

# TECHNICAL SPECIFICATION

## GENERAL DESCRIPTION FOR STANDARD VESSEL

A vessel suitable to carry minimum 32 persons (including crew & captain) The vessel shall be design to have good natural ventilation in comfort of all passengers. The vessel shall exhibit excellent motions, maneuverability and operate comfortably at an optimum speed in moderate and rough sea condition (Sea Status 3 and 4).

### PRINCIPAL PARTICULARS

|                    |                                                                          |
|--------------------|--------------------------------------------------------------------------|
| Quantity           | : 2                                                                      |
| Hull form          | : Mono hull                                                              |
| Hull material      | : Fiber Reinforced (to specify the fiberglass resin used and gelcoat)    |
| Standard of vessel | : Boat builder to specify (Documents to provide with the proposal)       |
| Length             | : 12 meters – 13 meters                                                  |
| Beam               | : 3 meters – 3.85 meters                                                 |
| Draft              | : 0.50 – 0.80 meters                                                     |
| Service Speed      | : <u>36 knots</u> or more at <u>medium load</u>                          |
| Passenger          | : Max. capacity to be specified on the proposal                          |
| Sea Keeping and    | : Vessel shall exhibit excellent motions and maneuverability in moderate |
| Maneuvering        | and rough sea condition (Sea Status 3 and 4)                             |
| Endurance          | : <u>5 hrs. minimum</u>                                                  |

### TANK CAPACITIES

|                   |                       |
|-------------------|-----------------------|
| Fuel oil capacity | : 1200-1500L          |
| Water tank        | : 180 liters minimum. |

### ENGINE AND STEERING SYSTEM

- Four stroke Nos 300HP x 3 outboard engines with gear and propeller.
- Engines to have local authorized distributor and service provider.
- Hydraulic Steering system including steering wheel with power assist.
- Electronic engine control system (drive by wire), electrical shift and throttle
- Complete installation of engines with all required accessories.

### GENERAL FEATURES

- Hard Top double finishing.
- Hull in complete selected White color gelcoat. (Double finishing reinforced hull).
- Registration number on both sides of freeboard.

- Nonskid flooring on decks.
- Built-in boarding steps.
- Semi-closed (up to rear seat/bench) cabin with 4 slidable windows (each side) glass and rest covered with black canvas using zips and bungee loops. Canvas zippers, well stitched and covered with canvas from both sides and rear.
- Flight/bus seating arrangement for passengers (28 pax minimum) with comfortable back rest and reclining.
- Comfortable upholstered cushions for driver (seat cushion thickness 08-inches).

## **BASIC FEATURES**

- Deck cleats, two on forward, two on aft cock pit and two on amid ship (8-12 inch).
- Bow U-bolt clamp.
- Sliding pilot side windows.
- Deck wash with outlet shower fixed on PORT shipside near entrance flushed to hull (Pipelength 50 Ft).
- Pipeline arrangement with necessary valves and taps for engine flushing
- Boat mirror (For Driver).
- Stainless steel hand railings where required.
- Fuel filling point with markings located on STBD side.
- Fresh water filling point with markings located on the PORT side.
- Fixed SS drain plates for deck draining points.
- Built in water bottle holders near passenger seats.
- D - fender to be fixed with SS bolts and SS nuts.
- Fuel sensors fixing arrangement, fuel sensors from excess from deck.

## **ELECTRICAL SYSTEM**

- Electric horn (SS preferred).
- Electric blower, for aft bilge ventilation.
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- Batteries
  - Battery for inhouse lighting and other necessary purposes (charging arrangement from engine)
  - Batteries for each engine (Engine starting batteries)
  - Selector switch able to select from separate to both
- 2 USB charging points near both driver and crew seats.
- Deck lights.
- Fresh water Pump. (Deck washing, engine flushing and toilet).
- Marine grade music player with Bluetooth and FM radio function.
- Automatic electric bilge pumps in required compartments (Pump Capacity: 2000-3000 gph).

