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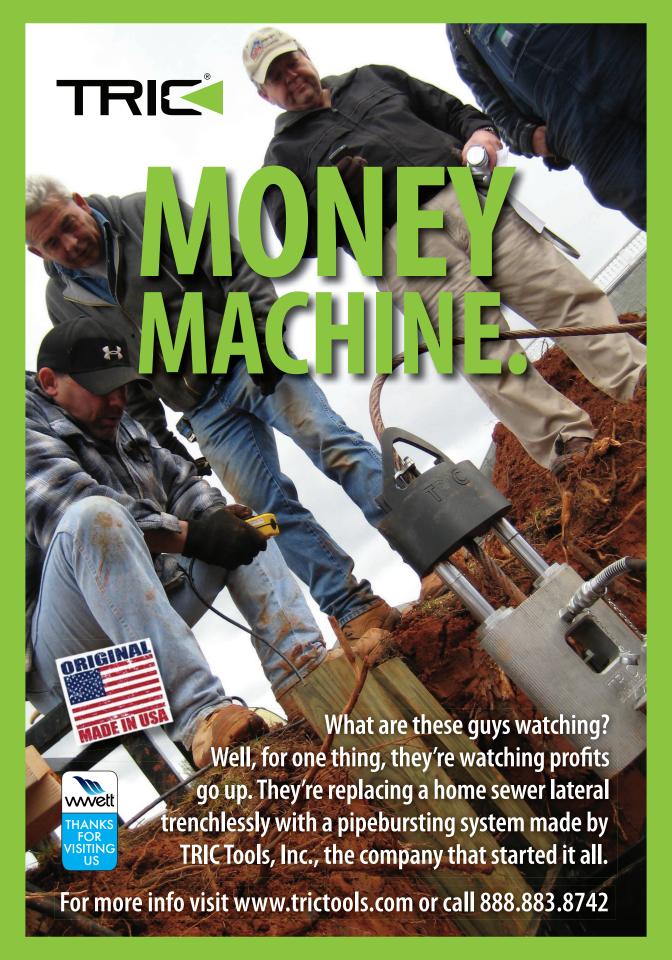
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Get the Picture

Thermal-imaging camera technology proves adept at detecting hard-to-find leaks.

- By Ken Wysocky

On the Cover

Plumbing technician Elvis Alarcon, with The Sunny Plumber, works on installing a water heating system (Bradford White) at a home in Las Vegas. The Sunny Plumber, headquartered in Las Vegas, has expanded operations to Arizona and California in just five years of operation. The company offers installation and repair services, drain cleaning, water heater installation and repair, water treatment system installation, testing and maintenance, and many other services.

Photography by Joel Angel Juarez

Pipeline Inspection, Location & Leak Detection

- Smart Business: Contract terms and conditions
- Plumber Profile: H2NO Leak (Miami)

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- By Cory Dellenbach

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FROM THE EDITOR



Cory Dellenbach

Keep the Customers Calling

Maintenance packages, customer support and technology will all help keep the customers coming back

an you believe we're at the end of the first quarter of 2018? This year is flying by, and if you aren't going just as fast, you could be left behind.

Your competitors are always on the move, coming up with new services, developing new promotions, adding staff, and generally trying to pull your customers away. Are you just sitting and watching it happen? Or are you doing something about it?

Your competitors are always on the move, coming up with new services, developing new promotions, adding staff, and generally trying to pull your customers away.

Ken Goodrich wouldn't let his company fall behind. He founded The Sunny Plumber in Arizona in 2013 and has already expanded to Nevada and California — all thanks to a strategy that puts customers at ease.

Customers can buy into a maintenance plan in which technicians inspect plumbing and clean drains twice a year. The company's work is 100 percent guaranteed; customers who aren't satisfied get all their money back.

Goodrich isn't slowing down — far from it. As you'll read in this issue's Profile, he wants a presence in all lower 48 states within the next 10 years.

BEING THERE NOW

A big part of The Sunny Plumber's success is being available, 24/7. Customers can reach staff by telephone, email, online chat and social media.

We all know customers with problems will likely go to the company they can reach first. The Sunny Plumber is positioned to be that company.

Wouldn't you love to have that reputation? Well, you can, even without a huge staff. Here are some tips to get you started:

- Offer multiple channels: Be easy to reach. Post your phone number and email everywhere; check email frequently. Make sure you're active on at least one social media platform (Facebook, Instagram, Twitter, etc.).
- Invest in online chat for your website: A 2016
 ATG global consumer trend study found that 90
 percent of customers consider live chat helpful and
 will go to that before calling.
- Respond to feedback fast: If someone leaves you
 a voicemail or a Facebook message, answer as soon
 as possible immediately if you can. Show
 customers that you care. Don't give them time to
 call someone else.
- Train your staff: It can be stressful to take feedback, especially since it's often negative. Equip your staff to handle complaints with ease and courtesy and to respond quickly to questions or issues. Consider a handbook with frequently asked questions. Don't skimp on training.

PUT TECH TO WORK

Once you have that customer connection, give technicians the tools to make jobs easy and efficient — for themselves and property owners.

In the On the Road feature, Dave Banghart explains why the FLIR Systems C2 thermal-imaging camera he

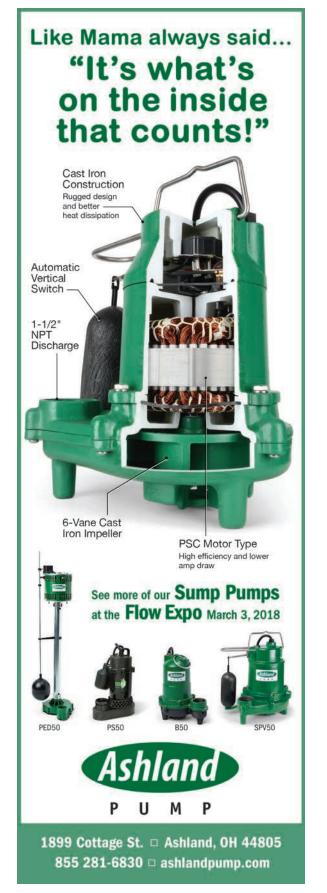
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purchased was a game-changer. Before, he had to open numerous holes in the walls to find leaks. Now, he just points the camera at the wall and gets a good idea where the leak is. The camera speeds up jobs and limits damage — which puts customers at ease.

There is a lot more technology out there. Check out Product Focus to see new tools for rehabilitation and repair.

