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### MCAA's Virtual Trade Show

MCAA's Virtual Trade Show, where our contractor members connect with the members of MCAA's Manufacturer/Supplier Council, because who doesn't need the best strategic supply chain to enhance productivity and profitability?



Learn more and experience the Virtual Trade Show for yourself today!

Don't forget to check out the "What's New" section where we have highlighted the newest additions to the show.

### MCAA What's Inside SMART olutions

Smart Solutions showcases new technologies and promotes cost-saving and productivity-enhancing applications available from members of MCAA's Manufacturer/Supplier Council. Smart Solutions is published biannually for contractor members of MCAA and its subsidiaries.

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**Mechanical Contractors Association** of America

1385 Piccard Drive Rockville, MD 20850-4340 301-869-5800 Fax 301-990-9690 www.mcaa.org

**Adrienne Breedlove** Director, Content abreedlove@mcaa.org

Jan Grillo Director, Membership Engagement jgrillo@mcaa.org

**Lesley Ravas** Director, Manufacturer/Suppliers & Association Executives lravas@mcaa.org

**Alex Newcomb** 

Communications Coordinator, Layout &

**Dana Trevas** Editor

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**NEW – MCAA Peer Groups** 



Retaining Your Competitive Edge with New ESG Resources



MCAA's Newest Online Course — Foundations of Field Leadership



MCAA & BuildOps Announce Partnership to Elevate Safety in **Mechanical Contracting** 



# ClutchPartners



Parthiv Amin Chair, MCAA Manufacturer/Supplier Council Executive Committee

Every issue of Smart Solutions showcases real-world examples of how contractor members and supplier partners collaborate to address complex challenges and sensitive situations. For example, Power and Combustion, Inc. partnered successfully with Victaulic on an HVAC overhaul in a courthouse that had to remain fully operational throughout construction. North Mechanical chose Morris Group International<sup>®</sup> brands to help a manufacturer accelerate production of glass vials critical for vaccines and other medicines. A coal-burning power plant used Apollo<sup>®</sup> Valves from Aalberts integrated piping systems to install new technology required for complying with the Clean Air Act. John W. Danforth Company relied on Zurn's efficient approach to packaging and delivery to help a new hospital open on time and on budget.

Contractors are reaping the benefits of investing in new products. Alexander Mechanical, Inc. immediately increased efficiency and decreased material costs with their first Watts pipe cutting machine, so they bought a second and realized even more gains. Kleeberg adopted Novarc Technologies' Spool Welding Robot, and its workers used the cobot to dramatically increase welding speed and save time. Pan Pacific found MILWAUKEE TOOL's new battery-powered wet/dry vacuums were safer, more versatile, and more durable than corded vacuums.

After making the transition from paper recordkeeping to BuildOps software, Jackson Mechanical increased revenue by 30 percent. Hurst Mechanical credits ServiceTrade software with increasing efficiencies and contributing to 25-percent growth in a single year. J.M. Brennan used Stratus to improve efficiency on the shop floor, and the investment paid for itself in about two months. DILFO counts on Trimble's ProjectSight project management software to improve communication, manage risk, and save time on every project. In a high-profile partnership, Ferguson has transformed its business model and streamlined workflows by using FARO technology, while FARO is expanding its reach in the industries that Ferguson supports.

MCAA's supplier partners are a great resource for information. See Sloan's advice on leveraging environmental, social, and governance, or ESG, principles to expand business and be more competitive. OpenSpace

explains how UMC uses 360° reality capture to improve coordination and workflow, and how you can, too. Ridge Tool Company describes how to select the best press tool for your needs. T&S Brass sheds light on how to balance aesthetics and functionality in commercial restroom projects with products that can streamline installation. A.O. Smith launched the Adapt<sup>™</sup> Premium Condensing Gas Tankless Water Heater, which promises unparalleled installation flexibility in the field. Going a step further, NIBCO is partnering with Chicago Pipefitter's Local 597 Union to elevate training programs that prepare the workforce of the future. As you read this issue, consider how MCAA and its partners can be your reliable sources in clutch situations.

### Parthiv Amin

Chair, MCAA Manufacturer/Supplier Council Executive Committee

# SOFTWARE LINKS OFFICE AND FIELD with Trimble & DILFO

With construction challenges increasing and timelines decreasing, DILFO turned to Trimble's ProjectSight project management software to improve communication, manage risk, and save time on every project. Based in Ottawa, DILFO is one of Eastern Ontario's largest mechanical contracting, HVAC services, and plumbing and heating contractors. The second-generation, family-owned business was founded in 1980 and employs more than 200 construction and service professionals. ProjectSight helped them streamline their document control and enhance team collaboration.

#### **Connecting the Office and Field**

Director of Operations Brendan Myers oversees day-to-day work, including DILFO's sheet metal and plumbing fabrication as well as field and service operations. Like many construction professionals, Myers believes, "It's harder to build these days. Project managers need information in a way that isn't cumbersome so they can focus on their tasks. It's also getting harder and harder for our foremen to do their job. There's more safety requirements, more paperwork, and the schedules are getting shorter."



DILFO's previous solution was working well in the field, but they needed a more holistic approach that could tie the office and field together as one with the documentation to run a project successfully. After a thorough review, Myers chose Trimble's ProjectSight because it was "the one that was best geared for what we needed," said Myers. "Document control is top-notch, revisions are an automatic process, and there is no concern about human error."

### Managing Risk With Confidence

One of the most important ways ProjectSight has helped DILFO is risk management. The software makes it easier for Myers and others at the company to know they are meeting contractual obligations on a project—and to help

DILFO used ProjectSight to improve their prefabrication processes, which helped them complete a mechanical room installation under tight time constraints. them prove it later if necessary. "We're mitigating risk by tracking everything," he said. "When an issue happens onsite and impacts or delays our work, we can very quickly capture that and bring it up to everybody. The foreman can send it to the project manager or superintendent, and they can decide whether they want to take action or not."

That level of tracking and communication helps keep projects moving forward and gives DILFO peace of mind long afterward. "We're validating that we're meeting contractual obligations. We've done the work, it's been approved, and the general contractor has signed off on it," Myers noted.

#### Working Faster and Better

ProjectSight not only helps protect the company, it also enables employees to do their work faster and better. Everyone knows what information they need to capture and where to store and retrieve it. Myers recalled that before ProjectSight, teams were organizing files differently and there was little standardization. "[Files] were either in a folder somewhere or in email," he said. "I saw the need for standardization across the company to improve document control and alleviate some of the inefficiencies that can happen with revisions and lots of documents and emails."

Having a centralized location for documentation means team members know where all the checklists, drawings, and pictures are, and that makes life a lot easier in the office and in the field. Myers elaborated, "Having a spot with all of the history, where you can understand what has happened and write comments, is great. Otherwise, if something happens and I can't get access to someone's email, I'm completely out of the loop."

#### **Promoting Collaboration**

Many contractors are good at getting data to the field, but it can be more challenging to get data from the field to the office. With ProjectSight as the central location, the office can see what has been done in the field to track completion. Foremen are seeing that the work they are putting in is making a difference as well, giving them increased peace of mind and job satisfaction.

Myers said ProjectSight has saved DILFO time on every project. "It's quick and accurate. We are capturing our work onsite each day, and superintendents don't have to go to the site to see where it's at. They can focus on other things in the office," he observed.

Beyond tracking progress, perhaps most important is the sense of teamwork and ownership ProjectSight has helped foster between the office and the field. "Foremen now can see the status of a submittal or request for information. They know whether a decision has been made or not, if so what it is, and things don't get forgotten or fall through the cracks."

#### **Supporting Service Teams**

Not only has ProjectSight helped DILFO's construction operations run more efficiently, it has enabled the company to get the most from its service business. With standardization and stronger document control, DILFO's service division now can quickly access as-built documentation from the construction phase. "Our business model is built around servicing what we construct," Myers said. "If we don't have a clear understanding of what was constructed, there's very little advantage for our service team, because we're going in blind. By having a solution like ProjectSight, where everything is organized the same way every time and laid out very cleanly, there's no confusion."



ProjectSight has helped DILFO foster a sense of teamwork and ownership between the office and the field, so important information does not fall through the cracks.

### **Looking Ahead**

Myers sees a bright future for DILFO with ProjectSight, because the software is backed by a strong company that is continually updating and improving the product. "I've always been impressed with our relationship with Trimble. There's really good communication there, and they always listen to our questions and feedback," he said. "ProjectSight is not a software that was bought and sitting on a shelf; it's constantly changing and improving."

Myers continued, "For what we get versus the other platforms out there, it's priced right, the support is fantastic, I love all of the guides and videos, there's a lot of resources there, so I'm happy with it. I am excited about the future with ProjectSight and Trimble. I've bought into the ecosystem, and we want to continue to grow with Trimble and take advantage of all the solutions Trimble has that are going to help us be a successful contractor. I think we're both moving in the right direction, and I'm excited to see where this takes us."

For more information, visit projectsight.trimble.com.



## Naking a Sustainable Business pansformation

By Paul Sambanis, Ph.D. Vice President of Sustainability, Sloan

For contracting companies looking to undergo a sustainable business transformation, making the sustainability shift can mean all the difference in future success. And environmental, social, and governance principles, often referred to as ESG, is a rapidly developing topic that you are likely hearing about now more than ever before.

