Unfinished 63m Catamaran Passenger Vessel
Bare Hull
Listing ID: 4157

DESCRIPTION: Unfinished 63m Catamaran Passenger Vessel Bare Hull
LENGTH: 63m (206ft 9in)
BEAM: 16m (52ft 5in)
DRAFT: 1.6m (5ft 2in)
LOCATION: ex-factory, Singapore
BROKER: Geoff Fraser
PRICE: See Long Description

General Description

We have pleasure in offering a 63m unfinished Catamaran Passenger Ferry Hull for completion. The builder is willing to let go as low as 1/3 of the market price of similar size of vessel. Below are the spec and photos of a sister and planned finished product. The vessel can be either purchased as it is or contracted for completion. It is offered either:

1. "As is where is" inviting offers with a price idea “in excess of 2 mil USD”. Price is open and negotiable if firm Buyer counter-propose.
2. "To complete" this hull to original specs of 1280 Pax, 38 knots light ship, very ball-park figure is USD 25 mil. As because Hull work is in fact in completion stage, pending equipment lead-time, outfitting and commissioning, realistically to kick-start and complete, it may be a 12/14 months period. This is a very approximate estimate and can be seen as a guide only.

GENERAL
Main Dimensions (As per Today)
The main dimension to be approximately:
Length overall 63.00 m
Beam maximum 16.00 m
Draught 1.60 m
Passenger capacity 1192 pax
Crew 12

General Description
The vessel will be an all aluminium catamaran passenger vessel of semi-planning type, diesel powered and equipped with four (4) units of water-jet propulsions.

Main deck shall be converted to Car Deck, by reinforcing the structure to allow Cars / Subs up to 2000Kg to be loaded.

LOADLINES ISSUES
Aprox 60 cars/subs is required capacity.

A ramp shall be constructed in the car deck stern of the vessel to load vehicles. Max length of the ramp should be 4.0Mts.

Another ramp should be constructed in the Bow of the vessel, to unload the vehicles. The ramp length should be enough for bow mooring and unloading.

Both ramps should be operated by winch and cable, or hydraulic.

The existing passenger saloons will be located on the bridge and passenger decks, with and arrangement of seat only and for aprox 650 / 700 seated passengers.

The VIP rooms on the bridge deck shall be removed, leaving an open floorplant for passenger seats.

The crew mess room and a kiosk in the front of the passenger saloon shall be removed. Five (5) toilets shall be provided on the bridge deck passenger saloon.

On the passenger deck nine (9) toilets shall be provided, one (1) of which shall be for disabled passengers. Located at the passenger deck, a forward and aft passenger saloon with a seating capacity according with the new floorplant shall be provided. A large walk in duty free shop area shall be provided in this deck.

Dimensions and layout to be addressed by shipowner, but will have not less than 250 square meters. The two (2) VIP saloons, each accommodating ten (10) VIPS, shall be removed. A kiosk shall be provided at/about the amid-ship area of the passenger deck with all necessary equipment for it’s intended operation.
On the main deck space, all actual construction shall be removed or relocated, and the whole deck shall be converted to car deck with A2 fire protection according to SOLAS and water sprinkler system shall be installed.

The entrance to the engine rooms shall be arranged at the main deck aft area. The interior bulkheads and doors shall be in accordance to the Classification Society’s requirements. The scheme of colours shall be in accordance to Owner requirements. All materials and equipment shall be of high quality and specially chosen/adapted to secure functions and reliability for the ship in its intended service.

**Capacities**

Intended accommodation shall be as follows

- 650 / 700 Passengers 65T
- 60 / 65 Cars (up to 2000 Kg each) 120T
- Free shop area (min) 250 sqM
- Fuel, 20,000 litres, as designed 100T
- Fresh water, as designed

**TOTAL 285T**

**LOADLINE??**

**Tank capacities (as designed)**

The tank capacities are as follows (may be altered, optionally):

- Fuel oil service tanks 4 x 7.5 m3
- Fresh water 2 x 3.0 m3
- Sludge 1 x 0.2 m3
- Bilge water 1 x 2.0 m3
- Lube oil 4 x 2.4 m3
- Septic 2 x 3.0 m3
- Hydraulic oil 2 x 0.25 m

**TOTAL ~18TONNES**

**MIN DWT REQUIRED 300T**

**Performance**

**Speed**

The intended speed of the vessel in calm and current-free water at the service speed shall be not less than 23 Knots. Some calculations (attached) has been made by shipowner (and need to be verified by shipyard), but aprox. With 2 x 2000 Kw engines vessel could reach the required speed.