YOUR WORK

Speaking of projects, I'd like to hear about yours. Have you faced a challenging work site or handled a tough job? Tell me about it, and you could find yourself in our First Responders feature. Call 800-257-7222, or email me at editor@plumbermag.com.

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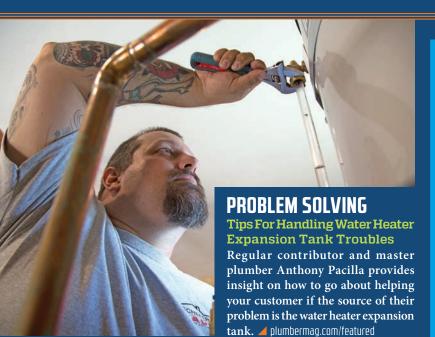


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NEW TECH

Manufacturers Develop Tools **That Connect** to Cellphones

It seems like you can't do anything without a cellphone these days. Everyone has a smartphone and the options for it are varied. It's

infiltrating the plumbing world as well. In this online exclusive, we look at some of the new offerings companies have that connect contractors and end-users to the technology that helps them better do their jobs and maintain their homes.

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TAX TIPS

The Ins and Outs to Mileage Recording With Company Vehicles

Say your technician lives 15 miles away in the next town and the first customer on the next day's schedule lives in the same community. It's a no-brainer for that employee to take a service truck home, so that he can immediately go to the customer's home instead of first coming to the shop in the morning, right? Many companies take this approach, but it's important not to overlook the tax implications or the IRS could be bothering you. Learn more in this online exclusive.

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usiness prospects are bright for The Sunny Plumber. Since it was launched in Arizona in 2013, the plumbing company has already reached markets in Nevada and California. And Gary Eisenhauer, general manager, believes that's only the beginning.

"Ten years from now, we'd like to be in all the states," Eisenhauer says. "It's a lofty goal but absolutely possible."

The Sunny Plumber would not, of course, be the first plumbing company with a national footprint. Think Roto-Rooter, for example. However, The Sunny Plumber can't offer a novel solution to clogged plumbing lines like Samuel Oscar Blanc did with his homemade root-cutting device. Rather, company executives are banking on expertise and a sunny disposition to power their expansion.

FINDING ROOM TO GROW

Ken Goodrich is the driving force behind The Sunny Plumber's ambitious growth plan. The entrepreneur, who grew up in his father's air-conditioning business, has founded a succession of successful heating-ventilation-air conditioning firms and plumbing companies, including acquisitions in Arizona in 2013 that introduced The Sunny Plumber to Tucson and Phoenix. Two years later, the company opened an office in Las Vegas and, in 2016, in Corona, California.

In these locations, Goodrich owns both an HVAC company — Goettl Air Conditioning — and The Sunny Plumber, but he operates them separately. What they have in common is the goal of growing across state lines. As Goodrich puts it in a Las

Vegas business publication interview in March 2017: "Our ultimate goal is to bring our brand, our unique customer-centric culture and processes across the nation and become the gold standard for home service in the U.S."

Plumbing technician Jason San Roman works on a new toilet installation at a home in Las Vegas. To that end, the plumbing side of the organization is being aggressively marketed around an image of the sun. The company logo is a smiling cartoon sun ablaze with cheerfulness and holding a pipe wrench in one of its sunbeams. The theme continues through bright orange and yellow wrapping on service trucks — and the giveaway of a pair of sunglasses with every job.

44 When things don't work, we leave the client satisfied by not taking his money and walking away. It's all about reputation."

Gary Eisenhauer





- ▲ Technician Chris Faherty lifts corrugated, stainless steel tubing as he installs a gas line at a home in Henderson, Nevada.
- ▼ Justin Kausal, a technician at The Sunny Plumber, organizes equipment in his truck prior to starting his workday.



FOR THE CUSTOMERS

The positive vibes flowing from the company image are also, by design, felt within the company, according to Eisenhauer. He says The Sunny Plumber is as optimistic a workplace as it appears to be.

"Every company goes through its trials, but we do everything we can to keep morale up. We do everything we can to make it a positive work environment. The management style I have always followed is to lead on a positive level," he says. "And the positive attitude we have in the office, when conveyed to our clients, helps them overcome their situations. After all, the clients have called us because they are unhappy. They are unhappy that something is wrong in their home."

Eisenhauer says the positive attitude begins with Goodrich, who, he says, is "upbeat and can-do and pretty demanding, too. He attracts the best talent — not just recruits them."

The upbeat company attracts customers, too. It holds them through such innovations as The Sunshine Club, an annual maintenance agreement in which The Sunny Plumber techs inspect all fixtures, check the pressure on lines, do recommended maintenance on the water heater, and flush drains. The agreement promises two drain clean-outs each year and a camera inspection whenever a snake is deployed to clear a line.

First, look for integrity



A growing company like The Sunny Plumber is necessarily a hiring company. It builds out its business on the backs of new hires who, once they prove themselves, become the veteran employees whose performances foster future growth.

The Sunny Plumber will be in a hiring mode for years to come because the Southwest U.S. company aspires to establish itself across the country. "We are not yet expanding across the country, but that kind of thinking is coming into play," says Gary Eisenhauer, general manager, "The goal (in 2018) is to expand quicker. Every month, we have a management meeting to determine if it is time to move forward or to slow down."

In the process of expansion, Eisenhauer constantly will be culling male and female technician candidates for employment. The general manager says technical ability is not the first criterion he considers as he interviews job applicants. "The first thing I look for in the recruiting process is integrity," he says. "That's because I will be sending them out to clients they have never met. They have got to be able to work with strangers."

He is not talking about an employee being congenial, though that also is a valuable customer service attribute. Rather, the employees must be trustworthy because they will be in clients' homes where personal security is always a paramount concern. Both Eisenhauer and his customers must be able to trust that the plumber entering a home will demonstrate good character while there. Eisenhauer says what separates The Sunny Plumber from some competitors is the trustworthiness of the company itself and the integrity of the service employees who represent it.

In his focus on character, the company's general manager might be channeling Warren Buffett, the legendary CEO of the Berkshire Hathaway conglomerate. Buffett is quoted saying: "In looking for people to hire, look for three qualities: integrity, intelligence and energy. And if they don't have the first one, the other two will kill you."



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AG Today's homeowners are not less hands-on. If anything, they are more hands-on. They'll watch some video and, by golly, they are now a plumber.

Then we get the calls."

