



उत्पाद मैनुअल
**Textiles — Light Weight Jute Sacking
Bags for Packing 50 kg Mustard Seed,
Niger Seed and Ragi — Specification
IS 18161: 2023 के अनुसार**

**Product Manual
For Textiles — Light Weight Jute Sacking
Bags for Packing 50 kg Mustard Seed,
Niger Seed and Ragi — Specification
According to IS 18161: 2023**

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	मानक सांख्या IS No.	:	IS 18161: 2023
	शीर्षक Title	:	Textiles — Light Weight Jute Sacking Bags for Packing 50 kg Mustard Seed, Niger Seed and Ragi — Specification
	सांशोधनों की सांख्या No. of amendments	:	03
2.	नमूना ददशाननदेश Sampling Guidelines		
a)	कच्चा माल Raw material	:	The raw material shall be conforming to the requirements specified in clause 4.1 of IS 18161: 2023. The compliance to the above requirement may be established through supplier test certificate/test report from BIS recognized lab/empanelled lab or any other lab having accreditation as per IS/ISO/IEC17025 or in-house testing/combination thereof. Note: This section indicates the requirements for raw material

		(if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/Factory Surveillance
b)	समूहीकरण दृशाननदेश Grouping Guidelines	: NA
c)	नमूने का पररमाण Sample Quantity	: 30 nos. bag + yarn 100g (three ply and single ply) Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (in case of market surveillance, effort may be made to procure the required quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	: i. Dimensions ii. The number of bags per bale Note: Apart from the above, any other requirements/parameters may also be declared as per the standard, as applicable.
3.	परीक्षण उपकरणों की सूची List of Test Equipment	: Please refer to Annex-A
4.	ननरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	
5.	एक दिन में संभावित परीक्षण Possible tests in a day	
	All tests except Average breaking strength of sacking and Average seam strength Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide ready reference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.	
6.	लाइसेंस का दायरा/Scope of the Licence:	
	"Licence is granted to use Standard Mark as per IS 18161: 2023 with the following scope:	
	Name of the product	Light Weight Jute Sacking Bags for Packing 50 kg Mustard Seed, Niger Seed and Ragi

ANNEX – A

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Requirement with Clause reference	Test Equipment
1.	Dimensions, Cl 4.1.1 and 5.1	Steel Tape, Porter Gauge, Table, Weighing balance
2.	Ends and Picks, Cl 4.1.1 and 5.1	Method A of IS 1963: Traversing Thread counter equipped with low power microscope Or Ordinary counting glass with aperture satisfying 5.2 of IS 1963 OR Method B of IS 1963 Clamps of Type A, B or C as per 6.1 of IS 1963 and forceps
3.	Mass, Cl 4.1.1 and 5.1	Table, Steel Scale, Weighing balance accurate to 0.005 g, Drying oven
4.	Average breaking strength of sacking and Average seam strength, Cl 4.1.1 and 5.1	Constant-rate-of-extension (CRE) Tensile testing machine capable of constant rates of extension of 20 mm/min and 100mm/min, with an accuracy of $\pm 10\%$, equipment for cutting samples
5.	Moisture regain, Cl 4.1.1 and 5.1	Moisture meter
6.	Oil content on dry de-oiled material, Cl 4.1.1 and 5.1	Soxhlet Apparatus, Drying Oven — capable of maintaining a temperature of $105 \pm 3^{\circ}\text{C}$, Weighing Balance — capable of weighing to an accuracy of 1 mg with suitable reagents and laboratory glassware/equipment
7.	Conditioning (Various clauses)	Air Conditioner or Conditioning Chamber to condition samples at $27 \pm 2^{\circ}\text{C}$ and $65 \pm 2\%$, Hygrometer, Thermometer

ANNEX B
SCHEME OF INSPECTION AND
TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Assurance Plan i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: all the bags manufactured in a day or part thereof.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as "R" or other tests which can be subcontracted as "S". Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as "R" in Column 2 of Table 1) is also optional.

2.2.1 MSME manufacturers may utilize common cluster based facilities as per guidelines for the utilization of cluster based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), where different tests given in the specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 TEST RECORDS- The manufacturers maintaining an in-house laboratory or utilizing common cluster based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be stenciled with indelible ink on each bale containing jute bags provided always that the material so marked conforms to each requirement of the specification.

3.1 Packing and Marking shall be done as per the Indian Standard.

3.2 Additional Marking requirements: The material shall also be marked with the following additional requirement on each bale:

a) “For BIS certification details please visit www.bis.gov.in”

4. REJECTION - All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. 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
(ONLY FOR GUIDANCE PURPOSE)

TEST DETAILS				Test equipment requirement R: required (or)S:Sub-contracting permitted	LEVEL OF CONTROLS		
Clause	Requirements	Test Method			No. of Samples	Frequency	Remarks
		Clause Reference	Method of Test				
4.1	Construction	4.1	IS 18161	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof		
4.2	Seam.	4.2	-do-	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof		
4.3	Safety stitch.	4.3	-do-	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof		
4.4	Hemming at mouth.	4.4	-do-	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof		
4.5	Freedom from defects	4.5	-do-	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof		
					requirements and maintain recordsthereof		
5.1& Table 1	<u>Specific Requirements:</u> i) Dimensions	8.3.2	IS 9113	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof		

	ii) Ends & Picks/ dm	8.4.2	-do-	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof	
	iii) Corrected mass/bag	8.5.2	-do-	R	Manufacturer shall put in place adequate in process controls to ensure conformity to the requirements and maintain records thereof	
	iv) Average breaking Strength of sacking (Warp way & weft way)	8.6.2	-do-	R	5 bags	Each control unit
	v) Average seam strength.	8.7	-do-	R	5 bags	Each control unit
	vi) Moisture Regain.	8.2	-do-	R	1 bag	Hourly
	vii) Oil content on dry de-oiled material	8.8	-do-	R	2 bags	Each control unit
5.2 & Table 2	Total Number of bags Per Bale	8.9	-do-	R	Each bale	
5.2 & Table 2	Contract mass of a bale.	5.2	IS 18161	R	Each bale	
5.2 & Table 2	Corrected net mass of a bale.	8.1	IS 9113	R	Each bale	
5.2 & Table 2	Number of Bags per bundle.	5.2	IS 18161	R	Each bundle	
5.2 & Table 2	Number of joined bags per bundle of 25 bags.	Visual		R	Each bundle	