



Shell and tube heat exchanger stainless steel / carbon steel

Cetecoil® is the collective name for a range of heat exchangers with tubes made of acid proof stainless steel and suitable for many different media, such as steam, domestic hot water, heating water and hot oil. When operating with steam, the Cetecoil is a very efficient condensate cooler. The Cetecoil heat exchanger is also very well-suited for use in systems in which continuous operation at high water velocities is required.

HIGH PRESSURES AND TEMPERATURES

Cetecoil heat exchangers have no gaskets and can operate at high pressures and high temperatures, even when handling media that are subject to sudden and big temperature variations, such as in steam and refrigeration systems. In their standard design, Cetecoil heat exchangers are rated for pressures up to 25 bar and temperatures up to 300°C.

FLEXIBLE RANGE

Cetecoil heat exchangers are manufactured in three different basic versions as regards materials and pressures, and these are designated R, S and E. All versions have stainless steel tubes.

Every basic version is manufactured in a number of sizes and different thermal lengths. This wide range makes it simple to order a suitable Cetecoil heat exchanger for virtually any operating conditions. For higher capacities, several heat exchangers can be connected in parallel or in series.

UNIQUE DESIGN WITH PATENTED TUBES

The stainless steel tubes are cross-ribbed. This improves the thermal properties of the tube, both on the inside and on the outside, which contributes towards a very high heat transfer rate. The performance of the heat exchanger is determined by the number of tubes and the tube length. The tubes are wound into a spiral around a central core. Each end is then secured into the tube plate. The tubes form together with the collecting chambers the 'coil' which is welded to the surrounding shell. In this design, the strength of an allwelded design is combined with high elasticity for absorbing thermal expansion. The upright position also means that Cetecoil needs a minimum of space.

KEY BENEFITS

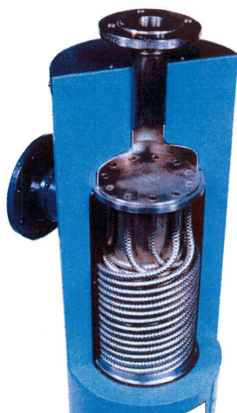
- Large high turbulence transfer surface: High power - Small space
- Low pressure drop, high ΔT
- No gaskets: No maintenance
- Ideal solution for high Primary/Secondary differential of temperature
- Up to 25 bar & up to 300°C with normalized flanges connections

Cetecoil S/R/E Type	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	K (mm)	I (mm)	Connections		Volume		Dry Weight (kg)
								1.2 PN 40*	3.4 PN 16	Coil (Litres)	Shell (Litres)	
480 - L	980	670	440	280	427	312	200	50	50	1,3	10,4	35
480 - M	1160	850	620	280	427	312	200	50	50	2,3	12,8	42
480 - H	1365	1055	825	280	427	312	200	50	50	3,3	15,8	50
850 - L	1070	760	530	280	427	312	200	50	50	2	11,5	40
850 - M	1365	1055	825	280	427	312	200	50	50	3,6	15,3	50
850 - H	1670	1360	1130	280	427	312	200	50	50	5,7	19	62
1450 - L	1145	875	585	280	418	270	200	50	65	3	16	51
1450 - M	1505	1235	935	280	418	270	200	50	65	6	22	66
1450 - H	1900	1630	1335	280	418	270	200	50	65	10	29	83
2150 - L	1170	935	580	340	413	235	235	50	80	6	21	61
2150 - M	1490	1255	900	340	413	235	235	50	80	11	26	80
2150 - H	1790	1555	1200	340	413	235	235	50	80	15	32	97
3300 - L	1255	973	420	430	547	270	270	65	100	14	40	115
3300 - M	1455	1173	620	430	547	270	270	65	100	20	47	145
3300 - H	1695	1413	860	430	547	270	270	65	100	26	58	177
4100 - L	1255	973	420	430	547	270	270	65	125**	16	38	119
4100 - M	1455	1173	620	430	547	270	270	65	125**	24	44	151
4100 - H	1695	1413	860	430	547	270	270	65	125**	32	52	186

All dimensions in mm. Design subject to changes without prior notice.

