



उत्पाद का मार्गदर्शन

एग्रो टेक्सटाइल्स - विंडशील्ड नेट के लिए कृषि और बागवानी प्रयोजनों

IS 17356: 2020 के अनुसार

PRODUCT MANUAL FOR

AGRO TEXTILES — WINDSHIELD NETS FOR AGRICULTURE AND HORTICULTURE PURPOSES AS PER IS 17356: 2020

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम 2018 की स्कीम-I के तहत यह उत्पाद मैनुअल प्रमाणीकरण की संचालन रीति में सुसंगतता और पारदर्शिता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा।

बीआईएस लाइसेंस/प्रमाण पत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग 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 17356:2020
	शीर्षक Title	:	AGRO TEXTILES — WINDSHIELD NETS FOR AGRICULTURE AND HORTICULTURE PURPOSES
	संशोधन संख्या No. of amendments	:	Nil
2.	नमूनाकरण दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	HDPE Monofilament Yarn shall conform to Cl. 4.1 & 4.1.1 of IS 17356:2020
b)	समूहिकरण दिशानिर्देश	:	Sample of each Type to be tested

	Grouping Guidelines		
c)	नमूनेकापरिमाण Sample Size	:	10m length
3.	परीक्षणउपकरणोकीसूची List of Test Equipment	:	Please refer Annex – A
4.	निरीक्षणवपरीक्षणस्कीम Scheme of Inspection and Testing	:	Please refer Annex – B
5.	एक दिन में संभावित परीक्षण Possible tests in a day	:	a) Length b) Width c) Mass d) Average breaking strength of wind shield net fabric, Warpway & Weftway e) Colour fastness to artificial light f) Bursting pressure g) Wind blockage
6.	लाइसेन्स का कार्यक्षेत्र /Scope of the Licence:		
	IS 17356:2020 केअनुसारमानकमुहरकाउपयोगकरनेकेलिएलाइसेन्सनिम्नलिखितकार्यक्षेत्रकेलिएप्रदानकियाजाताहै Licence is granted to use Standard Mark as per IS 17356:2020 with the following scope:		
	Name of the product	AGRO TEXTILES — WINDSHIELD NETS FOR AGRICULTURE AND HORTICULTURE PURPOSES	
	Type	Type 1/ Type 2	

BUREAU OF INDIAN STANDARDS

Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi – 110002

ANNEX-A
Test equipment list

Major test equipment essentially required to test as per requirements of Indian Standard.

S. No.	Test used in with Clause Reference	Test Equipment
1.	Length, Cl. 7.1	Calibrated Steel Rule of atleast 2m graduated in cm and mm, Smooth flat table, Conditioning chamber to maintain Relative humidity of 65±2% and temperature of 27±2 deg C
2.	Width, Cl. 7.1	Calibrated Steel Rule of atleast 2m graduated in cm and mm, Smooth flat table, Conditioning chamber to maintain Relative humidity of 65±2% and temperature of 27±2 deg C
3.	Mass, Cl. 7.2, Table-1	Horizontal, smooth and flat table, Graduated Steel Scale, Balance capable of weighing to an accuracy of 0.005 g, Conditioning chamber suitable for maintaining 65±2% Humidity and 27±2°C Temperature
4.	Average Breaking Strength of wind shield net fabric, Warpway & Weftway, Cl. 7.2, Table-1	Tensile testing machine, Equipment for cutting test specimens
5.	Retention of Breaking Strength after UV exposure of 144h, Cl. 7.2, Table-1	Fluorescent UV-B lamp (313 nm or its equivalent), Provision for maintaining temperature of 60°C & 50°C
6.	Colour fastness to artificial light, Cl. 7.2, Table-1	Blue wool reference materials 1 to 8 or L2 to L9, Dyes for blue wool references 1 to 8, Humidity chamber, Light source, Black-Standard Thermometer or Black-Panel Thermometer, Covers, Colour matching lamps, Assessment cabinet, Sample mounting card, Assessment Mask, Grey scale for assessing change in colour
7.	Bursting Pressure, Cl. 7.2, Table-1	Bursting tester
8.	Wind blockage, Cl. 7.2, Table-1	Source of wind-Blower/Compressed air with velocity range of 30kmph to 180kmph, Measurement chamber cylindrical with diameter of 160mm, Clamping device, Sensing probes, Anemometer

Note: The above is an indicative list for the purpose of guidance only.

ANNEX-B
To Product Manual for
AGRO TEXTILES — WINDSHIELD NETS FOR AGRICULTURE
AND HORTICULTURE PURPOSES

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 and implement 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 & MARKING** – The Standard Mark as given in the Schedule of the license and Licence Number (i.e., CM/L.....) shall be incorporated on the product , and the marking shall be done as per the provisions of the Indian Standard, provided always that the product thus marked conforms to all the requirement of the specification.
- 4. CONTROL UNIT** – All monofilament windshield nets rolls/bundles of same construction and type dispatched to a buyer against one dispatch note shall constitute one 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 to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1
LEVELS OF CONTROL

TEST DETAILS				Test equipment requirement R: required (or) S: Sub-contracting permitted	LEVELS OF CONTROL		
Clause	Requirement	Test Methods			No. of samples	Frequency	Remarks
		Clause	Reference				
5.1	Fabric	5.1	IS 17356	R	Manufacturer shall put in place adequate in-process controls and inspection to ensure conformity to requirements		
5.2	Eyelet	5.2	IS 17356	R	Manufacturer shall put in place adequate in-process controls and inspection to ensure conformity to requirements		
5.3	Colour	5.3	IS 17356	R	Manufacturer shall put in place adequate in-process controls and inspection to ensure conformity to requirements		
7.1	Length	7.1	IS 1954	R	Manufacturer shall put in place adequate in-process controls and inspection to ensure conformity to requirements		
7.1	Width	7.1	IS 1954	R	Manufacturer shall put in place adequate in-process controls and inspection to ensure conformity to requirements		
7.2	Mass	7.2, Table-1	IS 1964	R	1	Every control unit	
7.2	Average Breaking Strength of wind shield net fabric, Warpway & Weftway	7.2, Table-1	IS 1969 (Part 1)	R	1	Every control unit	

7.2	Retention of Breaking Strength after UV exposure of 144h	7.2, Table-1	Annex-B & IS 1969 (Part 1)	S	1	Once in a month	
7.2	Colour fastness to artificial light	7.2, Table-1	ISO 105-B02	S	1	Once in a month	
7.2	Bursting pressure	7.2, Table-1	IS 1966 (Part 1) or IS 1966 (Part 2)	R	1	Every control unit	
7.2	Wind Blockage	7.2, Table-1	Annex-C	R	1	Every control unit	

Note-1: Whether test equipment is required, or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: The control unit and levels of control as decided by the Bureau are recommendatory and the licensee can submit his own levels of control which can be followed consequent to approval of Head BO.