**Class and Regulations**

The Vessel will be designed and constructed in accordance with drawings approved by Uruguay Flag Authority, NOT HSC REQUIRED.

**Documentation (as required by original contract)**

At the delivery of the vessel, three (3) sets of the following documents will be supplied:

- Operating and Maintenance Manual for the vessel.
- Manuals for all main machinery, electrical and electronic units.
- Manufacturer’s and mill certificates according for main equipment and materials.
- Complete sets of structural and system drawings.
- Complete sets of test reports from quality checks, commissioning and delivery.
- Maker’s list with addresses of suppliers of equipments etc.
- Builder’s Certificate.

Furthermore, the following inspections shall be agreed with shipowner and flag authority:

- Framed Safety Plan
- Framed Evacuation Plan
- Stability booklet, subject authority approval time.
- FMEA report
- EO Manual
- International Load Line Certificate
- International Tonnage Certificate
- High Speed Craft Certificate
- IOPP Certificate

**Test and Trials**

Trials will be performed to satisfy the Shipowner and Flag Authority.

**HULL CONSTRUCTION**

**General (as designed, no modification required)**

The vessel will be constructed from salt water resistant aluminium alloy material and the major part of the vessel will be constructed with specially designed extrusions. All welding will be performed with automatic and/or semi-automatic MIG (metal inert gas) methods according to the Classification Society’s requirements.

**Hull (as designed, no modification required)**

Each demi-hull will be divided into nine (9) watertight compartments and completely separated by longitudinal bulkheads along the cross structures (compartment 2-10). The fore-peak (compartment 1) is a common compartment for the two hulls. Shell plates, decks and bulkheads will be made of extruded profiles of varying thicknesses. Frames will be made of extruded T-profiles.

**Fendering (as designed, no modification required)**

Light weight aluminium metal plate fendering to be fitted along both sides of the vessel as per the Classification Society’s requirements.

**DECK EQUIPMENTS, TANKS**

**Anchoring (as designed, no modification required)**
The vessel will be equipped with a Super High Holding Power type anchor, complete with chain and rope as well as a hydraulic anchor winch, in accordance to the requirements of the Classification Society.

**Moorings Equipment**
The mooring equipment will be arranged to support the alongside mooring. Hydraulically driven capstans shall be installed on the fore and aft decks with suitable fairleads. Mooring and lashing shall be sized as per the Classification Society and Administration requirements. The number of fixed bollards provided and installed on the vessel shall be as per the attached General Arrangement Plan.

**Masts and Flagstaffs (as designed, no modification required)**
One (1) mast on top of the wheelhouse will be provided as a common support for the radar antennas, horn and navigation lights. NUC lights and signals will be arranged for hoisting in a foldable mast. Fittings with stainless steel parts will be arranged on each side for hoisting of flags.

One (1) Flagstaff in the aft part of the upper deck will be provided (for the national flag) together with one (1) mast for the aft Masthead Light. All shall be in accordance to the General Arrangement Drawing.

**Bulwark (as designed, no modification required)**
Bulwarks and railings around all open deck areas will be arranged. Railings elsewhere made of aluminium tubes shall be provided for proper protection of the passengers and crew.

**Cranes (as designed, no modification required)**
The vessel will be equipped with two (2) davits installed on the bridge deck according to the Classification Society’s requirements, for handling of the rescue boats by one operator only. The davits shall

**Tanks (as designed, no modification required)**
All the tanks as specified in Chapter 02 will be separate tanks (not integrated into the hull). The tanks shall be equipped with inspection manholes, air pipes and filling/emptying connections with proper means of determining the tank levels. All the oil tanks will also be fitted with drain cocks.

