

INDOOR COMFORT

APRIL 2021

THE VOICE OF THE INDUSTRY
NEWS

www.indoorcomfortnews.com

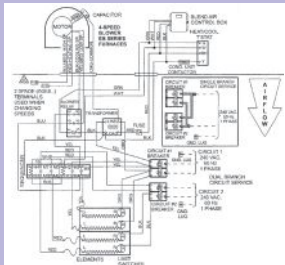
THE WEST'S LEADING MONTHLY NEWSMAGAZINE FOR THE AIR CONDITIONING, HEATING, REFRIGERATION, SHEET METAL AND VENTILATING INDUSTRIES



Editorial Focus

What's new? Find out here as ICN takes a look at the latest offerings in Indoor Air Quality, Zoning and Air Distribution Products.

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Troubleshooting

This month's problem involves a 9-year-old electric furnace that is running excessively.

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Indoor People

ICN puts the spotlight on the movers and shakers in the heating and air conditioning industry.

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New Report Documents HFC Leaks in Major Supermarkets

The Environmental Investigation Agency (EIA) recently released a report that it says exposes Walmart and other major U.S. supermarkets leaking potent greenhouse gases into the atmosphere.

Leaking Havoc: Exposing Your Supermarket's Invisible Climate Pollution is the result of a months-long investigation of dozens of supermarkets in the greater Washington, D.C. area, including Maryland and Virginia, that focused on detecting leaked refrigerant in refrigerated aisles. The investigation, using industry-accepted leak detector technology, found over half of all stores investigated to be leaking refrigerants. Using an infrared camera, EIA captured video showing HFCs leaking out onto products in an open refrigerated display case in a store.

EIA's investigation, which focused on Walmart and other top-grossing supermarkets, showed that 60% of Walmart stores visited had an HFC refrigerant leak. Across all other stores investigated, more than half were measurably



leaking these refrigerants. A few stores had high concentrations of HFCs still present months later.

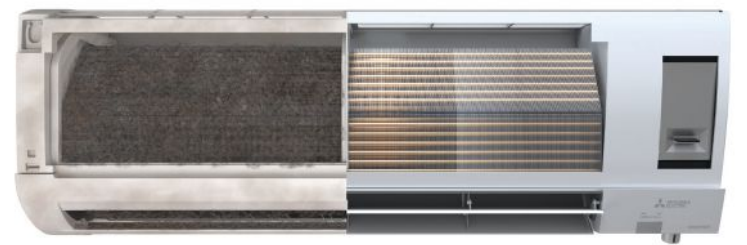
The leakage of refrigerants can be avoided through proactive refrigerant management, stated EIA. In spite of the current lack of regulations on HFCs, the recently passed American Innovation and Manufacturing Act (AIM) Act authorizes EPA to regulate production, use, and emissions of HFCs.

"It's alarming that today's regulatory landscape still allows supermarkets to legally use and leak HFCs in massive quantities," said Christina Starr, senior policy analyst at EIA. "With recent passage of the AIM Act, it's high time for the EPA to design more effective regulations to accelerate replacement of HFCs with climate-friendly refrigerants and to require companies to monitor and mitigate leaks."

Mitsubishi Electric Trane HVAC US (METUS), a leading supplier of Ductless and Ducted Mini-split and Variable Refrigerant Flow (VRF) heat-pump and air-conditioning systems, introduces the Deluxe Wall-mounted Single-zone System with H2i plus™ technology (MSZ/MUZ-FS). The system includes the new Deluxe Wall-mounted Indoor Unit with Dual Barrier Coating and new outdoor heat pump model with Hyper-Heating INVERTER® plus (H2i plus™) technology.

The Deluxe Wall-mounted Indoor Units are the first in the industry to feature the patented, next-generation Dual Barrier. Hydrophilic particles, including dust and dirt, and hydrophobic particles, like oil and grease mist, can accumulate on the heat exchanger, air ducts and fan over time, reducing an HVAC system's heating or cooling efficiency. Applied on the inside of the heat ex-

Product Spotlight



changer, vanes, air duct and blower wheel, the Dual Barrier Coating limits particle build-up, improving durability, efficiency and indoor air quality. The high-performing coating reduces maintenance requirements and maintains high efficiency levels throughout years of operation, resulting in energy savings.

Deluxe Wall-mounted Indoor Units are available in an extensive range of sizes and include an improved, remote controller featuring backlit display with easy-to-read operation modes.

The Deluxe Wall-mounted H2i plus™ System also includes MUZ-FS heat pump outdoor units equipped with new-to-market H2i plus™ technology. H2i plus



provides up to 100 percent heating capacity at outdoor ambient temperatures as low as -5° F. H2i plus is designed for continued performance down to -13° F without the need for

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2021

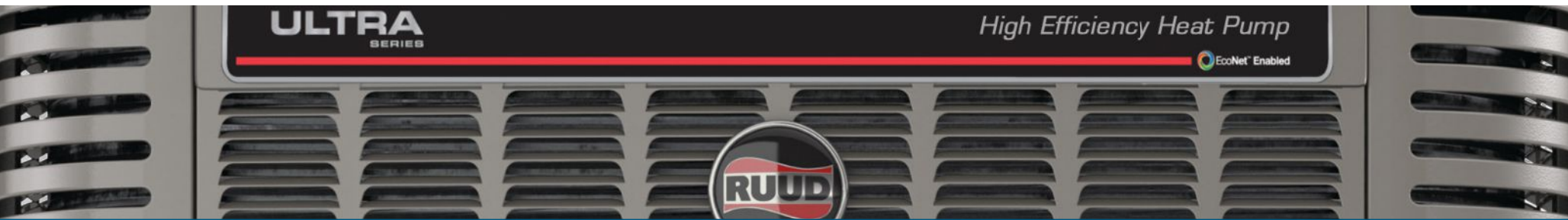
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See pages 24-25
for more information.



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- Efficiencies up to 18.5 SEER / 13.0 EER / 9.5 HSPF
- EcoNet™ enabled
- Three-stage operation



ACHIEVER® SERIES: TWO-STAGE (RP16)

- Efficiencies up to 16.0 SEER / 13.0 EER / 9.0 HSPF
- Two-stage scroll compressor
- Composite base pan for quieter operation



ACHIEVER® SERIES: SINGLE-STAGE (RP15)

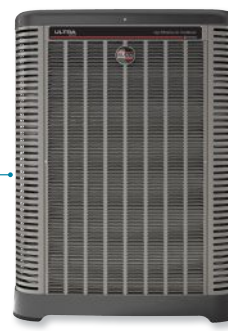
- Efficiencies up to 15.5 SEER / 13.0 EER / 9.0 HSPF
- Scroll compressor
- Composite base pan for quieter operation



ACHIEVER® SERIES: SINGLE-STAGE (RP14)

- Efficiencies up to 15.0 SEER / 12.5 EER / 9.0 HSPF
- Scroll compressor
- Composite base pan for quieter operation
- Piston option available

ULTRA® SERIES HEAT PUMPS



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- Humidity control
- Dual fuel system management



CONSTANT COMFORT™ AIR CONDITIONERS

DELUXE 19 AIR CONDITIONER WITH SMARTSENSE (CVA9)



- Up to 19 SEER cooling
- Up to 13 EER cooling
- As low as 56 decibels
- Communicating capability
- Two-stage operation
- Inverter variable speed compressor
- 10-Year No Hassle Replacement™ Limited Warranty
- 10-Year Parts Limited Warranty



DELUXE 17 TWO-STAGE CENTRAL AIR CONDITIONER (CCA7)



- Up to 17 SEER cooling
- Up to 13 EER cooling
- As low as 70 decibels
- Communicating capability
- Two-stage operation
- 10-Year No Hassle Replacement™ Limited Warranty
- 10-Year Parts Limited Warranty



CONSTANT COMFORT™ HEAT PUMP SERIES

DELUXE 18 HEAT PUMP WITH SMARTSENSE (CVH8)



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- Up to 13 EER
- Up to 11.0 HSPF
- As low as 56 decibels
- Communicating and self-configuring capabilities
- Two-stage operation
- Inverter variable speed compressor
- 10-Year No Hassle Replacement™ limited warranty



DELUXE 16 HEAT PUMP TWO-STAGE (CCH6)



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- Up to 9.5 HSPF
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- Communicating and self-configuring capabilities
- Two-stage operation
- 10-Year No Hassle Replacement™ limited warranty



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Send a text directly to our product experts Monday – Friday, 7:00 a.m. – 4:00 p.m.

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Industry News



CALIFORNIA



Stock Plan Makes Wallner Expac 100% Employee-Owned

Ontario, Calif. – Wallner Expac Inc. has completed a transaction to become 100% employee-owned through its newly-created Employee Stock Ownership Plan (ESOP).

All eligible employees will be granted shares of company stock each year, at no cost, allowing them to earn ownership over time through their service to the company and accumulate tax-deferred retirement wealth.

“Each employee of Wallner Expac is a trusted team member,” said Mariana Orozco, Wallner Expac president. “The founders of our company want our employees to feel that they ‘own and operate’ their own business which fosters tremendous pride resulting from owning a stake in the company. They also want our hard-working and loyal employees to benefit beyond their wages alone if they continue to help grow Wallner Expac. Together we strive to be more efficient, innovative, safe, and responsive to our clients’ needs.”

Fieldpiece New Website Launched

Orange, Calif. – Fieldpiece Instruments announced the launch of its newly redesigned website at www.fieldpiece.com.

“Our new website aligns with our company’s vision for growth and expansion in 2021 and into the future,” said Rachel Newport, Fieldpiece’s director of marketing. “We hope it provides our customers and those looking for better ways to service HVACR systems, with a resource for product knowledge and HVACR education.”

Fieldpiece’s redesigned website will include a blog that will be regularly updated with customer spotlights, HVACR pro tips, and product updates.

Dynamic Air Quality Names DMG for IAQ Systems

Orange, Calif. – Dynamic Air Quality Solutions announced that it has entered into an agreement with DMG Corporation of Orange, Calif., to distribute its air filtration air cleaning systems in Southern California, Central California, and Hawaii.

“We are very pleased to have Dynamic IAQ Products available through the DMG team who pride themselves on their ability to offer the right solutions to meet design standards

of today and tomorrow,” said Mark Montesanto, executive vice president of Commercial Sales for Dynamic Air Quality Solutions. “We expect this partnership to enhance our sales channels in these key markets and translate into new revenue growth for both companies.”

LonMark Names ‘20 Award Winners

San Ramon, Calif. – LonMark International, a non-profit international association recognized for the certification, education and promotion of interoperability standards for control networking, announced the winners of its “Best of the Year” awards for 2020. As an organization LMI continues to thrive with more than 1,000 products tested and certified, and over 1,000 industry professionals worldwide. Products based on the ANSI/CTA-709 (ISO/IEC 14908) standard continue to be widely deployed with products installed in over 500,000 buildings worldwide. These awards reflect the vision and innovation shared among the members of the LonMark community.

Categories and winners for 2020 include:

Multi-Vendor Project of the Year: ISDE is being recognized for providing an integrated, energy efficient automation solution for the Royal Hideaway Corales Resort in Spain. ISDE’s HOTELON

was the integrated automation solution based on the LONWORKS standard protocol. ISDE managed to meet all the requirements by the resort as well as reduce the implementation time and infrastructure costs.

Certified Product of the Year: LonWorks controller for Midea Air-condition system. The LonWorks gateway can connect up to 32 indoor and 32 outdoor air-conditioner units to the LonWorks Building Automation System. The LonWorks gateway transforms RS-485 communication protocols into a standard LonTalk protocol, thus achieving integration between the central air conditioning system and LonWorks’ BAS.

Visionary of the Year: Matthias Lurkens, Gesytec - Matthias has served on the LonMark Board of Directors for six years. During his time as a board member of LonMark Germany he managed a seamless integration of LonMark Germany to LonMark International. In addition, he is the chairman of the LonMark Technical Committee as well as the chairman of the German Marketing Task Group. Matthias along with his company Gesytec have been key contributors to the LON HD-PLC standard (ANSI/CTA 709.8). Matthias has been a key supporter and LMI is proud to honor his contributions with this well-deserved award.

LMI Contributor of the Year: Catherine Rambaud from Arcom is an active and valued member of LMI’s Smart City Council. Her involvement, support and creative insight have been instrumental for new marketing programs. In addition, she

has been a great advocate for promoting LonMark and the importance of interoperability and standardization.

“We are excited to re-vamp this award program to recognize the continued innovation, leadership and commitment to implement the LonMark especially during this past year,” said Rolf Bienert, executive director, LonMark International. “Despite a world pandemic LMI is positioned to see continued growth and has generated renewed momentum with a refreshed strategy, vision and value proposition.”

For more information on the award categories, photos and winners’ entries, please visit <https://www.lonmark.org/best-of-year-winners/>.

ServiceTitan Responds to Contractors Hit by Texas Storm

Los Angeles, Calif. – ServiceTitan is responding to the winter storm crisis throughout the central Southern United States by coordinating volunteer assistance and relief efforts with service professionals around the country.

“We’re putting out a call to all Titans who are available and willing to help their fellow contractors continue to meet the needs of their communities during this emergency,” said Ara Mahdessian, co-founder and CEO of ServiceTitan. “We had over 50 plumbers reach out to help in the first 24 hours, and we are matching them as they come in with businesses that need help. We know that tradespeople show up during difficult circumstances, and we’re in a position to connect contractors on the ground in the affected states with colleagues who can help them continue providing essential services to their customers.”

