MCHE – MICRO CHANNEL HEAT EXCHANGER

In condensing units in commercial AC applications, MCHEs improve your bottom line in all the following ways: First, their excellent heat transfer raises the efficiency of your products, enabling you to build a high-performance range with condensing units in commercial AC applications, MCHEs improve your bottom line in all the following ways:

First, their excellent heat transfer raises the efficiency of your products, enabling you to build a high-performance range with a slimmer design (for the same frontal area). With compact, energy-efficient products, you save on material, transport and storage costs – and increase the attractiveness of your offering to customers.

Another important advantage is that MCHEs have a 30% lower refrigerant charge than F&T coils, leading to environmentally friendlier systems. This means you can meet legal regulations, obtain environmental certification and take advantage of 'green' tax incentives.

Reach out to new customers with leaner, MCHE-based products that offer lower energy consumption and lower refrigerant charge (meaning fewer environmental inspections are needed over the product's lifetime).

01 COMPACT DESIGN

The smart design of MCHEs means smaller coils can be used compared with an F&T coil of equivalent performance.

Cooling units can be up to 35% smaller in size, which leads to further competitive advantages such as reduced footprint and smarter logistics solutions.

02 LOWER HOLD-UP VOLUME

The superior Micro Channel design delivers greatly improved heat transfer with less refrigerant. An MCHE's hold-up volume is a full 77% lower than that of an F&T coil.

03 LIGHT WEIGHT

MCHEs weigh 68% less than equivalent F&T coils. Their superior efficiency enables you to produce smaller, lighter units with equal performance. Their lightness also makes MCHEs cheaper to transport.

04 ALL-ALUMINUM

MCHEs are made of aluminum, a low-density metal that prevents the galvanic corrosion which can occur between the aluminum and copper in F&T coils. Being made of a single material also makes it easier to recycle the product.

05 GREATER AIR-SIDE HEAT TRANSFER EFFICIENCY

MCHEs successfully address one of the limiting factors of coil performance and give higher air-side efficiency than F&T coils.

They offer greater tube surface and better tube-to-fin joints as well as high and consistent contact between the metal surface and the ambient air.

06 BRAZED TUBE TO FIN JOINT

Air gaps reduce heat transfer. In an MCHE, all the parts are brazed together, so there are no air gaps in the joint between the fins and the tube so heat transfer is improved

07 EASY CLEANING

MCHEs are very easy to clean, unlike F&T coils from which dust and dirt are difficult to remove.

08 LOWER PRESSURE DROP PER UNIT HEAT TRANSFER

Pressure drop is lower in an MCHE, which allows you to use a smaller air side fan and reduce energy consumption.

Alternatively, you can use the same fan to increase capacity.

09 PRICE STABILITY

Since they can be made very compact, MCHEs contain less metal than F&T coils. The metal content therefore represents a smaller proportion of the total cost, which makes MCHEs less vulnerable to raw material price fluctuations.

10 LOW NOISE LEVELS

MCHEs have an unobstructed airflow that reduces noise – a strong competitive advantage in residential AC applications.

The straight-through air flow also gives a lower pressure drop and requires less fan power.

11 DESIGN FLEXIBILITY

Our comprehensive product range gives you maximum flexibility in both the size of the coil and your mounting options.

MCHEs are available up to 1.5 x 4 meters, and we offer a range of mounting accessories to suit every type of installation.

UNIVERSAL
CHILLING SYSTEMS