Fuel, hydraulic oil and fresh water tanks will be properly equipped with level switches. Individual tank fillings and empty connections with possibility of cross connections shall be arranged in recesses on both sides of the vessel.

Electronic level gauges for remote reading of the fuel tank levels will be installed with gauges in the wheelhouse. Visual and sound alarm shall be installed to prevent overfilling.

**Painting, Corrosion Protection (as designed, no modification required)**
All external metal works and internal bottom structures up to the water line, will be cleaned and coated according to paint manufacturer’s specification for aluminium vessels. Scheme of colours shall be according to the choice of the Owner. All external decks will be coated with non-skid paint. The external aluminium hull below the waterline area shall be protected against corrosion by zinc anodes. The zinc anodes shall give an anti-corrosion service life of at least one (1) year.

**General**
The superstructure will be of extremely light welded aluminium material.

**Weather Doors and Ramps**
On the bridge deck the wheelhouse is equipped with one (1) door on each side. Doors shall be provided for the toilets, kiosk, crew mess room, and at the aft of the bridge deck passenger saloon. On the passenger deck, the aft passenger saloon shall be equipped with two (2) doors in the aft bulkhead and one (1) door each or its port and starboard sides. Doors shall be provided for the kiosk area, staircase and toilets. Two (2) doors shall be provided at the aft of the forward passenger saloon. The two (2) VIP rooms shall be equipped with a door each. One (1) door on each side (port/starboard) shall be provided at the aft and forward of the passenger deck for passenger embarkation and disembarkation.

On the main deck, modifications shall be made to permit load / unload the cars. All other non use doors shall be removed.

**Windows (as designed, no modification required)**
The passenger areas on the passenger saloon will be equipped with large windows over the whole length of the superstructure. All windows shall be of tinted, scratch proof, toughened marine standard safety glass, mounted/bonded on the metal structure and with thickness to match the design pressure. Windows for the wheelhouse will be of un-tinted safety glass and equipped with wipers.

**Stairs, Ladders**
All stairs and ladders shall be of aluminium material. The steps of the stairs will be coated with the same material as the surrounding deck and proper anti skid front lists shall be fitted. All stairs will be equipped with proper handrails for passenger safety.

**FURNISHING**
**General**
The passenger saloons are located on the bridge, and passenger decks. A raised wheelhouse shall be provided on the front of the bridge deck. At the aft of the wheelhouse, a passenger saloon accommodating passengers according to new layout shall be provided. Five (5) toilets shall be provided on the bridge deck passenger saloon.

On the passenger deck, nine (9) toilets shall be provided, one (1) of which shall be for disabled passengers. Located at the passenger deck, a forward and aft passenger saloon with a seating capacity according to new design shall be provided respectively. A kiosk shall be provided at/about the amid-ship area of the passenger deck with all necessary equipment for it’s intended operation. All seats shall be provided, John Ekness transit yacht type or similar.

The entrance to the engine rooms shall be arranged at the main deck aft area. The interior bulkheads and doors shall be in accordance to the SOLAS requirements. The scheme of colours shall be in accordance to Owner’s requirements. All materials and equipment shall be of high quality and specially chosen/adapted to secure functions and reliability for the ship in it’s intended service.

**Ceiling**
The ceiling in the passenger cabins will consist of aluminium lightweight planking supported by separate frames. Noise absorption will be of good standard and the ceiling will distribute the ventilating air. Light fittings and loud speakers will be integrated into the ceiling structure. A clear headroom of 2.1 meters shall be arranged in the bridge and passenger deck saloons.
Carpets and Flooring
The decks in the passenger saloons, crew mess room and wheelhouse shall be furnished with wall to wall type carpets or vinyl in accordance to SOLAS and Owner/Operator’s requirements.

The decks in the toilets and kiosks/bar shall be covered with vinyl type flooring with welded joints and glued directly onto the aluminium deck. Scheme of colours shall be in accordance to the Owner/Operator’s requirements.

