

CASE STUDY

ROCHE PRODUCTS, WELWYN GARDEN CITY

STAR'S SHINING EXAMPLE AT HEALTHCARE HQ

Cooling solutions specialist Star Refrigeration has completed work as part of an award-winning project for Roche Products, one of the world's leading healthcare groups.

Star designed and installed an environmentally advanced and energy efficient cooling system for the building air conditioning at Roche's new UK headquarters. The state-of-the-art facility in Hertfordshire houses the company's pharmaceutical business, which provides products and services for the prevention, diagnosis and treatment of disease.



Artist Impression of UK Headquarters For Roche Products

Environmental sustainability was a guiding principle in the design and construction of Roche's new headquarters at Shire Park in Welwyn Garden City. Energy efficient cooling for the building's air conditioning system was key to achieving the high

environmental standard and reduced carbon emission levels required.

The Project Team including Roche, Meica, and BD chose Star as the team's refrigeration engineering partner. Star specialises in the design, manufacture, installation and operation of highly energy efficient refrigeration systems. The company is renowned for pioneering natural refrigerant solutions to meet the changing needs of customers.

Star developed a total of five high efficiency chillers to meet the air conditioning and cooling requirements at the Roche headquarters. The project has just received a major award within the refrigeration and air conditioning industry. Cooling Industry Award judges praised the installation for pushing forward the boundaries of environmentally friendlier technology.

Andy Pearson, Managing Director of Star Refrigeration says: "Star worked closely with Roche and its project partners to combine several environmental themes with innovative thinking and high quality engineering. Every aspect of the project was conceived with care for the local and global environment. We are proud to have played a key role in providing efficient, reliable and future-proof cooling solutions for a world class facility."

Star designed and installed two packaged ammonia chillers for general building cooling at the Roche headquarters. The chillers are located on the roof of the building and feature ambient air-cooled condensers to boost efficiency. Each ammonia chiller has a cooling capacity of 930kW.

Three hydrocarbon chillers were also developed to serve computer cooling requirements on site. The chillers operate with improved performance at average ambient temperature conditions. Each hydrocarbon chiller has a cooling capacity of 130kW.



Star Refrigeration Ammonia Chillers

All five chillers are fitted with leak detection and alarm systems to minimise health and safety risks. Each chiller features a computerised PLC control system to ensure built-in reliability and continuous operation.

The Roche project received the 'Installation of the Year Award – Commercial' in the Cool Industry Awards 2005. A recent independent report also verified that the new building has achieved CO2 emission levels around 20 per cent below the current Building Regulations target

Roche's new UK headquarters is a 21,800sqm building located on a 10 acre site. The state-of-the-art facility features a health and fitness centre, library, restaurant and café. The building houses around 1,200 Roche staff.

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