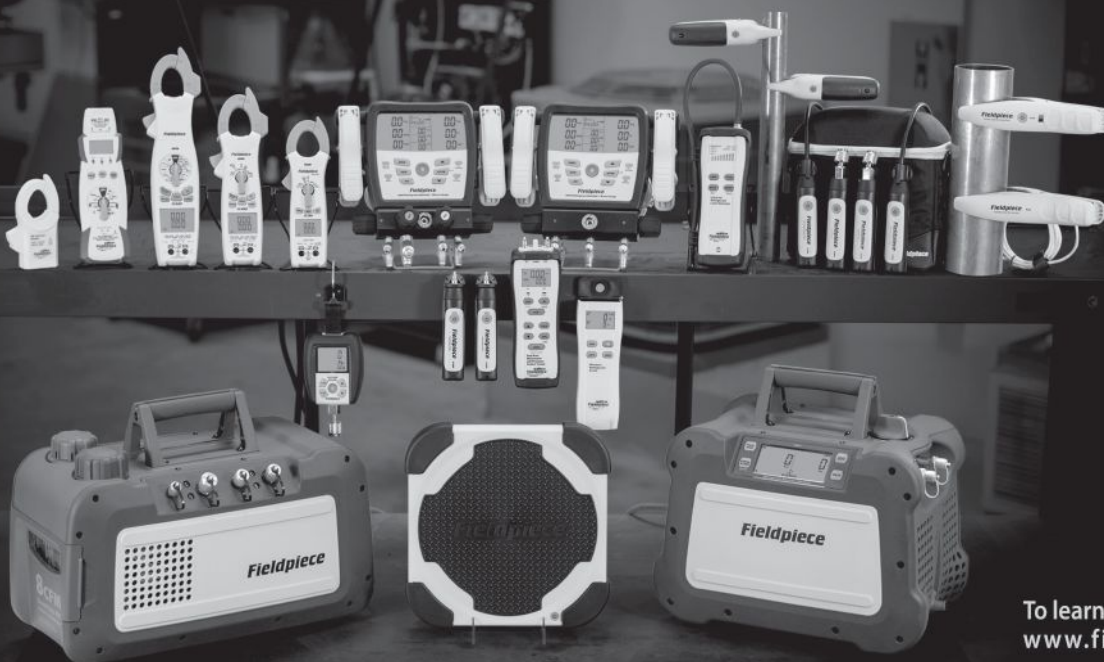
“The dedicated professionals in Texas and surrounding states have been working tirelessly to respond to this urgent situation, which unfortunately is likely to continue for several weeks,” Mahdessian said. “There are multiple ways that our customers and other con-

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Continued on Page 6

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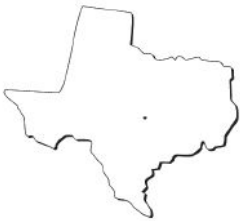
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tractors can support their efforts, whether it's sending a plumbing crew to the area, assisting with phone calls, or donating equipment."

TEXAS



Winsupply Opens in Rio Grande Valley

Mission, Texas – Winsupply Rio Grande Valley opened its doors to HVAC contractors on January 1, 2021. The new company serves HVAC contractors in the Rio Grande Valley of southern Texas. Ernesto "Ernie" Pena is the president of Winsupply of Rio Grande Valley. Pena has been in the HVAC industry for more than 10 years. He previously worked for Carrier, where he was in sales. Pena is joined by an equity partner at Winsupply of Rio Grande Valley in Joseph Midkiff, who was also previously at Carrier and leads non-sales related operations at the new company. "Ernie, Joe, and the rest of their team have 40-plus years of experience in the HVAC industry," said Rob Ferguson, president of Winsupply Local Company Group. "As owners of their own company, they have autonomy and local decision-making to decide how to meet the needs of their customers in the Rio

Grande Valley." Winsupply RGV partners with a local food bank, and for every air conditioning system sold, the business commits 10-12 meals to feed the hungry in the community. Through programs like Maytag Meals for the Valley, Frigidaire Feeds the Valley, and a number of supplies programs, Winsupply is aiming to provide over 20,000 meals in 2021 alone.

Interplay Learning Raises \$18M in Series B Funding

Austin, Texas – Interplay Learning announced it completed an \$18 Million Series B round of financing. Owl Ventures and S3 Ventures co-led the round, with additional investment from Strada Education Network and The Venture Reality Fund, as well as participation from existing investors SJF Ventures, Sierra Ventures, Holt Ventures, Wild Basin Investments, and Shelter Capital Partners. "Interplay Learning is setting the standard for fully interactive, lifelike, hands-on simulation learning that can be experienced through VR, mobile and desktop applications," said Ian Chiu, managing director of Owl Ventures. "Thousands of companies are leveraging Interplay to build their own scalable, job-ready workforce faster than ever before. Interplay's on-demand skilled trades training courses are designed to help the existing 24 million skilled workers, as well as those just entering the workforce, to be field-ready in

weeks, not years. We're excited to be partnering with Interplay as they continue to scale and expand on their market leadership." "This new capital enables us to broaden our offering into new markets and accelerate our vision for 'comersive' learning, combining immersive learning with human connection," said Doug Donovan, founder and CEO of Interplay Learning. "There is a critical shortage of essential skilled workers in the U.S. that is being exacerbated by the accelerating rate of retirement. This growing skilled trades gap is what drives us every day. We're excited about our growth in 2021; we plan to double our employee headcount and fulfill our mission of better careers, better lives."

ICD Building Automation Grows Honeywell Products Distribution

Houston, Texas – ICD Building Automation announced it will be a Honeywell Authorized System Distributor (ASD) in California and Hawaii. "ICD Building Automation is proud to continue our successful relationship with Honeywell in these new markets," said David Wilken, vice president of Rawson/Industrial Controls. "We look forward to delivering the latest solutions to help buildings become healthier and safer for occupants today and in the future."

NATIONAL



Mitsubishi Electric Trane Updates App

Suwanee, Ga. – Mitsubishi Electric Trane HVAC US (METUS), a leading supplier of Ductless and Ducted Mini-split and Variable Refrigerant Flow (VRF) heat-pump and air-conditioning systems, announces advancements to the Mitsubishi Electric MEView™ mobile app. The newest version of the Mitsubishi Electric MEView app allows contractors and homeowners to select the most appropriate model and location for an indoor unit using augmented reality technology to visualize the installation. Using the app is easy: simply choose an indoor model, align the app with the floor for detection, then point the phone at the wall or ceiling to place the 3D model in the space. "We're pleased to unveil these improvements to the Mitsubishi Electric MEView app," said Suzanne Rigdon, director, integrated marketing, Mitsubishi Electric Trane HVAC US. "The new app uses the latest detection technology to virtually place our models in a home. The homeowner will know exactly what a unit will look like, whether they choose a wall-mounted, floor-mounted or ceiling-cassette indoor unit. They can experience all of our model types in the comfort of their homes. Plus, the

estimator can provide the image to the installer so he or she knows exactly where to place the units." Other Mitsubishi Electric MEView app enhancements include: • Availability of the full suite of METUS products, including floor and ceiling units • Simplified room image sharing – users are now able to share renderings via text and email • Inclusion of products from additional METUS brands such as Trane®/Mitsubishi Electric and American Standard®/Mitsubishi Electric • In addition to iOS mobile devices the app is now compatible with Android devices

For more information about Mitsubishi Electric Trane HVAC US residential heating and air conditioning systems, visit mitsubishicomfort.com.

DiversiTech Buys Packard, Inc.

Duluth, Ga. – DiversiTech Corp., a leading supplier and manufacturer of highly-engineered components, accessories and tools for heating, ventilating, air conditioning and refrigeration (HVAC/R) professionals, announced that it has acquired Packard, the leading supplier of electrical aftermarket and OEM components in the HVAC/R industry. "Today marks the beginning of an exciting new chapter for Packard, Inc., one where the joining of two great organizations will accelerate our growth and service within the HVAC/R Industry," said Packard President Susan Kirkland. "We are excited to embark on this journey with DiversiTech." DiversiTech CEO Andy Bergdoll, commented, "DiversiTech is committed to being a supply chain solutions provider for parts & supplies. This means having the broadest product portfolio in the HVAC/R industry to enable wholesalers to consolidate suppliers, streamline ordering & logistics and improve profitability. Last year we commissioned our newest Manufacturing plant in Leesburg, FL to support our pad growth. We are excited to start 2021 with the addition of Packard to support our growth in electrical aftermarket components. Bringing together the great teams at Packard and

Continued on Page 8

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- Up to **\$1000** on qualifying natural gas tankless water heaters.
- Up to **\$175** rebate on ENERGY STAR® certified natural gas storage water heaters.
- Up to **\$1000** rebate on ENERGY STAR certified natural gas furnaces.

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This program is funded by California utility customers and administered by Southern California Gas Company under the auspices of the California Public Utilities Commission. Program funds, including any funds utilized for rebates or incentives, will be allocated on a first-come, first-served basis until December 31, 2021 or until such funds are no longer available. This program may be modified or terminated without prior notice. The selection, purchase, and ownership of goods are the sole responsibility of customer. SoCalGas makes no warranty, whether express or implied, including the warranty of merchantability or fitness for a particular purpose, of goods selected by customer. Customers who choose to participate in this program not obligated to purchase any additional goods offered by manufacturer, vendor, service provider, or any other third party. Eligibility requirements apply; see the program conditions for details.



Continued from Page 6

DiversiTech will ultimately enable us to deliver more value to our wholesale partners”.

Packard and DiversiTech have each serviced the HVAC/R industry for over 50 years.

For more information about DiversiTech, go to diversitech.com.

For more information about Packard, Inc., go to packardonline.com.

.....

Forbes Names Greenheck One of Best Employers

Schofield, Wisc. – Greenheck Group, one of the world’s leading manufacturers of air movement, control, and conditioning equip-

ment with manufacturing locations across the United States, was named as one of Forbes’ America’s Best Mid-sized Employers on Tuesday, February 9. Employers are chosen based on results from an independent survey distributed to more than 50,000 U.S. based employees working for companies that employ more than 1,000 individuals.

Companies considered for this award were rated by nationwide survey respondents on work-related topics such as working conditions, salary, potential for development, and overall company image. Greenheck Group ranked as one of the top 250 mid-sized companies in the nation and one of the top 15 manufacturers nationally in the mid-sized category. Greenheck was also selected for this award in 2019.

“Greenheck Group is honored to be a recipient of this prestigious

award yet again,” said Carrie Strobel, Greenheck Group Vice President of Human Resources. “Our team members play a significant role in providing clean, safe indoor air with the products manufactured in our facilities. The past 11 months have been unexpected; this recognition reflects our company culture and the ongoing efforts made by every Greenheck Group team member to live our values.”

.....

Carrier, IWBI Form Healthy Buildings Partnership

Palm Beach Gardens, Fla. – The International WELL Building Institute (IWBI) and Carrier Global Corporation intend to join forces to advance industry engagement glob-

ally through education about and encouragement of the adoption of healthy building practices.

“Carrier has been a force in the healthy building movement from the beginning, just as they were with the green building movement,” said Rachel Hodgdon, president and CEO, IWBI. “The company has long been a leader in the assessment and optimization of buildings, including improved indoor air quality and the fundamental elements of safety and security, and we’re pleased to see their continued leadership in this critical space. We’re excited to have such a tremendous global powerhouse working alongside us toward the same goal: getting us back indoors, in the places we love, with confidence.”

“Carrier is excited to collaborate with IWBI to provide safer

indoor environments, which is critical during the pandemic and will remain an imperative for generations to come,” said Carrier President and CEO Dave Gitlin. “In addition to our offerings, customers can turn to us knowing that they’re working with a company that’s walking the talk. We are working toward achieving the WELL Health-Safety Rating for Carrier facilities and to implementing broad WELL Accredited Professional status across our company. Together, with our experiences and our offerings, we’re committed to making healthy buildings more prevalent around the world, and to giving customers visibility and confidence in the safety of their indoor environments.”

The WELL Health-Safety Rating and WELL AP collaboration is expected to include:

- Research
- New healthy building solutions designed to help people feel more confident indoors
- Policy work to advance initiatives that will help restore confidence in workspaces, get economies back on track, and improve accessibility to healthier and safer residences for everyone

This work will be supported by Carrier experts who are expected to serve on two IWBI / WELL advisory boards. Chris Kmetz, senior vice president, Engineering, is expected to serve on IWBI’s Health Equity Advisory. Chris Kafura, senior director, Residential & Light Commercial HVAC Engineering, is expected to serve on the WELL Homes Advisory.

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A. O. Smith Celebrates Essential Workers

Ashland City, Tenn. – A. O. Smith, a leader in water heating and treatment, recently partnered with more than 35 U. S. wholesale manufacturer’s representative agencies to honor plant employees with a COVID-compliant luncheon. To thank essential workers and show their appreciation for the employees’ dedication during the pandemic, the agencies organized donation efforts to provide boxed lunches to more than 4,500 employees at five plant locations.

