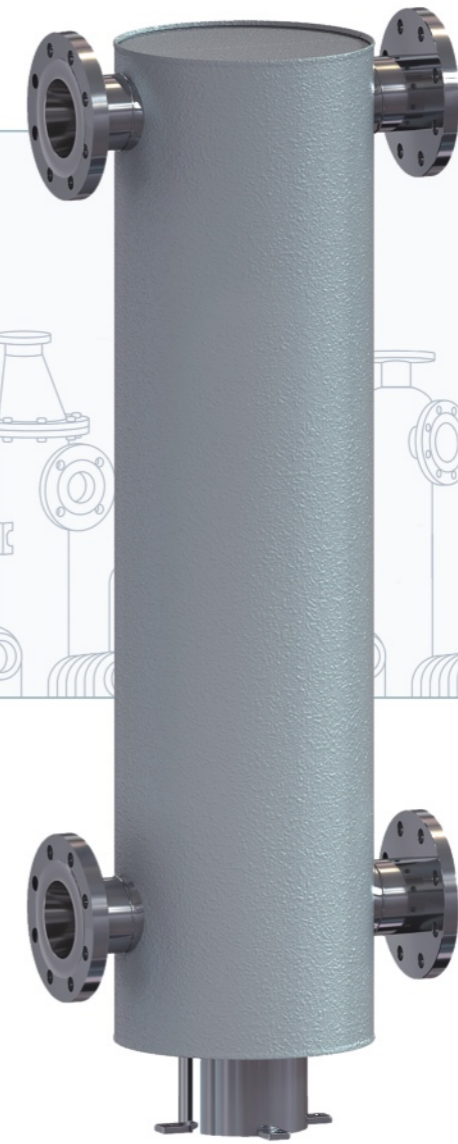
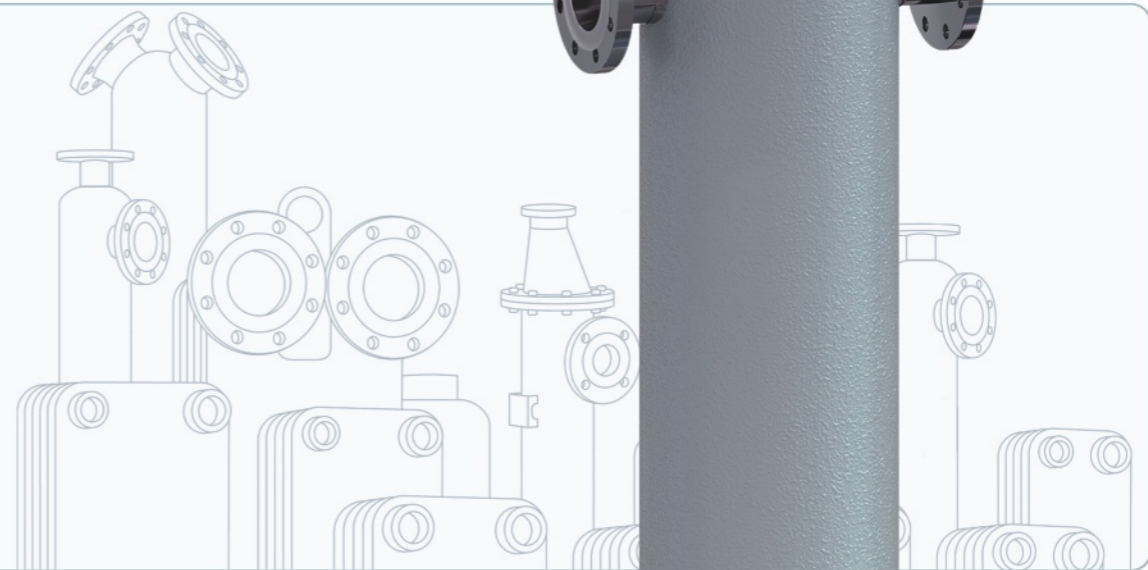


