Rental Association) Rental Show in Anaheim, California. Established in 1939, Electric Eel has supported the rental industry from its early days, first with the original dual-cable sectional mainline machine to today's full line of drain and sewer cleaning machines including sectional units, drum machines, high-pressure water jetters, and a full line of pipeline inspection and location products.

Baum Capital Partners ioins forces with Goettl Air Conditioning

Baum Capital Partners, a private investment firm, announced it has partnered with residential services and HVAC company Goettl Air Conditioning to complete its recapitalization. Founded in 1939, Goettl Air Conditioning is headquartered in Las Vegas, with additional locations in Phoenix and Tucson, Arizona, and Corona, California.

ρ

Send us your plumbing industry news: Email personnel, business acquisitions and related plumbing news, photos and videos to editor@plumbermag.com.







FLUIDMASTER» PRO SERIES PRODUCTS

"We have never had a failure with Fluidmaster products. Check out this line and you too will switch to Fluidmaster – which are safer to install, saving money and time, and you will have a better overall experience."

"I really believe in these products...
always have."

David Ortiz, Owner of Ortiz Plumbing

FLUIDMASTERPRO.COM





INDUSTRY MARKETPLACE

With 600 exhibitors and 350,000 sf of exhibit space, the WWETT Show is THE marketplace for the wastewater and environmental services industry. See the new product launches, get hands-on with equipment, and make your purchases. The WWETT Show Marketplace is WHERE DEALS GET DONE!









WHY SHOULD YOU ATTEND?

- Explore the Marketplace for tools and resources you need for your business
- ✓ CEUs from some of the best and brightest speakers in the industry
- **Events** to network with your peers or just kick back with friends.

MARKETPLACE





Hand-selected Wisconsin sausage and jerky delivered in a 20-qt. RUGID cooler.

\$199.99 Delivered

Meaty-Delivery

meaty-delivery.com 833-777-8443

Cleaner **Mosmatic**



WaterCannon.com 800.333.9274

SEE THE VIDEO AT: www.ARCTICBLASTER.com

Thawing: Frozen Water Lines • Sewer Lines Valve and Load Lines • Culverts

A PROPANE TORCH, 2 Gal. of Water & THE AMAZING ARCTIC BLASTER 15 minutes.

Makes steam in 10 minutes or less. Thaw 30 ft of water line in

ARCTIC BLASTER 403-638-3934

Superior **SMOKE**

Find Leaks & Sources of Odor

Fast • Inexpensive • Easy



Superior 5E Electric Smoker





SuperiorSignal.com/Plumber

et Us Build Your



opane





TRACERS

Solutions for:

- Infiltration
- Septic Systems
- Cross Connection
- Leaks and more...



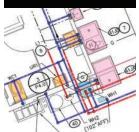
www.brightdyes.com 1-800-394-0678

Estimate Better TODAY

with

₩F\ST**DIDE Plumbing Estimating Software**

FAST | EASY | ACCURATE



Fast On-Screen Takeoffs

Easy to learn and use

Unrivaled customer support

60-day money-back guarantee

Award-winning mechanical estimating software that can improve the speed and efficiency of your estimating

FASTEST, INC.

800-828-7108 fastest-inc.com/plumbermag

Can't get enough

Plumber ?







Since 2016 Plumber has been telling the articles, news and events of the plumbing industry.

Visit plumbermag.com to read past issues







EXCLUSIVE JETTER TRAINING





- OPERATION
- **NOZZLE TECHNOLOGY**
- MARKETING STRATEGY

FOR DETAILS!

OVER 30 YEARS BUILDING QUALITY EQUIPMENT

- **HOT OR COLD OPERATION**
- CLEANS 2" 12" LINES
- **DUAL PURPOSE:**

JETTER & POWER WASHER

BEST ROI IN INDUSTRY!

FOR QUESTIONS CALL OUR IENDLY & HELPFUL JETTING



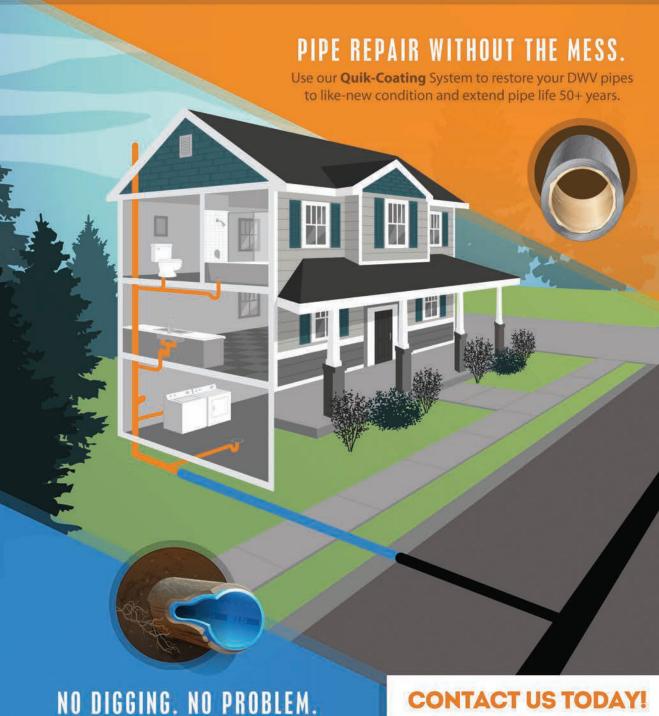
* TERMS: 20% DOWN WITH CREDIT APPROVAL

" LOWER 48 STATES ONLY CALL FOR DELIVERY TO HAWAII/ALASKA/INTERNATIONAL www.HotJetUSA.com



YOUR NO DIG SOLUTION!

IDEAL SOLUTIONS FOR PLUMBERS AND DRAIN CLEANERS



Our Quik-Shot System is the ideal solution to replace piping from the home to curb.

CONTACT US TODAY!

888-354-6464

info@pipeliningsupply.com

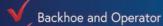


100% AMERICAN MADE

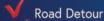
100% TRENCHLESS

100% SUPPORTED

TRADITIONAL DIG & REPLACE











Possible Utility Service Damage

Street Reconstruction

PERMA-LATERAL™ LINING

Zero Dig Technology

Multiple installs per day

Work Year-Round, Increased Productivity

Ease of Use

#1 Selling Small Diameter Pipe Relining
System

✓ Proudly Made in the USA

CALL TO SCHEDULE A ONE-ON-ONE DEMONSTRATION!



TURN-KEY TRAILERS & TURN-KEY BOX TRUCKS

PERMA-LINER"
INDUSTRIES, LLC.

\$

ZERO DOWN, NO PAYMENTS FOR 90-DAYS















