



**PRODUCT MANUAL**  
**FOR Textiles — Light Weight Jute Sacking Bags for Packing 50 kg Foodgrains — Specification**  
**ACCORDING TO IS 16186 : 2014**

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.	<b>Product</b>	:	IS 16186 : 2014
	<b>Title</b>	:	Textiles — Light Weight Jute Sacking Bags for Packing 50 kg Foodgrains — Specification
	<b>No. of Amendments</b>	:	02
2.	<b>Sampling Guidelines:</b>		
a)	Raw material	:	No specific requirement
b)	Grouping guidelines	:	NA (Sample of each type to be tested to cover the same in the scope of licence)
c)	Sample Size	:	30 jute bags
3.	<b>List of Test Equipment</b>	:	Please refer Annex –A
4.	<b>Scheme of Inspection and Testing</b>	:	Please refer Annex - B
5.	<b>Possible tests in a day :</b>	:	All tests except Average Breaking load of Sacking and Average Breaking Load of Seam
6.	<b>Scope of the Licence :</b>		
	Licence is granted to use Standard Mark as per IS 16186 : 2014 with the following scope:		
	Name of the product		Textiles — Light Weight Jute Sacking Bags for Packing 50 kg Foodgrains — Specification
	Type		Type A and/or B

**ANNEX-A**  
**PRODUCT MANUAL**  
**FOR Textiles — Light Weight Jute Sacking Bags for Packing 50 kg Foodgrains — Specification**  
**ACCORDING TO IS 16186 : 2014**

**LIST OF TEST EQUIPMENTS**  
**Major test equipment required to test as per the Indian Standard**

SL. NO.	Requirement with Clause reference	Test Equipment
1.	Dimensions, Cl 4.1 and 5.1	Steel Tape, Porter Gauge, Table
2.	Ends and Picks, Cl 4.1 and 5.1	<p><b>Method A of IS 1963:</b></p> <p>Traversing Thread counter equipped with low power microscope Or Ordinary counting glass with aperture satisfying 5.2 of IS 1963</p> <p>OR</p> <p><b>Method B of IS 1963</b></p> <p>Clamps of Type A, B or C as per 6.1 of IS 1963 and forceps</p>
3.	Mass, Cl 4.1 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 and 5.1	Constant-rate-of-extension (CRE) Tensile testing machine capable of constant rates of extension of 20 mm/min and 100 mm/min, with an accuracy of $\pm 10\%$ , equipment for cutting samples
5.	Moisture regain, Cl 4.1 and 5.1	Moisture meter
6.	Oil content on dry de-oiled material	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

**The list above is indicative and may not be taken as exhaustive**

ANNEX – B

**SCHEME OF INSPECTION AND TESTING**  
**FOR Textiles — Light Weight Jute Sacking Bags for Packing 50 kg Foodgrains — Specification**  
**ACCORDING TO IS 16186 : 2014**

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 equipment.
2. **TEST RECORDS** – The manufacturer shall maintain test records for the tests carried out to establish conformity.
3. **PACKING AND MARKING** – The Standard Mark as given in the Schedule of the license shall be stenciled with indelible ink on each bale containing jute bags; provided that bags contained in the bales to which this mark is thus applied conforms to every requirement of the specification.
  - 1.1 Marking and packing shall be done as per the provisions of the Indian Standard. In addition In addition, the following details shall be mentioned on each bale:
    - a) BIS Licence No. CM/L \_\_\_\_\_.
    - b) BIS website details i.e–“For details of BIS certification please visit [www.bis.gov.in](http://www.bis.gov.in)”
2. **CONTROL UNIT** – For the purpose of this scheme, all the bags manufactured in a day or part thereof shall constitute a control unit.
3. **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.
  - 3.1 All the production which conforms to the Indian Standard and covered by the licence should be marked with Standard Mark.
4. **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 LEVELS OF CONTROL**  
**(Scheme of Inspection and Testing)**

TEST DETAILS				Test equipment requirement R: required (or)S: Sub- contracting permitted	LEVELSOFCONTROL			Remarks
Clause	Requirements	TestMethod			No.of Samples	Frequency	LotSize	
		Clause Reference	Method of Test					
4.1	Construction	4.1	IS 16186:2014	R	One	Hourly	Each Control Unit	If the sample fails, two sample shall be tested. In case of an failure, the production shall b declared unfit for marking wit BIS Certification Mark.
4.2	Seam.	4.2	IS 16186:2014	R	One	Hourly	Each Control Unit	
4.3	Safety stitch.	4.3	-do-	R	-do-	-do-	-do-	
4.4	Hemming at mouth.	4.4	-do-	R	-do-	-do-	-do-	
4.5	Freedom from defects	Annex A		R	-do-	-do-	-do-	
5.1& Table1	<b><u>Specific Requirements:</u></b>			R				
	i) Dimensions	8.3.2	IS9113		-do-	-do-	-do-	
	ii)Ends & Picks/ dm	8.4	IS 1963	R	-do-	-do-	-do-	
	iii)	8.5.2	IS 1964	R	-do-	-do-	-do-	
	iv) Average breaking strength of sacking (Wrap & weftway)	8.6.2	IS 1969	R	5bagsMin	Each control unit at equal interval	-do-	

	v) Average seam breaking strength.	8.7	IS 9030	R	5bags	-do-	-do-	
	vi) Moisture Regain.	8.2	IS 9113	R	one	hourly	-do-	
	vii) Oil Content.	8.8	IS 2969	R	2bags	-do-	-do-	In case of any failure, the production shall be declared unfit for marking with BIS Certification Mark.
5.2& Table2	Total Number of bags per Bale	8.9	IS9113	R		-do-	Each bale	
5.2& Table2	Contract mass of a bale.		---	R		-do-	Each bale	
5.2& Table2	Corrected net mass of a bale.	8.1	-do-	R		-do-	Each bale	
5.2&	Number of Bags per bundle.		Visual	R		-do-	Each bundle	
Table2	Number of joined bags per bundle of 25 bags.		Visual	R		-do-	Each bundle	

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 empaneled 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 to BO head.