

# **TECHNICAL SPECIFICATION**

## **GENERAL DESCRIPTION**

A vessel suitable to be used for VIP transportation. The vessel to have closed cabin fully air conditioned with compact AC units. All Seats specially arranged and designed with comfortable cushions and armrests. Aft of the vessel to have seating arrangements for Security persons. Vessel must exhibit excellent motions to maximize passenger comfort while operating at an optimum speed on sea status 3 and 4

## **PRINCIPAL PARTICULARS**

- Hull form : Mono hull
- Hull material : Fiber Reinforced (to specify the fiberglass resin used and details)
- Classification : Boat builder to specify (Documents to be provided with the proposal)
- Length over all : 42 – 47
- Service Speed : 35 knots or more at medium load
- Cabin : A VIP room with toilet and if possible, a basic toilet for crew
- Passenger : Capacity to be specified by the builder (exact seating arrangements diagrams to be included on the proposal)
- Sea Keeping and Maneuvering : Vessel shall exhibit excellent motions to maximize passenger comfort while operating at an optimum speed on sea status 3 and 4
- Endurance : 8hrs minimum

## **TANK CAPACITIES**

- Fuel oil Tank : to specify by the builder, for a minimum 8hr endurance at optimum speed (Tank size and estimated endurance to be detailed on the proposal)
- Water tank : Minimum 300 liters

## **ENGINE AND STEERING SYSTEM**

- Four stroke outboard engines with Salt water series propeller.
- Engines to have local authorized distributor and service provider.
- Hydraulic Steering system including steering wheel with power assist.
- Electronic engine control system is preferred, if another system is suggested builder to specify as an option for owner to select and decide.
- Complete installation of engines with all required accessories.

## **GENERATOR**

- 1 x Generator set, preferred Onan or Kohler. (brand, model, capacity and to be specified on the proposal)
- Complete installation with all required accessories and wirings.

## **AIRCONDITIONING SYSTEM**

- Self-contained compact units to be installed in all the necessary compartments with remote controllers. (brand, model and capacity to be specified on the proposal)
- Complete installation with all required accessories.

## **GENERAL FEATURES**

- Hull in complete WHITE color gelcoat.
- “MNDF” and “Pennant number” painted “Black in color” on both sides of freeboard (sizes to be decided when hull is completed).
- Minimum 03 coats of Anti-fouling (selected color), undercoats as per manufactures guidelines (antifouling to be 2 inches above water line).
- VIP seating arrangement to be discussed or provide options for owners to decide and select (provided with drawing to select).
- Driver seats with comfortable upholstered cushions and hand railings (cushion thickness 08 inches).
- Seating arrangement on aft of the vessel.
- Teak on aft sitting area and all-weather decks (including flybridge deck).
- A boarding side door on port aft side.

## **BASIC FEATURES**

- Deck cleats, two on forward, two on aft cock pit and two on amid ship (8-12 inch).
- Sliding pilot side windows.
- Deck wash with outlet shower fixed on PORT shipside rear entrance flushed to hull (Pipe length 50 Ft).
- Plumbing arrangement with necessary valves and taps for engine flushing
- Stainless steel hand railings where required.
- SS swim ladder.
- Fuel filling point with markings located on gunwale of the STBD side.
- Fresh water filling point with markings located on gunwale of the PORT side.
- Fixed SS drain plates for deck draining points.
- D - fender to be fixed with SS bolts and SS nuts (D- fender joints to be located near bow)
- SS guard plate to be fixed on stem.
- Fuel and water level sensors fixing arrangement to be made with coaming. Provide access to fuel and water sensors from deck (Deck Plates).

## **HELM CONSOLE**

- Black top surface for anti-reflection.
- Red ceiling light for helm (LED light).
- 2 Nos DC USB outlets for phone charging.

- If console is closed natural ventilation shall be provided.
- All necessary controls and display arrangements on helm.
  - PORT and STBD engine display
  - Steering wheel
  - Engine throttle
  - 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
  - GPS and Rader display with power on/off switch
  - Fuel tank level gauge
  - Water tank level gauge
  - Battery voltage indicator digital

#### **FLY BRIDGE**

- Fly Bridge helm position
  - PORT and STBD engine display
  - Engine throttle
  - Steering wheel
  - Navigation light switch
  - Search light switch
  - Trim tab gauge and controls
  - GPS and Rader display (water proof with daylight mode)
  - Fuel tank level gauge
  - Battery voltage indicator digital
  - Compass
  - VHF hand set
- Upholstered captain seat
- Wind deflector screen
- Upholstered sofa seats
- SS handrailing
- Sun Top (Canvas removable with zippers)
- Self-draining

