



The Customer

First Milk, the UK's only major dairy company which is 100% owned by British farmers, turned to ACE Refrigeration for a new energy efficiency project at their Cowdenbeath site. The Glenfield Dairy is a major supplier to the retail and foodservice markets, through the production of Quark, cottage cheese and sour cream. Food processing experts ACE Refrigeration were tasked with replacing dated equipment which had become inefficient and was no longer working to full capacity in the Main Chill area.

ACE Refrigeration - Manufacturer Independence

Established in Glasgow in 1951, our knowledge, breadth of experience and professional indemnity enable us to have a very flexible approach to projects and working partnerships. Manufacturer independence gave ACE the ability to source from a large pool of top quality worldwide manufacturers allowing us to find the best solution to service First Milk's specialist requirements, offering the reliability and energy saving results required by the customer, all within budget.

Indemnified Design

The design department at ACE met the challenge to provide a cost effective replacement refrigeration system which also gave consideration to external noise restrictions.

Key Project

The existing condensers were located within the roof void which was warm and reduced the capabilities of the system. ACE engineers placed the new compressors on a mezzanine level where there is adequate ventilation and also installed a low noise condenser. Because the surface area of the condenser is larger, lower noise levels can be achieved without compromising on performance.

Internally there are also two mini compressor packs which have been designed with a finer level of control built in using electronic expansion valves. This means output can meet demand, allowing for the ability to switch off half of the compressor when production is reduced so that the plant runs more efficiently with less power outage.

Shortly after project completion, ACE received a further order for additional sensors to be connected to a data manager control system allowing for continuous mapping of the Main Chill Area with all sensors calibrated to UKAS standard.

The use of electronic expansion valves in commercial and industrial refrigeration has been instrumental in introducing a high-precision, stable and reliable control of refrigerant flow and a resulting increase in efficiency.

Energy Efficiency

For some organisations, refrigeration costs can represent more than 50 % of their energy bill, and 20 % of that can be wastage. A modern and energy-efficient refrigeration system will help save you money; we know where energy savings can be made and how to get cost-effective and efficient systems up and running in your business.

Service & Maintenance

Our service & maintenance departments have dedicated teams of fully qualified service & maintenance engineers who work together to achieve a service which is fast, effective and reliable. Our reputation has been built upon our attention to detail and rapid reaction times. To help minimise equipment breakdown and the inevitable disruption to your operation, we offer highly competitive maintenance contracts, individually tailored to meet your needs.

Other Clients in the Food Processing Industry

We have carried out major design and installation projects for cold rooms and freezer rooms, ice generators, chilled production facilities and blast chillers and freezers for food processors, bakeries, dairy companies, the fish and seafood industry, the meat business and fruit and vegetable sectors throughout the country. Customers include:

- 2Sisters Food Group
- Albert Bartlett Potatoes
- Glenrath Farms
- Associated Seafoods
- Castle MacLellan
- Braehead SFO
- Campbell's Prime Meats
- Caledonia Cheese
- Drysdale's Vegetables
- Galloway Seafoods
- Inverawe Smokehouse
- Marine Harvest
- McGhee's Family Bakers

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