



PLATE CONCEPTS, INC.

Plate and Frame Heat Exchangers

*Plate Concepts, Inc. specializes in the design and supply of **Plate & Frame Heat Exchangers**. Established in 1995, we have a proven record of providing superior equipment and service to the commercial HVAC, industrial, power, and process markets. We bring to these markets very competitive pricing, a quality product, and customer service that is second to none.*

Brazed Plate Heat Exchangers by Plate Concepts have numerous cost-effective and energy-saving benefits. These compact heat exchangers are ideal for hydronic systems like radiant floor heating, domestic hot water, and snow melting. Brazed heat exchangers are also used in refrigeration and oil cooling applications.



Copper Brazed Plate Heat Exchangers



Nickel Brazed Plate Heat Exchangers

BRAZED PLATE HEAT EXCHANGERS

Our Brazed Plate Heat Exchangers are custom designed to meet the specific needs of our customers. The type of brazed exchanger and the required number of plates are determined by the duty requirements, fluid media, temperature profile, flow range and hydraulic conditions.

Features

- Single and Double Wall Plates
- Copper or Nickel Brazed AISI 316 SS
- Custom Designed & Engineered
- Compact & Low Fouling
- Counter-Current Flow
- High Heat Transfer Coefficients



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Construction Data	
Maximum Working Pressure	362 psig
Test Pressure	471 psig
Maximum Working Temperature	365 °F
Minimum Working Temperature	-300 °F



Materials of Construction

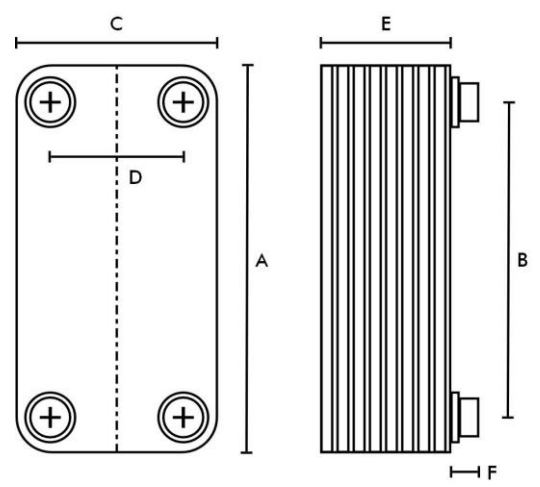
AISI 316 SS plates brazed with Copper or Nickel

Construction

Pressed metal plates are assembled in plate packs with the chevron pattern reversed in every other plate. The ridges of the pattern intersect on adjacent plates - forming a lattice of contact points. Each adjacent pair of plates forms a channel. The stainless steel plates are then brazed with copper (or nickel) in a high temperature vacuum furnace.

Operation

The hot and cold media flow in opposite (counter-current) directions to each other in alternate channels. The plate pattern induces intense turbulence in the hot & cold channels - resulting in a high heat transfer coefficient and maximum heat transfer.



MODEL	A	B	C	D	E	F	Conn Size NPT*	Weight lbs	Area/Plate ft ²	Vol/Channel Gal
MBC25	12-1/2"	11"	3"	1-5/8"	(N x 0.078)+0.2	3/4"	1/2" & 3/4"	(N x 0.20)+2.2	0.250	0.01
MBC37	11-1/2"	9-1/2"	4-5/8"	2-1/2"	(N x 0.08)+0.3	3/4"	3/4" & 1"	(N x 0.28)+2.7	0.366	0.014
MBC75	19-5/8"	17-1/2"	4-5/8"	2-1/2"	(N x 0.09)+0.4	3/4"	1-1/2"	(N x 0.47)+3.3	0.753	0.032
MBC150	23-7/8"	20-1/2"	9-3/8"	5-7/8"	(N x 0.1)+0.4	1-1/2"	2-1/2"	(N x 1.11)+4.9	1.506	0.084
MBC350	46-1/2"	33-11/16"	16-2/3"	9-3/8"	(N x 0.108)	Flanged	4" Flanged	(N x 2.826)+110.7	3.580	0.32

N=Number of Plates

*Other Sizes Available

Solder Connections Available