

INDUSTRY NEWS

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AHR Expo Announces 2018 Innovation Awards Winners

WESTPORT, Conn.—Show management announced the winners of the 2018 AHR Expo Innovation Awards, the annual competition recognizing some of the most inventive HVAC&R products, systems and technologies that will be featured at the 2018 AHR Expo.

The winners were selected by a panel of third-party ASHRAE member judges who evaluated all award entries based on innovative design, creativity, application, value and market impact. The winners will be recognized in a formal ceremony during the 2018 AHR Expo, Jan. 22 to 24, at McCormick Place in Chicago. The AHR Expo will also announce the winner of the Product of the Year Award at this ceremony.

“Each year, our winners set the bar higher for innovation in HVAC&R, and this year is no exception,” said Clay Stevens, president of International Exposition Company, the producers of AHR Expo. “We congratulate each of these leaders from across the industry and look forward to seeing their inventive solutions in action at the 2018 AHR Expo.”

The winners and finalists in the categories of building automation, cooling, green building, heating, indoor air quality, plumbing, refrigeration, software, tools and instruments, and ventilation are:

Building Automation

Winner: Setra Systems, Inc.

Innovation: Setra FLEX™, a complete room monitoring and control solution. Setra FLEX™ is used to ensure safe and energy-efficient indoor environmental and ventilation control conditions for operating rooms,



isolation rooms, biosafety laboratories, clean rooms and all pressurized critical spaces. Visual and audible alarms are configurable and fully comply with ASHRAE Standard 170, as well as US Pharmacopeia 797 and 800.

Finalists in this category were: BELIMO Americas (6-way Electronic Pressure Independent Valve); Cielo WiGle Inc. (Breez: Smart Controller for Ductless Air-conditioning Systems); and Emerson (Site Supervisor facility control platform).

Cooling

Winner: Emerson

Innovation: Copeland Scroll™, a two-stage compressor. The latest generation of Copeland Scroll two-stage compressors from 1 ton to 10 tons (3.5 kW to 35 kW) has been redesigned for improved performance and reliability in residential and commercial air-conditioning systems. The third-generation technology is optimized for mid-tier comfort and efficiency rebates with improved full-load and part-load performance up to 5%.



Finalists in this category were: Delta Cooling Towers, Inc. (Delta Anti-Microbial Cooling Tower); Johnson Controls, Inc. (YORK® Affinity™ YXV 20 SEER Variable Capacity Air Conditioner); and ZIEHL-ABEGG, Inc. (ZAVblue centrifugal fan).

Green Building

Winner: Danfoss

Innovation: Danfoss Turbocor® TTH/TGH High Lift Compressor, a compressor optimized for air-cooled chiller and heat recovery applications. Engineered for high-lift applications, including air-cooled chillers and heat recovery, Danfoss Turbocor® TTH/TGH models feature oil-free, variable speed, magnetic bearing

operation for outstanding full- and part-load efficiency, low vibration and sound, a small footprint, and reduced maintenance—while providing an expanded operating map suitable for air-cooled chiller and heat recovery applications.



Finalists in this category were: International Wastewater Systems Inc. (PIRANHA HC thermal energy recovery hot water production system); Nexus Valve, Inc. (Pressure Step Deaerator); Regal (NovaMAX™ Motor-600 rpm); and Smardt Chiller Group Inc. (Smardt Solar Integrated Chiller [SSiC]).

Heating

Winner: Calefactio

Innovation: The ONE, a three-in-one expansion tank, air separator and dirt separator. The ONE innovates by eliminating the number of joints, limiting the leaking possibilities; using less space and taking less time to install compared to installing the three devices separately; reducing costs—it is much less costly to buy The ONE than to buy all the devices separately.



Finalists in this category were: Cleaver-Brooks, Inc. (Cleaver-Brooks ClearFire®-CE hydronic boiler); Johnson Controls, Inc. (YORK® Affinity™ YZV 20 SEER Variable Capacity Heat Pump); and WaterFurnace International, Inc. (Versatec Variable Speed water source/geothermal heat pump).

