



**PRODUCT MANUAL FOR
LEGAL METROLOGY – WOVEN METALLIC
AND GLASS FIBRE TAPE MEASURES OF LENGTH
ACCORDING TO IS 1269 (Part 1): 1997**

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.	Product	:	IS 1269 (Part 1): 1997
	Title	:	Legal Metrology - Woven Metallic and Glass Fiber Tape Measures of Length
	No. of Amendments	:	1
2.	Sampling Guidelines:		
a)	Raw material	:	-
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	3 Tapes
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 :		
	Please refer ANNEX – D		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 1269 (Part 1): 1997 with the following scope:		
	Name of the product	Legal metrology – Woven Metallic and Glass Fiber Tape Measures of Length	
	Nominal Length		
	Accuracy Class		

ANNEX A

Grouping Guidelines

1. Woven Metallic and Glass Fiber Tape Measures of Length as per IS 1269 (Part 1): 1997 are classified as follows:

Nominal Length	Accuracy Class
0.5m to 5m	Class II or Class III
above 5m to 100m	Class I, Class II or Class III

2. The following grouping shall be considered for the purpose of GoL/CsoL:
 - (i) Group 1: Nominal length from 0.5m to 5m
 - (ii) Group 2: Nominal length above 5m to 100m
3. Sample of any nominal length from each group shall be tested to cover tapes of all nominal length in that group. If sample of higher accuracy class in a group is tested, tapes of lower accuracy class in that group may also be covered.
4. The Firm shall declare the varieties they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
5. During operation of licence, BOs shall ensure that all the varieties covered in the licence 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*

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Construction (Clause 5)	Micrometre
2	Graduation (Clause 6)	Suitable Scales for Length Measurement
3	Numbering (Clause 7)	Travelling Microscope with Magnification
4	Accuracy Class (Clause 8)	Vernier Calliper
5	Bend Test (Clause 10.1)	Bending Vice
6	Permanent Set Test (Clause 10.2)	Fixture along with 5 kg load
7	Sticking Test(Claue 10.4)	Fixture along with 50 kg load
8	Water Proofing Test (Clause 10.6)	Weighing Balance
9	Nominal length (Clause 3.1)	Facility for providing tension of 20 N AC

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 equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING – As per the requirement of IS 1269 (Part 1):1997.

4. CONTROL UNIT – Tape Measures of same Accuracy class and nominal length manufactured in a day 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 Standards 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

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
4	Material	4.1 to 4.3	IS 1269 (Part 1)	S	One	Each control unit	-
3	Nominal length	3.1	IS 1269 (Part 1)	R	One	Each control unit	-
5	Construction	5.1	IS 1269 (Part 1)	R	Each piece	-	-
		5.2, 5.3	IS 1269 (Part 1)	R	Five pieces	Each control unit	In case of failure, the control unit shall not be marked.
6	Graduations	6.1 to 6.5	IS 1269 (Part 1)	R	Each Piece	-	-
		6.6 to 6.10	IS 1269 (Part 1)	R	Five pieces	Each control unit	In case of failure, the control unit shall not be marked.
7	General Requirements	7.1 to 7.4	IS 1269 (Part 1)	R	Each Piece	-	-
		7.5, 7.6	IS 1269 (Part 1)	R	Five Pieces	Each control unit	In case of failure, the control unit shall not be marked.
		7.7	IS 1269 (Part 1)	R	Each Container	-	-

8	Accuracy Class & Maximum Permissible Errors	8.1, 8.2	IS 1269 (Part 1)	R	One	Each control unit	-
9	Case and Winding Device	9.1.1, 9.1.2, 9.1.4, 9.1.5	IS 1269 (Part 1)	R	One	Each control unit	-
		9.1.3	IS 1269 (Part 1)	R	One	Each consignment	-
		9.2.1, 9.2.2	IS 1269 (Part 1)	R	One	Each control unit	-
10	Bend Test	10.1	IS 1269 (Part 1)	R	One	Each control unit	In case of failure, one sample from next consecutive five control units shall be checked.
	Permanent Set Test	10.2	IS 1269 (Part 1)	R	One	Each control unit	
	Coating Stability Test	10.3	IS 1269 (Part 1)	R	One	Each control unit	
	Sticking Test	10.4	IS 1269 (Part 1)	R	One	Each control unit	
	Print Stability Test	10.5	IS 1269 (Part 1)	R	One	Each control unit	-
	Water Proofing Test	10.6	IS 1269 (Part 1)	R	One	Each control unit	-
11	Marking	11.1 to 11.5	IS 1269 (Part 1)	R	Each Piece	-	-
12	Provision of Stamping	12.1	IS 1269 (Part 1)	R	Each Piece	-	-

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

Possible Tests in a Day

- (i) Construction (Clause 5)
- (ii) Graduations (Clause 6)
- (iii) General Requirements (Clause 7.1)
- (iv) Accuracy Class & Maximum Permissible Errors (Clause 8)
- (v) Case and Winding Device (Clause 9)
- (vi) Bend Test (Clause 10.1)
- (vii) Permanent Set Test (Clause 10.2)
- (viii) Coating Stability Test (Clause 10.3)
- (ix) Sticking Test (Clause 10.4)