

# Plumber<sup>TM</sup>

## Customer COMMUNICATION

Along with diversified services and technology investments, keeping customers in the loop spurs rapid growth for Tacoma plumber  
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On the ROAD

## Portable and Powerful

Just one tough job convinced this Canadian plumber about the merits of the new compact RIDGID K-5208 sectional cable machine.

- By Ken Wysocky



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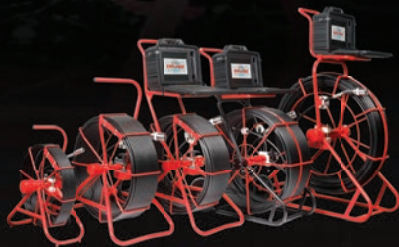


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Cory Dellenbach



## What's in a Name?

Developing your company's name is no easy task. Think of how you want it to appear and what it means to you when coming up with one.

A few months back I wrote about vehicle wraps in this column, and at the end I asked for you to share your vehicle wraps. I received a few submissions, and one of those still sticks out to me today.

Keith Hunt, a plumber in Orangeville, Ontario, sent me a photo of his truck. His company, Plumbs Up Plumbing & Drains, sports eye-catching vans decked out in the company colors of orange and blue with the company's phone number and website plastered on the door.

While it was a nice visual wrap, the part that sticks out to me the most is the name of the company — Plumbs Up. It got me thinking ... what is in a name?

### COMING UP WITH A NAME

As you know, many companies in this industry are named simply after the family: Dave's Plumbing Service, Jones Brothers Plumbing, Duke's, Pete's Plumbing, etc.

There are a few, though, that go away from that and come up with a name that'll get the company listed first online and in various directories. To do this, you either start your company with the letter A or a number. Here are a few examples of that: A1 Plumbing, A-Plus Plumbing, A Rated Drain and Plumbing.



▲ Keith Hunt and his wife, Lynsey, stand with one of their Plumbs Up Plumbing & Drains vans at their facility in Orangeville, Ontario.

You want a customer to think of your company's name right away. This is effective advertising. The average consumer sees or hears hundreds of company names every day, so you want to have a name that stands out to those potential customers.

There is no special secret to coming up with a name for your company. If your company is 100 years old, has stayed within the same family all that time and that's what people in your community know, stick with it. If you're starting your own company from scratch, like Hunt was, think of something that is catchy.

### HELP WITH THE NAME

Hunt wanted his company to be a legacy he could leave to his children, but also wanted to avoid using his last name in the title.

"I wanted it to be something that was going to stand out and that was catchy and easy to remember," Hunt says in the email. "Something short and simple, but grabs the customer."


With the help and guidance of KickCharge Creative, a marketing and advertising firm, he came up with Plumbs Up.

When selecting your company's name, there are a few more things to keep in mind. Avoid offensive names, which might turn customers away instead of attracting them. Be sure to also put the name on as many places as you can, from your utility trucks to your business cards. The company name should be catchy and easy for customers and employees to remember.

Whenever a person sees the name on an advertisement, he or she will be reminded of the important work you do.

### TELL ME ABOUT YOUR NAME

How did you come up with your company's name and why is it important to you? Email me at [editor@plumbermag.com](mailto:editor@plumbermag.com) or call me at 715-350-8436.

Enjoy this issue! 



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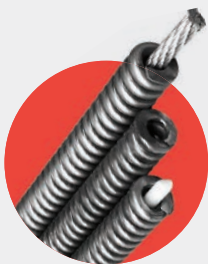
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## ROUGH-IN TIPS

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Master plumber and regular contributor Anthony Pacilla dives into tips regarding plumbing rough-in work on a home remodel. If you're not someone who tackles rough-ins on a daily basis, there might be some good insight to glean from this online exclusive. ▶ [plumbermag.com/featured](http://plumbermag.com/featured)

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### Why a Good Business Website Is Still Vital

Online exposure for a business once only meant having a website. In today's world, it means having a social media presence and taking advantage of things like Google Ads and online reviews. Is it even necessary to maintain a strong website? This online exclusive covers a few reasons why it's still important to do so.

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## OVERHEARD ONLINE

*"You need to discuss every scenario you can imagine and how the decision-making process will play out. Hiring a family member and changing the nature of that relationship causes all kinds of different questions and stress."*

— Targeting Family Members For Office Staff Hires

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▶ Harts Services owners Dan Hartsough, left, and Richard Hart pose for a photo in front of their service van at their shop in Tacoma, Washington. Within their truck is a RIDGID SeeSnake MiniPak, and a portable cart jetter from Jetters Northwest.

# Customer COMMUNICATION

Along with diversified services and technology investments, keeping customers in the loop spurs rapid growth for Tacoma plumber

By Ken Wysocky | Photography by Stephen Brashear

## Harts Services, Tacoma, Washington

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Richard Hart and Dan Hartsough  
33  
2013

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**S**pending years in the plumbing industry allowed Richard Hart to collect good intel about what a good plumbing company should be — and shouldn't be. In 2013, he morphed that vision into a reality when he established Harts Services in 2013 in Tacoma, Washington, based on one key principle: Always communicate extensively with and care about customers.

"We've fulfilled our vision of being a company of master communicators," says Hart, who owns Harts Services with business partner Dan Hartsough. "We emphasize excellent communications. It starts when customers first call us to the time a dispatcher calls to tell them when a technician will actually arrive. And it continues when a technician listens to customers to get absolute clarity on the situation, then answers all their questions and provides options for solving the problem.

"I worked for three or four companies that didn't communicate well with customers, and that was a big reason why I didn't want to work there," he continues. "I didn't want to keep working with upset customers who were overpromised and underdelivered in terms of service. That's why we always strive to underpromise and overdeliver."

That philosophy, coupled with an emphasis on diversified services, investments in efficiency-enhancing equipment and advice from external professional groups, has served the company well. From humble beginnings, the company has doubled its gross sales nearly every year, culminating with more than \$4 million in 2018.

During the same time period, employment rose to 33 people and the company's initial emphasis on service and repair plumbing expanded into drain cleaning, jetting and inspecting sewer lines, trenchless pipeline rehabilitation and horizontal directional drilling.

## GOING THE EXTRA YARD

"When we first opened the company, we didn't envision growing this big, having this many employees or offering this many services," says Hart, 35. "But it all stems from a place of caring — always doing the right thing — which I feel serves our customers at the highest level. We always do everything we promise we're going

**“I didn't want to keep working with upset customers who were overpromised and underdelivered in terms of service. That's why we always strive to underpromise and overdeliver.”**

**Richard Hart**



▶ Steven Shoopman snakes a sewer line in a residential remodel.

## Networking with other plumbers sparked dramatic revenue growth

Many businesses struggle to grow, despite their owner's best intentions and efforts. Harts Services in Tacoma Washington, which has roughly doubled its gross revenue every year since 2014 and posted more than \$4 million in sales in 2018, isn't one of the them — but it very well could've been without the business coaching provided by the Nexstar Network and CEO Warrior organizations.

"They've been huge contributors to our growth," says Richard Hart, company co-owner. "They help us push past that uncomfortable zone, where you don't want to offer customers new services because you've never provided those services before, yet you know you need to in order to provide first-class service."

"I think that as human beings, we sometimes scare ourselves into doing nothing," he adds. "But these groups open up our minds to things we otherwise wouldn't be so willing to do. Without them, we'd probably still be trying to become a \$2 million-a-year company."

(Membership fees for the two organizations vary; visit [www.nexstarnetwork.com](http://www.nexstarnetwork.com) and [www.ceowarrior.com](http://www.ceowarrior.com) for details.)

A key benefit to membership in the organizations is the ability to pick the brains of other plumbing executives that provide critical insights into strategies that worked or didn't work. It might be something as simple as learning how to roll out a new in-home, water-filtration product that Hart saw at a trade show. Or it might be something as large as developing an internal parts-warehousing system that increases profitability by virtually eliminating technicians' trips to supply houses.

"Having access to other business owners is huge," Hart says. "Take our inventory system, for example. We went to five or six different companies around the county, picked them apart and created our own parts-inventory system. (It combines ServiceTitan inventory-management software with parts supplied by Barnett, a Home Depot company).

"Now our inventory system is world-class," Hart says. "And we couldn't have done it without all of the networking — the open-door policy these groups provide. These other companies treated us like family and taught us so much."

to do, but we also make a point of doing a little bit above and beyond that, too."

For example, if technicians see a bad valve while replacing a water heater, they'll throw in a new valve at no charge to the customer. While that may make an accountant cringe, it makes perfect sense to Hart.