Gary Eisenhauer

Sometimes these inspections generate additional plumbing work, sometimes not. "If the house is in good shape, we're going to tell the homeowner so," Eisenhauer says. "If there are issues, we are going to say this is what you have going on. If you don't want it fixed, fine. If something is not quite up to specs or is getting corroded, we will suggest a fix to avoid flooding because each inspection is really about flood prevention."

Plumbing technician Elvis Alarcon, with The Sunny Plumber, works on installing a Bradford White water heating system at a home in Las Vegas.

Annual inspections are not original to The Sunny Plumber, except for the drain check and clearing, but are an increasingly popular feature: Eisenhauer says the company is signing up 100 to 150 Sunshine Club members each month. Fees for the plumbing maintenance do not vary with the size of a property. The service is reserved for residential customers, which constitute the bulk of the company's customer base.

Another feature of the customer-centric culture is a guarantee of 100 percent customer satisfaction. That sounds like a pie-in-the-sky promise, given the wideranging expectations of homeowners regarding service. But Eisenhauer says the company lives up to the pledge — one way or another.

"We know we can't make everyone happy. We could not get hot water to one bathroom we worked on, so we gave the client all his money back. I've given money back on \$12,000 jobs," he says. "When things don't work, we leave the client satisfied by not taking his money and walking away. It's all about reputation." The company's reputation is good enough to have an A+rating from the Better Business Bureau.

Eisenhauer believes people are afraid to call plumbers and other service technicians for fear of being victimized. With the 100

percent guarantee, potential customers know they have some recourse when things go wrong. "When people know that, they are more willing to let you do work for them. Most customers will let you work through problems until it's right." He adds that he has no evidence that potential customers try to game the system by feigning dissatisfaction.

A TEAM ATMOSPHERE

Eisenhauer's office is in Las Vegas. From there, he closely supervises the activity of the company in its four locations. He accomplishes this mostly through weekly conference calls, but specific management issues that crop up at any of the locations are addressed the same day in real time.

Besides offering competitive salaries to its 42 employees, Eisenhauer says the company offers a team atmosphere in which colleagues "can jell and help each other out in the field. Plumbing is a fickle industry for technicians, who seem to have 'the grass is greener' syndrome. I try to look after and take care of our technicians."

Continued >



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▲ The Sunny Plumber staff members in the Las Vegas office are (from left, front row) technicians Chris Faherty, Ivan Ivanov, David Shumaker, and Jeff Gorham; (second row) Nick Rollins, Art Hatikyan, technician Brian Garcia, technician Tony Castellanos, technician Elvis Alarcon, and General Manager Gary Eisenhauer; and (third row) technicians Matt Fall, Justin Kausal, Jason San Roman, and Dustin Rush.

In return, Eisenhauer expects job applicants to communicate well, both in listening and verbalizing. That's because a tech must be able to understand a customer's plumbing issue and then clearly explain the cause of the problem and what will be required to resolve it.

Eisenhauer acknowledges that, as in other maintenance and construction industries, attracting qualified and suitable people to work as plumbers is difficult. "I don't have a pipeline for techs, unfortunately." For those the company does hire on, there is no shortage of work: The Sunny Plumber offers true, live-dispatched 24/7 service.

Technicians roll out in the company's fleet of 43 trucks. Most of the trucks are fully equipped Nissan V2500 hightop models, which are deemed to be ideal because a water heater can be stood upright in them. Some repair specialists, as Eisenhauer describes the most experienced techs on the team, drive smaller units and are being transitioned to the standard-top version of the V2500.

A WIDE RANGE OF CALLS

Some of the same societal changes that make it difficult to find blue-collar employees are having impact on customers, too, but not as one might expect. The cultural preoccupation with electronic gadgetry has in some ways made homeowners more, rather than less, likely to roll up their sleeves and attempt plumbing repairs on their own, Eisenhauer says.

"Today's homeowners are not less hands-on. If anything, they are more hands-on. They'll watch some video and, by golly, they are now a plumber. Then we get the calls. We have a saying here: 'Everyone is a plumber until they mess something up."

Like their peers across the plumbing industry, The Sunny Plumber techs sometimes arrive at a home and find the results of interesting attempts by a homeowner to repair something on his or her own. Eisenhauer recalls the time a technician walked into a residence for an inspection and found an Australian Foster's beer can adapted to reuse as a vent on a water heater. "That was probably a homeowner fix."

Service calls typically range from clogged drains and leaking pipes to fixture failure.

Before he became general manager of The Sunny Plumber, Eisenhauer "dabbled" in a variety of careers, from office administration to law enforcement and federal prison supervisory work. It was in this last capacity — as plumbing supervisor for eight years

at a prison in California - that Eisenhauer gained perspective about customers. "I tell our technicians that my best client in prison was worse than my worst client on the outside," he says. "My best defense was communication." 🖪



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A Close Eye on Maintenance

Follow key service intervals, investigate and correct minor problems before they become major headaches By Brenda Silva

In the daily management of equipment and job site priorities, busy plumbing contractors risk having preventative maintenance of vehicles and equipment fall by the wayside. To reduce those risks, contractors are encouraged to establish a preventative maintenance program and educate staff on how to follow it. When maintenance becomes everyone's responsibility, there is less chance for routine maintenance to be neglected.

Aside from routine oil changes and tire checks, several additional maintenance tasks should be at the top of every to-do list. This includes many items that have the potential to decrease productivity and increase costs, ultimately affecting much more than just your vehicle fleet.

Well-maintained vehicles and equipment will help your machines last longer, provide more reliable service, and pay you back when it's time to sell. And more importantly, properly functioning equipment will protect your crew, according to Leighann Follis, marketing specialist at Geneva Equipment of LaSalle, Illinois.

"Vehicles in good operating condition also reduce the likelihood of operator injuries due to faulty equipment," she says. "On the other hand, poor maintenance results in employee downtime, untimely project completion, lost wages, and increased operating costs."

According to industry professionals, the following five tips can keep contractors moving in the right direction:

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1. Create and follow a preventative maintenance program

By creating a preventative maintenance program for your vehicles and having all employees adhere to it, performing maintenance quickly becomes second nature to everyone. Maintenance program templates are available online for contractors to download, copy, or duplicate; however, some contractors prefer to make their own. With a clearly defined and explained program, there's no reason support vehicles can't receive the same attention as job-specific heavy machinery. Getting into a new habit can play a crucial role in increasing the life of the vehicles and the project bottom line.

2. Train your employees to help spot potential problems

All employees should be trained to spot the signs of trouble long before they occur and become much more costly to the job duration and profits. Follis points out

Vehicles in good operating condition also reduce the likelihaad of operator injuries due to faulty equipment." Leighann Follis

the importance of a fivepoint inspection for all support vehicles and equipment.