Interior Bulkheads, Doors (as designed, with modifications for car deck)
All interior bulkheads will be of sandwich type with laminated surfaces constructed according to Classification Society’s requirements. A key locking system will be provided for all accommodation doors (except toilet room doors) and weather doors. Two (2) categories of keys will be supplied according to a key plan:
A) Master (all doors) (5 off)
B) Individual keys for all doors (2 off/door)

Engine rooms, staircase and aft/forward bulkhead passenger saloon/restaurant doors to be equipped with automatic closing devices.

Furniture
The layout for the passenger’s seating, inside the saloon shall be according to the “General Arrangement” drawing. The passenger seats provided in the passenger and bridge deck saloons shall be of economy classed seats. Scheme of colours shall be according to Owner/Operator’s choice. Furniture (seats and tables etc.) shall be arranged and installed in accordance to the new General Arrangement Drawing.

Wheelhouse and Toilets
Wheelhouse
The bridge will be designed for safe operation of the vessel in mind. The layout to be based on a four (4) seat arrangement on two (2) consoles; two (2) seats in front of the wheelhouse for the Captain and First officer and two (2) seats on the back console for the Chief and First Engineer.

All the main controls, instruments and navigational aids will be suitably designed and adopted for safe operation. They will be within reach/sight from the Master’s, First Officer’s seat, Chief Engineer’s and First Engineer’s seats. They shall have a clear view of the horizon. The wheelhouse and equipment (navigation etc.) shall be in accordance to the Classification Society’s and Authority’s requirements.

Toilets (as per design)
- Each toilet room will be equipped with:
  - Washbasin c/w cold water tap of self-closing type
  - Soap dish
  - Water closet c/w cistern with manual flushing
  - Mirror
  - Towel hooks/rail (or paper towel holder)
  - Toilet paper roll holder
  - Waste paper basket/dustbin w/cover
  - Tap with hose for wash down
  - Storm rail

Insulation
Fire insulation shall be provided in the engine room and control stations according to drawings approved by the Flag Authority and SOLAS. All fire insulation will be properly protected from wear and tear and from penetration of fluids. All passenger compartments will be properly insulated to achieve herein specified climatic properties. Attention will be given to noise reduction to achieve good passenger comfort. Less than 75 dbA as a mean value during the service speed of the vessel shall be obtained in the passenger compartments. The vibration and noise levels shall be attained as per requirements of the Flag Authority and SOLAS.

MACHINERY
General
The key of the project is the conversion of the existing 192 hull (designed for 4 engines and waterjets) into a 2 (two) engines with fixed propellers. Shipowner has attached to this specs, the preliminary calculations of the viability to get 23 / 24 service speed with 2 (two) 2000 Kw engines and FP, however, shipyard shall perform and validate the calculations.

Engines, Gears
To be addressed in the project.

Propulsion Units
To be addressed in the project.

Auxiliary Diesel Engines
To be addressed in the project.

Exhaust System
The exhaust system shall be sized, dimensioned and installed according to requirements set by engine manufacturer. Temperature monitoring for the exhaust system shall be provided locally and on the bridge alarm and monitoring systems.

Interceptors
There will be a fitted hydraulic adjustable interceptor attached to the transom. If they need to be removed or not will depend on the project.

VENTILATION, AIR-CONDITIONING, HEATING
General
Mechanical ventilation will be installed in the engine room, passenger saloons, and wheelhouse. Toilets and the food preparation area/kiosk will have separate mechanical ventilation. All other spaces will have natural ventilation. Car deck will have forced ventilation according to SOLAS and Flag requirements for this type of spaces All ventilation fans will be provided with remote stopping, all of which will be clearly marked and mounted in a position approved by the Flag Authorities.

The passenger saloons, crew space, passages, and the wheelhouse shall be air-conditioned. AC type, quantity and brand shall be proposed by yard. Necessary
monitoring of the ventilation and air conditioning systems shall be integrated with the bridge control and monitoring systems.

