

# **Heat Exchanger – Seal Supply Systems**



## **Product Description**

Circulation in accordance with API 682 / ISO 21049: Plan 21, Plan 22, Plan 23, Plan 41 HEK designed heat exchanger is employed to cool process/barrier fluids in seal supply systems. The heat exchanger has a wound double helix around the guide tube, the process/barrier medium is directed through the shell of the HEK and the cooling medium through the tubes.

#### **Technical Features**

- 1. Cooling capacity up to 10.5 kW
- 2. Cost effective solution
- 3. Effective cooling achieved with wound double helix around a guide tube
- 4. Designed for varied applications due to construction in stainless steel
- 5. For optimum and simple cleaning, the heat exchanger can be dismantled

#### **Typical Industrial Applications**

Chemical industry Petrochemical industry Power plant technology Refining technology Oil and gas industry

#### Notes

Mount vertically with connections pointing up. Provide for external venting on the process/barrier medium side (the user has to install a vent at the highest point of the pipe work).

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.

### Standards

PED 2014/68/EU (Design and production in accordance with EU Pressure Equipment Directive)

Technical Features		
Designation HEK	Tube	Shell
Pressure Equipment Directive	PED	
Allowable pressure <sup>1)</sup>	120 bar (1740 PSI)	16 bar (232 PSI)
Allowable temperature <sup>1)</sup>	160 °C (320 °F)	95 °C (203 °F)
Inlet temperature <sup>2)</sup>	70 °C (158 °F)	25 °C (77 °F)
Flow rate 2)	10 I/min	1.8 m³/h
Volume (litres)	0.34	1.13
Cooling surface <sup>2)</sup>	$0.3 \text{ m}^2$	
Cooling capacity (kW)	10.5	
Metal parts	SS 316	Carbon steel, primed on the outside
Seals		FKM
Screws		Stainless steel A4-70

Other versions on request.

- 1) These values are based on the calculation of strength.
- <sup>2)</sup> These values are based on the calculation of heat.