#### **SALOON**

- Comfortable sofa seating arrangement on both the sides
- Coffee table
- Home Theater system

- Smart TV
- Satellite TV
- DVD player with USB
- Carpet with underlaying (sample to submit for customer to select)
- window blinding (to discussed and confirm)
- Architectural lighting system
- Air Conditioning control
- 2 x luxury tissue box cover
- 1 x Dustbin

Note: - All materials and accessories shall be luxury or premium standard

### **MASTER CABIN**

- Luxury design ceiling with decorative lighting arrangement
- Master bed
  - Mattress
  - 2 x Pillows
  - 1 x Bolster
  - 2 x bed cover set (Complete)
- Reading light
- Led lighting under the beds
- Fitted Carpet with underlaying (all sides of the carpet to be stitched)
- Air-conditioning with remotes
- 1 x Wardrobe
- Mini bar (Drawer type preferred).
- Stainless steel Dustbin
- 1 x luxury tissue box cover

### **Master Room Toilet**

- Entrance door
- Appropriate counter top
- Wash basin and tap
- Electric quite toilet
- Extractor fan
- Sky shower
- Water proof Switches and sockets

Note: - All materials and accessories used shall be of luxury or premium standard

### **GALLEY (Optional or if applicable)**

- Corian Table
- Storage lockers with drawers
- Single hot plate

- Microwave
- Mini Bar
- SS sink and tap
- Overhead storage lockers
- Hob extractor fan

#### **GUEST ROOM (Optional or if applicable)**

- Decorative lightings for ceiling
- 2 Single beds
  - Mattresses
  - 2 x Pillows
  - 2 x bed cover set (Complete)
- Reading lights
- Led lighting under the beds
- Fitted Carpet with underlaying (all sides of the carpet to be stitched)
- Air-conditioning with remotes
- Maximum allowable storage cupboards
- Stainless steel Dustbin

#### **CREW TOILET (Optional or if applicable)**

- Entrance door
- Appropriate counter top
- Wash basin and tap
- Electric quite toilet
- Extractor fan

#### **ELECTRICL SYSTEM**

- Full set of navigation lights (DC)
- Battery charger with selector switch, able to charge all batteries.
- AC to DC converter for communication systems.
- Switch panel 12V DC with marine breakers for all electrical equipment and outlets.
- Batteries
  - Battery for generator.
  - Battery for house current (charging arrangement from engine).
  - Batteries for each engine.
- Selector Switch, for use with two or more batteries to permit selection between batteries. for starting and charging or operation of both batteries in parallel.
- Blue LED beacon bar visibility minimum 4 NM.
- 2 x wipers for both windscreens with water wash system.
- Electric horn (SS preferred).
- Suitable electric trimtabs fixed on transom.
- Electric blower, for aft bilge ventilation.
- AC power outlets with universal pins and USB port for VIP seats.

- AC power outlets with universal pins and USB port near helm and crew seat.
- USB charging outlets for VIP seats.
- Red light ceiling light for helm
- 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).

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## **NAVIGATION, COMMUNICATION AND SAFETY EQUIPMENTS**

### **Navigation**

- 12" Raymarine AXIOM Multifunction Display
- Rader Scanner Open Array
- Raymarine through Hull Transducer
- Raymarine i40 wind Meter (with Direction)
- GPS Antenna with STNG, Cable and Maldives map
- Raymarine AIS
- Digital flux gate compass (Furuno)
- Compass with light

## Communication

- Raymarine MF/HF Sailor m802 (250 w) Complete
- TETRA MTM800 base station complete
- Marine VHF complete (Raymarine)
- Isat satellite phone with docking station (Inmarsat)
- VHF set
- Intercom system
- Laptop

## Safety Equipment

- SART (Sailor SART)
- EPIRB (McMurdo)
- Security Camera system (Hikvision)
  - NVR with 1 TB HDD

**Note:** - Specific brand for some of the items are selected for easy integration of these equipment's and service provider availability

## LIFE SAVING EQUIPMENTS

- 02 x portable fire extinguishers embedded to hull in closed boxes, fixed in easily accessible areas (c-thru doors for boxes)
- 02 x Fire blanket
- Self-Inflatable life jackets (Adults) for maximum capacity
- 04 x self-inflatable life jackets for kids.
- 02 x Life Ring (fixing point to be decided).
- First Aid Kit (below is the list of Items to be included in the first aid kit)