In fact, among surveyed contractors, 52 percent said they're requested to provide ESG data in bid documents. Yet, 78 percent of those same contractors said they're only somewhat or not familiar at all with ESG, with 35 percent stating they've been asked by a potential customer to submit an ESG plan.

While ESG might seem intimidating and costly at first, it can provide huge benefits to an organization—and according to the survey, can mean the difference between business wins and losses.

ESG is a business strategy that can help contractors expand their business, foster employee loyalty, attract top talent, and enhance long-term sustainability. Some companies use terms like "corporate social responsibility" or "sustainability" to describe their responsible business priorities.

However a company defines ESG, it is pivotal in shaping the business's purpose, values, and day-to-day operations. Many companies have already implemented core concepts of ESG.

Undergoing this type of business transformation may be easier than you think. In fact, many companies may be surprised to find out that the activities they are already doing for cost savings, customer/legal compliance, or goodwill fall squarely into the ESG space.

This includes actions like measuring health and safety, implementing employee development programs, advising on environmental products and solutions, and ensuring the proper policies—such as an employee code of conduct—are in place.

Your business may not be documenting it as an ESG practice, but by taking stock of what your company does for people and the environment, it can be simpler than expected to align with core ESG principles and learn how to advance them even further.

#### Why ESG Matters

Manufacturers, distributors, contractors, and others across the supply chain are being asked by owners, developers, and government entities for ESG metrics like health and safety, carbon emissions, waste recycling, minority- and women-owned business enterprise participation, and more. This information may be used to ensure that they are satisfying legal requirements or meeting their ESG goals. This is no longer a niche request, and increasing regulation may lead to these metrics being required.

Within the bidding stage, sustainability initiatives can be viewed as a long-term cost-saving tactic for the end user, often resulting in reduced operational costs over the long term. For example, while an energy-efficient building lowers energy consumption, it is also the collective design, installation, maintenance, and operation of its mechanical system that help determine true efficiency.

In terms of hiring talented team members, employees increasingly prefer working for companies that prioritize sustainability, social responsibility, and ethical business practices. In a recent Deloitte survey, 69 percent of employees said they want their companies to invest in sustainability efforts, including reducing carbon, using renewable energy, and reducing waste. This sentiment was higher among surveyed employees between the ages of 18 and 34 years old, who showed a stronger interest in sustainability initiatives than respondents from older generations.

ESG is also important from a regulatory perspective. Governments around the world are moving toward mandating companies to share more information related to environmental and social sustainability.

This includes rules like California's Climate Corporate Data Accountability Act and new climate and human capital disclosure requirements from the U.S. Securities and Exchange Commission . These, along with other state and local regulations, may force large companies to report on or manage their ESG risks across their full value chain.



### Five Steps to Start the ESG Journey

When preparing to begin your business's path toward sustainability, the following five steps can serve as an effective guide.

- 1. Establish a foundation. First, conduct a thorough assessment of current business operations, including key ESG practices, risks, and opportunities. This information can be used to begin to inform a sustainability strategy. It will also be important to secure buy-in and support from leadership.
- 2. Conduct benchmarking and engage key stakeholders. Conduct benchmarking and a gap analysis to understand performance against your peers and others in the industry to understand how your business stands in terms of sustainability. Identify and engage with key stakeholders, including employees, customers, suppliers, and community members, to understand and validate where your business has the greatest risks and opportunities. For example, once you understand the sustainability goals of your customers and their customers, you can brainstorm ways to advise them to meet their goals, thus increasing the value you bring to the project.
- **3. Develop a strategic roadmap.** When starting a roadmap, it's important to establish ESG structure and policies. The

information gained from stakeholder interviews can be used to prioritize issues relevant to your business and develop a framework that aligns with your organizations values, industry standards, and stakeholder expectations.

ESG considerations can then be integrated into your business's overall strategy, ensuring that sustainability goals align with core business objectives. It's important to remember to develop both shortand long-term goals, targets, and key performance indicators to measure impact. When developing the roadmap, determine which new and emerging ESG-related regulations and reporting standards may be relevant to your company or its customers and plan to assure compliance and capitalize on opportunities.

- 4. Collect and share data. Begin by implementing systems and standard operating procedures for collecting relevant ESG data and monitoring current and future regulations. It's also important to work with legal advisors to decide where and how to disclose information and establish a transparent reporting process to communicate ESG performance to key stakeholders.
- 5. Train and communicate. A plan is only as good as how well the team knows it. That's why it's important to provide training to employees to raise awareness and educate on ESG principles. Businesses will want to develop internal and external communications strategies and commit to continuous improvement and adapt to changes in regulations, stakeholder expectations, and industry best practices.

Sloan has embarked on its own ESG journey, publishing its first-ever ESG report last year, as it put many of those sustainability initiatives into practice by becoming the first commercial restroom manufacturer to join the International WELL Building Institute's Works with WELL program, earning verification to The Water Council's WAVE program, and more.

For more information, visit www.sloan.com.



### Maximizing PROJECT COORDINATION featuring OpenSpace & UMC

With 360° reality capture from OpenSpace, UMC is harnessing real-time data and visualization to mitigate risk and optimize workflows. UMC recognizes that effective project coordination and adoption of innovative technologies are critical for success. Complete jobsite capture helps achieve unprecedented accuracy and efficiency in project planning and execution. Here are the most common uses of OpenSpace that help minimize errors and enhance collaboration across the full construction lifecycle.

- 1. Requests for information (RFIs): Successful coordination and issue resolution require clarity on RFIs. With photo documentation from OpenSpace, teams can easily pull up 360° captures to view the state of construction and make informed decisions on things like pricing and adjustments. Real-time visibility into a project's progress significantly reduces the risk of costly changes and saves time. Josh Wilson, project executive at UMC, said, "OpenSpace has quickly become one of our most valuable tools in the field for communication, documentation, and reporting."
- 2. Design intent vs. as-built: OpenSpace helps clarify complexities on the construction site. If concerns are raised about something on the jobsite, the team can simply overlay the model view on the site conditions captured. The team can then quickly identify discrepancies between the design and actual construction and address potential issues proactively, avoiding delays and rework down the line.
- **3. Ensuring quality control (QC):** Reality capture can also help subcontractors improve QC. Through side-by-side comparisons of models and site conditions



in OpenSpace, teams can ensure all necessary elements are in place as per the design specifications. As UMC's Wilson put it, "The OpenSpace image capture process and user interface makes it a breeze to compare real-world construction progress to the coordinated building information modeling (BIM) and quickly highlight potential quality assurance or QC discrepancies or identify areas in need of an RFI."

**4. Communication and collaboration:** By providing a centralized platform for sharing and reviewing site documentation, OpenSpace facilitates effective communication and collaboration among project stakeholders. Teams can quickly access relevant information and coordinate their efforts more efficiently. This streamlined communication workflow fosters a culture of collaboration and accountability, ultimately driving project success and quick adoption of OpenSpace across organizations.

> Wilson added, "The OpenSpace platform has also allowed our team to provide a more robust as-built deliverable to clients by allowing building owners and facility staff to virtually tour their space at any point during the construction process and hit the ground running on day one."

For more information, visit www. openspace.ai.



### Cleaning Up Coal Plant Emissions

### featuring Aalberts IPS - Apollo Valves

A coal-burning power plant in Gallatin, TN, chose Apollo® Valves from Aalberts integrated piping systems for a vital environmental upgrade. Apollo Valves products were selected for their reliability, durability, and precision—crucial characteristics in managing the slurry of limestone that neutralizes sulfur dioxide in flue gasses.

The project involved the installation of scrubber technology. Scrubbers are essential for cleaning gasses emitted from smokestacks. They play a pivotal role in reducing air pollution and curbing the formation of acid rain, which aligns with national efforts to meet stringent Clean Air Act regulations.

Specifically, the project used 11/2" through 4" 87A-90X-24, 300 class full port stain-

less flanged Apollo Valves. These valves are equipped with AS spring return pneumatic actuators.

Approximately 130 Apollo actuated valves were integrated into the scrubber system. The successful implementation of these valves not only ensured operational efficiency but also enhanced environmental compliance, significantly reducing sulfur emissions from the plant.

This scrubber project is a testament to how Aalberts integrated piping systems and its Apollo Valves brand support the power industry's transition to more sustainable operations. It exemplifies how industrial applications can achieve environmental goals through technological innovation.

For more information, visit aalberts-ips.us.

Durable, precise Apollo Valves effectively handle the slurry of limestone that neutralizes sulfur dioxide in flue gasses—a crucial reason that a Tennessee coal-burning power plant selected them when installing new scrubbers, which clean up smokestack emissions.



# **Court Is In Session**

Thanks to Victaulic & Power and Combustion, Inc.

Power and Combustion, Inc. partnered with Victaulic to minimize disruptions over the course of a nine-month HVAC overhaul, mitigating project risks and increasing onsite productivity while ensuring that the building-a courthouse-remained fully operational throughout construction. In the project's second phase, Power and Combustion again leveraged Victaulic grooved solutions to enhance installation efficiency while upgrading the building's mechanical room.

### **Strategizing for Success**

The Robert F. Sweeney District Court in Annapolis, MD, is a four-story courthouse serving Anne Arundel County residents. The 93,400-square-foot building includes six courtrooms, judges' chambers, and office space for court-related services. Shutting down operations while contractors replaced the building's aging HVAC system with an energy-efficient, variable air volume (VAV) system was out of the question. Instead, Power and Combustion, a subsidiary of J. F. Fischer, scheduled overnight work hours and made sure work areas appeared untouched and fully

functional for courthouse staff once morning came.

