



Cooling competence

Alfa Laval air cooled heat exchangers in the process and energy industries



Count on us for cooling

As a global supplier of specialized products and engineering solutions for heat exchangers, Alfa Laval is dedicated to optimizing the performance of cooling processes. Alfa Laval air cooled heat exchangers (ACHE) stands for reliable, customized and innovative solutions coupled with competent support.

Alfa Laval considers your priorities when choosing a cooling solution – from secure performance to optimization of energy consumption, water usage, installation cost, maintenance and noise. These are key design points to have in mind to lower the total life-cycle cost of the air cooled heat exchanger installation. With a boosted cooling system, the refined output is maximized and the profit is increased.

Traditional and innovative product offer

Alfa Laval's portfolio of air cooled heat exchangers includes both dry and wet coolers, ranging from standardized products to highly customized and innovative premium solutions. We are experts on certain applications and positions within our chosen technologies, namely finned tube technology, finned coil technology and wet surface air cooling. These are used in long proven positions in oil refineries, gas compression stations and gas plants, petrochemical plants, power plants, as well as the steel, mining, pulp and paper industries.

Deep knowledge, qualified support

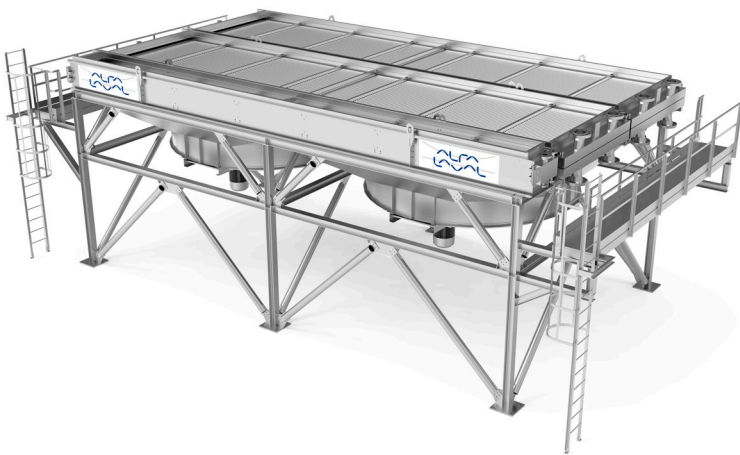
When choosing Alfa Laval as cooling supplier, you get access to quality support for the entire lifetime of the equipment. Across the globe, we have an organization of sales and service engineers who speak your language. This ensures the highest standard of reliability in order to reach the longest possible uptime.

We help to optimize processes and challenge assumptions when it comes to the choice of cooling solution. The aim could be to reduce water usage, electricity consumption or maintenance cost. With Alfa Laval's experience and know-how based on thousands of installations, we find the best solution for every particular need.

www.alfalaval.com/air

Alfa Laval air cooled

We provide technologies and solutions that will help to optimize cooling processes and keep them running smoothly year after year. Click on a product below to learn more about how the chosen air cooled heat exchanger can improve your business.



► Alfa Laval Olmi air cooled heat exchangers

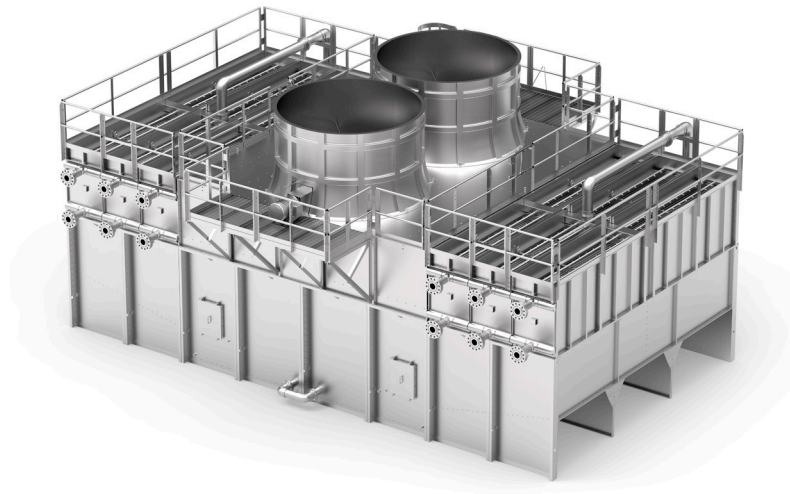


► Alfa Laval finned coil air cooled heat exchangers

heat exchangers



► Alfa Laval ACE air cooled heat exchangers



► Alfa Laval Niagara wet surface air coolers (WSAC)

Alfa Laval Olmi air cooled heat exchangers

Performance for peace of mind

When having tough demands on an air cooled heat exchanger, the Alfa Laval Olmi air cooled heat exchanger range is the best choice. Based on deep engineering and manufacturing competence, these coolers offer the most reliable solution for avoiding production interruptions. By investing in the right product from the start, Alfa Laval Olmi air cooled heat exchangers can lower life-cycle costs and reduce power consumption.

