

STAR HELPS £80 MILLION DAIRY KEEP ITS COOL

Star Refrigeration has installed an energy efficient cooling plant for Robert Wiseman Dairies, at its brand new £80million facility in Somerset.

Star developed the state-of-the-art cooling solution for Robert Wiseman Dairies' (RWD) new milk production facility in Bridgwater, Somerset. With eight processing dairies nationwide, RWD procures, produces and delivers liquid milk to major multiples and independent retailers throughout Great Britain.

RWD has a strong record of investing in new facilities to create the UK's most efficient and environmentally friendly dairies. The company's new facility in Bridgwater has been designed to produce 500 million litres of milk per year and features a number of innovative technologies to increase energy efficiency and reduce carbon emissions.

RWD wanted the Bridgwater facility to feature a high efficiency cooling plant, which operated on natural, environmentally conscious refrigerant. Following a competitive tender process, Star worked closely with RWD in a contract valued at over £1.5million.

Star's cooling solution for the Bridgwater site comprised a high efficiency process cooling and

cold room refrigeration system. The system operates with natural ammonia as the primary refrigerant, cooling a glycol secondary fluid.

The refrigeration plant has a total cooling capacity of over 3MW covering both process and cold room cooling requirements. In addition, Star's Envitherm transcritical CO2 heat pump provides high grade heat recovery for office and water cooling.



Main refrigeration plant room featuring the ammonia screw compressors

Energy efficient design features include inverter driven motors, floating head pressure control, economised screw compressors and heat recovery for warm glycol cooler defrosting. These provide RWD with an annual running cost saving of over £80k, when compared to a typical system design.

Star Refrigeration Sales Director Rob Lamb says; "The Robert Wiseman Dairies project demonstrates how energy efficiency benefits and running cost

savings can be applied to large capacity cooling systems.”

The refrigeration plant is located on the first floor of an adjacent plant room. The plant layout is carefully designed to minimise footprint but provide sufficient access for equipment servicing.

The plant features Star built screw compressor packages and surge drum, connected to evaporative condenser and plate heat exchanger evaporators. It also features variable speed process and evaporator pumps, cold room coolers and an Allen Bradley PLC linked to the main dairy control system. Star-owned mechanical and electrical contractor Penec was responsible for site wiring and control panels.

focuses on the design, manufacture, installation, commissioning and maintenance of industrial refrigeration systems. The company offers a turnkey package to all users of refrigeration plant.

Star's technical advisory arm, Star Technical Solutions (STS), operates as an independent consultancy providing advice on refrigeration engineering issues. Star also owns food freezing and chilling equipment specialist Starfrost, as well as mechanical and electrical contractors Penec.

For more information, phone Star Refrigeration on 0141 638 7916, email star@star-ref.co.uk or visit www.star-ref.co.uk. Star Refrigeration, Thornliebank Industrial Estate, Glasgow G46 8JW.



Wiseman Dairy chill store

Star Refrigeration is the UK's largest independent industrial refrigeration engineering company. Star

				
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