



**PRODUCT MANUAL FOR
POWRAHS
ACCORDING TO IS 1759:1986**

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 1759:1986
	Title	:	Specification for Powrahs
	No. of Amendments	:	2
2.	Sampling Guidelines:		
a)	Raw material	:	Handles (when supplied) – IS 620
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	3 pieces - For Hardened Condition 2 pieces – For Unhardened Condition 1 piece of the handle - If supplied with handle
3.	List of Test Equipment	:	Please refer ANNEX – B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	Possible tests in a day	:	All tests
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 1759:1986 with the following scope:		
	Name of the product	Powrah	
	Designation		
	Condition	Hardened/Unhardened	
	Any other aspect required as per the Standard	With/Without Handle	

ANNEX A

Grouping Guidelines

1. Sample of any one variety of Powrah from each Type (Clause 1 of IS 1759:1986) shall be tested for all the requirements to cover all the varieties of Powrah from that particular Type tested.
2. If Powrah of a particular Type with 'Hardened condition' is tested, then Powrah of 'Unhardened condition' of that Type may also be covered in the Scope of Licence.
3. If the sample tested is with Handle, Powrah of respective Type(s) without Handle may also be covered in the Scope of Licence.
4. The Firm shall declare the varieties they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
5. During the operation of the Licence, BO shall ensure that all varieties covered in the Licence are tested in rotation, to the extent possible.

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	Shapes and Dimensions (Cl 2.1 & 2.3)	(i) Vernier Calipers (ii) Radius Gauge (iii) Micrometer (iv) Steel Scale (v) Divider
2	Mass (Cl 4)	Weighing BalanceS
3	Hardness (Cl 5.2)	Rockwell Hardness Tester or Vicker Hardness Tester
4	Drop Test (Cl 10.1)	Drop Test Facility with platform made of Mild Steel Plate

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 equipments.

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

3. LABELLING AND MARKING – In addition to the requirements of IS 1759:1986, batch number shall also be marked on each Powrah.

4. CONTROL UNIT: Powrahs of each type and size manufactured in a day from one consignment of the raw material 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				
3.2	Handles	3.2	IS 620	S	One	Each Consignment	No further testing is required if the consignment is accompanied with test certificate.
2	Shapes, Dimension and Tolerances	2.1, 2.1.1, 2.2, 2.3, 2.4 and Fig 1 to 12	IS 1759	R	2%	Each Control Unit	---
4	Mass	4	IS 1759	R	2%	Each Control Unit	---
5.2	Hardness Test	5.2	IS 1759	R	Five	Each Control Unit	
6	Workmanship and Finish	6	IS 1759	-	One	Each Hour	Visual Inspection
7	Preservative Treatment	7.1 and 7.2	IS 1759	-	One	Each Hour	Visual Inspection
10.1	Drop Test	10.1	IS 1759	R	Five	Each Control Unit	---

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

Note-2: 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.