

# the NEWS

THE HVACR CONTRACTOR'S WEEKLY NEWSMAGAZINE SINCE 1926



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A bnp PUBLICATION

## There's Snow Business Like the HVAC Business

By Kyle Gargaro  
Of The NEWS Staff

**N**EW YORK — Neither snow nor cold could dampen the excitement of the 66<sup>th</sup> annual 2014 Air-Conditioning, Heating, and Refrigerating Exposition (AHR Expo), which took place Jan. 21-23 in New York. Attendees endured 10 inches of snowfall on the show's opening day.

According to the International Exposition Co. (IEC), the show's organizer, more than 61,000 attendees registered for the event. This included 42,991 visitors and 18,219 exhibitor personnel. At press time, actual attendance had not been announced.

"We were obviously very concerned with the weather forecast. Meteorologists predicted there would be a snow storm on opening day and arctic cold the last two days of the show," said Clay Stevens, president, IEC. "However, we were encouraged when we saw thousands of people pouring into the show as if the weather wasn't a factor."

While the weather outside was freezing, the mood of the contractors in attendance warmed the manufacturers. After a few years

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The 66<sup>th</sup> annual AHR Expo welcomed more than 61,000 visitors to New York City.



Mark Harris of Netbraze LLC demonstrates the holding ability of the company's newest products.



Ryan Cotton, Hilmor (left), demonstrates one of the company's 20 new tools to Christian Francis (middle) and Thomas Crammer (right) of Precision Air Inc.



Tim Cawley, EH&S Leader, The Dow Chemical Co., prepares to take a slapshot at the company's booth.

## fyi

### hvac briefs

#### Manufacturers

- **Danfoss** (Baltimore) vice president, public and industry affairs **Robert Wilkins** was named 2014 chairman of the board for the **Alliance for Responsible Atmospheric Policy**.
- **Bry-Air Inc.** (Sunbury, Ohio) is celebrating its 50<sup>th</sup> anniversary.
- **RectorSeal Corp.** (Houston) acquired certain assets of **Resource Conservation Technologies** (Sarasota, Fla.).
- **ABB** (Zurich) was awarded the Zayed Future Energy Prize 2014 in recognition of its efforts to drive innovation, renewable energy, and energy efficiency.
- **Knipex Tools LP** (Arlington Heights, Ill.) promoted **Michelle Devenny** to market development, automotive channel.
- **ecobee Inc.** (Toronto) hired **Ann Perreault** as director of strategic partnerships, utilities; and **Ann Souter** as account manager.
- **hilmor** (East Longmeadow, Mass.) named **Kenneth Chavez**, **David Hall**, and **Francisco Iniguez** as winners of its Retool Your Future scholarship contest.
- **The E.L. Foust Co. Inc.** (Elmhurst, Ill.) is celebrating its 40<sup>th</sup> year in business.
- **3M** (St. Paul, Minn.) will rebrand its Filtrrete air filters under the 3M banner.
- **Rinnai America Corp.** (Peachtree City, Ga.) appointed **Susan Mittelbrun** as vice president of marketing.



#### Distributors

- **Tommark Inc.** (Jackson, Mich.) earned the 2013 Rookie of the Year Sales Performance award winner from **Nordyne** (O'Fallon, Mo.).

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### FROSTlines eNewsletter

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### GreenSource CDI Series

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# focus

most residential, commercial, and industrial HVAC systems, including units with single- or multi-speed blowers and most variable air volume (VAV) systems. An optional wired output provides signaling to a remote building automation system (BAS) controller.

**Continental Fan Mfg. Inc.** displayed the MFT Mixed Flow in-line duct fans. They feature a UV-resistant plastic housing

and a two-speed motor. The fans are available in 4-12-inch duct diameters with airflow capacities up to 1,051 cfm. MFT-S mixed flow in-line fans feature a specially designed impeller and housing with an aerodynamic diffuser. Also displayed were the ARI Radon fans, which were designed to help mitigate radon gas from a home. According to the company, installing an ARI fan in the attic or on the exterior of the home will safely exhaust the radon. The fans incorporate a UV- and corrosion-resistant plastic housing, and are available in duct diameters from 4-8 inches. The airflow capacity is up to 583 cfm.

**Delta Products Corp.** showed its BreezSignature G2 Series and BreezSmart Series ventilation fans. The Delta BreezSignature G2 boasts less than 0.3 sones level at 110 cfm and enhanced airflow at 0.25 inches of static pressure. The second generation of the series adds new features including a removable motor, an LED indicator light, and a fresh grille design. The unit's dc brushless motor is designed for long life, low noise, and low power consumption. The BreezSmart Series incorporates Delta's DC brushless motor with adjustable humidity and speed, motion sensing, and a delay timer. The unit delivers 130 and 150 cfm at less than 0.3 sones, while consuming less than 12 W of power. The unit exceeds Energy Star energy-efficiency requirements by 300 percent.

