

PM/4572/2
July 2022



उत्पाद मैनुअल

FIBRE ROPES — POLYAMIDE —3-, 4-,8- AND 12-STRAND ROPES

IS 4572:2022/ISO 1140:2021 के अनुसार

PRODUCT MANUAL FOR FIBRE ROPES — POLYAMIDE — 3-, 4-,8- AND 12-STRAND ROPES ACCORDING TO IS 4572:2022/ISO 1140:2021

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में अभ्यास और पारदर्शिता के संचालन में पारदर्शिता सुनिश्चित करने 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 लाइसेंस/प्रमाणपत्र 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 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 4572:2022/ISO 1140:2021
	शीर्षक Title	:	Fibre Ropes — Polyamide — 3-, 4-,8- and 12-Strand Ropes
	संशोधनों की संख्या No.of amendments	:	00
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	No specific requirement
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer ANNEX-A

c)	नमूने का परमाण Sample Size	:	10m
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer ANNEX – <u>B</u>
4.	नरीक्षण ि परीक्षण स्कीम Scheme of Inspection and Testing	:	Please refer ANNEX – <u>C</u>
5.	एक ददन में सभावित परीक्षण Possible tests in a day		
	- Construction, Manufacture, Marking, Delivery Length (CI 5.2) - Linear density and Minimum breaking force can be carried out in a day provided the sample are conditioned		
6.	लाइसेन्स का कार्यक्षेत्र /Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS IS 4572:2022/ISO 1140:2021 with the following scope:		
	Name of the product	Fibre Ropes — Polyamide	
	Construction Type	A/B/L/T	
	Reference Number	Upto and including	
	Type of Stabilization	1 or 2 in accordance with IS/ISO 9554	

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ANNEX-A TO PRODUCT MANUAL

GROUPING GUIDELINES

For the purpose of Grant of Licence/Change in Scope of Licence, the fibre ropes are classified according to the reference number (size) and the tolerances on linear density into the following groups

Group	Type	Reference Numbers
Group I	Type A/B	From 4 up to and including 10
Group II	Type A/B	From 12 up to and including 36
Group III	Type A/B	From 40 up to and including 160
Group IV	Type L/T	From 12 up to and including 36
Group V	Type L/T	From 40 up to and including 160

From **each group**, sample of the **highest size (reference number)** of **each type** may be tested to cover the range of sizes of that type within that group. Sample of any type of stabilization may be tested.

Either Unspliced or Spliced rope may be drawn to cover both types.

Scope shall be restricted based on manufacturing and testing facilities available. During operation of licence, samples of all covered varieties shall be drawn in rotation, to the extent possible.

ANNEX-B**LIST OF TEST EQUIPMENTS**

Major test equipment required to test as per the Indian Standard

Sl. No.	Tests Used In With Clause Reference	Test Equipment/Chemical
1	Construction Cl. 5.2	Vernier caliper, Measuring scale, Weighing Scale
2	Linear density, Cl. 6.0, Tables 1, 2 and 3	rope gauge/ vernier caliper, weighing balance capable of weighing to an accuracy of 1 percent, measuring tape, Tensioning device/Tensile testing machine
3	Minimum Breaking Force. Cl. 6.0, Tables 1, 2 and 3	Tensile testing machine – Constant rate traverse type, as per IS 7071, Measuring tape.
4	For conditioning the sample	Conditioning Chamber

The list above is indicative only and may not be considered as exhaustive

ANNEX C

SCHEME OF INSPECTION AND TESTING

1. **LABORATORY-** A laboratory shall be maintained, which shall be suitably equipped (as given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the method given in the specification.

1.1 The manufacturer shall prepare **and implement** a calibration plan for the test equipment.

2. **TEST RECORD-** 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 shall be incorporated on the labels securely attached at both ends of each coil of fibre ropes provided always that the rope in each coil to which this mark is applied conform to every requirement of the specification. The standard mark shall also be marked on each package containing such ropes.

Marking, packaging, labeling, invoicing and delivery length shall be in accordance with IS/ISO 9554. In addition, the following details shall be marked on labels affixed to each coil.

i) Licence No. (CM/L... ..)

ii) BIS website details: For BIS Certification Details please visit www.bis.gov.in

4. **CONTROL UNIT** - For the purpose of this scheme, All fibre ropes of same type and reference number manufactured in a day may be taken as one control unit.

5. **LEVELS OF CONTROL** :- The tests as indicate in Table 1 and at the levels of controls in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and records maintained in accordance with paragraph 2 above.

All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark.

6. **REJECTION** - 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 MethodsClause Reference			No. of Sample	Frequency	Remarks
5.2	Construction and manufacture		IS/ISO 9554:2019	R	All coils	Each control unit	-
5.2	Lay		IS/ISO 9554: 2019	R	3 coils	Each control unit	-
5.2	Marking and Labelling		IS/ISO 9554: 2019	R	3 coils	Each control unit	-
5.2	Packaging, invoicing and delivered length		IS/ISO 9554: 2019	R	3 coils	Each control unit	-
6.0, Tables 1, 2 and 3	Linear Density		IS 7071:2021	R	3 coils	Each control unit	-
6.0, Tables1, 2 and 3	Minimum Breaking Strength		IS 7071:2021	R	3 coils	Each 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: 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.