"Our staff thoroughly examines the interior and exterior of all vehicles and equipment, specifically looking for signs of damage," Follis says. "This includes checking for any bare wires that may be exposed and that all connectors are intact and not corroded or damaged. We also inspect all brakes, belts, hoses and shifters to ensure they are in good

working order. It's also important to check for any frontend maintenance, transmission flushes and to check all fluid levels."

Protect electrical wiring from pooled rainwater and melting snow and ice that can end up inside machinery during long periods of field operation. Ongoing exposure can ultimately shorten the life of the equipment.

3. Pav close attention to fluid levels

Ensure vehicles and equipment have the proper fluid levels and lubrication to guarantee high performance. While contractors realize fluid levels are vital to machine life, this is a commonly overlooked aspect of regular maintenance. Noticed too late, improper or inadequate fluid levels can lead to faster wear and damage along with a shortened equipment life span. Fluids should be checked and sampled regularly as part of a scheduled preventative maintenance program — adjusted whenever necessary and documented — for optimal operation.

4. Follow factory-recommended maintenance scheduling

Follis urges contractors to pay close attention to maintenance scheduling and says, "It is always advisable to follow all manufacturer recommendations because they are put in place by those who know the vehicle and/ or equipment best." It's a good idea to place stickers on equipment that need maintenance at certain intervals as a constant reminder to schedule service. In addition, contractors should keep original owner's manuals for equipment as a reference of service-related conditions that can void a warranty.

5. Keep detailed records from the time of purchase

Keeping detailed service records cannot be stressed enough. These records serve as the vehicle or equipment's personal history after purchase and provide new employees or second owners with important information about what is due for service at any given time. Good recordkeeping can add value at resale and is key to maintaining and extending the life of your vehicles and equipment.

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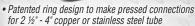
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Get the Picture

Thermal-imaging camera technology proves adept at detecting hard-to-find leaks By Ken Wysocky

hen Dave Banghart arrived at a five-story-tall apartment complex last summer to help a maintenance worker find what he called an "elusive" leak, the owner of Banghart Plumbing wasn't worried. The reason for his confidence? A FLIR Systems C2 Lowepro thermal-imaging camera.

"He took me into an underground parking garage and showed us a sewage leak in the ceiling," Banghart recalls. "I looked around with the camera and could tell we were below a tenant's bathroom." So Banghart asked the maintenance worker to let him into the first-floor apartment above the leak, where another look with the camera revealed a floor-to-ceiling bluish pattern — the color that indicates the presence of water.

"Then we went up to the second floor to see if the pattern continued or stopped, which would indicate the leak was confined to just the first-floor apartment," Banghart explains. "But we found the same pattern." So Banghart asked the worker to let him into the apartment above, on the third floor. Same story. When Banghart asked for permission to get into the next apartment up, on the fourth floor, the worker objected a bit, noting there'd never been any sewageleak issues that high in the building. "He was sure we were following the wrong path," Banghart says. But finally, the worker reluctantly agreed after Banghart made a persuasive pitch for the camera's abilities.

"A look at the wall in the fourth-floor apartment showed just a patch of blue at chest level," Banghart says. "The

> maintenance guy was incredulous he couldn't believe it. I said, 'Let's just open it up and take a look at it.' We found a separated waste fitting on a pipe coming down from a fifth-floor apartment. He was blown away."

Dave Banghart, owner of Banghart Plumbing in Everett, Washington, uses the FLIR ems C2 thermal-imaging

If you're the guy who's still opening up walls to find leaks while someone else doesn't because they're using a thermal-imaging camera, they've got an advantage."

Dave Banghart

The process took a little more than an hour. "And it only took that long because it took a while to convince him to let me into the fourth-floor apartment," Banghart says. "But in the end, he was pretty happy. Without that camera, we would've had to open up test holes on every floor, which would've been very disruptive to tenants, timeconsuming and expensive."

This case exemplifies the value of the FLIR Systems camera, which has greatly increased the efficiency and revenue of Banghart's one-man service and repair plumbing shop, based in Everett, Washington. As he puts it, better productivity naturally leads to better profitability. "When you go on a leak search, you have to

plan on setting aside a lot of time, especially for those 'elusive' leaks," he explains. "But now, I set less time aside because I'm confident we'll find leaks quickly. And that, in turn, opens up my schedule to take on more work."

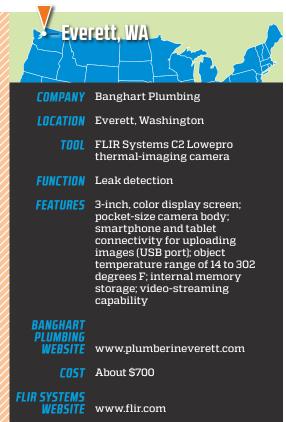
A GAME-CHANGER

Before he invested in the camera, Banghart relied on the traditional approach to tracking down the source of leaks: dead reckoning and triangulation, followed by opening up holes in ceilings or walls, for example, and trying to follow the water's trail. "Pretty soon, you've opened up more holes than you really wanted to, but there's no good way to avoid it," he points out. "But with the FLIR, you just point it at a ceiling and you can see the trail of water making its way across the ceiling. You can even see where the joists are located. I'd say we usually can find a leak within minutes, rather than hours."

The camera doesn't actually detect water; instead, it detects heat signatures represented by an array of colors. If water is cooler than its surroundings, it appears on the camera screen as a blue or dark-blue area. If it's warmer than its surroundings, it appears as a light-orange area, he says. "It's basically detecting heat differentials between surfaces," he explains.

Banghart says that after the first time he used the FLIR Systems camera and quickly found the source of a bathroom leak, he knew it would be a game-changer for his business.







"If it took two minutes, I'd be surprised," he notes. "I knew I wasn't going to have to use conventional leak-detection methods anymore."

EASY TO USE TECHNOLOGY

The camera is easy to use and offers customer-centric amenities such as a built-in thumb drive on which the user can store images. That comes in handy for insurance claims. "Or we can email images to a customer if they weren't able to be home when we come over for a service call," he says.

Banghart says he paid about \$700 for the camera. "And it paid for itself in the first week — and keeps on paying for itself," he adds. "Since we use flat-rate pricing, finding leaks faster puts dollars in my pocket.