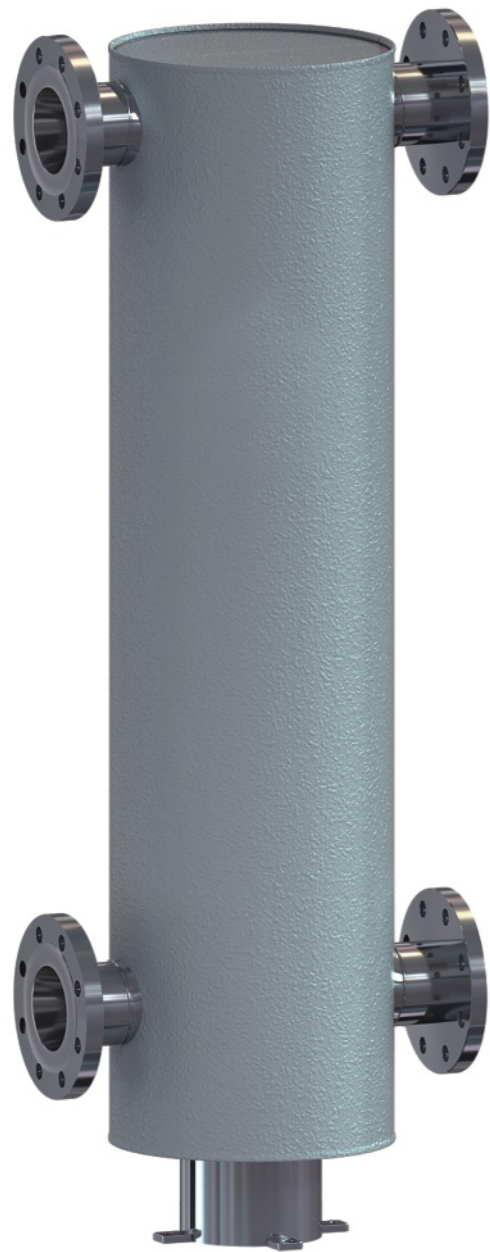


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HAD
shell & coil
heat exchangers

HAD – ready-to-install set: heat exchanger + insulation + mount



In order to meet market demand for compact, easy to install and economical solution, SECESPOL constructors created HAD heat exchanger. It is fully equipped ready-to-install set consisting of a heat exchanger, a mount and an insulation. As a result of advanced design work, HAD has all the advantages of shell and coil heat exchangers supplemented with new solutions, such as connections set in horizontal direction and factory installed insulation and mount. New features of HAD heat exchanger makes the installation to horizontal pipes easier and the whole process significantly faster. Moreover HAD provides a high performance to low cost ratio.

APPLICATION

- HVAC systems
- cooling systems
- heat exchange in industrial processes
- substations

CONSTRUCTION

HAD heat exchangers are counter current flow devices. An exchanger is a welded unit build of austenitic stainless steel. Heat exchange area is built by counter coiled tubes in diameter of Ø 8mm or Ø 10mm. In HAD K version tubes are corrugated which intensifies heat exchange by increasing flow turbulence. The exchanger is equipped with flange connections set in horizontal position.

INSULATION

Insulation for HAD heat exchanger consists of two parts fastened with latch clamps which makes the insulation easy to assembly and dismantle. It is made of mineral wool covered with aluminium (AMWI).

Working parameters:

max. working temperature: +250 °C / 482 °F
 thickness: 80 mm / 3.2 in
 thermal conductivity: 0,082 W/mK / 0.474 Btu/ft. hour °F
 at max. temperature

