



near

EDITORIAL

Driving the future at Chillventa 2014

Chillventa 2014 is one of the world's premier international trade fairs for refrigeration, air conditioning, ventilation and heat pumps, and once again Alfa Laval will be there with an exciting, interactive exhibit featuring all our latest innovations and products.

Most of the products that we will have on display are brand new – some are even making their first international appearance. All of the products we have chosen to exhibit meet growing demand in the industry for energy efficient and cost effective solutions.

One of the most exciting products that we will be introducing is the new Alfa Laval Arctigo range of industrial air coolers – a highly versatile state-of-the-art product that can be configured for a wide variety of applications.

In this issue of Near Refrigeration, you can read about the Alfa Laval Arctigo range in more detail, including first-hand experience of using Arctigo from one of our customers. You will also find a full guide to our Chillventa 2014 stall, including a list of all the products on display.

If you're at Chillventa 2014, please come visit us and see what we have to offer. And if not, you're always welcome to contact your local Alfa Laval representative to learn more about any of the products featured here. Either way, our team of experts is on standby and ready to answer your questions.

TOMMY ÅNGBÄCK,
MARKET UNIT
MANAGER,
REFRIGERATION



With Alfa Laval's help, Vesa Korpjärvi (left), from the installers Kylmet Oy, has been able to propose a customized solution to Teemu Sauvula (right), from Kalajoen Jäähdyttämö Oy.

GLOWING REVIEWS FOR NEW ALFA LAVAL ARCTIGO

FINLAND The new Alfa Laval Arctigo's wide and deep range of standard options means that customers like Kalajoen Jäähdyttämö Oy can get customized solutions for any application.

TEXT TIM BIRD PHOTO PEKKA AGARTH

Food businesses, from supermarkets to wholesale storage and distribution facilities, can thrive or die on the basis of the effectiveness and reliability of their refrigeration and air-cooling systems.

This is just as true for animal feed companies as it is for human food – and it is why Kalajoen Jäähdyttämö Oy, which produces animal feed in Kalajoki, western Finland, has taken delivery of and installed the innovative new Alfa Laval Arctigo air cooler.

The coolers were selected and installed according to the specific needs of the end-users by Alfa Laval's channel partner, Kylmet Oy. "We have a long customer relationship with Alfa Laval," says Kylmet's Vesa Korpjärvi. "An Alfa Laval contact recommended this new product to me when I was asking about possible products for these conditions." The simplified and streamlined appearance of the coolers was also an attraction.

Special demands for this customized application included the right tubing and casing



The Alfa Laval Arctigo installed at Kalajoen Jäähdyttämö Oy has to fulfil special demands when cooling animal feed.

materials for feed conditions, Korpijärvi explains. "This is because stored feed contains some formic acid that acts as a preservative, for example. In this case tubing and casing are both made from stainless steel. And of course we need to have fan ring heaters and hot gas defrost in the drip tray and also in the block through which the fans move the air, because of possible minimum temperatures of -33°C."

LOW ENERGY CONSUMPTION and durability are two of the most impressive features of Alfa Laval Arctigo, says Teemu Sauvula, of Kalajoen Jäähdyttämö Oy. "My first impressions of Alfa Laval Arctigo coolers are positive. For example, the power consumption of the electric motors is lower than I expected."

In fact, by choosing Alfa Laval Arctigo coolers, it is estimated that the company will save about 35 percent in energy consumption.

"Everything went smoothly and worked well," Sauvula continues. "Alfa Laval was chosen because of the recommendations made by Kylmet Oy's refrigeration specialists. Alfa Laval is a well-known and trusted brand and their products are known for their flexibility and durability. I think Kylmet showed their professional ability to choose the right product for their customers' needs."

Like Korpijärvi, Sauvula is impressed that the Alfa Laval Arctigo system – which has been proven in various applications since its launch – can be adapted to take into account the acidification prior to freezing that takes place for some animal feed. "Our expectations are high and I am confident that Alfa Laval Arctigo coolers will meet them," he says. ■

OPTIMAL DESIGN MADE REAL

ALFA LAVAL ARCTIGO: In industrial refrigeration, every application has its own unique requirements and needs a perfectly customized solution to achieve optimal efficiency. That's why Alfa Laval has developed Arctigo, our industrial air cooler platform.

Heavy-duty

- Corrosion resistant materials.
- Robust design.
- Optimal material thickness and weight ratio.

Optimized for your application

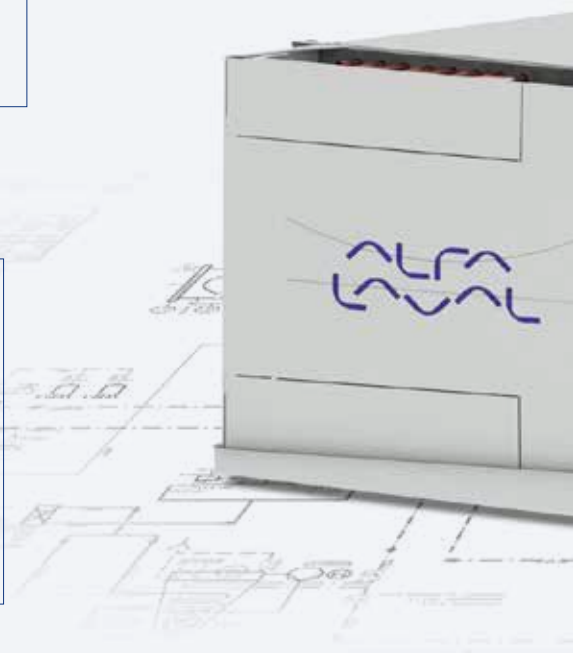
- Decades of experience in all industrial cooling applications.
- Wide choice of available dimensions.
- Up to 8 fan units, blow- or draw-through design, AC or EC.
- Choice of triangular or square coil pitch.
- Huge number of configurable options in selection software.