**Desiccant Rotors Intl. Inc.** introduced its G3MA Passive Desiccant Dehumidification Wheel. The wheel has the ability to be regenerated with the 50 percent relative humidity room return air allowing for substantial moisture removal through dehumidification of the fresh air being supplied to the room.

**DuctSox Corp., a subsidiary of Rite Hite Corp.,** exhibited the KitchenSox™ textile air-dispersion product for commercial and industrial kitchens, and food preparation environments. According to the company, air is evenly dispersed through highly porous fabric, eliminating drafts and condensation. The fabric panels, which come in two options, DT and Rx, can be removed for laundering. The company also showed its OvalSox product. The fabric ductwork in an oval shape is patent pending and produces minimal sag when the air-handling unit is off. Applications include areas with low head room or immovable obstructions. It comes with a five-year warranty for most applications.

**37 Dura-Tite Systems LLC** introduced the all-in-one Quick Connect Register Boot Ceiling Diffuser Combo. The 12-inch ceiling diffusers are available now in square or round models. Custom graphic, wood grains, colors, and crown-molding-style diffusers will be introduced soon. The boots are plenum-rated (UL 2043) and meet the Air Diffusion Council's recommended 2-inch collar length. These can be used for residential, commercial, new construction, and retrofit installs. The Register Boot comes with the DuraTite Quick-Zips to attach to the ceiling, no matter the thickness. The Easy Attach Knob feature allows you to attach the diffuser to the boot without any tools.



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**Durkee America Inc.** debuted its Nanosox™-L Series fabric duct system, a customized air-dispersion system. It is made of inherent, permanent, fire-retardant fabric with reliable and stable properties like high pressure resistance, tensile strength, stable permeability, and more. It offers more even air distribution and energy efficiency. Four models are available, including the L/General, L-M/Antimicrobial, L-S/Antistatic, and LOO/Non-permeable.

**38 Dynamic Air Quality Solutions** exhibited its Activated Carbon Matrix (ACM) filtration system. The patented design utilizes an activated carbon/ceramic honeycomb matrix that features unrestrictive air channels to provide a pathway for air to flow with low resistance. Because the carbon and ceramic are baked for long periods at an extremely high temperature, they are tightly bound together, eliminating dust shedding and the need for downstream filters, the company said. The system provides a purified air cleaning solution to prevent corrosion of valuable electronic equipment in process industries.

**Foster, an HP Fuller Construction Products Inc. company,** showed its Full Defense Fungicidal Protective Coating for shielding against mold and mildew. The product is ideal for residential and commercial mold-remediation projects and is an Environmental Protection Agency (EPA)-registered coating that kills residual mold and mildew and protects surfaces from mold regrowth. Its low-viscosity, high-solids formulation pro-

vides extended coverage with excellent hiding properties in one easy application. The product contributes to Leadership in Energy and Environmental Design (LEED) EQ Credit 4.2 and features a 10-year limited warranty.

**Frescaire Espana S.L.** debuted its Model 1500 and Model 5000 systems. Both units are air conditioning systems based on dew point cooling using water as a refrigerant. The water does not come into contact with supplied air during the cooling system, making it an indirect evaporative system. The hygroscopic material is humidified with water using sprinklers situated on top of the cooler. The only moving component in the system is one fan. Temperatures below wet bulb temperatures are obtained at minimal cost. The Model 1500 discharges processed air at 700 cubic meters per hour and consumes 8 liters of water per hour. Model 5000 discharges processed air at 7,500 cubic meters per hour and consumes 30 liters of water per hour.

**Fresh-Aire UV** displayed its free, on-site ultraviolet germicidal irradiation (UVGI) system demonstration trial and analysis for commercial/industrial HVAC a/c systems used in health care, hospitality, industry, education, and office buildings. The program is available to any HVACR contractor or their building owner clients in the continental U.S. The system is installed via a magnetically mounted assembly and plug-in power supply. Eligible buildings must have more than one air-handling unit or at least 10,000 cfm.

**Heatex America** exhibited the Model H2 crossflow air-to-air heat exchanger. It is designed with the best performance within crossflow heat recovery and features a new surface pattern, optimized bar spacers, a smaller frame and larger plate surface, lower pressure loss, higher efficiency, improved tightness, and higher differential pressure.

