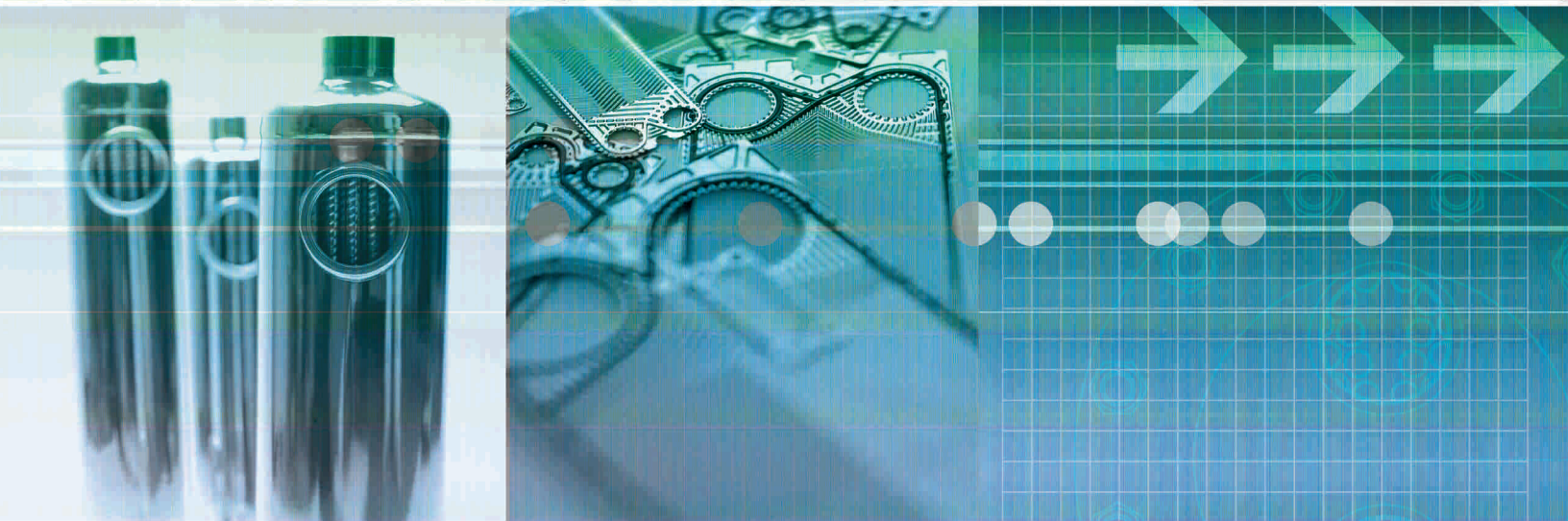


DIVERSITY MULTIPLE DESIGNS MULTIPLE SOLUTIONS



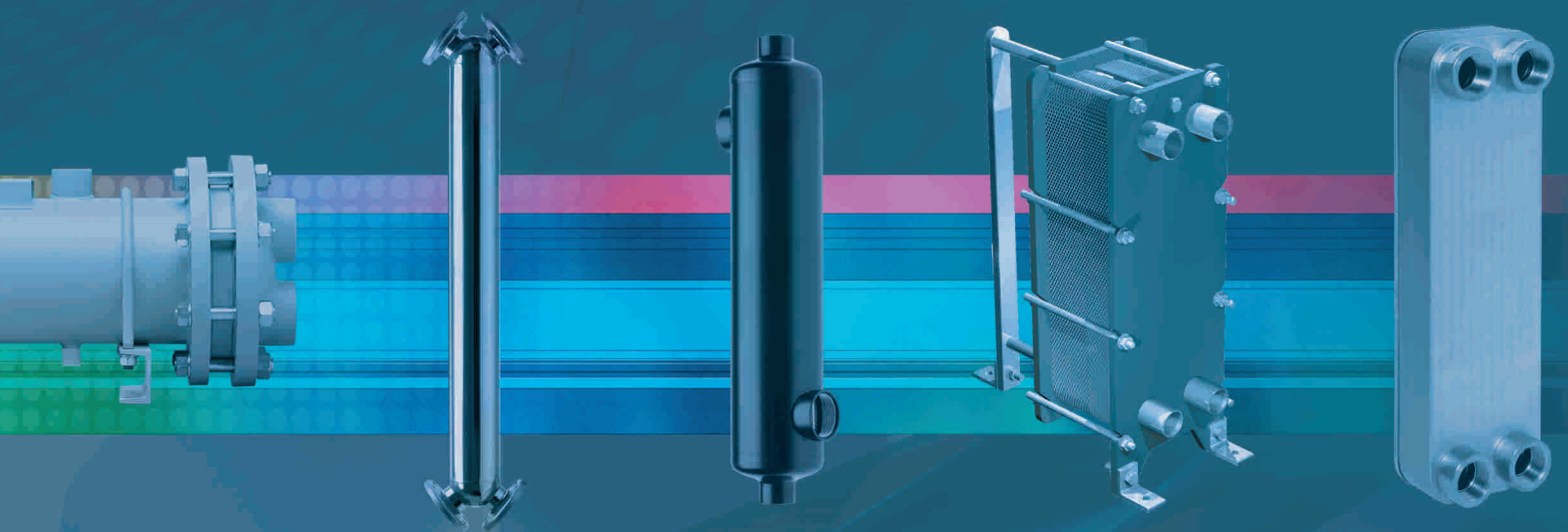
H E A T E X C H A N G E R S



aic 
ALLIANCE

Experience the quality and diversity of the **AIC brand**. Our focus on design efficiency is complemented by our commitment to pursue leading edge technology that sets new standards in the heat transfer field.

AIC has in-depth knowledge and years of experience working with versatile applications. We are experts in designing, engineering, and manufacturing heat exchangers that will fulfill the requirements of the various process industries in the world.



