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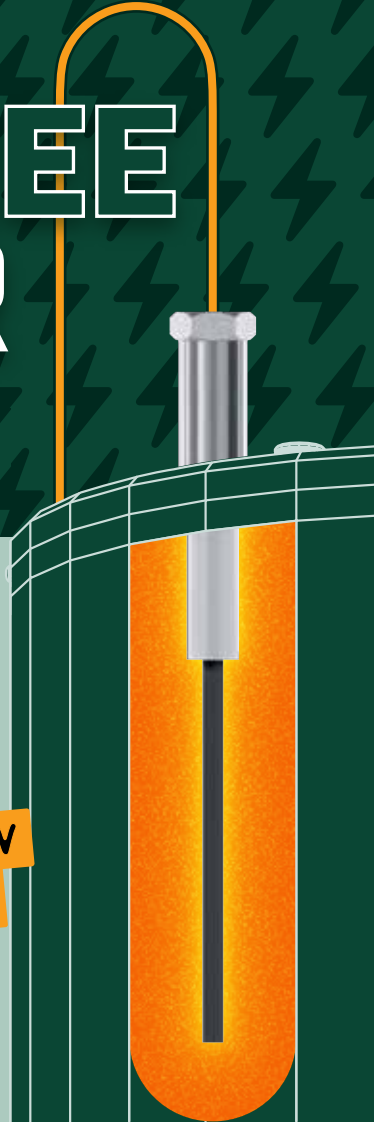


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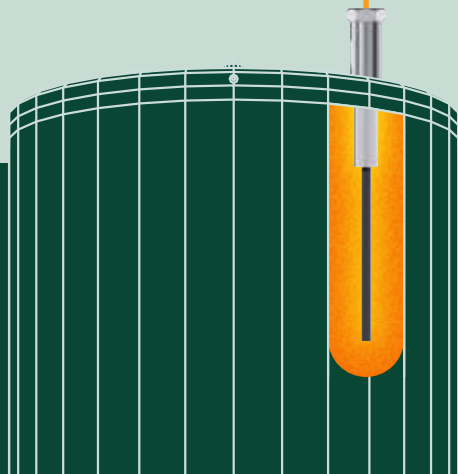
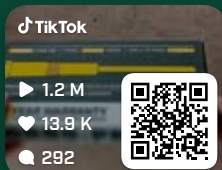
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TRANSFORMING THE GAME

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Plumber Profile

Transforming the Game

Adding technology to give customers more options has set up a young San Diego plumbing firm for plenty of future success.

- By Ken Wysocky

On the Cover

Salvador Rodriguez Jr. uses a RIDGID SeeSnake to inspect a drainline at a residential property in San Diego. Rodriguez founded RDZ Plumbing & Drains in 2018 and now has six employees and offers plumbing service and repair, drain cleaning and pipe lining throughout the metro San Diego area. **(Photography by Matt Dayka)**



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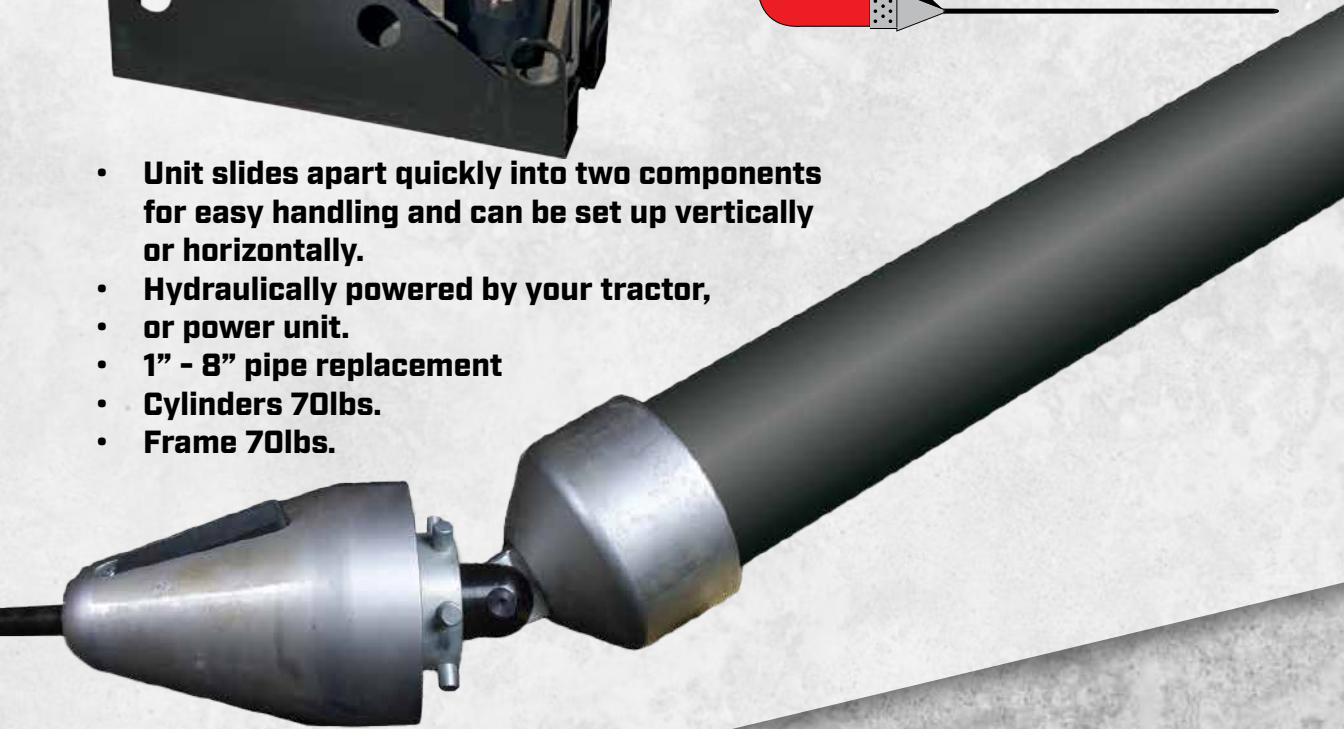
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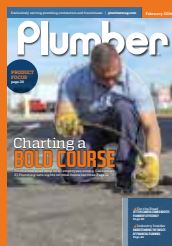
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Cory Dellenbach

Plumbing Together

The power of supporting your team and community can lead to more customers and keeping a solid team in place

B

eing on the board of a few different organizations in the small community I live in has opened my eyes to how working together can make things better and run more smoothly.

It's not much different than the world of plumbing, where every day brings new challenges and awards, the significance of creating a strong sense of unity within your team and community cannot be overstated.

Let's take a moment to reflect on the power of support — supporting your team and community isn't just a choice; it's a cornerstone of success.

A FOUNDATION FOR SUCCESS

The plumbing profession is undoubtedly a team sport. From apprentices to seasoned veterans, each member of your team plays a role in ensuring that projects are completed efficiently and effectively. The success of a plumbing project often depends on seamless collaboration and mutual support among team members.

As leaders in the plumbing industry, it is your responsibility to create an environment where every team member feels valued and supported. This goes beyond providing the necessary tools and resources; it's about fostering a culture of open communication, trust and respect. When your team feels supported, they are more likely to share their ideas, take calculated risks, and contribute to the success of the team.

Investing in the professional development of your team is another form of support that pays dividends. Whether it's offering training programs, workshops or mentorship opportunities, helping your team members grow in their roles not only benefits them individually, but also strengthens the overall capability of your team.

PLUMBING WITH PURPOSE

Beyond the confines of the workplace, the impact of plumbing extends to the communities you serve. Plumbing

Beyond the confines of the workplace, the impact of plumbing extends to the communities you serve. Plumbing isn't just about fixing pipes; it's about improving the quality of life for the people who rely on your services.

isn't just about fixing pipes; it's about improving the quality of life for the people who rely on your services. As plumbing professionals, you have a unique opportunity to give back to the communities that support you.

Engaging in community outreach programs, offering free or reduced-priced services for those in need, or participating in educational initiatives are ways that you can contribute to the community. These efforts not only create positive relationships with the public but also a sense of pride and purpose within your team.


Being actively involved in community initiatives positions your plumbing business as a responsible and caring member of society. This positive reputation can lead to increased trust, customer loyalty, and new opportunities for collaboration within your community.

A CALL TO ACTION

As you read through the pages of *Plumber* magazine, may you find inspiration in the stories of teamwork, community engagement, and the collective strength of plumbers around the world.

Together, let us continue to build a plumbing industry that not only excels in technical expertise but also stands in support of its members and the communities it serves.

Tell me how you and your plumbing team support each other and the communities you serve. Email me at editor@plumbermag.com.

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We're always on the lookout for relevant and interesting plumbing content across the internet and social media. In our e-newsletters, we regularly highlight that and share what else out there we're reading and watching. For example, this news story out of Chicago about a plumbing company being plagued by burglaries. Be sure to sign up for *Plumber* e-newsletters if you haven't already.



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Selling Customers on Water-Efficient Fixtures

Water efficiency is becoming increasingly important in society and installing water-efficient plumbing fixtures in commercial bathrooms is

an excellent way for businesses to conserve and protect our natural resources. As regular contributor Anthony Pacilla explains in this online exclusive, you have an opportunity to make change, get paid to do so, and convince building owners of the benefits.

