



BRAZED PLATE

HEAT EXCHANGERS

Brazed Plate Heat Exchangers



Advantages of Brazed Plate Heat Exchangers

- high heat transfer coefficient
- small unit size with high heat transfer capacity
- high resistance to pressure and temperature fluctuations
- cost efficiency
- stainless steel connections
- easy installation

Brazed plate heat exchangers consist of stainless steel plate packs, which have embossed chevron patterns. The plates are turned 180° to each other, causing the plate ridges to intersect, and creating a lattice of intersecting channels. The fluids can flow in counter-current or co-current way.

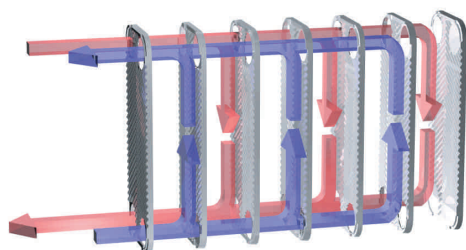
The entire construction is sealed together by the means of brazing in a special vacuum furnace.

Special corrugation patterns promotes high turbulence flow.

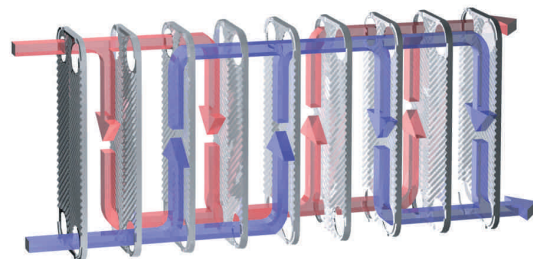
Turbulence dramatically improves heat transfer rates and reduces the amount of deposits inside the unit.



Flow Chanel Diagram in Heat Exchanger

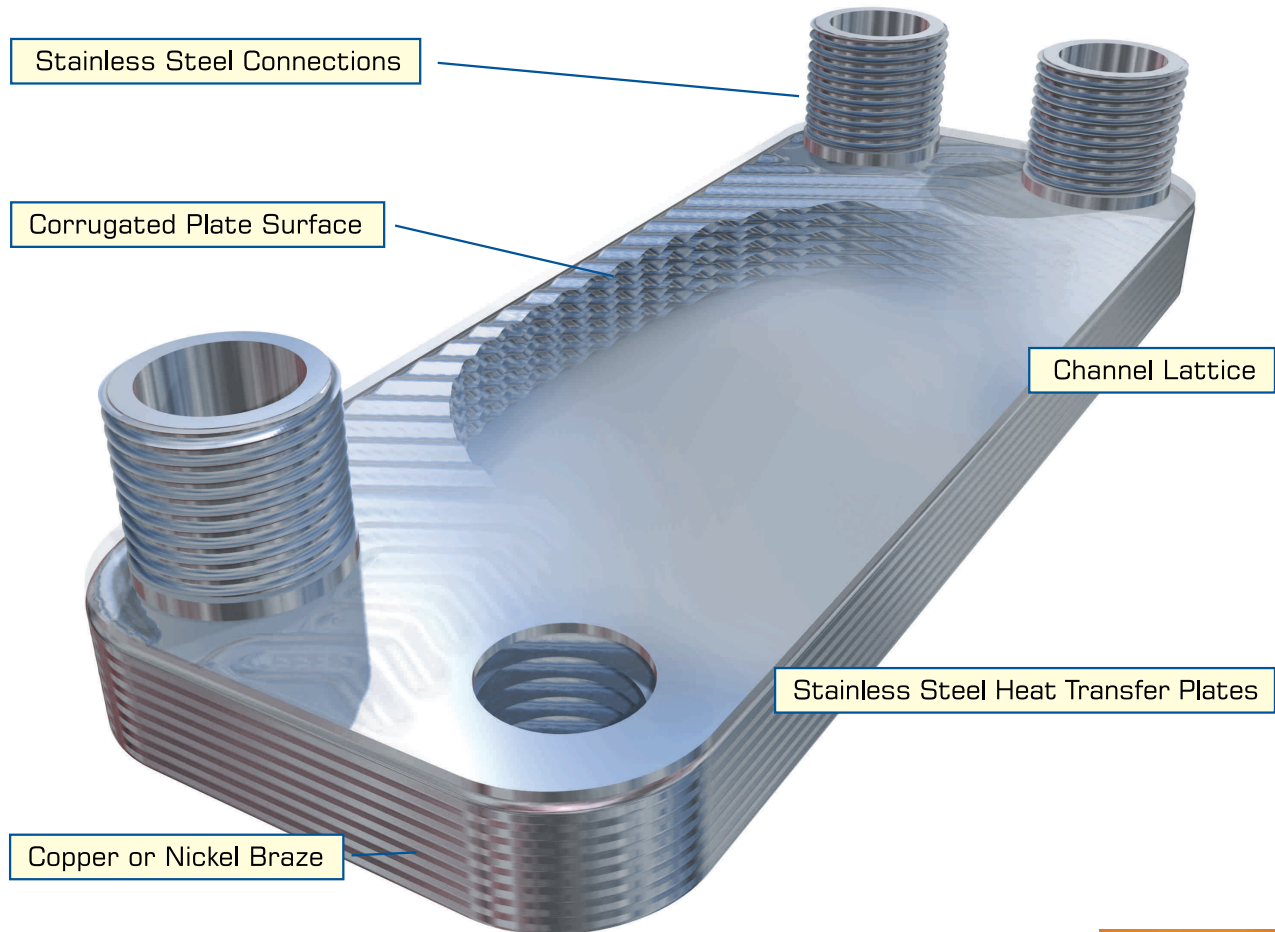


one-pass - channels are parallel.



multi-pass - system of channels is divided into groups which are connected in series.