A LINE

AIC is pleased to introduce the latest plate and frame technology to the heat transfer marketplace.

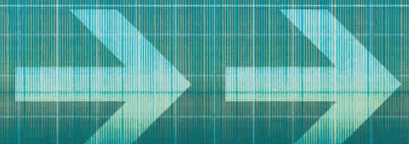
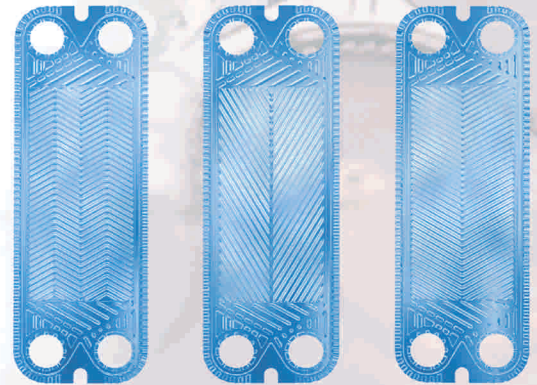
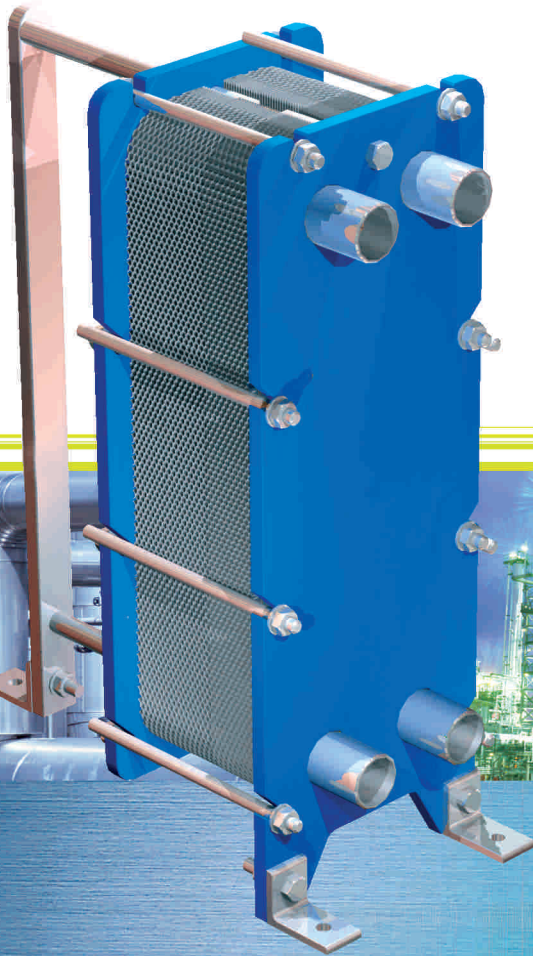
At the heart of the efficient **A-Line** system are a series of models available in a variety of materials and plate designs. This provides our clients with flexible, reliable, cost-effective means of achieving precision heat transfer. These advantages make the **A-Line** series the ideal choice for chemical, pharmaceutical, HVAC and food industries.

