

# SACOME® TFM

REMOVABLE

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 product circuit.

The Multitube TFM is a removable corrugated heat exchanger, so that not only the tubeside is easily cleanable, but also the service side of the heat exchanger.

## Applications

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

- UHT treatment and pasteurisation.
- High pressure/ temperature process or fouling.
- Energy recovery; product-product or water-product.
- Food processing in general.
- Milk concentrate and dairy product in general.
- Baby food.
- Butter.
- Purees.
- Ice cream.
- Pulp.
- Alcoholic and non alcoholic drink.
- Energy drinks.
- Juices.
- Fruit puree.
- Particulate juices.
- Ketchup and sauce.
- 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...)
- 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.
- Eccentric or concentric reductions.

### Type definition

#### TFM-1-70-4"/25-6000-316L/316L-H

TFM SACOME® Removable multi-tube  
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]

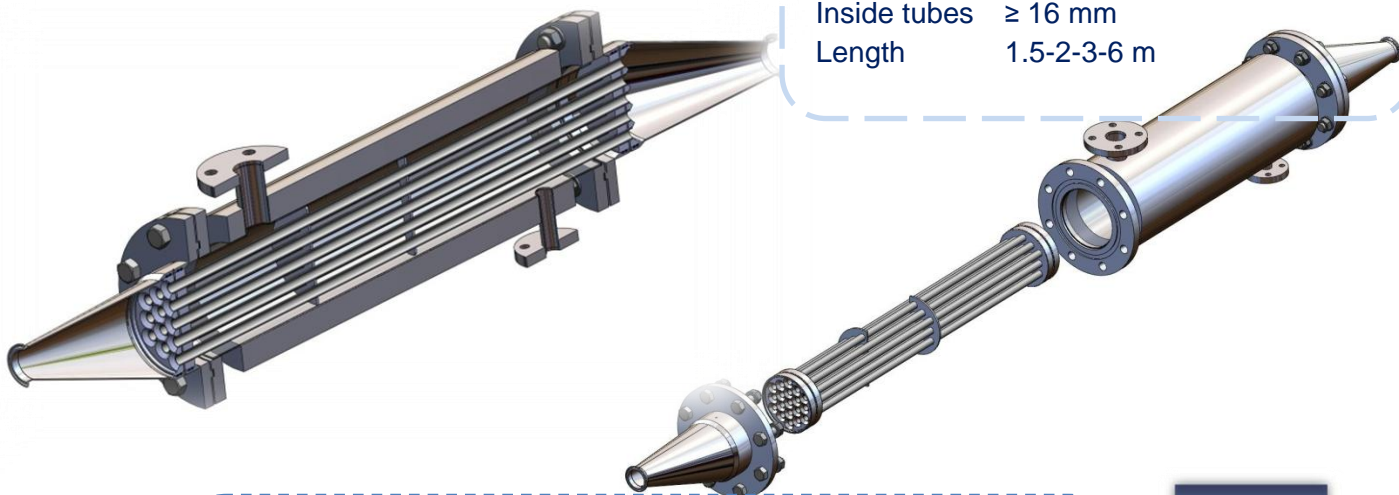
### Standard Design Conditions

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 Measurements

Shell 2" – 12"  
Inside tubes  $\geq 16$  mm  
Length 1.5-2-3-6 m



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