"It only takes a few minutes to do and it's the right thing to do," he explains. "If you do a little extra, you'll always get a little more in return. It's all about karma. Do the right thing and the return is golden — and you create customers for life."

The approach seems to be working; as of mid-January, Harts Services had earned an average customer rating of 4.9 out of a possible five stars on Google reviews, based on 794 reviews.

"We work off of the three-win rule, where the company, the employee and the customer all have to win," Hart explains. "If just one loses, everyone loses. We live off this. If a customer is upset, for example, then the employee didn't make sure the customer won. Or if we don't provide a great customer experience, our profitability isn't as good, so the company doesn't win. Sometimes we even give customers their money back."

### A CULTURE OF CARING

The company's slogan is "we care more," which is emblazoned on its service vehicles. But this applies to more than just customers; the same philosophy permeates the company. Hart says it is critical to attracting and retaining quality employees in an industry where it's very difficult to do so. "Great people make a great company," he emphasizes.

As an example, consider a program the company calls No-Man-Left-Behind Fridays, which fosters a culture of teamwork. Here's how it works: The first technician who returns to the shop on a Friday afternoon has to check in before leaving work to make sure everyone is going to get off work at a reasonable time.

"If not, we send the technician who's finished working first to whatever job site needs support," Hart explains. "So a technician who gets back to the shop at 3 p.m., for example, might get dispatched to help a colleague who's on a nightmare commercial job. Maybe three guys will end up going out there. In effect, nobody goes home until everyone goes home. They're all like family, rooting each other on and helping out when things get tough."

Creating that kind of family atmosphere helps to attract and retain employees. To build that kind of culture, Hart says he and Hartsough try to hire employees who are as highly motivated and enthusiastic as they are. "Not everyone works out, but our retention rate is pretty good," he says.





▲ Harts Services employees pose in front of the company's work van and shop in Tacoma, Washington.



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Apprentice Chris Ring, left, and underground lead Tim Paulk install a CIPP liner with a MaxLiner inversion gun at a residence.



To thoroughly vet job candidates, as well as give them a good feel for the company's culture, they go through a three-stage interview process. The steps include attending a companywide meeting held every Wednesday, where company officials talk about everything from sales and revenue goals to jobs that went well or off the rails, and going on a service ride-along with a veteran technician, Hart says.

The company also emphasizes employee accountability. For example, within five minutes after technicians leave a job, a customer service representative calls the customers and asks them to rate the technicians on a scale from one to 10. If the customer rating is less than eight, the rep finds out why.

"And if the score is less than five, we turn the technician around and send him back there," Hart says. "Our goal is to get all good reviews. But if we get a bad one, we talk about it at our next Wednesday meeting. We talk about the good ones, too, so all of us know how awesome we are. We all feed off each other."

## TRADESMAN AT HEART

Hart entered the trades in 2000, when he was 18 years old. "I definitely wasn't that kid who was going to college," he says.

“By the end of the year, we want everyone to know who we are. It's all about branding. When someone thinks about hiring a plumber, we want them to see orange in their head.”

*Richard Hart*

After working as a plumber in Hawaii for most of his career, Hart and his wife, Jordan, decided to move to Tacoma, where her family lives. Initially, things didn't work out well; Hart worked for several different plumbing companies. In fact, he was even considering moving back to Hawaii when Hartsough, a longtime friend, suggested Hart open his own plumbing company.

"He came up from California to help me start it," Hart says. "But then he realized how good we could do, so he stayed and we became 50-50 partners. Early on, he was developing processes and helping us get work while I was out in the field."

As the company grew, so did its fleet of equipment and vehicles. The backbone of the company is its fleet of 11 bright-orange Mercedes-Benz Sprinters (all 2016 or newer models) and four installation trucks (one Ford box

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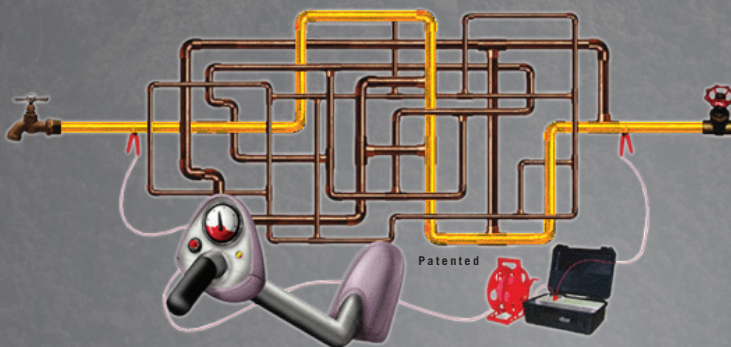
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*It's a jumble out there.*

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- ▶ Underground lead Jeff Chong, left, and warehouse lead David Burnett go over a truck stock replenishment form using ServiceTitan software at the Harts Services shop.
- ▼ Burnett fills a replenishment order to restock a coworkers truck.



“The trucks are so big that we can basically invite customers into the back to show them different types of faucets and other items. They’re like showrooms on wheels.”

*Richard Hart*

truck and three Dodge and Chevrolet utility-bed trucks). Hart invests in Sprinters because of their spacious cargo area, ample legroom for drivers and diesel engines that get 22 to 26 mpg. Plumbing technicians use eight of the Sprinters; the other three are dedicated to drain cleaning.

The Sprinters are equipped with VT Hackney/Hackney storage systems that enable each truck to carry between \$7,000 and \$8,000 worth of inventory, including three different styles of popular faucets. “The trucks are so big that we can basically invite customers into the back to show them different types of faucets and other items,” Hart says. “They’re like showrooms on wheels.”

“Customers can order other faucets if they don’t like the three we have on the trucks,” he adds. “But if they love one of the faucets we have, we’re ready to install it right then and there.”

## EFFICIENT INVENTORY CONTROL

The Sprinters’ size also minimizes time-killing trips to supply houses for repair parts. Unless it’s a specialty part, odds are that technicians have whatever they need. This also increases customer service because they don’t have to wait as long to get their plumbing problems

resolved. Furthermore, it ratchets up profitability because technicians can do more jobs than they otherwise could, Hart notes.

“Back when I worked as a tech, I went to a supply house every day — almost every time I needed a part,” he says. “By virtually eliminating supply-house trips, I’d say we can do five jobs per day, compared to the three we could do before. With eight plumbing-service trucks, that’s huge in terms of revenue.”

Other equipment includes Milwaukee Tool corded power tools; five Quadra Plex portable drain cleaning machines; three truck-mounted waterjetting machines built by Jetters Northwest (3,000 psi at 12 gpm); a MaxLiner USA pipe lining system; three RIDGID SeeSnake Mini pipeline inspection cameras; an R2 pipe bursting machine and a Basement Buddy horizontal directional drilling machine, both made by RODDIE; two mini-excavators built by Takeuchi; a micro-excavator manufactured by IHI (now owned by KATO Works); and two 14-foot dump trailers from PJ Trailers.

To ensure trucks have adequate inventory, Harts Services uses ServiceTitan inventory replenishment software that works in tandem with Barnett (a Home Depot company),



► Harts Services co-owner Richard Hart, left, uses a RIDGID SeeSnake while trying to locate at clog as sewer lead Steven Shoopman watches at a residential remodel.



a parts-supply company. ServiceTitan charges a monthly fee to use the software.

Here's how it works: When technicians use parts, they simply use an iPad to reorder them. "We're completely paperless out in the field," Hart points out. Then the parts get delivered from a local Barnett warehouse to a small warehouse set up by Barnett within the Harts Services facility.

Barnett doesn't charge any fees for this service; the only requirement, aside from passing a credit check, is that clients must purchase a minimum amount of parts and materials each month, Hart says.

"The warehouse occupies less than 2,000 square feet of our 8,000-square-foot building," Hart says. "All the parts are inventoried on consignment. We don't pay for them until we take them from the warehouse and put them on our trucks. It's a pre-positioned inventory system run by one of our employees."

The system pays for itself by eliminating trips to supply houses. "At the end of the day, we have a whole warehouse in our shop," he says. "From water heaters and faucets to garbage disposals, fittings and pipes, almost everything you can name is in our shop — about \$80,000 worth in all."

## MORE GROWTH EXPECTED

The company's success in its first five years has given Hart the confidence to set ambitious goals for future growth: \$20 million in gross revenue by 2025. That will require hiring more employees, buying more equipment and gaining more market share in the coming years. As Hart puts it, "We're firm believers that what got us here isn't going to get us there."

