

Hull 068 (Under Construction)

85m Wave Piercing Catamaran



General Particulars

Yard No: 068

Designer: Revolution Design Pty Ltd.
Builder: Incat Tasmania Pty Ltd.
Class Society: Det Norske Veritas

Certification: DNV + IAI HSLC RI CAR FERRY B EO

Length overall: 84.64m Length outer hulls: 80.00m Beam (overall) 26.62m Draft (design) 3.40m

Speed: approx 40 knots at 200 tonnes DWT

Capacities

Passenger Capacity: 630 persons (passengers and crew)

Passenger Deck - located on one level, Tier 2, is divided into three lounges: Forward lounge: seating areas, bars, male/female toilets and electronics room.

Midship Lounge: seating areas, children's and teenager's rooms, disability toilet/parents room, male/female toilets and crew rooms. Aft Lounge: seating areas, kiosks, pantry and shops.

Vehicle Capacity - 121 car spaces @ 4.5 m long x 2.3 m wide (545 car lane metres) or 330 truck lane metres @ 4.6 m clear height plus 300 sqm @ minimum 4.0 clear height.

The vehicle deck will have a axle load of 13 tonnes (single axle, four wheels) within areas of 4.6m clear height and 2.0 tonnes (single axle, two wheels) on the remainder of the vehicle deck.

Vehicle Access - Vehicles unload from shore based ramps over the stern or by an optional stern quarter ramp from alongside. An optional ramp bow door/ramp will be capable of loading/unloading cars and trucks over the bow.

Tankage

Fuel Oil (main storage) 2 x 30,000 litres
Fuel Oil (main engine header tanks) 2 x 1,240 litres
Fuel Oil (generator header tanks) 2 x 1,240 litres
Fresh Water 1 x 5,000 litres
Black & Grey Water 1 x 5,000 litres
Lube Oil 2 x 1000 litres
Engine Room Oily Water 4 x 160 litres
Aft Hydraulic Oil 2 x 500* litres
Fwd Hydraulic Oil 1 x 350* litres
(Note: *denotes tank content excluded from deadweight)

Construction

Design - Two slender, aluminum hulls connected by a bridging section with center bow structure at fwd end. Each hull is divided into eight vented, watertight compartments divided by transverse bulkheads. Two compartments in each hull are prepared as fuel tanks with additional strengthening on each of the end bulkheads and intermediate tank tops.

Ride Control System

An active ride control system is fitted to maximise passenger comfort. This system combines, active trim tabs aft with an optional retractable T-foil located at the aft end of the centre bow. The optional T-foil system comprises a foundation structure built into the centre bow, a hinge mounted deployable steel T-foil and a hydraulic actuation system.

Safety and Evacuation

Four Marine Evacuation stations (MES) each capable of serving up to a total of 200 persons under normal evacuation, are located on the Tier 2 Passenger Deck (two port and two starboard). Two SOLAS semi-rigid inflatable dinghies with 25hp motor located outboard adjacent to the superstructure with Incat standard approved launch/recovery davits. Lifejackets, fitted with lights and whistle devices, are provided in accordance with international regulations for passengers and crew, including children. Lifebuoys, smoke flares, immersion suits are also provided in accordance with international regulations.

Machinery

Four resiliently mounted MAN 28/33D 12V or Caterpillar C280-16 marine diesel engines, rated at 5400kW each at 100% MCR. Four Wartsila LJX 11000 SR waterjets configured for steering and reverse. Waterjets will be fitted with standard outboard hydraulic steering and reverse actuators. Four ZF gearboxes, with reduction ratios suited for optimum jet shaft speed. A flexible coupling approved by the engine manufacturer will be fitted between each engine and gearbox. Shafting (gearbox to jet) will be steel or composite.

Electrical

Four marine diesel generators rated at 230 ekW each. 415V, 50 Hz, 3 phase, 4 wire distribution with neutral earth allowing 240 volt supply using one phase and one neutral with distribution via distribution boards adjacent to or within the space they serve. Two main switchboards, one in each ante room. Each main switchboard is fitted with a load preferential trip system which automatically sheds non essential loads.