

In all stainless steel and designed for steam

TS6-FMC Plate Heat Exchangers

Applications

Heating of water or CIP (cleaning in place) solutions by means of steam. General heating and cooling duties.

Working principles

Channels are formed between the plates and the corner ports are arranged so that the two media flow through alternate channels. The heat is transferred through the plate between the channels, and complete counter-current flow is created for highest possible efficiency. The corrugation of the plates provides the passage between the plates, supports each plate against the adjacent one and enhances the turbulence, resulting in efficient heat transfer.

Standard design

The plate heat exchanger consists of a pack of corrugated metal plates with portholes for the passage of the two fluids between which heat transfer will take place.

The plate pack is assembled between a fixed frame plate and a movable pressure plate and compressed by tightening bolts. The plates are fitted with a gasket which seals the interplate channel and directs the fluids into alternate channels. The number of plates is determined by the flow rate, physical properties of the fluids, pressure drop and temperature program. The plate corrugations promote fluid turbulence and support the plates against differential pressure.

The plate and the pressure plate are suspended from an upper carrying bar and located by a lower guiding bar, both of which are fixed to a support column.

Connections are located in the frame plate or, if either or both fluids make more than a single pass within the unit, in the frame and pressure plate.



TS6-MFMC

Typical capacities

Liquid flow rate

Up to 20 kg/s, depending on media, permitted pressure drop and temperature program.

Water heating by steam

200 - 1,800 kW

Frame type

FMC

Plate types

TS6M

Standard Materials

Frame plate

Frame and pressure plate in solid stainless steel AISI 316L

Nozzles

Stainless steel AISI 316L

Plates

Stainless steel AISI 316

Gaskets

Nitrile, EPDM or HeatSeal F™

Connections

Flange 65 mm DIN 2501 PN10
Sanitary connections 76 mm. DIN, SMS, Tri-Clamp, B.S./RJT and IDF/ISO male parts.

Technical data

Mechanical design pressure (g)/temperature

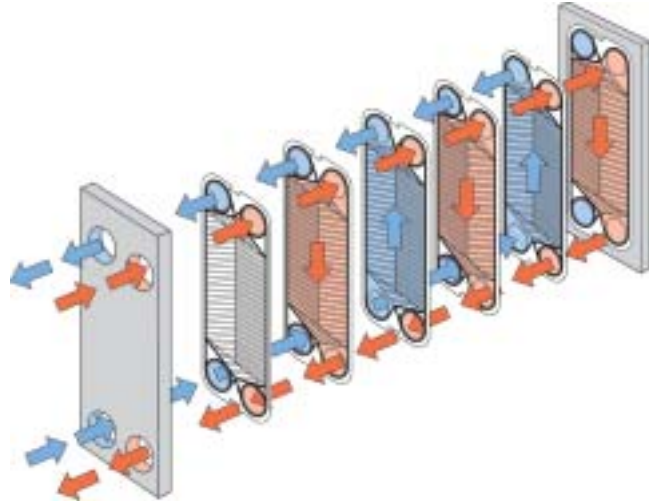
FMC 1.0 Mpa/175°C

Maximum heat transfer surface

13 m² (140 sq. ft)

Particulars required for quotation

- Flow rates or heat load
- Temperature program
- Physical properties of liquids in question (if not water)
- Desired working pressure
- Maximum permitted pressure drop
- Available steam pressure



Flow principle of a plate heat exchanger

Dimensions