In less than two months, the group, led by Steve Kidwell,

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April 8, 9, 15, 16 | 8 a.m. – noon

Selling Residential HVAC Heat Pumps for New & Retrofit Construction

April 12 | 5:30 p.m. – 7 p.m.

Overcoming Installation Barriers for Residential HVAC Heat Pumps

April 13 | 5:30 p.m. – 7 p.m.

Optimize Economizer Performance

4-Part Series

April 20, 21, 27, 28 | 1 p.m. – 5 p.m.

Demand Response for C&I Facilities

2-Part Series

April 27 & 29 | 9 a.m. – 11 a.m.

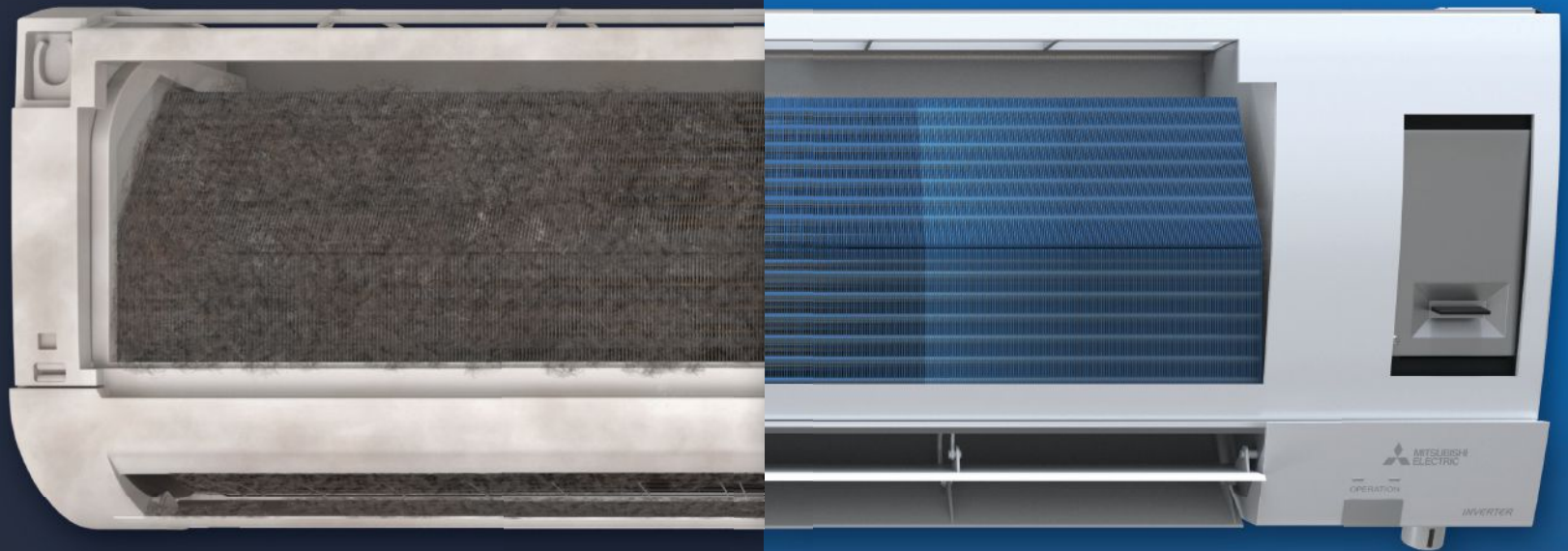
Reserve your seat today or check out other classes at seminars.sdge.com.

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Continued on Page 10



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Continued from Page 8

president and CEO at ROI Marketing in Millersville, Md., raised roughly \$60,000.

“A. O. Smith plant employees have dedicated their efforts to supporting our businesses throughout the pandemic. Nationwide, my colleagues and I felt a deep need to show our gratitude,” said Kidwell. “In a normal year, reps and contractors from across the country visit the A. O. Smith facilities to meet employees and see product production first-hand. That sense of community is core to our industry, and this is a first step to get it back.”

“While many businesses saw massive delays due to COVID, the A. O. Smith team kept things moving, so our customers could

continue to serve theirs,” Kidwell added.

Employees were honored at plant locations in Ashland City, Tenn.; Johnson City, Tenn.; Knoxville, Tenn.; McBee, S. C.; and Juarez, Mexico. In addition to the boxed lunches, banners were hung in the employees’ honor stating, “Not every hero wears a cape.”

“Clean, hot water is essential, especially with more people at home, and A. O. Smith plant employees have been working tirelessly, so homeowners and business owners can stay safe and comfortable during the pandemic,” said Dave Warren, senior vice president at A. O. Smith Corporation, and president and general manager for North America Water Heating. “This event really speaks

to the relationship we have with our customers, and we are beyond grateful for their partnership.”

Appreciation efforts will run through this week to ensure all employees receive a boxed lunch in a COVID-compliant way.

HB McClure Named ACCA Commercial Contractor of Year

Alexandria, Va. – The Air Conditioning Contractors of America (ACCA) concluded its winter board of directors and membership meeting by announcing HB McClure Company in Harrisburg, Pennsylvania, as the ACCA 2021 Commercial Contractor of the Year.

“ACCA is thrilled to present the 2021 Commercial Contractor of the Year award to the HB McClure team,” said Barton James, ACCA president and CEO. “HB McClure is a one of a kind company that has served central Pennsylvania and Northern Maryland for more than a century. Their commitment to empower and invest in their employees not only helps set them apart from their competition, but their unique style of leadership will also help move the HVACR industry forward for everyone.”

“We are very thankful to have earned this award through ACCA, who provides so much value to our industry and the companies that make it,” said Adam Smith, vice president of HB McClure. “To be recognized as the Commercial Contractor of the Year is a testament to the hard work and continual progress all our employee owners make each day. In

the face of COVID, a company’s true values were brought to light. Being honored during this time is a reflection of the focus we have maintained on our people and our customers which makes the recognition even more special.”

American Standard Honors O’Connor Co.

Lenexa, Kan. – O’Connor Company was recently named the winner of the American Standard’s 2020 Pinnacle Award. This designation recognizes performance vs. plan in the following business-critical areas: residential, commercial, parts and supply, new dealer business, residential new construction, multi-family, and non-owner occupied.

Awards are based on market share, sales, growth, and customer satisfaction and are the result of a successful relationship between distributor and dealer.

“We are proud to represent American Standard,” said Greg Borr, O’Connor Company president. “It takes the contribution of each and every team member at O’Connor Company and our outstanding dealer network to be recognized in this prestigious category.”

This is the second time O’Connor Company received American Standard’s Pinnacle Award, having first achieved the honor in 2007. Most recently, O’Connor Company was a runner-up for the award in 2018.

American Standard will present the Pinnacle Awards at a special ceremony later this year.

Weil-McLain to Host Online Boiler Technology Training Sessions

Burr Ridge, Ill. – Residential and commercial heating contractors can hone their boiler technology skills and training this spring by participating in Weil-McLain’s Knowledge Builder Sessions taking place twice a week in April and May.

The weekly educational sessions, hosted by the technical training team from the leading North American designer and

Continued on Page 12

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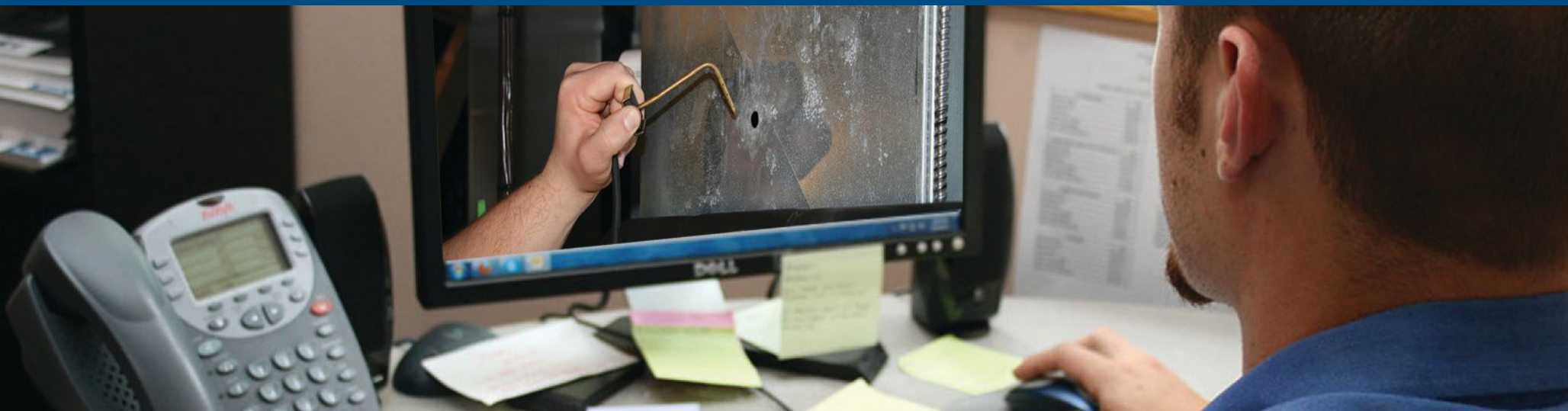
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California Utility Hosted Online Live Training for HVAC Professionals



National Comfort Institute, Inc., (NCI) High-Performance HVAC training is now available to HVAC professionals throughout California.

Southern California Edison and Pacific Gas and Electric have partnered with NCI to provide advanced training and certification.

These NCI classes also qualify for NATE and BPI Continuing Education Credits.

NCI offers cutting-edge HVAC training programs from technical, business, sales, and marketing perspectives. Learn from our knowledge experts how to solve airflow and comfort issues others miss every time, lead your team to success, improve your sales approach, and develop Key Performance Indicators (KPIs) that keep you and your staff accountable.

Our online, live classes are provided in 4-hour blocks. For example, our Residential Duct System Optimization program consists of four, 4-hour segments of training over a two week period. Students who participate in certification classes will also qualify for online, proctored NCI certification exams after the training, sponsored by our partners.

National Comfort Institute thanks the following Investor-Owned Utilities for hosting this training for HVAC professionals throughout California:



Upcoming California Training Calendar

 Pacific Gas and Electric Company	Refrigerant-Side Performance Certification April 22-23, 27-28 1pm - 5pm Pacific Certification Exam Included!	16-hour training program Regular Price: \$690 Student fee: Just \$100 per student Registration Closes: April 14, 2021
 SOUTHERN CALIFORNIA EDISON	Grow Profitably with Airflow Upgrades April 29 5pm - 7pm Pacific	2-hour training program Regular Price: \$95 Student fee: Just \$15 per student
 Pacific Gas and Electric Company	Performance-Based Selling May 4-5, 11-12 8am - 12pm Pacific	16-hour training program Regular Price: \$795 Student fee: Just \$100 per student
 SOUTHERN CALIFORNIA EDISON	Refrigerant-Side Performance Certification May 4-5, 11-12 1pm - 5pm Pacific Certification Exam Included!	16-hour training program Regular Price: \$690 Student fee: Just \$100 per student Registration Closes: April 28, 2021
 SOUTHERN CALIFORNIA EDISON	Commercial System Performance Certification May 18-19, 25-26 8am - 12pm Pacific Certification Exam Included!	16-hour training program Regular Price: \$690 Student fee: Just \$100 per student Registration Closes: May 12, 2021

Take an NCI Course Today! Call 800-633-7058 or visit ncilink.com/CALUtility

This program is funded by California utility customers and administered by SCE and PG&E under the auspices of the California Public Utilities Commission.



Continued from Page 10

manufacturer of hydronic comfort heating systems, will cover high-efficiency residential boilers on Wednesdays and high-efficiency commercial boilers on Thursdays. Each course, running through late May, will cover a specific Weil-McLain boiler as well as installation and servicing applications. The complete course offering is available at www.weil-mclain.com/training.

“Our livestream training program will cover the gamut, from technology, features and benefits, to maintenance, troubleshooting, installation, controls and set-up,” said Dante DeVille, Technical Training Manager with Weil-McLain. “Contractors, engineers and facility managers alike can select a specific course for in-depth product training and gain insider tips for keeping Weil-McLain boilers running at peak operational efficiency.”

The residential training programs will cover applications, installation and servicing of Weil-McLain’s popular condensing and non-condensing boilers, including its new ECO® Tec high-efficiency premium residential boiler, the Evergreen® stainless steel condensing boiler, the Ultra™ corrosion-resistant boiler, GV90+® high-efficiency cast iron boiler and the AquaBalance™ combi or heat-only boiler.

Commercial boiler training sessions will feature the Stainless Vertical Firetube™ (SVF) commercial condensing boiler line with industry-leading thermal efficiencies up to 96.8%, the SlimFit® boiler designed for limited spaces, Evergreen® Pro and the full line of Weil-McLain cast iron boilers.

Commercial application courses

include maintenance and troubleshooting, steam boiler replacement, commercial condensing boiler piping, hybrid applications, specifying high efficiency equipment and commercial condensing boiler controls.

For more information or to register for a session, visit www.Weil-McLain.com/Training.

Plumblines Services Opens New Location in Colo.

Denver, Colo. – Plumblines Services, a Wrench Group company, announced the grand opening of its newest location in Arvada, Colo.

With the expansion, the company now provides its services to many communities both north and west of Denver including Arvada, Boulder, Broomfield, Golden, Lafayette, Longmont, Louisville, Superior, Thornton, and Westminster.