**Heating & Cooling Products Mfg. Co.** offered its Total-Seal transverse sealed system. The fully sealed pipe and fitting system is sealed on the transverse and longitudinal seams and exceeds Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) Class 3 leakage standards. It eliminates the need for tape or mastic sealant and is available for residential and commercial applications.

**Howden Group Ltd.** showcased its FPX ultra low-noise fan, which has a specially shaped aerofoil design to meet the demands for low-noise applications combined with high efficiency. The FPX is available in a diameter range of 28-108 inches (711-2,743 mm), which makes it suitable for various cooling and ventilation applications. It has a tapered busing connection for quick and easy assembly. Optionally, the FPX can be equipped with blade leading-edge protection for use in wet cooling applications.

**Industrial Plastic Fan LLC** introduced its corrosion-resistant polypropylene fans. The plastic fans provide years of



**Punker LLC** showed its Series R63 D2 backward-curved fan wheel. For free-blowing operation, it is optimized with regard to noise and performance. It is available in steel and aluminum, in diameters ranging from 250-1,000 mm, and a variety of widths. Applications include plug fans and air-handling units, as well as industrial applications.

**PureAir Filtration** displayed its Electronic Adsorbent Bed Monitor, which improves odor control reliability and reduces surprise odor breakthrough by allowing remote media testing, so air stays odor-free. The device measures carbon/adsorbent media, transmits results wirelessly or through a wired connection, and provides alerts when media consumption is reaching capacity.

**40 RenewAire LLC** launched the LE Series large format ERV models. Featuring new internal airflow geometry, the LE Series is currently available for airflows up to 8,800 cfm and offers higher airflow and static pressure capabilities with lower blower horsepower, sound levels, and cost than previous models. The LE Series, which is available in both indoor and rooftop versions, can also be ordered as two easy-to-assemble modules, allowing shipment in enclosed trailers and greatly simplified site handling.

**Rotobrush Intl. LLC** introduced its RotoShield products for eliminating mold and odor in household ducts. The biocidal chemical in the Moldfighter kit is Environmental Protection Agency (EPA)-certified and does not require residents to leave their homes during the application process. Independent lab tests have shown that the BBJ Mold Control product kills 99.88 percent of aspergillum spores.

**S&P USA Ventilation Systems LLC** displayed its Premium Choice Series of ventilation fans, which provides flexibility to create the proper bath ventilation system needed for each application. These fans come with standard grilles, with an option of a lighted grille or a motion-sensing grille, and speed and humidity controls can be chosen separately. With plug-and-play flexibility, these fans can even be changed after installation.

**41 Sanuvox Technologies Inc.** featured its SR+ In-Duct UV Air Treatment System, which is designed to treat residential applications up to 2,000 square feet. The SR+ employs a proprietary UV process to effectively destroy airborne viruses, bacteria, mold, chemicals, volatile organic compounds (VOCs), and odors that continually circulate within the home's HVAC system and building in concentration within the home's envelope. Installation requires approximately 20 minutes, as the plug-and-play unit relies on a microprocessor-controlled sensor for automatic operation.

**Semco LLC, a Flakt Woods Co.,** displayed its Unitary Wheel Cassette (UWC), which recovers both sensible and latent energy. The performance edge is a result of UWC's transfer core. The honeycomb-like media utilizes an aluminum substrate coated with a fast-acting desiccant. A ceramic coating on the rotor gives extremely high corrosion protection and eliminates the need for cleaning. The UWC provides airflow capacities that range from 700-15,000 cfm. The wheel is independently certified in accordance with ASHRAE 94-1991 and provides a solution to ASHRAE Standard 62, "Ventilation for Acceptable Indoor Air Quality."

**Seresco Technologies Inc.** showed the NV Series indoor swimming pool ventilation product line. Available in 4,000-70,000-cfm sizes, the NV Series uses Glycol Run-Around Loop (GRAL) heat recovery. The GRAL's reduced fan energy makes the NV Series more efficient in terms of power requirements.

**Seungil Sentrol Co. Ltd.** displayed its Electrode Steam Humidifiers. The products are user-friendly and feature various capacities up to 180 kg per hour. They include flexible and durable steam hose, external 4-20mA/0-10-V signal, and a drain pump applied/manual drain level.

**Smart Fog Inc.** offered its ES100-1 and ES100-2 Series' Smart Fog Humidifiers. The unit is advertised as being free of particles.



When water evaporates, nothing other than pure humidity remains. The unit requires no drains, pumps, or fans. It can be wall-mounted or inserted into ducts. The ES100 consumes approximately 0.2 kW, and the ES100-2 about 0.4 kW of energy. Smart Fog's droplet size measures 2-4 microns and takes approximately 12,001-25,400 seconds for a particle to fall 10 feet.

