thermofin Coolers for a Danish Meat Processing Plant in China

thermofin is a global leading manufacturer of finned heat exchangers, and was founded in 2002 by Bernd Löffler in Heinsdorfergrund, Germany. Its product range includes evaporators, condensers, air coolers, dry coolers, and heat exchanger coils.

In 2018, thermofin opened its first plant in China, primarily to contribute to and support businesses and communications in the Asian and Australian markets. As one of such business examples, thermofin provided its coolers to a meat processing plant in China established by Denmark-based Danish Crown group.



Danish Crown establishes its first production base in China

The Danish Crown group is one of the largest pork slaughtering and processing companies in Europe and is the second-largest in the world, according to the company. The Denmark-based company has many global locations including France, Germany, Sweden, the Netherlands, Poland, and the United Kingdom, with market access to more than 130 countries around the world. In China, Danish Crown opened its first production base in 2019. The 17,000-m² plant is located in Pinghu City, 100 km from Shanghai, in the neighborhood of thermofin China.

With 150 employees, Danish Crown in China carries out production in two shifts. The plant is initially able to process 14,500 tons of meat per year, which can be expanded to 25,000 tons. Danish Crown has been successfully exporting pork from Denmark to China for 20 years, focusing on wholesalers and the meat processing industry. According to the managing director, Danish Crown's fresh and processed meat shipped from Denmark is supplied to almost 24 million Shanghai residents and around 80 million people living within a 200-km radius of Shanghai.

Danish Crown slaughters pigs and pre-cuts the meat in Denmark. The pieces of meat are then frozen, packed in containers, and shipped to China. Four of these containers leave the factory every hour. Upon arrival in Pinghu, the boxes are first stored and then removed from storage as required and according to the production plan. Before processing, the meat is thawed in a microwave tunnel and then processed into sausage, bacon, ribs or pulled pork. In order to guarantee the quality standard, only pork from Danish livestock farms is processed in Pinghu.

thermofin provided Danish Crown's Pinghu plant with a total of 89 units of sophisticated air coolers and evaporators which are used for cooling rooms and food. Each unit was specifically optimized for each application in order to meet the quality requirements. The heat exchangers were implemented optimally, thanks to careful selection of the components and refrigerants as well as the properties designated for the plant.

A total of 1.6 MW cooling capacity is provided for the precise temperature control of products and process rooms.

Of them, the 1.4 MW cooling capacity serves the processing rooms using air coolers: TGB and TGDB commercial series and TGN and TGDN industrial series.



thermofin air coolers with double coil

The TGP series glycol air cooler was used in particularly sensitive rooms, thanks to its quiet and low-draft operation.

Furthermore, the air coolers have very flat surfaces that are easy to clean, along with low air speeds, and improved dehumidification performance. The insulated trays prevent the formation of condensate water drops. The air is drawn in at the front and blown out horizontally on both sides through the coil, which results soft and draft-free operation. Optionally, the devices can be equipped with air filters to ensure better protection against contamination.



thermofin TGP air coolers for process rooms

In addition, a heat recovery system was integrated into the high-pressure side of the mediumtemperature system. It heats water in an 80-m³ storage tank, and the hot water is used for cleaning the production areas and for the sanitary facilities, minimizing the water and energy consumption of the cooling towers. The high-pressure side of the low-temperature system supplies the underfloor heating and provides hot brine for defrosting the evaporators.

On the low-pressure side, the system is divided into three temperature ranges: -36, -18, and -8° C. Direct evaporators cool the air in the low-temperature range and the medium-temperature range with room temperatures of 2 to 20° C and thermofin propylene glycol air coolers cool the air with the temperature down to -6° C.



thermofin ceiling-mounted air coolers

In addition, X-TEN type blast freezers were used in the -36°C sector. The X-TEN blast freezer passes cold air through a shelf, on which the meat contained in boxes to freeze. The customized coil dimension is designed to fit the freezing room in order to make full use of the inner space of the freezer and achieve a high air circulation ratio.

In the deep frozen storage facility, which serves as a buffer between delivery and processing, X-TEN type evaporators ensure optimal temperatures.

These thermofin products help Danish Crown's meat to be recognized as a premium brand in China and will expand its customer base to retailers in addition to meat wholesale and processing companies.

MARKET NEWS

Evergreen Line Shipping Company Adds 2,000 PrimeLINE Units to Fleet

Taiwan-based shipping company Evergreen Line recently added 2,000 Carrier Transicold PrimeLINE units to its refrigerated container fleet, citing industry-leading energy efficiency and reliability of the model.

"Our PrimeLINE units have been the bestselling model for 13 years and have a strong following due to their reliability and energyefficiency, which remains Evergreen Line's preferred option to offer their customers the most sustainable solutions," said Andrew See, general manager, Global Container Refrigeration, Greater China, Carrier Transicold.

PrimeLINE units are regarded for best-in-class refrigeration performance and industry-leading energy efficiency, including rapid temperature pull-down, tight temperature control, high air-flow performance and low cost of ownership.



Carrier Transicold's PrimeLINE units are adopted by Evergreen Line

EuroventSummit Postponed until October 2021



Owing to the ongoing COVID-19 outbreak, the organizers of the EuroventSummit have announced the postponement of its upcoming edition until 2021. Initially scheduled for September 2020, it will now take place from October 12 to 15, 2021 in Antalya, Turkey, and will be organized by the Eurovent Association, Eurovent Certita Certification, Eurovent Market Intelligence, COPILOT, PRODBIM, and ISKID, Turkey's air conditioning and refrigeration manufacturers' association.

The EuroventSummit is Europe's major gathering for heating, ventilation, and air conditioning (HVAC), process cooling, and food cold chain technologies, uniting more than 500 key decision-makers from the Europe, the Middle East, and Africa (EMEA) region and beyond.

With the main theme being 'Building Bridges', the focus of the 2021 EuroventSummit will be connecting manufacturers and consultants, planners, installers, trade associations, and policy makers, between Europe, the East, and beyond, towards more sustainable and circular products, and towards more socially and environmentally responsible industry.