“We are thrilled about the grand opening of our newest location in Arvada,” said Bob Logan, president of Plumblines. “We chose Arvada because we wanted to provide our outstanding and timely customer service to communities north of Denver, just as we have for the city and other areas near our location in Centennial for more than two decades. We now proudly serve the entire metro area, from Longmont all the way south to Castle Rock.”

Plumblines employs more than 35 people at the new Arvada location. The new location’s address is 5980 W. 59th Ave., Arvada, and can be reached via phone at 303-436-2525.

Victaulic Adds New Manufacturing Plant

Easton, Penn. – Victaulic, the world’s leading manufacturer of mechanical pipe joining, fire protection and flow control solutions has purchased a 220,000 square foot Waupaca manufacturing plant in Lawrenceville, Penn. When operating at full capacity, the facility will increase Victaulic’s foundry production capacity by 70 percent in the U.S. and allow for future growth as Victaulic’s business demands increase. The facility, including two foundry molding lines, will also enable Victaulic to produce larger scale products.

“The addition of Waupaca’s Lawrenceville foundry will provide the scale and capacity necessary to continue our growth plans and most importantly service our valued North American customers. Additionally, Victaulic is doing its part to add vital manufacturing jobs within Pennsylvania,” commented John F. Malloy, Chairman of Victaulic. “A major aspect of our business strategy has always been to manufacture products in close proximity to our customers.”

Victaulic anticipates adding new jobs to Tioga County in the near future. It is expected many of the new positions will be filled by local talent from the area’s skilled workforce. New hires will join the current Victaulic team of more than 1,600 Pennsylvania employees and approximately 4,500 people globally.

“Victaulic’s investment in Tioga County is a testament to the company’s incredible track record of growth, vision and passion for the communities they serve,” commented State Representative

Clint Owlett. “I look forward to welcoming this family-owned business with Pennsylvania roots to our community along with the jobs it will bring to our hard-working residents.”

Victaulic, headquartered in Easton, Penn., has nearly a thousand employees in the Lehigh Valley and remains one of the region’s largest employers of steelworkers, with plants in Northampton and Lehigh counties.

“Victaulic greatly appreciates the support of Develop Tioga, Tioga County, the Tioga County Commissioners, and its local elected officials, particularly Senator Cris Dush and State Representative Clint Owlett,” commented Rick Bucher, Victaulic President and CEO. “We are dedicated to building a long-term, mutually beneficial partnership with the region and its hardworking residents.”

The company is also nearing the completion of an additional 400,000 square foot light assembly operations facility in Lower Nazareth, which is expected to be fully operational in 2021.

FabricAir Opens Offices in Mexico

Lawrenceville, Ga. – FabricAir, the original manufacturer of HVAC/R fabric duct, established a Latin America subsidiary on Jan. 1 with offices and warehousing headquartered in Silao, Guanajuato, Mexico. FabricAir Latin America S.A. de C.V. now serves the Mexico, Central America and South America markets to provide cost-effective, high quality fabric HVAC/R dispersion systems backed by expert engineering support and short lead times.

The new Latin American management is responsible for the entire region and is headed by Anthony Josué Ramirez, sales manager–Caribbean, Central and South America; and Veronica Lozano, national sales manager for Mexico. Both executives report to FabricAir CEO, Brian Refsgaard. Ramirez and Lozano have a combined 18 years of experience selling fabric duct in Latin America.

The Denmark-based FabricAir has manufactured fabric duct for HVAC/R applications since 1973 and markets it globally. Previously, Latin American projects were facilitated by its U.S. Atlanta-based office.

Fabric duct is a metal duct alternative for open architecture ceilings that is superior in airflow uniformity, installation time reduction, energy efficiency, condensation prevention and other benefits. “We can see a potential growth for fabric duct in the Latin American HVAC market for supermarkets, food processing industry, warehousing, laboratories, sports facilities, schools, offices and other applications requiring optimum indoor air quality,” said Ramirez, who has past fabric duct sales experience in the Caribbean, Central America, Bolivia and Uruguay. “It’s perfect timing for this venture because many projects that were on hold due to the pandemic are now re-emerging,” said Lozano. “The Latin American market is ready for better quality fabric duct products with unprecedented engineering and customer support.”


The FabricAir Latin America team will be calling on consulting engineers, architects, specifiers, contractors and end-users. The subsidiary has already named the initial sales team as: Anaïd Olivares Lira, Adriana Lopez and Gustavo Adolfo Villarreal Ramos, who are territory managers for Mexico North, Central and South, respectively. Sales support for design, installation and service will be provided by eight-year veteran, Carlos Iriarte, inside sales and engineering support, from FabricAir Inc.’s U.S. Atlanta office.

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Honeywell to Buy Majority Stake in Fiplex Comm.

Charlotte, N.C. – Honeywell has signed an agreement to acquire a majority stake in Fiplex Communications Inc.

“We are looking to reshape how communications and connectivity within buildings work,” said Vimal Kapur, president and chief executive officer, Honeywell Building Technologies. “The addition of Fiplex’s products and software allows us to move toward creating the next generation of fire and life safety solutions to keep both building occupants and first responders safer. The Fiplex team brings superior engineering talent and unique capabilities for wireless communications that will enable us to enhance our in-building communications offerings and complement our innovative, industry-leading solutions.”

“Honeywell has long demonstrated leadership in the fire and life safety industry, and we are pleased to join their team,” said Matias de Goycoechea, chairman and chief technology officer, Fiplex. “We look forward to working with Honeywell to expand our technological advancements and to support the creation of better-connected buildings.”

Terms of the investment were not disclosed, and there is no change to Honeywell’s financial outlook as a result of the acquisition. The acquisition is pending customary deal closing conditions.

Dakota Supply Group to Expand

Plymouth, Minn. – Dakota Supply Group (DSG) has announced plans to open a new branch in Watertown, South Dakota, in April 2021. It will be DSG’s seventh location in South Dakota and its 36th across five states. The new facility will occupy a portion of the Town Clock building at 206 9th Avenue SE on Highway 212. Charlie Hendrickson will lead the new facility as branch manager.

“We’ve enjoyed the customer relationships DSG has built in the area,” said Ryan Tracy, South Dakota general manager. “Having a branch location in Watertown will allow us to be even more responsive in the

local market. It was also important for us to hire experienced people in Watertown. We’re excited to establish a business that is active in the Watertown community.”

DOE to Build \$75M Energy Storage Research Facility

Washington, D.C. – The U.S. Department of Energy (DOE) today announced the beginning of design and construction of the Grid Storage Launchpad (GSL), a \$75 million facility located at Pacific Northwest National Laboratory (PNNL) in Richland, Washington that will boost clean energy adaptation and accelerate the development and deployment of long-duration,

low-cost grid energy storage. “The Grid Storage Launchpad facility will bring together researchers and industry from around the country to modernize and add flexibility to the power grid, advance storage technologies, and boost use of clean energy,” said Secretary of Energy Jennifer M. Granholm. “Deploying new grid technologies means we can get more renewable power on the system, support a growing fleet of electric vehicles, make our grid more reliable and resilient, and secure our clean energy future.”

The planned facility will include 30 research laboratories, some of which will be testing chambers capable of assessing prototypes and new grid energy storage technologies under real world grid operating conditions. The GSL will include flexible workstations and collaboration

spaces, including Fellowship Labs, which will provide dedicated space for researchers to incubate storage technologies originating from the U.S. research and development community.

The GSL will focus on three outcomes to advance grid energy storage development:

Collaboration: Bringing DOE, multidisciplinary researchers, and industry together at the facility will lower the barriers to innovation and deployment of grid-scale energy storage.

Validation: The facility will enable independent testing of next generation grid energy storage materials and systems under realistic grid operating conditions.

Acceleration: From benchtop to systems, the facility will de-risk and speed the development of new

technologies by propagating rigorous performance requirements.

During this new phase of development, PNNL will select a design and construction contractor and begin working toward the start of construction, which could begin late this year. The building is expected to be operational and ready for occupancy by 2025.

“It took 40 years to get to the current state of today’s lithium-ion battery technology, but we need to move much faster to develop the long-duration, low-cost batteries needed to meet the significant challenges of decarbonizing the energy system,” said PNNL Director Steven Ashby. “The GSL will speed up the process considerably by doing the work needed to develop and deploy new grid storage technologies.”

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Indoor Air Quality, Zoning, & Air Distribution Products

Bosch Thermotechnology Inverter Ducted Split



Bosch Thermotechnology, a leading global source of high-quality heating and cooling systems, announced the expansion of its Inverter Ducted Split (IDS) Family to include the market's first 15 SEER rated unitary inverter

solution, IDS Light, as well as IDS Plus (18 SEER) and IDS Premium (20 SEER). Made possible by the new BVA15 air handler and BOVB18 condenser, the new IDS Light system is designed for optimum comfort at an approachable price point. The only 15 SEER (seasonal energy efficiency ratio) unitary inverter system on the market, IDS Light delivers quality engineering, quiet performance and exceptional value to homeowners whose needs may not be demanding enough to require a higher SEER rated system. Engineered for high-efficiency, Bosch IDS systems are designed

to use the optimum amount of energy to achieve maximum comfort while keeping sound levels to a minimum. One of the quietest systems on the market, the system uses silent blade technology, sound isolating mounts and outdoor condensing section placement to provide sound levels as low as 56 dBA. Conventional heat pumps' frequent cycling on and off can result in uncomfortable temperature fluctuations. Inverter-driven pumps are able to self-adjust, providing consistent room temperature, even when the outdoor temperature dips below freezing. The on-off cycle of traditional pumps also creates energy surges, while the IDS systems steadily ramp up operation – avoiding energy spikes and protecting the system's life-cycle and energy usage. The high-efficiency systems' ability to operate at optimum energy usage also qualifies for maximum rebates from energy providers, resulting in cost-savings to homeowners. The Bosch IDS Family now features three solutions to provide homeowners with the right-sized system to fit specific needs: • IDS Light: Providing the benefits of a 15 SEER inverter system at an approachable price point, this newly designed system combines the efficient and reliable BOVB18 outdoor unit with the BVA15 PSC air handler. • IDS Plus: Previously IDS 1.0, the 18 SEER IDS Plus system provides a balance of efficiency and comfort through a combination of the BOVB18 outdoor unit with the elevated BVA20 2 stage constant torque ECM style air handler. • IDS Premium: Delivering the IDS Family's highest efficiency for maximum energy rebates from providers, IDS Premium, previously IDS 2.0, is Bosch's highest efficiency system. Boasting a 20 SEER rating, the system utilizes the top tier BOVA20 outdoor unit with the BVA20 2 stage constant torque ECM style air handler. More information: www.boschheatingandcooling.com.



Clean Air Scrubber and associated accessories available for direct purchase. "As many businesses continue to evaluate the indoor air quality of their facilities, it's important for Carrier to make it as easy as possible for small-business owners to access the technology that can improve the air in their indoor environments," said Justin Keppy, President, NA Residential & Light Commercial, Carrier. "This new website provides educational content about Carrier's IAQ solutions and offers intuitive navigation to cost-effective options tailored to small-business owners." Carrier OptiClean units plug into standard wall outlets and use a HEPA filter to remove particles down to 0.3 microns. The units are available in two sizes to accommodate rooms of various sizes. One 600-cfm unit can adequately clean the air in a 600 sq. ft. space, such as an office or conference room, while the 1500-cfm unit is designed for rooms up to 1,500 sq. ft. In both cases, multiple units can be used for more expansive spaces. Each unit requires roughly three-square feet of floor space when oriented vertically and can also be operated horizontally, allowing for convenient, unobstructed placement in common areas. The OptiClean Dual-Mode Air Scrubber & Negative Air Machine was named one of TIME's 100 Best Inventions of 2020. It was developed through rapid innovation in early 2020 to help support infectious isolation rooms in hospitals as a negative air machine. TIME featured the OptiClean Air Scrubber & Negative Air Machine in the Medical Care category of its prestigious annual list that recognizes 100 ground-breaking inventions that are making the world better and smarter. OptiClean is among a number of solutions offered through Carrier's Healthy Buildings Program that can aid in addressing indoor air quality. Other offerings include HVAC system filters with high MERV or HEPA ratings; UV lights to clean inside HVAC equipment; Agion® anti-microbial coating, which can be applied to protect equipment against bacte-

rial growth; economizers; and a HumidiMiZer® dehumidification system. More information: https://opti-clean.carrier.com/.

Continental Fan CX-Aire

With the power of UVGI (ultraviolet germicidal irradiation) light, CX-Aire in-duct air purifier by Continental Fan effectively neutralizes harmful airborne viruses, bacteria, mold and fungi. UVC light purifies the indoor air as it circulates through the treatment zone within an HVAC duct system. The compact design of the CX-Aire easily installs in an existing HVAC duct system and conveniently utilizes a pre-wired 120V power cord. Features and Benefits: • High-intensity, energy efficient UVC germicidal lamp • Effectively neutralizes viruses, bacteria, mold & fungi • UVC light irradiates an AC coil of toxic organics and biofilm • Compact design easily installs in an HVAC duct system • Install in supply duct, in return plenum or above AC coil • Continuous operation • Ozone free • Pre-wired 120V power cord • Built-in safety switch • 2-year lamp efficiency; simple twist-and-lock replacement • Limited 10-year warranty More information: www.continentalfan.com.



