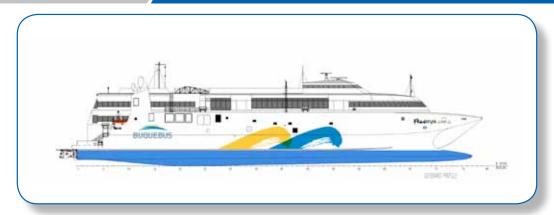


# **Hull 069**

# 99m Wave Piercing Catamaran



### **General Particulars**

Yard No: 069

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

Certification: DNV + IAI HSLC R4 CAR FERRY B GAS FUELLED EO

Length overall: 99.00m Length waterline: 90.54m Beam (overall) 26.94m Draft (design) 2.98m Deadweight: 450 tonnes

Speed: 51.8 knots @ 450 tonnes deadweight, 100% MCR

Lightship trial speed: 58 knots @ 100% MCR

# **Capacities**

Passenger Capacity: maximum1024 persons (passengers and crew) Tier 2 Passenger Deck is divided into three areas as follows:

T2 Aft Lounge (Economy Class) with seating areas and Bar/Kiosk.

T2 Duty Free Shop Lobby with Male/Female Toilets

T2 Duty Free Shop.

Tier 3 Passenger Deck is divided into four areas as follows:

T3 Aff Lounge (Tourist Class) with seating areas and Bar/Kiosk. T3 Main Foyer with Reception Area, Business Lounges (P&S), Male/Female Toilets and Disabled Toilet/Mothers Room. T3 Mid Lounge (Business Class) with seating areas Bar/Kiosk, Male/Female Toilets.

T3 Forward Lounge (First Class) with seating areas, Bar, VIP

Lounge and Male/Female Toilets.

The Tier 4 wheelhouse and Tier 3 lower wheelhouse are accessed from the T3 Forward Zone.

Vehicle Capacity: 150 car spaces at 4.5m long x 2.3m wide.

Tier 1 Vehicle Deck clear height: 2.3m

Tier 1 Vehicle Deck: Axle load: 2.0 tonne per axle

Vehicle Access: Via shore based stern ramps across transom.

# Tankage

Fuel Oil (main storage)  $2 \times 70,000$  (approx) litres Fuel Oil (generator header tanks)  $2 \times 1,240$  litres

LNG (main storage) 2 x 40m3
Fresh Water: 1 x 5,000 litres
Black & Grey Water: 1 x 5,000 litres
E/R Oily Water: 2 x 160 litres
Bilge Holding: 1 x 1,000 litres
Aft Hydraulic Oil: 2 x 400 litres

Fwd Midships Hydraulic Oil: 1 x 200 litres

#### Construction

Design - Two slender, aluminum hulls connected by a bridging section with centre bow structure at the forward end. Each hull is divided into nine vented, watertight compartments divided by transverse bulkheads. Two compartments in each hull are prepared as fuel tanks with an additional compartment prepared as a long range tank.

### **Air Conditioning**

Reverse cycle heat pump units throughout are capable of maintaining between 20-22 deg C and 50% RH with a full passenger load and ambient temperature of between 0 deg C and 35 deg C and 60 % RH.

# **Safety & Evacuation**

Four Marine Evacuation Stations (MES), two port and two starboard, each MES is capable of serving a total of up to 256 persons. A total of nine, 128-person open reversible life-rafts are fitted.

# Machinery

Gas Turbines: Two (2) GE Energy LM2500 marine gas turbines rated at 22MW each.

Water Jets: Two (2) Wartsila LJX 1720 SR waterjets are configured for steering and reverse.

Gensets: 4 x Caterpillar C18 340 ekW generators fitted with marine brushless self-excited alternators, arranged for automatic start-up and paralleling, provide power for all passenger and ship services. The electrical control system considers one genset is maintained as a standby set.

GT Gensets: 2 x Caterpillar C9 200 ekW generators fitted with marine brushless self-excited alternators provide electrical power for gas turbine services. Each GT genset is considered independent.

Trim Control: A hydraulically operated trim tab is fitted at the aft end of each hull to allow adjustment of the running trim of the vessel.

Hydraulics - Three hydraulic power packs, one forward and two aft, all alarmed for low level, high temperature, filter clog and low pressure, supply hydraulics for capstans, trim tabs, steering and stern ramp.

# Electrical

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. 200-amp 415V 3-phase shore power connection point fitted in starboard anteroom.