



उत्पाद मैनुअल
लाइफबॉय
IS 5326: 2025 के अनुसार

PRODUCT MANUAL
FOR
LIFEBUOYS
ACCORDING TO IS 5326: 2025

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में अभ्यास और पारदर्शिता के संचालन में पारदर्शिता सुनिश्चित करने 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 लाइसेंस/प्रमाणपत्र 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 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.	उत्पाद Product:	IS 5326: 2025
	शीर्षक Title:	Lifebuoys- Specification
	संशोधन संख्या No. of Amendments:	Nil
2.	नमूनाकरण दिशानिर्देश Sampling Guidelines:	
a)	कच्चा माल Raw material:	a) Retro reflector- as per Cl. 3.5 b) Electrical Short-Circuit Protection – as per Cl. 3.8 c) Buoyant material- as per Cl. 4.2 d) Grab Line as per Cl. 4.7 e) Self-igniting lights as per Cl. 5, if provided f) Self activating smoke signals as per Cl. 6, if provided g) Buoyant lifelines as per Cl. 7, if provided <i>Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be</i>

		<i>established during Grant of Licence/Change in Scope of Licence /Factory Surveillance.</i>
b)	समूहीकरण दिशानिर्देश Grouping guidelines:	Please refer ANNEX – A
c)	नमूने का परिमाण Sample Size:	12 Nos (for without any optional accessories), Additional samples as required for tests applicable to specific optional accessories shall be drawn to ensure complete testing <i>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 (in case of market surveillance, effort may be made to procure the required quantity of product sample, as far as possible since raw material sample may not be available in market).</i>
3.	परीक्षण उपकरणों की सूची List of Test Equipment:	Please refer ANNEX – B
4.	निरीक्षण व परीक्षण की स्कीम Scheme of Inspection and Testing:	Please refer ANNEX – C
5.	एक दिन में संभावित परीक्षण Possible tests in a day:	Please refer ANNEX – D
6.	लाइसेंस का कार्यक्षेत्र Scope of the Licence:	Licence is granted to use Standard Mark as per IS 5326: 2025 with the following scope:
	Name of the Product:	Lifebuoys
	Optional accessory, if supplied, specify the same	- Lifebuoys without any optional accessory <i>Lifebuoy:</i> with Self Igniting Lights and/or with Self Activating Smoke Signals and/or with Buoyant Lifelines

BUREAU OF INDIAN
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ANNEX A
Grouping Guidelines

1. Lifebuoys as per IS 5326: 2025 can be classified based on the optional accessories supplied as given below:
 - Lifebuoys without any optional accessory
 - Lifebuoy with optional accessories (Specify the optional accessory(ies): with Self Igniting Lights/ with Self Activating Smoke Signals/with Buoyant Lifelines)
2. Considering the above, the guidelines given below shall be followed for GoL/CSoL:
 - (a) Firm shall declare the optional accessories which are intended to be supplied and covered in the scope of licence. Sample of Lifebuoy with maximum number of optional accessories (with Self Igniting Lights/ with Self Activating Smoke Signals/with Buoyant Lifelines) shall be tested to cover the Lifebuoy with those particular accessories in the scope of licence. However, if Lifebuoy with any optional accessory is tested, then Lifebuoy without any optional accessory can be covered without separate testing.
3. 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.
4. During the operation of the Licence, BO shall ensure that all the 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.	Temperature Cycling Test Cl. 3.2 and G-1 Annex A	Cold and warm chambers/ Deep Freezer capable to maintain temperature of -30 °C/ Oven.
2.	Resistance to Oil, Cl. 3.3, Annex B	Suitable Resistance to Oil Test Setup as per Annex B Diesel Oil
3.	Dimensions Cl. 4.1, Cl 4.7	Measuring Tape Vernier Caliper
4.	Floataction Test, Cl. 4.3 Annex C	Tank with fresh Water as per Annex C 14.5 kg of Iron Weight
4.	Mass, Cl. 4.4	Weighing Balance
5.	Fire Test, Cl. 4.5, Annex D	Test Pan (30cm*35cm * 6 cm), Water, Petrol, Setup to move the lifebuoy through flames in an upright, forward, free-hanging position.
6.	Drop Test, Cl. 4.6, Cl. 5(f) and G-3, Annex E	Suitable Test Setup as per Annex E
7.	Strength Test, Cl. 4.8 and Cl. 6(g), Annex F	Suitable Test Setup as per Annex E 50 mm Wide Strap 90 kg weight
8.	Self-activating smoke signal test, if applicable, Cl. 6, Annex-G	Deep freezer, Water bath, Oven, test fixture as per Annex G
9.	Test for Operation with light and Smoke Signal, Cl. 6(f), Annex H	Suitable arrangement as per Annex H
10.	Breaking Strength, Cl. 7(c)	Tensile Testing Machine

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

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 : Quantity of Lifebuoys manufactured from same consignment of raw material in a day.

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 recognized/empaneled 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. PACKAGING AND MARKING** – As per the requirements given in IS5326: 2025. The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on the product, provided always that the product so marked conforms to each requirement of the specification.

3.1 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** - All 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- For guidance only)

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Method		No. of Sample	Frequency	Remarks
		Clause	Reference			
3.	GENERAL REQUIREMENTS FOR LIFEBOUY					
3.1	General Requirements except for cl. 3.2 and Cl. 3.3	3.1, 3.4, 3.5, 3.6, 3.7, 3.8	IS 5326	Manufacturer shall exercise adequate levels of control to ensure that entire production is conforming. Records shall be maintained.		
3.2	Temperature Cycling Test	3.2 and G-1	IS 5326	Two	Once in 6 Months	--
3.3	Resistance to Oil	3.3	IS 5326	One	Once in 6 months	--
4.	CONSTRUCTION, MATERIAL AND DIMENSIONS					
4.1 and 4.7	Dimension	4.1 and 4.7	IS 5326	Each Lifebuoy		
4.2	Buyout material	4.2	IS 5326	Manufacturer shall exercise adequate levels of control to ensure that entire production is conforming. Records shall be maintained.		
4.3	Floatation Test	4.3 Annex- C	IS 5326	Two	Once in a month	--
4.4	Mass	4.4	IS 5326	Each Lifebuoy		
4.5	Fire Test	Annex- D	IS 5326	One	Once in a month	--
4.6, 5(f) and G-3	Drop Test, as applicable	Annex E	IS 5326	Three	Once in a month	
4.8 and 6(g)	Strength Test, as applicable	Annex F	IS 5326	One	Once in a month	--
5	Lifebuoy self igniting lights, if applicable	5	IS 5326	Manufacturer shall exercise adequate levels of control to ensure that entire production is conforming. Records shall be maintained.		
6	Lifebuoy Self-activating smoke signal test, if applicable	Annex-G	IS 5326	Nine	Once in 6 months	
6(f)	Test for operation with a light and smoke signal, if applicable	Annex-H	IS 5326	One	Once in 6 months	
7	Breaking Strength, if applicable	7(c)	IS 5326	One	Once in a month	

ANNEX D
Possible Tests in a day

S. No.	Test
1.	General Requirements of Lifebuoys, Cl. 3
2.	Dimensions, Cl. 4.1 and 4.7
3.	Construction and Material, Cl. 4.2 and 4.7
4.	Mass, Cl. 4.4
5.	Fire Test, Cl. 4.5
6.	Drop Test, Cl. 4.6
7.	Strength Test, Cl. 4.8
8.	Breaking Strength, Cl. 7(c)