To increase the brand recognition required to spur more growth, the company has embarked on a marketing campaign called Paint the Town Orange. It includes both billboard rentals and TV commercials that feature the company's distinctive orange-with-black-trim Sprinters.

The company also entices customers to let Harts Services post yard signs on their lawns for three months at a time. How? By offering participants a chance to win \$100 in a monthly random drawing.

"The signs need to be there for a minimum of three months," Hart explains. "I deliver the check personally. We do a drive-by after we draw a name, just to be sure the sign still is there."

The company typically has about 500 yard signs installed. Along with the TV commercials, trucks and billboards — plus technicians' uniforms that feature the company's orange logo — Hart aims to have Tacoma residents seeing orange everywhere they go.

"By the end of the year, we want everyone to know who we are," he says. "It's all about branding. When someone thinks about hiring a plumber, we want them to see orange in their head." **PI**

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Erik Gunn

# Know When to Collect

Even if you're years away from retirement, it's wise to keep tabs on your government retirement benefit and adjust plans accordingly *By Erik Gunn*

**W**hether retirement is just around the corner or decades over the horizon, it's never too soon to start planning ahead.

The choices you'll face can seem endless — everything from where you'd like to live to how you'd like to spend those years when you don't have to come to work anymore. But one decision you'll have to make could prove especially tricky: when to start collecting Social Security.

If you're tempted to skip the rest of this column because your own retirement is 20, 30 or more years in the future — hold that thought.

This decision is going to sound deceptively unremarkable, one you might be tempted to brush off as no big deal. But don't be fooled. No matter your age, that decision has important implications for you here and now. And what you do now can help you make a much better choice when those golden years arrive.

So the answer about when to start collecting Social Security benefits may seem obvious — “Well, when I retire!” Yes, for some people, that really might be the best answer. But it's important to understand all your options and what those options mean if you're in your 20s or 30s instead of your 50s or 60s.

## TIMING IS KEY

The first thing you need to know is how much you will get each month from Social Security — depending on when you start taking it. We still casually refer to 65 as retirement age. But for Social Security, that hasn't been true for a while. For people born between 1943 and 1954, the federal government's so-called Social Security full retirement age — the age at which people qualify for their full Social Security monthly payment — is 66 years old.

If you were born between 1955 and 1959, your Social Security full retirement age creeps up year by year in two-month increments: 66 and 2 months if born in 1955, 66 and 4 months if born in 1956, and so on. And if you

“If you consider Social Security payments to be part of your retirement income strategy, you don't just decide at 65, ‘Oh, I'm going to claim,’ because you'll have no idea what you're owed.”

*Kyle Tetting*

were born in 1960 or afterward, the Social Security full retirement age is 67.

You can start taking Social Security sooner, starting at 62, but your monthly amount could be reduced by up to 30 percent depending on your birth year. (You can learn more here: [www.ssa.gov/planners/retire/agereduction.html](http://www.ssa.gov/planners/retire/agereduction.html).)

But that's not all. If you delay taking Social Security past your “full retirement age,” you can actually get more each month. The longer you delay, up until you turn 70, the more you can get.

Suppose you were born in 1956. You'd qualify for “full retirement benefits” in 2022. But if you can delay taking Social Security until 2026, you'd get almost 30 percent more every month. (For details, look here: [www.ssa.gov/planners/retire/delayret.html](http://www.ssa.gov/planners/retire/delayret.html).)

If you took the cash at the full retirement age and simply invested it, could you actually count on a consistent 8 percent return each year? If you're lucky, maybe. By delaying, however, you're effectively adding about 8 percent every year to your monthly benefit.

“It's about as close to a guarantee as you can get,” says Kyle Tetting, director of research for Landaas & Co., a Milwaukee investment management firm.

*Continued* ▶



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The same advantages for delaying taking Social Security, and penalties for taking it early, affect spousal benefits, he points out.

## GET GOOD ADVICE

So given a strong incentive to delay, why do some people choose not to, or even give up more by starting Social Security early?

“A lot of people are concerned they’re not going to maximize what they can take out,” Tetting says. Some may fear Social Security benefits will be cut in the future. Others might worry that they won’t actually live long enough to benefit from the higher payment they’d get by delaying.

But people are also living longer. As you get older, the real-dollar value of your monthly benefit will erode over time. By starting later and maximizing your monthly benefit, you can protect against that erosion.

Of course, every individual’s situation is different. There may be reasons you need to take benefits sooner. Be sure to work with a financial advisor who knows your specific circumstances and can guide you accordingly.

Another important source of information is the Social Security Administration itself. SSA employees can give you a lot of information about how much you’ll get under various scenarios that you can use to help determine your best course of action.

What they won’t do is advise you on the best strategy for your circumstances. “So that means you’ve got to talk to friends or a colleague about who they know who might be an expert in that area,” Tetting says. “That’s especially important for those individuals who might have more difficult situations.” That may be a spouse without an employment record or perhaps a divorce in their past, which might create an opportunity to build benefits through a former spouse.

“All of those are situations that are a little bit more nuanced than just, ‘Hey, you should wait until age 70 to claim.’”

## START EARLY

By now you can probably see why it’s important to have other resources besides Social Security when you

retire. For instance, if you have a solid stash in your 401(k) or individual retirement account, you might still be able to retire at 65 or 66 while delaying taking your Social Security benefits. (Of course, it can work the other way, too. If you are retiring in the middle of a down stock market and your investments have taken a beating, you may decide to apply for Social Security sooner while your private accounts recover. Again, this is a time to seek professional advice.)

“The challenge here is that 70 percent of workers say they plan to work until 65, but the median retirement age really is about 63,” Tetting says. That means that, for a couple of years, people are at risk for not having an income when they thought they would still be drawing a salary.

“You almost always have to draw down from savings that you weren’t planning on drawing down from, or you’re forced into this situation when you take Social Security earlier than you planned to.”

And that’s why it’s never too soon to think about when you want to take Social Security and to plan for those situations.

“The key for younger workers is that planning for retirement is best done early,” Tetting says. “And if you consider Social Security payments to be part of your retirement income strategy, you don’t just decide at 65, ‘Oh, I’m going to claim,’ because you’ll have no idea what you’re owed.”

Tetting routinely urges his younger clients to get in the habit of checking their work record with the SSA’s website to make sure they’re properly being credited for their earnings. “Ultimately their payments are going to be based on what’s been reported,” he says. “Mistakes are made — not all the time, but often enough — and it’s going to be more difficult to correct at age 65 than it was back at age 35 when you first noticed a mistake.”

If at all possible, workers need to understand as early as possible “that Social Security is not going to be the only source of retirement income for them,” he adds. “If they wait until age 55 or 60 to figure that out, it’s too late to save.” ■

*Erik Gunn is a magazine writer and editor in Racine, Wisconsin.*

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## Portable and Powerful

Just one tough job convinced this Canadian plumber about the merits of the new compact RIDGID K-5208 sectional cable machine *By Ken Wysocky*

**B**ob Baker admits he was a bit skeptical when his RIDGID customer rep suggested using a K-5208 sectional cable drain cleaning machine on an extremely difficult emergency job: a restaurant drainline clog so tough it snapped the cable on a large, powerful drum machine.

As it happened, no new cables were available on short notice and the restaurant was “up to its eyeballs in water,” as Baker puts it. So the veteran plumber — the owner of Baker Plumbing, Heating and Gasfitting in Calgary, Alberta — shifted to plan B, which was giving the K-5208 a shot.

“I was skeptical,” Baker says, noting that the line was clogged with grease, as well as a charcoal brick that somehow got pushed down the drain (the bricks are used to scour grills clean). “I told our rep that if it didn’t work, I was going to call him back and yell at him.” But he never had to make that call.

“We had already spent about 10 hours trying to get through the blockage, which was about 60 feet out,” he says. “But the K-5208 cleared the line in about 20 minutes. I was totally shocked.

“I’ve been in this business for 30 years and have always used a drum machine,” adds Baker, the third-generation owner of the company founded in 1956 by his grandfather Ralph Baker and then owned by his father, Gerry Baker. “And I’ve never run across a drain we couldn’t get through with our RIDGID K-7500. But I haven’t used a drum machine since that job.”

Now the company, which employs seven people and primarily focuses on commercial service and repair and drain cleaning in its plumbing division, owns three K-5208s. The machines cost about \$2,200 each (no major accessories included).

