

# MULTIPASS MULTITUBE HEAT EXCHANGERS

## **HRS MP SERIES**



The HRS MP Series is a complete stainless steel multitube heat exchanger, its design is ideal for hygienic and industrial applications. Using multiple passes on the tube side offers greater flexibility for optimising fluid velocity, pressure drop and heat transfer.

The unique design creates longer thermal length within the same module, avoiding designs with multiple modules and interconnecting bends. Using HRS corrugation technology, both heat transfer and efficiency are increased over standard smooth and dimple tube heat exchangers. In addition, potential fouling is minimised.

## **TECHNICAL DATA**

#### **APPLICATIONS**

Low-Medium Viscosity Fluids Food Industry Applications

### STANDARD MATERIALS OF CONSTRUCTION

Service Side: AISI 304/316L Stainless Steel
Product Side: AISI 316L Stainless Steel

Other material options available

### STANDARD CONNECTIONS

Service Side: Flange
Product Side: Clamp
All flange & clamp types available

#### **SURFACE FINISH**

External: Polished Internal: <0.8µ
Other surface finishes available

### STANDARD DESIGN CONDITIONS

Service Side: 10 bar/185°C Tube Side: 10 bar/185°C

## **FEATURES**

- Multiple passes on tube side optimise fluid velocity, pressure drop and heat transfer
- Corrugated tubes for increased heat transfer
- Bellows are fitted to absorb differential expansion between shell and inner tubes
- Multiple units can be interconnected and have the option of frame mounting, insulation and cladding in stainless steel
- Passes can be configured to include 2/4/6 passes

#### **RANGE**

MODELS	LENGTHS (m)	SURFACE AREA (m²)	SERVICE SIDE CONNECTION	PRODUCT SIDE CONNECTION	SERVICE SIDE VOLUME (I)	PRODUCT SIDE VOLUME (I)
MP 6/X 76/18	0.7 - 6.0	2	DN40	1.5"	16.6	7.2
MP 12/X 104/18	0.7 - 6.0	4.1	DN65	1.5"	28.5	14.3
MP 18/X 129/18	0.7 - 6.0	6.1	DN80	2"	47.8	21.7
MP 36/X 168/18	0.7 - 6.0	12.2	DN80	3"	70.8	43.4

Possible tube lengths in meters: 0.7/1/1.5/2/3/6 m. The surface area and volumes shown are for 6m length models.

## DESIGN CODE AND COMPLIANCE

PD 5500, PED 2014/68/EU, ASME | FDA, TR CU 032, DOSH Compliant

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