"This project was a tall order," said Jason Fischer, a project manager at Power and Combustion. "We decided early on that we wanted to use grooved pipe-joining because welding in an occupied space is too cumbersome. We didn't want people smelling welding fumes throughout the building or having the smoke accidentally set off fire alarms."

Fischer continued, "Having worked with Victaulic in the past, we knew their products could help take some of those risk factors and disturbances out of the jobsite while making us more productive at the end of the day."

Crews had a short window from 8 p.m. to 6 a.m. to replace VAVs in the overhead ceiling before the courthouse opened for the day. Understanding that every minute could make a difference, Power and Combustion and Victaulic collaborated closely to streamline installation workflows-coordinating every detail from material selection and equipment sizes to delivery times.



Power and Combustion used Victaulic KOIL-KIT<sup>™</sup> coil packages to simplify and expedite installation for the more than 100 VAV units it replaced. The preassembled packages reduced field joints and enabled crews to move efficiently from room to room. Victaulic ensured all components were correctly sized and labeled by room to correspond to the proper equipment. Victaulic also shipped bundled materials to arrive onsite early so Power and Combustion could get straight to work each night.

### "There's a substantial level of efficiency that we gain when we partner with Victaulic."

— Jason Fischer, Project Manager, Power and Combustion

"We knew exactly where each part and piece needed to go. That was really critical to our efficiency and ability to get the work done at night. Once we wrapped up, we knew that the system was installed correctly, so the heat and air conditioning would work without issue," Fischer said.

With Victaulic's support, Power and Combustion adeptly managed the project's time constraints, seamlessly completing the first phase of the project on schedule and without any setbacks. As the mechanical contractor finalized the HVAC scope and shifted focus to the courthouse's penthouse mechanical room, they trusted Victaulic to continue supporting them in streamlining their work for phase two.

### **Accelerating Efficiency**

For the mechanical room renovation, Power and Combustion crews needed to demolish and replace the building's two existing chillers, four pumps, and five air handling units. They used a trailer-mounted portable chiller to keep cool water and air flowing through the building. Although the temporary equipment would keep occupants comfortable until work in the mechanical room was completed, Power and Combustion wanted to compress their installation schedule as much as possible. To accomplish this, Power and Combustion combined the efficiency of their own offsite fabrication shop and Victaulic grooved pipe-joining products.

Power and Combustion's fabrication team used Victaulic couplings, fittings, and valves to create roll-grooved carbon steel spools, ranging in sizes from 10" down. Once delivered to the jobsite, Power and Combustion used a crane to hoist spools, materials, and new equipment to the penthouse, and pipefitters began installation immediately. Grooved mechanical joints can be installed in only a few minutes—five times faster than welded joints and three times faster than flanged joints—by tightening the coupling's bolts and nuts with a socket wrench or impact wrench.

#### **Coordinated Solutions**

Performing any construction work in an occupied space comes with myriad challenges, but the stakes are especially high when disruptions risk interfering with crucial community services like court proceedings. Power and Combustion identified and addressed risk factors upfront, engaging Victaulic early in the project's lifecycle to coordinate solutions that mitigated schedule risks, eliminated safety concerns, and optimized productivity.

"There's a substantial level of efficiency that we gain when we partner with Victaulic," said Fischer. "Between quickto-install piping connections and KOIL-KITs, alongside not having to worry about welding fumes or coordinating a fire watch in a building filled with people, we had a smooth project on our hands and pleased owners."

For more information, visit www.victaulic.com.



Photo by Power and Combustion, Inc.





The key to a successful restroom renovation lies in balancing aesthetics with practicality to create a space that is not only visually appealing but also integrates functionality, durability, and performance. A well-designed restroom can significantly enhance the overall experience for users, leaving a positive impression and reflecting well on the facility.

From the contractor's perspective, specifying the right products for a restroom renovation can streamline the installation process and ensure long-term satisfaction for clients. Here's how:

- **Time savings:** By choosing high-quality, reliable products, you reduce the likelihood of installation issues and callbacks, saving time and effort.
- **Efficiency:** Sensor faucets and other touchless fixtures reduce maintenance needs and downtime, enhancing the restroom's efficiency and functionality.
- **Client satisfaction:** Delivering a restroom that is both stylish and practical enhances your reputation and increases client satisfaction, leading to repeat business and referrals.
- **Sustainability:** Emphasizing eco-friendly fixtures aligns with modern sustainability goals, adding value to your services and appealing to environmentally conscious clients.

Read on for practical tips and innovative solutions to help you achieve a perfect blend of style, functionality, sustainability, and efficiency in your commercial restroom project.

#### The Importance of First Impressions

First impressions matter, especially for commercial restrooms. The appearance of this space can influence how people perceive the entire facility. A clean, modern, and well-maintained restroom suggests the facility values its visitors and takes pride in its upkeep. Conversely, an outdated or poorly maintained restroom can leave a negative impression, regardless of the quality of services provided elsewhere in the facility.

#### **Designing for Aesthetic Appeal**

To create a visually appealing restroom, consider integrating contemporary architectural elements. This can include sleek, minimalist designs; high-quality materials; and stylish faucet fixtures. These elements can make the space feel more inviting and comfortable for users.

Focusing specifically on aesthetically pleasing faucets, T&S Brass has captured the design elements of contemporary, modern, and classic architecture with their Crest series. Both WaveCrest sensor faucets and LakeCrest manual faucets feature sharp lines and defined planes, creating a visually striking faucet that adds contemporary sophistication to any facility.

#### **Focus on Functionality**

The trend towards touchless fixtures is modern and highly practical. Sensor-operated faucets, soap dispensers, and hand dryers improve hygiene by reducing contact with surfaces. Additionally, these fixtures are often easy to maintain and can reduce water and soap wastage.

Beyond the aesthetic appeal, T&S Brass' WaveCrest line seamlessly integrates form and function. The inclusion of a hidden sensor in each faucet is a deliberate move to shift the focus from mere functionality to overall design, not only adding elegance but also serving a practical purpose. With the sensor facing down and next to the aerator, activation is more intuitive and dependable, safeguarding the sensor from potential damage caused by harsh chemicals. Additionally, T&S Brass is currently incorporating Bluetooth technology in the WaveCrest line, which will provide valuable insights and control over water usage.



If you prefer manual faucets, the single lever, single hole manual faucet in the LakeCrest line features a handle that complements the sharp edges and defined planes of the spout, allowing easy manipulation by the wrist and minimizing direct contact for improved hygiene.

#### Commitment to Sustainability

In modern-day facilities, sustainability is no longer a buzzword but rather a requirement. When planning a commercial restroom remodel, be sure to prioritize sustainability to minimize environmental impact and reduce operational costs. Here are some key considerations:

#### Water Conservation

Look for fixtures and faucets that are designed to minimize water usage without compromising performance. Sensor-operated faucets, like those offered by T&S Brass, are an excellent choice, as they only flow when needed, reducing water wastage and human error. Additionally, consider options like low-flow toilets and urinals, which can significantly reduce water consumption over time.

### Energy Efficiency

Choose fixtures and technologies that minimize energy consumption, such as LED lighting and energy-efficient hand dryers. T&S Brass' hydrogen power option for WaveCrest models is a noteworthy example, using water flow to power the device and eliminating the need for regular battery replacements or electrical power. Similarly, the modern metering faucet in the LakeCrest manual line regulates water flow and duration without requiring electronic power, reducing energy usage.

### Compliance With Standards and Regulations

Ensure the fixtures and faucets you choose comply with industry standards and regulations related to sustainability. Look for products that undergo rigorous testing to meet and exceed these standards. T&S Brass' commitment to sustainability is reflected in its products, which are designed and tested to comply with industry regulations, ensuring optimal performance and environmental responsibility.

### **Principles for Success**

In the process of transforming commercial restrooms, achieving the right balance between aesthetics and functionality is key. By embracing modern design principles, integrating sustainable practices, and prioritizing user experience, you can craft a restroom that resonates with everyone who steps inside. Whether you are a contractor leading a renovation project or a facility manager overseeing operations, these guiding principles can lead you to success.

For more information visit www.tsbrass. com.

### Selecting the *Right* Press Tool

### Tips from Ridge Tool Company

Press tools are a reliable and accessible choice for joining pipe in all commercial and residential settings, with a variety of press tool options available depending on the jobsite. Today's professionals can rely on press tools to make secure, flameless connections on copper, stainless steel, PEX, and black iron in a fraction of the time it takes to solder pipe. A press tool not only saves you time, it also saves you money by delivering reliable performance, press after press.

When deciding which type of press tool to use, tool capacity, application, and size are the primary factors that will determine which press tool is right for the job:

- A mini press tool can be used for 1/2" to 3/4" copper, stainless steel, and PEX tubing. It is small and lightweight, making it perfect for most residential and service-oriented plumbers.
- The compact press tool category has a slightly larger capacity, 1/2" to 1-1/4" on copper and stainless steel and up to 1-1/2" on PEX, 1" on carbon steel, and 1-3/8" on refrigeration lines. This tool is a good fit for residential jobs but can also be used for light commercial work.
- The standard press tool is the workhorse for residential, commercial, and industrial applications. It is capable of pressing up to 4" copper and stainless steel. Some brands offer add-ons that allow you to press all the way up to 4" carbon steel and up to 2" PEX.
- An extended press tool is a dedicated tool for up to 4" carbon steel with the same capacity as the standard tool in the smaller sizes. It is ideal for anyone in a commercial or industrial setting pressing large-diameter fittings daily.