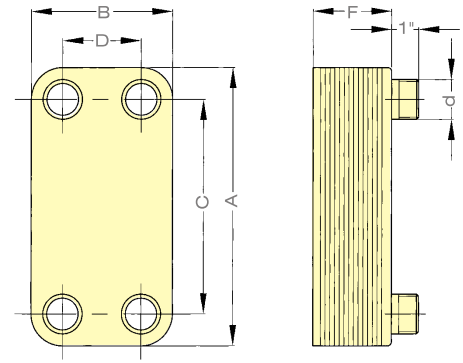
By changing number of plates, geometry of plates, pattern of plate corrugation and channel diagrams we can custom design heat exchangers for individual needs of the customers.



Applications:

- Central Heating
- Hydronic Heating
- Solar and Geothermic Heating
- Industrial Process Heat Recovery
- Condensers and Evaporators in Refrigeration Systems
- Oil Coolers
- Close Approach Fluid-To-Fluid Heat Transfer





Technical Parameters

Heat Exchanger Type	Dimensions mm (in)					Plate Area m ² (sq.ft)	Chanel Volume L (USGPM)	Maximum Flow L/min (GPM)	Maximum Number of Plate	Weight (empty) kg (lb)
	A	B	C	D	F					
LA 14	194 (7.6)	80 (3.1)	154 (6.1)	40 (1.6)	10.0+2.3NP(0.39+0.09NP)	0.012 (0.13)	0.021 (0.005)	110 (29)	80	0.8+0.05NP(1.8+0.10NP)
LA 22	300 (11.8)	79 (3.1)	260 (10.2)	42 (1.7)	9.0+2.3NP(0.36+0.09NP)	0.022 (0.24)	0.034 (0.009)	68 (18)	80	1.1+0.09NP(2.4+0.20NP)
LB 22	183 (7.2)	122 (4.8)	130 (5.1)	68 (2.7)	9.0+2.3NP(0.36+0.09NP)	0.022 (0.24)	0.034 (0.009)	68 (18)	80	1.2+0.09NP(2.6+0.20NP)
LB 31	306 (12.0)	126 (5.0)	250 (9.8)	70 (2.8)	12.4+2.4NP(0.49+0.09NP)	0.032 (0.34)	0.054 (0.014)	290 (77)	150	2.2+0.16NP(4.8+0.35NP)
LB 47	414 (16.3)	122 (4.8)	360 (14.2)	68 (2.7)	9.0+2.3NP(0.36+0.09NP)	0.047 (0.51)	0.072 (0.019)	190 (50)	150	2.1+0.18NP(4.6+0.40NP)
LB 60	506 (19.9)	126 (5.0)	444 (17.5)	64 (2.5)	12.4+2.4NP(0.49+0.09NP)	0.058 (0.62)	0.097 (0.026)	240 (63)	150	3.6+0.25NP(7.9+0.55NP)
LC 110X	530 (20.9)	248 (9.8)	456 (17.9)	174 (6.9)	13.0+2.4NP(0.51+0.09NP)	0.113 (1.22)	0.196 (0.052)	450 (119)	200	7.2+0.52NP(15.8+1.14NP)
LC 110Y	523 (20.6)	241 (9.5)	430 (16.9)	148 (5.8)	13.4+2.8NP(0.53+0.11NP)	0.104 (1.12)	0.216 (0.057)	700 (185)	200	7.2+0.55NP(15.8+1.21NP)
LC 110Z	523 (20.6)	241 (9.5)	430 (16.9)	148 (5.8)	13.4+2.8NP(0.53+0.11NP)	0.104 (1.12)	0.216 (0.057)	900 (238)	200	7.3+0.55NP(15.9+1.21NP)

NP - number of plates

Standard Construction:

- Plates & Connections: AISI 316
- Brazing Material: Copper (Optional - Nickel)
- Single Wall Plates (Optional - Double-Wall)

Design Parameters:

- Working Pressure up to 481 PSI
- Working Temperature up to 445°F

Standard Connections

Heat Exchanger Type	Solder	Threaded NPT
	d* (in)	d (in)
LA 14	7/8"	3/4"
LA 22	7/8"	3/4"
LB 22	1-1/8"	1"
LB 31	1-1/8"	1"
LB 47	1-1/8"	1"
LB 60	1-1/8"	1"
LC 110X	1-5/8"	1-1/2"
LC 110Y	1-5/8"	2 1/2"
LC 110Z	1-5/8"	3"

* inner diameter of connection



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