

Keeping your product Realcold

By Rose Northcott

WHEN IT COMES TO TECHNOLOGY to keep fish cold, many New Zealand seafood companies turn to Refrigeration Engineering. The Auckland company is one of the country's largest suppliers of refrigeration systems and a world leader in the development of low temperature chilling and freezing equipment and large multi-temperature refrigeration systems.

Part of the Realcold Group of Companies, Refrigeration Engineering has been designing and manufacturing complete refrigeration systems for the New Zealand and Pacific seafood industries for 53 years, says Robbie Hunt, general manager components division.

"Blast freezers are the most common type of freezer used in the fishing industry," says Robbie. "They are used to freeze fish and other food products ready for storage and can be found in fish processing plants and on board larger fishing vessels throughout New Zealand."

Designed and purpose-built in Refrigeration Engineering's Auckland manufacturing site, he says each blast freezer is customised to suit individual requirements and operating conditions.

"Each client needs a specific brief for it to perform properly for them. Our technical department can accurately interpret their needs so they end up buying a product that performs for them."

The top of the range is a very cold (-60 degrees Celsius), very high tech, blast freezer. This model has yet to be sold in New Zealand but Robbie says it is in demand in Japan where only the highest technology and quality freezers are used.

He stresses that each company considering a blast freezer will have different requirements and it's vital they understand what the technology is all about before they buy one.

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"There are several variables that impact on the blast freezer required; the kinds and quantities of fish to be frozen, the exact freezing

time of all the fish going into the freezer, and the space and layout available on the vessel or in the factory."

Robbie says Refrigeration Engineering are also specialists in commercial flake ice machines that help extend the shelf life of fresh chilled fish and keep it looking good.

"Flake ice always melts at 0 degrees Celsius, so it can keep products such as fresh fish at the temperature without freezing it. The temperature can be controlled accurately by adding or removing flake ice."

Refrigeration Engineering custom-builds and installs the Geneglace range of flake ice systems.

Robbie says in recent years there's been an upsurge in interest in the machines as markets for New Zealand chilled fish take off in the likes of Europe and the USA.

"As the flakes are very thin in relation to their large surface area, this provides highly efficient thermal exchange to ensure faster cooling of the fish.

"At sea, fish must be chilled as soon as it is caught and then cooled immediately to 0 degrees Celsius. With no break in the cold chain, its shelf life is considerably extended." ■

in New Zealand and is aiming eventually to have high saturation chilling systems on board all its vessels.

Chris actively looks for new and different option of applying current technologies to improve the cool chain management.

“We found this high saturation refrigeration system on the internet and thought it was worth investigating. I spent some time looking at it and talked to the people that produce it and agreed to give it a try. It’s exceeding what I thought it would do in the way it looks after the quality of the fish.”

“There’s been a lot of education in the fishing industry ... everyone along the chain now has an improved knowledge and understanding of how the cold chain works and its importance – the quality and value it adds to the product.” – Dion Muollo, Deep Blue Seafoods

Deep Blue Seafood director Dion Muollo has seen a massive improvement in product quality in the 12 years he’s owned the business and he attributes that largely to a much better understanding of the cold chain by everyone involved in the process.

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