



www.bis.gov.in

उत्पाद मानुयल
COUNTRY JUTE TWINE
IS 1912:2023 के अनुसार

PRODUCT MANUAL For
COUNTRY JUTE TWINE
ACCORDING TO IS 1912:2023

भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम की स्कीम-I के तहत यह उत्पाद मानुयल प्रमाणीकरण के प्रचलन में रीति और पारदर्शिता के सुसंगत सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेन्स धारियों द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस लाइसेन्स/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, 2008 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	उत्पाद Product	:	IS 1912:2023
	शीर्षक Title	:	Textiles — Country Jute Twine — Specification
	संशोधन संख्या No. of amendments	:	00
2.	नमूनाकरण दिशा निर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	The jute fibre used in the manufacture of the twine shall be free from defects like roots and specks and shall be well carded. Jute fibre shall be identified by the confirmatory test as specified in IS 667. Compliance of raw material shall be established through raw material suppliers test certificate or test report from BIS recognized/empaneled lab or other accredited lab or in house testing or combination thereof.
b)	समूहिकरण दिशा निर्देश Grouping Guidelines	:	Please refer Annex –A

c)	नमूने का परिमाण Sample Size	:	100 meter twine + 10 gm fibre
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer Annex –B
4.	निरीक्षण व परीक्षण स्कीम Scheme of Inspection and Testing	:	Please refer Annex - C
5.	एक दिन में संभावित परीक्षण Possible tests in a day	:	Please refer Annex -D
6.	लाइसेन्स का कार्यक्षेत्र/Scope of the Licence:		
	IS 1912:2023 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेन्स निम्नलिखित कार्यक्षेत्र के लिए प्रदान किया जाता है Licence is granted to use Standard Mark as per IS 1912:2023 with the following scope:		
	Name of the product	COUNTRY JUTE TWINE	
	Variety No.	1,2,3,4,5,6,7,8	

**ANNEX-A
GROUPING GUIDELINES**

There are eight varieties of jute Twine as per table 1 having various breaking load. For the purpose of grant of licence or change in scope of licence, the following grouping guidelines shall be followed:

Varieties of Jute twine having the maximum and minimum Breaking Load may be tested to also cover all other varieties having intermediate Breaking Load. So far as the number of ply is concerned the material tested should include at least one variety corresponding to the ply included.

(For eg to include all the varieties we can go for i) Variety 7 (Min BL,3 ply) ii) Variety 4 (Max BL,5ply) iii) Variety 3(4ply) iv) Any one variety of 2 ply)

However, scope of licence shall be restricted on the basis of the manufacturing and testing capability.

During the operation of licence, samples of each variety covered in the licence shall be drawn and tested by rotation.

ANNEX-B
LIST OF TEST EQUIPMENTS

Major test equipment required to test the requirements of the Indian Standard.

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Breaking Load (6.1)	Tensile Tester (CRT/CRL/CRE type) Air conditioned room for option 1 or Tank / bath with DM water and surfactant for option 2
2	Linear Density(6.1)	Wrap reel with a girth of 2 mtr, Single Pan Balance of LC 0.1 gm or better. Air conditioned room(First Method Only) Oven (Second Method only)
3	Moisture Regain(5.6) and Contract Moisture Regain (5.7)	Calibrated Moisture Meter or Oven along with Balance
4	Twist (6.1)	• Method A: Direct Counting Method [IS 832 (Part1):2011] -Twist Counter, Dissecting needle, Magnifying glass • Method B: Untwist/Retwist method [IS 832 (Part 2): 2011] - Twist counter or twist tester, consisting of a pair of clamps, one of which is rotatable in either direction and positively connected to a revolution counter
5	Packing(Clause 8)	Weighing Balance Steel Tape
6	Lubricant content in the twine (5.5)	Soxhlet apparatus Weighing Balance Oven Dessicator Graduated receiver Petroleum ether
7	Atmospheric Conditions for Conditioning and Tests (4)	Standard conditioning atmosphere/Chamber capable of maintaining (65 ± 2) percent relative humidity and (27 ± 2) °C temperature
8	Fibre Identification (6.2)	Apparatus – A. Burning Test – Forceps and Micro-burner B. Microscopic test – Compound Microscope, Dissecting Needle, Cover Glass, Cross-sectioning device. C. Chemical test (staining and solubility test) – Test tubes, stirrer, measuring cylinders, beakers etc. Chemicals (Reagent and Dyestuffs) – A. Staining test – Zinc chloride, Potassium Iodide, Iodine, Phloroglucinol, Hydrochloric acid (concentrated). B. Dyestuffs for staining test – Detex, shirlastain A, Neocarmine W and Texchrome. C. Solubility Test – Sulphuric acid (80%), Copper Sulphate, Ammonia, Caustic soda, Distilled Water

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 and implement 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 incorporated legibly and indelibly on each bale containing jute twine, provided always that the said material to which the mark is thus applied conforms to every requirement of the specification
 - 3.1 Marking and packing shall be done as per the provisions of the Indian Standard. In addition, the following information shall be given on each bale or the label attached to it:
 - a) Control Unit (or Batch) Number.
 - b) BIS website details i.e.–“For details of BIS certification please visit www.bis.gov.in”
4. **CONTROL UNIT** – For the purpose of this scheme the entire quantity of jute twine of the same variety number manufactured in a day under similar conditions 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 Standard 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
LEVELS OF CONTROL

(1)			(2)	(3)		
Test Details			Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method Clause Reference		No. of Sample	Frequency	Remarks
5.1 and 6.2	Jute Fibre	5.1 of IS 1912: 2023	R	Firm to have adequate in-process controls to check compliance of this parameter as per Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		
		IS 667: 1981	S	5	Each consignment	Compliance of raw material shall be established through raw material suppliers test certificate or test report from BIS recognized/empaneled lab or other accredited lab or in house testing or combination thereof.
5.2	Yarn	5.2 of IS 1912:2023	R	Firm to have adequate in-process controls to check compliance of this parameter as per Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		
5.3	Twine	5.3 of IS 1912:2023	R	-do-		
5.4	Skein	5.4 of IS 1912:2023	R	-do-		
5.5	Lubricating Material i.e., Lubricant content in the twine (if used)	IS 7071	R	2 Skiens	Each control unit	Skeins shall be drawn at regular intervals
5.6	Moisture Regain	5.6 of IS 1912:2023	R	5 Skiens	-do-	-do-
5.7	Contract Moisture Regain	5.7 of IS 1912:2023	R	5 Skiens	-do-	-do-
6.1 and Table 1	Linear Density	IS 570:1964	R	20 Skiens	-do-	-do-
6.1 and	Ply	6.1 of IS 1912: 2023	R	5 Skiens	-do-	-do-

Table 1						
6.1 and Table 1	Twist	IS 832 (Part1)/ (Part 2)	R	5 Skiens	-do-	-do-
6.1 and Table 1	Breaking Load	IS 1670:1991	R	5 Skiens	-do-	-do-

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 by BO Head.

ANNEX – D**POSSIBLE TESTS IN A DAY**

Sr. No.	Tests	Clauses with IS reference
1	Jute Fiber	5.1 of IS 1912: 2023
2.	Linear Density#	6.1 and Table 1 of IS 1912: 2023
3.	Twist	6.1 and Table 1 of IS 1912: 2023
4.	Breaking Load#	6.1 and Table 1 of IS 1912: 2023
5.	Moisture Regain#	5.6 of IS 1912: 2023
6.	Packing	8 of IS 1912: 2023
7.	Lubricant content in the Twine	5.5 of IS 1912: 2023

These tests requires conditioning and can be done if equilibrium is reached.