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CHANGING TIMES

Gen Z Shifts Workforce Dynamics

The newest coming-of-age cohort that's beginning to shift workplace dynamics is Generation Z, generally defined as the 72 million or so people born between 1997 and 2012. Gen Zers are expected to make up approximately 27% of the workforce by 2025 and 30% by 2030. This online exclusive takes a look at the needs and concerns of Gen Z employees that companies will have to be mindful of.

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— *Navigating the Legal Pitfalls of Workers' Comp*

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TRANSFORMING THE GAME

Adding technology to give customers more options has set up a young San Diego plumbing firm for plenty of future success

By Ken Wysocky | Photography by Matt Dayka



RDZ Plumbing & Drains, San Diego, California

OWNERS	Salvador and Sandra Rodriguez
FOUNDED	2018
EMPLOYEES	6
SERVICES	Plumbing service and repair, drain cleaning and pipe lining
SERVICE AREA	Metro San Diego area
WEBSITE	www.rdzplumbing.com

If anyone doubts how investments in technology can change the trajectory of a company, consider the case of RDZ Plumbing & Drains, a small company with growth aspirations.

The small San Diego-based company, owned by Salvador Rodriguez Jr., and his sister, Sandra Rodriguez, made a big decision to go into debt to buy a Quick-Shot pipe lining system from Pipe Lining Supply (now Waterline Renewal Technologies).

“It was a game-changer for our company,” says Salvador Rodriguez Jr., 33, who founded the company in 2018. “It has expanded our customer base geographically and opened up a new market for us, plus it helps us be competitive with other companies.”

The purchase jump-started the company’s growth plans, says Rodriguez. RDZ Plumbing & Drains employs only six people and runs three service vehicles — two Chevrolet Express vans and a Ford Transit Connect van. But the investment not only underscores the need to keep up with competitors, but also the truth of an old business adage: Companies have to spend money to make money.

“I look at it as good debt,” says Rodriguez of the money he borrowed to finance the purchase. “I’m not at all scared

“I’m not at all scared by the debt because I knew that once we received the proper training, we’d make good money with the pipe lining system. Sure, it was a big expense, but the profit margins are very good.”

Salvador Rodriguez Jr.

by the debt because I knew that once we received the proper training, we’d make good money with the pipe lining system. Sure, it was a big expense, but the profit margins are very good.”

PLUMBER FIRST

Salvador Rodriguez Jr. says he literally was born into the industry because his father, Salvador Rodriguez Sr., was a plumber, as were many uncles and cousins.

“When I was just a young kid, my dad and one of my uncles, Andres Rodriguez, would take me along to jobs every so often,” Rodriguez recalls.

But by the time he turned 18, Rodriguez had no desire to be a plumber because he considered



▶ RDZ Plumbing & Drains owner Salvador Rodriguez Jr. and technician Randy Suarez inspect and do an estimate on a gas pipe job at a residence in San Diego.



◀ Salvador Rodriguez Jr. operates a BossJet Pro from Amazing Machinery at a residence in San Diego.

it a dirty job. He instead started working in the grocery business and quickly became the director of a small chain of stores in San Diego. That all changed, however, when Rodriguez's father started thinking about retirement.

"I talked to him and he told me it was time to come back," Rodriguez says. "So I decided to take that big step. Besides, plumbers can make good money."

But the elder Rodriguez also pushed his son to get licensed and eventually open up his own business, which he did after working for his father for around three years. He was 28 years old at the time.

"I made the move and never looked back," Rodriguez says. "I finally realized that this is what I was meant to do."

Going it alone wasn't easy, so his sisters, Sandra and Mariana Rodriguez, came aboard to help out. "That's when we really started growing," Rodriguez says.

His sisters took responsibilities off his plate, which gave him more time to work in the field, and they also provided a lot of emotional support, he says.

Equipped for any job

Salvador Rodriguez Jr. firmly believes that a plumbing and drain cleaning company must be equipped to tackle a variety of different situations to avoid having customers go elsewhere for service. That philosophy explains why RDZ Plumbing & Drains, the small business he co-owns with his sister, Sandra, boasts a fairly large roster of machines.

Three machines in particular have played a crucial role in his company's growth since its inception in 2018: K9-102 and K9-204 drain machines from RIDGID and an RCM-10 drain machine from Renssi Finland Oy.

The Renssi RCM-10 is particularly critical because it's used primarily to descale drainlines prior to pipe lining, which has become one of the company's most lucrative services. The unit cost about \$5,000 and Rodriguez says it has easily paid for itself.

"The Renssi machine automatically is a moneymaker because just about every time we use it, we're shooting a liner," he says. "Every time we use it, we're facing a situation where something bad has happened. But it always does the job. We

mostly line cast iron pipes and some clay pipes. I've seen some really bad cast iron lines where I thought we maybe couldn't line them. But we've still been able to descale them enough that we can line the pipe."

One feature Rodriguez says he really appreciates is the safety foot pedal, which enables him to hold the cable with two hands for optimal control and feel while operating the machine with a foot.

"I don't need to have a drill in one hand and only one hand on the cable," he says. "It's also very easy to move around and it's so compact that it doesn't take up a lot of room on a service truck."

Powered by hand drills, the RIDGID FlexShaft machines also enhance productivity and profitability. The smaller K9-102 is designed for cleaning sink, tubs, shower and urinal drainlines. It comes with 50 feet of 1/4-inch-diameter cable and is designed for 1 1/4- to 2-inch pipes. The K9-204 is designed for use in 2- to 4-inch pipes and comes with 70 feet of 5/16-inch cable.



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MEETING CUSTOMER DEMAND

Rodriguez says his interest in pipe lining was piqued when he noticed more and more contractors lining pipes or using other trenchless pipe rehab methods.

"I knew we had to get into that, just to keep up with competitors," he says. "And when we got invited by a contractor to see how they do it, I was surprised at how easy it was, especially compared to digging up someone's front yard and all the costly labor that excavation requires."

Furthermore, more and more clients were asking Rodriguez if RDZ Plumbing & Drains did pipe lining or used other trenchless methods.

"Customers already knew about it, but we weren't able to do it," he says. "I knew we had to change that."

Rodriguez agrees that pipe lining comes with a degree of risk. But he says that proper training minimized the chances of jobs going sideways.

In addition, Rodriguez says he spent about \$5,000 on liners and other materials so he and his technicians could practice shooting liners at his house. They practiced straight shots, then graduated to lining 45- and 90-degree pipe bends.

"We practiced and practiced and practiced until we felt comfortable," Rodriguez says. "It wasn't pleasant spending that much money on practice shots, but I felt we had to do it."

Moreover, both machines can operate while a camera is in the line because the drain cable is enclosed in a nylon sheath.

"They're both super easy to use and the dual camera and cleaning capability saves us a lot of time," Rodriguez says. "The chain attachment spins from wall to wall, so it's truly cleaning the entire pipe. It just destroys clogs."

Rodriguez says he frequently has to go up on a house roof and pop a ventilation cover for drain cleaning access because there's no cleanout, and that's easy to do with the FlexShaft units because they're so light and compact. The K9-102 weighs about 24 pounds and the K9-204 weighs around 37 pounds.

The K9-102 costs around \$1,100 and the K9-204 is priced around \$1,600. They pay for themselves quickly, Rodriguez says, and boost customer satisfaction by unclogging drains quickly and efficiently.

"To succeed in this industry, you have to be equipped for different situations," he says.



- ▶ Salvador Rodriguez Jr. uses a RIDGID SeSnake to inspect a drainline at a residential property in San Diego. Rodriguez founded RDZ Plumbing & Drains in 2018 and now has six employees and offers plumbing service and repair, drain cleaning and pipe lining throughout the metro San Diego area.
- ▶ Rodriguez and Randy Suarez prepare an estimate at a residence in San Diego.



The Renssi RCM-10 is particularly critical because it's used primarily to descale drainlines prior to pipe lining, which has become one of the company's most lucrative services. The unit cost about \$5,000 and Rodriguez says it has easily paid for itself.

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Moreover, both machines can operate while a camera is in the line because the drain cable is enclosed in a nylon sheath.

Continued ▶

“I made the move and never looked back. I finally realized that this is what I was meant to do.”

Salvador Rodriguez Jr.

"You also need a positive mindset in this game and your workers need to be really focused. And they're motivated because lining pipes is much easier than excavating to replace pipes. When they don't have to dig anymore, they're happy and the customers are happy, too, which motivates us even more."

Rodriguez says it took about three jobs in order to feel completely comfortable about lining pipes.

EQUIPPED FOR ANY JOB

Rodriguez firmly believes that a plumbing and drain cleaning company must be equipped to tackle a variety of different situations to avoid having customers go elsewhere for service. That philosophy explains why RDZ Plumbing & Drains boasts a fairly large roster of machines.

Three machines in particular have played a crucial role in his company's growth since its inception in 2018: K9-102 and K9-204 drain machines from RIDGID and an RCM-10 drain machine from Renssi Finland Oy.

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“They’re both super easy to use and the dual camera and cleaning capability saves us a lot of time,” Rodriguez says. “The chain attachment spins from wall to wall, so it’s truly cleaning the entire pipe. It just destroys clogs.”

Rodriguez says he frequently has to go up on a house roof and pop a ventilation cover for drain cleaning access because there’s no clean-out, and that’s easy to do with the FlexShaft units because they’re so light and compact. The K9-102 weighs about 24 pounds and the K9-204 weighs around 37 pounds.

The K9-102 costs around \$1,100 and the K9-204 is priced around \$1,600. They pay for themselves quickly, Rodriguez says, and boost customer satisfaction by unclogging drains quickly and efficiently.