MATERIALS

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

MEDIA

- water
- steam
- glycol
- other

TECHNICAL PARAMETERS

Type	Heat exchange area m ² /ft ²	Tube diameter mm/in	Weight kg/lb	Shell side capacity l/gal	Tube side capacity l/gal	Dimensions for F version mm / in					Connection size*
						A	B	C	D	Dz	
HAD 50	2,3 / 24.8	8 / 0.3	28 / 61.7	6,2 / 1.6	3,3 / 0.9	401 / 15.8	938 / 36.9	1168 / 46.1	300 / 11.8	140 / 5.5	DN40 / 1.5"
HAD 51	3,1 / 33.4	8 / 0.3	24 / 52.9	9,8 / 2.6	4,5 / 1.2	403 / 15.9	1020 / 40.2	1250 / 49.3	320 / 12.6	159 / 6.3	DN40 / 1.5"
HAD 2.11.08.68	0,6 / 6.5	8 / 0.3	13 / 28.7	1,2 / 0.3	1,2 / 0.3	349 / 13.7	856 / 33.7	1092 / 43.1	240 / 9.4	80 / 3.1	DN40 / 1.5"
HAD 2.11	1,2 / 12.9	8 / 0.3	19 / 41.9	2,6 / 0.7	2,3 / 0.6	349 / 13.7	1534 / 60.4	1770 / 69.7	240 / 9.4	80 / 3.1	DN40 / 1.5"
HAD 3.18.08.75	1,2 / 12.9	8 / 0.3	21,4 / 47.2	2,5 / 0.7	2,6 / 0.7	384 / 15.1	947 / 37.3	1212 / 47.7	260 / 10.2	102 / 4.0	DN50 / 2"
HAD 3.18	2 / 21.5	8 / 0.3	25 / 55.1	5 / 1.3	4 / 1.1	384 / 15.1	1540 / 60.6	1805 / 71.1	260 / 10.2	102 / 4.0	DN50 / 2"
HAD 5.38.08.71	2,3 / 24.8	8 / 0.3	29,2 / 64.4	6,8 / 1.8	4 / 1.1	450 / 17.7	942 / 37.1	1247 / 49.2	300 / 11.8	140 / 5.5	DN65 / 2.5"
HAD 5.38	4 / 43.1	8 / 0.3	41,7 / 91.9	11,2 / 3.0	6,6 / 1.7	450 / 17.7	1544 / 60.8	1849 / 72.9	300 / 11.8	140 / 5.5	DN65 / 2.5"
HAD 6.50.08.72	3,1 / 33.4	8 / 0.3	36,6 / 80.7	9,9 / 2.6	4,6 / 1.2	497 / 19.6	960 / 37.8	1320 / 52.2	320 / 12.6	159 / 6.3	DN80 / 3"
HAD 6.50	5,3 / 57.1	8 / 0.3	51 / 112.4	13,6 / 3.6	11,2 / 3.0	497 / 19.6	1545 / 60.8	1905 / 75.2	320 / 12.6	159 / 6.3	DN80 / 3"
HAD 6.50.10	5,1 / 54.9	10 / 0.4	49,6 / 109.3	10,6 / 2.8	14,2 / 3.8	497 / 19.6	1545 / 60.8	1905 / 75.2	320 / 12.6	159 / 6.3	DN80 / 3"
HAD 9.88.08.65	4,9 / 52.7	8 / 0.3	61,5 / 135.5	20,8 / 5.5	6,6 / 1.7	604 / 23.8	957 / 37.7	1377 / 54.9	380 / 15.0	219 / 8.6	DN100 / 4"
HAD 9.88.08.85	6,2 / 66.7	8 / 0.3	70,3 / 154.9	25 / 6.6	8,2 / 2.2	604 / 23.8	1157 / 45.6	1577 / 62.8	380 / 15.0	219 / 8.6	DN100 / 4"
HAD 9.88	10,7 / 115.2	8 / 0.3	98 / 216.0	29 / 7.7	16 / 4.2	604 / 23.8	1552 / 61.1	1972 / 78.3	380 / 15.0	219 / 8.6	DN100 / 4"
HAD 9.88.10	8,3 / 89.3	10 / 0.4	81 / 178.5	30 / 7.9	16 / 4.2	604 / 23.8	1552 / 61.1	1972 / 78.3	380 / 15.0	219 / 8.6	DN100 / 4"
HAD 12.114.08.50	6,3 / 67.8	8 / 0.3	87 / 191.7	29 / 7.7	8 / 2,1	670 / 26.4	836 / 32.9	1274 / 50.6	430 / 16.9	273 / 10.7	DN125 / 5"
HAD 12.114.08.60	6,5 / 70.0	8 / 0.3	90,2 / 198.8	34 / 9.0	9 / 2,4	670 / 26.4	936 / 36.9	1374 / 54.6	430 / 16.9	273 / 10.7	DN125 / 5"
HAD 12.114.08.75	8,8 / 94.7	8 / 0.3	104 / 229.2	38,5 / 10.2	10 / 2,6	670 / 26.4	1086 / 42.8	1524 / 60.5	430 / 16.9	273 / 10.7	DN125 / 5"
HAD 12.114	18,4 / 198.1	8 / 0.3	160 / 352.6	54,2 / 14.3	20,1 / 5,3	670 / 26.4	1736 / 68.3	2174 / 86,1	430 / 16.9	273 / 10.7	DN125 / 5"
HAD 12.114.10	14,9 / 160.4	10 / 0.4	149 / 328.4	55 / 14.5	19,3 / 5,1	670 / 26.4	1736 / 68.3	2174 / 86,1	430 / 16.9	273 / 10.7	DN125 / 5"

* flanges: EN 1092-1 for PED 97/23/EC certified hex and ASME B 16.5 for ASME certified hex

TECHNICAL DRAWING

Standard location of connections

- K1/K4 – inlet/outlet hot side
- K3/K2 – inlet/outlet cold side

WORKING PARAMETERS

	tubes		shell	
	temp.	pressure	temp.	pressure
F	203°C / 397 °F	1,6 MPa / 232 PSI	203°C / 397 °F	1,6 MPa / 232 PSI
M	250°C / 482 °F	2,5 MPa / 362.5 PSI	203°C / 397 °F	1,6 MPa / 232 PSI
B	203°C / 397 °F	3,5 MPa / 507 PSI	203°C / 397 °F	1,6 MPa / 232 PSI

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

MATERIAL TYPE

- STA - shell 304L [18-10(1.4307)], tubes 321 [18-10(1.4541)]
- PRO - 316L [17-12-2,5(1.4404)]

