



उत्पाद मैनुअल
भा. मा. 415: 2022 के अनुसार
शटलकॉक के लिए
दस्तावेज संख्या-पी एम/आई एस 415/1/नवम्बर 2022

भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के 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
SHUTTLECOCKS
ACCORDING to IS 415:2022**

Document No.-PM/IS 415/1/ November 2022

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.

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1.	Product	:	IS 415: 2022
	Title	:	Shuttlecocks
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	Cork of Grade 2 Shuttlecock- As per Cl. 6.2.1 of IS 415
b)	Grouping guidelines	:	Separate sample of Shuttlecocks of Grade 1 and Grade 2 shall be tested to cover both grades for Grant of Licence (GoL) and change in Scope of Licence (CSoL)
c)	Sample Size	:	2 Nos.
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	:	All tests
6.	Scope of the Licence:	:	Licence is granted to use Standard Mark as per IS 415:2022 with the following scope:
	Name of product	:	Shuttlecock
	Grade	:	Grade 1/ Grade 2

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
	Cl. No.	Test	
1)	5.1	Dimension	Scale or Vernier caliper
2)	5.2	Weight	Weighing balance of least count 0.01 g
3)	8.1	Pace and Flight	Badminton Racket, Badminton Court marked with distances mentioned in Cl. 8.1 and Fig. 3

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 415: 2022.

4. CONTROL UNIT- All Shuttlecocks of same grade, manufactured under similar conditions from same consignment of raw material in a 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 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				
6.2.1	Cork material (For Grade 2 shuttlecock)	6.2.1	IS 415	S	One	Each Consignment	No testing is required in case material is received with test certificate
5.1	Dimension	5.1, Fig.1, Fig. 2	IS 415	R	One	Each Control Unit	--
5.2	Weight	5.2	IS 415	R	One	Each Control Unit	--
6	Construction and Workmanship	6.1, 6.2	IS 415	R	One	Each Control Unit	--
8.1	Pace and Flight	8.1, Fig. 3	IS 415	R	One	Every 30 th Control Unit	--

Note-1: 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 obligatory to which the licensee shall comply with.