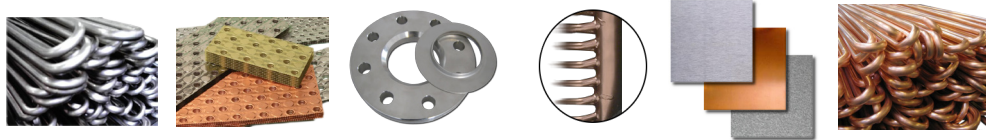


Material Options

Add value with EVAPCO Air Solutions

The right material at the right price. The large material array allows the design engineer complete flexibility in choosing materials for best heat transfer and construction concerns. EVAPCO Air Solutions versatile manufacturing capabilities allow stocked materials to be readily selected with limited delivery restraints.



Casing and Adiabatic Pad Frame Material options

- Galvanized steel (Z 275) Standard casing material for most applications.
- Alu Zink (AlZn) Offers more protection than Galvanized steel (Z 275).
- Aluminium Magnesium (AlMg3) Light weight material that provides extra protection above (AlZn).
- Stainless Steel (AISI 304) Good choice for corrosive environments.
- Stainless Steel (AISI 316) Ideal for harsh and coastal environments.

Coil Tubes and Headers

- Copper (Cu) Excellent thermal and corrosive properties for most applications.
- Aluminium (Al) Excellent choice for special applications such as deionized water.
- Stainless Steel (AISI 304) Ideal for corrosive environment or industrial applications.
- Stainless Steel (AISI 316) Used in food processing or harsher environments than (AISI 304).
- Titanium (Ti) - Very durable and lightweight. Ideal for use in cooling systems where sea water is circulated inside the tubes.

Fins

- Aluminium (Al) Excellent mechanical and thermodynamic properties.
- Copper (Cu) Heavy material with excellent thermodynamic properties and corrosion resistance.
- Copper Tinned (CuSn) Offers extra protection over ordinary copper.
- Alu Magnesium (AlMg) Good corrosion resistance in coastal environments.
- Stainless Steel (AISI 304) Ideal for corrosive environment or industrial applications.
- Stainless Steel (AISI 316) Used in food processing or harsher environments than (AISI 304).
- Aluminium Hydrophilic (AlHy) Ideal for adiabatic spray systems due to water-loving
- Epoxy coated Aluminium (AlEP) Alternative choice to (AlMg) and better properties suited for certain corrosive environments.

**Contact EVAPCO Air Solutions to determine
the best material selection based on application and conditions.**

Applications

Material Recommendations for Dry Coolers and Air Cooled Condensers

The material recommendations below are listed to serve as a guide for selecting the proper material for common commercial, industrial and offshore applications.



Offshore



Light Industry








Aggressive Industry



Commercial Refrigeration / HVAC









Standard Commercial / Light Industrial Applications

The following materials are applicable in environments where no aggressive components exist in the ambient air and no aggressive cleaning agents are applied, with tube material compatible with the medium being used.

Product	Application	Medium	Tube Material	Fin Material	Casing Material
 Air Cooled Condenser	Commercial Refrigeration/HVAC	HFC Refrigerants	Copper	Aluminium	AlZn/Galv
 Air Cooled Condenser	Commercial Refrigeration/HVAC	HFC Refrigerants	Aluminium	Aluminium	AlZn/Galv
 Air Cooled Condenser	Industrial Refrigeration	Ammonia	304 SS	Aluminium	AlZn/Galv
 Dry Cooler	Industrial / HVAC	Water / Glycol	Copper	Aluminium	AlZn/Galv
 Dry Cooler	Industrial / HVAC	Water / Glycol	Aluminium	Aluminium	AlZn/Galv

Industrial or Harsh Environment Applications

The following materials are recommended for use in environments where ambient air contains aggressive components, with tube material compatible with the medium being used.

Product	Application	Medium	Tube Material	Fin Material	Casing Material
 Condenser / Cooler	Industrial Atmosphere	HFC Refrigeration/ Water Glycol	Copper/Al	AlEp / AlMg	AlZn/304 SS
 Condenser / Cooler	Aggressive Industry	HFC Refrigeration/ Water Glycol	304 SS	304 SS / Heavy AlMg	304 SS
 Condenser	Industrial Atmosphere	Ammonia	304 SS	AlEp / AlMg	AlZn/304 SS
 Condenser	Aggressive Industry	Ammonia	304 SS	304 SS / Heavy AlMg	304 SS
 Condenser / Cooler	Sea Air/ Offshore	HFC Refrigeration/ Water Glycol	Copper/ 316 SS	CuSn/ 316 SS	304 SS
 Condenser	Sea Air/ Offshore	Ammonia	304 SS	Copper/ 316 SS	304 SS
 Cooler	Aggressive Industry	De-Ionized Water	Aluminium/ 304 SS	AlEp / AlMg	304 SS
 Cooler	Sea Air/ Offshore	Sea Water	Titanium	316SS/CuSn	304 SS