

ROTATING SCRAPED SURFACE HEAT EXCHANGERS

HRS R SERIES



The HRS R Series scraped surface heat exchanger has been developed for the more challenging heat transfer applications and is suitable for both hygienic and industrial applications.

Each inner tube contains a scraper bar fitted with a helical screw which rotates at high speed and enhances flow through the tube whilst reducing pressure drop. In addition, the continuous scraping action eliminates fouling on the inner tube wall, ensuring the heat transfer area is clean at all times.

TECHNICAL DATA

APPLICATIONS

Viscous and Fouling Fluids

Heating Cooling Evaporation Crystallisation

RANGE

STANDARD MATERIALS OF CONSTRUCTION

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

All other material options available

STANDARD CONNECTIONS

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

SURFACE FINISH

External: Polished Internal: <0.8µ

STANDARD DESIGN CONDITIONS

Service Side: 10 bar/185°C Product Side: 21 bar/185°C

FEATURES

- Continuous scraping action enhances mixing of highly viscous products
- Spiral blade and scraper design reduces pressure drop, with improved heat transfer
- Multitube option for reduced footprint, energy consumption and operating costs
- Unique sealing system enables removal and replacement of individual tubes
- Scrapers are available in metal detectable material
- Multipass version available

MODELS	LENGTHS (m)	SURFACE AREA (m²)	SERVICE SIDE CONNECTION	PRODUCT SIDE CONNECTION	VOLUME PRODUCT SIDE (I)	MOTOR SIZE (kW)
R I/I - R I/2	I - 2	0.35 - 0.7	DN65	2.5"	8.2 - 16.8	4
R 3/I - R 3/2	I - 2	1.05 - 2.1	DN65	2.5 - 3"	37.3 - 58.2	15
R 6/I - R 6/2	I - 2	2.1 - 4.2	DN80	3 - 4"	74.5 - 116.3	30

Units can be installed vertically and horizontally. ASME version has matt external finish.

DESIGN CODE AND COMPLIANCE

PD 5500, PED 2014/68/EU, 2014/34/EU (ATEX), 2006/42/CE, ASME | FDA, 3-A, TR CU 032, DOSH Compliant

HRS HEAT EXCHANGERS hrs-heatexchangers.com UK Office +44 (0)1923 545 625 info@uk.hrs-he.com