

### **General Particulars**

Builder:	Incat Tasmania Pty Ltd.
Class Society:	Det Norske Veritas
Certification:	DNV +1A1 HSLC R1 Car Ferry "B" EO
Length overall:	81.15m
Length waterline:	66.30m
Beam overall:	26.00m
Beam of Hulls:	4.33m
Draft:	3.00m approx. in salt water
Service Speed:	38 knots
Lightship Speed:	44 knots

\*Note - All speeds quoted at 100% MCR (4  $\times$  7080kw @ 1030 rpm) and excluding T-foil.

# Capacities

Max Deadweight - 320 tonnes (approximate dependent on building specification).

Total persons - up to 700 persons

Vehicle Capacity - 181 cars at 4.5m length x 2.3m wide.

- Axle loads<sup>-</sup> Transom to Frame 14 9 tonnes per axle group, Frame 14 35 2 tonnes per axle group and fwd of Frame 35 and vehicle ramps 0.8 tonnes per axle group.
- Fuel Capacity 4 x 12.0m3 integral aluminium tank and additional longrange tank provided in each hull.

Fresh Water 1 x 5000 litre GRP tank.

Sewage 1 x 5000 litre GRP tank.

### 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. One compartment in each hull prepared as short-range fuel tanks and one as a long-range fuel tank.

Welded and bonded aluminium construction using longitudinal stiffeners supported by transverse web frames and bulkheads. Aluminum plate grade 5383 H321 or H116. Aluminium extrusions grade 6082 T6 and 5083 H112.

### **Passenger Accommodation**

Superstructure - Passenger accommodation supported above the vehicle deck on anti-vibration mounts.

Outfit - All materials comply with IMO standards for fire, low flame spread, smoke and toxicity.

Public Address - Builder's standard, marine, public address system supplied and fitted to cover all passenger and crew areas, vehicle decks, stairwells and ante rooms. Colour televisions fitted throughout the passenger cabin to enable seated view of safety messages and video.

### Safety and Evacuation

Escape - Four Marine Evacuation Stations, two port and two starboard, and two external stairs aft. The MES serve a total of 100 persons each and aft stairs serving up to 200 persons each. A total of 8 x 100 person rafts are fitted.

Rescue - Two SOLAS inflatable rescue dinghy with 30 hp motor and approved launch / recovery method. Lifejackets with lights for full compliment fitted under seats and in storage cabinets.

Safety Equipment - Lifebuoys with lights and lines, smoke flares, Immersion suits, flares and lines throwing device fitted in accordance with international regulations

### **Fire Safety**

Fire Detection - An addressable fire detection system covers at minimum all high and moderate risk spaces (other than the wheelhouse) with alarm panel situated in the wheelhouse. CCTV system covers at a minimum, engine rooms, ante rooms, vehicle spaces, jet rooms, MES and liferafts stations (serving as mooring cameras) with monitors in the wheelhouse.

Fire Sprinklers - Vehicle deck and passenger cabin are protected by drencher systems with overhead sprinklers. Pump control is from the wheelhouse and anterooms.

General Equipment - Portable fire extinguishers, Fireman's outfits and equipment, water fog applicators, breathing apparatus, international connections and fire control plans fitted in accordance with international regulations.

#### **Machinery Installations**

Main Engines - 4 x resiliently mounted Ruston 16RK270 marine diesel engines.

Water Jets - 4 x Lips LJ135D waterjets configured for steering and reverse.

Transmission - 4 x Reintjes VLJ4431 gearboxes, approved by the engine manufacturer, with reduction ratio suited for optimum jet shaft speed.

Ride Control - A 'Maritime Dynamics' active ride control system is fitted to maximise passenger comfort. The system combines active trim tabs aft and optional bolt-on T-foil located at the forward end of each hull.

## **Electrical Installations**

Alternators – 4 x Caterpillar 3306B 165kw (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.