

## Double Wall Brazed Plate Heat Exchangers

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LB31-80DW

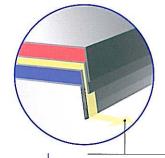
Special corrugation patterns
promote highly turbulent flow.
Turbulence dramatically improves
heat transfer rates and reduces the
amount of deposits inside the unit.

# Advantages of AIC Double Wall Brazed Plate Heat Exchangers

- visual leak detection
- prevents fluid cross-contamination
- · high thermal efficiency
- compact design
- strong, durable stainless steel construction
- quick and easy installation

The design of the double wall brazed plate heat exchanger prevents cross contamination of fluid streams if there is an internal leak within the unit.

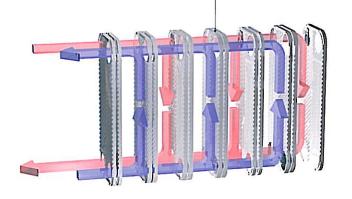
Two stainless steel plate walls separate the fluid streams, with an air gap in between. In the event of a leak, the affected fluid will flow into the air gap and escape out of the heat exchanger, enabling visual detection of the leak.



Flow Channel Diagram in Double Wall Heat Exchanger

Leaks escape into the atmosphere through the air gap between the double walls.

Double walls allow leaks to be visually detected without cross contaminating the fluid streams.









#### **Technical Parameters**

Model				ensions n (in)		Plate Area	Channel Volume	Maximum Flow	Maximum Number	Weight (empty)
	Α	В	C	D	F	m² (sq.ft)	L (Gal)	L/min (GPM)	of Plates	kg (lb)
LA14 DW	201 (7.9)	. 79 (3.1)	165 (6.5)	43 (1.7)	7.62 + 2.36NP(0.30 + 0.093NP)	0.014 (0.15)	0.023 (0.006)	75 (20)	50	0.9+0.07NP(2.0+0.15NP)
LB31 DW	287 (11.3)	122 (4.8)	231 (9.1)	69 (2.7)	8.89+2.46NP(0.35+0.097NP)	0.030 (0.33)	0.045 (0.012)	220 (58)	80	1.3 + 0.14NP(2.9 + 0.30NP)
LC110 DW	462 (18.2)	254 (10.0)	378 (14.9)	170 (6.7)	12.7 + 2.03NP(0.50 + 0.08NP)	0.110 (1.18)	0.163 (0.043)	340 (90)	80	3.6 + 0.5NP(8.0 + 1.10NP)

NP - number of plates

#### **Standard Construction**

- · Double Wall Plates
- Plate Material: ANSI 316
- · Brazing Material: Copper

## **Design Parameters**

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

#### **Standard Connection Sizes**

Heat	Solder	Thread NPT		
Exchanger Type	(in)*			
LA14 DW	7/8"	3/4"		
LB31 DW	1-1/8"	ļ"		
LC110 DW	1-5/8"	I-I/2"		

<sup>\*</sup> inner diameter of connection

## **Applications:**

- · Potable Water Heating
- Domestic Hot Water Heating

Suitable for any stringent applications and regulations that require double wall, vented heat exchangers.

AIC 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 interact, and creating a lattice of intersecting channels. The fluids can flow in either a counter-current or a co-current direction.

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



AIC heat exchangers are designed, manufactured, and tested to the strictest codes, and are certified by many national and international inspection authorities. We are a registered ISO-9001 company and are UL certified.



Advanced Industrial Components Inc.

2300 Bristol Circle Unit 4 Oakville , ON Canada Tel. 905-829-4666 Fax. 905-829-4646

Toll Free: 1-888-738-1350 www.myaic.net

Willow Springs Dist., LLC P.O. Box L Wittenberg, WI 54499 1-888-879-3010

Authorized Representative