



PRODUCT MANUAL FOR GUIDE AND RUBBING ROPES ACCORDING TO IS 3623:1978

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 license/certificate.

1.	Product	:	IS 3623:1978
	Title	:	Guide and Rubbing Ropes
	No. of Amendments	:	One
2.	Sampling Guidelines:		
a)	Raw material	:	As per Cl. 4 of IS 3623
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	Mechanical Tests: 4 meter Chemical Tests: 5 pieces of 5cm x 5cm
3.	List of Test Equipment	:	Please refer ANNEX – B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	Possible tests in a day	:	i) Dimension (Cl. 3) ii) Galvanizing test (Cl. 4.3) iii) General requirements (Cl. 7) iv) Tests on wires before manufacturing rope (Cl. 8) v) Tests on wires from Rope (Cl. 9.1)
6.	Scope of the Licence	:	Please refer ANNEX – D

ANNEX-A

GROUPING GUIDELINES

1. Guide and Rubbing Ropes covered under IS 3623: 1978 can be classified into different varieties based on the following:
 - a) **Type**
 - Round Rod Guide Ropes
 - Half- locked Coil Guide and Rubbing Ropes
 - b) **Size** (Nominal Diameter)
 - c) **Galvanized/ Ungalvanized**
2. Considering the above, the guidelines given below shall be followed for GoL/CSoL:
 - i) Sample of Rope of any Size (Nominal Diameter), preferably the largest, from each Type shall be tested for all the requirements to cover all the Sizes of that particular Type.
 - ii) If Galvanized rope is tested then Ungalvanized rope of the same size and type may also be covered.
3. The Firm shall declare the Varieties of various Ropes they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
4. During the operation of license, it shall be ensured that all varieties covered in the license are tested in rotation, to the extent possible

ANNEX--B**List of Test Equipment***Major test equipment required to test as per the Indian Standard*

Sr No	Tests used in with clause reference	Test equipment
1.	Dimension, Cl. 3, Table 1, Table 2	Vernier caliper, Micrometer, Measuring tape / Length Counter meter
2.	Minimum breaking force - Cl. 5, 9.2 Table 1, Table 2 Tensile test- Cl. 8	Tensile testing machine / Breaking Load Testing Machine
3.	Measurement of mass, Cl. 5- Table 1, 2	Weighing balance
4.	Reverse Bend Test, Cl.8	Bend testing machine
5.	Shape and dimensions	Snap gauge / Profile projector
6.	Tests for Galvanizing, Cl.4.3	Weighing balance, Chemicals etc

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 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. LABELLING AND MARKING – As per requirements of IS 3623: 1978.

4. 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.

4.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

5. 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 Required (R) or Sub- contracting permitted (S)	Levels of Control		
Clause	Requirement	Test Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
3	Size	3.1 Annex A	IS 3623 IS 6594	R	Each Rope		-
	Length	3.2	IS 3623	R	Each length		
4	Material	4.1	IS 3623	S	One	Each consignment	No further testing is required if accompanied with a test certificate.
		4.2	IS 3623	R	One	Each heat	
	Galvanizing test	4.3	IS 3623	R	One	Every 5 th coil	
5	Mass	5, Table 1, Table 2	IS 3623	R	Each length		
5	Minimum Breaking Force	5, Table 1, Table 2 Annex B	IS 3623 IS 16594	R	Two	Every 25 Tonnes or part thereof of finished rope	
6	Construction	6.1 to 6.3	IS 3623	R	Each Rope		

7	General requirements						
7.1	Workmanship	7.1	IS 3623	R		Each Rope	
7.2	Joints	7.2	IS 3623	R		Each Rope	
7.3	Lubrication	7.3	IS 3623	R		Each Rope	
8	Tests on wires or Rods used by Rope manufacturer (Before Rope manufacturing)						
8.1	Round Wire/Rod ropes						
	Tensile test	8.1	IS 3623	R	One	Each Coil/Length	
	Reverse Bend test	8.2	IS 3623	R	One	Each Coil/Length	
8.2	Locked Coil Rope						
8.2.1	Tensile test Round wire Shaped wire	8.2.1	IS 1835 IS 3623	R	One	Each Coil/Length	
8.2.2	Reverse Bend test Round wire Shaped wire	8.2.2	IS 1835 IS 3623	R	One	Each Coil/Length	

9	Tests on completed wire Rope*						
9.1	Tests on wires from completed Rope						
	Tensile test	9.1, 9.1.1	IS 3623 IS 1835	R	One	Every 25 Tonnes or part thereof of finished rope	In case of failure, procedure as per Cl. 9.1.2 shall be adopted.
9.2	Breaking Load test on Rope	9.2, Table 1, Table 2 Annex B	IS 3623 IS 16594	R	Two	Every 25 Tonnes or part thereof of finished rope	

*To be done when specified by purchaser

Note-1: 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.

ANNEX D

Scope of Licence

“Licence is granted to use Standard Mark as per IS 3623:1978 with the following scope:

Name of the product	Guide and Rubbing Ropes
Size	
Type	
Whether Galvanized or Ungalvanized	