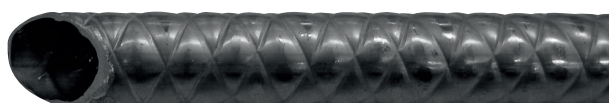
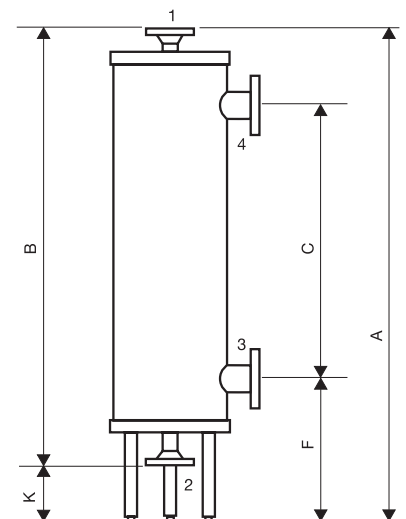
* PN16 on coil side for Cetecoil R & E

** DN 100 for Cetecoil E type

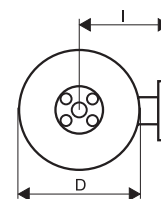


The tube coil inside the shell

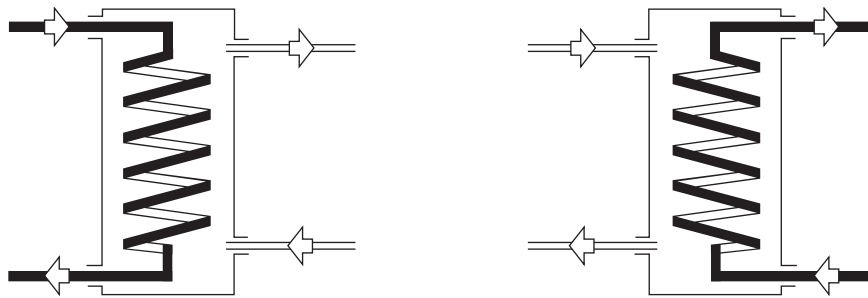
Cetecoil 480-4100



The cross-ribbed tube



CONNECTION EXAMPLES (FLOW DIAGRAMS)



(The heat exchanger must always be connected with the media in counterflow and, if the materials allow, at the larger flow rate on the shell side.)

OPERATING PRESSURE/OPERATING TEMPERATURE

Cetecoil Type	Max. operating pressure bar (gauge) at operating temperature					
	200°C		250°C		300°C	
	Coil	Shell	Coil	Shell	Coil	Shell
R	16	16	15	14	14	12
S	25	16	23	14	19	12
E	16	16	15	15	14	14

MATERIALS

Cetecoil Type	Coil		Shell
	Tubes	Collecting chambers	
R	Stainless steel	Stainless steel	Carbon steel
S	Stainless steel	Carbon steel	Carbon steel
E	Stainless steel	Stainless steel	Stainless steel

EXAMPLES OF SUITABLE MEDIA IN THE COIL AND SHELL

Cetecoil Type	Coil (connections 1 and 2)	Shell (connections 3 and 4)
R	Steam, domestic hot water, oils	Steam, hot oil, heating water
S	Steam, heating water	Hot oil, heating water
E	Steam, domestic hot water, oils	Same as on coil side

INSULATION

The insulation consists of 50 mm thick mineral wool clad with tough Aluminium structural plate.

QUALITY STANDARD/APPROVAL

Designed and rated according to PED 2014/68/EU and AD2000. Approved by German TÜV. Stainless steel type AISI 316.

CETECOIL ARTICLE NUMBERS

Cetecoil R/S/E type	Article no. Cetecoil R	Article no. Cetecoil S	Article no. Cetecoil E
480 - L	724115	724122	724129
480 - M	724116	724123	724130
480 - H	724117	724124	724131
850 - L	724118	724125	724132
850 - M	724119	724126	724133
850 - H	724120	724127	724134
1450 - L	725052	725234	725226
1450 - M	725053	725235	725227
1450 - H	725054	725236	725228
2150 - L	725099	725183	725188
2150 - M	725100	725184	725189
2150 - H	725101	725185	725190
3300 - L	725399	725818	725484
3300 - M	725400	725819	725485
3300 - H	725401	725820	725486
4100 - L	725402	725821	725487
4100 - M	725403	725822	725488
4100 - H	725404	725823	725489