



PRODUCT MANUAL FOR FOAM MAKING BRANCH PIPE AND FOAM INDUCTOR ACCORDING TO IS 2097:2012

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 2097: 2012
	Title	:	FOAM MAKING BRANCH PIPE AND FOAM INDUCTOR
	No. of Amendments	:	NIL
2.	Sampling Guidelines:		
a)	Raw material	:	As per clause 5 of IS 2097 : 2012
b)	Grouping guidelines	:	Separate sample of each type (FB 5X/ FB 10X/ FB 20X) and design (Jet or Jet/Spray) of Branch Pipe /Foam Inductor shall be drawn and tested for complete requirement to cover that type of Branch Pipe/Foam Inductor in the scope of licence.
c)	Sample Size	:	1 no
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) Performance Test (Clause 6.1) (ii) 25 percent drainage time (Clause 6.2)		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 2097: 2012 with the following scope:		
	Name of the product	FOAM MAKING BRANCH PIPE AND FOAM INDUCTOR	
	Type and Design (Jet or Jet/Spray design)		

ANNEX A**LIST OF TEST EQUIPMENT***Major test equipment required to test as per the Indian Standard*

Sr. No.	Tests used in with Clause Reference	Test Equipment
1	Performance Requirement (Clause 6.1, Table 1)	<ul style="list-style-type: none"> - Plastic or glass collecting vessel with bottom discharge facility as per fig 5 of IS 4989 - Foam collector for expansion and drainage measurement as per fig 6 of IS 4989
2	25 Percent drainage time (Clause 6.2)	<ul style="list-style-type: none"> - Flow rate measuring arrangement with pressure gauge - Flow solution vessel connected to nozzle - Air conditioner to maintain temperature $27 \pm 5^{\circ} \text{C}$ - Measuring tape/ scale - Weighing balance - Stop watch - Measuring cylinder - Water pump with flow meter - Foam compound as per IS 4989

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 equipments.

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 2097 : 2012.

4. CONTROL UNIT – All Foam Branch Pipes/Foam Inductor of same type and design (Jet or Jet/Spray) produced in a month 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		
CI	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
5	Materials						
5.1	Castings	5.1	IS 2097 IS 318 IS 617 IS 3444	S	1	Each Consignment	Further testing is not required, if consignment received is accompanied with manufacturers test certificate or ISI marked.
5.2	Sheet work and strainer	5.2	IS 2097 IS 410 IS 7882	S	1	Each Consignment	
5.3	Washer	5.3	IS 2097	S	1	Each Consignment	
6	Performance Requirements						
	Performance test	6.1, Table 1	IS 2097 IS 4989	R	1	Each control unit	
	25 Percent drainage time	6.2	Is 2097 IS 4989	R	1	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.