

Big plans for one of NZ's Cook Strait ferries



“Jumboisation” of vessels is a relatively new concept to the New Zealand marine industry – but our local suppliers have certainly proved up to the challenge. MID was a key player in the successful scoping project to expand the Interislander’s Aratere ferry.

The vessel

Built in Spain in 1998, the Aratere is a roll-on roll-off rail, vehicle and passenger ferry operating between New Zealand’s North and South Islands. She is owned by Interislander, one of the largest operators of train ferries in the world.

The name Aratere means “Quick Path” in Maori. The Aratere celebrated her 20,000th crossing of the Cook Strait in late 2009, having travelled around 2 million kilometres. She operates six crossings each day – three passenger, three freight.

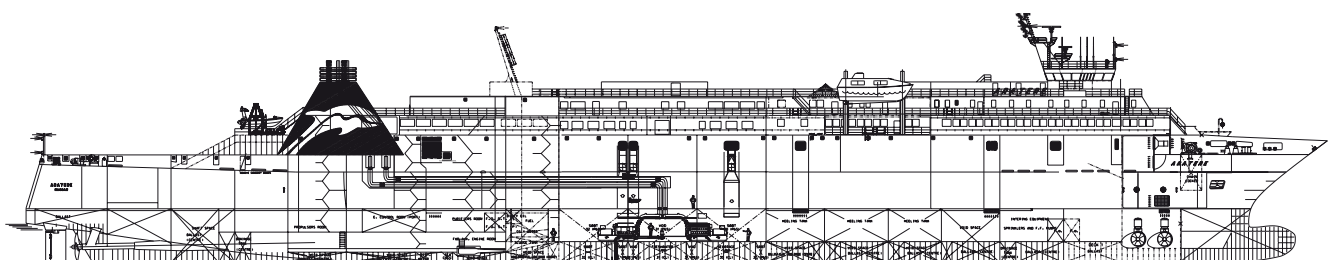
To better meet the growing business needs of the operation, plans have been made to undertake a “jumboisation” of the Aratere. Adding an extra 30m section, and two new engines, will increase safety improve efficiency and create additional usable space for rail, vehicles and passengers.

“They are extremely competent. They’re very knowledgeable, and they understand ships.”

Peter Clarke, Interislander

The task for MID

According to Peter Clarke, General Manager of Interislander’s Shipping Services: “Our strategy is to have ships that are long-term assets - that will continue to fit the business as we grow it. We made the decision to jumboise the Aratere rather than commission another vessel.”



The jumboisation will create space for an extra 40 cars, 250+ passengers, and 120 lane metres for rail and commercial vehicles. Two additional engines will help take the load off the main propulsion engines, and optimise efficiencies.

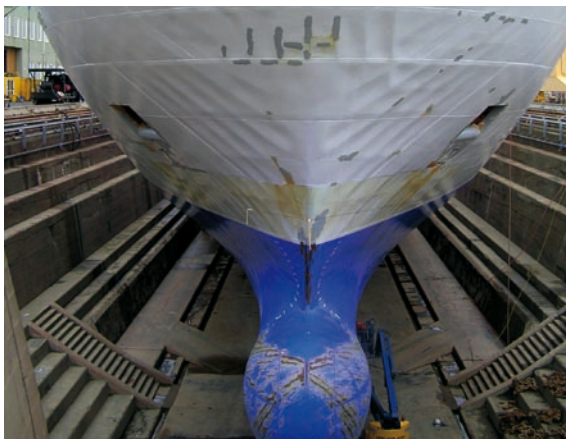
“We currently have four main engines, and run 6,000 hours a year on each. We have to have some redundancy – anything less than 3 engines and schedule integrity is comprised.”

MID was one of three NZ-based suppliers engaged by Interislander to plan the jumboisation project. They were responsible for engineering design for all ship systems that are affected by the expansion, including all systems required for the additional machinery room.

“The Aratere is like a small town on water,” says Peter Clarke. “All of the systems are affected in some way or other – from sewage, lighting, water, heating, gas supply and cooking facilities.”

The results

Peter Clarke says the jumboisation project affects almost every aspect of the vessel. And although jumboisation is fairly common in Europe, it was a new type of project for the local industry.



“MID has certainly delivered everything, in a timeframe that has sometimes been extremely tight. Their level of service is fantastic”

Peter Clarke, Interislander

PROJECT OVERVIEW

Main features

- Sewage, air, water & gas supply
- Heating, ventilation & lighting
- Cooking facilities for the 400-person restaurant
- An upgrade of the safety system

Name of vessel: Aratere

Owner: Interislander, which is owned by KiwiRail

Current size: 150m long, 12,596 tonnes

Current capacity: 360 passengers, 515 vehicle lane metres, 1,740 tonne rail

Jumboisation: an additional 30m section of vessel, and two additional generators (2.8MW) for redundancy

Project team: Newall Marine Services (Project Mgmt), Sea Spark (Naval Architecture) Lightning NA (Safety & Interiors) MID (systems engineering).

“Although there is no one entity that can do it all in NZ, this project has proved it’s possible to pull together the resources to make it happen here. We have the resource base – it’s just a matter of assembling the right people.”

In describing the expertise of MID, Peter Clarke says: “They are extremely competent. They’re very knowledgeable, and they understand ships.” MID also proved adaptable in responding to the changing scope of the project – which was altered part way from a 20m to 30m jumboisation. Working remotely from the ship and the project team was also handled smoothly.

“MID has certainly delivered everything we’ve asked them to deliver, and in a timeframe that has sometimes been extremely tight. Their level of service is fantastic.”



Aratere in Auckland for pre-jumboisation docking