Along with these basic categories, additional features to look for are ergonomic design, enhanced lighting, head rotation, and Bluetooth capabilities. Using press tools with these upgrades further enhances the simplicity of using a press tool for fast, quality pipe joining on any type of jobsite. For example, the RP 240 Ridgid Press Tool is lightweight and ergonomically designed, with Bluetooth connectivity that allows you to track the battery status and more. Regardless of the tool selected, these features will help you work smarter and more efficiently on any jobsite.

For more information, visit www.ridgid. com.

Larger press tools like the RIDGID RP 342-XL Press Tool can handle big jobs and do more than join pipe. Here, a worker snaps a piece of soil pipe with the Press Snap Soil Pipe Cutter attachment.



Rethinking Hor Nork (1958)

### Reaping Rapid Return on Investment featuring Stratus & J.M. Brennan

A decision to expand their workspace led J.M. Brennan to use Stratus to create a digital workflow that dramatically improved efficiency on the shop floor. After about two months, the investment had paid for itself with tremendous time savings, primarily in spooling. Integrating Stratus into the workflow not only transformed internal processes but also overall efficiency.

Justin Harer, director of construction operations at J.M. Brennan in Milwaukee, has more than 20 years of expertise at the company, where he started as an intern. He oversees all engineering, design, building information modeling, virtual design and construction, and shop fabrication for prefabrication activities. He explained how the adoption of Stratus fundamentally reshaped J.M. Brennan's operations, beginning with the shop layout.

"A few years ago, we realized we ran out of room in our shops because of our increased utilization of prefabrication," said Harer. "We decided to expand our shop, specifically for copper and PVC fabrication. Stratus was a pivotal part of reimagining that space around a digital workflow."

J.M. Brennan updated workstations to integrate with digital models. They ensured screens were large enough so that workers could view them even from the end of a 20-foot pipe. All inputs were made wireless, allowing for seamless operations even when working at a distance.

Field operations have also seen a shift with Stratus. All field foremen are equipped with iPads® to ensure high-speed connections and

easy access to digital models and spools. This shift has eradicated the need for paper plot spool drawings; instead, everything is now purely digital.

Regarding the return on J.M. Brennan's investment in Stratus, Harer remarked, "The payback period was less than two months, primarily due to time saved in spooling. Given that we were previously spending 10–20 minutes per spool, reducing that time to less than 30 seconds was revolutionary."

Implementing Stratus was a methodical journey. Initially, it involved intense labor, as the team had to create all reports and workflows from scratch. In today's setup, new users benefit from prebuilt templates, making the onboarding process significantly faster and smoother.

While change is not always welcomed, the integration of Stratus into daily operations has led to substantial improvements for J.M. Brennan. The key was gradual implementation and training—starting with projects and teams open to new methods before expanding more broadly.

Harer concluded, "Our construction industry needs to evolve and keep up with technological innovations to remain efficient and competitive." J.M. Brennan's experience demonstrates that investing in digital workflows like Stratus is not just about buying new software it is about fundamentally rethinking how work gets done, leading to better outcomes and future-ready operations.

For more information, visit www.stratus.build.



### **Boosting Mechanical Revenue 30 Percent**

with BuildOps & Jackson Mechanical

After making the transition from paper recordkeeping to BuildOps software, "our revenue has grown by 30 percent, we've doubled the number of tickets that we can handle, and we're working more efficiently than before," said Scott Fuksa, president of Jackson Mechanical Service.

Jackson Mechanical has been a cornerstone of the Oklahoma City mechanical services industry since 1957. With a strong commitment to fair pricing, exceptional customer service, niche specialties, and continuous technical training, Jackson Mechanical has grown from a small team of three to a robust operation with more than 80 employees and a fleet of 63 service trucks. Despite their growth, the company was mired in an archaic system of color-coded folders to manage their expansive operations.

"It was very old school," recalled Travis Fuksa, project manager at Jackson Mechanical. "If something wasn't on the original ticket, that information would be gone." The outdated system was not just slow; it was a black hole for data and dollars.

#### **Transformational Change**

Recognizing the need for modernization, Jackson Mechanical decided to make a leap to BuildOps. More than just adopting new software, the transition meant transforming their entire operational approach.

"Several members of the BuildOps and Jackson team came in over the weekend to manually enter hundreds of historical records for cost. It had to be done this way because Jackson was completely on paper," said Thurain Hlaing, BuildOps senior customer success manager. "It really felt like we were one team doing what had to be done for the best result."

This collaborative effort ensured a smooth transition. No more lost data, no more missed opportunities. BuildOps delivered a single platform where job progress, contract details, and crucial communications converged—in real time. The results were immediate and impactful. The time it took to schedule jobs was cut by half. The team managed to handle double the number of service tickets. As a result, revenue grew substantially.

"With BuildOps, we feel like we can go after anything," Travis Fuksa said. "The sky's the limit as far as the size of the project."

#### **Communication That Connects**

BuildOps redefined how the Jackson Mechanical team interacts, especially when every second counts. "BuildOps has helped us streamline our dispatching tremendously," said Amanda Campbell, customer service manager. "It has taken half the time to create a job and get it scheduled." Real-time updates from the field keep the whole team in sync and sharp, safeguarding timelines and budgets.

Since implementing BuildOps, Jackson Mechanical is thriving. They've expanded into two new buildings to accommodate their growth. "BuildOps helps us grow, helps us keep information flowing properly," said Scott Fuksa. "We love it here at Jackson Mechanical."

For more information, visit BuildOps.com.



Enhancing Pipefitter Training

### A Collaboration Between NIBCO & Local 597

Recognizing the need for skilled professionals equipped with knowledge and practical experience, NIBCO, a leading provider of flow control products, has partnered with Chicago Pipefitter's Local 597 Union to enhance its training programs. This collaboration aims to elevate the level of training and ensure that apprentices are well prepared for the field.



### Local 597's Training Approach

Local 597's apprenticeship program is a comprehensive five-year course designed to produce highly skilled pipefitters, welders, and HVAC service technicians. With 1,200 apprentices currently enrolled, it is one of the largest programs in the country, with a rigorous curriculum split between classroom instruction and hands-on training. The first three years involve block training, where apprentices spend three months in intensive training before heading into the field for nine months. In their fourth and fifth years, apprentices attend night classes while gaining field experience during the day.

Local 597 Training Director Joe Bonato oversees the main facility located in Mokena, IL, another in Palatine, IL, and a satellite school in Crown Point, IN. Bonato is a firm believer in the importance of exposing apprentices to industry specialists to supplement their learning. NIBCO's involvement has made a significant impact.

### **NIBCO's Role**

NIBCO approached Local 597 with a proposition to support the training center by sharing expertise, particularly in copper development and valve technology. Since fall 2023, NIBCO has been providing lectures and hands-on training sessions.

"Our 597 instructors are fantastic and possess great experience from being in the field, but it is a huge benefit to bring in industry specialists [who] can take us to the next level," explained Bonato.

Kyle Coleman, Local 597 training instructor, highlighted the value of this collaboration. "NIBCO expands on what we can offer in-house. They provide insights into the purpose and function of various valves, which is crucial for our apprentices," he said.

NIBCO's Aaron Kilburg, commercial sales manager, and Sean Kelly, area sales manager, bring a wealth of knowledge and practical experience from years of experience at NIBCO to the training sessions. Their approach is twofold—a combination of classroom lectures and hands-on training. The first day focuses on lead-free soldering with valves, where apprentices receive one-on-one instruction and feedback. The second day delves deep into valve best practices, providing apprentices with the tools to make better selections and troubleshoot issues in the field. Apprentices also learn about the vast array of commercial and industrial valves available today.

#### The Impact of Hands-On Training

Through the NIBCO-Local 597 collaboration, the apprentices gain practical experience. During hands-on sessions, they practice soldering large diameters and working with larger valves, which they might not encounter frequently in the field and are also cost-prohibitive to practice on during normal training.

"The opportunity to solder a 2" ball valve is rare. This training experience is crucial, as it helps apprentices understand the intricacies of working with different materials and techniques," explained Kelly.

Bonato acknowledged the significant impact of the partnership. "NIBCO has been top-notch in their approach. They are hands-on, engaging, and committed to helping



us produce the best journey workers possible. Their involvement ensures that our apprentices receive the highest quality training," he noted.

### **Building Skills, Building Relationships**

The hands-on training provided by NIBCO is invaluable for apprentices. "Apprentices get the opportunity to practice soldering larger-size pipes and working with large valves in a controlled environment. This not only builds their confidence but also ensures they are well prepared for real-world applications," explained Coleman. The feedback from apprentices has been overwhelmingly positive.

NIBCO's involvement goes beyond mere instruction; the focus is on building relationships with the apprentices. Kilburg explained, "We aim to create an environment where apprentices feel comfortable reaching out to us for additional training or resources. It's about fostering a sense of camaraderie and support."

"I think it is genius of a company like NIBCO to invest the time to come here," said Bonato. "They are meeting and building relationships with the next generation of leaders the industry supervisors, project managers, general foremen, and potential owners."

