

Commercial and Military and Private Vehicles and their Accessories and Components >> Motor vehicles >> Specialized and recreational vehicles >> Mobile Water Treatment Vehicle

Specifications:

Name	Type	Restrictions	Unit	Properties
Group: General Parameters				
1. The mobile water treatment equipment to treat all types of water sources - Sea water, Brackish water, River water, Lake water, Bore well water, Highly turbidity water as per source water range within single unit	Enumerable	Yes	N/A	Mandatory
2. All-terrain vehicle mobile system	Enumerable	Yes	N/A	Mandatory
3. Can treat multiple source of water including sea water and brackish water in a single unit TDS range is up to 35000	Enumerable	Yes	N/A	Mandatory
4. In built energy supply system for water treatment which eliminates need of external electricity source	Enumerable	Yes	N/A	Mandatory
Group: Essential Characteristics				
1. The Water treatment system mobile, self-contained independent, automatic and mounted on the vehicle	Enumerable	Yes	N/A	Mandatory
2. The water treatment vehicle can travel to low hilly areas, desert areas, rocky surfaces	Enumerable	Yes	N/A	Mandatory
3. The mobile system capable of airlifted and transported to site as and when required	Enumerable	Yes	N/A	Mandatory
4. The mobile water treatment system has to be integrated with inbuilt energy supply system No separate source, external power supply required	Enumerable	Yes	N/A	Mandatory
5. The mobile system inbuilt analytical system for detection of TDS and Turbidity	Enumerable	Yes	N/A	Mandatory

Name	Type	Restrictions	Unit	Properties
6. The system able to perform and produce drinking water at 3000 mtr above Mean Sea Level	Enumerable	Yes	N/A	Mandatory
7. The system can be operated – water temp between 3°C to 37°C	Enumerable	Yes	N/A	Mandatory
8. Storage Temperature for equipment along with vehicle (-10°C to 45° C)	Enumerable	Yes	N/A	Mandatory
9. System should have In Built advance control system, making it very convenient for operation	Enumerable	Yes	N/A	Mandatory
10. Mobile water treatment has operational capabilities - at 23 X 7 with equal efficiency on continuous operation of water treatment without mobility	Enumerable	Yes	N/A	Mandatory
11. Capable of Inbuilt diagnostic facility	Enumerable	Yes	N/A	Mandatory
12. Remineralisation system inbuilt to produce required water	Enumerable	Yes	N/A	Mandatory
13. The mobile system facilities of piping for source water collection and water treatment within the same unit	Enumerable	Yes	N/A	Mandatory
14. The mobile system compact and less weight for convenient mobilization	Enumerable	Yes	N/A	Mandatory
15. The size of the mobile treatment vehicle easy for transportation	Enumerable	Yes	N/A	Mandatory
16. The system plug and play type and easy to operate	Enumerable	Yes	N/A	Mandatory
17. Mobility	Enumerable	The equipment should be integrated and mounted on vehicle having an all-terrain feature with Good suspension and powerful engine	N/A	Mandatory

Name	Type	Restrictions	Unit	Properties
18. Transportability	Enumerable	The vehicle capable of being transported over a long distance by road and by air	N/A	Mandatory
Group: Vehicle Parameters				
1. Engine Capacity (cc)	Numeric	>=1400	N/A	Mandatory,Filter,Golden
2. Make of Chassis	Text	N/A	N/A	Mandatory
3. Type of Fuel	Enumerable	Diesel	N/A	Mandatory
4. Vehicle Emission Compliance	Enumerable	BS-IV	N/A	Mandatory
5. Engine Power Max	Measurable	Any value	power/horsepower	Mandatory,Filter,Golden
6. Rated RPM at Max Engine BHP	Numeric	Any value	N/A	Mandatory,Filter,Golden
7. Engine Torque Max	Measurable	Any value	force/Newton	Mandatory,Filter,Golden
8. Rated RPM at Max Engine torque	Numeric	Any value	N/A	Mandatory,Filter,Golden
9. Engine Aspiration	Enumerable	Natural Aspiration, Turbocharged, Supercharged, Turbocharged+ Supercharged, Turbocharged Intercooled	N/A	Mandatory,Filter,Golden
10. Fuel Tank Capacity (Enough capacity to treat minimum 80 hrs without Refueling while system is only used for treatment Purpose)	Measurable	Any value	volume/liter	Mandatory,Filter,Golden
11. Gradeability of Chassis(%)	Numeric	Any value	N/A	Mandatory,Filter,Golden
12. Ground Clearance	Measurable	Any value	length/millimeter	Mandatory,Filter,Golden
13. Wheel Base	Measurable	Any value	length/millimeter	Mandatory,Filter,Golden
14. Kerb Weight	Measurable	Any value	mass/kilogram	Mandatory,Filter,Golden
15. Gross Vehicle Weight	Measurable	Any value	mass/kilogram	Mandatory,Filter,Golden
16. No of Axle	Numeric	Any value	N/A	Mandatory,Filter,Golden
17. Chassis Transmission System	Enumerable	Automatic, Manual	N/A	Mandatory,Filter,Golden
18. Type of Steering	Enumerable	Power, Manual	N/A	Mandatory,Filter,Golden
19. Turning Radius	Measurable	Any value	length/millimeter	Mandatory,Filter,Golden