PLATES

- Extensive range of heat transfer areas
- Varying plate thickness
- Available materials: SS 304, SS 316, Titanium, Hastelloy.

GASKETS

- Glued or Clipped on
- Easy assembly
- Available materials: EPDM, NBR, VITON



L LINE

Advantages of AIC Brazed Plate Heat Exchangers

Compact models with high heat transfer capacity. Stainless steel plates with corrugated surface ensure turbulent flow and structural support to the unit.

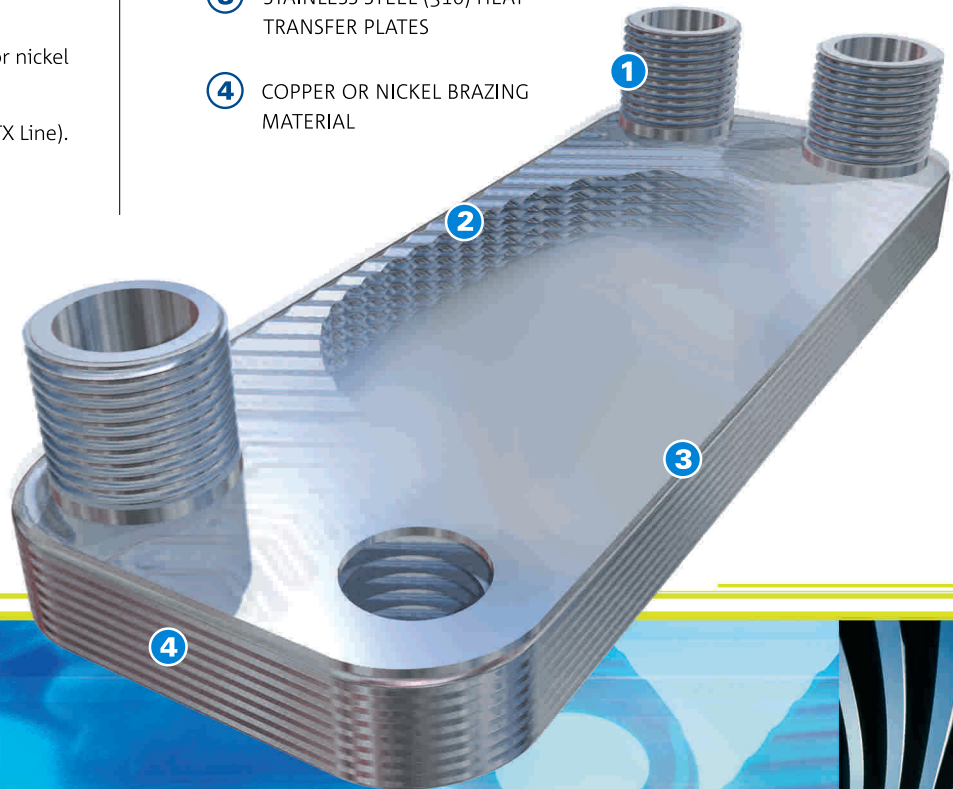
Single or double wall option. Copper or nickel brazing material available.

Exclusive design with titanium plates (TX Line). Quick and easy installation.

- ① STAINLESS STEEL CONNECTIONS
- ② CORRUGATED PLATE SURFACE
- ③ STAINLESS STEEL (316) HEAT TRANSFER PLATES
- ④ COPPER OR NICKEL BRAZING MATERIAL

APPLICATIONS

- Condensers and Evaporators in Refrigeration Systems.
- Oil Coolers.
- Close approach fluid-to-fluid heat transfer.