**Stelpro** displayed its Heating Boot duct heater. The Heating Boot is installed at the outlet of air ducts to heat the air coming from the central system. It allows room temperature in a home to be adjusted on a room-by-room basis, so as to be able to maintain a lower temperature in unused rooms and thereby save on heating costs. There are three models that will fill the most common assembly layouts in residential installations. It has a galvanized steel finish and includes a 10-year warranty for the elements and a five-year warranty for other components.

**Strobic Air Corp., a CECO Environmental company,** introduced its Mono-Stack fume-exhaust fan featuring wheel sizes ranging from 18-36 inches, airflow capacities up to 24,000 cfm, and an available heat recovery option. The efficient nozzle design features high-velocity flume dispersion, and the

unit includes premium efficient variable-frequency drive (VFD) duty motors.

**Sunroad Co. Ltd.** displayed the Electret Sock Filter Sani Filter, a filter that collects 99 percent or more of dust of 0.5-1.0-micron diameter. They can be easily changed by swapping filters and don't require an engineer to replace.

**Top Product Innovations** showed its Series C6.0, C10.0, and R6.0 Cold Plasma Generators. The cold plasma generators (CPG) create electrically charged air molecules, known as ions, to remove airborne mold, virus, bacteria, volatile organic compounds (VOCs), pathogens, and allergens from the air within your home. Each unit produces no detachable ozone, features no replacement parts, and helps to eliminate static electricity. The C6.0 and C10.0 units are 24 vac, needlepoint bi-polar ionized with airflow capacities of up to 6,000 cfm for the C6.0, and 10,000 cfm for the C10.0. The R6.0 features airflow capacities up to 6,000 cfm and a carbon-resin electrode. Its mounting box consists of ABS UL 94 plastic.

**Tri-Dim Filter Corp.** highlighted its Ultra Green MERV 10 reusable filter. The patent-pending filter is cleanable, highly efficient, and has low resistance. It can be used for up to two years with proper cleaning. It features a synthetic media with a metal frame.

**TVM Building Products** demonstrated its T-rap return air panning. T-rap is an alternative to sheet metal when constructing return air ducts between joists and stud cavities. The product consists of corrugated insulation faced with aluminum. It helps significantly reduce duct noise. It staples easily and quickly to floor joists and stud cavities, saving on labor costs and provides a high-quality, professional finish.

**UCAN Co. Ltd.** featured its FT-F UVSV Series ultrasonic humidifier. Available in 4-24 liters per hour humidity outputs, it is designed for a variety of applications, from refrigerated storage to clean rooms. The evaporative mist lowers the surrounding air temperature, allowing energy-saving humidification in refrigerated storage. Its powerful drip-proof air blower provides long mist distance. It comes equipped with a germicidal UV lamp that kills bacteria and viruses and sterilizes the water in the reservoir.

**USHIO America Inc.** introduced a mercury-free UV germicidal lamp. The lamps can be used for deodorization and disinfection in applications including refrigerators. Features include instantaneous on-off, effective germicidal UV wavelength, compact size, and easy installation. The UV light is not affected by the ambient temperature and functions well in cold temperatures.

**Vents-US** exhibited its Single Room ERV Units, available in TwinFresh Comfo RA-50, RA1-50, RA-50-2, and RA1-50-2 models. The units require no ductwork, consisting of telescopic duct, 6 inches in diameter. A ceramic UV core has a sensible recovery efficiency (SRE) rating of 91 percent at 32°F, covered with antibacterial compounds. The Series' reversible-axial EC fan operates at 5.7 cfm per watt. Quiet, the unit operates at 0.1 sones with a MERV-6 filter, providing antibacterial air purification. One TwinFresh Comfo ventilator can serve rooms up to 350 square feet in size. Each ventilator is controlled independently, allowing ventilation for each room individually.

**WingFan Ltd. & Co.** showed its Blex® blade extensions for ZeroTip® clearance. The Blex blade extensions are made from highly durable nylon textile. The flexible fabric is ideal to adapt the fan diameter to the contour of the shroud, thereby reducing the clearance to ZeroTip. The noise created at the fan blade tips by air slippage and turbulence is significantly reduced due to minimized tip clearances.

## Refrigeration + Ice Machines

**Arkema Inc.** showcased its Forane® 427A (R-427A) retrofit refrigerant, which can be used to retrofit many R-22 applications, including air conditioning and low- and medium-temperature refrigeration. The company stated that this refrigerant is the closest match to R-22 in terms of performance, mass flow rates, and operating pressures over the whole range of temperatures among R-22 retrofit solutions.