

KORORĀ

BIGGER IS BETTER



A 34-metre aluminium catamaran is the first of a two vessel repeat order for a New Zealand passenger ferry operator.

In survey to Maritime New Zealand requirements, the vessel represents continued collaboration between operator Fullers Group, designer Incat Crowther and builder Q-West. A near sister ship to *Te Kotuku*, delivered in 2014, *Kororā* will operate in Auckland and the adjacent coastal areas and evolves the design with the addition of a sundeck and an increase in passenger capacity from 335 to a total of 401.

Constructed at Q-West's Whanganui yard on the west coast of the New Zealand's North Island, she is built from 5083 grade marine aluminium and, as is

common with vessels from the designer, a significant amount of extrusion was used for decking and tunnel plates.

Although originally contracted by Fullers to provide copies of *Te Kotuku*, it was decided in the very early stages to increase the passenger capacity, which required significant modifications to the vessel's machinery and layout. To achieve the extra passenger capacity the wheelhouse was moved further forward and a large flybridge deck was added. The vessel was also modified to allow for a variety of different berthing options.

The main deck features seating for 178, a large café, luggage racks and wide access doors. Also fitted are two toilets (one of which is handicap-accessible) and racks

for 14 bicycles. The upper deck features 76 exterior seats, which are shaded by the sun deck, and 77 interior seats. An additional bar and pair of toilets are also located on the upper deck. Another level up, the sun deck features a further 70 seats which are accessible via staircase from the aft end of the upper deck. Passenger seating is from Beurteaux whilst lighting, both interior and exterior is from Hella. The interior fitout has been completed with Ayres panels and the Dampa ceiling tile system.

The wheelhouse retains its asymmetric configuration, designed in consideration of the local operational requirements. The frequently used starboard wing control station is enclosed for protection from the

elements, whilst the port side is dedicated to crew access via stairs to the foredeck, which houses palletised cargo and the Palfinger PK4501M deck crane.

Kororā features larger engines than her earlier sister, reflecting increased deadweight capacity and offering improved performance and engine longevity. 1,044kW Cummins QSK-38 diesels that were installed on *Te Kotuku* have been replaced with Cummins QSK50-M diesels, each 1,342kW at 1,950rpm. The vessel is propelled with conventional 5-blade fixed pitch propellers from Henleys Propellers and demonstrated an average speed of 29 knots at 85 per cent MCR with typical deadweight during sea trials.

11,000 litres of fuel is split between the two hulls with 3,000 litres of freshwater sufficient for on board use. Given the quite stringent environmental laws surrounding water pollution in New Zealand the boat has been designed with excess greywater capacity, up to 4,000 litres can kept until a shore discharge can be arranged.

A dry exhaust system is fitted which along with the engine room air outlets, exits high above the upper deck. This configuration, which reduces corrosion and fumes and noise in passenger areas, is typical of vessels in the Fullers fleet.

Kororā will be joined by a sister ship in 2017, to bring Fuller's fleet of this class of vessels to three.



Kororā

SPECIFICATIONS

Type of vessel:	Ferry
In survey to:	Maritime New Zealand
Home port:	Auckland, NZ
Owner:	Fullers Group, NZ
Designer:	Incat Crowther, NSW
Builder:	Q-West Boat Builders, NZ
Construction material:	Aluminium
Length overall:	34.995 metres
Length waterline:	34.8 metres
Beam:	9.5 metres
Draught:	1.9 metres
Depth:	3.05 metres
Displacement:	151 tonnes
Main engines:	2 x Cummins QSK50-M diesels, each 1,342kW @ 1,950 rpm
Gearboxes:	Twin Disc MGX6848 free standing
Propulsion:	Henleys Propellers, Tiger 5 blade 52.5" diameter
Generators:	2 x Cummins 6B-CP diesels, each 100kVA
Steering:	Hydrive marine steering system
Exhaust system:	Stainless steel dry-stack exhaust system
Maximum speed:	29 knots
Cruising speed:	26 knots
Range:	400nm @ 20 knots (20 hours)
Winch:	Muir AD150 Drum Winch
Anchor:	184kg SHHP POOL TW HDG
Crane:	Palfinger PK4501M
Air Conditioning:	Freezotec Marine
Seating:	Beurteaux
Lighting:	Hella LED
Panelling:	Ayres Panels and Dampa tile ceiling system
Liferafts:	5 x Ferryman 65 Liferafts MNZ-C
Fuel capacity:	2 x 5,500 litres
Freshwater capacity:	3,000 litres
Greywater capacity:	4,000 litres
Crew:	5
Passengers:	401