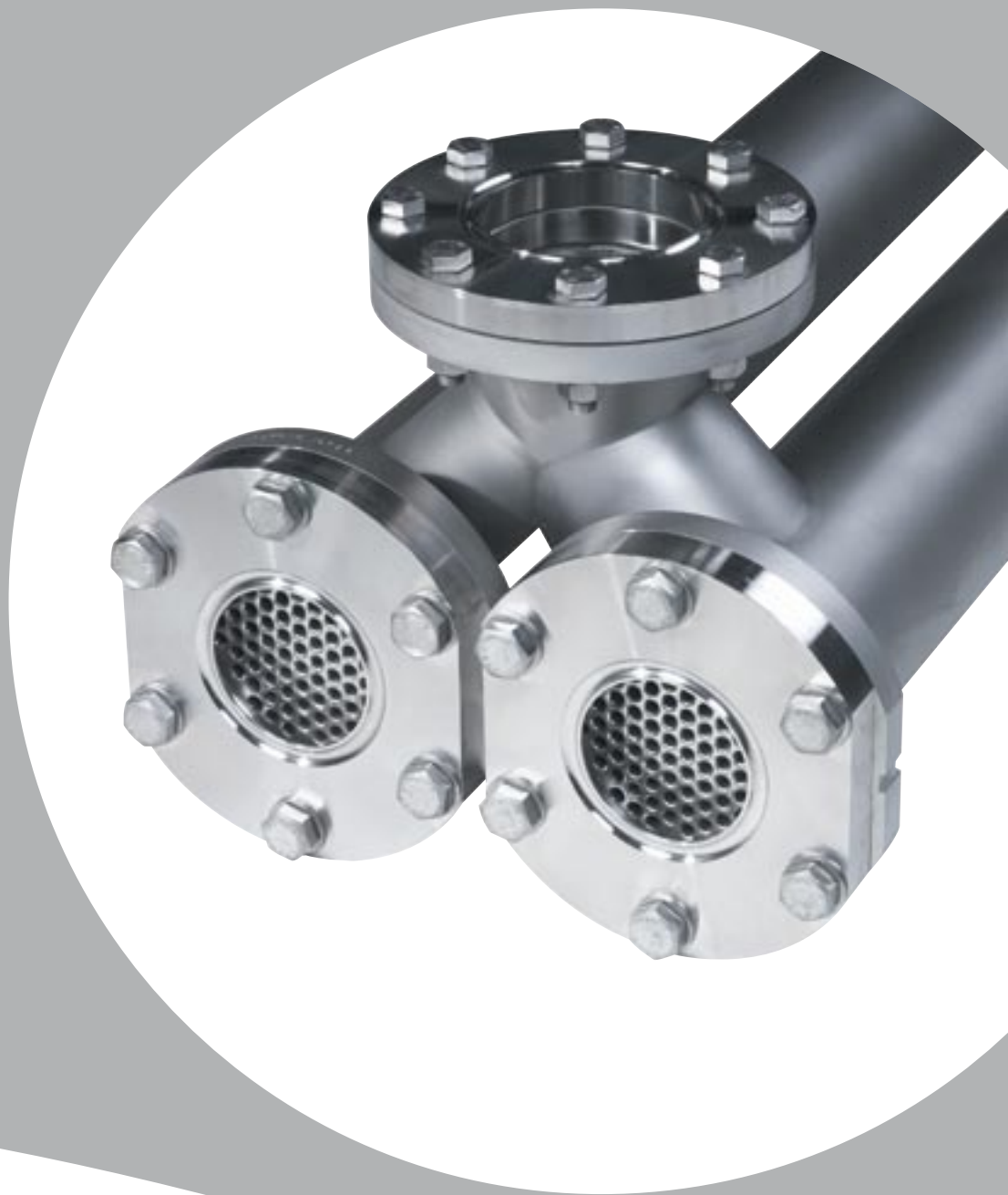


# VARITUBE<sup>®</sup> HS

## High Performance Hairpin Heat Exchanger

 Innovative Engineering –  
Quality in Line.





# VARITUBE® HS

Type	H = 1,500 mm		Weight empty (kg)	Connections			Volume (l)	
	B	T		Product	Steam	Condensate	Product side	Shell side
VT HS 19-1,5	300	220	46	DN 50	DN 40	DN 25	2.75	9.00
VT HS 37-1,5	286	240	61	DN 50	DN 50	DN 25	5.50	9.80
VT HS 55-1,5	300	340	91	DN 65	DN 65	DN 40	8.30	18.50
VT HS 74-1,5	426	380	131	DN 80	DN 80	DN 40	11.50	26.00
VT HS 109-1,5	470	440	158	DN 100	DN 125	DN 50	17.00	40.00

## Application

The VARITUBE® HS (VT HS) heat exchanger is mainly used for heating of CIP media and hot water generation for volume flow rates of up to 60 m<sup>3</sup>/h.

Type	Flow rate [m <sup>3</sup> /h]	Pressure drop [kPa]	Max. heat load [kW]	Delta T (K)
VT HS 19-1,5	3.5-10.5	8-60	450	80-37
VT HS 37-1,5	7.0-20.5	10-70	880	80-37
VT HS 55-1,5	10.0-30.0	10-80	1,290	80-37
VT HS 74-1,5	13.5-41.0	12-100	1,760	80-37
VT HS 109-1,5	20.0-60.0	15-120	2,575	80-37

Performance data relating to the final heating temperature of 85° C and a steam pressure of 3.0 barg (143° C)

## Design

VARITUBE® HS – a tubular heat exchanger which guides the product through several inner tubes, which are bent around 180°. The heat carry-

ing medium flows in the surrounding shell. This design allows to compensate for the different thermal expansion between shell and inner tube bundle caused by high temperature differences.

## Technical Data

### Materials

- Inner tubes: AISI 316Ti (1.4571)
- Shell: AISI 304 (1.4301)
- Gaskets: EPDM

### Connections

- Product side: hygienic flanges
- Medium side: flanges acc. to DIN 2633, PN 16

### Operating temperature/pressure

- Inner tubes: 150° C/23 bar
- Shell: 190° C/12 bar

### Further characteristics of the VT HS

- Fully welded hairpin version
- High thermal performance
- Vertical version
- Counterflanges included in the scope of supply
- Stainless steel air gap insulation included in the scope of supply



Process Engineering

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