

Heat Transfer Coils

AIRPAK Heat Transfer Coils have the following features:



Brazing

All joints are hand brazed with a generous amount of silver brazing alloys within a nitrogen environment.

This eliminates oxidisation, ensuring a clean weld, free of impurities, improving service life



Fins

Aluminium fins are standard for all fin profiles. Copper tubes with aluminium fin offers the best balance of cost to heat transfer. Extruded fin collars ensure optimum heat transfer by ensuring maximum tube contact, and accurate fin spacing.

- Aluminium (standard), Pre-Coated Aluminium ('Blue Fin') and Copper
- Corrugated (standard), straight, louvered, sine wave, and lanced sine wave profiles. These fin profiles enhance the heat transfer process by both increasing surface area and airflow turbulence.



Fittings & Connectors

All fittings and connectors are made from copper. Standard positions exist, with the ability to tailor the design to application requirements.



Frame

- Aluminium and stainless steel frames are available, with galvanised steel as standard
- Intermediate tube supports are standard equipment on with long coils.



Fully Collared Holes

In addition to collared fins, all end plates have fully collared holes. This eliminates tube erosion damage that can result from continuous expansion and contraction of tubes within the end plates throughout the life of the coil due to temperature change.



Handing

The correct mounting orientation of the coil is essential to:

- · Achieve thermal counter-flow for optimum heat transfer
- Ensure coil is self-draining by gravity and vents air effectively



Headers

Heavy wall seamless copper tubing is used on all headers. The headers are generously sized for low fluid pressure drop and uniform fluid flow.



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Heat Transfer Coils



Packaging

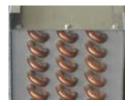
All coils are dehydrated, charged with dry Nitrogen, and sealed. Your guarantee that all coils reach site installation and commissioning with "leak free" piece of mind. All packaging is fully enclosed export quality timber boxes. Each box is manufactured to suit requirements and ensures all coils are tightly packed and protected from transport mishandling.

Each coil is clearly labelled for easy identification and future reference.



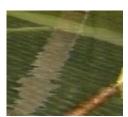
Protective Coatings

- All coils have a proprietary coating 'Standard Finish' applied. This acrylic postmanufacture coating helps protect the coil from mild coastal regions and general weathering.
- Additional anti-corrosion finishes are available:
 - o 'Epoxy Finish' 2-pack black epoxy coating for chlorinated environments.
 - Heresite The longterm standard in anti-corrosion protection.
 - o D-Coat With solutions for microbial, UV, as well as anti-corrosion protection.



Return Bends

Efficient circuiting is achieved through extensive use of pure copper U-bends. All bends have a smooth opening to ensure uniform water flow throughout the coil.



Testing

- All coils are tested to a pressure of 3,450kPa with dry compressed air whilst submersed within warm water.
- Coils are manufactured in strict accordance to ARI (Airconditioning & Refrigeration Institute - USA) specifications to guarantee the accuracy of performance data.



Tubes

All coils are produced with a staggered tube design. This provides a highly efficient airflow pattern that minimises air friction, to help reduce fan kilowatt requirements. Tubes are mechanically expanded into the fin collars to provide maximum bonding.

- Pure seamless copper tubing and return bends.
- 3/8" OD (9.5mm), 1/2" OD (12.7mm), and 5/8" OD (15.9mm)
- Plain bore or Inner-grooved (rifle) bore tubes



Vent and Drain Valves

Vent and drain valves are fitted as standard equipment on all coils.



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