EffectiV HVAC Inc. Air Purification Suite

EffectiV HVAC's UV diffusers integrate ozone-free UV lamps and design to increase air contact with UV-C light. The MERV 9 filter also intercepts dust, pollen, and other larger particles to supply pure air free of allergens and other irritants. Because the diffusers are hinged, there is easy access to change the filter and UV lamp. The light bulb has a two-year lifespan with optimal efficiency. The systems can be installed with the likes of EffectiV HVAC diffusers, AXO high induction, and PLAY adjustable diffusers. The result is a faster and more efficient

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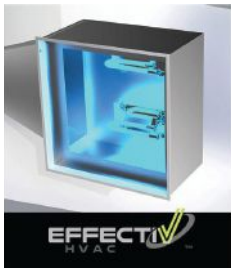
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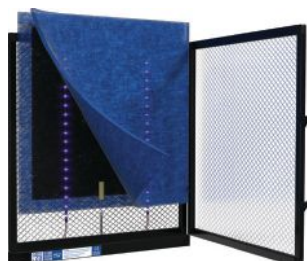
Fresh-Aire UV Purity Low Profile LED

Fresh-Aire UV, Jupiter, Fla., a leading manufacturer of indoor air quality (IAQ) products, introduces the Purity Low Profile LED (PLP-LED) the HVAC industry's first one-inch-thick (24-mm) replaceable filter that combines biological contaminant disinfection, VOC removal and particulate capture. The PLP-LED offers high efficiency filtration with minimal static pressure loss and is designed to fit the most common one-inch filtration rack sizes in residential and commercial air handlers.

The PLP-LED is the 2020 Air Conditioning Heating and Refrigeration (AHR) Expo Innovation Award winner in the IAQ category. Fresh-Aire UV also won the same award in 2011 for its APCO® combination UV, carbon-media and photocatalytic oxidation air purifier.

The PLP-LED is a three-stage filter using mini LED light arrays, advanced photocatalytic-coated reactive chemical adsorption media, and polarization technology to disinfect biological contaminants, remove VOCs and collect particulates, respectively.

The PLD-LED consists of three filter layers held together inside a corrosion-resistant, latched aluminum framework/mesh grill clamshell. The top and bottom blue layers are a particulate-capturing, UV reactive fiberglass media treated with Nanotech antimicrobial and photocatalytic coatings.



They're sandwiched between a black carbon core for improved VOC removal. The frame's grill, which includes two UV LED disinfecting arrays, opens easily for quick media replacement every four to six months. The PLP-LED also employs low-voltage negative and positive polarization to charge, attract, impinge and agglomerate particulates into the fiberglass media.

The three stages are:

- The UV-reactive media adsorbs household odors from chlorine, acetones, formaldehyde cooking odors, pet smells and other VOCs from the air.

- The polarized media capture 97-percent of particulates as small as 0.3-microns (.00001-inch). The polarization, activated by a 24V connection or optional plug-in transformer, electrically charges particulates so they attract to polar

opposite counterparts and agglomerate in the fiberglass media. Unlike electrostatic technology where collector plates need periodic cleaning to continually attract contaminants, the PLP-LED polarized media requires only replacement.

- The LED disinfecting light field, the first in the HVAC industry to appear on a one-inch polarized filter, disinfects biological contaminants, such as viruses,

bacteria, mold and mildew, that agglomerate into the fiberglass media.

The PLP-LED performance can be enhanced with an optional installation of a Fresh-Aire UV's renowned Blue-Tube UV® or APCO system for keeping the evaporator coil, air handler interior surfaces and airstream free of mold

Continued on Page 16

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Indoor Air Quality, Zoning, & Air Distribution Products

Continued from Page 15

and other biological contaminants.

Other PLP-LED features include:

- Doesn't create ozone, which has been defined by ASHRAE, UL-Spot.com, the Environmental Protection Agency (EPA), California Air Resources Board (CARB) and other organizations as harmful to human respiratory systems.

- Fresh-Aire UV's LED array methodology has been found effective in 2017 for surface sanitizing efficacy according to test standard ASTM E1153 "Test Method for Efficacy of Sanitizers Recommended for Inanimate Non-Food Contact Surfaces" administered by third-party lab, Microchem Laboratory, Round Rock, Texas.

- Lifetime warranty. LED arrays are replaced every five years;

More information: www.freshaireuv.com.

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Fujitsu General America
J-IV



Fujitsu General America, Inc. has released the new, single-phase J-IV and J-IVs Airstage VRF heat pump systems to replace the J-II and J-IIs lines. The systems serve heating and cooling applications between 3- and 5-ton capacities, making them ideal for the residential and light commercial markets.

The new air-to-air heat pumps feature expanded heating operation ranges, offering powerful heating capacity at an outdoor ambient temperature of -15°F.

The J-IVs offers efficiency levels up to 19.7 SEER and is available in 3- and 4-ton capacities, while the J-IV offers up to 19.8 SEER and is available in 3-, 4- and 5-ton capacities. J-IV models also allow up to 150 percent connection capacity of indoor units.

Installers can connect up to 9 indoor units to each 3-ton condensing unit, 12 indoor units per 4-ton condensing unit, and 15 indoor units to each 5-ton condensing unit. Choose from 11 indoor unit styles to create individually-zoned comfort for any size space or decor. With more than 11 types of indoor units, ranging from 4,000 to 96,000 BTUH, the J-IV and J-IVs meets a broad range of design requirement and aesthetics.

Other enhancements include the ability to reduce electrical circuit breaker sizes, several improvements to base pan including base pan heaters, and the addition of durable metal fan guards, updated wiring, and fan motor to meet low ambient specifications.

Fujitsu's Airstage VRF controls offer additional energy savings and comfort features, including scheduling, sleep timer, economy operation, and automatic season changeover. Several J-Series units can be connected to central control, building management systems (BMS) over BACnet, LonWorks or Modbus.

More information: www.FujitsuGeneral.com.

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Greenheck HVLS Fans



Greenheck high volume low speed (HVLS) fans can now be specified with electronic air cleaning technology. A needlepoint bipolar ionization (NPBI®) accessory is available on all models of Greenheck HVLS fans. The NPBI® accessory, designed to be installed on the ceiling near the HVLS fan, includes a universal mounting kit for easy installation. The accessory is also self-cleaning for low maintenance. The needlepoint bipolar ionization system meets UL-867 and UL-2998 standards for ozone-free operation.

Licensed to bear the AMCA Seal for Circulating Fan Performance, Greenheck HVLS fans are available in model DS with three- and six-blade designs in sizes 8 to 24 feet and model DC with a five-blade design in sizes 8 to 14 feet. Full color customization and an array of accessories are available, including automatic controls based on building temperature and humidity. Greenheck HVLS fans are ideal for destratification, comfort cooling and condensation prevention in education, warehouse, manufacturing, automotive, and retail applications.

More information: www.greenheck.com.

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Johnson Controls
KOCH DuraMAX



Johnson Controls, a global leader for smart and sustainable buildings, announces the KOCH™ DuraMAX line of air filters. With a range of efficiency ratings from MERV 11 to MERV 16, DuraMAX filters are a smart and safe upgrade from bag filters and other box-style rigid filters and effectively help lower the spread of COVID-19 indoors.

The DuraMAX line of filters works alongside other Johnson Controls HVAC products and solutions to help make buildings more safe, secure and sustainable.

"Primarily used for large com-

mercial and industrial applications, the DuraMAX line of filters is a superior indoor air quality solution to help a wide range of buildings combat the spread of COVID-19 and other airborne diseases," said Mark Mattingly, vice president and general manager, Air Filtration Products, Johnson Controls. "These medium and high-efficiency filters include the DuraMAX 4V and 4VS-16 with an industry-leading MERV 16 rating and low resistance to airflows, allowing customers to save money on energy costs while experiencing the highest levels of filtration."

Tested in accordance with ASHRAE Test Standard 52.2-2017, DuraMAX is an ideal choice in filtration systems with high velocities or variable air volumes. The high-capacity mini-pleat design allows a nominal 24x24x12 filter to incorporate 194 square feet of filter space, which creates an extremely high dust-holding capacity to significantly prolong the service life of the filter.

The DuraMAX 4v is designed to replace almost any competitive high-efficiency air filter in today's market. The lightweight, all-plastic frame installs into side-access housings or front-load holding frames and is an ideal choice to replace bag filters and other box-style rigid filters. The durable, all-plastic frame makes the DuraMAX 4v the filter of choice in filtration systems with high velocities, variable air volumes and high moisture, or in areas where the user desires to incinerate the filters after use.

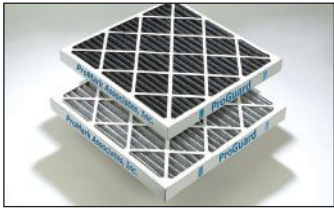
More information: www.koch-filter.com/.

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ProMark
ProGuard Filters

ProGuard Filters from ProMark Associates are a way for building owners and facility managers to improve IAQ. In most cases, there is a ProGuard Filter that is sized to be a direct replacement for filters currently in use. For each size, there are also different technologies available to respond to a particular situation.

ProGuard Filters use safe chemical and particulate filtering to replace existing particulate-only filters. ProGuard Filters use high-capacity potassium permanganate on alumina to kill pathogens. Other filters from ProMark can block the recirculation of viruses with MERV 14 filtration. These filter upgrades provide up to 95% airflow so that the overall resistance of the system will be only slightly



affected by the change.
More information: www.promarkassociates.com.

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Ruskin HZ700



The new HZ700 louver from Ruskin® is a 7-inch deep louver comprised of two pieces – a 4-inch horizontal front and a 3-inch vertical rear louver. The HZ700 was designed for applications needing a horizontal blade appearance but a vertical blade level of performance.

"Ruskin designed the HZ700 based off customer feedback," said Jay Ramkumar, director of louver sales at Ruskin. "Our representatives and their customers – including architects, engineers, contractors and building owners – sought a 7-inch louver with extreme performance abilities. This new model not only meets those expectations, but exceeds competitive louvers by offering an option with a high level of water and enhanced missile protection. The HZ700 is engineered for economy and high performance to satisfy our customers' needs."

The HZ700 meets AMCA 550 and AMCA 540 standards for enhanced protection, and has a low pressure drop, which delivers greater energy savings. It can be paired with equipment that requires high energy filters, resulting in improved air quality in critical facilities. The high-velocity wind-driven rain qualification allows the HZ700 to be used in essential facilities, such as hospitals, where high air quality is necessary in extreme weather. The visible mullion construction and horizontal front blade construction makes the louver aesthetically appealing and high performing.

More information: www.ruskin.com/model/hz700.



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Features

Johnson Controls Highlights Three Women as it Celebrates International Women's Day

Johnson Controls is working to create gender diversity in the HVAC industry.

"At Johnson Controls, we believe increased diversity in our workforce makes us a stronger, more robust company," said Joe Oliveri, vice president and general manager, Global Ducted Systems, Johnson Controls. "And we are living out this belief. We are investing in employee resource groups, such as our Women's Global Network and Women in Ops group. Through these initiatives and many others, we are establishing diversity in leadership positions as the expected and normal way we do business. And it's working. Women currently lead our two largest manufacturing plants and other diverse employees hold many other roles critical to our success. But we can't rest. We are continually recruiting diverse candidates to fill positions at all levels throughout our organization."

In honor of International Women's Day on March 8, Johnson Controls highlighted three female HVAC professionals.

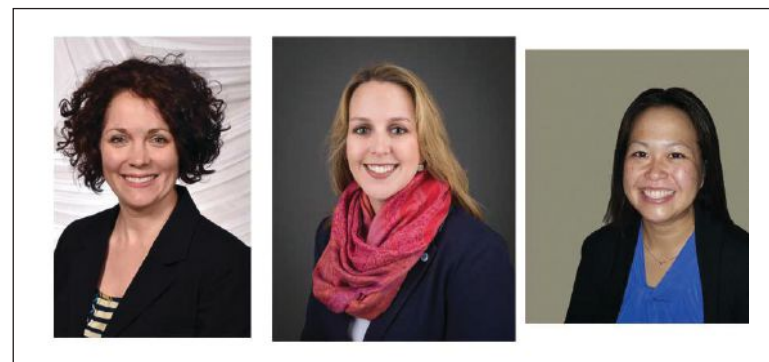
Amelia Bardwell is the plant manager at the Johnson Controls residential HVAC manufacturing facility in Wichita, Kansas.

"What sets Amelia apart is her ability to grow relationships and engage all levels of our organization, from the shop-floor to senior leaders," said Mike Mattacola, senior director of operations, Chillers and Ducted Systems, Johnson Controls. "She has great people skills, listens well to the needs of the team, and drives quick change. As a result, Amelia has had a big impact re-energizing our team in Wichita."

In addition, she has recently joined Johnson Controls Women in Operations steering committee, which is an internal business resource group with a focus on attracting and retaining women within operations. She also volunteers as a mentor to a female engineer through the University of Oklahoma's Jerry Holmes Leadership Program for Engineers and Scientists, which provides leadership education for students in the Gallogly College of Engineering. Through the program, Bardwell helps her mentee grow her leadership skills, nurtures her professional development, and introduces her to all the opportunities that manufacturing can offer.