Easy to install and maintain

- Delivery in mounting position with transport feet on a pallet.
- Hinged drip tray and side covers, and optional fan motors.
- Wide lateral spaces for comfortable welding of piping and installing valves and controls.

Reliable

- Wide casing reduces risk of sputtering and ensures even air distribution over finned tube coil.
- Eurovent certified performance (HFC DX models only).
- Refrigerant implementation in the selection software is a result of Alfa Laval's laboratory tests.



Energy efficient

- EC fan motors available.
- Optimal ratio between primary and secondary surface.
- Optimal fin thickness with waved fins.
- Internal tubes' corrugation increases turbulence and primary surface.

High quality

- World-class material and supplier choice, designed based on field and laboratory tests.
- Combined technology and experience from thousands of installations around the world.
- Renowned Alfa Laval commitment to performance and excellence.

Worldwide support and service

- Local sales organization in local languages.
- Worldwide support from product and application specialists.
- Efficient after-sales service.
- Spare parts available from Alfa Laval channel partners.

Alfa Laval, your one-stop supplier

- All you need for your refrigeration applications.
- Shell-and-tube heat exchangers.
- Welded, semi-welded, fully gasketed, brazed and fusion bonded plate heat exchangers.
- Air-cooled condensers, dry coolers and gas coolers.



State-of-the-art selection software

- Easy-to-use configurator with separate thermal selection module.
- Multiple configurations.
- Easy categorization by different parameters.
- Wide and deep product range in executions, material and options available for selection.

Wide fan range

- Blow-through or draw-through designs.
- Wide choice of power supplies for both single and triple phases.
- 6 fan diameters up to 1000 mm available as standard.
- Full range of AC and EC fan motors.
- Fan selection possible with different external pressures.

ALFA LAVAL ARCTIGO AT A GLANCE

- Suitable for all HFC, ammonia, CO₂ and brine refrigerants.
- DX and pumped system.
- Design pressures HFC DX 33 bar, NH₃ pump 27 bar, CO₂ 33/60 bar, brine 6 bar.
- Triangular or square pitched coil.
- Fin spacing 4 up to 12 mm.
- 1 to 8 fans, fan diameters 450 up to 1,000 mm.
- Hinged fan rings for easy maintenance, saving time and costs.
- Blow-through or draw-through design.
- Room temperatures +10 down to -40 °C.
- Capacity range 3 up to 250 kW.
- Air volumes 3,000 up to 120,000 m³/h.



New Alfa Laval products get world premier at Chillventa

CHILLVENTA 2014

14-16 October 2014 – Nuremberg, Germany
Visit us at stand 322 in hall 4A

Alfa Laval is planning its most innovative and exciting stall yet for Chillventa 2014 – one of the biggest international trade fairs for refrigeration, air-conditioning, ventilation and heat pumps.

WITH OVER 28,000 VISITORS, Chillventa is the ideal opportunity for Alfa Laval to present its latest innovations for industrial and commercial refrigeration. A number of brand new products will be on display, including some that will

be making their first international appearance. “All products have been selected because of their ability to meet industry needs, including reduced environmental impact, energy consumption and costs,” explains

Klaudija Cavala, Market Communication Manager, Industrial Equipment Segment at Alfa Laval. “Through the use of tablets and touchscreens, each exhibit is designed to be interactive and hands-on, so that visitors can

really capture the essence of Alfa Laval’s latest offers.”

To find out more about Alfa Laval’s Chillventa 2014 exhibit, including a summary of products on display, visit www.alfalaval.com/chillventa2014

INDUSTRIAL REFRIGERATION

Alfa Laval Arctigo – official launch

Chillventa 2014 will be the official launch of the new Alfa Laval Arctigo range – industrial air coolers that offer exceptional versatility and can be configured for a wide variety of applications.



Alfa Laval AlfaNova 76 with U-Turn separator

AlfaNova is a 100 percent stainless steel, fusion-bonded plate heat exchanger, suitable for applications where ammonia is used. Combined with the Alfa Laval U-Turn liquid separator, it will ensure minimum pressure drop losses and maximum energy efficiency.

Alfa Laval TK20 semi-welded plate heat exchanger – World Premiere

The latest member of the Alfa Laval semi-welded product range offers increased capacity in a smaller, more compact unit, and can be adapted according to customers’ needs.



COMMERCIAL REFRIGERATION

Alfa Laval’s Refrigeration distribution programme

Alfa Laval’s marketing and sales programme for distributor partners providing all the support and application knowledge they need in order to deliver best-in-class solutions to their customers.

Alfa Laval Anytime

Alfa Laval’s online sales tool enables new orders to reach the factory in seconds, as well as real-time tracking of standing orders all along the delivery chain.

Alfa Laval AC1000DQ

This brand new product is the largest brazed plate heat exchanger for refrigerant applications on the market. Dual circuits and asymmetry give outstanding performance for high capacities.

Alfa Laval DM

Alfa Laval’s first shell-and-tube heat exchanger developed for below zero temperatures. It is compliant with European regulations on low GWP, and optimized for R407F and R134a.