Name	Type	Restrictions	Unit	Properties
20. Wheel Drive	Enumerable	4 Wheel Drive	N/A	Mandatory
21. Length of Chassis	Measurable	Any value	length/millimeter	Mandatory,Filter,Golden
22. Width of Chassis	Measurable	Any value	length/millimeter	Mandatory,Filter,Golden
23. Height of Chassis	Measurable	Any value	length/millimeter	Mandatory,Filter,Golden
24. Front Vehicle Brake	Text	N/A	N/A	Mandatory
25. Rear Vehicle Brake	Text	N/A	N/A	Mandatory
26. Fire Extinguisher	Enumerable	Yes	N/A	Mandatory
Group: Electrical System				
1. Electrical System	Enumerable	CCA Battery Capability	N/A	Mandatory,Filter,Golden
2. Alternator	Enumerable	Yes	N/A	Mandatory
3. Horn	Enumerable	Yes	N/A	Mandatory
4. Power Socket	Enumerable	Yes	N/A	Mandatory
5. Head Lights	Enumerable	Yes	N/A	Mandatory
6. LED Tail Lights	Enumerable	Yes	N/A	Mandatory
7. Turn and Brake Lights	Enumerable	Yes	N/A	Mandatory
Group: Instrumentation				
1. Speedometer	Enumerable	Yes	N/A	Mandatory
2. Voltmeter	Enumerable	Yes	N/A	Mandatory
3. Fuel indicator	Enumerable	Yes	N/A	Mandatory
4. Temperature	Enumerable	Yes	N/A	Mandatory
5. Low Oil Pressure	Enumerable	Yes	N/A	Mandatory
6. Turn Signal	Enumerable	Yes	N/A	Mandatory
7. High/low beams	Enumerable	Yes	N/A	Mandatory
Group: Source Water Parameters				
1. Ph	Numeric	5 - 10	N/A	Mandatory,Filter,Golden
2. Total Sulfur as So4, (ppm)	Numeric	<=150	N/A	Mandatory,Filter,Golden
3. Total Chloride as Cl, (ppm)	Numeric	<=19500	N/A	Mandatory,Filter,Golden
4. Calcium as ca, (ppm)	Numeric	<=19500	N/A	Mandatory,Filter,Golden

Name	Type	Restrictions	Unit	Properties
5. Total Dissolved Solid, (ppm)	Numeric	35000	N/A	Mandatory,Filter,Golden
6. Specific Conductance at 25 °C, (µS/cm)	Numeric	10 - 45000	N/A	Mandatory,Filter,Golden
7. Turbidity (NTU)	Numeric	30	N/A	Mandatory,Filter,Golden
8. Sodium as Na (ppm)	Numeric	<=10500	N/A	Mandatory,Filter,Golden
9. Magnesium as Mg (ppm)	Numeric	<=1300	N/A	Mandatory,Filter,Golden
10. Fluoride as F (ppm)	Numeric	12	N/A	Mandatory,Filter,Golden
11. Iron dissolved as Fe (ppm)	Numeric	30	N/A	Mandatory,Filter,Golden
12. Barium as Ba (ppm)	Numeric	<=50	N/A	Mandatory,Filter,Golden
13. Free chlorine (ppm)	Numeric	<=15	N/A	Mandatory,Filter,Golden
14. Nitrite as NO2 (ppm)	Numeric	400	N/A	Mandatory,Filter,Golden
15. CO2	Numeric	400	N/A	Mandatory,Filter,Golden
16. Total Organic Carbon	Numeric	5	N/A	Mandatory,Filter,Golden
17. Dissolved Organic Carbon	Numeric	10	N/A	Mandatory,Filter,Golden
18. COD	Numeric	3	N/A	Mandatory,Filter,Golden
19. BOD5	Numeric	3	N/A	Mandatory,Filter,Golden
20. Total suspended solid	Numeric	120	N/A	Mandatory,Filter,Golden
Group: Treated Water Parameter				
1. Flow (m3/hr) of Sea Water	Numeric	>=1	N/A	Mandatory,Filter,Golden
2. Flow (m3/hr) of Fresh water source	Numeric	>=4	N/A	Mandatory,Filter,Golden
3. Min Pressure (bar)	Enumerable	1.5 for sea water	N/A	Mandatory,Filter,Golden
4. pH	Numeric	6.5 - 7.5	N/A	Mandatory,Filter,Golden
5. Total Hardness as CaCO3 (ppm)	Numeric	25 - 125	N/A	Mandatory,Filter,Golden
6. TDS (ppm)	Numeric	300 - 500	N/A	Mandatory,Filter,Golden
7. Turbidity (NTU)	Numeric	2 - 10	N/A	Mandatory,Filter,Golden
8. Chloride as Cl (ppm) max	Numeric	150 - 250	N/A	Mandatory,Filter,Golden
9. Iron as fe (ppm) max	Numeric	0.1 - 0.3	N/A	Mandatory,Filter,Golden
10. Technology used for water purification	Text	N/A	N/A	Mandatory