NIBCO has conducted similar training sessions at various union locations in the Midwest, including Local 75 in Wisconsin, Local 166 in Indiana, and Local 130 in Illinois. This widespread involvement underscores NIBCO's commitment to enhancing the skills of the next generation of professionals in the industry. The training sessions are continually refined based on feedback from apprentices and instructors.

"Every training session is a learning experience for us as well." Kilburg commented. "We pick up new techniques and insights from the apprentices and instructors, which helps us improve our training methods."

### **Looking Ahead**

By combining classroom instruction with practical, handson experience, the partnership between NIBCO and Local 597 provides apprentices with a comprehensive learning experience that prepares them for the challenges of the field. As the collaboration continues, both NIBCO and Local 597 are committed to refining and expanding their training programs and are dedicated to ensuring that apprentices not only acquire the necessary skills but also develop the confidence and knowledge to excel in their careers.

The NIBCO-Local 597 partnership represents a model for successful industry collaboration. By leveraging the expertise of industry specialists and providing practical training opportunities, this initiative is setting a new standard for apprenticeship programs. As Bonato put it, "It's about bettering the brand and ensuring that our apprentices represent the best in the industry. With NIBCO's support, we are well on our way to achieving that goal."

Kilburg added, "As appreciative as Local 597 is for the training we are providing, NIBCO is appreciative of the relationships we are developing."

This collaboration not only benefits the apprentices but also strengthens the industry as a whole. NIBCO and Local 597 are demonstrating that with the right support and training, the next generation of mechanical contracting professionals will be well equipped to meet the demands of the industry.

For more information, visit www.nibco.com. To learn more about training, contact Aaron Kilburg, NIBCO commercial sales manager, at kilburga@nibco.com.



### PARTNERING TO Accelerate PRODUCTION With Morris Group International & North Mechanical

For a new medical product manufacturing plant, North Mechanical chose Morris Group International<sup>®</sup> (MGI) brands Acorn Engineering Company<sup>®</sup> and Jay R. Smith Mfg. Co.<sup>®</sup> to meet the tight deadline and accelerate the manufacturer's production capacity. MGI's flexibility and willingness to prioritize the contractor's needs proved crucial in helping North Mechanical overcome obstacles and deliver a successful project.

North Mechanical won the bid to be the mechanical plumbing contractor for a new 560,000-square-foot state-of-the-art plant for an Italian-based pharmaceutical company. The company manufactures glass vials that are crucial to the distribution of lifesaving medicines, including vaccines.

The project, located in Fishers, IN, was a response to the impact of the COVID-19 outbreak on the owner's production facility in Italy—a country hit particularly hard early in the pandemic. Plant operations were not the only point of impact; the entire supply chain all but came to a halt. The pressure was on to establish a new, reliable source of these essential components in the United States and help ensure supply chain security and reliable sourcing during a surge in demand. The new plant will play a critical role in the fight against disease today and in any future pandemics.

This critical project was on an expedited timeline. North Mechanical needed partners who could deliver high-quality products quickly, adapt to the demands of the construction process, and help them navigate the unique challenges of getting laboratories up and running before the building was complete. Working with MGI representative P-M & Associates, North Mechanical selected Acorn and Smith stainless steel sinks and floor drains. P-M & Associates has worked with North Mechanical for nearly 40 years, through generations of leadership at both companies. It is a partnership that values quality, integrity, and service.

"Acorn and Smith products are high-quality, and everything is fabricated well and built to last," said Tyler Holman, project executive at North Mechanical. "And we knew they'd be stocked and shipped to us on time."

John Marini, national sales manager for Smith, added, "We're lucky to have a rep with over 50 years of drain experience. P-M & Associates know how to accurately fill an order and have it delivered exactly the way the customer wants. That's how they ensure their customers a superior level of service."

### **Expect the Unexpected**

The pressure to meet customer demand for the glass vials created a domino effect for construction. The entire project focused not only on building the plant quickly so it could start production, but also on getting the labs operational before the completion of the whole plant. That meant getting a certificate of occupancy for the lab area as construction was still underway. North Mechanical installed temporary water heaters for the labs, because the plant's hot water system was not in place.

That was not the only challenge. There was also a shortage of concrete that began right around the time the project broke ground. Drains are usually placed before the concrete is poured, but the short-





age meant that pour schedules changed daily. North overcame this challenge by prefabricating the drain assemblies in the shop so they could adjust to meet the erratic pour schedule.

### **MGI's Distribution Powerhouse**

Holman had confidence ordering the drains and stainless steel sinks because he knew that MGI could ensure the products were stocked and ready to ship, thanks to what MGI calls their "Golden Triangle." Products made in City of Industry, CA, and Mexico are shipped to Montgomery, AL, where they join the Smith inventory in a 340,000-square-foot warehouse. From there, the orders are loaded onto trucks and sent on their way. MGI CEO Donald E. Morris likes to call the Montgomery distribution center "the beehive" because stock trucks are always coming and going with precision.

Montgomery's central location helps make the Smith plant, warehouse, and property one of the best distribution centers in commercial plumbing, and Smith's experience adds to the value. Smith products—drainage, cleanouts, backwater valves, and traps—are often the first products to go into the ground on a jobsite. Nothing is worse for a contractor than having a cement truck lined up to pour a slab and not having drains and fittings in place because those parts have not been delivered. "That is the sort of pressure Smith is used to dealing with, and they've done a fantastic job and continue to be the best in putting product out in the field on time," said Barrett Morris, president of Acorn and Smith. "It is why we've made Montgomery our distribution hub."

### Partnership + Expertise = Results

The manufacturing site is still under construction, but it is on schedule to open this year. Thanks to North's ability to adapt and react quickly to get the labs open on time, the owner celebrated the production of the very first product in the new plant late last year.

North Mechanical's expertise, combined with a strong partnership with MGI and P-M & Associates, allowed it to navigate the demanding timeline and deliver outstanding results. Michael Henderson, president & CEO of P-M & Associates, said, "North Mechanical is one of the most progressive and innovative contractors in the country, and their leadership team continues to find ways to provide value-add to their projects and customers. From the field to the front office, the North Mechanical team works consistently and cohesively to deliver projects on time and not get bothered by the pressures you sometimes see on large-scale projects."

For more information, visit www.morrisgroupint.com.



### Saving Money and *Jending Leach* Through Partnership

### with FARO & Ferguson

For the past five years, FARO and Ferguson have embarked on a partnership that benefits both: With FARO equipment, Ferguson has transformed its business model and streamlined workflows—saving time, money, and labor—while FARO continued to gain a foothold in the industries that Ferguson supports. Ferguson plc's success relies on the company's ongoing commitment to innovation and its desire to partner with companies like FARO that are dedicated to delivering the very best that reality capture hardware, software, and software as a service (SaaS) has to offer.

When Ferguson plc was founded in 1971, lasers—the technology that underpins so much of the measurement machines that FARO produces and that third parties like Ferguson, the largest U.S. distributor of plumbing supplies, PVF, waterworks, and fire and fabrication products increasingly relies on—were only in the theoretical stages. In the decades that followed, lasers, in effect, took over the world, embedded into billions of products on land, sea, air, and space.

Today, by accurately and quickly capturing the as-built condition of a physical space and rendering that space in a 3D digital domain via point-cloud conversion, Ferguson and its customers can better ensure proper alignment and placement of a wide variety of physical assets, from the very small to the very large. Connected to cloud-based services like FARO's Sphere XG, these data can be shared, tracked, and monitored by key project stakeholders anywhere in the world, all in real time.

Ferguson relies on a host of FARO equipment, including eight FARO Focus Laser Scanners, the new FARO® Orbis<sup>™</sup> Mobile Laser Scanner, FARO® BuildIT Construction Software, and access to the recently upgraded Sphere XG, a cloudbased digital reality platform that provides users a centralized, collaborative experience across the company's reality capture and 3D modeling applications. Through Ferguson, FARO has a powerful opportunity to provide a trickle-down impact on numerous subindustries that Ferguson supports, such as the following:

- Plumbing
- HVAC installation
- Waterworks
- Fire and fabrication
- Residential and commercial building projects
- Government, infrastructure, and municipalities

"If you think about any construction environment, you're going to have measurements from point A to point B," explained Keith Alcorn, a Ferguson engineering specialist and reality capture manager. "And what scanning allows us to do is to go on to an existing jobsite and collect the data from that environment. It's gathered in its entirety, where field operators can come back, bring the data into a controlled environment, the shop and office, and then start 3D modeling through and around that scan, because it collects everything from the flange of a pump over to the existing connection of a valve."

In addition to hardware like the FARO Focus Laser Scanner, which includes Hybrid Reality Capture<sup>™</sup>, powered by Flash Technology<sup>™</sup>, a scan mode that combines the accuracy of a 3D scan with the speed of a panoramic camera, and FARO Orbis, powered by GeoSLAM's proprietary SLAM algorithm, allow Ferguson and its subcontractors to take 360° panoramic photos for general site documentation. Used as part of what Alcorn calls a "field audit kit," site documentation can take place much earlier in the project scouting process and in a far more coordinated manner than what was once possible.

