#### Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineering solutions.

Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again. We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

#### How to contact Alfa Laval

Contact details for all countries are continually updated on our web site. Please visit www.alfalaval.com to access the information.

# Sustainable heat transfer

Alfa Laval brazed and fusion bonded heat exchangers





## Partner with Alfa Laval to become best in class

With our unique wealth of experience, our dedication to finding innovative new heat transfer solutions with greater efficiency and lower energy consumption, and our global manufacturing and distribution network, Alfa Laval is your ideal partner.

#### Growing our businesses together

Becoming an authorized Alfa Laval distribution partner provides you with tools and support that aid in growing your business from new and existing customers.



Alfa Laval offer various levels of support depending on the scale of your business, how closely you wish to work with Alfa Laval and your ambitions for the future. Each level boosts your business by offering tools and tailored support for your day-today work. We offer a variety of training programs, sales-supporting web tools, marketing materials, and much more.

#### Support for competitive power

Alfa Laval Anytime is our eBusiness portal for partners. Find, calculate, customize and order your Alfa Laval products with just a few simple clicks, 24/7. The tool is always up to date and provides real-time stock count as well as track-and-trace functionality.

#### The Alfa Laval Product guide

The online product guide helps you or your customers to quickly find the right heat exchanger at the right capacity within 5 clicks. All products are available for immediate shipping.

#### Alfa Laval offers product specialists within applications such as

- Air conditioning (chillers, absorption chillers and VRFs)
- Heat pumps
- Boilers
- Solar heating
- Domestic hot water
- Process cooling
- Fuel cells
- Combined heating and power
- Air dryers

- Air compressors
- Oil cooling • Transport refrigeration
- Wind power
  - Vending machines
  - Engine cooling
  - Engine oil and fuel filtration
  - Heat recovery
  - Industrial refrigeration
  - Commercial refrigeration

#### Alfa Laval Partner Academy

As an Alfa Laval partner, you get access to a highly specialized learning centre backed by the resources of a global market leader. Our online or classroom training programs will boost your sales and service proficiency up to its full potential.

We offer you product and application knowledge with a commercial approach, hands-on demonstration of technical features and analysis of specific sales points

#### Product scope

#### **EVAPORATORS**

In evaporator duties, a brazed plate heat exchanger (BHE) can be optimized by varying the channel plate characteristics and adding a distribution system. The distribution system provides a uniform distribution of the refrigerant throughout the heat exchanger. This ensures high performance and stable superheating under variable conditions. Though designed to operate with typical heat fluxes, Alfa Laval's distribution systems can be adapted to higher and lower heat-flux conditions as well.

#### CONDENSERS

Alfa Laval offers a range of BHEs optimized as condensers. They feature speciallydesigned channel plates combining different corrugation angles, pressing depths and asymmetric channels. This makes them suitable for a wide variety of heat-pump duties - from water heaters and micro-heat pumps to residential and commercial systems.

#### ECONOMIZERS

The small footprint and versatile configurations of Alfa Laval's BHEs make them easy to optimize for economizer duties.

#### **OIL COOLERS**

Alfa Laval's BHE series of dedicated oil coolers, DOC range, offer unparalleled efficiency for hydraulic and lube oil cooling. The extra sturdy construction is fast and easy to install due to special connection blocks that decrease stress on the standard connection by 80%.

#### GAS COOLERS

Alfa Laval is leading the development of new technologies for green cooling with natural refrigerants such as CO<sub>2</sub> and propane. Alfa Laval offers the widest range of highpressure heat exchangers, which are not only more efficient, but also more reliable as well as safe for the environment and the people working around them.



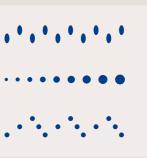
## Three innovative solutions that break barriers

## **INNOVATIVE SOLUTIONS / CAPACITY**

AC1000 is the largest dual-circuit BHE on the market, boasting design features that let you increase capacity, lower total system cost and boost efficiency.



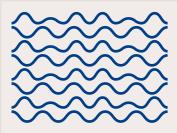
## DYNASTATIC DESIGN / FLEXIBILITY



This breakthrough production method gives you complete freedom to design the perfect refrigerant distribution system for your products. Whatever placement, size and number of distributors you want, we can produce it.

#### FLEXFLOW DESIGN / EFFICIENCY

Our range of asymmetrical flow patterns unlock new levels of efficiency. We don't believe in a one size fits all approach – we develop new asymmetrical patterns tailored by application, allowing smaller refrigerant volumes and optimized water pressure drops.



# The Alfa Laval advantage

## Alfa Laval offers a complete range of brazed and fusion bonded heat exchangers.



of copper or nickel.



