



**TRANE®**

## Trane Horizon™ Absorption Series Single-Stage Hot Water or Steam-Fired Absorption Water Chillers, 500-1350 Tons

### Technology You Can Trust

Absorption water chillers and Trane have been synonymous for forty years. In fact, Trane is the only North American chiller manufacturer to commercialize double-effect absorption over 25 years ago. With over 10,000 absorption chillers manufactured and shipped, Trane serves the commercial, industrial and process worldwide markets. Trane continues its worldwide leadership as the number one provider in absorption, centrifugal, scroll and helical rotary chillers.

### Dynamic By Design

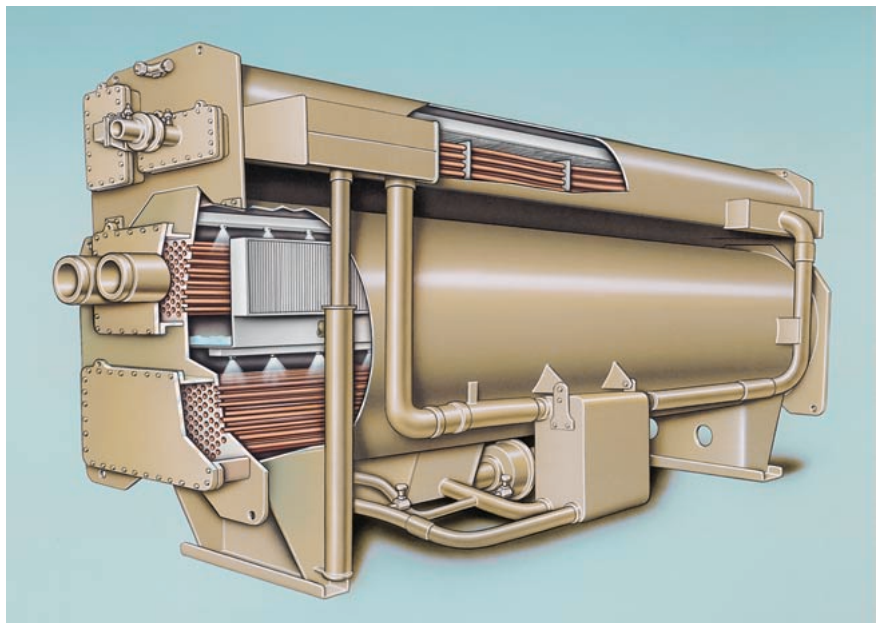
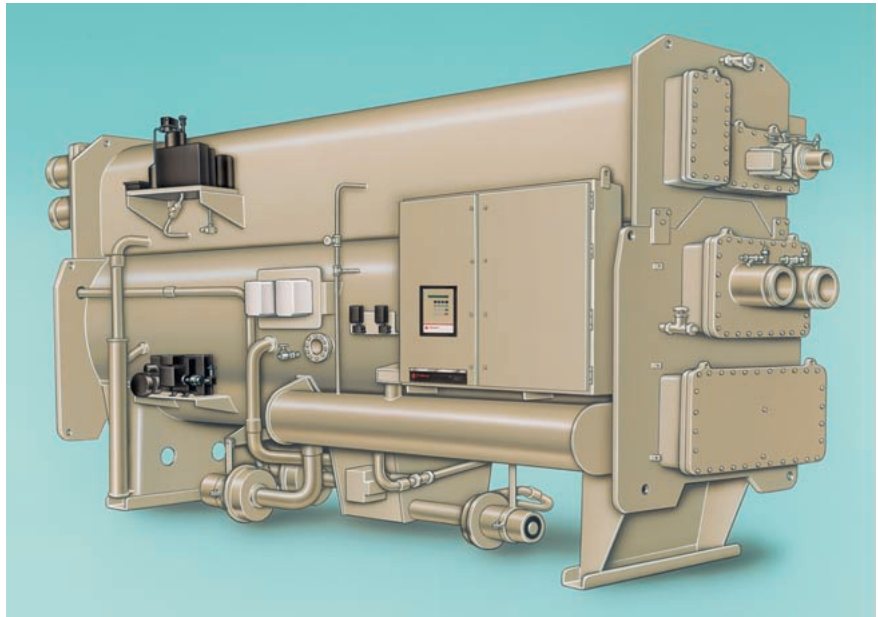
In the early 1990's, with the assistance of the Gas Research Institute, Trane began development of a series of advanced absorption chiller designs. The new design was to redefine industry standards for overall system performance, efficiency and reliability.

In 1996, Trane announced the Horizon™ line of two-stage steam/hot water absorption chillers. True to its name and true to the high standards for its design, the Trane Horizon chiller offers system advantages that go beyond those of other absorption chillers currently on the market.

### Operates With Steam $\leq$ 13 psig or Hot Water $\leq$ 270 F

In 2000, the Horizon series expanded to include single stage hot water and steam fired absorption. This state-of-the-art chiller design can produce chilled water temperatures as cold as 40 F and start up with tower water temperatures as low as 55 F. These lower operating temperatures can significantly reduce system energy consumption and cost.

This capability of making chilled water from these comparatively low temperature inputs is particularly important for energy conserving applications such as waste heat recovery, co-generation equipment and solar-energy powered cooling. Using water as the refrigerant helps eliminate concerns about refrigerant management and availability. Additionally, absorption technology reduces the requirement for electric energy.



### Sophisticated Reliability

Whether your specification calls for standalone chiller control, hybrid chiller control, or a building automation system, the Trane UCP2 control panel as provided on all Horizon chillers, is critical to reliable operation and optimal

performance. Controls from Trane are compatible with Integrated Comfort™ systems (ICS) and they can be easily integrated into the Tracer™ family of flexible chiller plant system controllers with a single twisted-wire pair communications cable.