JAD LINE

Advantages of JAD Series Vertical Heat Exchangers.

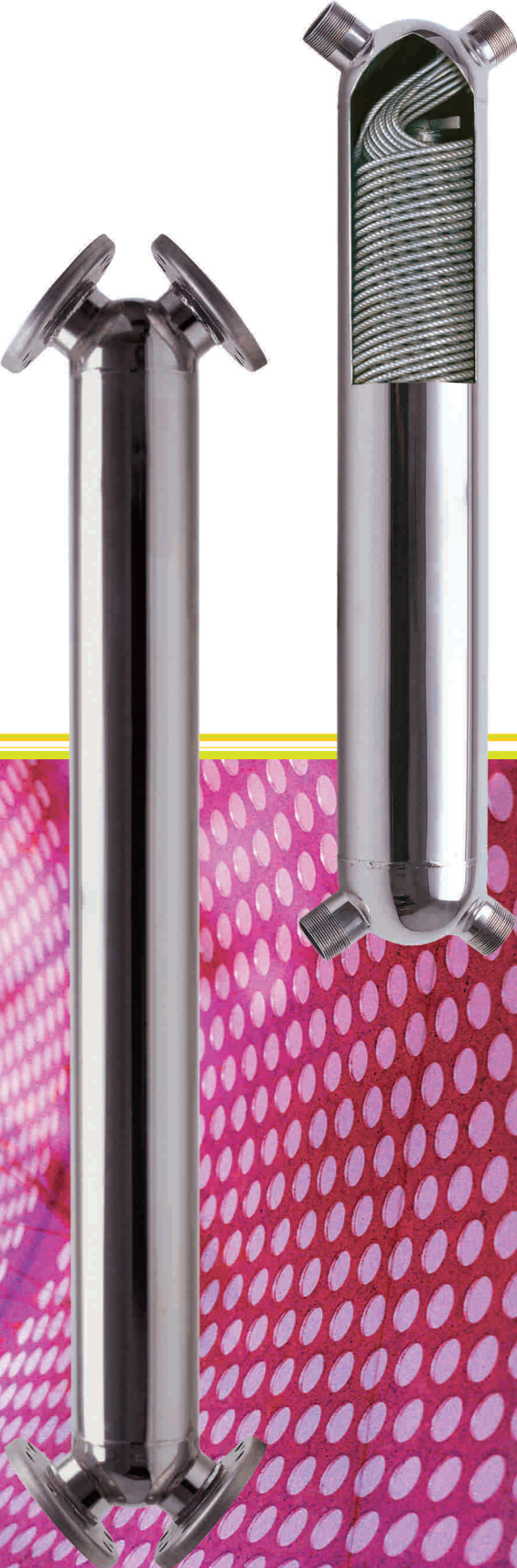
High Efficiency: Helically corrugated tubes packed closely together provide a large heat transfer area and an increase in thermal efficiency.

Compact Size: Compact and lightweight design requires less installation space and low installation costs.

Flexibility of design: Wide range of models and configurations available to suit various applications.

Flexibility of conditions: Applicable for a wide range of pressures, flows, and temperatures. Ideal for steam and water heating systems.

Low Maintenance: Helically corrugated tubes produce turbulence that aids in the reduction of scale buildup and fouling. Unit can be easily removed from the system, and flushed if necessary.



DISTINGUISHED FOR THEIR UNIQUE HELICALLY CORRUGATED COIL DESIGN, COMPLETE STAINLESS STEEL WELDED STRUCTURE, AND DEFINING ANGULAR CONNECTIONS.



B LINE

Designed to perform at high fluid velocities with low pressure drops.

Complete stainless steel 316L welded structure ensures strength and durability of products.

Efficient corrugated tube design promotes fluid turbulence and self-cleaning feature.

