

CompleteCoat™ Corrosion Protection

Corrosion-resistant, flexible coating uniformly bonded to all condenser coil surfaces



Trane CompleteCoat offers more application flexibility.

Trane has a corrosion-resistant coating available for our air-cooled chillers that goes beyond the performance and protection of anything offered in the past. CompleteCoat provides the corrosion protection you need without the worry of performance degradation or coating breakdown.

Air-cooled chillers are increasingly being chosen for a wide range of comfort and process-cooling applications. Unit efficiency continues to increase with advanced compressor and control designs. Trane air-cooled chillers in particular have achieved a reputation for rugged reliability and efficiency.

A condenser coil-coating system makes Trane air-cooled chillers the best choice for an even wider range of applications. Because of the potential for corrosion of air-cooled condenser coils, certain environments have traditionally limited the use of air-cooled chillers. This includes coastal applications and a wide variety of industrial environments. In such areas, there may be airborne corrosive salts, acids, bases, and/or other chemicals that shorten the life of air-cooled heat exchangers.

CompleteCoat offers unprecedented protection.

CompleteCoat is a water-based, flexible epoxy polymer coating process engineered specifically for HVAC heat transfer coils. Electrocoating is the process by which a coil is submerged in a paint/water bath where electricity is used to deposit paint onto it.

Benefits of CompleteCoat factory-applied electrocoating process:

- Fully dipped solution maximizing coil coverage
- Meets ASTM B117 standard, proven to stand up to 10,000 hour salt spray exposure test
- Increased corrosion and UV resistance make it suitable for coastal environments and other harsh environments
- Meets the demanding rigors of ASTM G85, acid fog test up to 2400 hours

CompleteCoat™ provides the corrosion protection you need without the worry of performance degradation or coating breakdown.

Previously, the choices were to either accept the shortened life of the aluminum heat exchanger or use a variety of coatings that fell short on corrosion protection and performance.

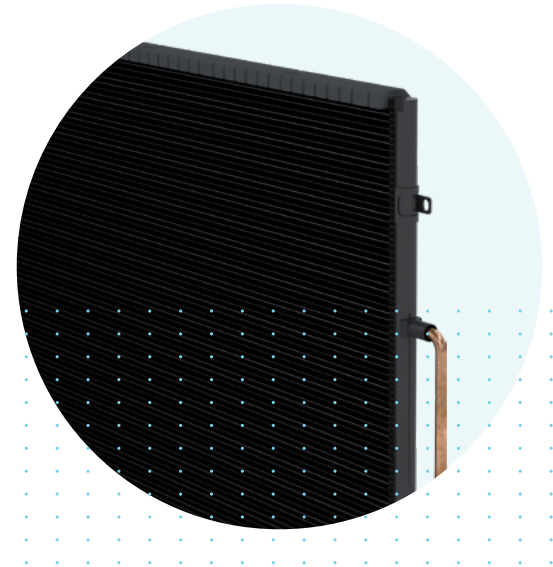
Phenolic coatings offer some protection from corrosion, but provide inconsistent coverage and can break down in challenging environments. Furthermore, phenolic coatings significantly reduce the heat-exchange value of the coil, requiring more energy usage and a larger unit to make up for the peak load performance loss. Because of their brittle nature, phenolic coatings can deteriorate from thermal flexing or from an abrasive environment.

The option to spray various coatings on in the field has also been available. This can provide a first-cost and delivery benefit compared to full coatings. However, these options can be very inconsistent in coverage, and provide protection mainly on the visible surfaces of the coils, allowing the interior fins and coils to corrode at the uncoated rate.

Another reliability enhancement from Trane.

Trane air-cooled chillers are available with the CompleteCoat coil-coating option. CompleteCoat is a tough epoxy coating that uniformly covers all condenser coil surfaces, including the edges of the fins, coils, heads, and frame. This advanced material is flexible, avoiding the thermal cracking problems of phenolics, and avoids bridging problems encountered with application of earlier, more viscous coatings.

Now you can consider the Trane air-cooled chillers for an even wider range of applications. CompleteCoat opens the door to a range of marine and industrial uses that other coating options could not handle. With CompleteCoat, thermal breakdown, performance degradation, and incomplete coverage will no longer be your foremost concern. Ask your Trane sales engineer for additional information on the CompleteCoat coil protective system. If you have a concern about coil corrosion from most airborne contaminants, this is the right solution.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.

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