“To succeed in this industry, you have to be equipped for different situations,” he says.

LINING CHALLENGES

One of the most difficult pipe lining jobs the company has performed involved an 85-foot-long shot in 4-inch-diameter clay sewer pipe that ran under a Mexican fast-food restaurant. The job posed a major challenge because about a foot of sewer line at the start of the run was badly degraded cast iron pipe.

“There were cavities in the bottom of the line, so we were afraid to jet it,” Rodriguez says. “There also was a failing grease trap, so chunks of grease were falling into the line. At one point, we actually thought about hiring a subcontractor to do pipe bursting instead of lining the pipe. But then I started thinking about how we bought this kind of equipment to do trenchless work, so I decided not to hire it out.”

The pressure was on because the restaurant owner, who was losing a considerable amount of money by not being able to operate, gave RDZ Plumbing & Drains one day to do the job. Rodriguez consulted with a representative at Pipe Lining Supply who suggested shooting what’s called a



▲ Sandra Rodriguez works in the RDZ Plumbing & Drains office in San Diego. She co-owns the plumbing company with her brother, Salvador Rodriguez.

“skeleton” liner — a thin, pre-liner that serves as a guide for the real liner to pass through the damaged area.

“We knew if the skeleton liner got caught where the pipe cavities were located, we wouldn’t be able to line the pipe,” Rodriguez says. “So we cleaned the pipe ahead of and behind the damaged portion, then shot about a 60-foot skeleton liner into the pipe. It was such a relief when the skeleton liner got through.”

EQUIPMENT INVESTMENTS

As the company grew, so did its fleet of equipment and machines. Today the company owns three Spartan Tool 300 and three Spartan 100 cable drain machines; three cordless M18 Drain Snakes from Milwaukee Tool; a BossJet Max cart-mounted water jetter from Amazing Machinery, equipped with a Cat Pump (5 gpm at 3,000 psi); a Viztrac XSC pipeline inspection camera from Amazing Machinery; and a skid-mounted BossJet (up to 10 gpm at 3,000 psi) water jetter with a 200-gallon water tank, carried inside a Chevrolet Express van.

RDZ Plumbing & Drains also owns RIDGID FlexShaft K9-102 and K9-204 machines; an RCM-10 drain machine from Renssi Finland Oy, used primarily for descaling drain-lines prior to pipe lining; and RIDGID and Milwaukee Tool power tools.

The company’s continued investments in productivity-enhancing equipment and machinery has been critical to its growth. More equipment also enabled the company to diversify its offerings, which include plumbing service and repair work, remodeling projects, drain cleaning, pipeline inspections and pipe lining, all primarily for residential customers.

RDZ also attracts new customers by providing 24-hour emergency plumbing and drain services. How

Continued ▶

“When you see clients in stressful situations, it feels good knowing you have the knowledge to get things back in order so they’re happy again.”

Salvador Rodriguez Jr.

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does Rodriguez handle that with just himself and two other field technicians?

“If anything comes up after normal business hours, I usually handle it,” he says. “Soon we’re going to start rotating technicians to be on call. But at the end of the day, I feel like it’s my business, so I feel responsible for handling those calls. If making more money and staying in business means waking up at 1 a.m., I go out there because I’m the one who needs to take care of business.”

NO REGRETS

Looking back, Rodriguez says he has no regrets about carrying on the family’s plumbing tradition. What keeps him motivated, aside from making money? Helping people out during emergency situations, he says.


“I like to be part of something that helps other people,” Rodriguez says. “I know we charge people for what we do. But when you see clients in stressful situations, it feels good knowing you have the knowledge to get things back in order so they’re happy again. That’s always a big win for me.”

The problem-solving aspects of the job are also rewarding, Rodriguez says.

“I love getting in there and doing what I do,” he says. “It’s rewarding when jobs challenge your skills and require you to use your experience to solve problems. And you’re always gaining new skills, too. Every job teaches you something different.”

Looking ahead, Rodriguez says he wants the company to keep growing, but not so fast that he loses control over job quality and decreases customer satisfaction.

“My ultimate goal is to run at least two more vans and hire two more plumbing technicians,” he says. “I would love to expand further north into Anaheim or Los Angeles.

“But overall, I want to keep it small. I don’t want to lose that family-owned feeling. And we don’t ever want to drop the ball when it comes to customer service.” 

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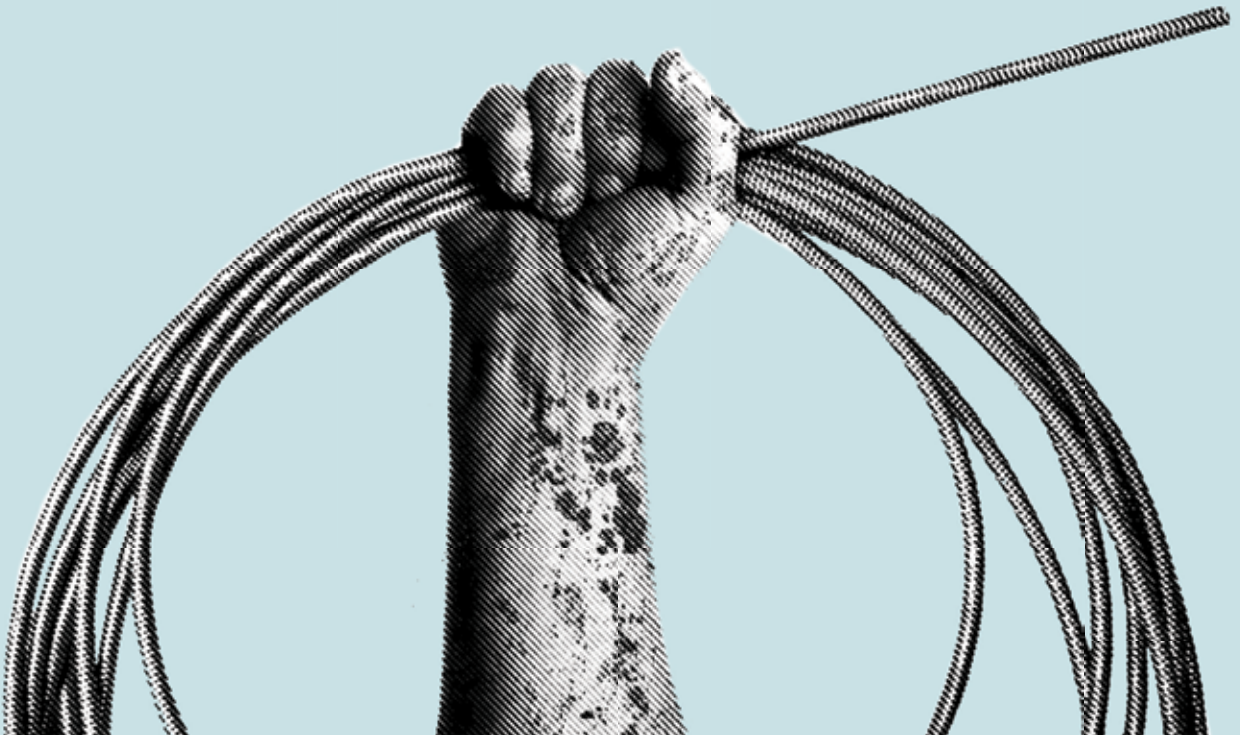
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Jessica Rector

Think Positive Thoughts

Change your thinking and create a culture that people don't want to leave

By Jessica Rector

Do you have a Negative Nancy or Toxic Tim that you're keeping longer than you should? Would you let them go if you weren't so short-staffed? One Negative Nancy or Toxic Tim infiltrates the whole company and it spreads throughout, affecting everyone.

Think of it like this: You attend a meeting that Negative Nancy was in. When you leave, you approach Positive Polly and share with Positive Polly, "It's so frustrating dealing with [Negative Nancy]. Why is she still here? All we do is constantly listen to her babble and unhappiness."

Before you know it, you become a Negative Nancy, and Positive Polly sees the impact the original Negative Nancy has made on you and the team. It only takes one person thinking negatively to bring the whole environment, culture and team down. In order to help you, Positive Polly shares the following.

You have 60,000 thoughts a day and 80% of them are negative. These come in the form of doubt, worry and stress and are linked to poor attitudes, declining engagement and poor performance.

Most people think they are positive and optimistic, yet negativity shows and they don't recognize it. In fact, 95% of your thoughts are repetitive. So, all of the negative thoughts keep getting repeated, impacting how you show up, speak out, lead and live.

Your thoughts are the fundamental foundation of everything you do and everything you don't do, yet oftentimes you don't think about them. When was the last time you thought about what you thought about?

If you're like most people you think the same way you've always thought, resulting in the same behaviors, actions and results. If you want to change relationships, communication, interactions, your confidence, you must first change how you think. Once you change that, then everything else will change as well.

Here is a five-step process to help you change your thoughts to invoke different actions, behaviors and results and develop a positive work environment.

Your thoughts are the fundamental foundation of everything you do and everything you don't do, yet oftentimes you don't think about them.

