

HAD heat exchangers

In order to meet the market demand for compact, easy to install and economical solutions, SECESPOL engineers created the HAD heat exchanger. Unique construction of connections lower pressure loss at high flow velocity. It also reduces fouling and makes the exchanger more resistant to differences in media parameters. Corrugated tubes promote turbulent flow which further intensifies heat exchange and helps the reduction in build up of deposits. It is a fully equipped ready-to-install set consisting of a shell & coil heat exchanger, a mount and insulation. Compactness and high efficiency with low pressure drop and outstanding reliability are the core advantages of HAD. It is manufactured using highest quality stainless steel and comes in numerous size versions.





8 reasons to choose the **HAD** heat exchanger



Compact size with large heat exchange area.



Vertical installation reduces space requirements.



Low maintenance costsreduced fouling thanks to special construction of connections which accelerate flow and to corrugated tubes which enhance turbulence.



Efficient heat exchange thanks to corrugated tubes which boost flow turbulence.



Able to handle high temperatures, pressures, flows and wide range of media.



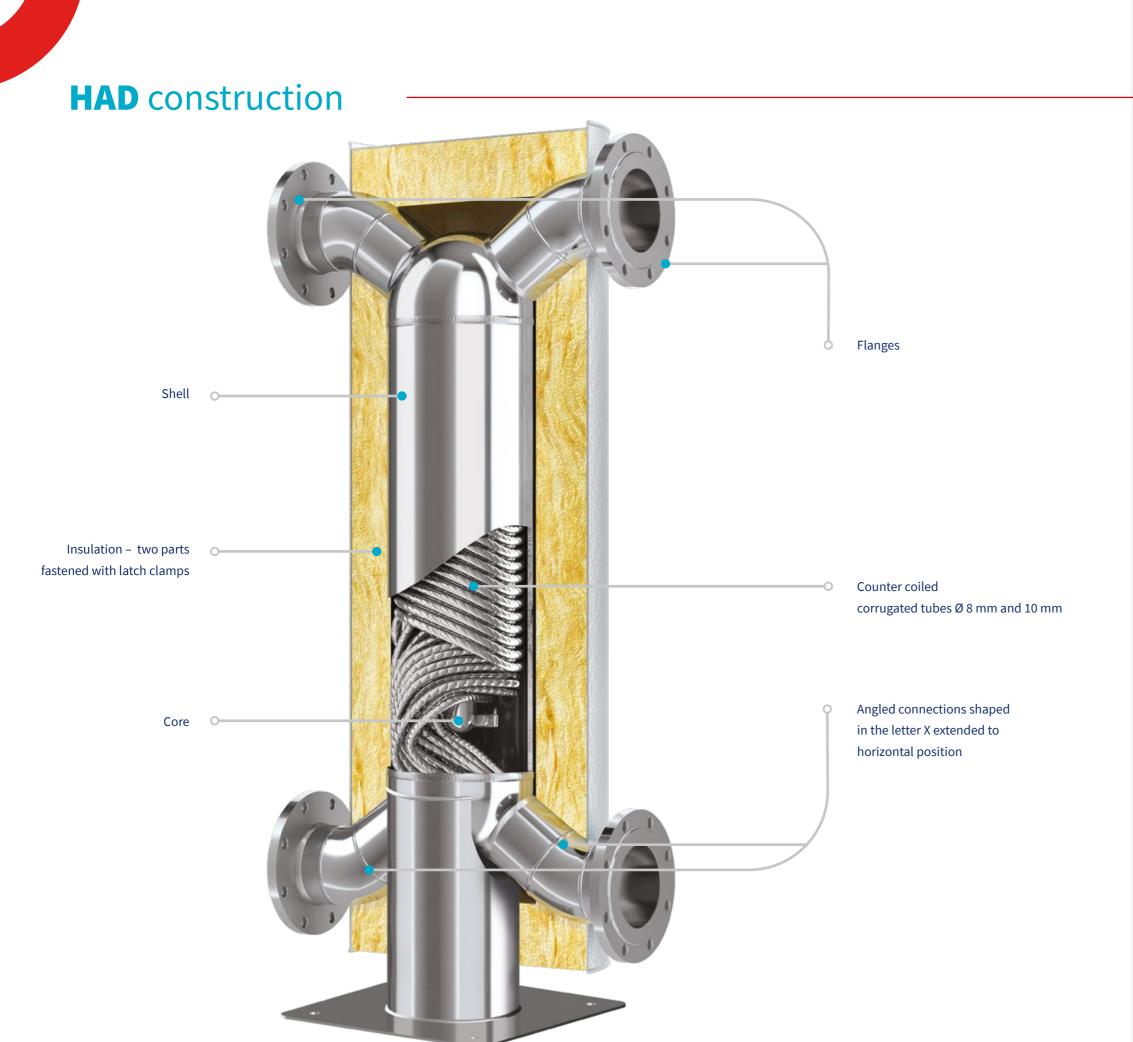
Factory-installed insulation and mount enable quick installation.