APPLICATIONS

- Pools, spas, hot tubs
- Transmission and engine coolers
- Oil coolers
- Boiler sample cooler
- Waste water heat recovery

STANDARD MATERIALS:

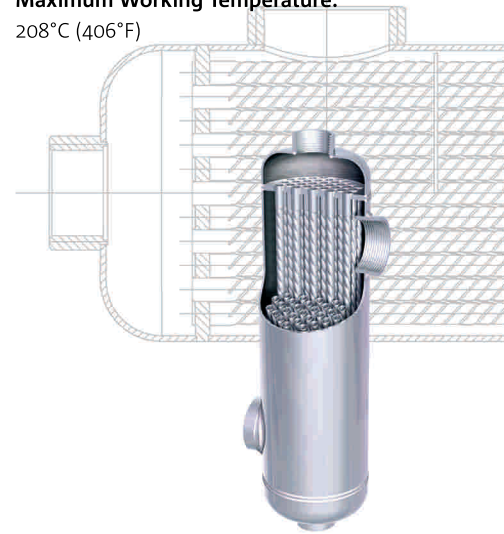
Stainless steel 316L, Titanium.

Maximum Working Pressure:

17 bar (250 PSI)

Maximum Working Temperature:

208°C (406°F)



PS/PW LINE

LIQUID - STEAM / LIQUID - LIQUID

Features

- Removable U-tube bundles made from stainless steel tubing
- 2 or 4 pass construction with lengths up to 10 ft. and shell diameters up to 30 in.
- Heat transfer area ranging from 5 to 1380 sq. ft. in 2 and 4 pass units.
- Sturdy, rugged cast-iron or steel head.
- Steel shell body
- Mounting saddles

1 Connections
Standardized sizes for easy assembly.

2 Tube Sheet
U-bend tubes expanded into tube sheet allow for tube expansion and contractions due to thermal fluctuations.

3 Gaskets
High quality compressed fibers (reusable).

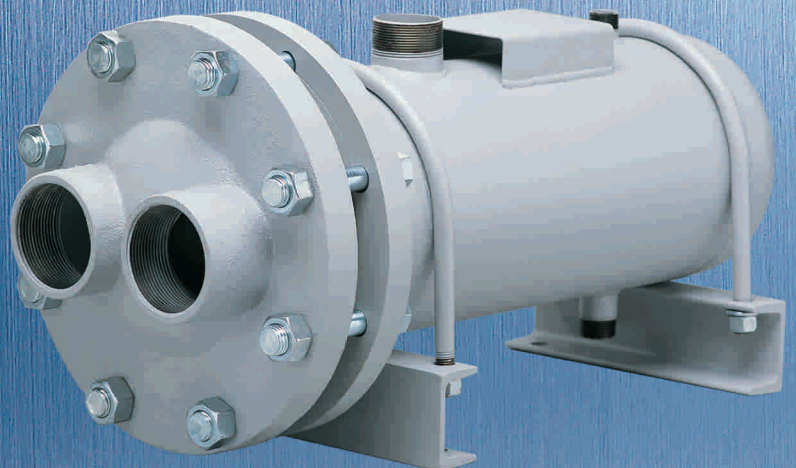
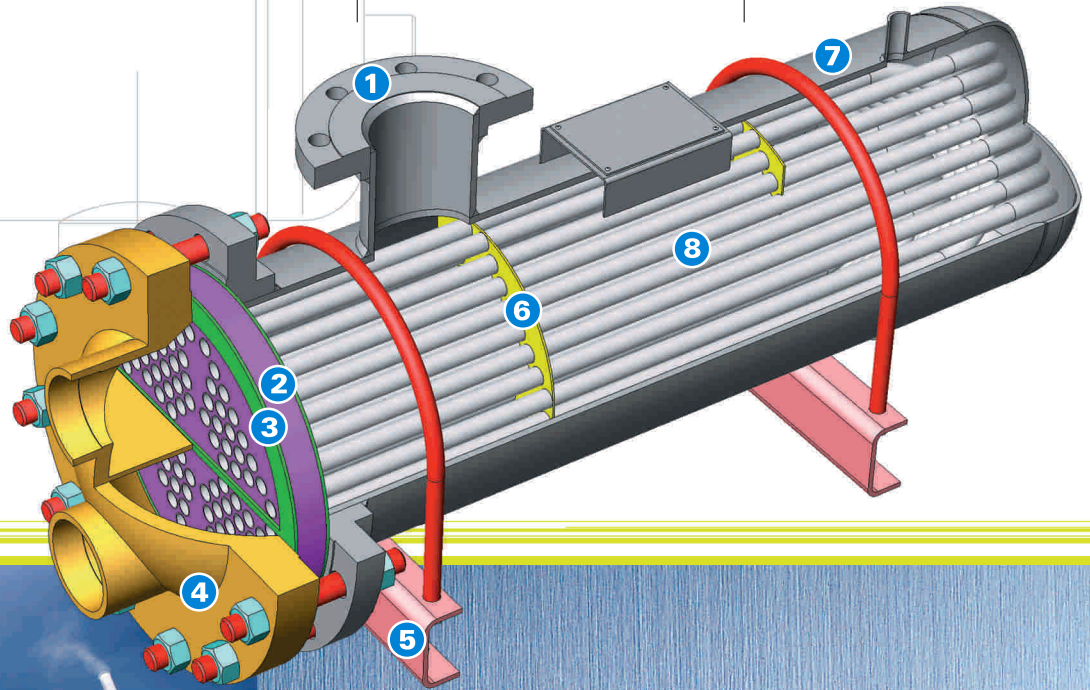
4 Head
Standard cast iron or steel head for heavy-duty services.