**Ventilation**
The different ventilation systems, including fan units, ducts and nozzles shall comply with the following minimum requirements:
- Passenger saloon 25 m³ / pax h
- Toilet rooms and Kiosk 10 changes / h
- Wheelhouse and crew area 6 changes / h
- Car deck to be designed by yard

**Air-Conditioning**
To be designed by yard

**Engine Room Ventilation**
Engine room ventilation shall have the capacity to keep the temperature in the engine room less than 40°C in all service conditions. Ventilation inlets shall be placed at the highest possible location to prevent salt water from entering the engine room. The air pressure shall be reasonably close to normal atmospheric pressure to allow for easy handling of doors and dampers. Ventilation inlets shall be arranged in such a way as to prevent excess salt and water in the engine room. Both the inlets and outlets of the engine room ventilation system shall be equipped with the Flag authority approved closing devices. Necessary monitoring shall be integrated with the bridge control and monitoring systems.

**Heating and De-frosting**
Demisting of the wheelhouse front windows shall be accomplished by nozzles directing the ventilation air towards the glass.

**PIPING SYSTEMS**

**Fire Fighting System (as designed)**
One (1) fire fighting system with a fire main connected to fire hydrants shall be installed. They shall be positioned and equipped according to the drawing approved by the Flag Authority.

One (1) Sprinkler System, of low-pressure type shall be installed in accordance to the Classification Society’s requirements, with nozzles covering the following areas:
- Car deck
A fixed CO2 gas fire fighting systems should be designed and installed in machinery room, according to SOLAS

**Bilge and Sludge System (as designed)**

**Bilge**
Bilge water systems shall be provided in each demi hull where pumps of submersible types shall be installed according to drawings approved by Classification Society.

**Sludge**
One (1) sludge system will be provided complete with collecting tank (see 02, 25), hand pump, drip trays and valves according to drawing approved by the Classification Society. The emptying connection will be positioned on the aft deck. An oily water separator shall be provided and installed with all necessary arrangements and fittings in accordance to the Flag Authority requirements. Drainage system shall be provided in accordance to the Classification Society’s requirements.

**Fuel and Lubricating Oil System**
Each of the main engines and auxiliary engines shall have separate lube oil and fuel oil systems. The fuel oil system will consist of a standard main engine “built on” aggregates connected to the fuel tanks via proper filters with water separators. A suitable fuel filtering system with diesel oil separators for the quality of fuel available will be installed to guarantee good operation of the main and auxiliary engines on board. Spare lubricating oil shall be stored in the tank rooms.

**Hydraulic System (see if its necessary for winches.)**

**Cooling Water System**
Main engines and gensets shall be installed and cooled in a system designed according to manufacturer specs.

**Sanitary Systems**

**Fresh water (as specified)**
One (1) fresh water system shall be provided for fresh water distribution to the following:
- All toilet wash basins (cold)
- Toilet flushing (cold)
- Wheelhouse window washing (cold)
- Taps in kiosk/bars etc. (hot/cold)
- Each engine room (cold)

The pressure in the system shall be accomplished by two (2) electrically driven pumps connected to the fresh water main and operating sequential/stand by. One (1) accumulator of suitable size will be installed. Filling of the fresh water tank shall be carried out from both sides of the vessel in a recess with quick connection similar to the fuel oil filling. Stainless steel/aluminium pipes or equivalent shall be used for filling and venting.

**Septic (as designed)**
One (1) freshwater pump will be installed with pressure switches, accumulator of suitable size and strainer to provide water for the toilet flushing system. One (1) septic tank in each hull with all necessary accessories shall be provided. All toilet discharging shall be carried out through the ship’s bottom and into the sea or to the septic tank. The outlet should be arranged to avoid back-flushes of water due to pressure peaks in the tunnel.

**Grey Water (as designed)**
All grey water will be disposed off through the ship’s side. From above main deck, the grey water shall be discharged by gravity, and, from below the main deck it shall be discharged by submersible pumps in collecting tanks/overboard.

**Electrical System**

**General (as designed.)**
The electrical apparatus and wiring shall comply with requirements of the Classification Society. All electrical equipment shall be constructed with watertight or drip proof enclosures according to the location in the vessel and placed or protected so as to minimise mechanical damages, damages by dripping liquid, high
temperatures, vapours and dust.

