

### Technical Parameters

Heat Exchanger Type	Dimensions (in)					Plate Area (sq.ft)	Chanel Volume (USGAL)	Maximum Flow (GPM)	Maximum Number of Plates	Weight (empty) (lb)
	A	B	C	D	F					
LA 14	7.9	3.1	6.5	1.7	0.36+0.09 NP	0.15	0.006	18	80	1.5+0.1 NP
LA 22	11.8	3.1	10.2	1.7	0.36+0.09 NP	0.24	0.009	18	80	2.4+0.2 NP
LB 22	7.2	4.8	5.1	2.7	0.36+0.09 NP	0.24	0.009	18	80	2.6+0.2 NP
LB 31	11.3	4.8	9.1	2.7	0.36+0.09 NP	0.33	0.012	50	150	3.1+0.3 NP
LB 47	16.3	4.8	14.2	2.7	0.36+0.09 NP	0.51	0.019	50	150	4.6+0.4 NP
LC 110	18.2	10.0	14.9	6.7	0.39+0.09 NP	1.18	0.043	89	200	11.2+0.9 NP
LC 170	28.7	10.0	23.8	6.7	0.63+0.10 NP	1.83	0.067	105	200	18.1+1.2 NP

NP - number of plates

#### Material:

- Plates and Connections: AISI 316
- Brazing: Copper, Nickel

#### Design Parameters:

- Maximum Working Pressure: 435 Psi ( 232 Psi\*)
- Maximum Working Temperature:
  - copper brazed: 437°F ( 401°F\*)
  - nickel brazed: 752°F
- Minimum Working Temperature:
  - copper brazed: -319°F
  - nickel brazed: -256°F

\* economic version

#### Standard Connections

Heat Exchanger Type	Sweat		Threaded		Die formed flanges or welded neck flanges	
	d* (in)	E (in)	d (in)	E (in)		
LA 14	1/2"	3/4"	1/2" NPT	7/8"		
LA 22	3/4"	3/4"	3/4" NPT	7/8"		
LB 22						
LB 31	1-1/4" 1-1/2"	1-3/8"	1" NPT 1-1/4" NPT 1-1/2" NPT	1-1/8"		
LB 47						
LC 110	2"	2-1/4"	1-1/2" NPT 2" NPT	1-1/4"	1-1/2"	3.9"/5.5"
LC 170	2-1/2"	2-1/4"				

\* inner diameter of connection



BRAZED PLATE  
HEAT EXCHANGERS



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## 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

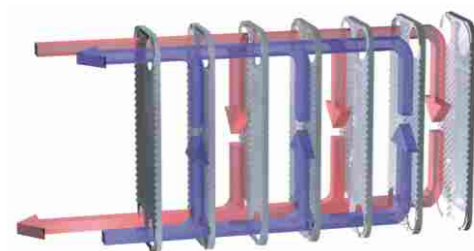
Brazed plate heat exchangers consist of stainless steel plate packs, which have embossed chevron patterns. The plates are turned 180° to each other, causing the plate ridges to intersect, and creating a lattice of intersecting channels. The fluids can flow in counter-current or co-current way.

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

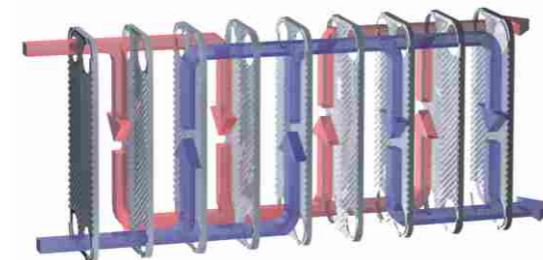
*Special corrugation patterns promotes high turbulence flow. Turbulence dramatically improves heat transfer rates and reduces the amount of deposits inside the unit.*



## Flow Chanel Diagram in Heat Exchanger

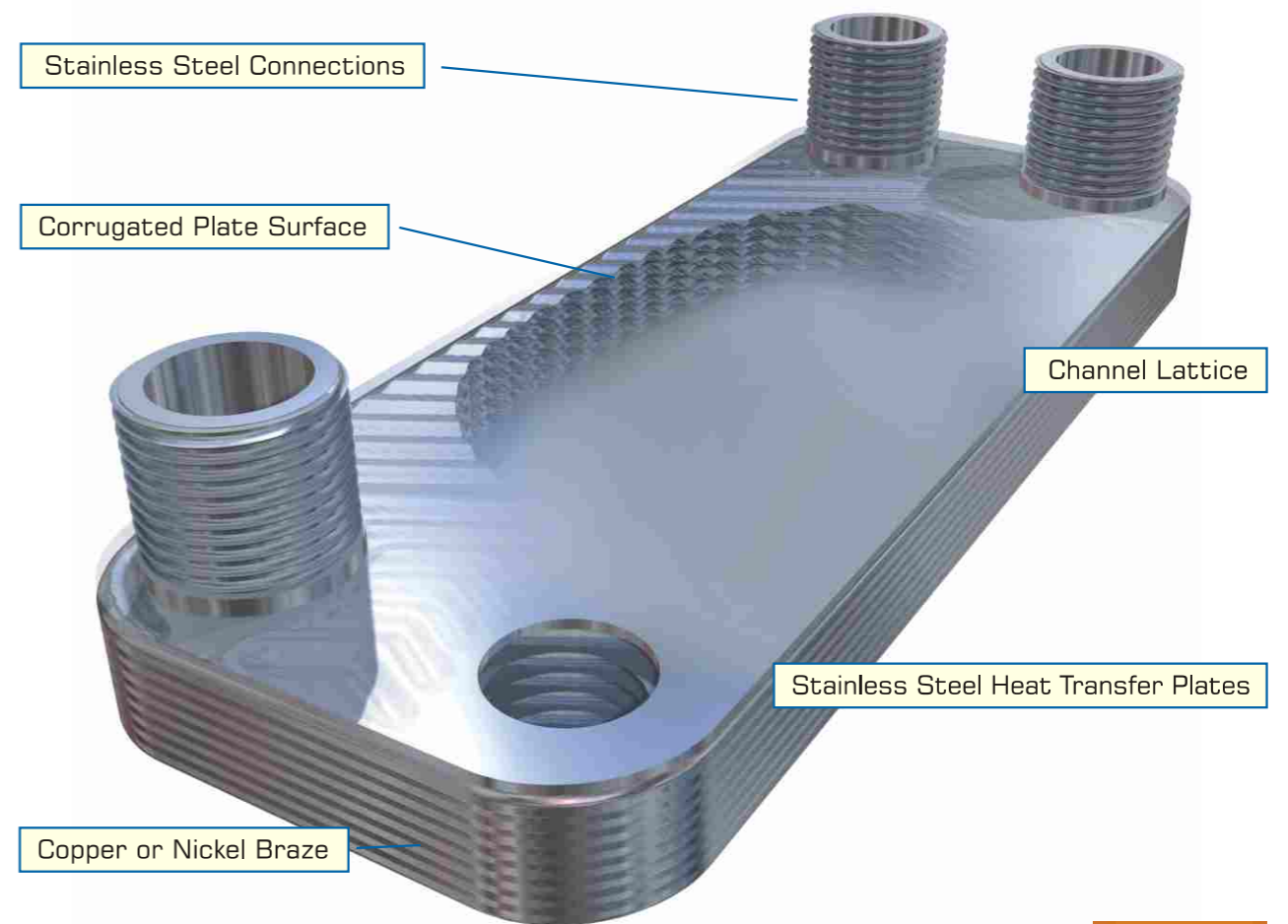


one-pass - channels are parallel.



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