The Alfa Laval Olmi air cooled heat exchanger range is suitable for demanding conditions, complex installations and critical applications. Using finned tube technology, the range is ideal for tough welding requirements, special material requests or to safeguard against potential hazards in the process such as lethal service, high pressures and temperatures.

Secure all the way

Professional project managers at Alfa Laval will be available throughout the project, so you can feel secure from delivery to maintenance of the Alfa Laval Olmi air cooled heat exchanger. By choosing this optimally designed product, the highest reliability can be achieved – providing you with top performance for peace of mind.

Key benefits

- Reliability
- Top performance
- High pressure
- High temperatures

Key industries

- Natural gas
- Oil refining





► Product information

► 3D model

- ▶ Case stories
- ▶ Product information
 - ▶ Solar
 - ▶ V-shape
 - ▶ FBL
- ▶ 3D model



Alfa Laval finned coil air cooled heat exchangers

Optimized for utility applications

When looking for optimization of your auxiliary cooling system, Alfa Laval finned coil air cooled heat exchangers are a good solution. These air cooled heat exchangers are suitable in utility applications where the focus lies on finding a solution within a tight budget. The coolers can help to optimize energy consumption and are superb in situations where water supply is limited, and dry cooling is the way forward.

Alfa Laval finned coil air cooled heat exchangers are delivered preassembled to reduce installation time on-site. The units have lower weight compared to traditional solutions and open up new possibilities for placement, for example on roofs. The versatile coolers can be used in a great variety of industries for auxiliary cooling.

Technology for potential savings

Alfa Laval finned coil air cooled heat exchangers can help optimize the cooling system and increase profitability. The coolers come in a plug and play system, which makes the cost of installing these units lower compared to traditional solutions. The standardization also makes spare parts cost efficient.

Key benefits

- Cost optimized solution
- Compact design
- Easy installation
- Less power consumption

Key industries

- Power
- Steel
- Mining
- Pulp and paper



Dry cooling making a big difference in Spanish biomass plants

- Biomass-fuelled power plants in Córdoba, Spain benefit big time from Alfa Laval dry coolers – providing big savings on water and maintenance



The cooling side of district heat and electricity in Finland

► Learn how Fortum, Finland, choose Alfa Laval heat exchangers for reliable, cost-effective cooling



Alfa Laval ACE air cooled heat exchangers

Engineered for severe-duty and responsive service

The Alfa Laval ACE air cooled heat exchangers offer robust coolers that have been designed with a harsh environment in mind. Quick and reliable response times combined with accountable technical support provide the basis for ensuring a competitively priced product, designed and delivered on time. The finned tube technology used enables these air cooled heat exchangers to reach high temperatures and pressures when necessary. Alfa Laval ACE air cooled heat exchangers are coolers especially engineered for applications in the natural gas field, where compressed natural gas, lube oil and water can be cooled in the same unit.

When timing is critical

With Alfa Laval ACE air cooled heat exchangers we offer an unparalleled service – our advanced sales and engineering system provides our dedicated sales team with the ability to respond rapidly on project-specific requests. The dispatch continues to be responsive, with an efficient operations team focused on fast delivery, along with safety, quality and improved manufacturing capabilities.

