



**PRODUCT MANUAL FOR
ENGINE MONOSET PUMPS FOR CLEAR, COLD
WATER FOR AGRICULTURAL PURPOSES
ACCORDING TO IS 11501:2023**

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	Product	:	IS 11501:2023
	Title	:	Engine Monoset Pumps for Clear, Cold Water for Agricultural Purposes
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	Gaskets, Seals and Packing – IS 5120
b)	Grouping guidelines	:	Each variety of Engine Monoset Pump, differing from each other in terms of technical parameters as given in Scope of licence, is to be tested for GoL and CSoL
c)	Sample Size	:	One Pump set
3.	List of Test Equipment	:	Please refer ANNEX – A
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – B
5.	Possible tests in a day	:	All tests
6.	Scope of the Licence	:	Please refer ANNEX – C

ANNEX A**List of Test Equipment***Major test equipment required to test as per the Indian Standard*

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	General Requirements (Clause 11)	(i) Bore Gauge with Dial Indicator (ii) Fuel Consumption Check with Burette Set (iii) Hardness Tester (iv) Hydrometer (v) Inspection Table (vi) Micrometer (vii) Balancing set up as per IS/ISO 21940-11 (viii) Steel Rule (ix) Stop Watch (x) Surface Plate (xi) Vernier Caliper
2	Pump Testing (Clause 12.3)	(i) Delivery & Suction Pipe Set with Pressure & Suction Controlling Valve etc. (ii) Flow meter (iii) Fuel Supply Arrangement (iv) Oil Storage Tank (v) Power Panel (vi) Pressure Gauge (vii) Suction Gauge (viii) Tachometer (xii) Water Collection tank

The above list is indicative only and may not be treated as exhaustive.

ANNEX B

Scheme of Inspection And Testing

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING – As per the requirement of IS 11501:2023. The Standard Mark, as given in the Schedule of the licence, shall be marked on each Engine Monoset Pump provided always that the product thus marked conforms to all the requirement of the specification. In addition, the licence no. CM/L-_____ and details of BIS website shall be marked at an appropriate place on product or package as follows: “For details of BIS certification please visit www.bis.gov.in”

4. CONTROL UNIT – All pumps of same input, manufactured under essentially similar conditions, in a fortnight shall constitute a control unit.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in Column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1

Note-1: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: The control unit and levels of control as decided by the Bureau are only recommendatory in nature. Manufacturer may define his own Batch No./Control Unit/levels of control and implement with approval of Head (BO).

ANNEX C**Scope of Licence**

Licence is granted to use Standard Mark as per IS 11501:2023 with the following scope:													
Name of the Product			Engine Monoset Pumps for Clear, Cold Water for Agricultural Purposes										
Sr. No	Model	Size (mm)	Head (m)	Fuel Consumption (g/hr)	Capacity (lps)	Rated Speed (rpm)	Rating (kW/HP)	Max power Cons. (kW)	Priming Type	Operating Head Range in mt.		Capacity Range (lps)	
										Min.	Max.	Min.	Max.