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Incat's New Wave of Wave Piercing Catamarans is here



Incat Hull 068, *Akane*, heralds Incat's new breed of Wave Piercing Catamarans designed to be the most fuel efficient, economical cats in service around the globe.

Catering for a tourist market, the vessel's interior fitout includes a shop and information desk, first aid room, children's play area and pet room. Galley and crew rooms are also located mid-ship.

Nine hydraulically operated mezzanine decks provide the flexibility to cater for a full tourist load of passenger cars at peak times and to carry trucks, vans and cargo loads.

Fully loaded with 470 tonnes of deadweight the vessel achieved over 37 knots at sea trials and is expected to operate at approximately 40 knots with 200 tonnes of passengers and cargo.

Capacities



Passenger Capacities

Passenger Capacity: 692 persons (passengers and crew)

Passenger Deck: The single level tier 3 deck is accessed by side entry doors, lift or spiral staircase from the vehicle deck and is divided into 3 lounges:

Forward lounge: seating areas, male/female toilets

Midship Lounge: seating areas, information desk and shop, disability toilet/parents room, male/female toilets and crew rooms.

Aft Lounge: seating areas, male and female toilets, children's room and pet room.

Vehicle Capacities

Vehicle Capacity: 151 car spaces @ 4.5m long x 2.3m wide (755 car lane metres) or 330 truck lane metres @ 4.6m clear height plus 300 sqm @ minimum 4.0 clear height.

Vehicle Decks: Truck deck - Axle load of 13 tonne (single axle, dual wheel) from Transom to Frame 45.
2.0 tonne (single axle, single wheel) from Frame 45 forward.
Mezzanine Decks hoistable decks, 0.8 tonnes (single axle, single wheel)

Vehicle Access: Vehicles unload from two folding ramps over the stern. The vehicle deck has nine hydraulically hoistable mezzanine decks.

Features



Tier 2 - Aft Passenger Lounge



Tier 2 - Mid Passenger Lounge



Tier 2 - Business Class Lounge

Tankage

• Fuel Oil (main storage)	2 x 50,000 litres
• Fuel Oil (generator header tanks)	2 x 1,240 litres
• Fresh Water	12,000 litres
• Black & Grey Water	1 x 5,000 litres
• Lube Oil	2 x 500 litres
• Engine Room Oily Water	4 x 160 litres
• Aft Hydraulic Oil	2 x 500 litres
• Fwd Hydraulic Oil	1 x 500 litres

Ride Control System

An active ride control system is fitted to maximise passenger comfort. This system combines active trim tabs aft with a retractable T-foil located at the aft end of the centre bow. The T-foil system comprises foundation structure built into the centre bow, a hinge deployable steel T-foil and a hydraulic actuation system.

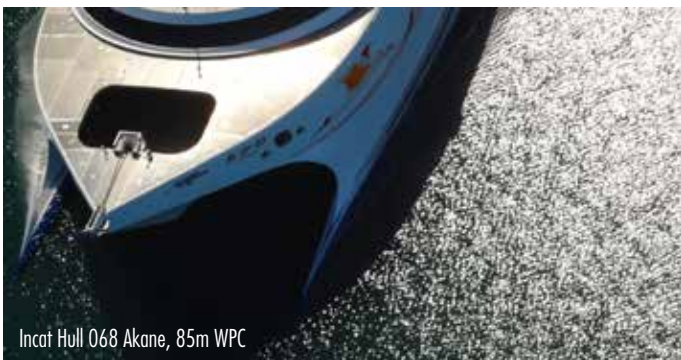
Air Conditioning

Toshiba reverse cycle heat pump units throughout are capable of maintaining between 20 and 22 deg C and 50% FH with a full passenger load and ambient temperature range of - 5 deg C to +35 deg C and 50% RH.

Construction & Safety



Incat Hull 068 Akane, 85m WPC



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LSA Liferafts

Construction

Design - Two slender, aluminum hulls connected by a bridging section with centre bow structure at the forward end. Each hull is divided into eight vented, watertight compartments divided by transverse bulkheads. Three compartments in each hull are prepared as fuel tanks with additional strengthening on each of the end bulkheads and intermediate tank tops.

Safety and Evacuation

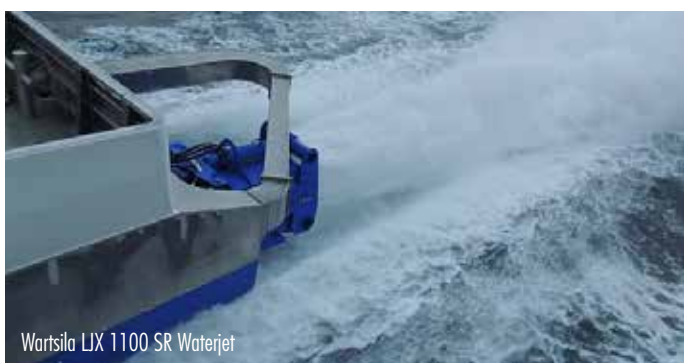
Four Marine Evacuation stations (MES) each capable of serving up to a total of 200 persons under normal evacuation are located on the Tier 2 Passenger Deck (two port and two starboard).

Two SOLAS semi-rigid inflatable dinghies with 30hp motor are located outboard adjacent to the superstructure. Lifejackets, fitted with lights and whistle devices, are provided in accordance with international regulations for passengers and crew, including children. Lifebuoys and smoke flares are provided in accordance with international regulations.