"This is a great example of why you have to keep up with technology," he continues. "If you're the guy who's still opening up walls to find leaks while someone else doesn't because they're using a thermal-imaging camera, they've

44 Without that camera, we would've had to open up test holes on every floor, which would've been very disruptive to tenants, time-consuming and expensive."

Dave Banghart

got an advantage. Say you're not available and a customer instead uses a new plumber that owns one of these thermalimaging cameras. If he finds that leak in 15 minutes, you've just lost that customer."

In the meantime, Banghart — who runs a 2016 Chevrolet Savannah cutaway truck with a 12-foot box body made by the Heiser Body — says he plans to buy another FLIR Systems camera that offers even more capabilities. "I just want to keep staying ahead of the technology curve," he says.



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Managing More Services

Taking on mechanical work will likely require extra staff and in-depth training for contractors By Neil Feldman

ommercial plumbing contractors looking to expand often consider taking on mechanical projects. And, while mechanical work certainly dovetails nicely into a plumbing business, it does require a very specific set of abilities, relationships and other considerations that must be accounted for prior to jumping in.

When projects are put out for bid, the plumbing and mechanical packages are virtually always entirely separate. Most companies that wear both hats separate the plumbing and mechanical divisions. Jedd Mercer, vice president of construction at Smith Mechanical, a Columbia, Marylandbased plumbing and mechanical contractor, underscores the importance of maintaining a clear division between both disciplines. "We have separate estimators and project managers on both sides," he says. "They are all experts in their field, and the bids and management of projects are kept separate."

PREPARING FOR MECHANICAL

Initially getting set up to take on mechanical work requires a significant amount of legwork. Major vendors will want to feel comfortable that a new account has the resources in place to properly handle the work. "We go through a thorough vetting process when evaluating potential new accounts," says Ben Hedenberg, sales director at Trane (Ingersoll Rand), a global manufacturer of HVAC equipment. "It's definitely important that those installing our equipment are fully competent on our systems."

To instill confidence with key vendors, contractors typically need to have onboarded at least one estimator and one project manager with notable mechanical experience. Prior to investing in human capital resources, contractors are well-advised to initially engage in discussions with vendors to ensure they will open them up as an account and to understand what their expectations are. It's also

We're always trying to further develop what we already have in place. If a customer is happy with our work in one division. they will almost always give us an opportunity with our other division."

Jedd Mercer

important because no competent estimator or project manager will accept a position with a sea of unknowns.

Another consideration when working with new vendors is the level of pricing you will initially receive and the ability, if any, to negotiate pricing on a per job basis. Many manufacturers have tiered pricing tied to volume. While it is unlikely any new contractor will receive the deepest discounts right away, it is important to be at a level where you can be competitive from the start. This is a major reason why it's important to convince key vendors that the volume will eventually come.

BUILDING RELATIONSHIPS

As with any type of contracting, the backbone of establishing a solid mechanical division is cultivating relationships. Well-grounded commercial plumbing contractors naturally have the advantage of already having a portfolio of accounts and established relationships through the plumbing business, but they will hardly be known to major mechanical manufacturers. In initially establishing relationships with mechanical vendors, most in the industry

suggest focusing on no more than two key vendors supplying similar items. "It's important to convince a supplier like us that you're going to be dedicated to building a mechanical business and then follow through by landing some decent projects," Hedenberg says. He also emphasized the importance of a rigorous product training program for new vendors.

Product training, particularly in the first month or so of forging new vendor relationships, can significantly inhibit the ability to pursue new work because of the time commitment manufacturers expect new vendors to invest in it. Even if an experienced estimator is brought on board, they will likely need to devote some time to product training because manufacturers typically have training requirements or expectations for dealers - not for individuals. After the initial training has been complete, manufacturers often have periodic training for new products, normally in the form of "lunch and learn" or day-long sessions.

Most manufacturers have a couple of key personnel, like a regional vice president or a territory sales manager, who are important to build solid relationships with from the beginning. "You're definitely better off establishing a few really good relationships with a couple of select vendors than trying to befriend everyone," says Bobby Hedrick, HVAC division manager at JA Croson, a Sorrento, Florida-based plumbing and mechanical contractor. "I speak with our top area (vendor) managers several times a week, have lunch with them, play golf with them and consider them friends. That helps with the business relationship tremendously."

FOCUSING ON THE CUSTOMERS

Once the vendor relationships are in place and initial training is behind you, it's advisable to focus on a handful of existing customers who are already solid plumbing accounts. "We're always trying to further develop what we already have in place," Mercer says. "If a customer is happy with our work in one division, they will almost always give us an opportunity with our other division."

Mercer suggests having a key contact in the plumbing division who has the relationships in place to introduce the mechanical estimator and project manager to the existing customer in a face-to-face meeting. He also underscores the importance of setting the correct expectations from the start. "Don't tell a new account you'll

quote every opportunity they send you if in reality you want to limit the size of the jobs you're taking on and the geography you're willing to cover," he says.

Management and execution of the first few projects will be especially critical because, as a new face to the mechanical business, you will initially be placed under a microscope. "Anytime a contractor enters into a new trade or starts doing work with a new customer, there is no margin for error," Hedrick says. He advises taking very few projects initially to ensure that they are managed with precision and a solid reputation is established from the beginning. The last thing any contractor wants to do, he adds, is to load the hopper up with new projects and then not have the management or installation crews in place to properly deliver on them.

Do you have a plumbing business question you'd like answered? Email editoraplumbermag.com with your question.







Anthony Pacilla

Following in the Footsteps

Younger generation learns a different way of managing iob sites from the old-timers By Anthony Pacilla

ne of the first things I learned from the "old-timers" was to keep a clean job site. When I was an apprentice I swept, cleaned, organized tools, set out fittings, changed out the trash, vacuumed, dusted, etc. I did this for the entire eight-hour day. I felt I could be more useful and productive, but I didn't realize until I was running my own jobs just how valuable the "ground man" — as the old-timers called the position — was.

Both ended up doing exceptional work; but with the older crews, you could really see the experience shine through. They were very calm and methodical.

There was a battle between the old-timers and the younger journeyman. The old-timers stressed keeping a clean job site during the entire installation process. The younger crew's theory was to focus on the piping and clean up last. As ridiculous as this may sound, this was almost always the difference between a professional, quick, and profitable job and a lengthy, messy money pit.

The old-timers made a habit of paying attention to the details. They would take trash cans with liners on every job. Any excess pipe insulation, wire jackets and debris went into the trash. They had another different-colored trash can for scrap. Any excess metal got thrown into the scrap bin.