### PORTABILITY PLUS POWER

The electric-powered K-5208 is designed to clean lines ranging from 2 to 8 inches in diameter. It can use either



▲ Bob Baker, the owner of Baker Plumbing, Heating and Gasfitting in Calgary, Alberta, uses a RIDGID K-5208 sectional cable drain machine to unclog an 8-inch-diameter drainline in a Calgary-area hotel. (Photo courtesy of Baker Plumbing, Heating and Gasfitting)

7/8- or 1 1/4-inch-diameter cables that come in 15-foot lengths; the 7/8-inch cables can reach up to 175 feet, and the 1 1/4-inch cables can reach up to 200 feet.

Featuring a square, steel-tubing frame, the unit offers both portability and power. It weighs 55 pounds and measures roughly 21 inches long by 11 1/2 inches wide by 18 inches tall, which is 35 percent lighter and 71 percent smaller than older RIDGID sectional drain machines, according to RIDGID.





<b>COMPANY</b>	Baker Plumbing, Heating and Gasfitting, Calgary, Alberta
<b>OWNER</b>	Bob Baker
<b>MACHINE</b>	RIDGID K-5208 sectional cable drain machine
<b>FUNCTION</b>	Unclogging 2- to 8-inch-diameter drainlines
<b>FEATURES</b>	Weighs 55 pounds; measures roughly 21 inches long by 11 1/2 inches wide by 18 inches tall; 3/4 hp electric motor generates 700 rpm; accommodates 7/8- and 1 1/4-inch-diameter, 15-foot-long cable sections; toolless clutch for quick switching between cable sizes; sectional cable decoupler for disconnecting cables
<b>COST</b>	About \$2,200 (no major accessories included)
<b>WEBSITE</b>	<a href="http://www.bakerplumbing.ca">www.bakerplumbing.ca</a>
<b>RIDGID WEBSITE</b>	<a href="http://www.ridgid.com">www.ridgid.com</a>

Baker says his technicians can carry the machine up and down stairs without a problem. "And it fits into tight spaces because it's not very big," he notes. "It also doesn't have a lot of spinning parts, so you don't always have to watch out for your fingers, toes or loose clothing. The only thing turning is the cable itself."

The machine's power belies its compact size. A 3/4 hp motor provides enough torque to spin the cable sections at 700 rpm. A toolless clutch enables technicians to quickly switch between cable sizes, and an included sectional cable decoupler makes disconnecting cables fast and easy.

Power is an important consideration for Baker because most of the drain cleaning jobs technicians face are commercial in nature, including hotels, warehouses, restaurants and small businesses in industrial parks. "They require fairly intense and aggressive drain cleaning," he explains. "In particular, restaurants don't always keep up with preventive drainline maintenance, so when they have a problem, it's usually a pretty serious problem. But the K-5208 blows right through them."

"The guys also like it because if they wreck a cable, it doesn't wreck their whole day (the way it would if they

snapped, say, a 150-foot-long drum-machine cable). They just put the broken section of cable aside, throw on a new section and carry on. The machine doesn't care. Sometimes it's a little more work (using a sectional machine), but for what we do, it works great."

## GETS THE JOB DONE

Baker believes the thicker cables on sectional machines also provide more drain cleaning muscle and leverage. "I talk to guys on an Instagram plumbers' group and they all say the same thing about sectional cables," he says.


In fact, sometimes the K-5208 is almost too effective. Why? Baker Plumbing technicians now finish some jobs so quickly that at times, clients question whether they've really thoroughly cleaned the drainlines. "They're used to seeing guys drag in a 400-pound drain machine, which takes time," he explains. "But with the K-5208, many times our guys are in and out in 30 minutes or so."

The units also increase the company's profitability in two ways. First of all, completing jobs faster enables technicians to clean more drains than they otherwise could. Second, Baker charges a two-hour minimum fee for drain cleaning. "So if we're there for 30 minutes, we still bill out at two hours, so it's more profitable," he says. "Most times we're able to make an average of 30 percent more revenue per job than before."

*"We had already spent about 10 hours trying to get through the blockage, which was about 60 feet out. But the K-5208 cleared the line in about 20 minutes. I was totally shocked."*

**Bob Baker**

Moreover, the K-5208 has proven to be a reliable workhorse. Baker says the machines, which the company has owned for about nine months, get used every day and have yet to break down. And in terms of return on investment, Baker says he paid about \$3,500 (in Canadian dollars) and has easily billed out 10 times that much in just the first six months of owning the first machine. "The first one we bought actually paid for itself on the first day," he says.

For the record, Baker says he's in no hurry to encounter another 10-hour drain cleaning job like the restaurant emergency that led him to the K-5208. "It's too stressful," he says with a laugh. But if one does come along, he says he's confident the compact machine will be up to the task at hand. 



Anja Smith

# The Tricky Business of Homeowner Trust

Follow these easy suggestions as a way to keep those residential customers calling you for work *By Anja Smith*

**P**lumbers are often in the business of delivering bad — and expensive — news to homeowners. These conversations can be difficult for even the most experienced technician.

Without building trust first, the customer's lack of confidence will soon be your lack of revenue. Residential service customers are expensive to obtain. On top of that, they tend to lack loyalty.

Before the end of your first appointment, the homeowner will have labeled you a charlatan or a savior. They will have already decided if you'll ever step on their property ever again. In spite of these headaches, residential service can be extremely profitable.

You have a small window to create trust. It's difficult to build and easy to break. Make your life easier by taking these steps to earn and keep faith with your customers:

## BRANDING

There are many ways to influence customer perception through branding. Here are a few things to consider:

- **Color Use.** Did you know that blue makes people feel safe and secure, while red evokes passion and sometimes anger?
- **Professional Design.** A professional logo, vehicle wrap and website make you look, well, professional.
- **Your Story.** Is your business family-owned and -operated? A franchise with the strength of nationwide resources? Each of these stories generates trust differently.

## REVIEWS

If online reviews aren't your priority, they should be. Social proof is a big deal these days. One BrightLocal

A residential customer who thinks of you as "their plumber" will not only become a repeat client, but will rave about you to their friends.

study claims that 90 percent of consumers research businesses online before they buy.

With good online reviews, trust is yours to lose.

## APPOINTMENT SETTING

Create an appointment-setting experience that sets clear expectations. Before customers get off the phone with your team, they should:

- Have an opportunity to describe their problem. Your team should ask appropriate follow-up questions.
- Know what day and time to expect you, including any details about appointment windows.
- Know the name of who is coming to their house.
- Be aware of any diagnostic or appointment fees.

## UNIFORM AND PERSONAL APPEARANCE

First impressions do matter. They matter even more when you are letting a stranger into your home. Make an effort.

A confident smile, handshake and introduction don't hurt either.

## CUSTOMER EDUCATION AND CLEAR DIAGNOSTICS

Overeager tradesman taking advantage is a common fear for homeowners. That's for a good reason. Most



homeowners have a very vague understanding of how their plumbing system works.

Too often, the reported problem is just the tip of the iceberg. An excellent service plumber understands the customer's anxiety and uncertainty. Rather than praying on that, a good plumber wants to help ease customers' fears.

Explaining the situation helps empower customers. It allows them to make the right decision for their home and budget. Never lead with worst-case scenarios. They leave the customer feeling like you are using scare tactics to push them into a decision.

Whenever possible, use diagnostic methods that allow you to show the problem to the customer. Asking for a customer to trust your experience is one thing. Showing them the problem so they can see it with their own eyes is another.


## CUSTOMER OPTIONS

Upselling is all about persuading the customer to purchase a more expensive or premium version of an item for the simple purpose of increasing a sale.

In and of itself, there is nothing immoral or wrong about this tactic. Where it goes wrong is when technicians use scare tactics or high-pressure tactics to push a customer into an upsell.

Here's the kicker — an excellent customer care conversation includes an upsell option. That's because customers deserve the opportunity to make their own decisions. Don't always assume you know best.

It's their money, and it's their home. Options are a powerful tool in building trust. Just wield that power carefully.

There is no foolproof way to build trust with every residential customer. Please don't underestimate the effect that it can have on your bottom line though. A residential customer who thinks of you as "their plumber" will not only become a repeat client, but will rave about you to their friends. 

-----  
Anja Smith is the managing partner at All Clear Plumbing and writer/speaker at Tradebiz Toolbox. Contact Anja at [www.tradebiztoolbox.com](http://www.tradebiztoolbox.com).



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## Coming Up With Cash

There are several options for plumbers to choose from when it comes time to financing a startup, but researching is the first step for each

*By Joan Koehne*

**L**ooking for money to open a plumbing business? A variety of lenders are out there — from your gray-haired grandma to a stranger you meet on the internet. Banks, credit unions, investor groups, and city and state microloan programs are just a few of the financing options available. Choosing the best way to finance a startup is one secret to long-term success.