Victoria Davidyock, the director of portfolio marketing for the Ducted Systems division of Johnson Controls, has a degree in mechanical engineering. Working for an HVAC manufacturer is what afforded Davidyock the opportunity to earn her MBA. After receiving her degree, she was promoted from marketing engineer to product manager.

Theresa Gillette, engineering manager for residential controls at Johnson Controls began her career at Johnson Controls. She started as an intern while she pursued her engineering degree at Wichita State University. After graduation she secured a full-time position within the engineering department. Last year, Gillette was promoted to her current role, and leads the controls



(L-R) AMELIA BARDWELL, VICTORIA DAVIDYOCK, AND THERESA GILLETTE.

group for the residential business. Most recently, she was awarded Inventor of the Year at the 2020 Global Patent Award Ceremony.

Gillette has been instrumental in developing control strategies for multiple new prod-

uct introduction (NPI) projects related to zoning control solutions, thermostats, air conditioning, heat pumps, furnaces, and packaged unit control. In February 2021, she celebrated her 10-year anniversary with the company.

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Technical Training

Growing Green Technicians
Part 138: Cleaning Coils to
Prevent Wasted Energy

By Jim Johnson
Contributing Editor

Looking ahead to the upcoming summer season, it's a good time to consider one of the simplest maintenance procedures a technician can accomplish to ensure that air conditioning equipment is operating as efficiently as possible...inspecting, and, if necessary, cleaning an indoor coil. Of course, we know that this is something that needs to be done even if the system has only been in service for a few years, and filters have been changed regularly.

In some HVAC installations,

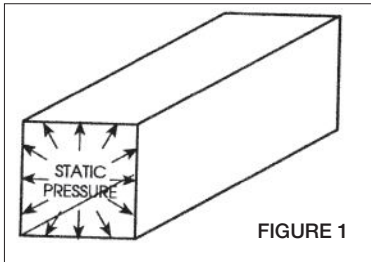


FIGURE 1

accessing an indoor coil for visual inspection and cleaning is a relatively simple task. In other situations, though, it's not. And in those cases, it's common to find that the response to a customer's complaint that their equipment isn't keeping the building comfortable doesn't in-

volve the required follow-through that would confirm that the air volume and velocity traveling through the supply and return duct systems is correct.

When taking a green approach to evaluating system performance, however, procedures such as static pressure testing to check the drop across a coil, performing a visual

inspection of the duct system, and making sure the proper duct system pressure can be achieved are just naturally part of the job. The simple theory behind ensuring that the air flow in a system is working properly in conjunction with the refrigeration system capacity involves the three pressures:

- 1. Static Pressure
- 2. Velocity Pressure

3. Total Pressure

Static Pressure is a force that is exerted in all directions on a duct, and in our example in **Figure One** we're showing a positive pressure being applied to the supply ductwork interior. On the return side of the system, the static pressure theory still applies, but as a negative pressure.

Velocity Pressure, as the term implies, is caused by the velocity of the air moving in the direction of flow in the duct system. This pressure is always positive.

Total Pressure is the sum of Static Pressure and Velocity Pressure, and is the basis of calculations that lead to the proper sizing of the fan assembly.

When these three pressures are understood from the perspective of the design of equipment, the need to consider the possibility of an indoor air flow problem when a customer is complaining that their cooling system isn't cooling enough, or their heat pump isn't heating enough (or costing more than it should to operate due to excessive run time or supplemental heat kicking in when it shouldn't be) is obvious. And the same philosophy applies to outdoor coils.

Studies performed by HVAC manufacturers have proven the impact of dirty coils in equipment. When comparing the operation of equipment with clean coils to systems in which the coils were moderately dirty for a time frame of 1,000 hours, which allowed them to measure performance over a full season, the test results clearly showed how much money is wasted when a system is not properly maintained. (See **Figure Two**)

This chart shows that in the case of a 5-ton system, the operating costs for that particular equipment for a season with a clean coil was \$470.00. With dirty coils, the cost of operating the same system was \$687.00. Taking the time to perform proper maintenance on this system results in a savings of \$217.00 for the season.

Tonnage	KW Hours per Season (Clean)	Total Cost per Season (Clean)	KW Hours per Season (Dirty)	Total Cost per Season (Dirty)	Total Savings Per Season
3	4,100	\$320	5,700	\$448	\$128
5	5,500	\$470	8,100	\$687	\$217
7 1/2	7,400	\$650	11,200	\$964	\$314
10	12,300	\$1,000	16,800	\$1,394	\$394
15	16,000	\$1,370	24,400	\$2,092	\$722
20	20,800	\$1,790	32,400	\$2,794	\$1,004
25	27,000	\$2,290	40,800	\$3,493	\$1,203
30	30,800	\$2,680	48,900	\$4,205	\$1,525
40	41,500	\$3,570	66,400	\$5,716	\$2,146
50	52,100	\$4,470	82,300	\$7,056	\$2,586
60	63,000	\$5,390	98,600	\$8,404	\$3,014

FIGURE 2



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- Thurs., April 22 – Part 2
- Wed., April 28 – Part 3
- Thurs., April 29 – Part 4

MAY



Webinar

AC & HP Refrigeration Module

Instructors: Mitch Bailey / TBA

- Wed., May 19 – Part 1
- Thurs., May 20 – Part 2
- Wed., May 26 – Part 3
- Thurs., May 27 – Part 4

JUNE



Webinar

Air Distribution Module

Instructors: Mitch Bailey / TBA

- Wed., June 16 – Part 1
- Thurs., June 17 – Part 2
- Wed., June 23 – Part 3
- Thurs., June 24 – Part 4

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Attendees must register for each night separately and registration is on a first-come, first-served basis.

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Industry Events

More Than 1,800 in Attendance as ASHRAE Wraps Up 2021 Virtual Winter Conference

The 2021 ASHRAE Virtual Winter Conference concluded with more than 1,800 people in attendance over three and a half days and presentations from industry thought leaders.

The conference, which ran from February 9-12, featured 59 live sessions, 27 Q&A chats with presenters of Conference Paper Sessions, and 80+ on-demand sessions. In the weeks leading into the conference, committee members also participated in meetings of technical, standards, and standing committees, developing guidance for the future of the industry and ASHRAE.

The technical program included numerous sessions on topics surrounding rapid changes in technology, policies, tools, and engineering practices related to the pandemic. Top sessions included “Building Operation and COVID-19: Standard of Care,” “What Did Building Do During the Pandemic, and How to Make your Buildings More Resilient”, and “Lessons from Managing Infrastructure through the COVID Shutdown.” Other sessions included labs, IAQ, ASHRAE standards, ethics, controls, and energy efficiency.

“The ASHRAE Virtual Winter Conference provided an ideal place for our members and industry professionals to connect directly with each other, to explore the latest research, and learn how to address the challenges that we all face in establishing healthy indoor environments for building occupants,” said 2020-21 ASHRAE President Charles E. Gullledge III, P.E. “We were pleased to be able to showcase the new and exciting ways we’re moving ASHRAE forward as a society and how our resources have become an invaluable asset as the world learns more about the relationship between infectious disease mitigation and indoor air quality.”

The conference kicked off with the ASHRAE Meeting of the Members, including a Secretary’s Report from ASHRAE Executive Vice President Jeff Littleton and the State of the Society address from President Gullledge, updating the membership on the traction gained from his society theme “The ASHRAE Digital Lighthouse and Industry 4.0”. Both spoke on recent society accomplishments including a research

promotion campaign, the work of ASHRAE’s Epidemic Task Force during the pandemic, the establishment of a diversity task group, government affairs involvement, and the opening of ASHRAE’s new global headquarters.

“ASHRAE volunteers remain committed to sharing their valuable time, wisdom and expertise – they remain steadfast in their determination to make the world a better

place through ASHRAE,” said Littleton during his report. “Thank you to the thousands of volunteers at the society, regional and chapter levels that have adapted and persevered – and in many cases flourished – under these trying circumstances. Because of you, ASHRAE will emerge from the pandemic stronger and more influential than ever before.”

The ASHRAE Meeting of the Members video can be found at

ashrae.org/president.

Attendees received a behind-the-scenes look at the solutions that went into ASHRAE’s new global headquarters through a technical tour of the building, guided by ASHRAE Building Ad Hoc Committee Chair Ginger Scoggins.

The ASHRAE Global Headquarters technical tour video can be found at ashrae.org/newhq.

The accomplishments of 165

ASHRAE members were recognized during special honors and awards segments each day, including the elevation of 16 members to level of ASHRAE Fellow.

All technical sessions are now available on-demand to registrants for the next 18 months. Registration for the 2021 ASHRAE Virtual Conference remains open for both individuals and groups at ashrae.org/2021Winter.

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Resort in Music City, USA Nashville Opts for Mechanical System Stardom

Today, Nashville is known as the heart of country music, though this wasn't always the case. The turning point came in 1925, when "Music City, USA" saw completion of The Grand Ole Opry. This truly kick started the music industry in Tennessee, making Nashville the epicenter of the country music universe. More recently, its economic growth outpaces many other cities nationwide, and tower cranes can be seen all over the skyline; signs of a swelling economy. Hotels and resorts, both new and existing, have expanded and improved to handle the influx of tourism. One small part of the citywide improvement was a large mechanical system improvement at one iconic, four-and-a-half million square-foot resort on the city's eastern side. Its cooling system

was in need of new heat rejection equipment to battle Nashville's hot, humid summers. The scope of the hydronic system retrofit was daunting. The resort's massive cooling load calls for 24,000 gallons of chilled water per minute, enough to fill two Olympic sized swimming pools in less than an hour. To make the project more interesting, the system had to remain online without interruptions to serve the 3,000+ guest rooms and suites, 15 restaurants, and the rest of the resort facilities. Success came by way of a cohesive team – including reps, engineers, mechanical contractors, resort maintenance personnel and manufacturers – that operated like a well-oiled machine.

Retiring old cooling towers
"The resort's cooling towers had

reached their expected lifecycle," said Jason Dawkins, Project Manager at Nashville Machine Company, Inc. "They'd been considering replacement of the towers for almost a decade. The resort suffered a severe flood in 2010, and replacing the cooling towers was discussed at the time. Ultimately, they were reconstructed, but after eight years, maintenance costs to battle leaks and fan failures was rising. We've done many projects at the resort, so we were familiar with the cooling system long before the retrofit began." Nashville Machine Co. was founded in 1887 as a machine shop. As the city grew and expanded, so did the firm, branching into commercial HVAC, plumbing and fabrication. The company provides pre-fabrication, pipefitting, welding and sheet metal for other mechanical shops in addition to their own projects. As a



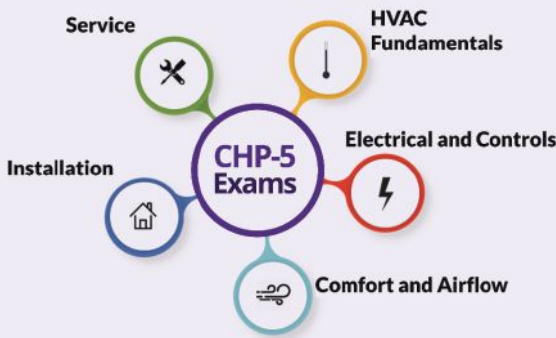
AN EXTERIOR PHOTO OF EVAPCO'S COOLING TOWERS AT A MUSIC RESORT IN NASHVILLE, TENN.

union shop, Nashville Machine Co. typically employs between 500 and 1,000 tradesmen and women. Their task was to remove and replace the resort's four original cooling towers, with a total of 19 cells. The units are adjacent to a mechanical/service building east of the resort proper. The system includes seven, 1,200-ton water-cooled chillers to provide cooling capacity to fan coil units and air handlers throughout the huge resort. These components, along with large pumps that serve the cooling towers, were still serviceable. Chilled water is piped roughly 1,000 feet from the mechanical room to terminal units within the resort. The design phase for the retrofit included input from Nashville Machine Co., Beech Construction Services (the resort's chosen general contractor), Mechanical Resources Group (MRG), a Nashville-based commercial manufacturer's rep firm, and I.C. Thomasson & Associates, an employee-owned engineering consulting firm based in Nashville. "Our in-house CAD department worked with MRG to complete the 3D modelling for the retrofit," said Nashville Machine Co. Project Manager, Miller Orr. "Throughout two phases, we replaced the original towers with new stainless steel EVAPCO models for the same cooling capacity." **Counterflow solutions** The original spec included crossflow cooling towers, but given the goals set by the resort – ease of maintenance, aesthetics, and ideal discharge air movement – MRG's design team worked with EVAPCO to assemble a new spec using counterflow models. "In conventional crossflow cooling towers, air is drawn across the tower's heat transfer media (fill) perpendicular to the direction of the cascading cooling water," explained Brett Alexander, Applications

Engineer at EVAPCO. "In a counterflow tower, air is induced up through the fill in the opposite direction of the falling water. Our counterflow models also feature sun-tight louvers, helping stem the growth of algae in the basin of the tower. That can't be accomplished with a crossflow tower." "After learning what the resort was hoping to accomplish, it became apparent that a counterflow tower design would better serve the property," said Phil Collison, Director of Replacement at EVAPCO. "At first, there was resistance from the director of physical plant, simply because his earlier experience with cooling towers involved crossflow designs." MRG organized a trip with several of the resort maintenance personnel to visit EVAPCO's manufacturing headquarters in Maryland, allowing them to see the potential advantages of counterflow towers in person. One of the benefits that counterflow units provided was to simplify the maintenance process. The original crossflow towers included 19 cells lined up in a row with no space between. Components could only be accessed from either end of the 192-foot row of towers, requiring shutdown of each tower that personnel passed through. "The size and layout of the new counter-flow towers provides 360-degree access to the water basins of each tower via access corridors between the towers," said Matt Fruetel, Business Development VP at MRG, which has carried the EVAPCO line for 12 years. "Maintenance personnel no longer have to duck-walk through water basins to reach any of the cells." Tower aesthetics was a

Continued on Page 22

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Troubleshooting

An Electric Furnace That's Running Too Long and Not Heating Enough

By Jim Johnson
Contributing Editor

Our troubleshooting problem this time around involves a complaint from a customer who is concerned that their 9-year-old electric furnace is running excessively and wasting energy. The customer also tells the dispatcher that the system has never been serviced, and they considered calling last season because they thought that the operation of the unit may not be normal, but they put it off. Now, their description of the situation is that they've recently noticed that the problem seems to be worse than it was the year before especially since the temperatures are milder early in the spring season.

