



**उत्पाद मैनुअल
दमकलकर्म कुल्हाड़ी के लिए
आई एस 926:1985 के अनुसार**

**PRODUCT MANUAL
FIREMAN'S AXE
ACCORDING TO IS 926:1985**

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	मानक संख्या IS No.	:	IS 926 : 1985
	शीर्षक Title	:	Fireman's Axe
	संशोधनों की संख्या No. of amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Please refer to Annex-A Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/ Factory Surveillance
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Nil
c)	नमूने का परिमाण Sample Quantity	:	2 nos Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (incase of market surveillance,

			effort may be made to procure therequired quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request		Nil
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer to Annex-B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer to Annex-C
5.	एक दिन में संभावित परीक्षण Possible tests in a day		
	(i) Shape and Dimension, Cl. 4, Cl.5, (ii) Hardness of pick and blade, Cl. 4.3, (iii) Performance test, (Blow test) Cl. 6.1, (iv) Performance test, (Load test) Cl. 6.2 Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide readyreference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.		
6.	लाइसेंस का दायरा /Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 926:1985 with the following scope:		
	Name of the product	Fireman’s Axe	

भारतीय मानक ब्यूरो
 BUREAU OF INDIAN STANDARDS
 मानक भवन, ९, बहादुर शाह ज़फ़र मार्ग
 Manak Bhawan, 9, Bahadur Shah Zafar Marg
 नई दिल्ली- ११०००२
 New Delhi – 110002

ANNEX A
Raw Material

Raw Material	Indian Standard
Axe Head (Cl 3.1)	Steel used in the forging of axe head shall conform to Clause 3.1 of IS 926.
Axe Handle (Cl 3.1.1)	Steel used for axe handle shall conform to IS 2062
Handle (Cl 3.2)	The insulated handle shall conform to Clause 3.1 of IS 926.

ANNEX B**List of Test Equipment***(INDICATIVE LIST, FOR GUIDANCE ONLY)*

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Shape and Dimension, Cl. 4, Cl.5	- Vernier Caliper - Micro meter - Scale - Radius Gauges
2.	Hardness of pick and blade, Cl. 4.3	- Hardness tester
3.	Performance test, (Blow test) Cl. 6.1	- Mild steel bar 5mm
4.	Performance test, (Load test) Cl. 6.2	- Jig as per Fig. 2 of IS 926 - 100 kg Weight
5.	Performance test, (Insulation resistance test) Cl. 6.3	- Insulation resistance test set up capable of testing at 20000 Volts

ANNEX C

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is : All fireman's axe manufactured from same cast/lot of raw material in a day shall constitute a control unit.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**. Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan.

2. ENSURING COMPLIANCE THROUGH TESTING- manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred :

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 TEST RECORDS- The manufacturers shall maintain test records for the tests carried out

(either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated clearly and permanently on each axe provided always that the material so marked conforms to each requirement of the specification.

3.1 Marking shall be done as per Clause No 7 of IS 926:1985.

3.2 **Additional Marking requirements:** Additionally, the following shall also be marked on product or package :

- “For BIS certification details please visit www.bis.gov.in”

4. REJECTION - The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. 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*(Recommended Levels of Control by BIS- for Guidance Only)*

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Method		No. of Sample	Frequency	Remarks
		Clause	Reference			
3	Material	3.1, 3.1.1	IS 926 IS 2062	One	Each Consignment	No further testing is required if accompanied with Test Certificate or ISI marked.
4	Shapes, Dimensions and Constructions	4.1, 4.2, 4.4	IS 926 IS 926	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity.		
5	Workmanship and Finish	5	IS 926			
4.3	Hardness test	4.3	IS 1501	One	Each Control Unit	-
6	PERFORMANCE TESTS –					
6.1	Single Heavy Blow Test as per Clause 6.1	6.1	IS 926	One	Each Control Unit	-
6.2	Static Load of Handle Test as per Clause 6.2	6.2	IS 926	One	Each Control Unit	-
6.3	Insulation Resistance Test of insulated Handle as per Clause 6.3	6.3	IS 926	One	Once in a month	Additional sample shall be tested whenever there is any change in the material of handle.