The ground man's job was to keep everything clean and organized. He would make sure all batteries went straight to a charger and tools were cleaned, organized and ready. That person would make sure extension cords were kept out of the way and uncluttered and that trash was thrown away.

Nothing was tracked outside or inside. There was no garbage on the floor, no metal scrap lying around, no tripping hazards, and no music blasting. It always surprised me how deliberate and precise they were. They made complex systems and connections look simple. When they soldered their last joint, they would leave. There was nothing left to do.

The younger crews did things different. They didn't want a ground man because "he watches and get parts." The trash can was for soda bottles and tobacco spit. Pipe insulation, wire jackets, copper and iron scrap, and dropped screws all ended up on the floor. They said it would be quicker to clean it up all at one time. They would blast music, take breaks, forget to have batteries on charge, and forget to put cardboard under the threading machine.

They spent a lot of time going through bags and boxes of unorganized fittings trying to find the right ones. Coming down and spending two to three hours cleaning the mess they made was routine. They usually had caused such a mess that it became a bigger job trying to get cleaned up than the piping job itself. Right around the time they started to clean up, the old-timers would be leaving for home.

I noticed a big difference between the two crews. Both ended up doing exceptional work; but with the older crews, you could really see the experience shine through. They were very calm and methodical. It was almost a religious experience to watch them work. They would say, "fast is slow, slow is fast." But their difference-maker was that ground man. The ground man was able to keep the plumbers' minds clear, focused and organized. It was almost like they were "in the zone" because they didn't have to wonder whether it was cleanup time. They didn't have to concern themselves with cleaning and organizing their tools at the end of the day.

The ground man was satisfied because he got to learn and be useful, and the pipe fitters were satisfied because it was another easy workday. There was something calming and satisfying about the way they did things. It really felt like a professional job every time. Each job felt safe and under control.

Workmanship always goes hand in hand with job site cleanliness. A cluttered job site leads to a cluttered mind; and a cluttered mind leads to mistakes. At some point, the younger crew of pipe fitters adopted the clean policy. Now with the combined power of old-school workmanship and new technology, they are the best in the business.

About Me

I have been in the trades since I was 9 years old (family business). I started cleaning toilets, mopping floors and putting fittings away in our warehouse. As I picked up skills, I would add becoming a ground man and laborer. I spent every minute that I could after school and weekends trying to find someone to go with. I spent summers and winters helping the guys dig ditches and run service calls. When I was ready, I became an apprentice and then a journeyman plumber. I graduated college with a business and economics degree and immediately wanted to come back to work in the family business. A few years ago, I become a licensed master plumber.



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Rehabilitation and Repair

By Craig Mandli

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Pow-r Mole Trenchless Solutions model PD-33M

The model PD-33M pipe bursting machine from Pow-r Mole Trenchless **Solutions** is designed to replace existing underground pipes 2 to 6 inches in diameter. Its nonslip, cylinder-activated jaws prevent cable damage while providing 60,000 pounds of pulling force. It offers a

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Excavating

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impact but has the ability to switch to a vibrating nozzle. It comes with a hard metal front blade for pipes that are more than 50 percent clogged. The side blades are self-sharpening and maintain their sharpness over their entire service life. The cutting ball operates with controlled rotation speed and is capable of running on recycled water. It is leak-free. 877-369-8721; www.enzusainc.com.



Hydra-Flex Ripsaw

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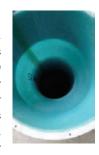
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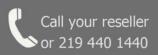


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Rehabilitation

Brasscraft Cobra Pro CP3020 Cable Drum Machine

The Cobra Pro CP3020 Cable Drum Machine from Brasscraft is designed for floor drains, roof stacks and cleanouts. It offers 100 feet of 1/2-inch cable with a reinforced steel inner core. This machine can clear pipes from 2 inches



to 4 inches up to 100 feet. It is driven by a 1/2 hp motor with foot pedal for hands-free motor operation. Its frame has oversized wheels for stairs. The machine also includes a fourpiece cutter set. 877-272-7755; www.brasscraft.com.

Clean-Fit Products Blue Monster

Contractors can fix problem leaks under pressure without turning off the water source with Blue Monster



compression seal tape from Clean-Fit Products. It can be used to seal leaks up to 150 psi on almost any material, from galvanized and cast iron to copper and all types of plastics and rubber. Its self-fusing layers form a waterproof seal by compression without the use of any adhesive. Pulling and wrapping the tape tightly around problem leaks creates a chemical reaction that fuses the layers of tape into a mass of silicone that serves as the emergency or long-term repair. It is available in 1- and 2-inch rolls; 12-feet in length; and packaged in a round, plastic case for convenient storage in toolboxes. It is environmentally safe and nontoxic, safe for drinking-water applications, and effectively seals up to 500 degrees F. 800-321-3598; www.cleanfit.com.

CUES MPlus+ XL

The CUES MPlus+ XL push system is designed for easy operation with an all-inone setup and flexibility by quick removal of the control unit to be used separately. It includes a coiler configuration and panand-tilt camera for mainline and larger pipeline applications up to 500 feet. It



integrates video observation coding, observation coding interface and digital recording into an easy-to-use package. The lightweight system includes large, durable wheels for portability and a balanced footprint for stability. It is manufactured to handle rigorous field use. 800-327-7791; www.cuesinc.com.

FloLogic Smart **Leak Control**

FloLogic Smart Leak Control offers accurate, realtime, flow-based leak





monitoring for detecting and automatically stopping all supply leaks, starting as small as 0.5-ounce-per-minute up to high-volume leaks. The app-based interface allows notifications and water control from anywhere. The maker suggests offering it to customers who have had a leak as a best practice that will support plumbers' businesses and protect more property owners from damage. 877-356-5644; www.flologic.com.

Milwaukee Tool M18

The M18 short throw press tool with PEX crimp jaws from Milwaukee



Electric Tool is the industry's first press tool optimized for residential installations. The lightweight, inline design of the tool enables the installer to press with just one hand. And, with a 3-second cycle time and the ability to press 400 1-inch connections on a single charge, this tool allows residential installers to do their job faster and easier, without paying for more force than is needed. 800-729-3878; www.milwaukeetool.com.

Pipe Lining Supply 199.000 Btu/h heater

The 199,000 Btu/h heater from Pipe Lining Supply can be used to accelerate the curing of CIPP lateral sewer liners and eliminate worry about undercuring. The system includes a boiler that can raise the cure temperature to a safe and steady 180 degrees F. The system has a recirculation



pump, temperature controls, flow controls, a water circulation manifold, and supply and return hoses. The unit runs on propane and can be used indoors or out. It is mounted to a hand truck that allows it to be carried into basements, attics, roofs, or virtually any site to cure a liner in an hour or less. The unit can cure a liner up to 8 inches and 150 feet in length. Units can be ganged for larger or longer lines.

