Trane features AHR Show with New Products & Systems

The AHRI (American Heating & Refrigeration) Show brought over 70,000 building owners, vendors, architects, design engineers, contractors and servicers to Las Vegas from January 30th through February 1, 2017.

The Trane display drew large crowds and featured the discussions and product displays of the following new or redesigned Trane offerings:

**Trane Model S Water Cooled Centrifugal Chiller:** Oil-Free (using ceramic bearings and not electronics to levitate the shaft) OR With Oil (this is a new option for this model), low pressure, compact design, highest full load and part-load efficiency, utilizes newest HFO refrigerants with very low GWP ratings

**Trane Air Cooled CGAM Air Cooled Chillers:** Quiet operation, low GWP refrigerants, ice storage capability

**Trane Performance Climate Changer:** New variable aspect ratio design allowing variable heights and widths

**Foundation 3-5 ton Rooftop Units:** No curb adapter required, microchannel coils

**Precedent 6-10 ton Rooftop Units:** Featuring eflex compressors

**Tracer SC:** Trane’s state-of-the-art controller that is the brains of our building automation system. BACnet compatible. Wired or wireless ties to Trane Air Fi Controls, links easily to Tracer Ensemble or Trane Concierge

**Trane Thermal Storage:** Trane partial or full storage can often reduce the tonnage of chillers required and reduce customer’s utility bills

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EPA 608 Final Rules Will Impact Building Owners and HVAC Servicers

The U.S. Environmental Protection Agency’s (EPA) final updating of its Section 608 Refrigerant Management Program became effective on various dates. Here is a summary of the major changes:

1. Extends the requirements of the Refrigerant Management Program to cover substitute refrigerants such as hydrofluorocarbons (HFCs). Effective January 1, 2017, technicians must handle HFC refrigerants and appliances containing HFCs in the same manner that they’ve been handling ozone-depleting refrigerants and appliances.

2. Lowers the leak rate thresholds that trigger the duty to repair refrigeration and air conditioning equipment containing 50 or more pounds of refrigerant. The new regulations lower the leak rates from 15% to 10% for comfort cooling equipment.

3. Requires quarterly or annual leak inspections or continuous monitoring devices for refrigeration and air conditioning equipment that exceeded the threshold leak rate effective January 1, 2019.

4. Requires owner/operators to submit reports to the EPA if systems containing 50 or more pounds of refrigerant leak 125% or more of their full charge in one calendar year.

5. Extends the sales restriction of HFCs and other non-exempt substitutes with the exception of small cans, containing 2 pounds or less, of non-exempt substitutes for motor vehicle air conditioner servicing.

6. Requires technicians to keep a record of refrigerant recovered during system disposal from systems with a 5-50 pound charge effective January 1, 2018. Technicians are required, before opening or disposing of appliances, to evacuate ozone depleting substances (ODS) or substitute refrigerants to the evacuation levels specified in the regulations using certified recovery and/or recycling equipment.

7. Wholesalers and others who re-sell refrigerants must maintain invoices that indicate: purchaser name, sale date, and quantity of CFC, HCFC, HFC, and IAFO Refrigerants purchased. These records must be maintained for no less than 3 years.

8. Employers must require proof of certification for technicians and must maintain a copy of their certification for 3 years after a certified individual leaves the employer. Those who are already certified under Section 609 DO NOT need to be re-certified.

9. Effective January 1, 2017, recovered CFC, and HCFC refrigerants may not be resold unless they have been reclaimed by a certified reclaimer or it is charged into equipment belonging to the same owner.

10. Starting January 1, 2018, the sale of Ozone Depleting Substance (CFC and HCFC) and substitute refrigerants are restricted to certified technicians.
Trane recently announced advancements in reducing the GWP (Global Warming Potential) of the refrigerants used in its Centravac, centrifugal water chiller products.

200 TO 1,500 TON CENTRAVACS

Centravacs from 200 to 1,500 tons can be purchased with R123 or they can utilize R1233zd which is an HFO with a very low GWP rating and no phase-out date.

1,500 TO 4,000 TON CENTRAVACS

Beginning in late 2017 Trane will begin delivering new Centravac chillers with R514A, low pressure refrigerant which has ultra-low GWP ratings. Trane machines in sizes 1,500 to 4,000 can be purchased with this new refrigerant. The timing of the delivery of these units hinges on the availability of sufficient quantities of the refrigerant from the Trane’s refrigerant vendor which is estimated to be in late 2017.

Machines suitable for use with R514A can be ordered in advance of the late 2017 date and will operate initially with Trane’s current refrigerant, R123. These machines can then be easily converted to R514A to the new refrigerant when the fluid is available in quantities large enough to satisfy the market needs.

R123 PHASEOUT

While R123 is being phased out of production for use in new machines as a result of the Montreal Protocol, refrigerant manufacturers will be producing R123 for service use through 2030. Trane offers customers buying new machines today numerous guarantees of refrigerant availability that will insure adequate amounts of R123 are available for the life of all new machines (30-40 years).

15-YEAR WARRANTY NOW AVAILABLE

At the AHR Show in Las Vegas, Trane announced the industry’s first 15-year full machine warranty. This new offering is now available on all new Trane Centravacs.

CHILLER BUYING DECISIONS

Customers should be mindful that making a buying decision based on the refrigerant being used is shortsighted. As the diagram below points out a huge portion of the total cost of ownership (88.5%) of a centrifugal water chiller is in the cost to operate the machine. First cost represents less than 5% of the chiller’s full life cycle costs. The machine’s efficiency across the full operating range, the manufacturer’s local training, local service and local parts capabilities should also be given careful consideration.

Again, Trane offers guarantees of refrigerant availability for the life of all of its Centravac water chillers.

How Can I Protect My Investment?

Focus on reliable, chiller efficient designs...

And let the manufacturer worry about the refrigerant!

A balanced approach with a focus on efficiency

- 4.92% “First Cost” (chiller + refrigerant)
- 6.53% Lifetime Service Costs*
- 0.04% Lifetime Refrigerant Supply*
- 88.51% Lifetime Electrical Costs

30 YEAR INVESTMENT
Attention Tracer Summit Owners! Tracer Summit Availability/Obsolescence

Why we’re doing this:
The product line has been replaced by Tracer SC and Tracer Ensemble and orders have naturally declined to extremely low levels making it increasingly difficult to maintain and manufacture the hardware and software components.

Our customers need to transition to our current products to ensure ongoing support, including computer hardware and software.

How this impacts our customers:
Customers will still be able to purchase replacement Service Parts.

We need to help them develop a migration plan to upgrade to current Controls products – Tracer SC and Tracer Ensemble.

Timing:
Tracer Summit software and BCUs will no longer be available effective May 15th, 2017.

A final Tracer Summit service pack will be made available at the end of April 2017.

Expansion or upgrades to your control system should focus on the use of Trane’s SC control device that can easily be adapted to your system and provide many improvements and advancements when compared to the BCU. Please contact your Trane representative for details.

Replacement parts will be available for several years - dependent on availability of components. Tracer Summit software can be accessed via Trane Updater if needed for replacement scenarios. Trane LonTalk controllers will still be available (at least) through the end of 2017.