## Ideal for Process and Commercial Applications

With Horizon chillers, the application possibilities for the absorption machine are expanded. Capabilities such as lower flow, variable evaporator flow, lower chilled water temperatures and advanced control capabilities make the single-stage Horizon absorption chiller ideal for both process and comfort applications.

## When Long-lived Reliability Is Important

Trane has been a long-time proponent of the use of high quality materials in absorption chiller designs. The lithium bromide temperatures and water refrigerant, typical of all absorbers, can more quickly corrode lower-grade metals in the presence of air. Trane recommends and uses industrial-grade materials to provide long-lived, reliable cooling.

## A Global Network of Absorption Expertise

When you specify a Trane Horizon chiller, you're getting the knowledge, expertise and assistance of a pool of experts with decades of absorption expertise. Making The Trane Company part of your management team gives you access to refrigeration, air conditioning and facility control system applications specialists and a unique breadth of innovative solutions to satisfy your facilities needs for today... and tomorrow.

## Standard Specification For Single-Stage Horizon Chillers

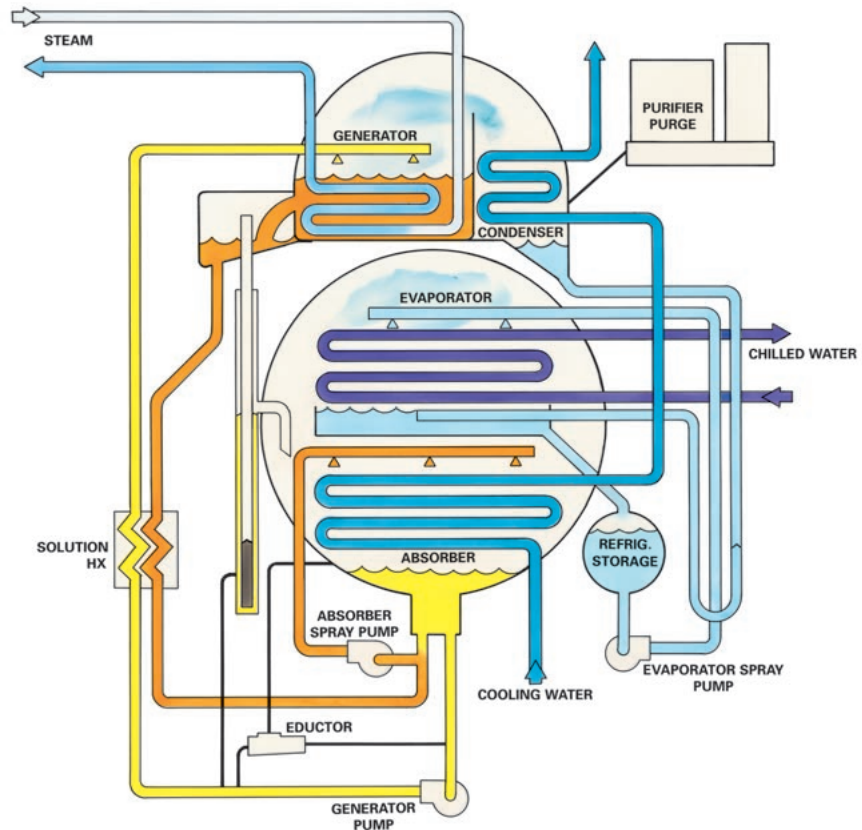
- C.O.P. 0.70
- Victaulic™ water connections
- Industrial-grade tubes
  - Generator .028 wall, 90/10 Cupro-nickel
  - Evaporator .025 copper
  - Absorber 500-800 tons .022" wall 95/5 Cupro-nickel, 975-1350 tons .028" wall copper
  - Condenser 0.028" wall copper
- 150 psig pressure design on evaporator, absorber and condenser sections
- Industrial grade energy valve
- Rigging eyes for easy installation

**The Trane Company**  
**An American Standard Company**  
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For more information contact  
 your local district office or  
 e-mail us at [comfort@trane.com](mailto:comfort@trane.com)

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## Horizon™ Single-Stage Steam-Fired Absorption Unit



- Advanced microprocessor control system with adaptive control functions
- 2-line, 40 character clear language interface to unit functions and diagnostic information
- Fixed and floating generator tube supports help prevent thermal stress
- Efficient stainless steel brazed plate solution heat exchangers
- Long life solution pumps
- Molybdate inhibitor system
- Factory installed and commissioned controls
- All tubes individually replaceable
- Removable absorber and evaporator spray tree systems

## Optional Specification For Single-Stage Horizon Chillers

- Advanced cycle management system with Adaptive Frequency™ drive solution control
- 150 psig raised face flanges for the evaporator, condenser, and absorber water connections

- Disassembled unit – providing for easy disassembly and reassembly of major components at the job site
- Lithium bromide filter
- Marine style waterboxes on the condenser and absorber sections
- Cooling water crossover pipe factory installed between the absorber and condenser
- Factory mounted energy valve
- Fully automatic purge system
- Choice of tube materials and options

## Absorption Cooling – A Sound Decision

Life cycle costing has become a primary concern for chiller buyers who have long-term investment opportunity in mind. Changes in the distribution and pricing of electricity have made the absorption water chiller a popular choice when alternative energy use makes sense. Ask your local Trane representative for a comprehensive analysis of your facility and the energy saving opportunities Trane offers for the design of HVAC systems and controls.

Since The Trane Company has a policy of continuous product and product data improvement, it reserves the right to change design and specification without notice.

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