All outgoing circuits shall be fed via approved circuit breakers. All cables will be of high conductivity copper, insulated according to Classification Society’s approval. Cables for three (3) phase and single phase circuits shall be respectively 4-core and 3-core type (minimum). Plastic labels will be fixed to identify switches, instruments and circuits, switches and switch boxes.

**Power supply 380/220V, AC (as designed.)**

One (1) diesel driven generating set shall provide power through the main switchboard to the 3 phases 380V 50Hz AC net. One (1) similar stand-by generating set shall be provided. The system is designed for parallel use. The generator sets shall be installed in the engine room in each hull. One (1) shore connection with a capacity of 2 x 63 A will also supply power via the main switchboard to the 380V net when the ship is moored. When the ship is connected to the shore net, the generators will automatically be disconnected. Power for lighting will be supplied from a single phase 220V, 50Hz AC net connected to the 380V system phase and ground bus-bars. The single-phase loads will be distributed so as to avoid excessive imbalance of the system load.

**Power Supply 24V, DC**

Four (4) independent battery groups will provide power through the battery switchboard to the 24V DC net. The available power shall be minimum 200 Ah per group. Charging of these batteries will be from direct driven generators, one on each auxiliary engine and from charging rectifiers connected to 380V net.

For the radio equipment there will be one (1) separate battery group with a minimum capacity of 200 Ah installed in the wheelhouse. A separate charging rectifier connected to the 380V net will charge this battery group. All shall be installed in accordance to the Classification Society’s requirements.

**Emergency Power Supply 24V, DC**

One (1) separate battery group with a minimum capacity as required by the Classification Society/Authority shall provide power through the emergency switchboard to the emergency lights, controls and the navigation equipment necessary for safe operation and navigation, when the ordinary battery power supply is failing. The battery group and switchboard shall be positioned above the main deck. One separate charging rectifier connected to the 380V net will perform charging of this battery group. Emergency lighting shall automatically be switched on in case of black outs.

**Lighting 220V, AC**

Fixed light fittings will be of indirect or/and direct light type. Some of the light fittings will accommodate emergency light bulbs. Controls for the lights will be located in the wheelhouse for open decks, embarkation stations and the wheelhouse. Controls for passenger saloon/restaurants, toilets will be located on their respective decks or at the kiosk. The remaining areas shall be locally operated. Lights for guidance to operating areas will be controlled from the main entrance.

Engine rooms shall be brightly lit to facilitate vision at all times.

**Monitoring**

For the monitoring of auxiliary engines, and all ship systems, one (1) computer operated monitoring system shall be provided in accordance to the Classification Society’s requirements.

A separate monitoring system from the engine manufacturer will be additionally installed for the main engines. The system shall include audible and visual alarms as well as readings for all essential parameters. All alarm messages shall be printed out together with necessary machinery data for the machinery log.

The main engine speed (rpm) indicators, manoeuvring system (all indications) and fire alarm shall be separately installed. Oil pressure and water temperature gauges for the main engines and auxiliary engines shall be installed in the wheelhouse. The propulsion manoeuvring gears shall be actuated from the bridge by Electro-hydraulic control systems. The main steering lever will be positioned on the front panel for the Master’s right hand. Forward/reverse and engine speed will be controlled by a single lever.

A wing station for manoeuvring of the propulsion gears shall be installed on each side of the bridge. Besides the ordinary system, there shall be one back-up system installed for each unit with separate cables and control levers. The controls will be within easy reach of the Master. The pressure gauges for water-jet pressures shall be installed. In the engine room there will be gauges and indicators necessary for local operation of the diesel engines. One (1) fire alarm central unit approved by the Classification Society shall be installed in the wheelhouse connected to smoke detectors in the engine rooms and passenger saloons, as well as heat detectors in the engine rooms plus manual push buttons for public areas. The complete system shall be installed according to the Classification Society’s and Authority’s approved drawings. The alarm will be signalled through the intercom system.

**Communication and Entertainment**

The vessel shall be equipped with both internal and external communication equipment including the following. As for the type and models, refer to Appendix A.

