A comprehensive range of heat exchangers for HVAC applications

An optimal solution for any duty

Alfa Laval has the widest range of heat exchangers for HVAC applications: gasketed heat excha
and our latest innovation Alfa Nova heat exchangers, as well as air products and all-welded hea

Gasketed Plate Heat Exchangers

Capacities: up to 50,000 kW

Gasketed plate heat exchangers (PHEs) consist of thin corrugated plates, which are sealed by a rubber gasket and held together by a bolted frame.
Alfa Laval has developed and manufactured PHEs since the 1930s. This wide experience has resulted in optimized design regarding thermal performance, fouling resistance, mechanical performance, ease of installation and serviceability.
Alfa Laval offers a wide range of PHEs in different sizes and appearances, optimized to meet specific temperature demands and capacities in HVAC applications.
All units can be used with design pressures up to 25 or 30 bar. Depending on water quality, the PHEs are available with different plate materials, stainless steel, titanium, or various nickel alloys that secure corrosion resistance.
Accessories available: heating insulation, cooling insulation with drip tray, protection sheet, and others.

Benefits

- Compact design
- Optimized PHEs for different applications
- Small temperature differences between the circuits possible
- High thermal efficiency providing high turbulence and low risk of fouling
- High temperature performance up to 180°C
- Easy installation
- Easy to extend capacity
- Easy to service
- Certification according to CE / PED, ASME or pvc ALS™ (*)

(*) Internal Alfa Laval pressure vessel rules for fulfilment of sound engineering practice

Applications

- District heating
- Radiator heating
- Domestic hot water
- Geothermal heating
- Swimming pool heating and cooling
- Heating using steam
- Pressure breakers
- District cooling
- Thermal storage
- Condenser protection for chillers

Brazed Plate Heat Exchangers

Capacities: up to 4000 kW

Alfa Laval invented the brazed heat exchanger (BHE) concept in 1977.
BHEs consist of a copper brazed pack of corrugated stainless steel plates, giving high thermal and mechanical performance.
Alfa Laval BHEs are available in several different models and can be designed as either one-pass or multi-pass with connections both at the front and back. Pre- and post-design with six connections is also available as standard. Larger connections on the secondary side are available for better performance for asymmetrical flows in the case of radiator or tap water duties.
All models have standard sizes available in stock to ensure short delivery times. All heat exchangers undergo a pressure test and a separate leakage test prior to delivery to ensure the best possible quality.
Accessories available: heating insulation, cooling insulation, couplings and feet.

Benefits

- Compact size with small foot print
- Easy installation
- High thermal efficiency providing high turbulence and low risk of fouling
- Pressure tested with air and leakage tested with helium
- Certification according to CE / PED or ASME

Applications

- Domestic hot water
- Radiator heating
- Floor heating
- Heat pumps
- District cooling
- Solar heating

Fusion-bonded Alfa Nova Plate Heat Exchangers

Capacities: up to 4000 kW

Alfa Nova is a totally new type of plate heat exchanger; the world's first heat exchanger made of 100% stainless steel. Alfa Nova consists of corrugated stainless steel plates bonded together with Alfa Laval's new patented revolutionary technology, Alfa Fusion; the art of joining stainless steel components together.
Alfa Nova heat exchangers are ideal for HVAC applications, which demand high thermal efficiency and strength as well as good resistance vs. pressure fatigue.
Temperature range: -50°C to 550°C, design pressure range: up to 25 bar
All models have standard sizes available in stock to ensure short delivery times. All heat exchangers undergo a pressure test and a separate leakage test prior to delivery to ensure best possible quality.
Accessories available: heating insulation, cooling insulation, couplings and feet.

Benefits:

- 100% stainless steel construction ensures unbeatable durability
- AlfaNova can be used for high or low alkalinity water
- High thermal efficiency providing high turbulence and low risk of fouling
- High galvanic corrosion resistance
- Ideal solution for applications where copper or nickel contamination is not accepted
- Pressure tested with air and leakage tested with helium
- Certification according to CE / PED or ASME

Applications

- Radiator Heating
- Domestic Hot Water
- Floor heating
- Heat pumps

The Alfa Laval production process is certified in accordance with: ISO 9001 and ISO 14000 (Environmental)

angers, brazed heat exchangers,
t exchangers, especially designed for steam applications.