5 Mounting
Saddles attached with standard units for quick & easy mounting.

6 Baffles
Punched baffles with minimum clearances between tubes ensure correct fluid flow and minimized bypass.

7 Shell
Welded shell with high quality paint for corrosion resistance.

8 Tube Bundle
Stainless steel tubes allow for strong, durable performance over a wide range of applications.



A Line Technical Product Specifications

Model	A40	A80	A100	A130	A150	A200	A270	A280	A380	A450	A480	A530	A600	A860	A1000	A1100	A1300	A1700	
Width	(mm)	178	254	337	330	337	330	549	508	483	508	549	711	660	711	660	1143	991	1397
	(in)	7	10	13	13	13	13	22	20	19	20	22	28	26	28	26	45	39	55
Height	(mm)	610	762	883	838	828	1092	1343	1245	1702	1676	1702	1801	1803	2264	2540	2081	2362	2794
	(in)	24	30	35	33	35	43	53	49	67	66	67	71	71	89	100	82	93	110
Maximum Length	(mm)	813	889	1145	1245	272	1245	2119	2362	2362	2362	2362	3301	4318	4454	4318	4851	4826	4953
	(in)	32	35	45	49	50	49	84	93	93	93	93	130	170	176	170	191	190	195
Plate Area	(mm)	0.04	0.08	0.09	0.13	0.15	0.20	0.27	0.28	0.38	0.45	0.48	0.53	0.60	0.85	1.00	1.10	1.30	1.70
	(in)	0.46	0.81	1.02	1.40	1.61	2.15	2.91	3.01	4.09	4.84	5.16	5.70	6.46	9.15	10.80	11.85	14.00	18.32
Standard Connections	(mm)	25	50	40	50	40	50	100	100	80	100	100	200	150	200	150	300	250	400
	(in)	1	2	1.5	2	1.5	2	4	4	3	4	4	8	6	8	6	12	10	16
Maximum Weight (empty)	(kg)	43	132	229	236	296	272	1191	816	1330	1045	1605	3480	5080	4726	3214	5962	5670	14624
	(lb)	95	290	505	520	652	600	2626	1800	2933	2300	3539	7671	2309	10420	7070	13145	12500	32245

Materials of Construction

Plates	
Standard	Optional
SS 304	TITANIUM PALLADIUM
SS 316	HASTELLOY C276, C22,B-2
TITANIUM	AVESTA 254 SMO
	NICKEL 201
	INCOLOY 825
Frame	
Standard	Optional
CARBON STEEL	SS304 SANDBLASTED
EPOXY PAINTED	SS316 SANDBLASTED

Gaskets	
Standard	Optional
NITRILE	PTFE
EPDM	AFLAS
VITON	SILICON
	HYPALON
Connections	
Standard	Optional
THREADED NPT SS316L	TRI-CLAMP SS 316L
RAISED FACE & STUDS	THREADED NPT TITANIUM
LINED FLANGE SS316	LINED FLANGE TITANIUM

Design Parameters

FRAMES AVAILABLE

Pressure

21 bar (300 PSI)