Aaron Faulkner, senior vice president at Bank First in Green Bay, Wisconsin, encourages entrepreneurs to begin by understanding how a plumbing business operates. “Make sure you talk to other people in the industry,” he says. “It pays to reach out to guys who have been there, done that.”

Experienced plumbers understand working capital. They know how often they are paid, the method of payment and how to maintain a steady cash flow. Successful plumbers can provide the inside information a plumber needs to get his business going.

“The more perspectives you can have, the better decision you can make in the long run,” Faulkner says.

The second step to securing financing is to write a high-level business plan. The plan should include strategies for ownership, business management, capital and decision-making.

“You need to think things through so two years down the road you’re not disappointing your bank, your family and your investors,” he says. Opening a business is not for the faint of heart. “Nobody goes into business to lose money ... but there’s a high percentage of startups that don’t make it. I think one of the biggest success factors is tenacity and the ability to not quit.”

Unless the business owner has the ability to finance the new venture 100 percent, the third step is to investigate different avenues for funding. According to Faulkner, each option should be evaluated based on three things: the cost of the financing, the flexibility and what’s going to be the best fit at the time.

Here’s a breakdown of the most common forms of financing:

### **Borrowing from family and friends**

This method can offer flexible repayment terms. For example, grandma lends you \$50,000 at 3 percent interest and tells you to pay her back when you can. However, relationships can be strained if things don’t pan out like expected.

“Draw up a standard agreement so there’s no disappointment on either side,” Faulkner says.

### **Borrowing from an investor group**

This may be the best option for startups willing to sell a portion of their company in exchange for capital.

### **Microloans**

These are available through business advancement organizations, municipalities and states. Eligibility guidelines vary, but microloans can often be paired with other funding sources.



“Make sure you talk to other people in the industry. It pays to reach out to guys who have been there, done that.”  
*Aaron Faulkner*

▲ Aaron Faulkner is the senior vice president at Bank First in Green Bay, Wisconsin. Faulkner has a background in business banking.



“Nobody goes into business to lose money ... but there's a high percentage of startups that don't make it. I think one of biggest success factors is tenacity and the ability to not quit.”

**Aaron Faulkner**

### Internet lending and GoFundMe

These type of accounts are becoming more accepted forms of financing, but it's important to know the terms and conditions before signing up. “Just like any lending, know what your fees are,” Faulkner says. “Understand what your cost of capital is, what your interest rate is and how long it's locked in for.”

While the internet may be good for the lending, entrepreneurs might find value in forming a relationship with a local lender.

“A local relationship can provide some different insight into your business as you get going,” Faulkner says.

### A home equity line of credit

This enables owners to fund their business venture through the equity in their home. Companies can draw against the line of credit if they're running short and can pay it down as cash comes in. A business line of credit operates in much the same way.

“Funds are available to you as you need them, versus having a set term loan,” Faulkner says. “If we loan you \$10,000, once it's gone, it's gone.”

### Credit cards

Credit cards are the most unstable and expensive way to finance a startup. Credit card payments are typically higher than payments for a line of credit. In addition, high balances on credit cards can negatively impact a business owner's credit score.


“You want to be real protective of your credit,” Faulkner says. “Financing your business on your personal credit cards is going to stretch you personally, increase your payments and potentially impact your credit score, which is not the ideal situation when you're starting your new venture.”

### Commercial lending

Commercial lending is a standard method of financing a startup, and Faulkner recommends asking a potential lender a series of questions: What is your focus? Do you work with plumbers? How do you support small business?

What financing options are available? Are you a preferred lender with the Small Business Administration? Do you have experience with SBA loans?

“Whoever you're going to be banking with, make sure you're comfortable sitting down with them and having a conversation,” Faulkner says. “Be sure they're explaining things in a way that makes sense to you.”

Business owners can finance their startup with a combination of finance types, contributing some of their own money while keeping some money in their pockets. “A good, seasoned banker can direct you to some options,” Faulkner says. 

### Editor's Note

*This is a series of business stories focused on helping plumbers start their own company. Throughout the year, we'll offer different tips geared toward those looking at starting their own operation. If you have any suggestions, email us at [editor@plumbermag.com](mailto:editor@plumbermag.com).*

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# Five Steps for Better Routine Equipment Maintenance

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

**I**n the daily management of construction equipment and job site priorities, busy contractors risk having preventive maintenance of vehicles and equipment fall by the wayside. To reduce those risks, contractors are encouraged to establish a preventive 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 important,

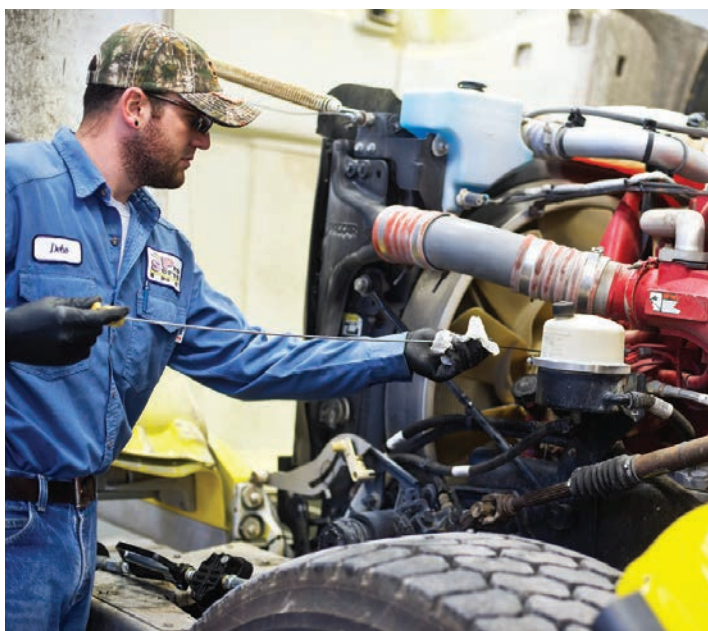
properly functioning equipment will protect your crew, according to Leighann Follis, marketing specialist at Geneva Equipment of La Salle, Illinois.

"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:

## 1. Create and follow a preventive maintenance program

By creating a preventive maintenance program for your support vehicles and having all employees adhere to it, performing maintenance quickly becomes second



“Vehicles in good operating condition also reduce the likelihood of operator injuries due to faulty equipment.”

*Leighann Follis*

▶ Pro Serve's Daniel Vicknair performs maintenance on a truck in the company's fleet in Prairieville, Louisiana. As a vital part of machine operation, fluids should be checked and sampled regularly as part of a scheduled preventive maintenance program. (Photography by John Ballance)



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 the importance of a five-point 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 front-end maintenance, transmission flushes and 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. Pay 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 preventive 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 record-keeping can add value at resale and is key to maintaining and extending the life of your vehicles and equipment. 

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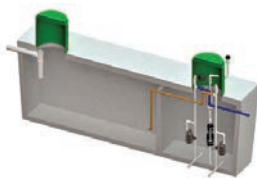
# Septic and Sewer Systems

By Craig Mandli

## Advanced Treatment Units

### Anua PuraSys sequencing batch reactor

The **Anua PuraSys** sequencing batch reactor ships in a boxed kit that can be installed in hours in any standard septic tank, requiring no additional space. The kit includes a control panel, floats, pre-drilled siphon pipe, PVC pipe stands, siphon/sludge pump, aerator and a drainfield pump. It can be used for new construction or be retrofitted into existing tanks to renovate biologically failed trenches or sand mounds. It uses a batch process where the treatment steps are done in a timed, sequential manner. The process is energy-efficient since treatment occurs as needed, using intermittent aeration, mixing and settling. It is certified to NSF/ANSI 40 Class I and to NSF/ANSI 245 (nitrogen reduction). Residential and commercial configurations are available. 336-547-9338; [www.anuainternational.com](http://www.anuainternational.com).



### BioMicrobics MicroFAST

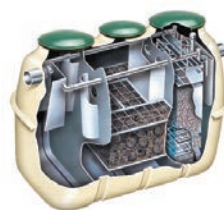
**MicroFAST** wastewater treatment systems or **MicroFITT-ee** (energy-efficient version) systems from **BioMicrobics** are integrated into a standard septic tank. With the SFR feature, alternate modes include intermittent operation of the blower to reduce electricity usage up to 45 percent and recirculation of nitrified wastewater to the primary settling chamber for added denitrification. Biosolids treatment and sludge digestion are designed to reduce treatment cost and maintenance. Available in 500- to more than 9,000-gpd configurations, technology scales up for larger residential and commercial flows. A stable treatment process with fully submerged, fixed-film media and the effectiveness of activated sludge treatment help in certain difficult applications and where infrastructure may not be available, according to the maker. The effluent meets secondary quality requirements and can be distributed to a



soil treatment system or water reuse applications. Larger **MyFAST** and **MacroFITT** configurations can offer up to 2 million-gpd flow. 913-422-0707; [www.biomicrobics.com](http://www.biomicrobics.com).