- 1. Identify:** Recognize your thoughts. There's an exercise to help you very specifically identify your negative thoughts. It's called the "Stand Up/Sit Down" exercise. This is a great exercise to do as a team. Have someone read a set of statements. For every statement you agree with, you will move your body. For example, if the first statement is "If you've ever thought you're not smart enough," and you agree, you'll sit down. If you disagree with the statement, you'll remain as you were. If the next statement is, "If you've ever thought you don't have enough time," and you agree, you'll move (either stand up or sit down depending on what you did for the first statement). This repeats for every statement read (there should be about 15 statements read). During this activity, you can expect to hear laughter evoke from your group, as they are moving for most of them, which shows that negative thinking arises without you consciously knowing. And you have a lot more of them than you believe.
- 2. Write it:** Once you've identified your negative thoughts, it's important to write them down. Something happens in your brain when you write things down. They tend to become real, and you remember them more. So, when you write down your negative thoughts, you become more mindful when they arise. Follow the rest of the process with just one of your negative thoughts. Once you have mastered one, work on another (you don't want to overwhelm you or burn you out on doing too many at once).

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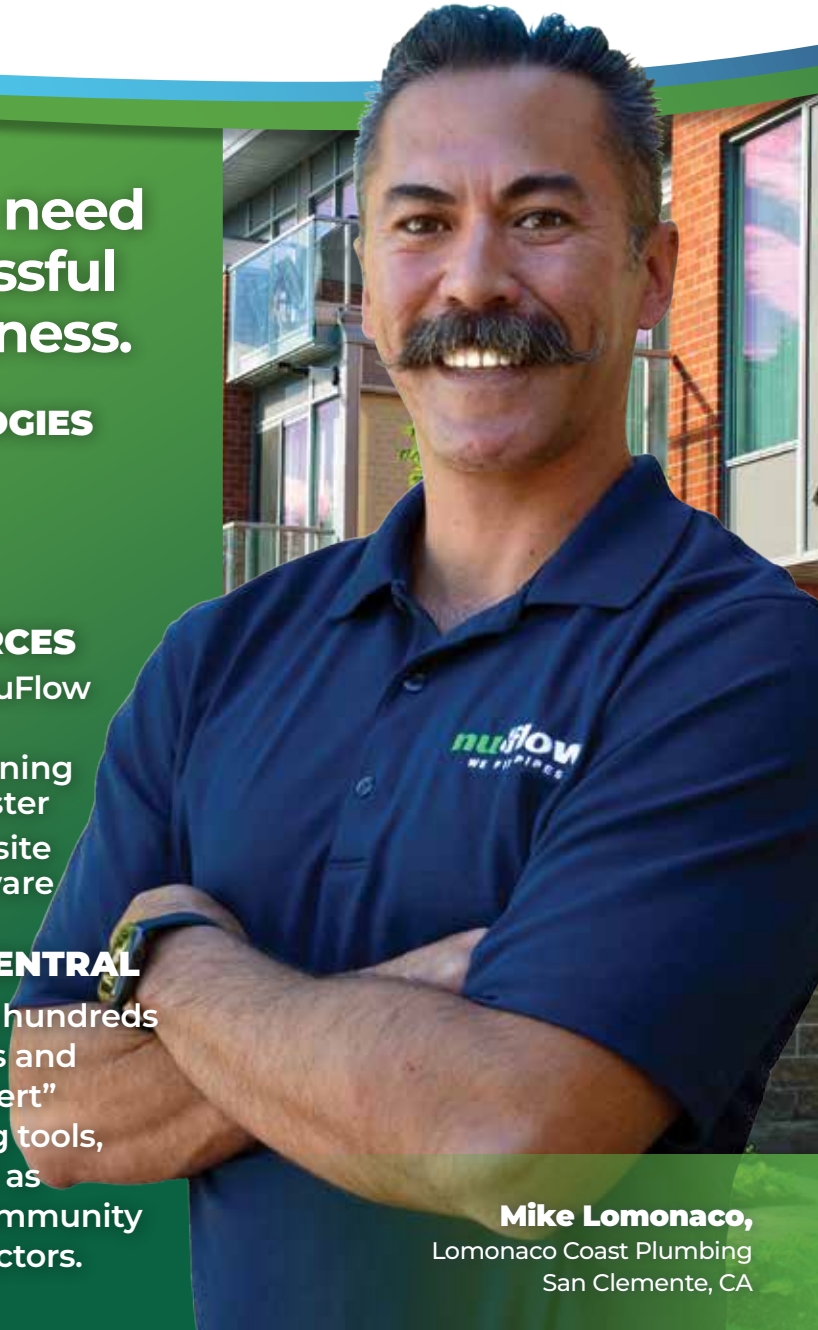
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- 3. Triggers:** What are your triggers for your negative thinking? Triggers can be a place, situation, mood, experience or thing. If you've ever had a conversation with someone and walked away saying to yourself, "Why do I even bother?" then you also know a trigger can be a person too. And many times, it is a person. Write down all of your triggers. When you're aware of your triggers, you can be on the lookout for them. When they come up, as they will, you are armed to not allow the negative thoughts to follow.
- 4. Reframe:** List all the ways to reframe the negative thought. There are two ways to do this reframing. First, you can say the opposite of the negative statement. Instead of saying I'm not a good enough leader, you can say, "I'm an awesome leader." The second way is to ask questions. For instance, "What courses do I need to take to become a better leader?" "What leadership book should I read to improve my leadership skills, or who can mentor me into being a better leader?" Your brain is constantly talking to you. If you say you're not a good enough leader, your brain will validate it with all the ways that it's true. If you say you're an awesome leader, your brain will validate it with all the ways that it's true. Listening to the positive part of your brain will make all the difference in your work and life.

- 5. Action:** Once you have your reframing options, pick one to take action on. Nothing changes until you take action on it. Small action makes a huge difference. If you want to know the best leadership book to read, you may initially think you do not know any, however, your brain can solve that dilemma. It'll reply with ideas to look up leadership books on Google, put a post on Facebook asking your friends for their recommendations or look up Amazon book reviews. Then it's time to decide which action you will take (which book to order and order it). Small consistent action is key to eradicating negative thinking.

The more you work through this process the more positive thoughts you have. You'll soon recognize negative thoughts in others and can help them master their own mindset. You'll become the Positive Polly and help develop a positive work environment that no one wants to leave. 📌

Jessica Rector, MBA, author of the NO.1 best-selling *Blaze Your Brain to Extinguish Burnout* and nine other books, helps organizations, leaders and teams "Say Yes" to eradicate burnout and enhance mental health. As a burnout trailblazer, her research is used in her consulting and speaking and often shared on her podcast, "The Say Yes Experience." For how Jessica can help your organization and team, go to www.jessicarector.com.



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By Craig Mandli

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Crawler wheels from **Cua Claws** can help improve footage in wet, slippery PVC or other plastic pipe. The wheels have a tungsten carbide furnace brazed to the wheel. An extended range of modes is available that can be retrofitted to the customer's crawler. The company also offers a service to apply its carbide to crawler wheels. Some wheels are stainless steel and cannot be processed so Cua Claws has a line of replacement wheels of exact fit in mild steel so the grit can be applied. This way the customer can harvest the savings to re-grit instead of replacing the wheels when necessary. 714-697-8697; www.cuaclaws.com



Drainline TV Inspection Cameras

CPI Products URS1

The **URS1** roller skid from **CPI Products** protects a wide variety of push cameras and enables them to safely go further down the pipe. A durable plastic enclosure around the camera body with wheels enables the cameras to move smoothly down the pipe, around corners and seams from 6- to 12-inch pipes. It has movable arms that expand and contract to center the camera and jump over debris, seams and negotiate elbows and maneuver around bends. A waterproof LED light kit is available to improve the camera image, and a large wheel kit enables it to be centered in pipes up to 14 inches in diameter. Cameras up to 2 inches fit inside, and for larger cameras the Endzo adapter can handle camera heads up to 2.5 inches. 413-443-0925; www.cplproducts.com



CUES flexiprobe C540c

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



Electric Eel EELvision Elite

The **EELvision Elite** inspection camera from **Electric Eel** is designed for inspecting 3- to 10-inch-diameter lines. It has a 1.30-inch self-leveling color camera with vivid adjustable LED lights and a large 7-inch monitor for easy viewing. A sunshield allows for outdoor viewing and protects the monitor in transport. It comes standard with 200 feet of 1/2-inch-diameter premium push cable, an on-screen footage counter, continuous display odometer, one-touch recording to USB and screenshot capability, an extended ergonomic handle to facilitate maneuverability and transport, heavy-duty metal frame and wheels, a user-friendly control panel, quick-start guide tutorial prompts, QR code for manual and support accessibility, a built-in always-on sonde, dual power sources (AC and 18-volt), and a Makita M18 battery port. It also accepts both Milwaukee and DeWalt batteries with a provided adapter. 800-833-1212; www.electriceel.com





EPL Solutions Gvision V7

The **Gvision V7** from **EPL Solutions** is a ruggedized elite camera system that can be purchased for mainline use with 200, 300 or 400 feet of stiff yet flexible pushrod or a 150-foot mini-camera. Instantly capture video recordings and snapshots with the press of a button and access them anytime within the

internal storage. The tech will never have to wonder where a video was taken as geolocation information is automatically attached and displayed on recordings. Add text overlay using the camera reel or a USB keyboard. Copy recordings and snapshots on two USB flash drives at once, or share them using the Gvision app. The app allows the user to remotely control, preview and download video inspections for easy sharing. Users can capture every detail with the color camera head clearly displayed on a 10.4-inch True-View LCD screen. Add an internal battery for up to six hours of runtime. **714-453-9760; www.epls-usa.com**