#	QTY	UOM	Description	#	QTY	UOM	Description
1	1	Nos	AED	16	1	Bot.	Betadine Solution
2	1	Nos	Oxygen cylinder with carrying Case	17	1	Tub.	Betadine ointment
3	2	Nos	O2 Tubing Mask/Nasal Prongs	18	1	Bot.	Optrex eye lotion
4	1	Nos	Cervical Collar (adult)	19	1	Bot.	Moov Spray
5	1	Nos	Scissor	20	1	Bot.	Merbromin
6	1	Nos	Torch penlight	21	1	Bot.	Calamine Lotion
7	1	Nos	Tactical Tourniquet	22	1	Oint	Mupricon
8	1	Nos	FA Bag	23	1	Nos	Asthalin Inhaler
9	10	Tab.	Emeseg 4mg	24	1	Nos	Crepe Bandage
10	10	Tab.	Faxofenadine 180mg	25	5	Nos	Roller Bandage 7.5x3
11	20	Tab.	Uphamol 650mg	26	2	Nos	Triangular Bandage
12	10	Tab.	Dompan OD	27	4	Nos	Micropore Plaster
13	20	Tab.	Panadine	28	50	Nos	Band Aid
14	10	Pkt	Citro sod/Eno	29	2	Nos	Eye Pads
15	5	Tab.	Cetirizine 10mg	30	100	Nos	Disposable gloves

## **BOAT EQUIPMENTS**

- 01 x SS electric winch if applicable and appropriate anchor SS
- 01 x Flag set (CB – 5)
- 02 x Buckets (08 Liter)
- 01 x Hand mirror (small)
- 01 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)
- 01 x 150ft 16mm Rope for anchor
- 01 x 50m Flexible hose reel
- Snorkel, Mask, Fins (03 sets)
- 04 x Raincoats
- 02 x Aluminum foil foldable wind shield reflector (helm equipment protection)

## **TOOLS**

- 01 x Oil extractor pump (engine Oil change)
- 01 x Wrench set (sizes 8-24 mm)
- 01 x Wrench (size 27 mm)
- 01 x Allen key set (7 pcs)
- 01 x Tool box (18")
- 01 x Ratchet wrench
- 01 x Adaptor for extension (6")
- 01 x Nose plier
- 01 x Plier
- 01 x Adjustable Spanner 12"
- 01 x Adjustable Spanner 06"
- 01 x Socket set (sizes 8-24)
- 01 x socket (size 27 mm)
- 01 x Deep socket (size 14 mm)
- 01 x Screwdriver set
- 01 x Screw driver big (-),
- 01 x Screw driver big (+)
- 01 x Universal piece
- 01 x Hammer 1lb
- 01 x Grease gun (flexible nozzle)
- 01 x Silicon gun
- 01 x Filter removing wrench for oil
- 01 x Filter removing wrench for fuel
- 01 x Strap wrench
- 01 x Line tester



- 01 x Cable cutter
- 01 x More gripper (medium size)
- 01 x Grease tin
- 01 x Tools Bag

## **ESSENTIAL SPARES AND ACCESSORIES**

- Necessary spares for Engine's 1<sup>st</sup> routine.
- Engine oil and Gear oil for 1<sup>st</sup> routine maintenance.
- 01 x Complete Gear with salt water propeller
- 1 x Parts Catalogue for main engine and Generator
- 1 x Service Manual for main engine and Generator

## **Trials**

- Engine break-in 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 break-in period.
- All the trials and equipment tests shall be carried out in the presence of an owner and builder appointee.
- All trial data check sheets to be finalized and signed by both the parties.

## **WARRANTY AND OTHER DOCUMENTATIONS**

- Hull
  - Minimum 5years 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 the supplier or the shipyard promptly, within a reasonable scope.
  - Supplier or Builder shall have their own facility for repairing and maintenance of hull
  - If the proposed vessel is classified under any class, document copies shall be provided with the tender proposal
- 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
  - 1year 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 supplier or 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

- Equipment and accessory details shall be mentioned in the tender proposal (eq: Brand, model etc...)

## **DOCUMENTATION AND LABELLING**

- Documentations Required with the vessel
  - Hull warranty documents
  - Instruction manuals of equipment's
  - Service manuals
  - Trial Documents
  - Checked list of all equipment's, accessories and spares that will be provided with the vessel
  - Checked list of all the documents included in the box file (separate for each vessel)
  - All the documents to be box filled and handed over while delivering the vessel
  - Boat warning labels to be fixed where applicable. (First aid kit, Mind your head, Lifejackets, Sanitizer, Fire blanket, Fire extinguisher, No smoking etc.)
  - Vessel Data plate to be engraved on a SS plate and fixed on the vessel.