

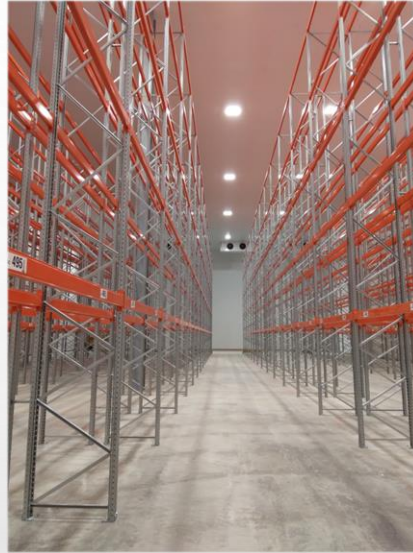
LARGE CHILL STORE

Orwell Design Associates were awarded the contract to design refrigeration equipment for a new site in the Northwest of England. As it was the first project for us with this client, it was very important to understand their needs, requirements and expectations.

The client required a +4°C chill store to hold a variety of products for distribution to retail food stores.

Two Space Pack CO₂ refrigeration systems were selected, to offer resilience and remove any potential 'single point of failure'.

The packaged equipment has multiple compressors to improve the operating efficiency of the systems, particularly at part load or when the ambient temperature is below the design ambient.



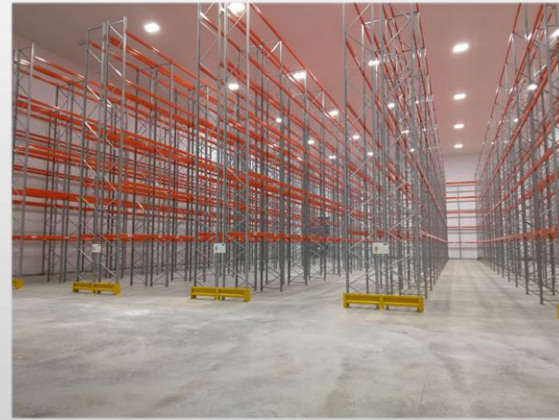
Each of the ECO2 MAXI 4x0 HT compressor packs had 3no Bitzer 4GTE-20K and 1no Bitzer 4GTE-30k compressors. Both packs were supplied within a housed walk-in.

To meet the cooling load and match the design criteria, the chill store required 4off ceiling mounted evaporators, with an equal split between the refrigeration systems. Each evaporator was fitted with off cycle defrost. The control panels were positioned in the roof void



Each system was connected to a CO₂ Güntner Gas Cooler. Both were oversized to cope with extreme conditions and has increased corrosion protection to extend the life of the equipment.

For controls and front-end system, Space supplied and installed an RDM Active FM monitoring system with a remote dial out on a 3G router.



The project was a success, and we are looking forward to working with them on future refrigeration designs.