Machinery & Electrical



Caterpillar C280-16 Marine Diesel Engine



Wartsila LJX 1100 SR Waterjet



The Bridge

Machinery

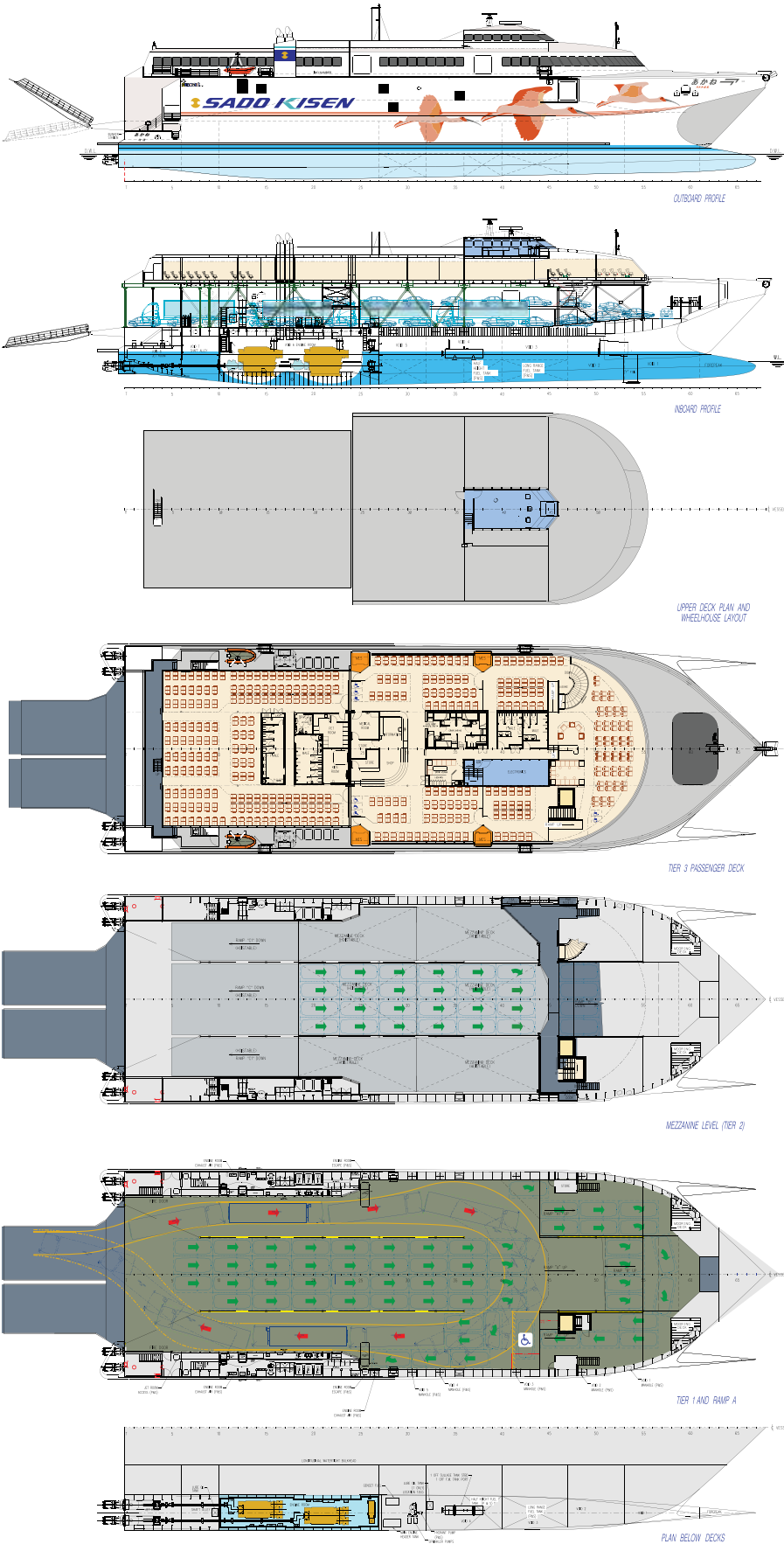
- Four resiliently mounted Caterpillar C280-16 marine diesel engines, rated at 5650kW each at 100% MCR.
- Four Wartsila LJX 1100 SR waterjets configured for steering and reverse. Waterjets are fitted with standard outboard hydraulic steering and reverse actuators.
- Four Reintjes VU 6831 gearboxes, with reduction ratios suited for optimum jet shaft speed. A flexible coupling is fitted between each engine and gearbox.

Electrical / Electronics

- Four Caterpillar C9 diesel generators rated at 250kW each, 440V 60 HZ, 3 phase, 4 wire distribution with neutral earth allowing 256 V single phase and transformers to supply 100V domestic appliances, distribution is via distribution boards adjacent to or within the space served.
- Two main switchboards, one in each ante room. Each main switchboard is fitted with a load preferential trip system which automatically sheds non essential loads.
- The Wheelhouse (control station) provides 360 degree visibility over the aerodynamic structure, with a forward facing bridge in addition to an aft-facing docking console and CCTV monitors. The latest in Furuno electronic, navigation and communication equipment to comply with the HSC Code is fitted.

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General Arrangement



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Principal Particulars

Yard No:	068
Designer:	Revolution Design Pty Ltd.
Builder:	Incat Tasmania Pty Ltd.
Class Society:	Det Norske Veritas
Certification:	DNV + IAI HSLC RI CAR FERRY B EO
Length overall:	85.2
Length outer hulls:	81.0m
Beam (overall)	26.2m
Draft (design)	3.40m
Speed:	approx 40 knots at 200 tonnes DWT 37 knots loaded @ Sea Trial with 470 tonnes cargo