### Clarus Environmental Fusion

**Clarus Environmental's Fusion** treatment systems are drop-in wastewater treatment units designed for decentralized applications where effluent quality must meet or exceed secondary treatment standards. They are designed for residential, commercial and small community applications and are available in 450- to 4,000-gpd treatment capacities. All models up to 800 gpd are NSF/ANSI Standard 40 certified to produce effluent quality of 9 mg/L CBOD<sub>5</sub> and 9 mg/L TSS. The design enables installation without a pretreatment tank, making it suitable for sites with limited space. Effluent disposal options include conventional trenches, dosed systems, drip irrigation or disinfection with direct discharge. 800-928-7867; [www.clarusenvironmental.com](http://www.clarusenvironmental.com).



### Norweco Singulair R3

The **Singulair R3** water reuse system from **Norweco** reduces water consumption, reuses treated effluent and recycles water to conserve and recharge water resources. It provides a solution to chronic water shortages and reduces energy costs associated with water and wastewater treatment. The system quietly, efficiently and automatically treats all incoming wastewater to the highest level for restricted indoor and unrestricted outdoor use. It exceeds the effluent requirements of NSF/ANSI Standards 40, 245 and 350, and qualifies for Green Building credits under both the LEED rating system and the NAHB ICC 700 National Green Building Standard. By using the R3 system and following local building code, a homeowner can expect to dramatically reduce water usage. 800-667-9326; [www.norweco.com](http://www.norweco.com).





## Drainfield Media/Components

### Eljen GSF

The GSF, or Geotextile Sand Filter, advanced wastewater treatment and dispersal system from **Eljen** is designed to provide treatment and dispersal in the same footprint while keeping installations easy and maintenance minimal. Utilizing a two-stage pretreatment process, the geotextile modules apply filtered septic tank effluent to the soil, increasing the soil's ability to accept the effluent and increase the long-term acceptance rate. Its design provides increased surface area for biological treatment that greatly exceeds the module's absorption area. Open-air channels within the module support aerobic bacterial growth on the module's geotextile fabric interface, surpassing the surface area required for traditional absorption systems. The result is simple installations in a smaller soil absorption area, according to the maker. The system is tested and certified by NSF to NSF/ANSI Standard 40. **800-444-1359; www.eljen.com.**



### Jim Murray Mini Power Post

The **Mini Power Post** from **Jim Murray** can be used to make a professional and safe connection for power and float-switch wiring connections to an onsite septic system. It comes with a 30-inch post to install in the ground with the vented post cap, cable grips and junction box pre-

installed to the post, which eliminates a 4-by-4-inch wood post and the exposed wires. This alarm can be used for a variety of applications, including septic tanks, holding tanks, pump chambers and water tanks. It is available in 120- or 230-volt AC models and serves as a junction box for easy wire access connections of pump power, pump float switch and high-level alarm float switch, which is connected to the remote alarm panel. There are several float switch and accessory options. **800-234-5490; www.jimmurrayinc.com.**



According to the maker, it works in the first 24 hours after application. It can serve as part of a maintenance program. It works with all types of systems, is safe to handle and is environmentally friendly. **888-352-7226; www.arcan.com.**

### Bionetix International Eco-Sept

**Eco-Sept** pouches from **Bionetix International** contain pink, granular powder with a high concentration of beneficial bacteria (28 billion per pouch), enzymes, biological nutrients and stimulants designed to improve the microbial action of a septic system. When added to a septic tank, they reduce the frequency of pumping by degrading paper, grease, vegetable waste and other organic wastes quickly, according to the manufacturer. This helps keep sewer lines open, prevents drain blockage and backups, extends life of leachfield lines and reduces foul odors, the maker says. It is safe to use and will not damage pipes or fittings. It comes packaged in 1-ounce water-soluble pouches, 400 per pail. For 500- to 800-gallon tanks, the initial dose is one pouch per day for four days, followed by a one pouch per month maintenance dose. For tanks of 1,000 to 2,500 gallons, the initial dose is two pouches per day for four days with a maintenance dose of two pouches per month. **514-457-2914; www.bionetix-international.com.**



### Century Chemical Bio-Tab

**Bio-Tab** from **Century Chemical** is a tablet that sinks to the bottom of a septic tank where buildup problems begin. Its time-release technology is designed to gradually dissolve to create a growing area of activity at the bottom of the tank. There, self-reproducing bacteria and enzymes quickly grow as they digest and liquefy the organic waste. The tablet establishes itself by working from the inside out. Regular usage, combined with routine pumping, can help maintain a septic system in good working condition while also helping to keep the proper level of bacterial action established and reducing odors and gases, according to the maker. **800-348-3505; www.bio-tab.com.**



## Drainfield/Septic Treatment

### Arcan Enterprises Septic-Scrub

**Septic-Scrub** chemical additive from **Arcan Enterprises** is designed to help remove sludge that builds up and sticks to the stone in a drainfield, pit or sand mound to rejuvenate the drainfield.



## Excavation Equipment

### Ramvac by Sewer Equipment AX-4000

The AX-4000 air excavator from **Ramvac by Sewer Equipment** offers a simple, single-engine design with 12-volt electrical controls and manual hand valves for ease of use while also providing operators the ability to excavate with both air and water effectively using only one truck. This series offers payload capacities from 5,000 to 12,000 pounds while the hydraulic rear door allows operators to dump spoils quickly and easily. It allows you to customize your blower to achieve the results you need in any applications, with capacities of 18 or 27 inches Hg, 1,400 or 3,000 cfm, and hose diameter of 4 or 6 inches. All water systems are contained within a single heated enclosure for cold-weather applications while also offering a large amount of standard tool storage. 888-477-7638; [www.ram-vac.com](http://www.ram-vac.com).



components, pumping more water per horsepower and improving efficiency. Utilizing TIG progressive welding, the metal materials are mixed during the process, creating a stronger bond for durability in harsh environments. 260-824-2900; [www.franklinwater.com](http://www.franklinwater.com).

### HCP Pumps of America GF Series grinder pumps

GF Series grinder pumps from **HCP Pumps of America** come in a 1.25- and 2-inch discharge and ranges from 1 to 10 hp. Their radial cutters have four blades instead of two. The internal capacitor motor design provides five times higher torque than average capacitor-starting motors, and all single-phase grinder models are equipped with centrifugal switches. Standard accessories include an epoxy resin-sealed and water-resistant cable base, auto-cut thermal motor protector and triple seal design. 251-943-8080; [www.hcppumpsamerica.com](http://www.hcppumpsamerica.com).



## Pumps

### Ashland Pump SWS50V1-10

The SWS50V1-10 sewage pump from **Ashland Pump** is constructed of heavy-duty cast iron and is designed with a vortex thermoplastic impeller. The impeller is built to pass 2-inch spherical solids. The pump is equipped with a vertical integrated float switch. The oil-filled, continuous-duty PSC motor is thermally protected, and the cast iron has suitable heat dissipation. The pump can reach 136 gpm and has a maximum lift of 22 feet. 855-281-6830; [www.ashlandpump.com](http://www.ashlandpump.com).



### Polylok PL-CPE5A

The PL-CPE5A from **Polylok** is a submersible 1/2 hp, 115-volt, single-phase effluent pump with a 2-inch NPT vertical discharge. It has a maximum head of 48 feet and a maximum flow of 64 gpm. It is designed with a 3,450 rpm, oil-filled permanent split-capacitor motor and has an amp rating of 8.5 for 115 volts, cast iron housing, and volute equipped with a cast iron vortex impeller that passes 3/4-inch-diameter solids. The stainless steel shaft is supported by two single-row, oil-lubricated ball bearings. The shaft seal is an inboard design with a secondary exclusion V seal. Construction materials are carbon for the rotating face and ceramic for the stationary face. All elastomers are Buna-N, and the hardware is 300 Series stainless steel. It has a 20-foot UL/CSA-listed power cable that's suitable for submersible service and fitted with a three-prong plug. It is supplied with an integrated clip on its piggyback mechanical float switch for automatic operation. 877-765-9565; [www.polylok.com](http://www.polylok.com).



