

Hull 053

96m Wave Piercing Ro/Pax Catamaran



General Particulars

Yard No: 053

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

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

Length overall: 95.47m Length waterline: 86.00m Beam overall: 26.60m Beam of Hulls: 4.50m Draft: 4.01m

Speed: 38 knots at 728 tonnes deadweight 46.7 knots at lightship

Note - All speeds quoted at 100% MCR 4×7200 kW @ 1050 rpm without deployment of T-foil, with clean underwater parts and in water depths of 10 metres to 50 metres.

Capacities

Max Deadweight - 718 tonnes

Passenger Capacity - 900 persons (including crew)

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

- Äft Lounge with First and Economy Class seating areas, Bar, Male/ Female Toilets, Guides Room, Children's Play Area and exterior Passenger Deck.
- Midship Lounge with seating areas, Kiosk, Food Preparation Area, Disability Toilet/Mothers Room, Shop and Passenger Entry Doors.
- Forward Lounge with seating areas, Bar, Male/Female Toilets, Crew Room including Crew Wash Room, Lower Wheelhouse and Passenger Entry Doors.

Vehicle Capacity - 330 truck lane metres at 3.1m wide \times 4.0m/4.35m clear height plus 80 cars at 4.5m length \times 2.3m wide or 260 cars only using optional mezzanine decks.

Axle loads - Transom to Frame 47 - 10 tonnes per dual wheel axle or axle groups to suit European standards. Fwd of Frame 47 Ramp A to D - 0.8 tonnes per single tyre/single axle group.

Tankage

Fuel Oil - 174,880 litres

(plus 392,856 litres in long range tanks)

Fresh Water - 5,000 litres Sewage - 5,000 litres Lube Oil - 2 x 465 litres ER Oily Water - 2 x 150 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 eight 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 tank.

Air Conditioning

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

Safety and Evacuation

Escape is via Four Marine Evacuation Stations, two port and two starboard and two external stairs aft. Each MES serving a total of 200 persons each and one aft stairs 100 persons. A total of ten 100-person rafts are fitted. 2 x SOLAS inflatable dinghy with 30 hp motor and approved launch / recovery method.

Machinery Installations

Main Engines - $4 \times \text{resiliently}$ mounted Caterpillar 18V 3618 marine diesel engines, each rated at 7200 kW at 1050 rpm.

Water Jets - $4 \times \text{Lips} \ 150/3 \ \text{D}$ waterjets configured for steering and reverse.

Transmission - $4\times$ Reintjes VIJ 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, for running of mooring capstans, anchor winch, ride control, steering/reverse and rescue boat cranes.

Ride Control - A 'Maritime Dynamics' active ride control system is fitted to maximise passenger comfort. This system combines, active trim tabs aft and optional bolt-on T-foils located at fwd end of each outer hull fitted with active fins. The structural abutment, electrical and hydraulic services to receive the fwd T-foils fitted as standard to the vessel.

Monitoring - An electronic alarm and monitoring system with dual central VDU displays, keyboards and printer fitted in the wheelhouse. Alarm and monitoring to meet the requirements of the HSC Code, the HSLC Rules and EO requirements.

Electrical Installations

Alternators - 4 x Caterpillar 3406B 245kW (nominal) marine, brushless, self-excited 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. Distribution to essential services from independent distribution boards supplied from both switchboards

Details provided are based on original design and certification.

For information on Incat representatives in your region contact head office