"It kind of makes us sticky with the client—the likelihood of a customer staying loyal to a brand—and then we just carry the client with us through the whole process," Alcorn said. "And then when we start going down the road of using Li-DAR scanners, like the Focus, using the larger format scanners, we'll scan the environment and then we inevitably will model in that environment, and we can bring it all together in Sphere XG."



Arguably it is this all-in-one hardware, software, and SaaS ecosystem that Alcorn and the Ferguson team admire most. In addition, data uploaded to FARO's cloud platform are wholly owned by the company performing the upload. As a result, customers have full access to viewing and managing the data.

While it is difficult to quantify how much time, money, and labor FARO technology saves Ferguson and their customers, Alcorn estimated that the collective gains are significant, describing it as a mass multiplier effect. If Ferguson can gather the information faster and more accurately, they can get that data into the shops faster and provide their customers with a more expedient return.

Ferguson recently renewed its partnership with FARO for another three years. Together, the two industry leaders hope to shape the future of 3D laser scanning and the infrastructure, plumbing, appliances, HVAC, fire, and fabrication industries they help support.

While a single ecosystem of hardware and software is where the current conversation lies (versus the siloed nature of data collection), future discussions revolve around building single devices that can essentially "do it all." Anticipating such developments, Alcorn said he supports "the increased use of scanning and reality capture in such a manner that anybody can use it in any circumstance."

For more information, visit www.ferguson.com and www. faro.com.

# with Novarc Technologies & Kleeberg

Despite an industry-wide shortage of skilled welders, Kleeberg has increased productivity by partnering with Novarc Technologies and adopting the Spool Welding Robot (SWR<sup>™</sup>). The SWR is a welding cobot designed specifically for pipe, small-pressure vessels, and other types of roll welding. With the cobot, Kleeberg has increased welding speed by three to four times on larger pipes.

Kleeberg excels in a wide array of services ranging from sheet metal and mechanical services to design-build projects and custom industrial fabrication. However, they confronted challenges in sustaining uniform welding quality and efficiency, particularly in welding pipes ranging from 4" to 24". These dimensions were critical in their diverse array of projects, involving complex systems like steam, chilled water, and hot water. Kleeberg aimed to enhance the consistency of their welds and amplify overall welding productivity while maintaining low repair rates.

Novarc's robust support system, characterized by prompt responsiveness and comprehensive training, facilitated a smooth transition for Kleeberg's operators, enabling them to master the SWR within a week. With 95% of their welding now conducted using the SWR, Kleeberg has experienced a transformative shift in their welding processes. This advancement not only resolved their immediate challenges but also positioned them as a frontrunner in industrial efficiency and technological adoption. Kleeberg quickly realized a number of benefits from using Novarc's SWR.

- Accelerated project completion: Kleeberg achieved a substantial reduction in project completion times. Specifically, they can complete welding tasks on 12" pipe joints in just 10 minutes, a significant improvement from their previous timelines.
- **Increased welding productivity:** The implementation of the SWR resulted in a remarkable increase in productivity, with over 250 factored diameter inches per shift, enhancing the speed by three to four times for pipes ranging from 8" to 14".
- Significant weld cost savings: Kleeberg achieved substantial cost savings per weld, amounting to approximately \$25 for smaller pipes (6–8") and around \$45 for larger pipes (12–14"), exclusive of the Novarc system's cost.



• **Time savings:** Overall, the SWR contributed to a 12–15-percent decrease in time in Kleeberg's operations.

Other companies that have invested in the SWR have not only increased their pipe welding productivity but also dropped their repair rates to less than 1 percent, making them more competitive when bidding on jobs and increasing margins on contracts already won. The collaboration with Novarc Technologies enabled Kleeberg to successfully address key challenges and set new benchmarks in welding productivity and quality.

For more information, visit www.novarctech.com.



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### ackag ime and M **On Hospital Project**

with Zurn Elkay Water Solutions & John W. Danforth Company

John W. Danforth Company wanted a lean jobsite for its new hospital project, so it worked closely with Zurn on packaging materials and delivery schedules long before any materials were needed, saving time and money in the process. The new Wynn Hospital of Utica, NY, part of the Mohawk Valley Hospital System, opened in October 2023 on time and on budget.

Wynn Hospital is located on 25 acres, and the 702,000-square-foot, 10-floor facility offers 373 beds, plus a helipad for easy air transport to and from the emergency department. It is expected to support 90,000 visitors per year. New York State Department of Health Commissioner James V. Mc-Donald, M.D., said, "The opening of this new hospital not only brings expanded medical services, enhanced patient engagement, and greater access to high-quality health care, it's also part of a community renaissance that will continue to improve the health and well-being of all Mohawk Valley residents."

From the outset, Danforth set their sights on managing the packaging of materials and cadence of delivery so products were delivered as needed, pallet size requirements were met, products could be easily identified, and a lean jobsite was maintained. The Zurn team immediately established a partnership with Danforth and invited them to tour the Zurn Cary Innovation Center in Cary, NC. Representatives from Danforth evaluated high-volume pack outs, met Zurn team members, and reviewed the schedule months before any material was needed.

Zurn Product Manager Bob Carter noted, "Continual

direct communication between Danforth and Zurn via phone, email, and text ensured expectations were met." Weekly, biweekly, or monthly calls were held internally (depending on the speed of the project at the time) between customer care, operations, sales reps, and product management to coordinate material movement. The Zurn contractor team also held calls with the contractor, area manager, and product manager to get pertinent project information straight from the contractor. "It's very evident that Zurn was willing to help us out whenever we needed it," said Casey Hopkins, project manager at Danforth.

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Zurn staged pallets at a local representative's warehouse, ensuring pack outs were ready for shipment at a moment's notice and within a day's transit time. This approach meant that less material sat at the jobsite, lowering the risk of costly product misplacement or damage. Zurn's efficient and accurate deliveries contributed to the on-time and on-budget opening of the state-of-the-art health care facility.

The project employed more than 1,500 Zurn plumbing fixtures, including dual flush manual valves for water closets, sensor hard-wired flush valves for urinals, bed pan washer flush valves for patient rooms, stainless steel sinks, sensor faucets, manual faucets, and Zurn drains.

Zurn One Systems took the guesswork out of mixing and matching different manufactured plumbing parts. As Hopkins explained, "Zurn does this awesome thing called a Zurn One Package. Everything you need to install a fixture in one box, ready to go."





Zurn One delivered everything Danforth selected in a completely organized package—including labeled products, accessories, and clear assembly instructions. Danforth was able to preassemble products at their offsite facility and deliver them to the Wynn Hospital jobsite ready to install, saving both time and money.

Danforth chose Zurn because they were confident Zurn would make their job easier. By managing the organization and delivery of product to the jobsite, clearly labeling deliveries, maintaining continual communication, and customizing pallets to Danforth's specifications, Danforth's confidence in Zurn proved to be well placed. "Working with Zurn will save you money. Simple as that," said Hopkins.

For more information, visit www.zurn.com.



Growth

with ServiceTrade & Hurst Mechanical

Since adopting ServiceTrade, Hurst Mechanical experienced 25 percent growth in a single year, a testament to the efficiencies gained through the platform. In addition, using ServiceTrade to streamline preventive maintenance (PM) scheduling and management led the company to increase PM volume by 20 percent.

Hurst Mechanical is a leading provider of commercial and industrial HVAC services in West Michigan. They faced significant inefficiencies that were both time-consuming and prone to errors, including lengthy quote times, cumbersome purchase orders, and difficulties tracking their customers' service history. Additionally, they lacked timely access to crucial business insights. After years of managing their business on paper and a failed attempt with another software solution, in 2020 they ultimately selected ServiceTrade for its comprehensive features and user-friendly interface.

### From Skeptics to Wizards

After switching to ServiceTrade, Hurst Mechanical quickly saw the benefits. In two months, the team was up and running on the software. Despite some initial reluctance, particularly from veteran technicians who had experienced previous software failures, the transition proved to be highly successful. Those once-skeptical technicians have since become proficient users of ServiceTrade. Alex Haan, vice president of service at Hurst Mechanical, now describes them as "wizards" with the software. Their ability to quickly adapt and fully use ServiceTrade's features has been a key factor in the company's enhanced efficiency and operational success.

### **Streamlining Pays Off**

Using ServiceTrade revolutionized Hurst Mechanical's operations. The platform has streamlined processes, particularly in quoting and parts management. "It used to take three days to deliver a quote to a customer—but now it takes less than one," said Haan.

Technicians use the service history feature to access previous job details to understand prior customer interactions, reducing time spent on phone calls with the office. ServiceTrade made obtaining purchase orders significantly easier, eliminating unnecessary delays. Now, technicians can issue purchase orders and enter receipts directly in the mobile app and plan ahead for parts without wasting time calling the office.

Haan noted that ServiceTrade has enabled the company to streamline operations across the board, creating a more efficient workflow that supports sustained growth. A significant part of the





Hurst Mechanical technicians use ServiceTrade's service history feature to access previous job details, reducing time spent on phone calls with the office and contributing to the company's rapid growth.

success is the growth in PM, with PM agreements now making up roughly 40 percent of Hurst Mechanical's business. ServiceTrade not only streamlined scheduling and management of PM but also helped Hurst Mechanical uncover more high-profit repair opportunities, contributing to the overall revenue increase.

Haan highlighted that the new processes allow them to keep up with the growing demand for PM services, ensuring that Hurst Mechanical can provide timely and high-quality maintenance to their clients. The proactive approach to maintenance has also strengthened customer relationships, positioning Hurst Mechanical as a reliable partner in their clients' operational success.

