

Case Study:

Pork Production Plant, Hull

Dean & Wood and Danfoss support refrigeration upgrade.



Dean & Wood joined forces with manufacturer Danfoss to support contractor SURE Solutions in delivering a major refrigeration upgrade for a state-of-the-art pork production facility in Hull. The plant produces own-brand gourmet sausages for supply to UK grocery retailers, the food-to-go sector and other foodservice outlets, including a substantial export business.

When the customer required additional refrigeration plant to support a significant increase in production, Wirral-based SURE was chosen to oversee the project as part of a multi-million pound site investment, with operation maintained throughout the installation period.

With a design brief to provide a dual low-temperature and high-temperature system to cool spiral freezers, impingement freezers, cold stores and a HT glycol chilling system, **SURE Solutions Managing Director Garry Shaw** and his team had to take a number of key requirements into consideration when selecting industrial ammonia valves and associated products.

Energy efficiency and reliability were crucial for the project, while the quality of the product meant it was imperative that the correct type of equipment was specified and used.

Dean & Wood parent company Beijer Ref recently opened a new Industrial Academy in Preston as a joint venture with Danfoss and the strong working partnership saw D&W supply the Danfoss plate heat exchangers for the facility's glycol system and heat recovery side of the ammonia system, alongside Danfoss glycol valves and inverters. Danfoss supplied the drive units direct.

Case Study: Pork Production Plant, Hull



Garry Shaw, SURE Solutions Managing Director, said:

“The project represented a multiple product partnership between Dean & Wood, Danfoss and SURE Solutions. We chose Danfoss/Dean & Wood because they were offering the widest range of available equipment, highest quality and strong technical support.

Our engineering team are well versed in the Danfoss industrial product range and are confident in their quality and reliability, which we believe are the best available on the market.”

Darren Ditchfield, National Sales Manager for Industrial Refrigeration (Dean & Wood), who worked closely with SURE Solutions on the project, said:

“Our involvement was to liaise with Danfoss to provide the most cost-effective solution for the plate heat exchangers required, which have been amongst the first for Danfoss since they started to supply into the UK.

It was also imperative along with the PHE that the large, detailed inventory of industrial valves were also delivered in co-ordinated stages on the specific direction of SURE Solutions within the timescale promised, so the whole fabrication process for the valve stations was also completed as originally requested.”



PRODUCT BENEFITS

Valves

- The Danfoss ICV Flexline valve family includes ICM motor control, ICS piloted controlled servo valves and ICLX 2-step servo-operated valves. The valve variants are based on one common valve body to offer outstanding flexibility.
- The modular concept of the ICV Flexline enables the building of a valve that offers energy savings and a reduction of downtime. All valves are designed for maximum and future high-pressure refrigerants.
- ICV Flexline valves are quick and simple to install. Due to their low weight and compact design, they are easy to handle, and the direct coupled connections reduce the risk of leaks and require no use of flanges.
- The Danfoss SVA stop valve range designed to ensure perfect closing and withstand a high system pulsation and vibration, which can be present specifically in the discharge line.

Plate heat exchangers

Danfoss semi-welded plate heat exchangers were selected to optimise plant operation and configuration alongside Danfoss valves. They also come with glue-free gaskets to simplify future maintenance.

The new plate design delivers excellent heat transfer capabilities and improves thermal heat transfer and performance. It also ensures strength and stability. All Danfoss plate heat exchangers go through a rigorous helium leak test to ensure maximum safety on site and the overall longevity that the plant required.

Working directly with the Danfoss factory, the exchange of information regarding what was required reduced time and prevented errors in specification.

- SURE Solutions was named ACR Contractor the Year at the 2023 National ACR & HP Awards, with Beijer Ref named Training Provider of the Year.

- To find out more about the new Beijer Ref/Danfoss Industrial Academy, visit <https://www.beijerrefacademy.co.uk/>

For more details about our range, please contact your local dean&wood branch today.