Fiberscope.net by MEDIT TROGLOTREK

The **TROGLOTREK** pipe inspection robot from **Fiberscope.net by MEDIT** is operated by a rechargeable battery and does not require access to an AC power supply, making it convenient for use in remote locations. All system parts, including a motorized cable drum, are battery-powered. With a full range of quick-changeable wheels, the robot can inspect pipes from 4 inches in diameter and up. For larger pipelines, additional auxiliary lights and wheel extension brackets are available. The pan-and-tilt camera thoroughly observes the inspection area, while a rear-view camera lets you monitor the surrounding area when moving backward. The crawler comes with a 984-foot Kevlar braided cable. The splash-proof control center allows the system to be used in wet locations or during rain or snow. Inspection data can include text, footage and inclining information. **877-613-2210; www.fiberscope.net**



Hathorn Inspection Cameras H7

The **H7** from **Hathorn Inspection Cameras** is a complete inspection camera system that comes standard with a 7-inch daylight-readable, shatter-resistant LCD monitor with 1,000 cd/m² of brightness. It also has an on-board hard drive with 64 GB (upgradable to 128 GB) capacity and USB recording allowing the user to record MPEG4 video and JPEG screenshots. These systems are compatible with 18-volt Milwaukee (or equivalent) batteries for portability and over 5 hours of runtime on a single charge. They come with 200 feet of premium cable and a choice of camera heads. They are available with Wi-Fi video streaming technology as an option. **866-428-4676; www.hathorncorp.com**



MyTana MS11-NG2

MyTana's versatile **MS11-NG2** inspection system inspects 3- to 6-inch lines with a self-leveling camera head. Swap in a smaller head included with the optional MS11+ Combo Kit to inspect 1.5- to 2-inch lines. Each head has a 512 Hz transmitter built in. A high-clarity 6.4-inch daylight-readable monitor and all the controls are integrated on the sturdy reel frame for grab-and-go convenience; helpful when access points are scattered or hard to reach. Save footage to internal or removable drives, or stream video wirelessly to a mobile device and add voiceover using the built-in microphone. The durable pushrod is available in 150- or 200-foot lengths and can be replaced in your facility. **800-328-8170; www.mytana.com**



Ratech Electronics Plumber's Helper Jr.

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





Spartan Tool Traveler 3.0

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



TROJAN WORLDWIDE VisionHD

The **VisionHD 1080P** camera system from **TROJAN WORLDWIDE** is a reliable and easy-to-operate system designed for use in 1.5- to 4-inch lines. The all-in-one enclosed case features a 1-inch high-definition 1080p self-leveling waterproof color camera head with adjustable LED lights and a built-in 512 Hz sonde transmitter for locating. The system has 100 feet of durable pushrod, and a built-in foot counter. The display module has a 10-inch full HD LCD with DVR and is capable of recording to an SD card or USB flash drive for up to 6 hours on a full charge. Other features include a keyboard for text writing and attachable microphone for voice recording. Accessories include headphones with mic, two centering skids, charging cord and USB adapter. **800-395-4902; www.trojanworldwide.com**

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The **FloLogic** alarm offers smart leak detection and an automatic shutoff system with industrial-grade U.S.-made cast bronze valves in sizes up to 2 inches. It has comprehensive real-time leak detection, detect-



ing leaks as small as a half-ounce per minute from the moment they start. When a leak is detected, the water is shut off automatically and the users receive an alert through the FloLogic smartphone app. The FloLogic CONNECT module also features a thermometer, allowing low room temperature alerts and automatic water shutoffs. All systems are equipped with battery backup for continued protection during outages. Plumbers who sell and install FloLogic can help their clients secure their home against plumbing supply leak damage. **877-356-5644; www.flologic.com**

Hermann Sewerin GmbH SeCorrPhon AC 200

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



Electronic Pipe Location

General Pipe Cleaners Gen-Eye Hot Spot

General Pipe Cleaners' Gen-Eye Hot Spot pipe locator includes a total field antenna array and on-screen icons to lead the user to the target, without the long learning curve. They can quickly locate inspection cameras, sondes, active power lines and utility lines with pinpoint accuracy. The rugged locator is rated at IP65, is dust- and dirtproof, and water-resistant. It passed the one meter drop test and the screen passed the 18-inch steel ball drop test. There is no need to interpret numbers and bar graphs, as the easy-to-see auto backlit LCD shows the way with arrows that point users in the right direction every time. Utility line location and active buried power line locating is just as easy. **800-245-6200; www.drainbrain.com**



Milwaukee Tool M12 Pipeline Locator

Milwaukee Tool's M12 Pipeline Locator provides plumbers and drain cleaners with a simple locating experience. A guiding arrow appears on the 4.3-inch daylight-readable screen upon startup, immediately pointing in the direction of the sonde and eliminating the need to guess and check the exact location of the sonde. A sonde icon appears on screen to confirm the exact location once in range. Omnidirectional antennae make it easier to locate than ever before, providing increased sensitivity for precise locating and eliminating false peaks. The locator features a sealed battery door and is IP 65 rated for durability in harsh job site conditions. All of Milwaukee's inspection reels feature energized push cables, allowing users to quickly locate and map sewer lines. Milwaukee is committed to delivering a comprehensive lineup of pipeline inspection camera solutions to improve the way work gets done. **800-729-3878; www.milwaukeetool.com**

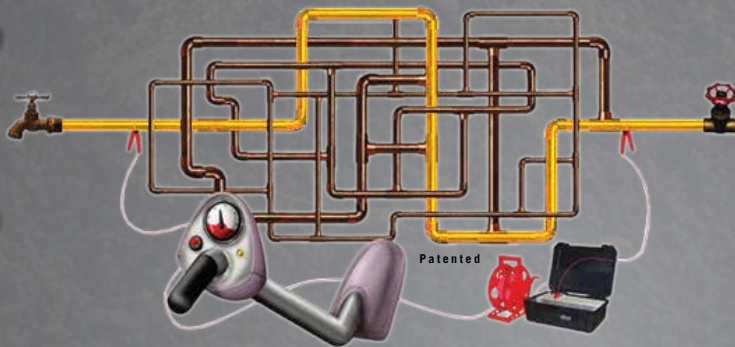


RIDGID SeekTech R-24LE

The RIDGID SeekTech SR-24LE is a precision utility locating receiver with integrated GPS and Bluetooth Low Energy technology for easy integration with smartphones, tablets and high-precision GPS instruments for real-time location coordination via the RIDGIDtrax App. Its omnidirectional antennas capture the complete signal field, making it easy to acquire the signal and trace its path. The receiver maps the utility's position and direction on its display for an intuitive locating experience. Audio and visual warnings notify the operator if the shape of the signal field is being distorted so action can be taken to avoid mismarking the utility's position. Equipped with the 18-volt battery adapter, it is ready to be powered with a RIDGID 18-volt battery (not included) for long-lasting power in the field. It also has a foldable mast for easy transport and storage. **800-769-7743; www.ridgid.com**

Pulsar 2000 Line Tracer

- ✓ Locate Lines
- ✓ Locate Water Leaks
- ✓ Training Video



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

if you are not satisfied. If you want to learn more about the Pulsar 2000 and our leak locating equipment, please call **214-388-8838** 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
DISTRIBUTORS WANTED



Subsite Electronics UtiliGuard 2 RTK

The **UtiliGuard 2 RTK** receiver from **Subsite Electronics** was designed as a simple, easy-to-operate utility locating tool for operators locating, mapping and capturing underground utilities. It utilizes survey-grade technology and features dual-band antennae to provide operators with reliable positioning data with centimeter-grade accuracy. Its precision helps when locating abandoned and untracked utilities that are difficult to pinpoint. By quickly verifying the utilities installed, operators efficiently tailor bids to match a job site needs, as well as gain insight into the underground infrastructure to avoid cross bores during future projects. The receiver provides locate crews with integrated data capture, GPS positioning and an intuitive user interface to improve work quality and maximize locate awareness. By downloading the MyUtiliGuard application, operators simplify and streamline how they capture, map and share data. **800-846-2713; www.subsite.com**



Vivax-Metrotech vLoc3 RTK-Pro

The **vLoc3 RTK-Pro** utility locator from **Vivax-Metrotech** adds RTK GNSS accuracy. Using the internal cellular module with 4G LTE capabilities, the operator can connect to an NTRIP RTK (Real-Time Kinematic) caster that provides RTCM 3 corrections. By utilizing these corrections, the operator can collect both utility location data and the utility's geographical location with survey-grade accuracy. All field data is sent to the cloud and retained in the receiver's onboard storage for review and exporting to mapping programs. **800-446-3392; www.vxmt.com**

Smoke Locators

Cherne Residential Plumbing Smoke Blower



The **Cherne Residential Plumbing Smoke Blower** is a fast and easy leak-detection system. The blower uses long-lasting dense smoke that

is pumped into a plumbing system to identify leaks quickly and efficiently. Featuring a 5-foot heavy-duty hose that fits a 4-inch cleanout tee, the blower is lightweight and corrosion-resistant. With exhaust pumped through the plumbing, the blower can be used indoors and easily transported with its top-mounted carrying handle. Its efficient 122-CC, 3.5 hp, 4-stroke Honda engine provides more than 700 cfm, making it fast, easy and safe to determine plumbing problem areas. Vibration damping minimizes excess movement and noise, creating a smoother and more efficient experience. **800-843-7584; www.cherneind.com**