Manufactured in accordance with PED, ASME.



Easy selection with user-friendly CAIRO Selection Software.



- Made of high-alloy austenitic stainless steel
- Counter-current flow device
- Mount with a small footprint

H A D

Shell & Coil Heat Exchanger

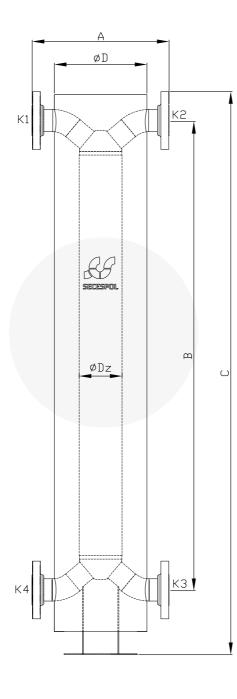
Technical drawing

Standard location of connections

K1/ K4 – inlet/outlet hot side

K3/ K2 – inlet/outlet cold side





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	tub	es	shell			
_	temp.	pressure	temp.	pressure		
F	200°C / 392°F	16 bar / 232 PSI	200°C / 392°F	16 bar / 232 PSI		
M	250°C / 482°F	25 bar / 362.5 PSI	200°C / 392°F	16 bar / 232 PSI		
В	200°C / 392°F	35 bar / 507 PSI	200°C / 392°F	16 bar / 232 PSI		

For ASME certified heat exchangers - only M working parameters are available.

	Heat exchange area Tube diameter	T 1	CI	61 11 11	- I - I	Dimensions				
Туре		Mass	Shell side volume	Tube side volume	А	В	С	D	øDz	
-	m²	mm	kg	ι	l	mm	mm	mm	mm	mm
HAD SO	2,3	8	35	6,5	3,6	401	938	1168	300	140
HAD S1	3,1	8	42	9,9	4,6	403	1020	1250	320	159
HAD 2.11.08.68	0,6	8	25,6	2,5	1,8	349	852	1088	245	80
HAD 2.11	1,2	8	36	3,5	2,8	349	4534	1770	245	80
HAD 3.18.08.75	1	8	31,5	4,4	3,3	384	948	1213	265	101,6
HAD 3.18	2	8	44,6	6,9	4,7	384	1540	1805	265	101,6
HAD 5.38.08.71	2,3	8	47,6	8,9	6,6	450	944	1249	305	139,7
HAD 5.38	4,3	8	66	12,8	9,5	450	1544	1849	305	139,7
HAD 6.50.08.72	3	8	57	14	9,2	497	960	1308	320	159
HAD 6.50	5,5	8	78,5	19,1	12,9	497	1545	1893	320	159
HAD 6.50.10	4,7	10	74,9	18,5	13,9	497	1545	1893	320	159
HAD 9.88.08.65	4,9	8	81,8	29,1	16,8	604	956	1376	385	219,1
HAD 9.88.08.85	6,3	8	95	33,4	18,8	604	1156	1576	385	219,1
HAD 9.88	10,6	8	120,6	38,3	25	604	1552	1972	385	219,1
HAD 9.88.10	7,7	10	110,8	36,5	24,6	604	1552	1972	385	219,1
HAD 12.114.08.50	5,8	8	100,6	43	23,4	670	834	1272	435	273
HAD 12.114.08.60	6,4	8	107,1	47,3	24,2	670	934	1372	435	273
HAD 12.114.08.75	8,8	8	123,3	50,7	27,7	670	1084	1522	435	273
HAD 12.114	18,2	8	187,8	67,6	41,4	670	1736	2174	435	273
HAD 12.114.10	18,6	10	193,8	53,2	51,1	670	1736	2174	435	273

