



PRODUCT MANUAL FOR FIRST-AID HOSE-REEL FOR FIRE FIGHTING ACCORDING TO IS 884: 1985

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 884 : 1985
	Title	:	FIRST AID HOSE REEL FOR FIRE FIGHTING
	No. of Amendments	:	3
2.	Sampling Guidelines:		
a)	Raw material	:	Clause 3.1 and Table 1 of IS 884
b)	Grouping guidelines	:	Each Type of hose-reel (Type A/ Type B) shall be tested for GoL/CSoL
c)	Sample Size	:	1 hose reel
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 :		
	(i) Resistance to leakage (Clause 5.2)		
	(ii) Impact resistance test (Clause 5.3.1)		
	(iii) Range and water flow rate (Clause 5.4 and 5.4.1)		
	(iv) Swinging (Clause 5.5)		
	(v) Reel action (Clause 5.6)		
	(vi) Workmanship (Clause 6)		
	(vii) Painting (Clause 7)		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 884 : 1985 with the following scope:		
	Name of the product	First-Aid Hose-Reel for Fire Fighting	
	Type	Type A/Type B	

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

S. No.	Tests used in with Clause Reference	Test Equipment
1.	Dimensions (Clause 5.1)	a) Vernier caliper b) Steel scale c) Thread Ring gauge
2.	Resistance to leakage (Clause 5.2)	Testing arrangement for Hydrostatic test with pressure gauge and timer.
3.	Impact resistance test (Clause 5.3.1)	Steel hammer 25 kg and 125 OD
4.	Load Resistance Test (Clause 5.3.2)	Load 80 kg
5.	Range and Water flow rate (Clause 5.4 and 5.4.1)	Measuring Tape, Pressure gauge, Water flow meter and pumping arrangement
6.	Swinging (Clause 5.5)	Angle measurement arrangement
8	Pinting (Clause 7)	Coat meter

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 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 requirements of IS 884: 1985.

4. CONTROL UNIT – Hose reel of same Type manufactured from same material in one day 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 Standard 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 Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
2	General	2.1	IS 884	-	All	-	-
3	Materials	3, Table 1	IS 884	S	One	Each Consignment/ Lot received	No further testing is required if accompanied with test certificate or ISI marked.
5	Requirements						
5.1	Dimensions	5.1 , Fig 1 & 2	IS 884	R	All	-	-
5.2	Resistance to Leakage	5.2	IS 884	R	One	Each control unit	In case of failure, all hoses shall be tested and only conforming hoses shall be marked.
5.3.1	Impact Resistance test (Strength Test)	5.3.1 & Fig 3	IS 884	R	One	After every 300 reels or once a month, whichever is earlier	In case of failure two more samples shall be tested and marking continued if both the samples pass. If any of the samples fail, the related control units shall not be marked and frequency changed to every control unit till samples from three consecutive control units pass.
5.3.2	Load resistance test	5.3.2 & Fig 4	IS 884	R	One		
5.4	Range and Water Flow rate	5.4.1	IS 884	R	One		
5.5	Swinging	5.5	IS 884	R	One		
5.6	Reel Action	5.6	IS 884	R	One	Each Hose Reel	
6	Workmanship	6	IS 884	R		Each Hose Reel	
7	Painting	7	IS 884	R		Each Hose Reel	

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 obligatory in nature.