888-354-6464; www.pipeliningsupply.com.



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Rehabilitation and Repair

Bv Craig Mandli

Pipe freeze protection device converts seasonal cabins into year-round residences



Problem: The owners of two seasonal, 1950s-era cabins near Rocky Mountain National Park needed to solve persistent water pipe freeze problems so they could live in the cabins year-round. The cabins are adjacent to each other and share one water pump in a separate well house. The main feeder line runs approximately 28 feet across an uninsulated area under the first cabin to feed the second cabin. With temperatures holding below freezing for weeks at a time, the owners tried wrapping the pipe with heat tape, but the pipe still froze.

Solution: In 2008, the owners installed a low-voltage HotLine Internal Water Pipe Heater inside the main feeder pipe to both cabins.

RESULT The heater has reliably and economically solved the frozen water pipe problem and successfully converted two cabins sharing an older water system into year-round residences. 877-881-2980; www.hotlineinternalpipeheater.com.

Bursting system used to rehabilitate line under concrete floor



Problem: A customer called LBA Air Conditioning, Heating & Plumbing in Mission, Kansas, with drainage problems. Upon arrival, LBA found a slab-on-grade residence with deteriorating cast-iron pipe and no accessible window. They were looking at having to wet cut the concrete floors to replace the customer's seriously deteriorated trunk line.

Solution: Using video of the **Spartan Tool UnderTaker's** bursting head breaking open clay and cast-iron pipe as the head is passing through, LBA was able to show the customer how trenchless pipe replacement works. That video helped LBA sell a lateral replacement to the customer. LBA was able to access the pipe from outside of the house and use the UnderTaker to reverse the pull and replace the line.

Result: LBA saved the customer the frustration, cost and mess associated with cutting 60 feet of concrete flooring. A conventional repair could have meant a loss of service for the customer and one to two nights in a hotel, plus the large cost associated with the concrete restoration. Using the UnderTaker, the job was completed more quickly than a conventional repair, and the customer saved the cost of repairing the concrete floor. 800-435-3866; www.spartantool.com.

Updated bathroom shines with new flushing technology

Problem: Lynne and Christian Geisthoff decided to completely overhaul an outdated hallway bathroom to a crisp, modern style.

Solution: Alan Giese of Giese Construction in Boulder, Colorado, took on the bathroom remodel, installing a touchless, alpine-white, glass flush plate and in-wall flushing system from Viega. He'd never worked with the in-wall carrier system, so while there was a learning curve to installing it, in the end, it was simple enough, and he understands the appeal. The house framing made moving the plumbing around a little more challenging to accommodate the wall-mounted toilet. Lynne chose the touchless flush plate for the sanity aspect. The wave of a hand triggers a small or large flush. They also picked a high-tech toilet, complete with push-button technology, helping to reduce contact with germs. An in-wall system removes the crevices between the bowl and tank, which are often more difficult to clean. Plus, with the bowl lifted off the floor, it's easy to run a mop underneath.

Result: After it was done, Giese concluded he didn't see any cons to the in-wall system. "I'd put one in my house," he says. "There's such a wide price range, and some of them don't cost a lot more than a standard system. It cleans up the bathroom, plus there's the sanitary aspect." 800-976-9819; www.viega.us.







Product Spotlight

very commercial system plumber has dealt with the same problem at one point. How do you regulate hot water access to everywhere in the building? ThermOmegaTech attacks that issue with the Circuit Solver -a self-actuating temperature control valve that is easy to install and maintain, saving time, money, and energy

Water flows to the path of least resistance, and many buildings require multiple branches off the hot-water supply line. Since hot water use is dynamic, the path of least resistance is constantly changing, and manual balancing valves cannot properly resolve these issues. Circuit Solver fixes this problem when installed on the end of each supply branch. As water enters the valve, the thermostat senses the temperature and increases or decreases flow based on the water temperature and the valve's setpoint.

"This allows the right temperature water to always be readily available at the tap." says Nick Tallos, vice president of engineering for ThermOmegaTech. "We're manufacturing the valves out of stainless steel, so they're certified to NSF 61 and AB1953 for potable drinking water — there's no lead or other dangerous contaminants. The product can easily be added to the old systems as well, so it's a tremendous retrofit solution."

When entering water temperature is below Circuit Solver's setpoint, the thermal actuator will begin to open the valve to establish a flow rate that will achieve setpoint. If the water temperature exceeds the setpoint, the valve



will begin to throttle back to find the current equilibrium point. This constant, automatic response to water ternperature enables each hot-water branch to guickly and consistently deliver the right temperature of hot water to each connected fixture.

"Even people who are very knowledgeable with years of experience in the industry are impressed with what Circuit Solver can achieve," Tallos says. "They ask, Where was this 20 years ago?' and call Circuit Solver a game-changing technology."

The unit climinates the need for oversized recirculating pumps, minimizes heat loss by reducing fluctuations in average temperature and flow rate, and lowers flow in hot water return lines, minimizing erosion-corrosion problenis caused by excessive velocity. The result is a dramatic reduction in water waste, energy savings, and improved comfort and satisfaction from users of the commercial water system. 877-379-8258; www.circuitselver.com.

Armstrong Fluid Technology stainless steel vertical inline numb

Armstrong Fluid Technology's stainless steel vertical inline pumps are ideal for potable water or residential water applications. They provide exact flow and pressure output without throttling. The pumps are available in six sizes, ranging from 1 to 2 hp with 1.5- and 2-inch connections. 800-356-9845: www.armstrongfluidtechnology.com.





Novenni Steiniess sinks

Available in four unique models, the Novanni Stainless Fireclay sinks have a porcelain enamel finish and are handcrafted by a master

potter. The sinks are nonporous, easy to clean, and scratchresistant, 800-661-1795; www.novanni.ca.

RIDGID C-Style Close Quarters Copper Tubing Cutters

RIDGID's C-Style Close Quarters Copper Tubing Cutters are perfect for cutting tubing in tight spaces, as they cut three sizes



with only two tools. The 1/2- and 3/4-inch combined tubing cutter has a quick-change feature that allows easy switching between the two sizes, with the second cutter designed for 1-inch tubing. Each comes with a spring-loaded cutter wheel that provides constant pressure on the tubing and features the X-CEL Wheel Pin for quick wheel replacement without tools. In addition, slots were added around the outside of each cutter for a flat-head screwdriver to advance and rotate the tool where access is limited. 800-769-7743; www.ridgid.com.