Superior Signal 5E FLEX

Superior Signal's 5E FLEX battery-powered smoke blower is designed for smoke-testing building plumbing and sewer laterals. It is compatible with leading 18- to 20-volt tool batteries and, utilizing a high-quality power adapter, the blower integrates with an existing electric tool set. Additionally, it can run off any 12- to 24-volt power source — such as a car or truck battery — using the DC clips power adaptor. It gently pushes smoke through the system in just a few minutes and takes only seconds to see results. While it is popular for a variety of plumbing applications, it is also useful in testing sewer laterals, and can clearly illustrate where a fault or leak may occur on private property. It comes with an 8-foot industrial-grade hose. Used with 1A or 2B smoke candles, it creates 4,000 or 8,000 cubic feet of smoke, respectively. The smoke candles are also sold in SealPac cans which extend shelf life. **732-251-0800; www.superiorsignal.com**



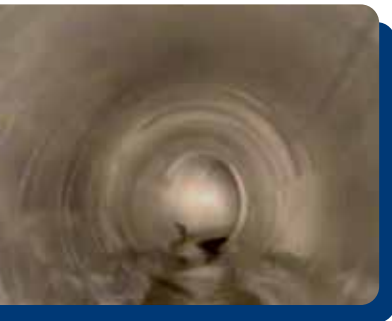
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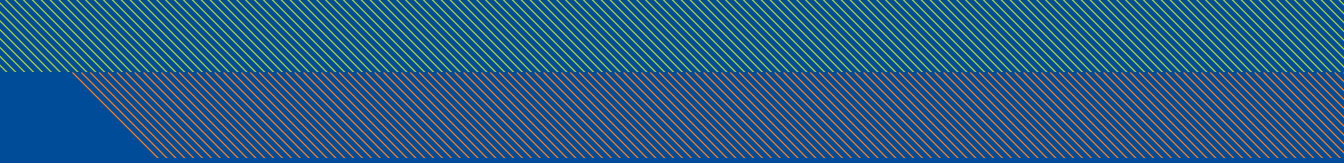








2024 Plumber

INSPECTION, LOCATION & LEAK DETECTION DIRECTORY

DEALER/DISTRIBUTOR OF	PIPE DIAMETERS - INCHES	REEL SIZES - FEET	RECORDING METHODS	ACCESSORIES	REPAIR PARTS	INSPECTION VEHICLES	REPAIR FACILITY	SOFTWARE AVAILABLE	DETECTION EQUIPMENT	LOCATION EQUIPMENT
Allan J. Coleman Co. 5725 N Ravenswood Ave., Chicago, IL 60660 773-728-2400 ■ (f) 773-728-2499 shane@allanjcoleman.com www.allanjcoleman.com ad on page 17	RIDGID, Insight Vision, VuTek, General Wire, Electric Eel, UEMSI, Spartan	1" to 12"	30' to 325'	Flash Drive/USB Thumb Drive, DVR, SD Card	✓	✓	✓			
Central Oklahoma Winnelson 5037 NW 10th St., Oklahoma City, OK 73127 888-947-8761 ■ 405-947-8761 (f) 405-947-1934 krjones@winnelson.com www.centralwinnelson.com ad on page 37	RIDGID	.75" to 12"	65' to 325'	Flash Drive/USB Thumb Drive, DVD, Wi-Fi	✓	✓	✓			
 CUES 3600 Rio Vista Ave., Orlando, FL 32805 800-327-7791 ■ (f) 407-425-1569 salesinfo@cuesinc.com ■ www.cuesinc.com	CUES	2" to 200"	100' to 4000'	CD, Compact Flash, DVD, DVR, Flash Drive/USB Thumb Drive, HDD, SD Card, VHS, Wi-Fi		✓	✓	✓	Water, Gas	Sewer, Pipe
Duracable Manufacturing Co. 300 Ashworth Rd., West Des Moines, IA 50265 800-247-4081 sales@duracable.com ■ www.duracable.com ad on page 21	RIDGID, Picote, APS, Drain Gear, General Pipe Cleaners, Fisher	1" to 12"	30' to 325'	Compact Flash, DVD, Flash Drive/USB Thumb Drive, SD Card, Wi-Fi	✓	✓	✓		Water	Sewer, Pipe, Leak
 General Pipe Cleaners 1101 Thompson Ave., McKees Rocks, PA 15136 800-245-6200 ■ 412-771-6300 info@drainbrain.com ■ www.drainbrain.com ad on page 44	Gen-Eye, Gen-Ear	1.25" to 10"	100' to 400'	Flash Drive/USB Thumb Drive, Wi-Fi, SD Card			✓	✓	Water	Electric, Sewer, Pipe, Leak
 Hermann Sewerin GmbH Robert-Bosch-Strasse. 3 D-33334 GUTERSLOH GERMANY sewerin-usa@sewerin.net ■ www.sewerin.net ad on page 20		3" to 8"	200' to 330'	DVR, Flash Drive/USB Thumb Drive, SD Card, WiFi					Water, Gas	Pipe, Leak
Hurco Technologies, Inc. 409 Enterprise St., Harrisburg, SD 57032 800-888-1436 ■ 605-743-2466 info@hurcotech.com ■ www.hurcotech.com ad on page 37	LiquiSmoke									Smoke



	DEALER/DISTRIBUTOR OF	PIPE DIAMETERS - INCHES	REEL SIZES - FEET	RECORDING METHODS	ACCESSORIES	REPAIR PARTS	INSPECTION VEHICLES	REPAIR FACILITY	SOFTWARE AVAILABLE	DETECTION EQUIPMENT	LOCATION EQUIPMENT
 <p>MyTana 746 Selby Ave., St. Paul, MN 55104 800-328-8170 ■ 651-222-1738 mytana@idexcorp.com ■ www.mytana.com ad on page 19</p>	MyTana NG2, PGR, DrainTracker	1.5" to 12"	50' to 400'	DVR, Flash Drive/USB Thumb Drive, Wi-Fi, SD Card	✓	✓		✓			Sewer, Pipe
 <p>PEARPOINT Pearpoint Inc. 39-740 Garand Ln., Unit B. Palm Desert, CA 92211 800-688-8094 ■ 760-343-7350 (f) 760-343-7351 pearpoint.sales.us@spx.com www.pearpoint.com</p>	Pearpoint (USA)	2" to 60"	100' to 1000'	Flash Drive/USB Thumb Drive, HDD, Wi-Fi			✓	✓	✓	Water	Sewer, Pipe
 <p>SPARTAN TOOL Spartan Tool LLC 1618 Terminal Rd., Niles, MI 49120 800-435-3866 customerservice@spartantool.com www.SpartanTool.com ad on page 2</p>	Traveler, Explorer, Sentinel	1.5" to 8"	100' to 400'	HDD, Flash Drive/USB Thumb Drive, SD Card, Wi-Fi	✓	✓	✓	✓	✓		Sewer, Pipe
<p>Superior Signal Company LLC 178 West Greystone Rd., Old Bridge, NJ 08857 732-251-0800 info@superiorsignal.com www.superiorsignal.com/plumber ad on page 42</p>	Superior Smoke, Superior SealPac										Smoke, Sewer, Pipe, Leak
<p>USB-USA 7565 Owl Creek Dr., Douglasville, GA 30134 678-214-7965 dlong@usb-usa.com ■ www.usb-usa.com</p>	NozzCam	3" to 8"	200' to 330'	SD Card							Sewer
 <p>VIVAX METROTECH Vivax-Metrotech Corp 3251 Olcott St., Santa Clara, CA 95054 800-446-3392 ■ 408-734-1400 salesUSA@vxmt.com www.vivax-metrotech.com ad on page 11</p>	vCam Inspection Cameras and vLoc3 Utility and Sonde Locators	1.5" to 12"	70' to 400'	Flash Drive/USB Thumb Drive, HDD, SD Card, Wi-Fi	✓	✓		✓			Electric, Pipe



Anthony Pacilla

The Original Ruud

Features on a 1907 water heater are very similar to the new tankless water heaters on the market today

By Anthony Pacilla

“This is the most efficient and economical of all water heater types. Simple to install, works successfully with any plumbing system, and easily gets installed in the same manner as any other gas fixture. It combines instantaneous service with an inexhaustible hot water supply and only uses fuel when the want for hot water arises from opening a hot water faucet. Enclosed is a burner, thermostat inner lining, insulated heat exchanger, a coil of copper through which the water flows and is quickly heated.”

Sound familiar? Do you want to start an argument about tankless versus tank-type water heaters? That’s one of the first advertisements from 1907 for the original Ruud Instantaneous Automatic Water Heater.

That’s right, tank-type water heaters are new, not tankless. The original Ruud water heater was the greatest invention of all time regarding the progression of a modern civilized world.

THE AUTOMATIC CONTROL

The prominent feature of the original Ruud was the automatic control. The automatic control had gas being held back on one side of the valve and a water supply on the other. When a hot water faucet was opened anywhere in the house, the water pressure would drop enough to move the plunger holding the gas back. This, in turn, allows the gas to go to the burner and be ignited by the pilot flame.

The water would then travel around the coiled tubing as the full flame heated it. Closing the hot water spigot would allow the plunger inside the valve to re-establish balance and close the gas off to the main burner.

How is it possible to have that much of a pressure drop? The answer is they had very low pressure. Ruud sold two types of water heaters: standard pressure and low pressure. The cutoff difference between the two was only 25 psi. They also had a table to size the gas orifice based on the water pressure and gas type.

WATER HEATER SIZES

Everyone has seen these old water heaters around supply houses, antique shops and old plumbers’ places as collectibles or on display in showrooms, but only a few know what the numbers mean on the front: No. 3 or No. 8.