## **NAVIGATION, COMMUNICATION AND SAFETY EQUIPMENT'S**

- **Navigation & communication**
  - GPS with Antenna and Maldives map
  - RC led Search light
  - Compass
  - Marine VHF complete Set
- **Safety Equipment**
  - EPIRB
  - Vessel Tracking Device

## **HELM CONSOLE**

- Black top surface for anti-reflection.
- 2 Nos DC USB outlets for phone charging.
- Red ceiling light for helm (LED light)
- All necessary controls and display arrangements on helm.
  - PORT and STBD engine display
  - Navigation light switch
  - Search light switch
  - Cabin light switch
  - Deck light switch
  - Stern light switch (Engine service light)
  - Water Pump switch
  - Bilge pump switches
  - Blower switch
  - Wiper controls
  - Trim tab gauge and controls
  - Engine throttle
  - Fuel tank level gauge
  - Water tank level gauge

## **TOILET**

- Marine Electric Toilet
- Entrance door with locking mechanism.
- Wash basin with fresh water tap
- Toilet Mirror
- Ventilating blower
- Proper lightings with water switches
- Hand shower
- Additional step if necessary

## **LIFE SAVING EQUIPMENT'S**

- 02 x portable fire extinguishers embedded to hull in closed boxes, fixed in easily accessible areas (c-thru doors for boxes) as per National Marine vessels Safety Regulation (R-229/2015)
- 02 x Fire blanket as per National Marine vessels Safety Regulation (R-229/2015)
- Self-Inflatable life jackets (Adults) for maximum capacity as per National Marine vessels Safety Regulation (R-229/2015)
- 04 x self-inflatable life jackets for kids as per National Marine vessels Safety Regulation (R-229/2015)
- 01 x Life Ring with rope (minimum 30m)- (fixing point to be decided) as per National Marine vessels Safety Regulation (R-229/2015)
- First Aid Kit as per National Marine vessels Safety Regulation (R-229/2015)

## **BOAT EQUIPMENT'S**

- 01 x Flag set (CB – 5)
- 03 x Torch light (water proof)
- 01 x Boat hooks
- 02 x F-4 Fenders
- 02 x F-5 Fenders
- 01 x 100ft 14mm Rope for berthing (Yacht Rope)
- Snorkel, Mask, Fins (03 sets)

## **TOOLS**

- 01 x Oil extractor pump (engine Oil change)
- 01 x Wrench set (sizes 8-24 mm)
- 01 x Allen key set (7 pcs)
- 01 x Ratchet wrench
- 01 x Socket set (sizes 8-24)
- 01 x Screwdriver set
- 01 x Hammer 1lb
- 01 x Grease gun (flexible nozzle)
- 01 x Silicon gun
- 01 x Filter removing wrench for oil & fuel
- 01 x Line tester
- 01 x Cable cutter
- 01 x More gripper (medium size)
- 01 x Grease tin
- 01 x Tools Box

**TRIALS**

- Engine commissioning and trial period to be completed with the guidance of engine supplier.
- Vessel shall be tested at different speed, under different sea status. These trial tests to be initiated after engine commissioning completed.
- All the trials and equipment tests shall be carried out in the presence of the owner and builder appointee.
- All trials data check sheets to be finalized and signed by both the parties.

**WARRANTY AND OTHER DOCUMENTATIONS**

- **Hull**
  - Minimum 1-year shipbuilder warranty from the date of delivery. All warranty documents issued by the manufacturers for property articles shall be transferred to the owners.
  - Any repair on hull or superstructure that is raised from non-abusive usage, to be attended by shipyard promptly, within a reasonable scope.
  - Builder shall have their own facility for repairing and maintenance of hull.
- **Engines**
  - **1year** warranty from the date of delivery.
  - Engines shall be procured with full consent of local distributor or service provider in Maldives with all services and warranty issues being obligatory to such parties.
- **Equipment and accessories**
  - **1 year** warranty for all equipment's and machineries installed onboard from the date of delivery.
  - Any defects that are raised from non-abusive usage with in this 1 year, shall be attended by the builder.
  - If unable to fix any of the equipment's or repaired it shall be replaced with in 1 week. However, in case of unavailability of a critical item, the supplier or builder to give a delivery date not exceeding 1 month

**DOCUMENTATION AND LABELLING**

- Documentations to provide with the vessel
  - Hull warranty documents
  - Instruction manuals of equipment's
  - Service manuals
  - Trial Documents