Temperature

160°C (320°F)



L Line Technical Product Specifications

Model	Dimensions mm (in)					Plate Area m ² (sq.ft)	Channel Volume L (USGPM)	Maximum Flow L/min (GPM)	Maximum Number of Plates	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)	900 (238)	200	7.2+0.55NP(15.8+1.21NP)

NP - number of plates

Standard Connections

Model	Solder	Threaded
	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"

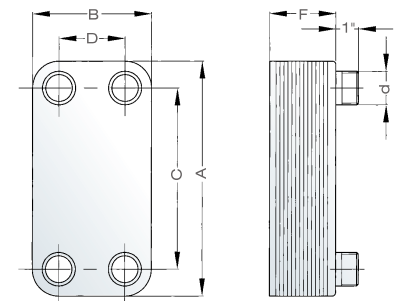
* inner diameter of connection

Standard Construction:

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

Design Parameters:

- Working Temperature up to 230°C (445°F)
- Working Pressure up to 33 bar (481 PSI)



JAD Line Technical Product Specifications

Model	Heat Transfer Area		Connections	
	m ² (ft ²)		in	
HELICALLY CORRUGATED TUBES				
H-0K	0.29 (3.12)		3/4"	
H-1K	0.76 (8.19)		1"	
H-2K	1.32 (14.21)		1"	
JAD XK 2.11	1.20 (12.92)		1-1/2"	
JAD XK 3.18	2.00 (21.53)		2"	
S-0XK	2.30 (24.76)		2"	
S-1XK	3.14 (33.80)		2-1/2"	
JAD XK 5.38	4.00 (43.06)		2"	
JAD XK 5.38.08.71	2.30 (24.76)		2"	
JAD XK 6.50	5.70 (61.35)		3"	
JAD XK 6.50.10	5.10 (54.89)		3"	
JAD XK 6.50.08.72	3.14 (33.80)		3"	
JAD XK 9.88	10.70 (115.17)		4"	
JAD XK 9.88.10	8.30 (89.34)		4"	
JAD XK 9.88.12	6.82 (73.41)		4"	
JAD XK 9.88.08.85	6.20 (66.74)		4"	
JAD XK 9.88.08.65	4.97 (53.50)		4"	
JAD XK 12.114	18.40 (198.06)		4"	
JAD XK 12.114.10	14.90 (160.38)		4"	
JAD XK 12.114.12	10.50 (113.02)		4"	
JAD XK 12.114.08.75	8.78 (94.51)		4"	
JAD XK 12.114.08.60	6.46 (69.53)		4"	
JAD XK 12.114.08.50	6.25 (67.27)		4"	
JAD K 14.163.08.120	25.00 (269)		6"	
JAD K 14.163.10.120	18.20 (195.90)		6"	
JAD K 14.163.12.120	15.70 (168.90)		6"	
JAD XK 17.217.10	35.00 (376.74)		6"	
JAD XK 17.340.08.120	60.80 (655)		6"	

Model	Heat Transfer Area		Connections	
	m ² (ft ²)		in	
SMOOTH TUBES				
JAD X 2.11	1.20 (12.92)		1-1/2"	
JAD X 3.18	2.00 (21.53)		2"	
JAD X 5.38	4.00 (43.06)		2-1/2"	
JAD X 6.50	5.70 (61.35)		3"	
JAD X 9.88	10.70 (115.17)		4"	
JAD X 12.114	18.40 (198.06)		4"	
JAD X 17.217.10	35.00 (376.74)		6"	
JAD X 17.340.08.120	60.80 (655)		6"	



THREADED CONNECTIONS AVAILABLE UP TO 2-1/2 INCH

FLANGE CONNECTIONS AVAILABLE FROM 2 INCH AND LARGER - COMPATIBLE TO PN 10/ PN 16 OR ANSI 150LB / 300LB

Materials of Construction	standard		optional	
	SHELL	STAINLESS STEEL 316L		TITANIUM
TUBES	STAINLESS STEEL 316L		TITANIUM	
NOZZLE	STAINLESS STEEL 316L		TITANIUM	
FLANGES	CARBON STEEL		SS/TITANIUM	

