



Munters evaporative humidification helps maintain food freshness

Woolworths distribution center, Australia



The iconic Australian supermarket chain Woolworths opened their first store in Sydney in 1924. In 2013, there were 1,063 supermarket stores in Australia and New Zealand, and they plan to open 20-30 stores every year.

Woolworths is one of the biggest companies in Australia, based upon annual revenue and market share, which is 39% in Australia.

Located at Perth Airport, Woolworths' Distribution Centre (DC) tackles the mind boggling logistical challenge of coordinating supplies from farms to supermarket shelves across the state.

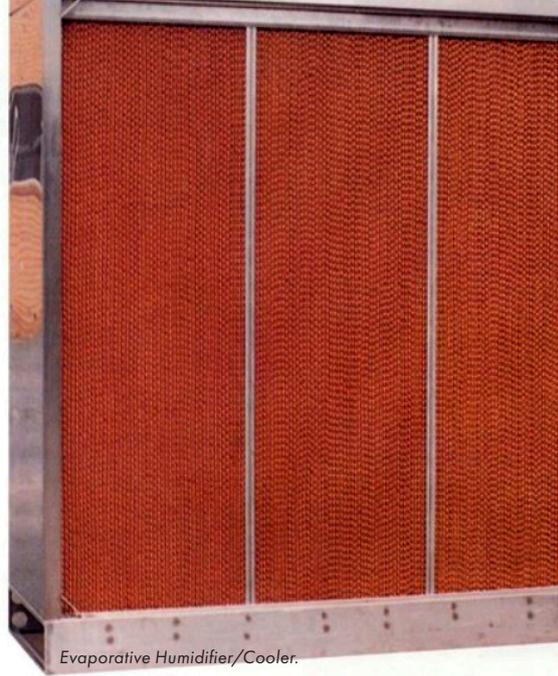
The 81,500 square metre distribution center is the hub that links Woolworths' network of farmers to its 85 WA stores, from Broome in the north to Esperance 2910km to the south. There are three quality controllers who randomly check the contents of all deliveries, a giant task given that just over 24,000 cartons go through the distribution center every day.

Case study

Woolworths distribution center refrigeration unit humidifier upgrade.

Advantages:

- Humidifiers preserve freshness and shelf life
- Combats the drying effect of refrigeration units
- No additional energy needed to dehumidify refrigerators
- Low water consumption



Temperature and humidity control

Fresh fruit and vegetables are best stored in stable humidity to avoid the drying effects of cooling. To enhance quality and shelf life, Munters was brought in, first at the Perth distribution center, which was the first of six Woolworths regional distribution centers that Munters supported.

Munters experts and engineers assisted in the base design, finding a solution to controlling three separate spaces at 2°C, 7°C and 12°C while maintaining 95% relative humidity. This solution would help preserve freshness and shelf life, since both are maximized by treating goods by their individual storage conditions.

The Munters solution

Munters were brought in by BECA consulting group to install MHI evaporative humidifiers directly into the refrigeration penthouse units, which are above ceiling refrigeration air handling units.

Munters was chosen due to its unique ability to deliver a system that has equal and stable humidity within different temperature zones for each penthouse refrigeration unit.

The Munters solution provides humidity directly to the air handlers, combating the drying effect of the coolers. Air passing through the CELdek® pad is humidified and cooled due to intense contact between the air and the wet, unheated pad surface. The increase in humidity occurs through evaporation alone, without the need for additional energy input. Only a small amount of water is consumed.

Would you like to find out if Munters has a solution for your company too? If so, please visit our website, www.munters.com/food

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