The water heaters’ number represented the unit’s gallons per minute. So, the No. 3 unit does 3 gallons per minute. The No. 8 does 8 gpm, and so on. From there, the gallons per minute were for specific residences. For example, a No. 3 putting hot water out at 3 gpm was shown on the sizing chart to be sized for “one bathroom and kitchen sink, small family.”

A No. 8 at 8 gpm is suitable for “a three or four family bathroom, servants’ bathroom, kitchen, pantry, laundry and lavatories.”

Anything more significant, like an apartment building, would be calculated at 2/3.

THE SHEDS

One of the most ingenious things about these water heaters was how they would collect and dispose of the acidic condensation.

Instead of winding the copper spools with uniform outside larger dimensions, they curved the spools in and out, getting wider in some spots and narrower in others. They then installed water deflectors or sheds to catch the acidic condensation and spiral it down to the collector cup outside the water heater.

The original Ruud water heater was the greatest invention of all time regarding the progression of a modern civilized world.

LEGAL NOTICE

You may be entitled to benefits from a class action settlement if (a) you own or have owned at any time since May 26, 2003, a residential, commercial, or other structure that contains or contained Bow Plumbing Group Inc.'s PEX Tubing, or (b) you repaired or paid to repair damage resulting from water leaking in Bow's PEX Tubing in one of these structures.

A proposed settlement has been reached in a class action lawsuit filed in Federal District Court in Alabama against Defendant Bow Plumbing Group Inc. alleging that Bow's PEX Tubing is defective and can leak and cause water damage. Bow denies all of the allegations and denies that there is anything wrong with the Tubing. The Tubing includes PEX Tubing manufactured or sold by Bow in the United States. You can find more information about the specific Tubing at www.BowPEXSettlement.com.

Who's included in the Settlement Class? The Settlement Class includes all Persons within the fifty states, the District of Columbia, and all territories of the United States that own or have owned at any time since May 26, 2003, a residential, commercial, or other structure that contains or contained Bow's PEX Tubing, including their spouses, joint owners, heirs, executors, administrators, mortgagees, tenants, creditors, lenders, predecessors, successors, trusts and trustees, and assigns ("Occupant Persons"); as well as all Persons who have standing and are entitled to assert a claim on behalf of any such Occupant Persons, such as but not limited to a plumber, builder, contractor, distributor, seller, subrogated insurance carrier, or other Person that has claims for contribution, indemnity, or otherwise against Bow as a result of leaks of the PEX Tubing in such residential, commercial, or other structures. The Settlement Class includes all Persons who subsequently purchase or otherwise obtain an interest in a residential, commercial, or other structure covered by this Settlement without the need of a formal assignment by contract or court order. The Settlement Class includes all Persons within this definition regardless of whether any such Person has any active lawsuit against Bow, or an active claim or potential claim against Bow, whether tolled or otherwise, involving Bow's PEX Tubing. Exclusions apply. Visit www.BowPEXSettlement.com for the complete class definition.

What benefits does the Settlement provide? A Settlement Fund of up to \$8,025,000.00 will be established to provide benefits to Settlement Class Members and to pay for settlement administration costs. Payments to eligible Settlement Class Members who submit a valid and timely Claim Form may include:

1. Payment for Past Property Damage Claims for Qualifying Leaks that occurred between May 26, 2003 and the Effective Date.
2. Payment for Future Property Damage Claims for Qualifying Leaks that occur after the Effective Date and before December 31, 2028.
3. An option for re-plumb with an initial payment covering 70% of the cost for those who have experienced or do experience Multiple Qualifying Leaks prior to the end of the Claim Period. At the end of the Claim Period, the Eligible Claimants shall also receive a pro rata payment, depending on the claim rate, which shall make the total payment up to 80% of the Re-Plumb Calculation. Alternatively, Claimants eligible for a re-plumb have the option of selecting a one-time cash payment of \$8,500.00 in lieu of a re-plumb.

How do I receive Settlement benefits? You must submit a valid and timely Claim Form to the Settlement Administrator. If the Qualifying Leak occurred between May 26, 2003, and the Effective Date, the deadline is 100 days after the Effective Date. If the Qualifying Leak occurs after the Effective Date and before December 31, 2028, the deadline is 100 days after the Qualifying Leak occurs. If Multiple Qualifying Leaks are experienced, the deadline for submitting a re-plumb claim is 100 days after the Effective Date if all such leaks were experienced before that date, and 100 days after the third Qualifying Leak occurs if such leak occurs after the Effective Date and before December 31, 2028. The Claim Period ends on December 31, 2028. Once known, the Effective Date will be posted on www.BowPEXSettlement.com. You can also visit the website to download and submit Claim Forms. Claim Forms can also be submitted by mail to the Settlement Administrator at the address below.

Who Represents Me? The Court appointed Farris Riley & Pitt, LLP as Class Counsel to represent the Settlement Class. You do not have to pay Class Counsel. If you wish to be represented by your own lawyer, you may hire one at your own expense.

Your Options. If you are included in the Settlement Class and do not submit a Claim Form, your rights will be affected, and you will not receive payment from this Settlement. If you do not want to be legally bound by the Settlement, you must exclude yourself by April 12, 2024 following the instructions in the Notice of Class Action Settlement available at www.BowPEXSettlement.com. If you do not exclude yourself from the Settlement, you may submit a written objection to the Settlement by April 12, 2024 following the instructions in the Notice of Class Action Settlement available at www.BowPEXSettlement.com. You cannot request exclusion and object.

The Final Approval Hearing. The Court will hold a Final Approval Hearing on July 9, 2024 to decide whether to approve the Settlement, award Class Counsel attorneys' fees and costs up to \$3,960,000.00 and award the Class Representatives any requested service awards. If approved, these amounts will be paid separately from, and in addition to, the \$8,025,000.00 settlement fund.

Want More Information? Visit www.BowPEXSettlement.com or contact the Settlement Administrator at:

Bow PEX Settlement Administrator
Angeion Group
Email: info@BowPEXSettlement.com
Phone: (844) 600-6681
1650 Arch Street, Suite 2210
Philadelphia, PA 19103

INDIRECT FIRE

Ruud also had an indirect fired model, whereas a nearby boiler could be piping in a loop connection at the Ruud tankless so that in colder months when demand for hot water was had, the tankless would ignite as usual.

Still, the thermostat would realize the water was already hot and extinguish the flame. The water heater would automatically light if the water temperature dropped below the setpoint (set from the factory at 140 degrees). You could turn this indirect feature on or off using the "ByPass Valve" on the unit, and because it had the Automatic Control, it would only use enough gas to get the water to temperature.

TANKLESS CIRCULATOR

You thought a circulator for a tankless was relatively new? Nope. That's old, too. Some of the original Ruud units had a little side piece with its own small pilot flame, which heated up a small water buffer.

When a demand for hot water was had, the water from this "circulator" was drawn first because it was higher, and the main gas valve would still light and heat the cold water as usual. This would give the user a small amount of hot water until the leading hot water arrives, eliminating the cold-water sandwich. This little side piece, known as the "circulator," tied its vent into the central burner vent.

A CHANGE IN FOCUS

Ruud went on to invest in soda/beer heaters and storage tanks.

The invention of the water heater by Ruud is the most overlooked in history. The genius behind his creations was lost in society for a hundred years. What once was old is new again. 📌

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 became a licensed master plumber. To contact Pacilla, email editor@plumbermag.com.

Navigating the Depths

Tools, technology come together to help plumbers handle inspection, location and leak detection easier *By Cory Dellenbach*

There is no worse feeling than being a homeowner and looking up at your ceiling and seeing a water stain. Especially when it's right above where your upstairs bathroom is. It's not any fun for a plumber either, is it?

The plumber is typically called in to figure out exactly where that leak is coming from and how to fix it. It can be a full-day task if it's not an easy drop-down ceiling or clearly evident where the water is flowing from.

Continuous education and training are essential for plumbing professionals to remain at the forefront of their field.

Unseen issues can manifest into costly problems and the importance of thorough inspection, precise location and efficient leak detection cannot be overstated. Staying ahead of potential problems is not just a best practice; it's a necessity.

UNVEILING THE UNSEEN

Plumbing systems are the unsung heroes of our built environment, working tirelessly behind the scenes to provide us with clean water and efficient waste disposal. Yet, hidden within the walls and beneath the floors, potential issues can silently fester. Regular inspections are the flashlight that illuminates these hidden corners, helping plumbers identify and address problems before they escalate.

The advancements in inspection technology over the years continue to evolve the plumbing industry. Gone are the days of relying solely on guesswork or invasive methods to identify issues. Modern inspection tools, such as cameras with flexible probes, allow plumbers to navigate through

pipes, giving them a real-time view of the interior conditions. This not only saves time, but also minimizes the need for unnecessary disruptions to the infrastructure.

The data collected during inspections serve as a valuable resource for predictive maintenance. Plumbers can identify patterns and trends that might show potential issues in the future. By using this information, they can recommend measures to prevent major disruptions and costly repairs.

Continuous education and training are essential for plumbing professionals to remain at the forefront of their field.

PINPOINTING PRECISION

Once an issue is identified through inspection, the next challenge is often locating its exact position. The ability to pinpoint the location of a problem with accuracy not only saves time, but also minimizes the disruption caused during repairs.

Advanced location technologies have transformed the way plumbers approach this aspect of their work. GPS tracking systems, acoustic sensors and thermal imaging are just a few examples of tools that enable precise location mapping. Plumbers can now create detailed maps of plumbing systems, making it easier to identify and address issues in a targeted manner.