Standard Design Parameters	TUBES		SHELL	
	TEMPERATURE	217°C (422°F)		217°C (422°F)
PRESSURE	21 bar (300 PSI)		21 bar (300 PSI)	

B Line Technical Product Specifications

Model	Nominal Capacity		Water Flow				Heat Transfer Area		Connection	
			Hot		Cold				Shell	
			kW	MBH	LPM	GPM			LPM	GPM
B 45	13	45	23	6.08	150	39.63	0.15	1.62	1"	3/4"
B 70	20	70	25	6.60	170	44.91	0.246	2.64	1-1/2"	3/4"
B 130	38	130	27	7.13	200	52.83	0.33	3.64	1-1/2"	3/4"
B 180	53	180	30	7.93	210	55.48	0.44	4.70	1-1/2"	1"
B 250	73	250	35	9.25	270	71.33	0.63	6.80	1-1/2"	1"
B 300	88	300	40	10.57	300	79.25	0.84	9.00	1-1/2"	1"
B 500	146	500	55	14.53	360	95.10	1.56	16.80	2"	1"
B 1000	293	1000	95	25.10	705	185.24	1.97	21.21	2"	2"

Nominal values are based on 60°C (140°F) temperature difference between incoming heating and heated water.

Standard Materials		
SHELL	Stainless Steel 316L	Titanium
TUBES	Stainless Steel 316L	Titanium
CONNECTIONS	Stainless Steel 316L	Titanium

Design Parameters				
	TUBES		SHELL	
TEMPERATURE	208°C (406°F)		208°C (406°F)	
PRESSURE	17 bar (250 PSI)		17 bar (250 PSI)	





PS/PW Line Technical Product Specifications

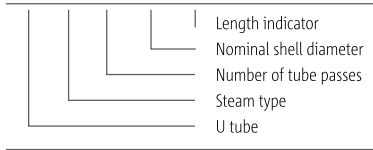
Materials of Construction		
	Standard	Optional
SHELL	STEEL	STAINLESS STEEL (304/316)
TUBES	STAINLESS STEEL 304	COPPER, SS316, 90/10 CuNi
TUBESHEET	STEEL	STAINLESS STEEL (304/316)
CONNECTIONS	STEEL	STAINLESS STEEL (304/316)
HEAD	CAST IRON / STEEL	STAINLESS STEEL (304/316)
GASKETS	NON-ABESTOS, COMPRESSED FIBER	

Standard Design Parameters		
	Design Pressure	Design Temperature
SHELL	10 bar (150 PSI)	190°C (375°F)
TUBES	10 bar (150 PSI)	190°C (375°F)

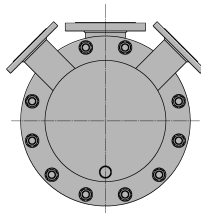
Optional Design Parameters		
	Design Pressure	Design Temperature
SHELL	21 bar (300 PSI)	217°C (422°F)
TUBES	21 bar (300 PSI)	217°C (422°F)

Model Number Key

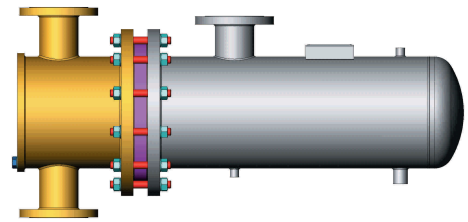
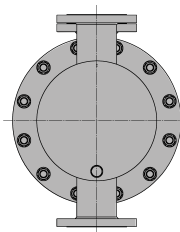
P S 2 04 1



4 pass



2 pass

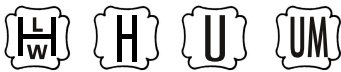


Quality Management System

At AIC we are committed to providing exceptional service and value to our diverse clientele.

Our stringent quality processes and management systems fulfill and are certified to the requirements of **ISO9001**.

AIC heat exchangers are designed, tested, and manufactured according to ASME Code Section VIII, Div.1 and will bear the U or UM stamp accordingly. Our products are certified by many national and international technical inspection authorities: Canadian CRN, CSA, UL, HLW, H, PED(97/23/EC). We can also work closely with our clients to design products to meet their exact criteria.



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 www.myaic.net



Authorized Representative