- Two (2) VHF Radiotelephone.
- One (1) MF/HF DSC Radiotelephone.
- One (1) Epirb.
- Two (2) Sart.
- Three (3) VHF portable radio.
- One (1) radio with tape cassette player, guide microphone and public address systems
- One video system serving sufficient number of television sets.
- Separate volume controls shall be provided for passenger, main and bridge decks.
- Intercom system for communication between wheelhouse, engine room (head set), fore and aft deck.
- Public Address system for the whole vessel.

A computer based controlled CCD Colour Camera shall be provided at the following locations with suitable number of monitors equipped in the wheelhouse:

- One (1) unit each at the stern and forward of the vessel
- One (1) unit each for the engine rooms.
- One (1) unit each at embarkation/disembarkation and evacuation location.

A suitable number of television sets shall be installed for the passenger decks at strategic locations such that all the passengers can view the monitor.

**SAFETY, NAVIGATIONAL EQUIPMENT**

**Safety Equipment**

**Rescue / Tender Boat**

The vessel will be equipped with two (2) inflatable rubber boat, VIKING 470 GRP, equipped with an outboard engine all to the satisfaction of the Classification Society/Authority. The boat will be stowed on the aft passenger deck and equipped with suitable cradles and lashing. Equipment for one hook lifting of the boat
shall be provided.

**Life Rafts**
Provision of life rafts according to final arrangement and passenger capacity + 50% to accomplish Flag regulations

**Life Jackets**
Life jackets, numbers, sizes and approvals, according to the Flag Authority requirements shall be provided. Life jackets will be stowed at the back or under each seat. Spare life jackets shall be provided as per requirements.

**Life Buoy**
At least nine (9) life buoys with a 30m line, seven (7) life buoys with lights and two (2) life buoys with light and smoke will be installed. All shall be provided and strategically placed in accordance to the Flag Authority approved safety plans.

**Distress Signals.**
Twelve (12) parachute rocket flares, one (1) line throwing appliance and six (6) red flares will be provided as per the Flag Authority approved safety plans.

**Fire Fighting Equipment.**
Four (4) units of fire fighting suits shall be provided in accordance to the Classification Society’s and Administration’s approved Safety Plans. Portable fire fighting equipment such as extinguishers shall be provided according to the Flag Authority approved safety plans.

**Breathing Apparatus.**
A suitable number of breathing apparatus shall be supplied with spare bottles as per the Flag Authority approved safety plans.

**Immersion Suits**
If required by the Maritime Authority, suitable number of immersion suits shall be provided.

MES (Marine Evacuation System)
Life rafts shall be provided with slides in accordance to the Flag Authority approved Safety Plans.

**Navigational Equipment**
**Instruments**
The vessel shall be equipped with navigational instruments according to Classification Society, International and Local Authority’s rules and regulations and shall include the following. As for the type and models, refer to Appendix A.
- 1 Magnetic steering compass.
- 1 Gyro Compass with repeater.
- 1 Autopilot.
- 1 DGPS Navigator.
- 2 Bright track radars
- 1 Echo sounder.
- 1 Electronic Navigation Chart.
- 1 Automatic Identification System.
- 1 Rate of Turn Indicator
- 1 Speed Log
- 1 Barometer
- 1 Six day ships clock
- 1 Search light
- 1 Ships bell
- 1 Horn
- 1 Binocular
- 2 Loud hailer
- 1 Hand lead line
- 1 Parallel ruler
- 1 Triangular ruler
- 1 Magnifying glass
- 1 Divider
- 1 Flag code set
- 2 National ensigns

**Navigation Lights**
Navigation lights will be electric 24V D.C., of approved type and installed according to IMO collreg 72. The following lights to be installed:
- 1 masthead light
- 1 Starboard light
- 1 Port light
- 1 Stern light
- 2 Anchor lights
- 2 NUC lights
The vessel will also be equipped with three (3) black balls day signal shapes.
IMPORTANT: The Company offers the details of this vessel in good faith but cannot guarantee or warrant the accuracy of this information nor warrant the condition of the vessel. A buyer should instruct their agents, or their surveyors, to investigate such details as the buyer desires validated. This vessel is offered subject to prior sale, price change, or withdrawal without notice.

Unfinished 63m Catamaran Passenger Vessel Bare Hull Images