



AHR Expo 2026 Recap

BY DREW CHAMPLIN, ASHRAE JOURNAL EDITOR

LAS VEGAS—More than 53,000 people attended AHR Expo 2026, held from Feb. 2–4 in Las Vegas. The total number was 53,315 professionals, which included engineers, sales channel partners, owners, contractors, installers and more. AHR Expo featured 1,956 exhibitors spread over 578,980 ft² (53,789 m²) of show floor in three halls of the Las Vegas Convention Center

Data Centers at the Forefront

Many manufacturers at AHR Expo reported strong growth in data center business over the past few years.

Xylem hosted a chat on designing efficient, adaptable and resilient data centers. Chris Reininger, Associate Member ASHRAE, is a territory sales manager from James M. Pleasants USA and contributed to the panel.

“Well, at the end of the day, the data center world is extremely customizable,” Reininger said. “I always make the example of how we’ve designed hospitals relatively the same. We’ve designed school systems relatively the same, but all of a sudden now data centers are such a user of power and such a user of water. We do have to find a balance of all of our resources.

“There’s no one solution to everything. Oftentimes these data centers are designed, and it’s a hybrid solution. It might be two, three, even four different heat rejection measures. And even in a data center, there might be different server racks, and there might

be different server capacity. So this is truly the most customizable thing we’ve ever done as an industry. And it changes every so often. Every few months we’re onto something different. It’s just changing at such a rapid pace that it’s just unlike anything else our industry’s ever faced.”

Reininger said that while engineers “kind of know what we’re getting into” in the HVAC business, every few months a new technology emerges in the data center space that causes a reemphasis on communication.

“I think one of the biggest pain points goes back to the idea of collaboration in the sense that things aren’t even developed yet for the solutions that the engineers are asking for,” Reininger said. “They’re being asked to do something, and the technology is still in development.”

“That’s why the collaboration with the manufacturers and the reps and the engineers and the owners truly has to exist because if not, if you’re only relying on information that’s on a website or in a catalog. By the time it gets published, it was needed six months ago. Websites aren’t even being updated as rapidly, but the product is available.

“That’s where the reps have to understand what’s available. Manufacturers have to keep coming up with different stuff, being willing to collaborate, being willing to be open-minded and adapt. And then the engineers, we have to have those good relationships. We have to keep those channels open. So the engineer says, ‘I want



► **Images from AHR Expo 2026.**

to do this. I'm being tasked with this problem. Can you help me get there?' Hopefully the answer is yes. And then we say, 'Well, we got to bring the manufacturer in, but that's fine.' And so that's been the unique part of it."

The role of artificial intelligence (AI) has also made adaptability a key component to data center design.

"One of my engineers has always told me that even sometimes when it's published on a set of plans, it might already be outdated," Reininger said. "That's the speed we're having to work at. Adaptability is the biggest challenge I think the engineering community is facing. How do they design a building that can still be relevant in even a year? That's a unique set of challenges that we've never faced.

"This space is so different. Every few months, there's a new technology, and we have to figure out a way to adapt it."

Reininger said it would be tough to predict the industry as it pertains to data centers even a year from now.

"I wish I could project it," Reininger said. "You walk around the show here and you see so many different technologies, and data centers are going to be the hot commodity, right? So every single vendor, every single major manufacturer in hydronics and heat rejection is going to be talking about data centers. What that means is that everyone keeps coming up with new ideas."

Dustin Demetriou, Ph.D., Member ASHRAE, of IBM was part of a panel recording an *ASHRAE Journal* Podcast. He echoed Reininger's thoughts.

"I think the industry is starting to recognize that we're not in a three- to four-year life cycle of IT (information technology) equipment anymore," Demetriou explained. "We're in a one-year life cycle of IT equipment. And so what does that mean? It means there's no constant. Everything is going to be changing every year as we go on into the future. And so as I think



about this, clearly what we're doing with AI and what we're doing with the hyperscalers and scaling liquid cooling is important. Every year we're going to have something different. We're going to have to think about how we standardize and make things as repeatable as possible, but its speed is the theme."

Gaurang Pandya, president of Climate Solutions Americas at Carrier, said that the company has tripled data center manufacturing capacity in the last three years. Carrier's data center business doubled from 2023 to 2024 and doubled again from 2024 to 2025.

"That's obviously helping us unlock value as you think about the opportunity that's in front of us," Pandya said.

Kevin Calzada, senior director of product management for the Americas Commercial Buildings Division for Xylem, added, "One of the biggest areas of innovation we see for 2026 and beyond is supporting mission-critical applications like data centers, where cooling systems must operate reliably under continuously changing loads. Compact, adaptable and smart hydronic systems help maintain uptime and reduce water and energy use. This is critical in facilities where every hour of reliable cooling matters."

Geothermal Chatter

Along with data centers, geothermal heat pumps were heavily showcased, both in residential and commercial applications.

David Budzinski, deputy CEO global, president of Americas, Bosch Home Comfort Group, highlighted dual-fuel systems for both residential and commercial use as one of the biggest opportunities in HVAC.

“Dual-fuel systems combine electric and gas energy sources, giving building owners and homeowners in all regions the advantages of electrification with enhanced reliability from the built-in redundancy,” Budzinski said. “Using a heat pump for cooling and heating when the ambient conditions are conducive, the system automatically transitions to the furnace as auxiliary backup heating if outdoor conditions drop below the heat pump’s operating range.”

“By combining electric and gas energy sources, they make partial decarbonization a viable, and valuable, solution for building and homeowners in all regions. These innovative systems enhance energy efficiency, lower operating and utility costs and increase reliability while maximizing comfort.”

