

Technical Specifications and Trial directives of IRB with 40 HP OBM

S.N	Parameters	Technical Specifications	Trial Directives
	IRB		
1	Exterior Size of Boat, Min (Length X Breadth in mm)	4500 x 1900	BOO to physically check the parameter
2	Interior Size of Boat, Min (Length X Breadth in mm)	3200 x 1000	BOO to physically check the parameter
3	Carrying capacity, considering per person weight of 825/10 Kgs, Speed	10 Persons, Speed at light load with three persons not less than 15 Knots and at full load not less than 6 Knots	BOO to physically check the parameter
4	Floor Board (no's & Size) interlocked together to form a rigid platform (mm x mm x mm)	3250 X 1170 X 12 (+-5%)	BOO to physically check the parameter
5	Total Min Inflatable Chambers including inflatable Keel	5	BOO to physically check the parameter
6	Diameter of Buoyancy tube, Min (mm)	480 millimetres	BOO to physically check the parameter
7	Inflatable Mechanism of Boat	Foot Pump as well as Electric Pump (12 V DC)	BOO to physically check the parameter
8	The Hull, Air Tube (buoyancy Chambers), floor, and Keel must made of composite fabric consisting Hypalon (outside layers) and Neoprene (inside layers) with 1670 Dtex, 1500 GSM as per ISO 15372	Yes	BOO to check and verify through lab test reports from Govt./NABL-accredited labs/ International labs.
9	Transom - FRP Coated marine plywood as per IS 710 to form waterproof Cocoon as per ISO, OBM mount on transom should of marine grade aluminium alloy plate	Yes	BOO to check and verify through lab test reports from Govt./NABL-accredited labs/ International labs.
10	Over lapping of seam of Boat	Quadruple	BOO to physically check the parameter
11	5/8" Grab line nylon braided (as per IS 4227) all along the side for safety	Yes	BOO to physically check and verify through IS 4227 or OEM certificate.
12	Inflatable Keel of suitable Diameter for rigidity & stability during operation and swift water rescue	Yes	BOO to physically check the parameter
13	Two Nos drain valve akin to NRV on the lower most part of the transom board near the rear end fitment of the keel close to the centre line	Yes	BOO to physically check the parameter
14	Air Valve one way type Conforming to International Standards (Inflation/Deflation Valve) for each	Yes	BOO to physically check the parameter

	compartment		
15	Length of Engine Shaft suitable for transom (in cm)	In accordance with height of transom of IRB.	BOO to physically check and verify.
16	Transom Height	As per OBM engine	BOO to physically check the parameter
17	Dry Weight	Max 76 kg	BOO to physically check and verify.
18	2 paddles for Emergency Rowing	Yes	BOO to physically check the parameter
19	Floor Board shall be interlocking type of High Strength Tempered Anodized marine grade aluminium alloy/ Marine plywood encapsulated in FRP coating Polygon (Al alloy) & U Channel (Al alloy) for fitment of floorboard - as per offered design	Yes	BOO to physically check and verify through OEM certificate.
20	Boat Shall have Round/ Conical ends for Rapid Planning	Yes (round)	BOO to physically check the parameter
21	Built in oarlocks for easy Rowing	Yes	BOO to physically check the parameter
22	Two Stainless Steel SS 316 "D " Rings for Towing	Yes	BOO to physically check and verify.
23	Two Layer of Material on Lower Tubes for better Puncture resistance and abrasion	Yes	BOO to physically check and verify through OEM certificate.
24	Mandatory Fitment on Collar including 100 mm Rubbing Stake of Vinyl/urethane/EPDM/ Neoprene, Anti chafing strip of 2" inch under keelson, Chafing patch for coxswain's position, Bow rubbing strip 4", D-rings, Anti-Skid Coating etc. as per standards	Yes	BOO to physically check and verify through OEM certificate.
25	Minimum Four Carrying handles shall be provided, two on each side and one front lifting handle One additional handle to be provided near Coxwain to provide grip to helmsman while operating OBM	Yes	BOO to physically check the parameter
26	Additional Fitment on Collar including 2 paddle blade Pocket, 2 rope Stowage pocket, 4 securing Rings SS 316, 1 bow Ring SS 316 etc.	Yes	BOO to physically check and verify.
27	Lifesaving Equipment in a wooden Box Carrying First Aid Kits	Yes	BOO to physically check and verify.
28	Instruction Manual	Yes	BOO to physically check and verify.
29	No of Life jackets	10	BOO to physically check and verify.
30	No of Life Buoys	2	BOO to physically check and verify.
31	Repair Kit	fabric patches 05, adhesive tube (Dendrite) 500 gm, roughing tool 1 set	BOO to physically check and verify.