Name	Type	Restrictions	Unit	Properties
Group: Performance of the equipment - Influent flow data				
1. Inlet flow rate (m3/hr) for Sea Water	Numeric	>=2.5	N/A	Mandatory,Filter,Golden
2. Inlet flow rate (m3/hr) for Other water sources	Numeric	>=5	N/A	Mandatory,Filter,Golden
3. Pressure	Measurable	<=3	pressure/bar	Mandatory,Filter,Golden
4. Water Temperature	Measurable	3 - 37	temperature/degree Celsius	Mandatory,Filter,Golden
5. Average daily flow (m3) for Sea Water	Numeric	>=20	N/A	Mandatory,Filter,Golden
6. Average daily flow (m3) for Other water source	Numeric	>=80	N/A	Mandatory,Filter,Golden
7. Maximum Daily Flow (m3) of Sea Water	Numeric	>=23	N/A	Mandatory,Filter,Golden
8. Maximum Daily Flow (m3) of Other water source	Numeric	>=100	N/A	Mandatory,Filter,Golden
9. Maximum Monthly Flow (m3) of Sea Water	Numeric	>=580	N/A	Mandatory,Filter,Golden
10. Maximum Monthly Flow (m3) of Other water source	Numeric	>=2900	N/A	Mandatory,Filter,Golden
11. Hours per day Operation	Numeric	23	N/A	Mandatory
12. Days per year of operation	Numeric	355	N/A	Mandatory
13. System redundancy	Enumerable	1 X 99%	N/A	Mandatory
14. Standard Sparewheel and Tool Kit	Enumerable	Yes	N/A	Mandatory
15. Battery Warranty (Months)	Measurable	12, 24, 36	time/month	Mandatory,Filter,Golden
16. Warranty Time (Month)	Measurable	12, 24, 36	time/month	Mandatory,Filter,Golden
17. No Of Free Service	Numeric	3 - 20	N/A	Mandatory,Filter,Golden
Group: Safety Features				
1. Low Voltage System (12 V, no high voltage or generator)	Enumerable	Yes	N/A	Mandatory
2. Rolling cage cabin	Enumerable	Yes	N/A	
3. Movement operation interlock	Enumerable	Yes	N/A	Mandatory
Group: Spares				

Name	Type	Restrictions	Unit	Properties
1. External water storage tank	Enumerable	Yes	N/A	Mandatory
2. Tool kit	Enumerable	Yes	N/A	Mandatory
3. Work light	Enumerable	Yes	N/A	Mandatory
Group: Certification				
1. Chassis Certification ARAI/VRDE/ICAT	Enumerable	Yes	N/A	Mandatory
2. Chassis Certification ARAI/VRDE/ICAT No	Text	N/A	N/A	Mandatory
3. Availability of type test report from ILAC/NABL accredited/central govt labs for compliance to the specifications for Water Treatment System	Enumerable	Yes	N/A	Mandatory,Filter,Golden
4. Test certificate No	Text	N/A	N/A	Mandatory
5. Test Report Date	Text	N/A	N/A	Mandatory
6. Name of lab where test conducted	Text	N/A	N/A	Mandatory
7. Test Certificates to be provided to buyer on demand	Enumerable	Yes	N/A	Mandatory