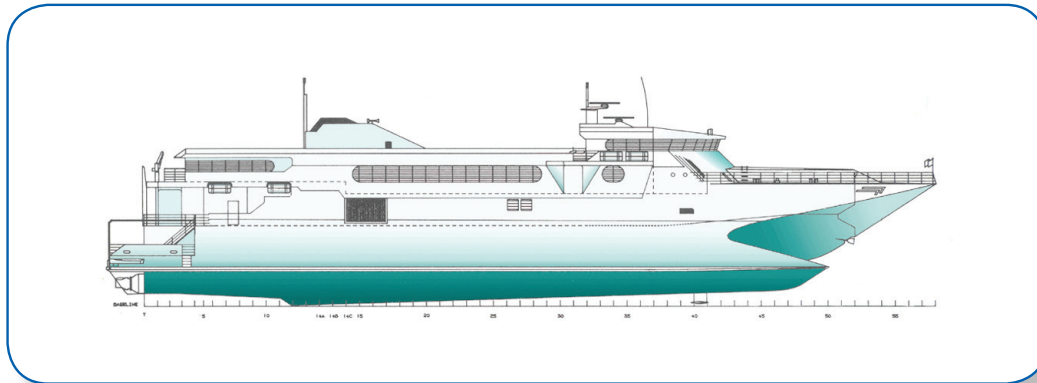


## Hull 023

### 74m Wave Piercing Catamaran Car Passenger Ferry



#### General Particulars

Builder: Incat Tasmania Pty Ltd.  
Class Society: Det Norske Veritas  
Certification: DNV + 1A1 HSLC R1 Car Ferry "A" EO NAUT B  
Length overall: 73.60m  
Length waterline: 59.90m  
Beam: 26.00m  
Beam of Hulls: 4.33m  
Draft: 3.10m  
Speed: 37 knots

#### Capacities

Max Deadweight – 185 to 230 tonnes (estimate based on building specification).  
Total persons - 450 persons  
Vehicle Capacity - 84 cars @ 4.5m x 2.3m  
Vehicle Deck Access - 2 x stern doors/ramps and 1 x bow visor/ramp approximately 3.8m wide each.  
Axle loads - 2.0 tonnes main vehicle deck and 0.8 tonnes outer vehicle deck.  
Fuel Capacity - 4 x 8900 litres integral aluminium tank and additional long-range tank capacity provided in each hull.  
Fresh Water - 1 x 5400 litres aluminium tank.  
Sewage - 1 x 4000 litres aluminium tank

#### Construction

Design - Two slender, aluminum hulls connected by two main bridging beams and intermediate transverse sections with centre bow structure at fwd end.

Subdivision - Each hull is divided into vented watertight compartments divided by transverse bulkheads. One compartments in each hull prepared as short-range fuel tanks and one as a long-range fuel tank.

Fabrication - Welded aluminium construction using longitudinal stiffeners supported by transverse web frames and bulkheads. Aluminum plate grade 5083 H321 or H116 and 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 - Two Marine Evacuation Stations and two external stairs aft. The two forward MES serve a total of 100 persons each and aft stairs serving the remaining persons. A maximum of 6 x 100person rafts fitted.

Rescue - one 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 - Liebuoys 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 at 4050 kW each.

Water Jets - 4 x Lips UJ115DX. Two waterjets configured for steering and reverse.

Transmission - direct drive.

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

Monitoring - An electronic alarm and monitoring system with 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 3306 142kw (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.

Details provided are based on original design and certification.

For information on Incat representatives in your region contact head office