

RELY ON EXCELLENCE

WEL2 & WEL6

Seal Supply Systems | Heat exchangers



Advantages

- Helical finned tube design with vertical arrangement of the fins to the wind direction: the solution for high cooling capacities
- Welded finned tubes without gaps for guaranteed optimum energy transmission
- Universal usage: high-quality 1.4571 stainless steel finned tube design
- No cooling water connection or heating required for the cooling water pipe in winter

Standards and approvals

- PED 2014/68/EU (Design and production in accordance with EU Pressure Equipment Directive)
- ASME VIII, Div. 1 (Calculation)

Recommended applications

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

Features

Heat exchangers of the WEL2000 range (shown: WEL2001/A040) are used to cool process/barrier fluids in seal supply circuits. The heat exchangers are made of helical, laser-welded finned tubes. The cooling medium is ambient air. There is a choice of three different basic versions of the WEL2000 range, supplied fully assembled along with valves, base frame and other system components.

Circulation in accordance with API 682 / ISO 21049: Plan 21, Plan 22, Plan 23, Plan 41

Notes

WEL heat exchangers should be installed in well ventilated places indoors or, ideally, outdoors. Vertical installation is essential.

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Installation, details, options

Product variants

****	WEL2 - single	WEL2 - double	WEL2 - quadrupel	WEL6 - single	WEL6 - double	WEL6 - quadrupel
Cooler design	1 finned tube, coiled	2 finned tubes, coiled	2x2 finned tubes, coiled	1 finned tube, coiled	2 finned tubes, coiled	2x2 finned tubes, coiled
Conformity				API 682	API 682	API 682
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	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)	17 kg	34 kg	75 kg	20 kg	36 kg	63 kg
Process fluid						
Process connections ¹⁾	G 1/2" (female)	G 1/2" (female)	G 1/2" (female)	Flansch 3/4", 600 lbs	Flansch 3/4", 600 lbs	Flansch 3/4", 600 lbs
Drain / vent connection ¹⁾	1/2" NPT (female)	1/2" NPT (female)	1/2" NPT (female)			
Design pressure ¹⁾	G 1/2" (female)	G 1/2" (female)	G 1/2" (female)	1/2" NPT (female)	1/2" NPT (female)	1/2" NPT (female)
Design temperature ¹⁾	110 bar (g)	110 bar (g)	110 bar (g)	76 bar (g)	76 bar (g)	76 bar (g)
Material (metal parts ¹⁾)	200 °C	200 °C	200 °C	150 °C	150 °C	150 °C
	14.571	14.571	14.571	316/316L	316/316L	316/316L
Cooling capacity depending on process fluid						
Water	(low flow ²⁾ / high flow ³⁾)	(low flow ²⁾ / high flow ³⁾)	(low flow ²⁾ / high flow ³⁾)	(low flow ²⁾ / high flow ³⁾)	(low flow ²⁾ / high flow ³⁾)	(low flow ²⁾ / high flow ³⁾)
Oil ISO VG10	1,0 kW / 1,2 kW	1,9 kW / 2,4 kW	2,6 kW / 3,2 kW	0,8 kW / 0,9 kW	1,5 kW / 1,8 kW	2,1 kW / 2,5 kW
	0,9 kW / 1,1 kW	1,5 kW / 2,0 kW	2,0 kW / 2,6 kW	0,7 kW / 0,8 kW	1,2 kW / 1,6 kW	1,6 kW / 2,1 kW

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

²⁾ Low Flow: 8 l/min (process fluid), 0.7 m/s (Wind speed), $\Delta T = 40 \text{ K}$ ($T_{\text{fluid}} - T_{\text{ambient}}$)

³⁾ High Flow: 15 l/min (process fluid), 1.0 m/s (Wind speed), $\Delta T = 40 \text{ K}$ ($T_{\text{fluid}} - T_{\text{ambient}}$)



WEL2001/A010
Two finned tubes switched on parallel.



WEL2002/A003
Two finned tubes switched on parallel and double length.



WEL6020A4A001-D0
Cooler according to API 682 4th edition.

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Charts

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