

RELY ON EXCELLENCE

## WED5

### Seal Supply Systems | Heat exchangers



#### Advantages

- Modular Design, length upgradeable
- High pressure version up to 250 bar (3,625 PSI) on request
- High temperature version up to 425 °C (797 °F) on request
- 316/316L stainless steel: high resistance to corrosive fluids
- Compliant with requirements acc. to TEMA C

#### Standards and approvals

- ASME VIII, Div. 1 (Design, calculation and production)

#### Recommended applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology

#### Features

Heat exchangers of the WED5 range (photo: WED5050/A020-D1) are used to cool process/barrier fluids in seal supply circuits. WED5 heat exchangers are available in 3 standard sizes and are API 682 conform. The process/barrier medium is directed through the tube and the cooling medium through the shell. For simple draining of the cooling water side, the heat exchanger can also be supplied with drainage ball valves. In addition, the heat exchangers can also be combined with a temperature instrument in the supply line to mechanical seal (optional in accordance with API 682). Circulation in accordance with API 682 / ISO 21049: Plan 21, Plan 22, Plan 23, Plan 41

#### Notes

##### Cleaning:

Cooling water side: the area around the tubes can be cleaned mechanically after the housing is removed

Process/barrier medium side: flush with a suitable solvent

## RELY ON EXCELLENCE

### Installation, details, options

#### Product variants

****	WED5-500	WED5-800	WED5-1200
Cooler design	U-tube bundle, dismantable	U-tube bundle, dismantable	U-tube bundle, dismantable
Conformity	API 682, TEMA C	API 682, TEMA C	API 682, TEMA C
Design code	ASME VIII, Div. 1 oder PED2014/68/EU	ASME VIII, Div. 1 oder PED2014/68/EU	ASME VIII, Div. 1 oder PED2014/68/EU
Weight (empty)	44 kg	50 kg	58 kg
Process fluid			
Process connections <sup>1)</sup>	Flange 3/4", 600 lbs	Flange 3/4", 600 lbs	Flange 3/4", 600 lbs
Design pressure <sup>1)</sup>	76 bar (g)	76 bar (g)	76 bar (g)
Design temperature <sup>1)</sup>	150 °C	150 °C	150 °C
Material (metal parts) <sup>1)</sup>	316/316L / 1.4401/1.4404	316/316L / 1.4401/1.4404	316/316L / 1.4401/1.4404
Cooling water			
Process connections <sup>1)</sup>	3/4" NPT (f)Flange 3/4", 150 lbs	3/4" NPT (f)Flange 3/4", 150 lbs	3/4" NPT (f)Flange 3/4", 150 lbs
Drain / vent connection <sup>1)</sup>	1/2" NPT (inside)	1/2" NPT (inside)	1/2" NPT (inside)
Design-pressure <sup>1)</sup>	16 bar (g)	16 bar (g)	16 bar (g)
Design temperature <sup>1)</sup>	95 °C	95 °C	95 °C
Material (metal parts) <sup>1)</sup>	316/316L / 1.4401/1.4404	316/316L / 1.4401/1.4404	316/316L / 1.4401/1.4404
Cooling capacity depending on process fluid	(low flow <sup>2)</sup> / high flow <sup>3)</sup> )	(low flow <sup>2)</sup> / high flow <sup>3)</sup> )	(low flow <sup>2)</sup> / high flow <sup>3)</sup> )
Water	7,7 kW / 11,6 kW	10,0 kW / 15,7 kW	11,8 kW / 19,4 kW
Öl ISO VG10	3,1 kW / 4,7 kW	4,2 kW / 6,6 kW	5,3 kW / 8,6 kW

## RELY ON EXCELLENCE

---

<sup>1)</sup> further versions available upon request (e.g. operating conditions, flange connection 1500 lbs, duplex material, etc.)

<sup>2)</sup> Low Flow: 8 l/min (process fluid), 10 l/min (cooling water),  $\Delta T = 40$  K (hot-cold)

<sup>3)</sup> High Flow: 15 l/min (process fluid), 20 l/min (cooling water),  $\Delta T = 40$  K (hot-cold)

The cooling performance depends on the available fluids, their temperatures and flow rates. Please contact EagleBurgmann for professionally selecting the correct heat exchanger.