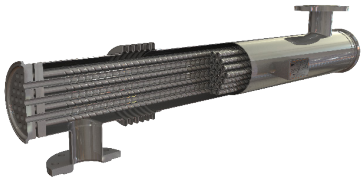
DOUBLE TUBEPLATE PHARMACEUTICAL HEAT EXCHANGERS

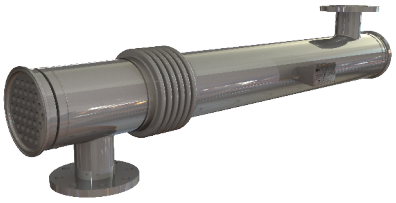
HRS SP04 SERIES



The HRS SP Series is a multitube shell and tube heat exchanger designed with the added security of a double tubeplate, providing leak detection to avoid cross contamination between the service and product fluids.

The HRS SP series is perfect for pharmaceutical applications.

Using our corrugation technology, heat transfer and efficiency are increased over standard smooth and dimple tube heat exchangers. In addition, potential fouling is minimised.



TECHNICAL DATA

APPLICATIONS

Water for Injection (WFI)
Purified Water

SURFACE FINISH

External: Polished
Internal: <0.4µ
Electropolished version available

STANDARD MATERIALS OF CONSTRUCTION

Service Side: AISI 304/316L Stainless Steel
Product Side: AISI 316L Stainless Steel
Other material options available

STANDARD DESIGN CONDITIONS

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

STANDARD CONNECTIONS

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

FEATURES

- Corrugated tubes for increased heat transfer
- Bellows are fitted to absorb differential expansion between shell and inner tubes
- Multiple units can be interconnected and mounted in a frame
- Multipass version available

RANGE

MODELS	LENGTHS (m)	SURFACE AREA (m^2)	SERVICE SIDE CONNECTION	PRODUCT SIDE CONNECTION	MAX FLOW SHERVICE (m^3/hr)	MAX FLOW PRODUCT (m^3/hr)	VOLUME SERVICE SIDE (l)	VOLUME PRODUCT (l)
SP04 4 64/17	0.7 - 6	1.3	DN40	2.5”	17	6	11.7	3.7
SP04 7 76/17	0.7 - 6	2.3	DN40	3”	17	10	15.5	6.5
SP04 13 104/17	0.7 - 6	4.3	DN65	4”	40	20	29	12
SP04 21 129/17	0.7 - 6	6.8	DN80	5”	52	32	44.4	19.4
SP04 31 154/17	0.7 - 6	10	DN80	6”	52	50	58.4	28.6
SP04 37 168/17	0.7 - 6	11.8	DN80	ISO1127 DN150	52	60	72.6	33.6

By standard the following lengths can be supplied: 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 | TR CU 032, DOSH Compliant

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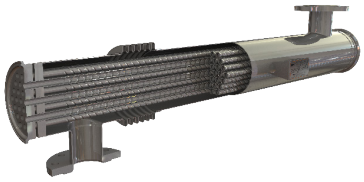
DOUBLE TUBEPLATE PHARMACEUTICAL HEAT EXCHANGERS

HRS SP05 SERIES



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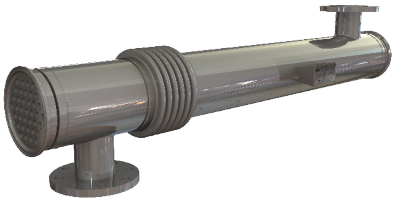

TECHNICAL DATA

APPLICATIONS

Water for Injection (WFI)
Purified Water

SURFACE FINISH

External: Polished
Internal: <0.5µ
Electropolished version available

STANDARD MATERIALS OF CONSTRUCTION

Service Side: AISI 304/316L Stainless Steel
Product Side: AISI 316L Stainless Steel
Other material options available

STANDARD DESIGN CONDITIONS

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

STANDARD CONNECTIONS

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

FEATURES

- Corrugated tubes for increased heat transfer
- Bellows are fitted to absorb differential expansion between shell and inner tubes
- Multiple units can be interconnected and mounted in a frame
- Multipass version available

RANGE

MODELS	LENGTHS (m)	SURFACE AREA (m^2)	SERVICE SIDE CONNECTION	PRODUCT SIDE CONNECTION	MAX FLOW SERVICE (m^3/hr)	MAX FLOW PRODUCT (m^3/hr)	SERVICE SIDE VOLUME (l)	PRODUCT SIDE VOLUME (l)
SP05 4 64/19	0.7 - 6	1.4	DN40	2.5"	15	7	10.3	4.6
SP05 7 76/19	0.7 - 6	2.5	DN40	3"	15	12	13.2	8.1
SP05 12 104/19	0.7 - 6	4.3	DN65	4"	40	20	26.3	13.8
SP05 19 129/19	0.7 - 6	6.8	DN80	5"	52	33	40.7	22
SP05 27 154/19	0.7 - 6	9.7	DN80	6"	52	50	55.5	31.6
SP05 31 168/19	0.7 - 6	11	DN80	ISO1127 DN150	52	62	71.1	35.7

By standard the following lengths can be supplied: 0.7/1/1.5/2/3/6 m. The surface area and volumes shown are for 6m length models.

DESIGN CODE AND COMPLIANCE

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