



**उत्पाद मैनुअल
आई एस 8035: 2022 के अनुसार
हथ बरमे – उथला कुआँ के लिए**

दस्तावेज संख्या – पी एम/आई एस 8035/2/सितम्बर 2022

भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/ प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

**PRODUCT MANUAL FOR
HAND PUMPS- SHALLOW WELL
ACCORDING to IS 8035:2022**

Document No.- PM/IS 8035/2/September 2022

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.



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1.	Product	:	IS 8035: 2022
	Title	:	Hand Pump – Shallow well
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	Please refer ANNEX – <u>A</u>
b)	Grouping guidelines	:	Not Applicable
c)	Sample Size	:	One Handpump
3.	List of Test Equipment	:	Please refer ANNEX – <u>B</u>
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – <u>C</u>
5.	Possible tests in a day	:	All Tests
6.	Scope of the Licence		
	Licence is granted to use Standard Mark on Shallow well Handpump as per IS 8035: 2022.		

ANNEX A**Raw Material**

Components	Material requirement
Casting	IS 210 (Cl. 4.2, fig 2, fig 4, fig 8 of IS 8035)
Steel Plate/ Sheet and Rounds, Eye, Threaded bush, Sliding plate, Plunger plate, Follower plate, check Valve weight	Quality A, Grade E 250 of IS 2062 (Cl. 4.3, fig 2, fig 4, fig 6, fig 8 of IS 8035)
Steel Bright bar	IS 9550 (Cl. 4.4, fig 2, fig 4, fig 6 of IS 8035)
Spring washer	IS 6735 (Cl. 4.5, fig 2, fig 6 of IS 8035)
Bolts and nuts	IS 1363 (Part 1) and IS 1363 (Part 3) (Cl. 4.6, fig 2, fig 6 of IS 8035)
HDPE	IS 7328 (Cl. 4.7, fig 8 of IS 8035)
Flexible PVC compound	IS 9766 (Cl. 4.8, fig 6 of IS 8035)
Circlip	IS 3075 (Cl. 4.9, fig 2, fig 4 of IS 8035)
Rubber gasket	IS 11149 (Cl. 4.10, fig 2 of IS 8035)
Nitrile rubber	Hardness 60 Shore A, as per Cl. 4.11 of IS 8035 (Cl 4.11, fig 8 of IS 8035)
Fulcrum Pin	IS 9550 (fig 4 of IS 8035)
Hardened Steel Bush	IS 1875 (fig 6 of IS 8035)

ANNEX B**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.	Bore of Pump body (Cl. 6.2.12)	Ø 89 ± 0.2 x 300 mm hollow mandrel, Ø 130 x 12 mm plate, feeler gauge.
2.	Hydrostatic test (Cl. 6.3.2)	Hydrostatic pressure test setup, pressure gauges.
3.	Discharge test (Cl. 6.3.3)	Water tank, measuring jar
4.	Dimensions	Steel Scale, measuring tape, feeler gauge, snap gauge, plain plug gauge, thread plug gauge, ring gauge, fillet gauge, vernier calliper, micrometre.

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

ANNEX C

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 equipment.

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 8035.

4. CONTROL UNIT – All shallow well hand pumps assembled in a week or 100 numbers, whichever is less, 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

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub- contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
4	General Requirements						
	Raw Material	4.2 to 4.11	IS 8035	S	One	Each Consignment	Please see Note 1
5	Anti-corrosive treatment						
5.1	Electro galvanising	5.1	IS 8035 IS 1573 IS 1367-11	S	One	The no. of components/ assembly of one type galvanised together	-
5.2	Galvanising	5.2	IS 8035 IS 4759 IS 2629				-
5.3	Painting	5.3	IS 8035 IS 2074 IS 2932			The no. of components/ assembly of one type painted together	-

6	Testing						
6.1	Visual Test	6.1.1	IS 8035	-	Every pump		-
6.2	Dimensional and Other Tests	6.2.2 to 6.2.12	IS 8035	R	Two	Each Control Unit	-
6.3	Routine Test						
	Critical Dimensions	6.3.1	IS 8035	R	Two	Each Control Unit	The pump may be checked for critical dimensions only.
	Hydrostatic Pressure Test	6.3.2					-
	Discharge Test	6.3.3					-

Note-1: Raw materials which are covered under mandatory certification of BIS shall be ISI marked and received along with manufacturers test certificate. For other materials, no further testing is required if received along with test certificate or ISI marked.

Note-2: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-3: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.