## Hull 064

## 112 m Wave Piercing Ro/Pax Cafamaran



## General Particulars

## Yard No: 064

Designer: $\quad$ Revolution Design Pty Ltd.
Builder:
Incat Tasmania Pty Ltd.
Class Society:
Certification:
DNV 1 Al HSLC R1 Car Ferry "B" EO
Length overall:
Length waterline:
Beam moulded
Beam of Hulls:
105.60 m
105.60 m
30.50 m
5.80 m

Draft:
Speed:
3.93m
approx 40 knots at 600 DWT
Note - All speeds quoted at $100 \%$ MCR $4 \times 9000$ kW @ 1000 rpm without deployment of T-foil, with clean underwater parts and in water depths of 10 metres to 50 metres.

## Capacities

Max Deadweight - approx 880 tonnes or 1380 at reduced operating conditions.
Passenger Capacity - 800 persons (including crew)
Passenger Deck - located on two levels, the Passenger
Deck is divided into four lounges:
Forward Tier 3 Economy Class Lounge
Midship Tier 3 Entrance Lounge.
Aft Tier 3 Business Class Lounge.
Tier 4 Executive Class Lounge.
Vehicle Capacity - 450 truck lane metres at 3.1 m wide and 4.35 m clear height plus 193 cars at 4.5 m length $\times 2.3 \mathrm{~m}$ wide or 355 cars only.

Axle loads - Tier 1-12 tonne (single axle dual wheel) between transom and frame 72, CL to 7100 and between Transom and frame 63 outboard of 7100 . 9.0 tonnes (single axle dual wheel) FWD. of frame 63 (outboard of 7100 only) and fud. of frame 72. Tier 2-9 tonne (single axle dual wheel) between Transom and frame 21. 2.0 tonnes between frame 21 and 76.

## Tankage

Fuel Oil - 900,000 litres
Fresh Water - 10,000 litres
Sewage - 5,000 litres
Lube Oil $-2 \times 1000$ litres
ER Oily Water - $4 \times 150$ litres
Genset Fuel Oil - $2 \times 1238$ 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 shortrange 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 load and ambient temperature of 35 deg C and $60 \% \mathrm{RH}$.

## Safety 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 a total of 300 persons each. A total of nine 100-person rafts are fitted. $2 \times$ SOLAS inflatable dinghy with 30 hp motor and approved launch / recovery method.

## Machinery Installations

Main Engines - $4 \times$ resiliently mounted MAN 28/33D marine diesel engines, each rated at 9000 kW .

Water Jets - $4 \times$ Wartsila LJX 1500 wateriets configured for steering and reverse.

Transmission - $4 \times$ ZF60000 NR2H 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 - $4 \times$ MAN D 2876 LE $301 / H C N 534$ C 360 kW (nominal) marine, brushless, self-excited alternators.

Distribution $-415 \mathrm{~V}, 60 \mathrm{~Hz} .3$ 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.