Efficient location services are particularly crucial when dealing with commercial or industrial plumbing systems. In these complex environments, a minor issue in one part of the system can have other effects if not addressed promptly. Plumbers equipped with state-of-the-art location tools can navigate through intricate networks, ensuring that their interventions are focused and effective.

THE DIGITAL AGE

Leaks can be elusive adversaries, causing damage over time and often remaining undetected until it's too late. Effective leak detection is not just about fixing visible leaks;

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it's about identifying hidden leaks that can lead to structural damage, mold growth and skyrocketing water bills.

The traditional methods of leak detection, like visual inspection and pressure testing, are still valuable tools in a plumber's arsenal. However, technology has brought forth a new era of leak detection that goes beyond the surface. Acoustic sensors can pick up the sound of water escaping from pipes, even when it's imperceptible to the human ear. Thermal imaging can reveal temperature variations that might indicate the presence of a hidden leak.

In the digital age, smart leak detection systems are gaining prominence. These systems use sensors and connected devices to monitor water flow and detect problems in real time. Some advanced systems can even shut off the water supply automatically when a leak is detected, preventing extensive damage.

As a plumber, staying informed about the latest leak detection technologies is essential for providing comprehensive services to your clients.

EMBRACE THE TECH

The trifecta of inspection, location and leak detection forms the backbone of proactive plumbing maintenance.

By embracing the latest technologies and staying informed about industry trends, plumbers can not only address issues efficiently but also prevent them from escalating into costly problems. 📱



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NIBCO promotes Stanley and Smith to vice presidents

NIBCO Inc. announced the promotion of Allen Stanley to vice president, fittings manufacturing and distribution, and Rudy Smith to vice president, valve manufacturing. Both Stanley and Smith will report to Ashley Martin, president and COO, NIBCO. In this new role, Stanley has responsibility for the Stuarts Draft, Virginia manufacturing operations and the demand planning department, along with his current responsibilities for the U.S. distribution centers, world headquarters logistics and all plastic manufacturing facilities. In his new role, Smith will have responsibility for NIBCO's Blytheville, Arkansas, facility, along with the company's Nacogdoches, Texas, McAllen, Texas, and Reynosa, Mexico facilities.



▲ Allen Stanley



▲ Rudy Smith

Scorpion and ServiceTitan enter into strategic partnership

Scorpion, a provider of digital marketing solutions for local businesses, and ServiceTitan, a software platform built to power the trades, announced a strategic partnership. The collaboration will position Scorpion as the sole preferred digital marketing partner for ServiceTitan, and ServiceTitan as Scorpion's sole preferred software partner for home services. Scorpion and ServiceTitan will work together to develop new product offerings to help businesses attract more leads, acquire more customers and generate repeat business. ServiceTitan includes the Aspire and FieldRoutes platforms.


Caleffi's Mark Olson retires, succeeded by Tina Gullickson

Caleffi North America announced the retirement of long-serving CEO, Mark Olson. Olson was instrumental in guiding the company through nearly two decades of continuous growth to establish a successful North American business highly regarded for innovation, education and service. Tina Gullickson succeeds Olson, bringing over 20 years' experience in the plumbing and hydronic industries. Gullickson has had several leadership positions and provides a wealth of industry knowledge and expertise.

Watts celebrating 150 years of innovation and excellence

Since 1874, Watts has been delivering innovative water technologies that make the world's water resources safe and accessible. Watts plans to host several celebratory events throughout the year, including a year-long sweepstakes for customers and a celebration at its headquarters in North Andover, Massachusetts.

REHAU to commemorate 75 years in business in 2024

This year, REHAU will be celebrating 75 years in business. In that time, REHAU has grown from a family-owned company into a family of companies that will continue to invest in sustainable growth. Today, the REHAU Group is an international family of companies with 190 locations, more than 20,000 employees and an annual turnover of more than 4.5 billion euros. The company is currently expanding in Africa, where it recently acquired a South African company. And in Mexico, REHAU opened a production facility for the furniture industry in December in order to meet the increasing demand for REHAU products in North and Central America. 

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

Electric Eel celebrating its 85th anniversary

Electric Eel Mfg., based in Springfield, Ohio since 1939, is celebrating its 85th year as manufacturers of professional drain and sewer cleaning equipment in 2024. Known as the originator of the Model C dual cable sectional drain cleaner, Electric Eel steadily grew and expanded its product line over the years at its Ohio manufacturing facility. Electric Eel's current product line includes a wide range of electric and gas-powered sectional drain cleaning machines, drum-style machines, high pressure water jetters, pipeline inspection camera systems and locators.

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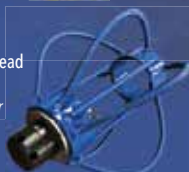
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Product Spotlight

Company expands on high-efficiency gas water heater line

By Craig Mandli

As a plumber, you are constantly on the lookout for products that will help your customers save on utility bills. It's an added bonus if they can also qualify for tax credits or rebates. Rheem recently announced two new products within its Maximus lineup of super high-efficiency gas water heaters with those ideas in mind — the 75-gallon Maximus Heavy Duty with LeakSense, along with Maximus plus models available in 40- and 50-gallon sizes.

“This expanded line offers customers a comprehensive selection of super high-efficiency condensing gas-fired tank water heaters,” says James Courtney, director of product management, Rheem Manufacturing. “All models meet Energy Star 5.0 requirements to help homeowners save on utility bills, qualify for available tax credits and rebates, and meet rigorous hot water demands for larger homes.”

The Maximus Heavy Duty with LeakSense suits those larger homes at 75 gallons. It provides the same efficiency, performance features and smart options as the original Maximus with LeakSense in a high-capacity version for homes with three or more bedrooms. In addition, its Max-Mode feature gives homeowners up to 15% more hot water when demand is high.

The Maximus plus models are designed to give homeowners a lower cost, super high-efficiency option with



powerful performance. Available in 40- and 50- gallon sizes, the new models provide the same performance found in premium models but with streamlined features, allowing homeowners to get the most for their money.

Rheem introduced Maximus with LeakSense in early 2023, leveraging input from plumbers for faster service and flexible installation. With zero clearance on sides, single SKU for PDV/PV, and a variety of venting options, it's as easy as a stand-

ard tank install. According to Courtney, the units are fully serviceable from the front and designed to quickly diagnose with full-text diagnostic information at the water heater. Premium models feature built-in EcoNet Wi-Fi technology, which offers complete control like adjusting water temperature, operating modes, scheduling and the ability to view energy usage reports and advanced diagnostics.

Also included is a built-in 360-degree LeakSense leak detection system for maximum protection. Service alerts can be received immediately through the EcoNet app or on-unit display. The LeakGuard automatic water shut-off valve can be added as an accessory, protecting homes from potential water damage by limiting leaks to no more than 20 ounces of water. The heaters are designed to reduce energy use and carbon emissions by up to 36% and NOx emissions by up to 75%. **800-621-5622; www.rheem.com**

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Caleffi XF Xtra Filtration dirt separator

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Asahi/America J-Switch manual ball valve limit switch

Asahi/America introduced the new J-Switch manual limit switch compatible with Asahi/America's Type-21/21a ball valves and Type-23 Multiport ball valves. The new limit switch is a low-cost manual valve position indication solution. Available in 1/2-, 3/4-, 1-, 1 1/2- and 2-inch sizes, the J-Switch features a compact profile, direct mount, glass-filled polypropylene enclosure that requires no tools for simple field installation. The J-Switch also features up to 180 AC/DC multivoltage capabilities, a corrosion-resistant, NEMA 4X enclosure and a cable gland with 2-meter flying leads. It operates at up to 150 degrees F. 800-343-3618; www.asahi-america.com



Rinnai I-SERIES Plus condensing gas boiler

The I-SERIES Plus wall-hung condensing gas boiler from Rinnai is a new line of solo and combi condensing gas boilers that offers value and performance with an expanded product line that features Smart Sense adaptive gas valve technology. Now with the touch of a button on a unit controller or smartphone, fuel type can be selected — conversion kits are no longer required. It offers Smart connect, a Bluetooth-enabled setup on the Rinnai Central app for parameter settings and speedy unit configuration. It also offers simultaneous delivery of heat and domestic hot water for maximum comfort, and up to 96% Annual Fuel Utilization Efficiency. The I-SERIES Plus has the capability for cascading, common venting and longer vent lengths, giving PROs more options during the installation. 800-621-9419; www.rinnai.us



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Dallas Build Expo, Dallas Market Hall.
Visit buildexpousa.com

May 14-15
Emerging Water Technologies Symposium, Scottsdale Plaza and Villas, Arizona. Visit ewts.org

May 22-23
Austin Build Expo, Palmer Events Center, Austin, Texas.
Visit buildexpousa.com/austin-build-expo

June 10-12
Women in the Mechanical Industry 2024 Conference, Renaissance Cleveland Hotel. Visit mcaa.org/events

June 10-13
AWWA Annual Conference & Exposition, Anaheim Convention Center, California. Visit <https://events.awwa.org>

June 16-18
Canadian Institute of Plumbing & Heating Annual Business Conference, Delta Grand Okanagan Resort, Kelowna, British Columbia. Visit www.ciph.com

June 26-27
Houston Build Expo, NRG Park Center (Hall E1/E3), Houston.
Visit buildexpousa.com/houston-build-expo/

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