



उत्पाद मैनुअल

भा. मा. 17570 (Part 1): 2021/ ISO 16890 (Part 1): 2016 के अनुसार
सामान्य संवातन के एयर फ़िल्टर
भाग 1-विविक्त द्रव्य दक्षता पर आधारित तकनीकी विशिष्टियां अपेक्षाएं एवं वर्गीकरण पद्धति
के लिए

दस्तावेज संख्या-पी एम/आई एस 17570 (Part 1)/ ISO 16890 (Part 1)/1/ फरवरी 2023

भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति औरपारिशिष्ट की सुसंगतता सुनिश्चित करनेके लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

PRODUCT MANUAL FOR AIR FILTERS FOR GENERAL VENTILATION- Part 1- TECHNICAL SPECIFICATIONS, REQUIREMENTS AND CLASSIFICATION SYSTEM BASED ON PARTICULATE MATTER EFFICIENCY (ePM) ACCORDING to IS 17570 (Part 1): 2021/ ISO 16890 (Part 1):2016

Document No.-PM/IS 17570 (Part 1)/ ISO 16890 (Part 1)/1/ February 2023

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.

भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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PRODUCT MANUAL FOR
AIR FILTERS FOR GENERAL VENTILATION- Part 1- TECHNICAL SPECIFICATIONS,
REQUIREMENTS AND CLASSIFICATION SYSTEM BASED ON PARTICULATE
MATTER EFFICIENCY (ePM)
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1.	Product	:	IS 17570 (Part 1): 2021/ ISO 16890 (Part 1): 2016
	Title	:	Air Filters For General Ventilation- Part 1- Technical Specifications, Requirements And Classification System Based On Particulate Matter Efficiency (ePM)
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	As per Cl. 5.2 of IS Table 1 of IS 17570 (Part 1): 2021/ ISO 16890 (Part 1): 2016 <i>Materials used shall be declared and conformity to declared parameters and Specifications shall be submitted by manufacturer</i>
b)	Grouping guidelines	:	Please refer ANNEX –A
c)	Sample Size	:	1 No.
3.	List of Test Equipment	:	Please refer ANNEX –B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX –C
5.	Possible tests in a day	:	Resistance to air flow test (Cl. 5.4)
6.	Scope of the Licence:	:	Please refer ANNEX –D

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ANNEX A**Grouping Guidelines**

1. For the purpose of certification, following technical parameters are considered for classifications of “Air Filters For General Ventilation” into different varieties as per IS 17570 (Part 1): 2021/ ISO 16890 (Part 1):2016:

Sl. No.	Technical parameters	Classification based on technical parameters
1.	ISO rating	ISO ePM __ %
2.	Nominal air flow rate	
3.	Physical description of Construction (e.g. pocket filter, number of pockets)	
4.	Type of medium	identification code net effective filtering area
5.	Dimensions (width, height and depth)	

2. A variety may be defined as group of models having the same value of these technical parameters as above.
3. Each variety shall be tested for all the requirements for the purpose of GoL/CSoL. All model numbers, along with their technical parameters as above, intended to be covered in the scope of licence, shall be declared by the manufacturer. Further, In addition to the models drawn for independent testing as per above guidelines, factory test report of all other models intended to be covered in scope shall also be submitted. BIS shall endorse the details of models also as an Annexure in the licence document.
4. During operation of the licence if any new model is intended to be covered within the existing scope of licence (due to changes in technical parameters other than those mentioned above), the parameters as per para 3 above for all such new model numbers will be declared by licensee to BIS for records. The declaration shall be submitted by the manufacturer as per APPENDIX I through Manakonline (communication window) and the information shall be noted by BIS and these additional models will be endorsed in the licence document by revising the Annexure to the licence document containing the list of models. After submission of the declaration to BIS Branch Office through Manakonline, the licensee may use the standard mark on such new models without waiting for BIS to endorse the models in the licence. (Licensee shall be able to produce documentary proof of having submitted this information to BIS).

However, in case any discrepancy is observed post-facto due to which it is viewed that the models are not to be endorsed in the scope (e.g. if the added models do not fall within granted scope), Head of BIS Branch Office concerned, may, after giving the licensee an opportunity to explain, direct the licensee to cease marking on such models, or in case the appliances are already marked and dispatched, issue directions for product recall.

5. 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.

APPENDIX –I
FORMAT FOR DECLARATION FOR ADDING NEW MODELS WITHIN SCOPE
OF LICENCE BY LICENSEE

Date:

To,
Branch Office
Bureau of Indian Standards

Sir/Madam

Subject: DECLARATION FOR ADDING NEW MODELS WITHIN SCOPE OF
LICENCE

With reference to my existing licence for “Air Filters for general ventilation” (Licence
No CM/L-.....), I request BIS to add the following new models in the scope of my
licence:

List of new models intended to be covered in existing scope of licence

Model	Model 1	Model 2	Model 3
Technical parameter			
ISO rating			
Nominal air flow rate			
Physical description of Construction (e.g. pocket filter, number of pockets)			
Type of medium			
Dimensions (width, height and depth)			

I declare that the above models, as indicated above, fall within the existing scope of my
licence.

I declare that the above information is true and correct to the best of my knowledge
and undertake that incase my declaration is found defective or incorrect BIS may take
action as deemed appropriate as per theBIS Act, Rules and Regulations which we
shall comply with including recall of such products from the market.

Signature with date of Firm’s authorized signatory

Name and designation

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.	Resistance to air flow, Cl. 5.4	Test rig as per IS 17570-2/ ISO 16890-2
2.	Fractional efficiency curve determination, Cl. 5.5 Particulate matter efficiency.	Test rigs as per IS 17570-2/ ISO 16890-2 and as per IS 17570-4/ ISO 16890-4
3.	Arrestance, Cl. 5.6	Test rig as per IS 17570-3/ ISO 16890-3, L2 Test dust

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 equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING – Each Filter shall be legibly and permanently marked with following : Model number, ISO rating, Nominal air flow rate .

4. CONTROL UNIT- Quantity of Air Filters with same model number produced in one shift of production 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		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
5.2	Filter Material	5.2	IS 17570 (Part 1)/ ISO 16890 (Part 1)	S	One	Each Consignment	Materials used shall be declared and conformity to declared parameters and Specifications shall be submitted by manufacturer
5.4	Resistance to air flow	5.4	IS 17570 (Part 1)/ ISO 16890 (Part 1) IS 17570-2/ ISO 16890-2	R	One	Each Control Unit	
7	Efficiency test	7	IS 17570 (Part 1)/ ISO 16890 (Part 1)	R	One	Once in 3 months	Testing shall be done in such a way that sample of all model numbers produced in a month is tested at least once in a month
5.6	Arrestance	5.6	IS 17570 (Part 1)/ ISO 16890 (Part 1)				

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.

ANNEX D

Scope of Licence

“Licence is granted to use Standard Mark as per IS 17570 (Part 1)/ ISO 16890 (Part 1) with the following scope:	
Name of the product	Air Filters For General Ventilation
ISO rating	
Nominal air flow rate	
Physical description of Construction (e.g. pocket filter, number of pockets)	
Type of medium	
Dimensions (width, height and depth)	

Annexure to Scope of licence-List of models covered in scope of licence

Model	Model 1	Model 2	Model 3
Technical parameter			
ISO rating			
Nominal air flow rate			
Physical description of Construction (e.g. pocket filter, number of pockets)			
Type of medium			
Dimensions (width, height and depth)			