

PRODUCT MANUAL FOR STAND POST TYPE WATER AND FOAM MONITOR FOR FIRE FIGHTING ACCORDING TO IS 8442:2008

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 8442: 2008				
	Title	•					
			FOR FIRE FIGHTING				
	No. of Amendments		NIL				
2.	Sampling Guidelines:	1					
a)	Raw material		As per clause 4, Table 2 of IS 8442 : 2008				
b)	Grouping guidelines		Please refer ANNEX – A				
c)	Sample Size		One Monitor				
3.	List of Test Equipment	:	Please refer ANNEX – B				
4.	Scheme of Inspection		Please refer ANNEX – C				
	and Testing	:	110000 10101 <u>111 (1121 0</u>				
5.	Possible tests in a day:						
	(i) General (Clause 3)						
	(ii) Construction (Clause 5)						
	(iii) Workmanship and Finish (Clause 6)						
	(iv) Anticorrosive treatment (Clause 7)						
	(v) Painting (Clause 8)						
	(vi) Performance requirements (Clause 9)						
	(vii) Leakage Test (Clause 10)						
6.	Scope of the Licence :						
	, and the second		andard Mark as per IS 8442: 2008 with the following scope:				
	Name of the product		STAND POST TYPE WATER AND FOAM MONITOR FOR FIRE FIGHTING				
	Type	(i	(i) Water monitor				
		(i	(ii) Foam – cum- water monitor				
			- With water/foam barrel with aspirating type nozzle				
			- With non-aspirating type jet/spray nozzle				
	Sizes	63	63 mm, 75 mm , 100 mm				

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ANNEX A

Grouping Guidelines

- 1. Stand post type water and foam monitor for fire fighting as per IS 8442 : 2008 are categorized as given below:
 - a) Types (i) Water monitor
 - (ii) Foam cum- water monitor
 - With water/foam barrel with aspirating type nozzle
 - With non-aspirating type jet/spray nozzle
 - b) Sizes 63 mm, 75 mm and 100 mm (Any size provided by purchaser as per their requirement are also permitted)
- 2. For considering GoL/CSoL the guidelines given below shall be followed:
 - a) Monitor of the highest size from each type and sub type as mentioned at 1(a) shall be tested for all requirements to cover monitor of that particular type and subtype for all sizes upto and including the size tested.
- 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 operation of license, BO shall ensure that all the varieties covered in the license 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

S. No.	Tests used in with Clause Reference	Test Equipment			
1 General (Clause 3)		_	Micrometer		
1	General (Gladse 5)	_	Vernier caliper		
		_	Steel scale/tape		
		_	Protractor		
2	Construction (Clause 5)	-	Protractor		
		-	Vernier Caliper		
		-	Thread ring gauges		
3	Anti-corrosive treatment (Clause	-	Coat meter or other suitable coating thickness		
	7)		measuring equipment		
4	Performance requirements	-	Hydrostatic pressure test unit with water		
	(Clause 9)		pumping system and pressure gauge		
		-	Flow meter		
		-	Protractor		
		-	Measuring tape		
		-	Stop watch		
5	Leakage test (Clause 10)	-	Hydrostatic testing apparatus with pressure		
			gauge		
		-	Stop watch		
		-	Performance test equipments as per 4 above		

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 requirements of IS 8442 : 2008.
- **4. LEVELS OF CONTROL** The tests as indicated in column 1 of <u>Table 1</u> and the levels of control in column 3 of <u>Table 1</u>, 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.
- **4.1** All the production which conforms to the Indian Standard and covered by the licence should be marked with Standard Mark.
- **5. 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) Test Details				(2)	(3) Levels of Control			
				Test equipment				
Cl	Requirement	Test M	lethod	requirement R: required (or)	No. of Sample	Frequency	Remarks	
		Clause	Reference	S: Sub-contracting permitted				
3	General	3.1 to 3.4	IS 8442	R	-	Each Monitor	-	
4	Material	4, Table 2	IS 8442	S	One	Each Consignment	No testing is required, if material received is ISI	
	Paint	8	IS 8442 IS 2932	S	One	Each Consignment	marked or accompanied with manufacturers test certificate.	
5	Construction	5.1, 5.2	IS 8442	R	-	Each Monitor	-	
6	Workmanship and Finish	6	IS 8442	-	-	Each Monitor	-	
7	Anti-Corrosive Treatment	7	IS 8442	R	-	Each Monitor	-	
8	Painting	8	IS 8442	-	-	Each Monitor	-	
9.	Performance Requiren	nents	<u> </u>	1	1	1	<u>l</u>	
9.1	Water Monitor	9.1, Table 3	IS 8442	R	-	Each Monitor	-	

9.2	Foam-cum-water Monitor	9.2, Table 4	IS 8442	S	One	Once in three months	All sizes shall be covered over a period of time. Additional sample shall be tested in case of change in design, material or manufacturing process.
10	Leakage Test	10.1, 10.2	IS 8442	R	-	Each Monitor	#

In case of leakage detected from any welded portion the same shall be rectified and again subjected to leakage test, which should invariably pass the test. In case of leakage from other than welded joints, the monitor shall be rejected

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.