### Franklin Electric SSI Series

SSI Series submersible pumps from **Franklin Electric** are designed to be a cost-effective, high-flow option available in 6-, 8- and 10-inch models with flows from 85 to 1,300 gpm at a maximum 1,250 feet of head. The stamped stainless steel pumps are fully serviceable and corrosion-resistant. I-Blade technology is designed to improve the structural integrity of the pump's internal





## Septic Tanks & Components

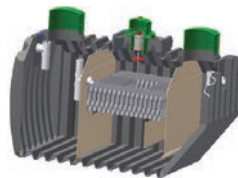
### Infiltrator Water Technologies IM-Series Tanks

Injection-molded IM-Series Tanks from Infiltrator Water Technologies are available in multiple sizes including the IM-540 pump tank, IM-1060 and large-capacity IM-1530 septic tank. Lightweight, strong and watertight, the tanks enable shallow, multiple and serial tank installation options in septic and pump applications. All have integral heavy-duty lids that interconnect with the watertight click-and-lock EZsnap riser. The tanks also have structurally reinforced access ports, reinforced structural ribbing and fiberglass support posts to provide additional strength. The two-piece tank design nests for efficient shipping, and inboard lifting lugs make delivery and handling easy. The tanks frequently house Advanced Wastewater treatment systems such as the ECOPOD fixed-film bioreactor system or the ECO-FILTER pump vault tank filtration system. **800-221-4436; www.infiltratorwater.com.**




### Jet Inc. J-500-800PLT

The J-500-800PLT plastic tank from Jet Inc. offers a lightweight alternative to concrete J-1500 Series BAT Media Plants. The tanks offer variable treatment capacity from 500 to 800 gpd. They are rotational molded out of lightweight polyethylene to offer a seamless tank with maximum strength and durability. They are easy to transport and install in difficult site conditions. **800-321-6960; www.jetincorp.com.**



### Premier Tech Aqua Ecoflo Biofilter

The Ecoflo Biofilter from Premier Tech Aqua is offered as a nitrogen-removal unit using a new add-on kit. Integrating a pressurized flow divider to recirculate a fraction of the water back to the primary tank, all records and management of the dosing pump's cycles are monitored by a simplex control panel. It is available in ready-to-use rotomolded units or concrete units integrated into existing tanks made by local precasters. The 40 percent increased hydraulic load of the coco media has also allowed the development of the Ecoflo PACK, an all-in-one treatment system integrating the biofilter and primary tank delivered to sites in a single monobloc configuration, reducing wait and installation time. **604-346-8199; www.premiertechaqua.com.** 

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# Septic and Sewer Systems

*By Craig Mandli*

## Unit provides solution for convenience store chain



**Problem:** A mid-Atlantic convenience store chain had drainfield failure at close to all of its stores being served by onsite systems. Since initial permitting, they went from a traditional grab-and-go that offered handmade sandwiches to a full food service menu, introduced a line of 12 coffee decanters (that must be dumped every 4 hours), baking in-store bread, making smoothies, soft serve ice cream, milkshakes, all while disposing of substantially more disposable wipes, installing low-flow fixtures and moving from chlorine to quaternary ammonium for disinfection. The client was unwilling to change standard operating practices for stores with onsite systems, so the client needed systems to meet the needs.

**Solution:** Hoot Systems collaborated with the maintenance providers and engineers on developing modifications to dosing times of the equalization tank, automating the aeration system to vary carbon dioxide delivery based on wastewater strength and calibrating cycle times to ensure proper retention intervals in each stage of the treatment process. In addition, they stabilized alkalinity using pH boosters, added specific chemicals to the neutralize disinfectants and used carbon for the completion of the nitrogen-reduction cycle.


**Result:** With the redesign and operational modifications, Hoot Systems and the collaboration team brought these decentralized wastewater systems into compliance without changing the owner's day-to-day standard operating procedures. 888-878-4668; [www.hootsystems.com](http://www.hootsystems.com).

## Passive treatment unit used to replace failed system



**Problem:** A failed sand filter overboard discharge system on a shoreline needed to be replaced in Southport, Maine.

**Solution:** With the suggestion of the installer, the site evaluator decided on placing EnviroFin onsite treatment system from Presby Environmental Inc. (PEI) in the same location as the previous sand filter system, as the sand was of the quality needed for the EnviroFin system. The treatment system is 100 percent passive and treats the effluent better than NSF Standard 40 standards. The installation includes two EnviroFin units at 270 gpd.

**Result:** The customer has the benefits of a treatment system without the large expense, maintenance contracts or electricity. 800-473-5298; [www.presbyeco.com](http://www.presbyeco.com). 



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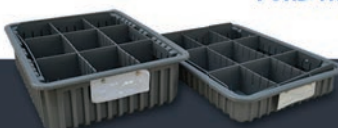
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## Product Spotlight

### New jaws and rings increase versatility of press tool

By Craig Mandli

**W**hile the sheer number of raw materials that make up plumbing systems continues to increase, the room plumbers need to store and haul tools hasn't. That's why it's important that the tools they do bring to the job are lightweight and versatile. With that in mind, Milwaukee Tool has increased the versatility of its FORCE LOGIC line of press solutions. The 2 1/2- to 4-inch IPS XL Ring Kit fits directly in the M18 FORCE LOGIC Long Throw Press Tools and gives it the ability to press Viega MegaPress XL Fittings without the use of tool extensions while vastly expanding the range of applications the tool can accomplish.

"This tool can tackle the broadest range of materials and pipe sizes," says Alex Boll, senior product manager for Milwaukee Tool. "With the addition of these jaws, mechanical contractors can now make controlled, flameless connections on 2 1/2- to 4-inch Schedule 10 to Schedule 40 black iron pipe with the very same tool they use for pressing copper, PEX and stainless steel."

The tool's adjustable stroke length delivers optimized cycle time with minimal impact on its overall weight. In addition, its in-line design and 180-degree rotating head offers unrivaled access in tight spaces and for navigating around installed pipes.



The M18 FORCE LOGIC Long Throw Press Tool delivers a long calibration interval at 50,000 cycles and offers peace of mind, even on the most critical jobs. A pre-press battery check prevents the user from starting a press the tool cannot complete, while Auto-Cycle ensures a full press every time and indicates to

the user via a green light that the connection is complete. The fittings available in the industry are approved for use in hydronic heating, compressed air, fire protection and cooling water applications, among others. According to Boll, users who have tried the solution are impressed.

"The feedback has been overwhelmingly positive," he says. "Contractors know that our press solutions have increased productivity during their current day-to-day applications and are very excited about having a solution that now gives them the ability to press up to 4-inch steel."

Powered by Milwaukee REDLITHIUM batteries, the M18 FORCE LOGIC Long Throw Press Tool is fully compatible with all jaws and rings compatible with the M18 FORCE LOGIC Press Tool, as well as the entire M18 line, now offering more than 180 power tool products. 800-729-3878; [www.milwaukeetool.com](http://www.milwaukeetool.com).

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### Eppco Enterprises TigerGrip nitrile gloves

TigerGrip orange nitrile gloves from Eppco Enterprises have a raised, textured surface for superior

grip and has an 8 mill thickness. The gloves are powder- and latex-free and come in a high-visibility orange color that is easily seen in dark engine compartments. They come in sizes small through large with 100 count per box and extra and extra-extra large in 90 count per box. Also available in large 50-count and extra-large 45-count boxes. **216-382-8300; [www.eppco.net](http://www.eppco.net).**

### HammerHead Trenchless QuickLok inversion drums

HammerHead Trenchless' QuickLok inversion drums have two drum sizes capable of holding up to 125 feet and 225 feet of 4-inch liner, respectively, and have a single-lever lockdown that gives a positive seal and secure latch. Other features include extra viewing ports and a detachable spindle wheel that makes it easier to navigate tight areas. Once in place, the wheel may be reattached to either side of the drum, accommodating workspace limitations or the preference of the operator. **800-331-6653; [www.hammerheadtrenchless.com](http://www.hammerheadtrenchless.com).**



### Watts Water Technologies TD-300 elevator channel drains

Watts Water Technologies'

TD-300 elevator channel drains are specifically designed for areas near an elevator to quickly evacuate water and protect firefighters and evacuees. The stainless steel channel drain keeps water from draining through the elevator shaft while firefighters are extinguishing a fire and evacuating the building, and it can quickly evacuate 100 gpm of water. The TD-300 meets California and San Francisco fire codes, as well as multiple state, county and metropolitan regulations for drainage safety. The drains are available in 36-, 42-, 48-, 60- and 96-inch sizes, and custom lengths are also available. **978-688-1811; [www.watts.com](http://www.watts.com).**



