



SACOME® TFMI

MULTITUBE

CORRUGATED TUBULAR HEAT EXCHANGER



Advantages of using tubular heat exchangers

- ✓ Low maintenance costs due to the absence of gaskets.
- ✓ High working pressures.
- ✓ High working temperatures.
- ✓ Processing of particulated or fibre products.
- ✓ Easy inspection and disassembly.
- ✓ High security in aseptic processes.
- ✓ Easy to enlarge due to its modular design

Benefits of the corrugation

- ✓ Increasing of the turbulent flow.
- ✓ Higher heat transfer coefficients.
- ✓ Lower exchange area.
- ✓ Homogeneous thermal treatment.
- ✓ Lower fouling.
- ✓ Short processing times.
- ✓ Longer running times.

Geometry and design

A number of tubes inside an outer shell; with one pass on product circuit. The Multitube TFMI is a welded heat exchanger with corrugated tubes. We understand that hygienic equipment has to be cleaned easily, and this type of heat exchanger is designed to be perfectly cleanable in place (CIP).

Applications

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Low and medium viscosity products. Particulate liquids for food and beverage applications such as:

- Milk concentrate and dairy product in general.
- Baby food.
- Butter.
- Purees.
- Ice cream.
- Pulp.
- Alcoholic and non alcoholic drinks.
- Energy drinks.
- Juices.
- Fruit puree.
- Particulate juices.
- Ketchup and sauces.
- Mayonnaise.
- Spirits.
- Oils.
- Vegetable and animal fats.



Available Modifications

- Tube side or shell side materials can be made to suit particular needs (304, 316, duplex stainless steel as 2205, 2507, 254 SMO and others under request)
- Different connections are available, according to the customer's requirements: DIN flanges and SMS clamps, among others.
- Gaskets materials: VITON, EPDM, NBR, PTFE and others under request.
- Exchangers can be specified with different surface finish or electropolished.
- Exterior surfaces can be glass blasted.
- The heat exchangers can be made in any dimensions.

Type definition

TFMI-1-70-4"/25-6000-316L/316L-H

TFM-I Welded multitube

0/1 without / with expansion joint

70 7 inner tubes

4" diameter shell in inches

25 diameter inside tubes in mm

6000 length inside tubes

316L material shellside

316L material tubeside

H/S indication of corrugation

[H = hard; S = soft]

Standard Design Conditions

Design Temperature 180 °C

Design Pressure 10 bar

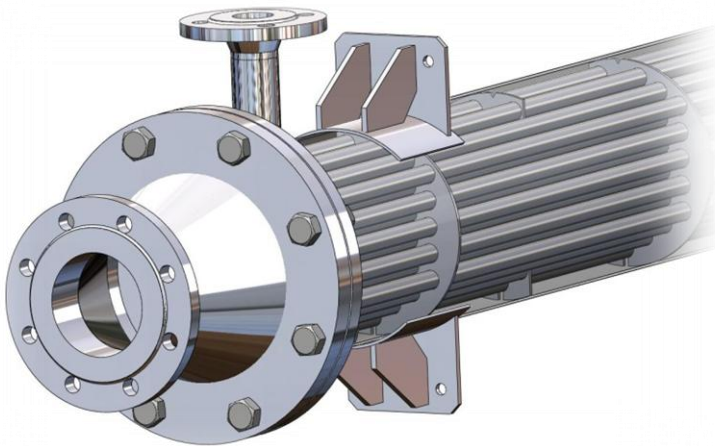
For higher design pressure or temperatures, the heat exchangers can be checked according to AD 2000 Merkblätt, ASME VIII Div. 1, PD 5500, EN13445 or by Finite Elements Analysis.

Standard sizes

Shell 2" – 30"

Inside tubes ≥ 16 mm

Length 1.5-2-3-6 m



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