### Information Increases Efficiency

Previously limited to monthly reviews, Haan now uses

ServiceTrade's business reporting to review the backlog report daily, ensuring PM work is on track. The labor analysis report helps track job types and growth trends. This real-time data access empowers informed decision-making and sustained growth. Additionally, Hurst Mechanical can access revenue reports and other critical data anytime, allowing for continuous monitoring and optimization of business performance.

Hurst Mechanical's strategic adoption of ServiceTrade has transformed their service delivery and operational efficiency. By leveraging ServiceTrade, they continue to drive growth and success, positioning the company as a preferred partner among their customers.

For more information, visit servicetrade.com.



## Maximizing Productivity with ordless

### with MILWAUKEE TOOL & Pan Pacific Mechanical

Using MILWAUKEE TOOL's new line of wet/dry vacuum solutions helps Pan Pacific Mechanical better keep its workspaces clean, which enhances productivity. Pan Pacific also found the cordless vacuums safer, more versatile, and more durable than corded vacuums.

As a seasoned shop foreman at Pan Pacific Mechanical, Bryan Burch understands the importance of efficiency, productivity, and reliability in his daily operations. Burch oversees the prefabrication work at the company's Fremont, CA, location. Prefabricating plumbing and mechanical equipment demands precision. Keeping the workspace free of copper, metal, wood, and plastic debris is crucial to maintaining organization and maximizing productivity.

Burch relied on several corded wet/dry vacuums to maintain a clean and organized space, but they came with frustrations. Managing cords became a time-consuming task, and the corded vacuums restricted reach, forcing Burch and his team to constantly seek out nearby power outlets or rely on cumbersome extension cords. Durability concerns added another layer of frustration; broken wheels and damaged cords were all too common. These challenges not only compromised efficiency but also posed safety risks, highlighting the urgent need for a more streamlined and versatile solution.

MILWAUKEE TOOL introduced a lineup of wet/dry vacuum solutions designed to alleviate these challenges. When doing research and working side-by-side with users to understand their needs and frustrations, MILWAUKEE TOOL was consistently asked to deliver a cordless solution that also addressed productivity and durability. MILWAUKEE TOOL's new battery-powered vacuums allow professionals to tackle medium and large jobsite cleanup applications without sacrificing performance. Already familiar with the MILWAUKEE TOOL M18™ battery system, Burch and his team decided to invest in MILWAUKEE TOOL's jobsite cleanup expansion, purchasing the M18 FUEL™ 9-Gallon Dual-Battery Wet/ Dry Vacuum. "We had already been switching over to Milwaukee for a while," Burch explained. "We trusted the battery performance, and everything is compatible, which makes it easier."

### **Cutting the Cord**

"I knew there would be a benefit to having a cordless solution," Burch noted. "No more worries about tripping over cords or having to constantly manage them. But what surprised us was the power. It matched, if not exceeded, that of the corded vacuums."

Specifically, the vacuum's robust suction capabilities impressed Burch, allowing his crew to tackle the diverse range of debris in the shop. "We have to suck up all different types of materials," he explained, from fine dust particles to larger debris. This vacuum's power remained consistent and reliable across various surfaces and applications. Moreover, the crew was impressed by the vacuum's ability to maintain its power output during application. "There really is full power throughout the battery's charge," Burch attested. MILWAUKEE TOOL's vacuum exhibited consistent suction strength from start to finish, enabling uninterrupted operation without compromising cleanup efficiency.

Transitioning to cordless was not just about ditching cords for Burch and crew; it was about embracing a new standard of performance. The cordless solution improved versatility on the job. "That's the biggest thing," Burch explained. "The [crew members] like the flexibility without the cord, and it gives them better access." Plus, eliminating the cord from the unit altogether makes it a safer product, said Burch, alleviating the concern of "having someone cut the cord and get electrocuted."



Burch estimated that nearly 90 percent of Pan Pacific's tools are on the MILWAUKEE TOOL M18 battery system, ensuring that batteries and chargers are always within reach. "We always have easy access to a battery since it's all compatible," he said, noting the efficiency this step has introduced to the shop without any concerns for runtime.

### Improved Durability and Versatility

The durability of their MILWAU-KEE TOOL M18 Wet/Dry Vacuum was another game-changing factor for Burch's team, often a concern with equipment subjected to the demands of professional shops. "Broken wheels and hoses or cut cords were definitely issues we had run into," explained Burch. "If someone drops something on a cord, that cord is no good," and the shop must either invest time in replacing a cord or buy a new unit. "For someone to spend an hour to replace a cord—it's often cheaper just to buy an entirely new vacuum," said Burch. Reinforced casters and crush-resistant hoses also enhance durability. Burch's crew has not had to worry about common maintenance or unit replacements.

Frustrated by trying to fit a variety of hoses to vacuum accessories, the Pan Pacific crew relied on PVC bushings and tape to create adapters that allow accessories to fit on different vacuums. Once they adopted MILWAUKEE

TOOL's AIR-TIP<sup>™</sup> trade-focused vacuum accessories, however, the crew was able to spend more time on other tasks. Designed for professional-grade applications, these accessories delivered extended reach, access to tight spaces, dust control, and debris agitation. "They can get to those hard-to-reach places," which is especially beneficial in a shop that uses a variety of equipment and machinery that needs to be cleaned, Burch explained. Burch and his team seamlessly integrated MILWAUKEE TOOL'S M18 FUEL 9-Gallon Dual-Battery Wet/Dry Vacuum into their workflow. This solution is safer and easier to use, more durable, and more versatile than the corded vacuums Pan Pacific had been using, allowing the company to increase efficiency and improve productivity.

For more information, visit www.milwaukeetool.com.



A Pan Pacific Mechanical worker uses MILWAUKEE TOOL's battery-powered wet/dry vacuum with the AIR-TIP 3-in-1 Crevice and Brush Tool to remove debris from tight spaces, keeping the workspace clean to maximize productivity.



# Joing Sig Second Pipe Cutter More Efficiency

### with Watts Specialties & Alexander Mechanical, Inc.

Alexander Mechanical, Inc. purchased its first Watts pipe cutting machine in 2020 and immediately increased efficiency and decreased material costs. So as business grew and fabrication jobs started calling for bigger pipe, Alexander Mechanical bought a second, larger Watts pipe cutter that again increased efficiency and also offered more flexibility.

Alexander Mechanical specializes in commercial, industrial, and federal projects nationwide, with an approach it describes as "design, build, and maintain." The company prides itself on completing quality projects on time and within budget. President and CEO William (Bill) Alexander founded Alexander Mechanical in 1998 after a 22-year career as a journeyman pipefitter and a member of Pipefitters Local Union 533 in Kansas City, MO.

### **Rising Demand**

Alexander explained, "Entering into 2020, our pipe fabrication volume was growing, and we wanted to become more efficient. Simply put, we needed to cut more pipe and we needed to do it more quickly. At that time the majority of pipe we were fabricating and installing was 12" outer diameter (OD) or less.

"Our situation was actually quite simple," continued Alexander. "To keep up with the fabrication demand, we had to automate our systems. Because of our involvement with MCAA, I was aware of Watts Specialties. Our local Watts rep did a very good job of promoting their product, so we visited a company with a Watts machine and immediately realized that this would help us to grow our fabrication output and our company."

### **Perfect Timing**

Alexander noted, "In 2020, we purchased and installed a Watts W-122 CNC pipe cutting machine with a 25' feeder roller bed. We immediately saw an increase in our pipe cutting ability. This was perfect timing; our pipe fabrication began to increase just as we had expected. Not only did our actual pipe cutting become more efficient, our material costs improved as well.

"Prior to having the W-122," Alexander continued, "we kept a very large bin where pieces of scrap went in case we needed a 3' pipe. The Watts machine, running on their 3D-Profile Plus software, reduced our scrap pieces to almost nothing. The software maps out the cuts for the job and optimizes the cuts to minimize waste. We probably save 100' of pipe every month because of the efficiency of the Watts machine with the pipe cutting software."

### **Continued Growth**

Alexander went on to say, "As we approached 2023, our fabrication jobs continued to increase. In addition, we started getting jobs calling for larger pipe. Many of our fabrication projects called for pipe that exceeded 12" and even 20" OD. We needed another machine that could handle up to 24" OD.



"We looked at a larger machine of a competitor," Alexander said, "but the service we received from Watts and the reliability of our first machine made the choice easy. We decided to get a Watts W-244 machine. This has increased our flexibility and efficiency once again.

"Honestly, I really had not appreciated the value of having a six-axis cutting head until the new machine was operating. We had to manually change the angle of the torch head with the W-122 machine. The W-244, with the six-axis cutting head, does everything controlled by the software and the machine. Hit 'submit' and that machine moves through multiple cuts, adjusts the cutting head angles, and makes the cuts in minutes, depending on the cuts."

### **Seamless Software Solution**

"We install a lot of pipe for chilled water, hot water, and steam piping," said Alexander. "On the majority of our projects, we try to fabricate more than 40 percent in our fab shop, either with piping racks or pre-piped equipment skids. One of our objectives with the new machine was to increase our ability to automate our processes with our Stratus 3D building information modeling to spooling to fabrication. The Watts 3D software makes this process more seamless."