Water Cannon Inc. - MWBE wet sandblasting kit

The wet sandblasting kit from Water Cannon Inc. -MWBE is designed to remove unwanted surface contamina-



tion such as rust, scale, loose paint, barnacles and debris. The sand and high-pressure water work together using venturi siphon technology to more safely clean metals, concrete and other similar surfaces. The kit quick-connects to the end of a commercial pressure washer wand and works on 3,000 up to 6,000 psi systems. It automatically draws sand through a 26-foot, reinforced, lightweight feed hose using an engineered self-venting pickup tube. The venturi siphon technology eliminates the need for an air-feed system or other heavy and bulky equipment. 800-333-9274; www.watercannon.com.

A. O. Smith ProLine XE **Combination Boiler**

A. O. Smith's ProLine XE Combination Boiler has a servicefriendly, compact design and is engineered with residential building professionals in mind. By moving components, such as the built-in circulator, to an easily accessible



location within the unit, service and maintenance are simplified. The backlit LCD display has a user-friendly interface that provides text-based diagnostic information. Available in 110,000, 150,000 and 199,000 Btu/h models, the boilers can deliver up to 4.8 gallons of hot water per minute, the highest capacity in the combination boiler category. The unit features an air-handler interlock that immediately stops nonheated air from circulating when it alternates from space heating to domestic hot-water mode. 800-527-1953; www.hotwater.com.

John Guest USA ProLock Brass Female Drop Ear Elbow

The ProLock Brass Female Drop Ear Elbow from John Guest USA is available in a 1/2-inch copper tube size by 1/2-inch National Pipe Thread



size. Most suitable for showerhead installations, the elbow simplifies any showerhead repair or remodel job. The leadfree fittings require no tools to make secure, leak-proof connections and can be used with copper, PEX or CPVC pipe. They are not suitable for potable water applications. 973-808-5600; www.jgprolock.com.

Matco-Norca grooved couplings and nipples

Matco-Norca's grooved couplings come painted or galvanized in sizes 1 to 12 inches.



They have a ductile iron body (ASTM A536), feature EPDM gaskets and are UL/FM approved. Schedule 40 grooved nipples are available in either grooved by beveled or grooved by threaded configurations and conform to ASTM A53 and ASME B1.20.1 standards. All grooves are cut per the American Water Works Association C606 standard. Grooved nipples come in sizes 2-by-4-inch, 3-by-3-inch and 3-by-4-inch. 800-431-2082; www.matco-norca.com.



American Standard Studio S **Collection of faucets**

The Studio S Collection of bath and shower faucets from American Standard highlights an

alluring combination of contemporary geometric lines and subtle design details. The faucets feature a unique, nested handle that eliminates the traditional gap when in the open position for a clean look. It is offered in two handle options: refined lever handles or a modern knob design. The bathroom sink faucets are WaterSense certified, delivering a flow rate of 1.2 gpm that saves 45 percent more water over standard 2.2 gpm models. Showering options include both Pressure Balance and Thermostatic valve options, diverter trims and a drenching 8-inch rain showerhead. 800-442-1902; www.americanstandard.com.





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Hackney names new northeast regional sales manager

Hackney has hired Michael Puhl as its northeast regional sales manager. He will be charged with growing the company's beverage, special applications and aftermarket presence in the region including the states of Pennsylvania, New York and New Jersey. Puhl has over 10 years' management experience



and previously worked at The Home Depot and Schwan's.

GPS Insight recognized as one of the Best Places to Work

GPS Insight was recognized at the Phoenix Business Journal's Best Places to Work awards for the fourth consecutive year. It won the sixth best place to work in the midsize business category, 100-500 employees.

The Sunny Plumber earns 2017 Contractor of the Year

The Sunny Plumber has been named the 2017 Contractor of the Year by the Metro Phoenix Plumbing Heating and Cooling Contractors Association. In 2017, The Sunny Plumber partnered with the Foundation for Senior Living and donated \$100,000 to ensure seniors in the area are able to take care of vitally needed plumbing repairs in their homes.

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LOCATORS

Used RIDGID NaviTrack, Gen-Eve Model 100 and Goldak Model 4400. The Cable Center 800-257-7209. (CBM)

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Flow Expo 2018. Long Beach Convention Center. Long Beach, California, Visit www.flowexpousa.com.

March 18-22

Mechanical Contractors Association of America (MCAA): JW Marriott San Antonio Hill Country. San Antonio. Visit www.mcaa.org.

March 23

Illinois Plumbing Heating Cooling Contractors **Association EXPO & Education Day.** Drury Lane Conference Center. Oakbrook Terrace. Illinois. Visit www.ilnhcc.com.

May 15-16

Sixth Biennial Emerging Water Technology **Symposium.** DoubleTree Hotel. Ontario. California. Visit www.aspe.org/2018ewts.

June 7-9

Illinois Plumbing Heating Cooling Contractors **Association Convention.** French Lick Resort. French Lick. Indiana. Visit www.ilphcc.com.

June 11-14

American Water Works Association (AWWA) 2018 **Annual Conference & Exposition (ACE).** Mandalav Bav Convention Center. Resort and Casino. Las Vegas. Visit www.awwa.org.

Oct. 8-12

Plumbing Heating Cooling Contractors Association **CONNECT 2018.** Hvatt Regency Albuquerque Hotel. Albuqueraue. New Mexico. Visit www.phccweb.org.

Plumber invites organizations and associations to submit details about upcoming industry trade shows and conferences for our calendar of events. Send information to editor@plumbermag.com.

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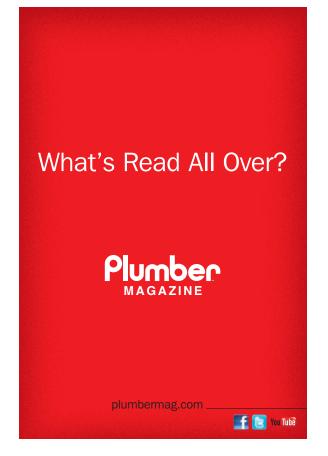


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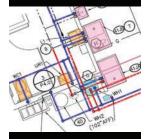
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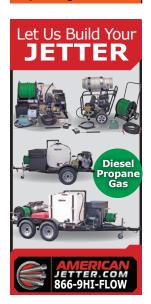
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