32	PVC coated nylon fabric Valises and Store bags	Heavy duty storage bag for Hull – 01 Heavy duty storage bag for Floorboard – 01 Storage bag for oars & other accessories – 01	BOO to physically check and verify through OEM certificate.
33	Additional spares	Inflation/ Deflation Valves - 10 Nos Pressure gauge - 01 No Plugs for Water Drain - 04 Nos NRV for Water Drain - 10 Nos Electric Inflation pump - 01 No Bellow Inflation Foot Pump - 2 Nos Patching material with adhesive to repair leak/ damage in buoyancy tube.	BOO to physically check and verify.
34	Test & trials	As per IRS rules and norms	
35	Marking on builder's plate fitted on inner side of the transom	Boat General purpose Inflatable No., Date of supply, Name of manufacturer, Max load carrying capacity (Kg), Max motor rating (KW), Max No. of persons, recommended working pressure	BOO to physically check and verify.
	GENERIC		
36	Functions performed	The inflatable boat shall perform the following tasks: - (a) Search & Rescue during flood (b) Transport men and material	BOO to physically check and verify through the OEM certificate.
37	Conformity to Standards for Boat Accordance with IRS Classification Society Rules and Norms issued and ISO 6185-3	Yes	BOO to physically check and verify through the OEM certificate.
	Performance		
38	Conformity to Standards for Rubberized Inflated Boat As per ISO 6185-3	4.5 m (For 10 Persons)	BOO to physically check and verify through the OEM certificate.
39	Weight of Boat without OBM	Max 145 kilograms	BOO to physically check and verify.
40	Weight of Boat max with passengers without OBM	Max 970 kilograms	BOO to physically check and verify.
41	Availability of approved Drawing from IRS/ Govt. of India (DG Shipping) approved	Yes	BOO to physically check and verify.
42	Availability of Test Report including Environmental test as per ISO 6185-3 latest amendment from IRS/Govt. of India (DG Shipping)	Yes	BOO to physically check and verify through the OEM certificate.

	approved to prove conformity to specification for declared parameters		
43	After Sales and Service	OEM of IRB and OBM should have adequate facilities in India for providing after-sales service / Technical Support and spares including electronic equipment for min. period of 10 years (after delivery of the last equipment) including electronic equipment	BOO to physically check and verify through the OEM certificate.
44	Inspection Authority	The inspection authority for the boat will be IRS or Equivalent IACs (International Association of Classification Societies) member.	BOO to physically check and verify through the OEM certificate.
	OBM		
45	Make of Out Board Motor Engine (OBM); OBM make should have proven Indigenous product support throughout India		BOO to physically check the parameter on the ground.
46	Out Board Motor	An outboard motor is a propulsion system for rescue boats, consisting of a self-contained unit that includes engine, gearbox and propeller or jet drive, designed to be affixed to the outside of the transom with accessories	BOO to physically check and verify.
47	Model No of Out Board Motor Engine (OBM)	--	
48	Fuel	Petrol	BOO to physically check and verify.
49	No of Strokes	Two Stroke	BOO to physically check and verify through OEM certificate.
50	Engine	40 HP 02 Stroke Petrol	BOO to physically check and verify through OEM certificate.
51	No of Cylinders	2 or 3	BOO to physically check and verify.
52	Fuel Capacity; The OBM shall be provided with OEM supplied standard fuel tank, connecting fuel hoses	25 liters	BOO to physically check and verify.
53	Power (HP)	40 HP	BOO to physically check and verify through OEM certificate.
54	Fuel Delivery System	Carburetor	BOO to physically check and verify through OEM certificate.
55	Engine Starting	Manual recoil	BOO to physically check and verify.
56	Trim method position	Manual	BOO to physically check and verify.
57	Engine Stopping Switch	Yes	BOO to physically check the parameter on the

			ground.
58	Start-in gear protection	YES	BOO to physically check and verify.
59	Engine Cooling System	Water Cooled	BOO to physically check and verify.
60	Engine Lubrication	Premix with petrol in two-stroke engine	BOO to physically check and verify through OEM certificate.
61	Engine Exhaust	Through Propeller	BOO to physically check and verify.
62	Type of Steering System	Tiller Handle	BOO to physically check and verify.
63	Length of Engine Shaft suitable for transom (in cm)	In accordance with height of transom of IRB.	BOO to physically check and verify.
64	Gear Shift	FNR	BOO to physically check and verify.
65	Thermostat-controlled cooling system	Yes	BOO to physically check and verify through OEM certificate.
66	Dual water intake	Yes	BOO to physically check and verify.
67	Through prop hub exhaust	Yes	BOO to physically check and verify.
68	Water pump housing	Yes	BOO to physically check and verify.
69	Fuel tank	1	BOO to physically check and verify.
70	Emergency stop switch (lanyard)	Yes	BOO to physically check and verify.
71	Propeller material	Aluminum Alloy	BOO to physically check and verify through OEM certificate.
72	Full throttle operating range (rpm)	Min. 5000	BOO to physically check and verify through OEM certificate.
73	Drive protection	Rubber hub	BOO to physically check the parameter.
74	Engine model number	As per OEM	
75	Gear ratio	1.8 to 2.3	BOO to physically check and verify through OEM certificate.
76	Propellers dimensions	As per OEM	
77	Fuel attachment	1 set	BOO to physically check and verify.
78	Standard Tool Kit including Open Spanner, Socket, T Handle, Extension for Socket, Screw Driver , Feeder Gauge, Box Spanner, and Torque Spanner of Required Numbers and Sizes	Yes	BOO to physically check and verify.
79	OBM Spares	1.1 Engine oil filter - 03 nos. 1.2 Fuel Filter - 06 nos. 1.3 Air Filter - 02 nos. 1.4 Fuel line with priming valve and connectors – 01 no. 1.5 Propeller - 01 No.	BOO to physically check and verify.

		1.6 Water pump repair kit – 01 set 1.7 Water pump impeller – 01 no. 1.10 Gear oil drawn screw washer – 06 nos. 1.8 Lubrication oil drain plug washer – 02 nos. 1.9 Fuses of all systems complete - 02 set * These spares are to be provided as per the OBM Manufacturer. 1.10 OBM shall be provided with suitable tank with facility to store fresh water for pre – use and post use stowage, maintenance and upkeep of OBM: - as per NDRF requirement. 1.11 Any other spare recommended by OEM.	
80	Standard for OBM	CE or EN or equivalent BIS standard.	BOO to physically check and verify through relevant certificate.