#### **Steady Support**

Alexander Mechanical also appreciated Watts' customer support. Alexander explained, "We really work these machines, and we sometimes need support. Watts was always there when we needed them. This was a deciding factor when making a decision on a replacement. Ultimately, the support we received from Watts with the first machine made the second machine purchase an easy decision.

"From phone support to in-person visits, the support is prompt and issues are resolved! They have ensured the least amount of downtime by shipping parts quickly or guiding us through software issues," Alexander concluded.

For more information, visit watts-specialties.com.

The Watts W-244 pipe cutter with a six-axis cutting head, paired with 3D Profile Plus software, helps Alexander Mechanical optimize efficiency. "Hit 'submit' and that machine moves through multiple cuts, adjusts the cutting head angles, and makes the cuts in minutes," said president and CEO Bill Alexander.







with A.O. Smith

A. O. Smith launched the Adapt<sup>™</sup> Premium Condensing Gas Tankless Water Heater, which promises unparalleled installation flexibility in the field—it can be con-

formed on the spot to fit the exact needs, no matter the install location, fuel type, or existing venting. It is the first tankless water heater designed and manufactured entirely by A. O. Smith.

To enhance installation flexibility, the Adapt line offers 2" and 3" dual pipe venting, ½" and ¾" gas line options, and universal indoor/outdoor installation. The units can be converted from natural gas to liquid propane in the field with an included kit.

"Innovation is at the heart of everything A. O. Smith does, and the Adapt tankless series is no exception. When designing and manufacturing this product, flexibility was our top priority. We're providing contractors with the ultimate hot water toolkit," said Isaac Wilson, A. O. Smith tankless senior product manager.



Units are available in three sizes (160,000 BTU/ hr, 180,000 BTU/hr, and 199,000-BTU/hr). They are equipped with A. O. Smith's patented X3 Scale Pre-

> vention Technology, which inhibits scale build-up and corrosion to extend the life of the unit up to three times longer, with zero lifetime descaling maintenance. Adapt tankless water heaters also include Wi-Fi capability for remote monitoring and an integrated recirculation pump that provides hot water instantly. Units also qualify for state and local rebates and are ENERGY STAR certified.

"We understand that contractors are not just in the field; they are also on the clock," said Wilson. "With the Adapt tankless line, contractors can meet a homeowner's needs without having to go back to their wholesaler to get a different unit or carry additional inventory in their truck saving them both time and money."

For more information, visit www. hotwater.com.

Participating in industry peer groups not only offers a valuable platform for fostering relationships and exchanging expertise within a supportive community but also represents a proven best practice adopted by many successful MCAA contractor members. These groups provide professionals with an opportunity to benchmark their performance, exchange best practices, address common challenges, and gain strategic insights from industry peers.

> Visit mcaa.org and search "Peer Group" to learn more.





**RETAINING YOUR** ompetitive S, doje WITH NEW ESG RESOURCES

In today's competitive landscape, demonstrating environmental, social, and governance (ESG) awareness is no longer optional—it's essential for business growth. As MCAA members, embracing ESG practices can significantly impact your success.

### Here's why ESG is important:

- 1. Winning Bids: ESG considerations are increasingly part of competitive bids in certain sectors of our industry. By integrating ESG principles into your operations, you enhance your chances of winning contracts.
- 2. Industry Strength: Committing to ESG not only benefits your business but also strengthens the entire industry. Your efforts contribute to a sustainable future.
- **3. Free Resources:** As an MCAA member, you have access to three new resources focused on ESG. These resources are designed to help you navigate ESG complexities effectively.

The resources were unveiled at the MCAA24 Annual Convention during a session hosted by MCAA Past President Brian Helm. The presentation featured subject matter experts from SLOAN, Victaulic, Ferguson, Stanley Black & Decker, DEWALT, Trane Technologies, and Watts Water. They discussed what ESG means for a company's business and how to initiate ESG efforts.

Take the next step: Explore these resources and position your business for success in the ESG era.

### The new resources are:

The **ESG Impact Template** will help you drive business development, differentiate your business, and prepare for long-term success in an evolving environment by preparing your first ESG impact summary.

The ESG Resource Guide 2024 highlights the what, when,

where, and why's of beginning your ESG journey, as well as five steps to help get you started. A chart is provided to help you monitor your progress in the different categories of ESG. The guide also includes a glossary of key terms, sample reports, commitments, and policies to help you prepare.

The **ESG Panel Presentation** from the MCAA24 Convention highlights the Manufacturer/Supplier Council's newest initiative including the results of multiple surveys conducted during the planning process and recently produced resources.

The new Manufacturer/Supplier Council ESG Initiative dedicated nearly two years to creating these valuable resources. Individuals and companies who believe in the ESG process invested a tremendous amount of effort in researching the topic and preparing the resources and presentation. MCAA sincerely appreciates their time, passion, and commitment to ensuring our members' continued competitiveness.

*Visit* **mcaa.org** *and search "ESG" to see all MCAA's ESG resources.* 

Also in this issue: See SLOAN's article for information about the company's ESG journey.

### ENHANCE COMPETITIVENESS

Environmental Social Governance

### WITH THREE NEW RESOURCES



### MCAA'S NEWEST ONLINE COURSE



We are excited to announce our newest educational offering: an 8-week online program created for new and aspiring field leaders working for MCAA member companies.

Foundations of Field Leadership (FFL) is taught by senior field leaders with extensive experience running mechanical jobs. The program is based on the input of 42 mechanical field leaders from MCAA member companies across the country. The topics covered in this course were identified by these 42 experts as being the most important things for new field leaders to learn.

Each lecture is a combination of best practices, lessons learned, and tips and tricks provided

by the field leaders themselves – based on their experience, leveraging their extensive knowledge of the role and its requirements.

Topics cover a wide range of fundamental skills including:

- The Field Leader's Role
- Productivity & Goal Setting
- Documentation & Communication
- Planning & Scheduling
- Relationships
- Safety & Compliance
- Technology As A Tool
- Leadership

Visit mcaa.org and search "FFL" to learn more about this exciting new offering, and get full details on our next classes and what is required to enroll.

### **MCAA & BuildOps Partner to**

### in Mechanical Contracting

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MCAA has joined forces with BuildOps, an MCAA member and a provider of all-in-one field service and construction management software tailored for the modern mechanical contractor. This pivotal partnership will integrate MCAA's extensive safety training resources directly into the BuildOps platform, granting all MCAA member companies using BuildOps unprecedented access.

### Revolutionizing Safety Training Through Technology Integration

This collaboration introduces a powerful, new dimension to safety training for BuildOps.

BuildOps will host an array of safety-focused educational materials and resources from MCAA, ensuring that MCAA members have instant access to critical safety training necessary to maintain the highest standards of workplace safety and compliance.

"The integration of MCAA's trusted safety content into our platform marks a significant step forward in our mission to provide the most comprehensive, user-friendly, and efficient tools for the industry," said Glen West, BuildOps Head of Growth and Partnerships. "This partnership is more than just a merging of resources—it's about making it easier than ever for MCAA member contractors to keep their teams safe, knowledgeable, and compliant on the job."







Partner to Elevate Safety in Mechanical Construction

MCAA Member BuildOps Users Will Soon Enjoy In-Platform Access to MCAA Safety Resources

### Empowering Contractors with Essential Tools for Success

Through BuildOps' innovative digital platform, MCAA members will have direct access to a curated selection of crucial safety courses and materials, specifically designed to:

- Enhance industry knowledge and facilitate compliance with safety and health standards.
- Promote a sustainable culture of safety across all levels of operations.
- Provide engaging, easily accessible educational resources right at their fingertips.

"This partnership leverages BuildOps' technological strength and adds to an impressive list of partners to deliver safety training to our members," said Timothy J. Brink, MCAA CEO. "We are committed to ensuring that every MCAA member contractor and their team can access top-tier safety training seamlessly."

### Expanding Contractor Safety and Efficiency

This partnership is set against a backdrop of BuildOps' continued growth and innovation in the field service management space. Recent product releases such as their Forecasting and Credit Hold features exemplify their commitment to empowering contractors.

By integrating MCAA's safety materials, BuildOps is once again demonstrating its dedication to reshaping the landscape of commercial contracting.

MCAA members now have four companies that are committed to delivering important safety and health resources through their platforms: BuildOps, MCAI Training Vault, Tyfoom, and ServiceTitan.

Visit mcaa.org and search "BuildOps" to learn more.







### SEPTEMBER

**11-13 Fabrication Conference** *Milwaukee, WI* 

**22-25 MSCA Annual Education Conference** Colorado Springs, CO

**26-28** GreatFutures Forum *Seattle, WA* 

### NOVEMBER

**11-13 Field Leaders Conference** *Atlanta, GA* 

### DECEMBER

**4-6 Industry Funds Conference** Longboat Key, FL

### JANUARY

**14-16 Safety & Health Conference** Fort Lauderdale, FL

**27-30 MEP Innovation Conference** *Los Angeles, CA* 

MARCH

**2-6 MCAA Annual Convention** *Austin, TX* 

For more information about MCAA's Educational Events, visit **MCAA.org/events**.





## MANUFACTURER/SUPPLIER TRAINING

Looking for a specific Manufacturer/Supplier partner's training information? Save yourself time and let MCAA connect you to the latest Manufacturer/Supplier member's training opportunities. Visit the Resource menu at **mcaa.org**.

