Case Study



Dexion workers chill out in Brisbane.





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Dexion pulled out all stops to help P&O and its project manager, Wiley and Company, complete and commission a new cold store in the Brisbane suburb of Murarrie.

Murarrie 2, as it is known, is right next door to P&O's Murarrie 1 cold store.

The innovative new facility was purpose built to suit the requirements of its primary customer, Chrisco Hampers Australia.

One of these requirements was that it had to be up and running in time for the Christmas 2003 trading season.

P&O's Operations Manager, Jeff Hogarth, said the modular design of the new facility enabled fast construction and staged completion to meet the deadline.

"The first ground was turned in March 2003 and we were loading product by the end of August.

"The Dexion people were racking some rooms while others were still being finished and the last racking was being installed while we were loading product into the finished rooms. "Some of the Dexion guys were actually working in the cold!

"Dexion delivered everything when required. This enabled the site to be handed over to P&O in plenty of time to handle Chrisco's pre-Christmas business peak." Jeff Hogarth said.

The Murarrie 2 facility introduces an innovative "inside-out" concept.

It does not have the traditional cold room panels on the outside and refrigeration units in cold rooms.

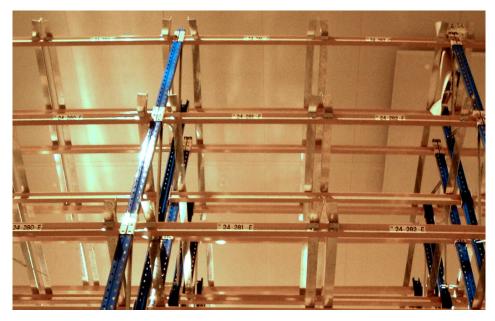
Instead it is built like a giant car port with an outer steel frame and an over-roof.

Cold rooms are built inside this structure with the refrigeration units above the cold rooms and under the "over-roof".

Construction was a little more expensive than for a traditional design but the new system provided a number of advantages including faster construction.

Taking the refrigeration units out of the cold rooms and putting them under the





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over-roof cleaned up the interiors and allowed more racking to be fitted and more product to be stored in the same area.

The majority of the maintenance to evaporators, lighting, smoke detectors, ammonia lines, etc is carried out above the cold rooms, under the over-roof.

This means that workers don't have the problem of working in the cold and the cold rooms do not have to be taken out of service for maintenance.

Work can be performed at any time without disrupting the normal operation of the facility.

Murarrie 2 has a capacity of 10,800 pallets, an extra large loading dock and an attached packing dock. Some of the rooms are dedicated to export shipments.

The cold rooms can be run as chillers, at temperatures between +20C and +40C, or as freezers between -200C and -240C. A confectionery room runs between +100C and +140C while the dock is maintained between +20C and +40C. In addition to providing storage, the facility picks and packs hampers for Chrisco. This involves replenishment from the cold rooms to the packing dock and then return to the rooms.

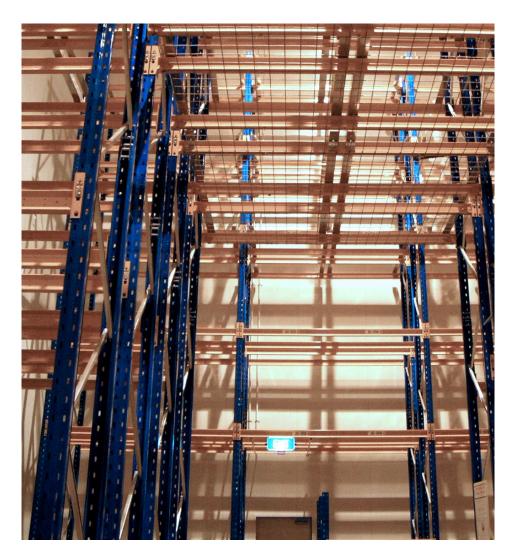
In peak periods, Murarrie 2 manages up to 500 pallets in and out per day for Chrisco and a number of other clients.

The 10,080 pallet positions are on a combination of Dexion single-select and double deep racking.

In each of the two main storage rooms, double deep racking holds just over 2,200 pallets.

A Dexion I-beam pallet racking system was installed and the double deep racking is fitted with heavier duty clips that were specially developed to hold the rail system.

There are six storage levels with a top level of 9.2m in the single select racking sections. The double-deep sections have seven storage levels, the first just 300mm above floor level.



Dexion also supplied an upright protector, specifically designed for this project, which incorporates a rubber washer to withstand impact loads.

Operational safety is enhanced by mesh

beneath drive-unders and heavier duty pallet back stops.

Completion of the Murarrie 2 facility in near record time was a tribute to the co-ordinated efforts of P&O, Wiley & Company and Dexion.