### Webstone, a brand of NIBCO, differential pressure bypass valves

The differential pressure bypass valves from Webstone, a brand of NIBCO, maintain system performance and efficiency in zoned systems with fixed-speed pumps. Available in sizes 3/4- and 1-inch with press, FIP, MIP or SWT connections, they are also compatible with optional G1 union accessories to customize installation. **800-255-9529; [www.webstonevalves.com](http://www.webstonevalves.com).**



### Weil-McLain Aqua Pro indirect-fired water heaters

The Aqua Pro indirect-fired water heaters from Weil-McLain feature a nonmetallic, corrosion-resistant design that delivers superior first hour ratings and recovery. The Aqua Pro units are available in four sizes — 30, 55, 80 or 119 gallons — making them flexible for a broad range of applications. The unit's lightweight, non-metallic tank allows for easy maneuverability and installation in basements, storage rooms or other tight spaces. The units also feature a removable copper-finned high-output coil, a durable brass drain valve and 2-inch foam insulation that minimizes any standby heat loss. The unit is designed without welds for a seamless tank construction. **855-248-1777; [www.weil-mclain.com](http://www.weil-mclain.com).**



### Rinnai America I-Series residential boiler

The I-Series boiler from Rinnai America is designed for the residential market. The boiler has the ability for simultaneous usage of home heating and domestic hot-water production. The technology also includes an innovative bypass servo valve, which enables precise control of the hot-water temperature. The I-Series is available in both combi and heat-only models and comes standard with multizone heating control. **800-621-9419; [www.rinnai.us](http://www.rinnai.us).**





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## Caleffi North America 520 Series AngleMix thermostatic mixing valve

The 520 Series AngleMix thermostatic mixing valve from Caleffi North America delivers accurately tempered domestic hot water from an exclusive angle-style body. The valve mounts on top of water heaters and minimizes the use of elbow fittings to reduce cost and save installation time and space. AngleMix features tight close-off inlets to increase accuracy performance and eliminate temperature creep. The valve is ICC-ES certified to ASSE 1017, CSA and NSF 372. It meets the requirements of IPC, IRC, UPC and NPC for use in accordance with the U.S. and Canadian plumbing codes. AngleMix is available for 3/4-inch pipe sizes in press or sweat union connection styles with temperature gauge or body-only for the flexibility of separately ordered end connections. 414-238-2360; [www.caleffi.com](http://www.caleffi.com).



## Aquam Pipe Diagnostics Investigator Mini detection system

The Investigator Mini pressurized pipe inspection and leak detection system from Aquam Pipe Diagnostics is designed for 2- to 6-inch-diameter pipework. The system is mounted onto pipework through a selection of fittings and/or hot tapings. Real-time data monitoring is captured by the high-definition camera and hydrophone sensor head to understand internal pipework conditions and identify leaks. A 100-foot cable is supplied with the system, which can offer a maximum inspection distance of 200 feet upstream and downstream off the insertion point. The software displays video in a resizable window and also acoustic data in order of amplitude and frequency. 858-242-1640; [www.aquamcorp.com](http://www.aquamcorp.com).

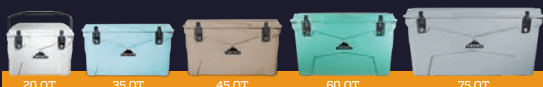


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## Caleffi North America appoints new controller, sales manager

Theresa Weyker was named as Caleffi North America's new controller. She will be responsible for leading and managing all aspects of the company's financial and benefit activities. Weyker most recently served at Vesta, in Franklin, Wisconsin, as controller. She earned her MBA from Keller Graduate School in Milwaukee.

Also, Caleffi North America announced the hiring of Ben Freeman to the position of regional sales manager for the Southern U.S. In this new position, Freeman is responsible for growing Caleffi North America's sales in the south by working with manufacturer representatives, designers, contractors and wholesalers.



Theresa Weyker



Ben Freeman


## Allan J. Coleman launches new website featuring online store

Allan J. Coleman announced the launch of a revamped website and online store for their RIDGID product line. The responsive design allows for shopping on desktop, mobile and tablet devices. Searches can be done by tool application, category and price. An account can be created for faster checkout, the ability to save multiple shipping addresses, tracking orders and creating a wish list of future purchases. The site and online store will soon feature monthly specials as well as tool kits exclusive to Allan J. Coleman. The new online store is at [www.allanjcoleman.com](http://www.allanjcoleman.com).

## Scott Bardreau joins Midland Metal's management team

Midland Metal announced Scott Bardreau joined the company as chief sales officer for its growing platform of companies, which includes Anderson Metals and Buchanan Rubber. Bardreau has over 35 years' industry experience across plumbing and heating, industrial, waterworks and irrigation verticals. He spent the last 12 years with Matco-Norca in the role of vice president of sales and marketing. Prior to Matco-Norca, he served in various management roles at Watts Water Technologies, in both wholesale and retail channels.

## SJE moves in to new Florida location

SJE moved its Florida office to a new building in St. Petersburg. The new building is over 80 percent larger, providing space for growth. The new facility has 17,500 square feet, bringing the production space up to over 10,000 square feet. Other benefits of the new building include a one-level layout, better employee common areas and a conference room. The new building address is 10040 18th St. N., Suite Number 1, in St. Petersburg, and it is about a 6-mile drive southeast from the old location. 

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**June 9-12**

**Safety 2019 Professional Development Conference & Exposition,** Ernest N. Morial Convention Center, New Orleans. Visit [www.safety.assp.org](http://www.safety.assp.org)

**Sept. 11-13**

**World Plumbing Conference,** Melbourne Convention Centre, South Wharf, Australia. Visit [www.worldplumbingconference.com](http://www.worldplumbingconference.com)

**Oct. 2-4**

**Plumbing Heating Cooling Contractors Connect 2019,** The Westin Indianapolis, Indianapolis. Visit [www.phccweb.org](http://www.phccweb.org)

**Oct. 16-18**

**Service World Expo, Paris Las Vegas Hotel & Casino,** Las Vegas. Visit [www.serviceworldexpo.com](http://www.serviceworldexpo.com)

**Oct. 24-27**

**American Society of Plumbing Engineers (ASPE) Technical Symposium,** Wyndham Grand Pittsburgh Downtown, Pittsburgh. Visit [www.aspe.org](http://www.aspe.org)

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## WHAT IS YOUR PRIMARY SERVICE?

- ☐ Plumbing/Heating/Cooling ☐ Rehabilitation/Relining/Bursting  
☐ Sewer/Drain Cleaning ☐ Dealer/Distributor/Manufacturer  
☐ Septic System Installation/Repair ☐ Consulting/Engineering  
☐ Other \_\_\_\_\_

## WHAT BEST DESCRIBES YOUR PRIMARY JOB FUNCTION?

- ☐ President/CEO/Owner ☐ Management/Supervisor  
☐ Operator/Technician ☐ Other \_\_\_\_\_

## HOW MANY EMPLOYEES DO YOU SUPERVISE OR WORK WITH AT YOUR FACILITY?

- ☐ 1-3 ☐ 4-9 ☐ 10-19 ☐ 20+

## HOW MANY VEHICLES DO YOU CURRENTLY HAVE IN SERVICE?

- ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21+

## WHAT IS THE APPROXIMATE POPULATION OF THE AREA IN WHICH YOU PROVIDE SERVICE?

- ☐ 1-10,000 ☐ 10,001-50,000 ☐ 50,001-100,000  
☐ 100,001-200,000 ☐ 200,001-500,000 ☐ 500,001+

## WHAT IS YOUR ANNUAL EQUIPMENT BUDGET?

- ☐ \$1-\$50K ☐ \$51K-\$75K ☐ \$76K-\$150K ☐ \$151K-\$250K  
☐ \$251K-\$350K ☐ \$350K +

## WHAT SERVICES DO YOU PERFORM ON A REGULAR BASIS?

- ☐ Plumbing Maintenance/Repair ☐ Sewer/Drain Cleaning  
☐ New Construction - Commercial ☐ Pipe Bursting  
☐ New Construction - Residential ☐ HVAC ☐ TV Inspection  
☐ Location/Leak Detection ☐ Septic System Installation  
☐ Septic Tank Pumping ☐ Other \_\_\_\_\_



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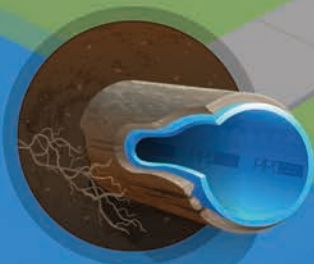




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