

## SANITARY HEAT EXCHANGERS

# S-TFM-I

**Multitube. Non removable tube bundle.**

### SANITARY LINE

Optimized designs to favor a good CIP (Clean In Place) cleaning of the product channel, guaranteeing the best finishes and the drainability of the equipment.

### OPERATION

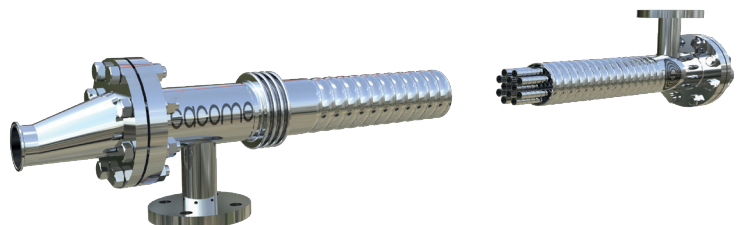
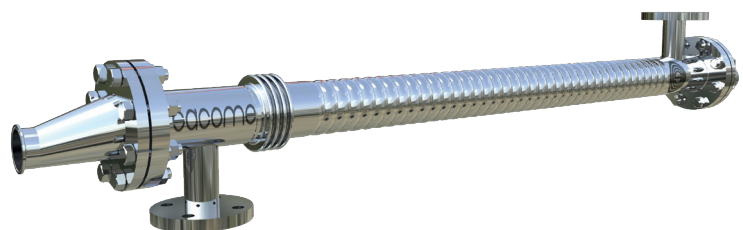
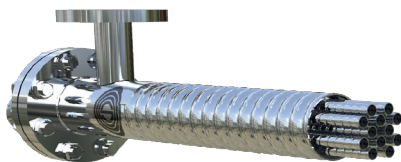
The S-TFM-I is a heat exchanger with a tube bundle within a shell. The product flows by the inner tubes while the service do it by the external channel.

### ADVANTAGES OF CORRUGATION

- HYGIENIC PROFILE
- DIFFERENT CORRUGATION GEOMETRIES (HARD/SOFT/PLAIN)
- TURBULENT FLOW (LOWER REYNOLDS NUMBER THAN FOR SMOOTH TUBES)
- HIGHER HEAT TRANSFER COEFFICIENTS AND LOWER EXCHANGE AREA
- HOMOGENEOUS THERMAL TREATMENT
- LOWER FOULING
- SHORTER RESIDENCE TIMES
- LONGER RUNNING TIMES

### ADVANTAGES OF TUBULAR HEAT EXCHANGER

- LOW MAINTENANCE COSTS
- HIGH WORKING PRESSURES
- HIGH WORKING TEMPERATURES
- PROCESSING OF PARTICULATE OR FIBRE PRODUCTS
- EASY INSPECTION AND DISASSEMBLY
- HIGH SECURITY IN ASEPTIC PROCESSES
- EASY TO ENLARGE



### APPLICATIONS

Heating (pasteurization, esterilization, UHT, etc.) or cooling processes of medium - low viscosity products which may contain fibres and small particles. This model is designed for dairy products, juices, margarines, drinks, food grade oils and others which may require good product channel finish.

Discover all the advantages of corrugation in tubular heat exchangers  
[sacome.com/corrugated-shell-and-tube-heat-exchangers](http://sacome.com/corrugated-shell-and-tube-heat-exchangers)

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## SACOME HEAT EXCHANGER TYPE DEFINITION

**S-TFM-I-7-1-85/18-6000-304/316L-H**

**S**

SANITARY LINE

**TFM**

MULTITUBULAR

**I**

NON REMOVABLE TUBE BUNDLE

**0/1**

WITHOUT/WITH EXPANSION JOINT

**7**

NUMBER OF INNER TUBES

**85**

Ø SHELL (mm)

**18**

Ø INNER TUBE (mm)

**6000**

NOMINAL LENGTH (mm)

**304**

SHELL SIDE MATERIAL

**316L**

TUBE SIDE MATERIAL

**H/S/P**

CORRUGATION INDICATOR

(HARD / SOFT/ PLAIN)

### STANDARD DESIGN CONDITIONS

Design temperature  
**180 °C**

Design pressure  
**10 barg**

For higher design pressure or temperatures as well as hazardous fluids, the heat exchangers can be checked according to AD 2000 Merkblätt, ASME VIII Div.1, PD 5500, EN13445 or by Finite Elements Analysis and CE certificated by individual inspection modules.

\* Included: 3.1 Quality certificate and CE Marking according to 2014/68/UE.

### STANDARD MEASURES

Shell side diameter  
**52 mm – 204 mm**

Inner tube diameter  
**≥ 16 mm**

Length  
**1-1.5-2-3-6 m**

\* Other available sizes under request.

### MATERIALS

Shell & Tubes

**Stainless Steel 304 or 316L**

\* Other materials available on request (2205, 2507, 254 SMO among others).

### AVAILABLE CONNECTIONS

Clamp  
Flange  
**DIN 11851**

\* Other connections available on request.

### SURFACE FINISH

External  
**External Polished**

Product side  
**Product channel designed to promote CIP (Clean In Place).**

### OPTIONS

#### INSULATION

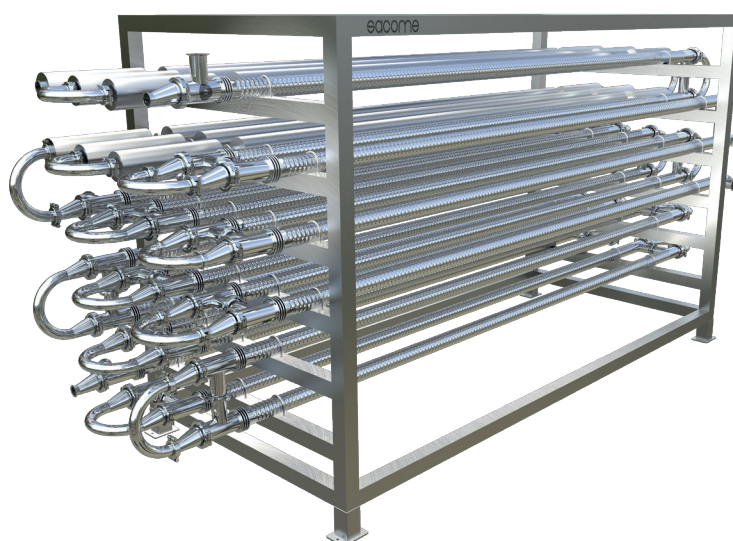
Mineral wool coated in 304 stainless steel metal sheet.

#### INTERCONNECTIONS

In case the equipment contains several units in series, SACOME can provide the interconnections for the product channel and the service channel. Thinking of the easy drainability we propose eccentric reductions.

#### FRAME

In 304 stainless steel. The type and shape of the frame will be selected to fit the needs of each project. If required, equipment may be sloping for better drainage.



## SACOME