Alfa Rex All-Welded Heat Exchangers

Capacities: up to 15,000 kW

AlfaRex is an excellent product for applications with temperature demands in excess of 180°C and pressures above 30 bar.
AlfaRex comes in two different models, TM10 and TM20. Both models are made of a welded plate pack assembled into a frame. The difference from a standard gasketed plate heat exchanger is that welds are used instead of gaskets to seal and separate the different channels.
The plates are made of either stainless steel, titanium or nickel alloys and the corrugated pattern provides high thermal efficiency in combination with thin plates. The welded plate pack in combination with a frame also provides high mechanical performance.

Benefits

- Temperatures up to 350°C
- Pressures up to 40 bar
- High thermal efficiency using plates with herring-bone pattern
- Small temperature differences between the circuits possible
- High turbulent flow and low risk of fouling
- Low hold-up volume
- Easy installation
- Compact size and small foot print
- Certification according to CE / PED or ASME

Applications

- Boiler plants producing hot water for district heating
- Heating using steam
- Heating using waste steam from factories

Compabloc All-Welded Heat Exchangers

Capacities: up to 75,000 kW in steam / water applications

Compabloc is an all-welded heat exchanger for use in the case of high capacity duties and where high temperatures or corrosive media are involved.
Compabloc consists of rectangular, thin corrugated plates that are welded together to a plate pack and covered on all sides by panels as a pressure vessel. The panels are bolted together, which allows the unit to be opened for cleaning purposes.
Compabloc can be used with design temperatures up to 350°C and design pressures up to 35 bar.
Size and placement of connections is very flexible, since the panels are tailor made for each unit. This is useful for steam condensation where there is a large connection on the steam side but a small connection is sufficient for condensate. With multi-pass designs, it is possible to achieve condensation and sub-cooling of condensate within the same unit.
Compabloc is available with different plate materials, stainless steel, titanium, or various nickel alloys that secure corrosion resistance.

Benefits

- All-welded design
- Compact design
- Low hold-up volume
- Small temperature differences between the circuits possible
- Flexible connection configuration
- Can be opened for cleaning
- Installation possible horizontally and vertically
- Handles large flow rates and high capacity demands
- Certification according to CE / PED or ASME

Applications

- Boiler plants producing hot water for district heating
- Heating using steam
- Heating using waste steam from factories

Air Heat Exchangers: Air Cooled Condensers and Dry Liquid Coolers

Capacities: up to 1600 kW

Alfa Laval has a comprehensive product range for HVAC cooling. In combination with our brazed and gasketed plate heat exchangers, our air cooled condensers and dry coolers will match any demand specification with great accuracy.
Dry coolers are used for liquid (water or glycol) cooling in indirect systems and free cooling systems.
Dry coolers are excellent alternatives to conventional cooling towers as there is no water consumption and no risk of legionella growth; in the long term, energy consumption figures are better than for most alternatives.
Innovative heat exchanger design gives excellent heat transfer with minimised fluid volume, thanks to the new fin corrugation, combined with smooth tubes;
Designed for air conditioning, air cooled condensers are fitted with cross fin copper tubes and innovative corrugated aluminium fins and are robust, have an attractive design and offer very high corrosion resistance.
Noise levels and energy consumption are both low.
Design temperatures from -30°C to 50°C

Benefits

- High cooling efficiency
- Low power consumption
- Low noise level
- Wide range of options (spray water device, cabling, fan speed control, coil coating, EC fan motors)
- Rigid Design
- Optimization with liquid cooled PHE in free cooling systems
- Performance certified by Eurovent

Applications

- Cooling of public buildings, indoor sports arenas and office complexes
- Dry coolers are an alternative to conventional cooling towers

Alfa Laval in brief

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

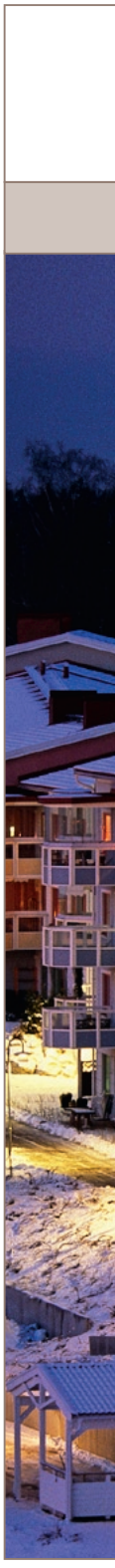
Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

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

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com



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