What you find on this service call is that this system is stand-alone straight heating, while the cooling system for the building is a separate evaporative cooling unit. The temperature is not comfortable in the building and the thermostat is turned to a maximum setting. After confirming that the filter is clean, you check the equipment wiring diagram (see **Figure One**) and note that the indoor blower motor is wired to ORG and RED. As your first step, you note the temperature rise listing on the equipment tag and perform a temperature rise test, which

shows a result of lower than called for according to the manufacturer's specifications.

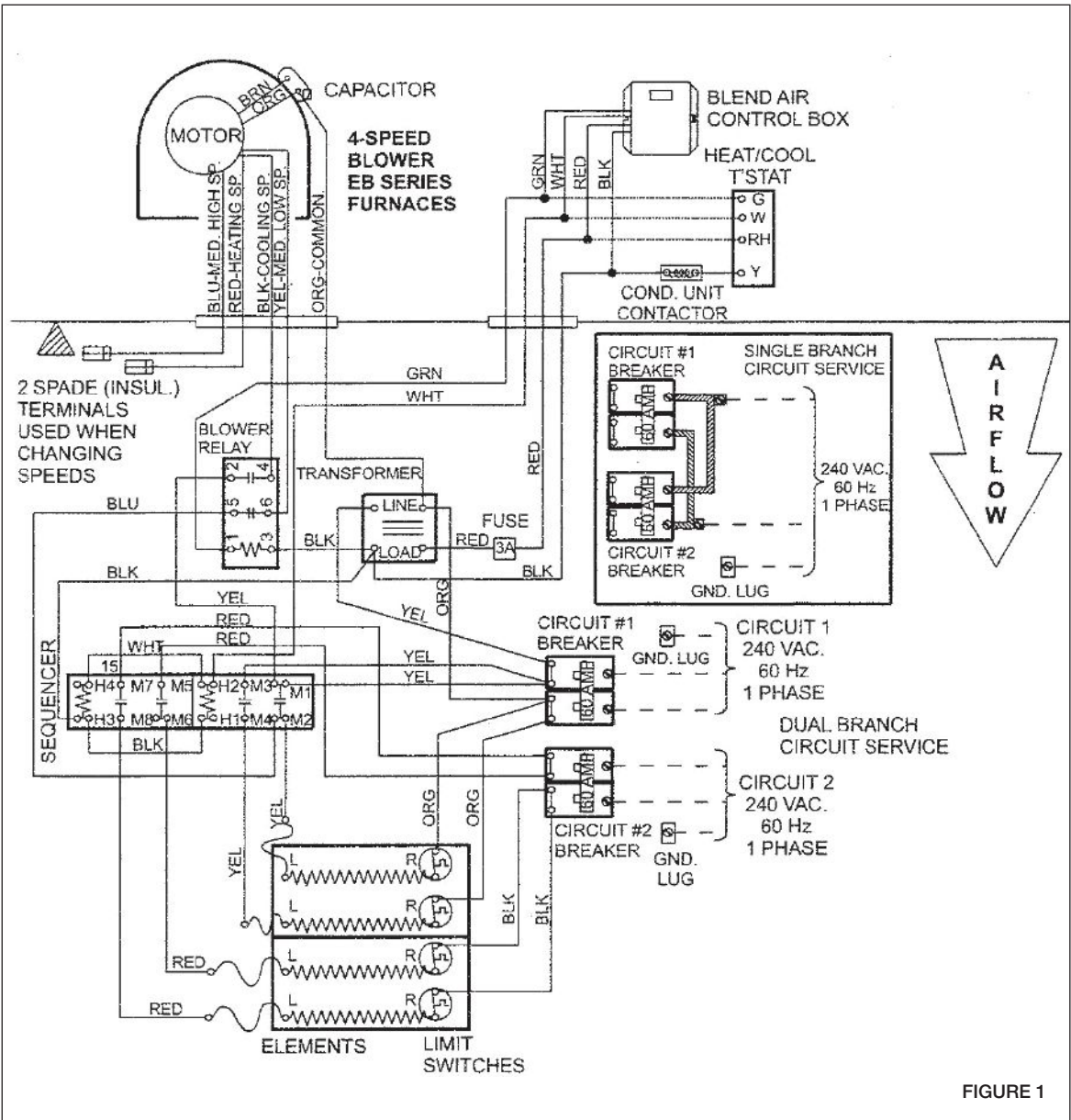
With your air flow evaluation accomplished, you check the electrical system and find 240 VAC applied to terminals L and R on each of the 4 heating element connections. Your subsequent ammeter tests show a current draw within the manufacturer's specifications on two of the elements, while at the top element (ORG from Circuit Breaker #1) and the bottom element (BLK from Circuit Breaker #2) show 0-Amps.

Your troubleshooting question: *What is your next step in servicing this equipment?*

If you believe you have the correct answer to one of Jim Johnson's Troubleshooting Problems, please submit it by email to Jim Johnson at icntroubleshooting@techtrain-assoc.com or by U.S. Mail to: Technical Training Associates, PO Box 2259, Green Valley, AZ 85622-2259.

In your email subject line please include "Troubleshooting Answer" and indicate which month the question you are responding to was published.

Correct answers will be entered into a drawing and will be eligible to receive a copy of Jim Johnson's video "Evaluating Refrigeration Systems: Troubleshooting & Identifying Problems."



Answer to Last Month's Question

In order to get this unit back to full operating capacity, the first issue is that the indoor coil needs to be cleaned. Our illustration shows that the air handler discharge is directly into the supply duct, which means that the squirrel cage fan draws air through the indoor coil. When we removed the access panel to the air handler, we provided an alternate air supply other than the path of air flow that was through the dirty indoor coil and measured an increased air flow with our second test.

The second issue is the overcharged sealed system. To be certain that the system will be correctly charged and that there will be no contaminants, the best course of action is to recover the refrigerant, install a new filter-drier, evacuate to a level of 500 microns, and charge the system by weight according to the manufacturer's specifications.

The Winner of Last Month's Troubleshooting is:
Remo Guidi

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JAY TORRES

Rahn Industries announced **Jay Torres** has joined Rahn Industries team as Regional Commercial Sales Representative. Torres will be joining Rahn Industries from DMG North, where he was in outside sales for almost five years. He has worked with brands such as Carrier, York, Dai-kin, and LG and has designed various types of systems using chillers, air handlers, packaged units, VRF, and fans. Jay brings experience in

heat transfer equipment and coatings to Rahn Industries and will manage Southern California and Hawaii as the Regional Commercial Sales Representative. “I am thrilled to have Jay join the Rahn team and we are fortunate to have someone with Jay’s background in HVAC systems in this role,” said John Hancock, President at Rahn Industries. “Jay brings a wealth of knowledge and industry relationships to this new role. He has a mechanical engineering degree from UC Irvine and a background of working on large projects like the Chase Center and Levi’s Stadium in Northern California.” “I am looking forward to working with Rahn Industries team and I am impressed with the already well-established name recognition Rahn Industries has here on the West Coast,” said Torres. “I am going to be focused on working


closely with our customers and giving them the support, they need on their projects going forward.” Rahn Industries is a recognized national leader as a custom HVAC/R coil manufacturer and supplier of OEM coils to various national and internationally recognized HVAC/R manufacturers. Rahn Industries is also a leading supplier of coatings for coils and HVAC package system using antimicrobial coating materials. Rahn Industries has earned ISO 9000:2015 certification for our quality systems ensuring the products we make meet our customers’ high standards. Mitsubishi Electric Trane HVAC US (METUS), a leading supplier of Ductless and Ducted Mini-split and Variable Refrigerant Flow (VRF) heat-pump and air-conditioning systems, is pleased to announce the



TOM OVERS

hiring of **Tom Overs** as vice president, residential business. Before joining METUS, Overs spent 18 years with Lennox International and affiliated companies, serving in continually advancing roles including product manager, district manager, general manager and as vice president of Heatcraft Australia and Advanced Distributor Products (ADP) in the United States. Overs recently





served as vice president of the dealer channel at Harvey Windows and Doors. “We’re so pleased to have Tom join our team,” said Steve O’Brien, senior vice president, sales, marketing and supply chain, Mitsubishi Electric Trane HVAC US. “His extensive knowledge of the HVAC industry, strong customer focus as well as his sales and product management expertise will support the residential business in reaching new levels of success.” Overs holds a Bachelor of Science in mechanical engineering from Ohio Northern University and a Master of Business Administration from Saint Joseph’s University in Philadelphia. Uponor North America announced the appointment of **Brett Boyum** to the position of vice president of marketing & offerings



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Case Study

Continued from Page 20

significant factor, too. Because the cooling towers are installed just above ground level, they’re easily seen from the street. Scale buildup or icicles on the fill material of the original towers were impossible to hide. In a counterflow tower design, the heat transfer sections are fully enclosed. “Another design consideration was avoiding air recirculation,” said Fruetel. “During the winter, visible plume from the original towers showed that the units were recirculating discharge air.” This challenge came from the fact that the old towers sat below the roof level of the mechanical building, and because the cross-flow towers only drew air from two sides, one of which was against the side of the building. “The new towers, which were designed to have a smaller footprint and greater height, clear the top of the building,” said Collison. “Pulling air from four sides is a big advantage, too. To match the original capacity, the resort could have selected smaller box sizes and larger fan motors. That would have reduced the initial cost. But they opted for larger boxes, focusing on energy efficiency.”

Phased replacement

“The largest upfront challenge was tower sequencing with new steel, while keeping the plant online to provide enough heat rejection capacity to support the

hotel loads,” explained Dawkins. “Good planning with the general contractor and execution by field personnel including but not limited to Wolfe and Travis, Inc. for power requirements, and MRG for product support and tower start up.” The original tower cells were taken offline and replaced in two phases. Temporary piping was used to maintain service to the resort’s chiller plant. New dunnage was fabricated and the original tower basin steam heat system was modified to serve the new cells. “We replaced everything from the strainer on,” said Orr. “Prefabricating components in our shop helped reduce downtime. A total of 9,000 tons of cooling capacity is now provided by stainless steel EVAPCO AT towers. “The footprint of these units needed to fit very specific dimensions on top of a raised platform behind the mechanical building,” said Fruetel. “We selected EVAPCO’s AT line because of the huge range of models and box sizes available, including the largest counterflow towers on the market.” The counterflow design of the AT towers saves water and increases efficiency, and with Cooling Tower Institute certification, designers could rely on the provided cooling performance data. MRG’s knowledge of the line streamlined both the design phase and start-up. From start to finish, the system was operational in about six months. The investment made by the resort will pay dividends by reducing energy, water and sewer expenses, and all of the resort’s expectations were met or exceeded.

Indoor People



BRETT BOYUM

and a member of the company's senior management committee.

Boyum will focus on growing business by accelerating the innovation pipeline, managing the product portfolio, connecting the technical aspects of solutions to the needs of Uponor's customers, and building stronger connections between company strategies and customer experiences.

"We believe Brett is a great fit for Uponor, as he will help move our company into the future," said Bill Gray, president, Uponor North America. "Specifically, we were impressed with his range of expertise in creating differentiated solutions to solve customer challenges; a passion for developing strategic portfolio growth opportunities; and an ability to deliver award-winning digital and analog engagement marketing strategies."

Boyum most recently served as senior vice president of marketing for Cambria. Previously, he worked more than 17 years at Marvin Windows in marketing roles of increasing responsibility, ultimately serving as vice president, Brand Strategy and User Experience. He also owned a marketing consultancy and

worked early in his career at both Recovery Engineering Inc. (PUR brand) and Northern Hydraulics Inc.

He earned an MBA from Walden University in Minneapolis, an undergraduate degree from the University of Minnesota, and completed marketing-focused executive development programs at both the University of Minnesota and Columbia Business School.

• • • • •

Goettl Air Conditioning and Plumbing announced **Laura Rymut** as Vice President of Customer Experience, a brand-new executive position within the HVAC and plumbing company.

In her new role, Rymut will focus on elevating the quality of customer experience throughout all Goettl markets in Nevada, California, Texas and Arizona. Her goal is to seamlessly deliver a Goettlized experience through every customer touchpoint starting from the contact center to the technicians.

