

SANITARY HEAT EXCHANGERS

S-TFMP-1

Multiple pass. 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

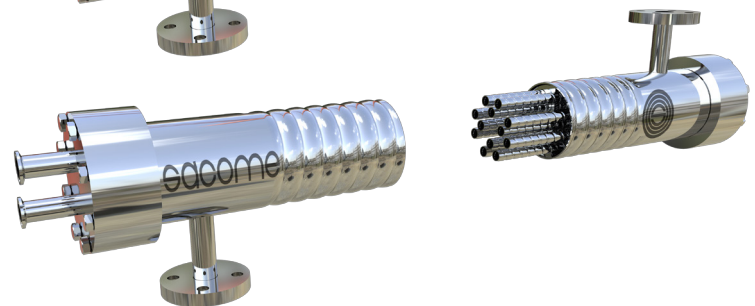
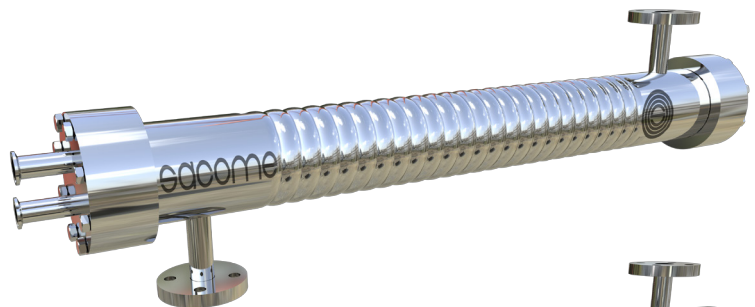
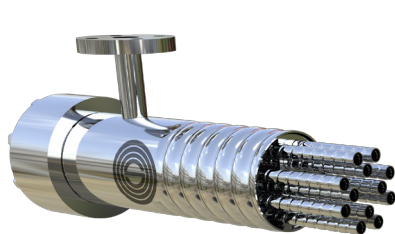
S-TFMP-1 is a heat exchanger consisting of a tube bundle within a shell. The product flows through the inner tubes making multiple pass while the service does it on the outer channel.

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



SACOME HEAT EXCHANGER TYPE DEFINITION
S-TFMP-4-I-7-1-85/18-6000-304/316L-H
S
SANITARY LINE
TFMP
MULTIPLE PASS
I
NON REMOVABLE TUBE BUNDLE
0/1
WITHOUT/WITH EXPANSION JOINT
7
NUMBER OF INNER TUBES
4
NUMBER OF PASSES
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.

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.