	AC16	AC18	AC30	AC40	AC70	) AC72	2 AC73	3 AC74	AC11	12 AC22	20 AC	C230 A	AC232 AC	C240	AC500 AC	502 AC10	000 CB	B10 CB <sup>.</sup>	11 CB	316 C	B18 CB	HDW18 C	СВ20 С	CBXP27	CB30	CBXP52	CB60	CB62	CB65	CB110	CB112	CBXP112	CB200	CB400	DOC16	DOC20	DOC30	DOC60	DOC112	AN14	AN18	AN27	AN52	AN76	AN200	AN400	CD100	CD200	CD300
Evaporator	х	х	х	х	х	х	х	x	×	х		х	x	х	x >	x x	:									х	х	х	х		х	х								х	х	х	х	х	х	х			
Condenser	х	х	х	х	х	х	х	х	х	х		х	х	х	x x	x x						х		х	х	х	х	х	х	х	х	х								х	х	х	х	х	х	х			
Economizer	х	х	х	х	х			х		х		х	х	х	x x	<											х													х		х	х	х					
Oil cooler		х															>	x x	: ×	<					х		х			х	х		х	х	х	х	х	х	х		х		х		х	х			
Desuperheater		х																				х			х		х			х																			
Secondary Heat Exchanger																	>	x x	: ×	K	х	х			х																х								
Solar Heating																					х	х	х		х		х	х		х	х		х								х								
Tap Water Heating																	>	x x	: ×	ĸ	х	х	х		х		х	х		х	х		х	х							х	х	х	х	х	х			
AHRI approval (AQ-series)																			×	ĸ	x		x		х		х			х	х		х	х						х	x	х	х	х	х	х			
Intermediate Heat Exchanger																	>	x x	: ×	ĸ	x		x		х		х	х		х	х		х	х							x								
Dimensions, mm (width/height)	74/210	74/316	95/325	121/332	2 111/52	26 113/52	29 113/52	29 113/52	29 191/6	616 190/6	616 250	0/490 25	50/490 289	9/525 3	22/739 322	/739 487/8	817 74/	/192 74/1	192 74/2	210 74	/316 7	7/315 94	4/324 1	160/362	113/313	111/526	113/527	113/529	120/535	191/616	191/616	191/616	324/742	390/990	74/210	94/324	113/313	113/527	191/616	77/207	76/318	111/310	111/526	192/530	324/742	390/990	74/210	113/313	248/488
Dimensions, inches (width/height)	2.91/8.27	2.91/12.4	4 3.74/12.8	30 4.76/13.0	4.37/20	.71 4.45/20	.83 4.45/20	.83 4.45/20.	.83 7.52/24	4.25 7.48/24	4.25 9.84	/19.29 9.84	4/19.29 11.38	3/20.67 12.	68/29.09 12.68	/29.09 19.17/3	32.17 2.91/	/7.56 2.91/	7.56 2.91/	/8.27 2.91	/12.44 3.0	3/12.40 3.70	0/12.76 6.	6.30/14.25	4.45/12.32	4.37/20.71	4.45/20.75	4.45/20.83	4.76/21.06	7.52/24.25	7.52/24.25	7.52/24.25	12.76/29.21	15.35/38.98	8 2.91/8.27	3.70/12.76	4.45/12.32	4.45/20.75	7.52/24.25	3.03/8.15	2.99/12.52	4.37/12.20	4.37/20.71	7.56/20.87 1	2.76/29.21 1	5.35/38.98	2.91/8.27 4	4.45/12.32	9.76/19.21
Design Pressure (BAR)	32/45	32/45	32/45	48	32/45	5 32/48	3 32/48	3 32/45	5 32/4	8 32/4	48 32	2/45 3	32/45 32	2/45	32/45 32/	/45 48	3 10/	)/32 10/3	32 10/	/32 10	)/32	32	16	90	32/45	90	32/45	32/48	32/45	32/48	32/48	85	25	25	10/32	16	32/45	32/45	32/48	14/23	25	30	30	30	18	19	32	31	16
Design Pressure (PSI)	464/653	464/653	3 464/653	3 696	464/65	53 464/69	96 464/69	96 464/65	53 464/6	696 464/6	696 464	4/653 46	64/653 464	4/653 4	64/653 464	/653 69	6 145/	5/464 145/4	464 145/	/464 145	5/464	464	232	1305	464/653	1305	464/653	464/696	464/653	464/696	464/696	1233	363	363	145/464	232	232	464/653	464/696	232/334	363	435	435	435	261	290	464	450	232
Single or Dual Circuit	Single	Single	Single	Single	Single	e Single	e Single	e Single	e Singl	le Singl	jle D	Dual I	Dual D	Dual Sir	ngle/Dual Du	ual Du	ial Sin	ngle Sing	gle Sin	gle Si	ngle S	Single S	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single													
Distribution System available			х	х	x	х	x	x	x	х		x	x		x x	x x								x	х	х	х	х	х		х	х											х	х					
Asymmetric plates available	х	x		х		х	x	x	x	х				Х	>	x x	: >	x x	: ×	<	x							х	х		х				х				х										
High Efficiency						x	x		x	x				х	>	x x		x										х	х		х																		
Hydroblock																	>	x x	: ×	<	x						х																						
Multipass					х														×	<	x		x		х		x	х		x	х		х	х								х	х	х	х	х			
High pressure version, AXP (bar/psi)					55/79	8				60/87	70						167/2	/2422					1	130/1885	60/870	130/1885	60/870				60/870	140/2031									32/464	70/1015	70/1015	40/580	32/464	32/464		50/725	

Please note that the table is a reference. Always check actual designs and dimensions before order.

\*\* AN-XX is a the AlfaNova range of fusion-bonded, all stainless steel heat exchangers.

A brazed plate heat exchanger (BHE) is very compact compared to other heat exchangers for similar applications, meaning less refrigerant is needed. AlfaNova is a range of fusion-bonded, all-stainless-steel heat exchangers. They are ideal in situations involving media that is corrosive or very sensitive to contamination

All BHE units are pressure tested and labelled to comply with all major industry according to specific applications and approvals (PED, UL, Chinese PV, KHK, system requirements. Each optimized KRA, and CRN). They are also leak tested heat exchanger is unique to the with helium to ensure that every unit is customer, with a unique article number. gas tight.

Alfa Laval also offers the widest range optimize their products. of AHRI certified heat exchangers which means that performance is guaranteed by an acclaimed third party global HVAC organization.

Alfa Laval can optimize the BHE Customers can be safe in the knowledge that Alfa Laval uses all its know-how to

Continuous innovation and product development are ensured by Alfa Laval's in-house laboratories available at all production sites. All developments and solutions are validated before being offered to customers.