This newly developed position at Goettl is a unique differentiator throughout the HVAC and plumbing industry. Rymut



LAURA RYMUT

Product Spotlight

Continued from Page 1

supplemental heat.

MUZ-FS model outdoor heat pump units are available in 6, 9, 12, 15, and 18 KBTU/H capacities.

The minimal maintenance requirements of the Deluxe Wall-mounted Indoor Units and the high-performing, lower temperature heating capacity of H2i plus heat pumps offer occupants a consistent HVAC experience. Additionally, the single-zone systems have earned ENERGY STAR® certification for all indoor unit/outdoor unit combinations.

"The Deluxe Wall-mounted System reflects our commitment to offering customers the ultimate in personal indoor comfort," says Mitul Patel,

director of residential product management, Mitsubishi Electric Trane HVAC US. "Recent advances in cold-climate heat pump performance mean more homeowners than ever can experience personalized comfort while improving their home's sustainability. Dual Barrier Coating and H2i plus are prime examples of meaningful advancements. With these innovations, the Deluxe Wall-mounted System achieves high energy efficiency while responding to critical consumer demands for low-maintenance, high-performing HVAC units."

For more information on the Deluxe Wall-mounted Single-zone System with H2i plus™ technology and other residential heating and air conditioning solutions from Mitsubishi Electric Trane HVAC US, visit www.mitsubishicomfort.com.

believes that having an executive level position that concentrates on customer experience will allow her the opportunity to continue the growth of a culture that keeps customers at the center of everything they do.

"As we grow and Goettlize the nation, it's vital to have consistent world-class customer service in place across all markets," said Rymut. "I look forward to developing the skill sets of our current and new team members."

Rymut's vast experience in customer service, sales and call centers will be a welcomed addition to Goettl. "Providing quality and elevated customer service the right way, not the easy way is essential to continue Goettl's genuine legacy," said Ken Goodrich, CEO of Goettl. "The addition of Laura to our team will ultimately provide our customers with the best possible Goettl experience every time."



ROGER CHACKO

Neighborly has recently appointed **Roger Chacko** as its new chief strategy and marketing officer.

"To help build further on the growth momentum we have at Neighborly, I am delighted to welcome Roger Chacko to lead the marketing and strategy of our organization," said Mike Bidwell, president and CEO at Neighborly. "Chacko has a proven track record of developing and delivering segment-defining marketing and sales

programs across several business segments and geographies. The intersection between brands and consumers is narrowing through consumer experiences, and Chacko's global experience and transformational marketing and strategy work at this intersection of consumers and brands will prove invaluable in Neighborly's journey to creating and delivering exceptional home service experiences to our consumers and franchise partners."

Chacko brings over 25 years of global brand building, corporate strategy, and growth catalyst experiences. He has held various marketing, commercial, and strategy roles with global companies including Carlson Hotel Group, Bloomin' Brands, USAA, Kellogg's, and more. Immediately prior to joining Neighborly, Chacko served global fitness chain Planet Fitness as its chief commercial officer.



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MARCH

System Diagnostics Module

(Four-Night Class Cont. to April)

Instructors: Mike Griffin / John Dalton

Mon., March 29 – Part 1

Tues., March 30 – Part 2

APRIL

System Diagnostics Module

(Four-Night Class Cont. from March)

Instructors: Mike Griffin / John Dalton

Mon., April 5 – Part 3

Tues., April 6 – Part 4

MAY

System Performance Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Tues., May 4 – Part 1

Tues., May 11 – Part 2

Tues., May 18 – Part 3

Tues., May 25 – Part 4

JUNE

Air Distribution Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Tues., June 1 – Part 1

Tues., June 8 – Part 2

Tues., June 15 – Part 3

Tues., June 22 – Part 4

SEPTEMBER

NATE Core & Gas Heating Training

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Tues., Sept. 7 – Part 1

Tues., Sept. 14 – Part 2

Tues., Sept. 21 – Part 3

Tues., Sept. 28 – Part 4

OCTOBER

NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Tues., Oct. 5 – Part 1

Tues., Oct. 12 – Part 2

Tues., Oct. 19 – Part 3

Tues., Oct. 26 – Part 4

APRIL

Electrical Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., April 21 – Part 1

Thurs., April 22 – Part 2

Wed., April 28 – Part 3

Thurs., April 29 – Part 4

MAY

NATE Core & Gas Heating Training

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., May 19 – Part 1

Thurs., May 20 – Part 2

Wed., May 26 – Part 3

Thurs., May 27 – Part 4

JUNE

NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., June 16 – Part 1

Thurs., June 17 – Part 2

Wed., June 23 – Part 3

Thurs., June 24 – Part 4

IHACI

APRIL

Electrical

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., April 21 – Part 1

Thurs., April 22 – Part 2

Wed., April 28 – Part 3

Thurs., April 29 – Part 4

MAY

AC & HP Refrigeration

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., May 19 – Part 1

Thurs., May 20 – Part 2

Wed., May 26 – Part 3

Thurs., May 27 – Part 4

JUNE

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(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., June 16 – Part 1

Thurs., June 17 – Part 2

Wed., June 23 – Part 3

Thurs., June 24 – Part 4

SEPTEMBER

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Thurs., Sept. 15 – Part 4

OCTOBER

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(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Oct. 5 – Part 1

Thurs., Oct. 6 – Part 2

Wed., Oct. 12 – Part 3

Thurs., Oct. 13 – Part 4

NOVEMBER

NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Nov. 10 – Part 1

Thurs., Nov. 11 – Part 2

Wed., Nov. 17 – Part 3

Thurs., Nov. 18 – Part 4

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Instructors: Mitch Bailey / TBA

Wed., April 21 – Part 1

Thurs., April 22 – Part 2

Wed., April 28 – Part 3

Thurs., April 29 – Part 4

MAY

Refrigeration Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., May 19 – Part 1

Thurs., May 20 – Part 2

Wed., May 26 – Part 3

Thurs., May 27 – Part 4

JUNE

Heating Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., June 16 – Part 1

Thurs., June 17 – Part 2

Wed., June 23 – Part 3

Thurs., June 24 – Part 4

SEPTEMBER

Diagnostics Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., Sept. 15 – Part 1

Thurs., Sept. 16 – Part 2

Wed., Sept. 22 – Part 3

Thurs., Sept. 23 – Part 4

OCTOBER

Heating Training

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., Oct. 20 – Part 1

Thurs., Oct. 21 – Part 2

Wed., Oct. 27 – Part 3

Thurs., Oct. 28 – Part 4

NOVEMBER

Refrigeration Training

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., Nov. 3 – Part 1

Thurs., Nov. 4 – Part 2

Wed., Nov. 10 – Part 3

Thurs., Nov. 11 – Part 4

APRIL

System Performance Module

(Four-Night Class)

Instructors: Mitch Bailey / TBA

Wed., April 7 – Part 1

Thurs., April 8 – Part 2

Wed., April 14 – Part 3

Thurs., April 15 – Part 4

MAY

Chiller Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., May 5 – Part 1

Thurs., May 6 – Part 2

Commercial Cooling Tower Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., May 12 – Part 1

Thurs., May 13 – Part 2

JUNE

Boiler Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., June 2 – Part 1

Thurs., June 3 – Part 2

Commercial Refrigeration Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Wed., June 9 – Part 1

Thurs., June 10 – Part 2

SAN DIEGO GAS & ELECTRIC

APRIL

Electrical Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., April 7 – Part 1

Thurs., April 8 – Part 2

Wed., April 14 – Part 3

Thurs., April 15 – Part 4

MAY

AC & HP Refrigeration Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., May 5 – Part 1

Thurs., May 6 – Part 2

Wed., May 12 – Part 3

Thurs., May 13 – Part 4

JUNE

Air Distribution Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., June 2 – Part 1

Thurs., June 3 – Part 2

Wed., June 9 – Part 3

Thurs., June 10 – Part 4

JULY

System Diagnostics Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., July 7 – Part 1

Thurs., July 8 – Part 2

Wed., July 14 – Part 3

Thurs., July 15 – Part 4

AUGUST

System Performance Module

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Aug. 4 – Part 1

Thurs., Aug. 5 – Part 2

Wed., Aug. 11 – Part 3

Thurs., Aug. 12 – Part 4

SEPTEMBER

Chiller Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Sept. 1 – Part 1

Thurs., Sept. 2 – Part 2

Commercial Cooling Tower Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Sept. 8 – Part 1

Thurs., Sept. 9 – Part 2

OCTOBER

Boiler Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Oct. 6 – Part 1

Thurs., Oct. 7 – Part 2

Commercial Refrigeration Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Oct. 13 – Part 1

Thurs., Oct. 14 – Part 2

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Help Wanted



Institute of Heating and Air Conditioning Industries, Inc. (IHACI)
Commercial HVAC Instructors Wanted

IHACI is looking for qualified Commercial HVAC/R/SM instructors to join its education team. These are evening classes (typically 4 nights/4 hrs. per night.) Locations: Chatsworth, Downey, Irwindale, San Diego, Stockton, and Tulare, CA. We offer competitive hourly rates, mileage reimbursement, hotel/meal accommodations when needed. Previous training experience very helpful.
HVAC/R/SM disciplines – Candidates should indicate all applicable areas of expertise.
• HVAC/R/SM Industry Certifications
• Commercial Components and Applications
• Boilers

Help Wanted

- Chillers
 - Water Towers
 - Refrigeration Systems
 - Water Source Heat Pumps
 - Fan Coils & Air Handlers
1. Instructors should have a minimum of twenty (20) years of actual field experience in the HVAC/R/SM industry.
2. Instructors should have recognized HVAC/R/SM industry certifications.
3. Instructors should have the ability to teach face-to-face, HVAC/R/SM material as determined by the IHACI Education Committee (typical 80 to 160 seminar attendees).
4. Instructors should have minimum computer skill sets to present existing and future formatted IHACI curriculum.
5. Instructors should be able to pass HVAC/R/SM work history and security background checks.
6. Instructors should be able to travel as needed to the different training venues.
7. Instructors must be able to attend required education and training meetings.
- Interested instructor candidates should submit their resumes to the IHACI office for review and evaluation by IHACI's Education Committee. Please send resumes to: s.evans@ihaci.org or fax to 818-551-1115.

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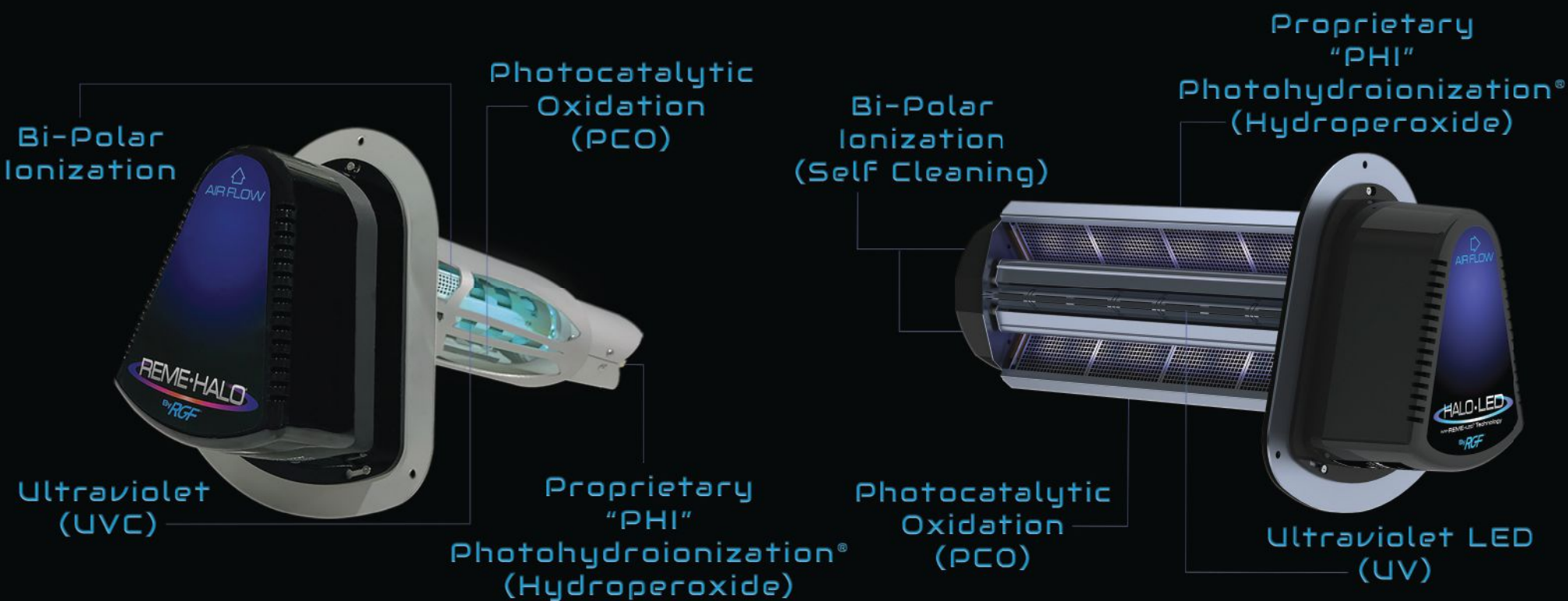


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