Indoor Air Quality

Winner: Spartan Bioscience

Innovation: Spartan Legionella Detection System, the world's first on-site Legionella human DNA test to help

prevent outbreaks. Spartan's Legionella Detection System fully integrates DNA collection, extraction and analysis in a compact format. Spartan's technology enables unprecedented portability with no sample shipment to an outside laboratory and no technical expertise requirements. In addition, the system provides results in 45 minutes.



Finalists in this category were: AAF Flanders (Sensor360™ filtration monitor); Addison (Linear Capacity™, Dedicated Outdoor Air System); and Johnson Controls, Inc. (GLAS smart thermostat).

Plumbing

Winner: AquaMotion Inc.

Innovation: AquaMotion Aqua-Flash™, an under-sink hot water recirculation system. The Aqua-Flash bypass valve provides an improved bypass design that prevents the hot water from entering the cold line when the hot water faucet is opened; a bimetal coil element that closes the internal shuttle bypass port in the valve when hot water reaches the valve; a bimetal element that is calibrated to deliver the hot water temperature desired; and more than double the pipe diameter to prevent calcium buildup.



Finalists in this category were: Caleffi Hydronic Solutions (LEGIOMIX® electronic mixing valve with disinfection); and John Guest USA, Inc. (JG ProLock twist-to-lock fitting system).

Refrigeration

Winner: Chemours

Innovation: Opteon™ XP44 Refrigerant (R-452A), a non-ozone depleting, low-GWP, HFO-based

refrigerant replacement for R-404A/507. It offers an approximately 50% reduction in global warming potential compared to R-404A/R-507, while providing the closest match to the compressor discharge temperature of any other low-GWP solution on the market. With the regulations addressing high-GWP refrigerants such as R-404A/R-507 in commercial refrigeration applications, Opteon™ XP44 uniquely provides equipment manufacturers and end users an option to cost effectively cut the environmental impact of their refrigerant choice in half, without sacrificing performance or equipment reliability.



Finalists in this category were: CAREL INDUSTRIES S.p.A. (HEEZ control and management solution); and Emerson (fractional horsepower low-temperature Copeland Scroll™ compressor).

Software

Winner: Regal

Innovation: Browning® Toolbox Technician® Motor Efficiency Calculator, for Apple and Android platforms. This mobile app calculator module allows a user to identify efficiency differences between different generations of integral horsepower electric motors. This app not only identifies the potential efficiency gain, but it allows the user to tailor the motor usage parameters to mirror their application or overall facility use so a projected return on investment (ROI) can be displayed.



Finalists in this category were: Coolfront Technologies (Coolfront Mobile flat rate pricing app); LG Electronics USA, Inc. (LG Air Conditioning Technical Solution [LATS]

Revit drawing plug-in); and SuperCool Slide Rule (SuperCool HVAC app).

Tools and Instruments

Winner: Fluke Corporation

Innovation: Fluke T6 Electrical Tester, an electrical tester that takes simultaneous voltage and current measurements without test leads. The T6 testers now make it possible to take reliable true-rms measurements in crowded junction boxes or along conductors with inaccessible endpoints, saving time, minimizing potential errors and greatly reducing the possibility of arc flash.



Finalists in this category were: GrayWolf Sensing Solutions (GrayWolf's DirectSense® II Smart Probes/Sensor); Milwaukee Tool (102 × 77 Spot Infrared Imager); and SuperCool Slide Rule (Line-set Saver cleaning device).

Ventilation

Winner: Triatek

Innovation: Stable Vortex® II Fume Hood, a dynamic, low-flow, high performance fume hood that protects chemists from harmful dust and vapor during experiments. It delivers a safer environment for the user than the average fume hood, while also providing substantial energy savings. The Stable Vortex II passes the ASHRAE Standard I10 test as manufactured, as installed and as used because the design accounts for how people actually use fume hoods, to truly keep them safe.



Finalists in this category were: Regal (UlteMAX Axial PM Motor); Titus (TJD, OMNI diffuser) and ZIEHL-ABEGG, Inc. (ZAbbluefin bionic, high-efficiency impeller). ■