

QUALITATIVE REQUIREMENT (QR) OF WATER SCOOTER FOR 2 MEN

General

The Water Scooter is commonly used personal watercraft for water sport activities and in some countries used for patrolling purpose and by police and life-guards. The rider uses the watercraft mainly sitting on it and typically holds 2 people, have an inboard engine driving a pump jet with impeller to create thrust for propulsion and steering.

This is an excellent force multiplier and can enhance the operational efficiency of security forces for special operations, patrolling, interception and reinforcement in water-bodies. Water scooters have excellent manoeuvrability and capability to perform in water. This Water Scooter in Indian context is ideal for use by police in riverine areas, lakes and coastal areas for multifarious tasks.

Qualitative Requirements (QRs)

As per users, the Water Scooter should have a capacity to carry two adults (i.e. one QRT person and driver), Capable for cruising and quick response in placid waters, flowing water having water current and in narrow water lanes where it is difficult to have access by boats. All fixtures and accessories should be of marine grade. **The product should be approved by ECE certification.**

S/No.	QRs/Technical Specification	
1.	Length	3000 mm (min)
2.	Breadth	1200 mm (min)
3.	Height	1000 mm (min)
4.	Engine	4 stroke
5.	Seating Capacity	02 persons
6.	Endurance	02 Hours (min) at Cruising speed with full load.
7.	Speed	
	(a) Cruising	25 Knot/ 46 Km/hr/29 mph
	(b) Maximum	45 knot /83 Km/hr/ 52 mph
8.	Full throttle rpm	Min – 5000 RPM
9.	Minimum operating depth of water	2 Feet
10.	Horse power	Minimum 110 HP to meet the speed criteria mentioned at srl No. 7
11.	Propulsion system	Jet propulsion system.
12.	Fuel	Petrol
13.	Impeller material	Stainless Steel and anti-corrosive.
14.	Pay load	200 Kg (minimum)
15.	Seating and seat material	Water proof, vinyl, cushioned, bolstered saddle shape seating with grab/strap.

S/No.	QRs/Technical Specification	
16.	Hull and deck material	a) Fiberglass Reinforced Composite (base material /Vinyl Ester/additives /core material/ Gel coat)Skid resistant b) V shape hull for better stability
17.	Hull and Deck protection	a) Skid resistant b) Floor board c) Boarding step d) Knee pads
18.	Fender material	Suitably broad and thick, all round, marine grade, rubber fender
19.	Fuel tank capacity	Fuel tank under the seat to meet the endurance requirement with 25% fuel reserve.
20.	Accessories	a) Light weight Mini Telescopic Oars (02 Nos) b) Tow hook c) Slings d) Marine grade Adult life jackets (2 Nos) e) 2 Nos Hinged PVC Fender
21.	List of Manuals	User and maintenance manual, Service manual, parts catalogs.
22.	Tools	Combination plier and screw driver set along with mandatory standard tool kit for routine maintenance.
23.	Spares	On Board spares and filters for 2 year or 500 hours operations as per maintenance schedule of OEM.
24.	Colour	As per requirement of user end.
25.	Product support.	The product support should be available in India for minimum 10 years.
26.	Cooling system	Water cooled.
27.	Starting	Electric self-starter and Manual start on emergency
28.	Steering and Controls	a) Handle bar b) Handle bar throttle controls c) Tilting steering
29.	Emergency engine shutoff	Required.
30.	Engine Protection and Warning system	a) Buzzer system b) Safety trip and monitoring system. c) Fuel level warning d) Temperature warning
31.	Clogging by weeds	Effective inbuilt clogging countermeasures
32.	Bilge System	Automatic bilge siphon

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33.	Lifting arrangement	2 to 3 Nos lifting hook provided at suitable place for lifting of Water Scooter.
34.	Horn	Electric Horn.
35.	Light	Head light suitable for night operation for clear visibility upto 50 Mtr.
36.	Gear operation	a) Provision of forward, Neutral and reverse. b) Throttle type - Finger.
37.	Battery	12 Volt gel type maintenance free battery.
38.	Speedo meter, RPM meter/Tachometer, Electronic Clock	01 No. each, standard, waterproof
39.	Storage	Under Seat Storage, Glove box, Front storage well
40.	Certification	Product should be approved by ECE certification.

Note- All firms are requested to provide the following.

1. Original Brochure of product by OEM.
2. Detail literature about the product.
3. Comprehensive comments for in-corporation in the specifications.

The Sub-group has decided to upload the QRs on MHA and BSF website for 15 days to invite the views/ comments/ suggestions of prospective bidders to make the QRs more broad based.


(Vikas Singh)
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