Midea showcased its heat pump offerings, especially on the residential side where there isn’t as much awareness of the benefits.

“The biggest obstacles are awareness, training and retrofit complexity,” said David Rames, product management director, Midea America Research Center. “Most homeowners still don’t understand that today’s heat pumps can deliver 100% heating even in subzero temperatures. On the contractor side, the skill gap around cold climate system sizing, airflow diagnostics and inverter commissioning slows uptake. Electrification mandates are accelerating faster than workforce readiness.”

Rames noted that many consulting engineers still design for outdated performance limits.

“Engineers need to factor in (current performance limits) early in the design process to future-proof projects and meet code requirements,” Rames said. “System selection, control integration and mechanical room layout can make or break a heat pump install. Engineers who specify overly complex ductwork or incompatible equipment increase cost and reduce reliability. There is a growing trend toward specifying low-footprint, dual-fuel and smart-integrated systems in both residential and multifamily projects.”

Tony O’Neil, commercial product manager of Water Furnace, said they view the geothermal heat pump market as very healthy with continued momentum

heading deeper into 2026. He wanted to help clear up misconceptions about heat pumps at AHR Expo.

“Designers or building owners often assume the up-front cost to geothermal is cost prohibitive, but when you start to add in the long-term energy efficiency and savings along with the federal tax incentives, the return on investment is extremely powerful for geothermal,” O’Neil said.

Workforce Development

The workforce was another talking point at the Expo as older workers are aging out, and executives at TowerTech are among those trying to bring in more youth and innovation into the cooling tower industry.

“I started in this industry when I was 13 years old,” said Robert Curtis, a sales manager for TowerTech. “So as a young person, it already intrigued me, thinking about what is this thing about a cooling tower that will cool water at 10 degrees that’s so important to the rest of the pieces of equipment in a central plant? For me, I think that’s what would interest people. They’re used to maybe traditional chillers and pumps and things of that nature. When you get to a cooling tower, oftentimes it is things that you have not seen before. It’s really innovative things that you’re getting involved in, that you’ve not seen before.”

“Innovation’s very important. And as anybody would know, as you get older, you relax a little bit more. You need that younger vibe to come in. We’ve got younger people that have joined our company and are already bringing innovation, excitement, things that maybe we need. So I think those are two things that come to mind for me.”

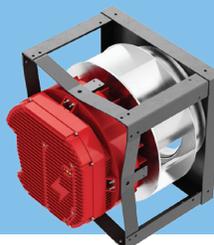
Innovation Awards Winner

Blue Frontier took home the top product in this year’s AHR Expo Innovation Awards with its BF-DOAS product. Product of the Year was selected from 10 category winners. Blue Frontier’s product was the Sustainable Solutions winner. The announcement for Product of the Year was made on Monday, Feb. 2, at AHR Expo.

Up Next

AHR Expo returns to Chicago in 2027 from Jan. 25-27. The Expo will be held in Orlando, Fla. from Feb. 7-9, 2028, in Chicago Jan. 22-24, 2029, and will return to Las Vegas in 2030. ■

2026 AHR EXPO

SHOW PRODUCTS**B****C****D**

Many new products were introduced at this year's AHR Expo. Here is a sampling from the event, held Feb. 2-4 at the Las Vegas Convention Center.

HYBRID COOLER

Baltimore AirCoil showcased the Nexus modular hybrid cooler with PuriStream water treatment system for HVAC and light industrial applications with touchscreen intelligent and intuitive controls that automatically balance water and energy use, delivering the lowest installation and operating costs, maximum uptime and reduced maintenance.

A COOLING TOWER MOTOR

Under its U.S. MOTORS brand, **Nidec** launched a cooling tower motor that helps keep industries like data centers operating at peak performance, and a premium efficiency inverter duty closed coupled pump (CCP) motor for energy savings in data centers, commercial buildings and other applications.

CONTROL SYSTEM

Johnson Controls' PENN System 550 integrates temperature, humidity and pressure control with A2L refrigerant leak detection and adaptive defrost

algorithms. This system is ideal for food retail, health care and pharmaceutical environments.

B COMMERCIAL UNITS

RenewAire's HE Series upgrades of the former HE1.5X and HE2X indoor and outdoor commercial units, the HE15 and HE20, consume up to 34% less power than previous models. Features include airflow ranges from 369 cfm to 2,200 cfm; standard direct-drive, backward-curved EC motorized impellers and optional bypass economizers.

COMPRESSOR

Copeland launched the KF variable-speed scroll compressor with EV4 variable frequency drive platform in North America. It is Copeland's premium variable-speed scroll compressor for the 1.5 ton to 5 ton North American residential market, designed for premium comfort especially in cold climates.

HEAT PUMP

LG introduced a next-generation all-electric Heat

Recovery Heat Pump VRF solution designed to meet today's demands for energy efficiency, application flexibility and intelligent climate control. On-device AI support and energy efficiency automatically adapt to any condition, making the LG Multi V *i* ideal for a wide range of commercial environments.

C FAN SYSTEM

Engineered to help customers do more with less, **Infinitum's** EC Fan Systems deliver up to 25% energy savings. The new solution features an industry-leading Fan Energy Index (FEI), high power density, reliable performance and quiet operation—while requiring fewer motors, fewer kilowatts and less electrical infrastructure when compared to traditional fan solutions.

D FANS

Designed as a total fan system rather than a loosely assembled fan array, the **Q-PAC** Fan delivers superior airflow and inherent resiliency for critical infrastructure in health care, education, commercial buildings, and other high-demand comfort cooling environments. ■