Туре	Connection size
HAD SO	DN40
HAD S1	DN40
HAD 2.11.08.68	DN40
HAD 2.11	DN40
HAD 3.18.08.75	DN50
HAD 3.18	DN50
HAD 5.38.08.71	DN65
HAD 5.38	DN65
HAD 6.50.08.72	DN80
HAD 6.50	DN80
HAD 6.50.10	DN80
HAD 9.88.08.65	DN100
HAD 9.88.08.85	DN100
HAD 9.88	DN100
HAD 9.88.10	DN100
HAD 12.114.08.50	DN125
HAD 12.114.08.60	DN125
HAD 12.114.08.75	DN125
HAD 12.114	DN125
HAD 12.114.10	DN125

^{*} Flanges: EN 1092-1 for PED 2014/68/EU certified hex and ASME B 16.5 for ASME certified hex



Material

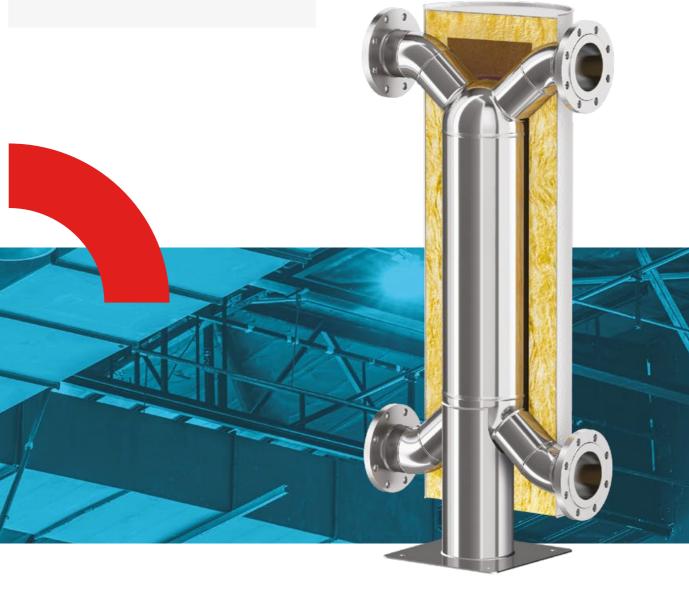
- stainless steel
- flanges stainless steel (SS) or carbon steel (CS)

Media

- Water
- Propylene glycol
- Group II fluids
- Other

Application

- HVAC systems
- Steam applications
- Heating and cooling systems
- Heat transfer in industrial processes
- Oil coolers



Insulation AMWI ——— Exemplar designation



Mineral wool covered with aluminium

- Max. working temperature: + 250 °C / 482°F
- Thickness: 80 mm / 3.15 in
- Thermal conductivity at max. temperature: 0,082 W/mK / 0.474 Btu/ ft. hour °F



HAD S F X K 3.18.08.75

heat exchanger type HAD material group (S for STA or P for PRO) PRO - 316L [17-12-2,5 (1.4404)]; S STA - shell 304L[18-10 (1.4307)], tubes 321 [18-10 (1.4541)] working parameters (F, M, B) F coil made of corrugated tubes, K without K - coil made of smooth tubes heat exchanger size 3.18. tube diameter [mm]; lack of designation 08.

means tube diameter is 8 mm

shell length [cm]

75











