

Hull 058

98m Wave Piercing Ro/Pax Catamaran



General Particulars

Yard No: 0.58

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

DNV 1A1 HSLC R1 Car Ferry "B" EO Certification:

97.22 m Length overall: Length waterline: 92.00 m 26.60 m Beam overall: Beam of Hulls: 4.50 m Draft: 3.43 m

Speed: 38 knots at 744 tonnes deadweight

Note - All speeds quoted at 100% MCR 4 x 7080 kW @ 1030 rpm without deployment of T-foil, with clean underwater parts and in water depths of 10 metres to 50 metres.

Capacities

Max Deadweight - approx 744 tonnes

Passenger Capacity - 900 persons (including crew)

Passenger Deck - located on one level, the Passenger Deck is divided into three lounges:

Aft Lounge with seating areas, Bar, Office, Disability Toilet/Mothers Room and Male/Female Toilets.

Midship Lounge with seating areas, Kiosk, Food Preparation Area and Shop.

Forward Lounge with seating areas, Club Class Lounge, Bar, Male/Female Toilets, Children's Play area, Lower Wheelhouse,

Crew Room and Crew Wash Room.

Vehicle Capacity - 380 truck lane metres at 3.1 m wide and 4.35m clear height plus $80\ cars$ at $4.5m\ length$ x 2.3m wide or $267\ cars$ only using optional mezzanine decks.

Axle loads - Transom to Frame 49 - 10 tonnes per dual wheel axle or axle groups to suit European standards. Fwd of Frame 49 Ramp A to D - 0.8 tonnes per single tyre/single axle group.

Tankage

Fuel Oil - 190,080 litres (plus 420,467 litres in long range tanks) Fresh Water - 10,000 litres Sewage - 9,000 litres Lube Oil - 2 x 1500 litres

ER Oily Water - $2 \times 150/1600$ litres Genset Fuel Oil - 2 x 850 litres*

Construction

Design - Two slender, aluminum hulls connected by a bridging section with center bow structure at fwd end. Each hull is divided into nine vented, watertight compartments divided by transverse bulkheads. Two compartments in each hull prepared as short-range fuel tanks and one as a long-range fuel

Air Conditioning

Sanyo reverse cycle heat pump units throughout capable of maintaining between 20-22 deg C and 50% RH with a full passenger load and ambient temperature of 35 deg C and 50 % RH.

Saftey and Evacuation

Escape is via Four Marine Evacuation Stations, two port and two starboard. The two forward MES serve a total of 200 persons each and the two aft MES can serve up to a total of 300 persons each. A total of ten 100-person rafts are fitted. 2 x SOLAS inflatable dingly with 30 hp motor and approved launch / recovery method.

Machinery Installations

Main Engines - $4\,\mathrm{x}$ resiliently mounted Ruston 16RK270 marine diesel engines, each rated at 7080 kW at 1030 rpm.

Water Jets - 4 x Lips 120E waterjets configured for steering and reverse.

Transmission - 4 x Reintjes VLJ 6831 gearboxes, approved by the engine manufacturer, with reduction ratio suited for optimum jet shaft speed.

Hydraulics - Three hydraulic power packs, one forward and two aft, all alarmed for low level, high temperature and filter clog and low pressure. One pressure line filter and two return line filters fitted. An off-line filter / pump provided.

Ride Control - A 'Maritime Dynamics' active ride control system is fitted to maximise passenger comfort. This system combines active trim tabs aft and optional folddown T-foil located at aft end of centre bow fitted with active fins. The structural abutment, electrical and hydraulic services to receive the fwd T-foil will be fitted as standard to the vessel.

Electrical Installations

Alternators - 4 x Cummins N14 265 kW (nominal) marine, brushless, selfexcited alternators.

Distribution - 415V, 50 Hz. 3 phase. 4 wire distribution with neutral earth allowing 240 volt supply using one phase and one neutral. Distribution via distribution boards adjacent to or within the space they serve.