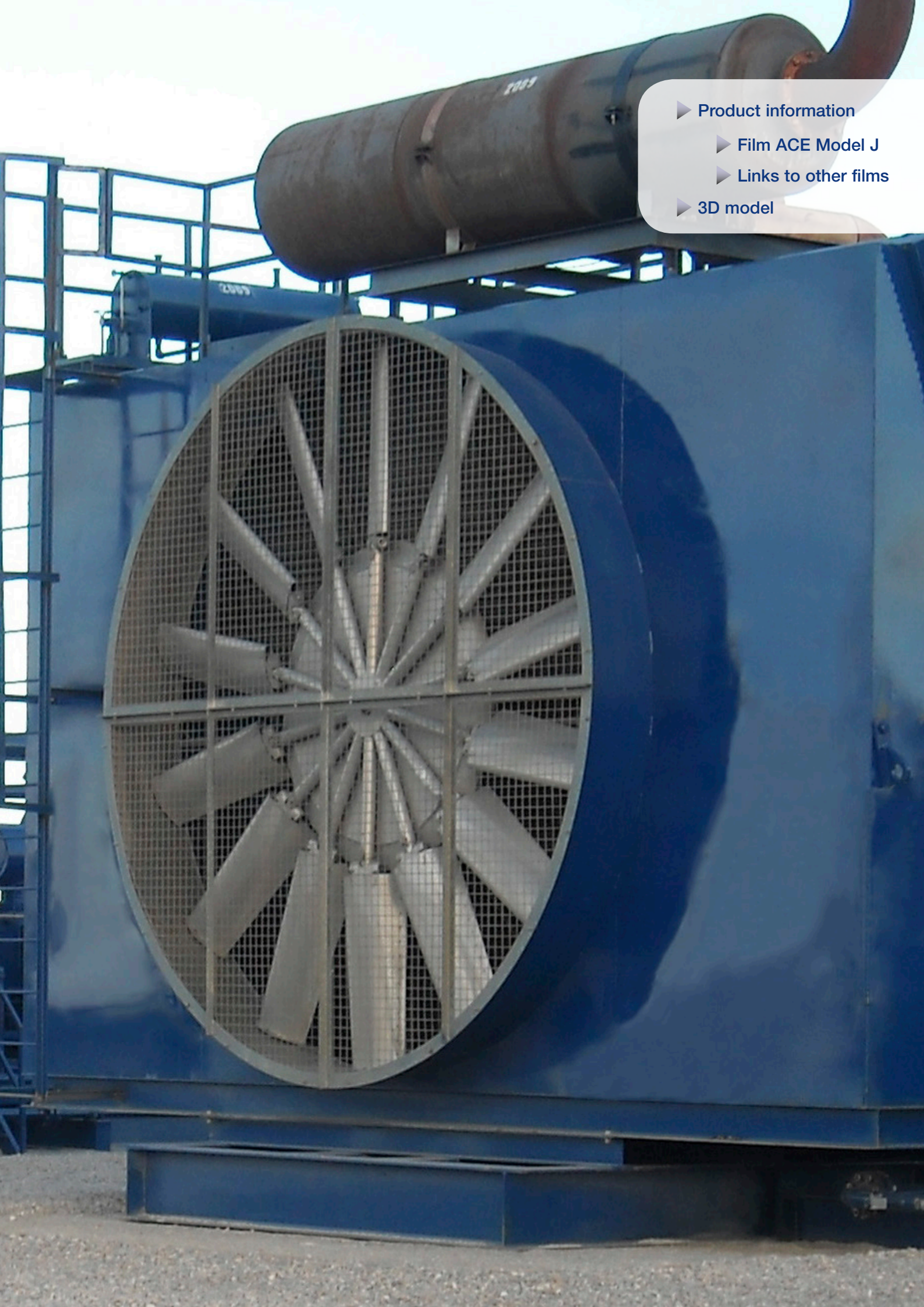
Key benefits

- Fast delivery time
- Rugged design
- 3D inventor models available

Key industries

- Natural gas wellhead compression
- Drilling rig genset cooling
- Natural gas compression for gathering pipeline





► Product information

► Film ACE Model J

► Links to other films

► 3D model

- Film case
- Film wet surface technology
- Product information
- 3D model



Alfa Laval Niagara wet surface air cooler (WSAC)

Proven philosophy for lower temperatures

Alfa Laval Niagara wet surface air cooler presents a water conservative and maintenance friendly solution for superior cooling. Lower outlet temperatures are achieved thanks to a technology of flooded spraying on bare tubes.

Alfa Laval Niagara wet surface air cooler is based on a modular design and engineered to order. The investment cost is low when looking at the life-cycle perspective, and in its daily running this cooler requires less energy and water – giving your business a smaller carbon footprint. Alfa Laval Niagara wet surface air cooler is used in hydrocarbon refrigerant condensing, as well as numerous applications in the oil and gas industries, power plants and steel plants.

Water conserving technology

In comparison with similar technologies, substantial water savings are possible when using Alfa Laval Niagara wet surface air cooler. The evaporative system is able to use water from many water sources as it can handle higher solid and salt concentrations in the spray water. The process medium can be cooled directly since it is a closed loop system, and thereby a single approach to the wet bulb thermometer is achieved.

The advantages when comparing with a system containing a cooling tower and heat exchangers or a dry cooling system are many. Whereas cooling towers are expensive to install, difficult to clean and the system heat exchangers will require good water, Alfa Laval Niagara wet surface air cooler offers a water and maintenance efficient method for exceptional direct cooling of the process. The advantage compared to dry coolers is the lower outlet temperature that can be arrived at.

Key benefits

- Superior cooling
- Water saving
- Energy efficient

Key industries

- Natural gas liquefaction
- Oil refining
- Power

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**

