



उत्पाद मैनुअल
**TEXTILES — FLAT WOVEN WEBBING SLINGS MADE FROM BLEND OF POLYESTER
MULTIFILAMENT AND HIGH STRENGTH MIXED POLYOLEFIN TAPES — SPECIFICATION**

IS 18118:2023 के अनुसार

PRODUCT MANUAL
**FOR TEXTILES — FLAT WOVEN WEBBING SLINGS MADE FROM BLEND OF POLYESTER
MULTIFILAMENT AND HIGH STRENGTH MIXED POLYOLEFIN TAPES — SPECIFICATION**
ACCORDING TO IS 18118:2023

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 18118:2023
	शीर्षक Title	: Textiles — Flat Woven Webbing Slings Made From Blend Of Polyester Multifilament And High Strength Mixed Polyolefin Tapes — Specification
	संशोधनों की संख्या No. of amendments	: NIL
2.	नमूना दिशानिर्देश Sampling Guidelines	
a)	कच्चा माल Raw material	The webbing shall be woven from the blend of polyester : high tenacity continuous multifilament and mixed polyolefin high tenacity tapes. The elongation of polyester multifilament and high strength mixed polyolefin tapes when tested by the method prescribed in IS 1670 shall be (12 ± 2) percent. (Cl. 4.1.1. of IS 18118:2023) End fittings of metal, shall have a breaking load of at least four times the maximum safe working load of the sewn webbing component.

		Conformity to the specified requirements shall be established through supplier's test certificate or test report from BIS recognized/empaneled lab or any other lab having valid accreditation or in house testing.
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	: Please refer Annex-A
c)	नमूने का आकार Sample Size	: 20 pcs
3.	परीक्षण उपकरणों की सूची List of Test Equipment	: Please refer Annex-B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	: Please refer Annex-C
5.	एक दिन में संभावित परीक्षण Possible tests in a day	
	All tests	
6.	लाइसेंस का दायरा /Scope of the Licence:	
	"Licence is granted to use Standard Mark as per IS --- with the following scope:	
	Name of the product	Textiles — Flat Woven Webbing Slings Made From Blend Of Polyester Multifilament And High Strength Mixed Polyolefin Tapes
	Material (Blend composition)	Blend composition of Polyester Multifilament and High Strength Mixed Polyolefin Tapes to be indicated in percentage terms
	Working load limits for the sling in basic configuration	160 kg, 200 kg, 250 kg, 315 kg, 400 kg, 500 kg, 630 kg, 800 kg 1 t, 1.25 t, 1.6 t, 2 t, 2.5 t, 3.0 t, 4.5 t, 6.0 t, 8 t, 10 t

**BUREAU OF INDIAN STANDARDS
MANAK BHAVAN,9, BAHADUR SHAH ZAFAR MARG,
NEW DELHI-110002**

ANNEX-A

GROUPING GUIDELINES

1. The manufacturer shall declare the material (Blend composition of Polyester Multifilament and High Strength Mixed Polyolefin Tapes to be indicated in percentage terms) of the slings being manufactured. For each unique blend, they shall indicate the Working load limits for the sling in basic configuration.

a) Samples of slings made of each type of material i.e. each unique blend composition, intended to be covered in the scope of licence shall be tested, and for each blend composition

b) If the sample of sling with the highest value of Working Load Limit in Basic Configuration is tested, slings with lower values of Working Load Limit for the sling in Basic Configuration may be covered in the scope of the licence on that basis

2. The scope of the licence shall be restricted based on the manufacturing and testing facilities available.

3. During the operation of the licence, samples of all varieties covered in the scope of licence 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

Sr. No.	Test	Test Equipment
1.	Dimensions	Scale/ measuring tape, Vernier caliper, micrometer.
2.	Thickness	Thickness tester with reference plate, presser foot, thickness gauge
3.	Proof testing, Strength Test	Tensile testing machine, humidity chamber,

The least count and range of test equipment should match value/ parameters/ tolerances mentioned in the Indian Standard.

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

ANNEX B

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 licence shall be incorporated legibly and indelibly on the label attached to each Flat Woven Webbing Slings Made from Blend of Polyester Multifilament and High Strength Mixed polyolefin Tapes provided always that the material so marked conforms to each requirement of the specification.

3.1 The label attached to each Flat Woven Webbing Slings Made from Blend of Polyester Multifilament and High Strength Mixed polyolefin Tapes shall also be marked with the following:

- a) Manufacturer's Name or Trade Mark
- b) Identification mark or number
- c) Material of webbing (e.g. polyester)
- d) Safe working load of the sling in basic configuration
- e) Month and year of manufacture
- f) BIS licence number and "For BIS certification details please visit www.bis.gov.in"
- g) Any other information required by the buyer

Note 1: Each sling may also be marked with information such as effective length, thickness, width and safe working loads for various modes of use.

4. **CONTROL UNIT**- For the purpose of this scheme, all Flat woven webbing slings made from same material (blend) and having and having same manufacturing particulars like width, thickness, safe working load manufactured under similar condition in a day shall constitute a 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.

5.1 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 requireme nt R: required (or)S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Methods Clause Reference			No. of Sample	Frequency	Remarks
4.1	Webbing						
4.1.1	Materials	4.1.1	IS 18118:2023	S	One	Each Consignmen t	No testing is required if material is accompanied by supplier's test certificate
4.1.2	Weaving	4.1.2	-do-	R	Two	Each control unit	In case sample fails, draw 10 samples. If all the 10 samples pass, accept the batch, otherwise reject.
4.1.3	Width	4.1.3	-do-	R	Two	-do-	-do-
4.1.4	Thickness	5.3	-do-	R	Two	-do-	-do-

4.1.5	Dyeing	4.1.5	-do-	S	One	Each Control unit	That the dye used for dyeing is not toxic to human beings may be established through dye supplier's certificate.
4.1.6	Other treatments, after-treatments or coverings	4.1.6	-do-	S	One	Each control unit	The manufacturer shall maintain records of Other treatments, after-treatments or coverings done in production of slings and shall establish through either supplier's test certificate or declaration/undertaking that these are not toxic to human beings
4.2	Sewing of slings						
4.2.1	-do-	4.2.1	-do-	R	One	Each control unit	
4.2.2 4.2.3 4.2.5 4.2.5.1	-do-	4.2.2 4.2.3 4.2.5 4.2.5.1	-do-	R	One	Each control unit	
4.2.3.1 4.2.4 4.2.4.1	-do-	4.2.3.1 4.2.4 4.2.4.1	-do-	R	Two	Each control unit	In case sample fails, draw 10 samples. If all the 10 samples pass, accept the batch, otherwise reject.
4.3 4.3.1 4.3.2	Soft eyes	4.3 4.3.1 4.3.2	-do-	R	Two	Each control unit	-do-

4.4	End fittings						
4.4.1	General	4.4.1	IS 1811 8:20 23	R	One	Each control Unit	
4.4.2	Material	4.4.2	-do-	S	One	Each consignment of fitting	No testing is required if material is accompanied by supplier's test certificate
4.4.3	Finish	4.4.3	-do-	R	One	Each control unit	
4.4.4	Form	4.4.4	-do-	R	-do-	-do-	
4.4.5	Proof Testing	5.4	-do-	R	-do-	-do-	
4.4.6	Re -use by the manufacture of end fittings returned by the user	4.4.6	-do-	R	Each returned end fitting		
4.5	Working load limit	5.1, 5.2	-do-	R	Two	Each control unit	
4.6	Maximum safe working load	5.1,5.2 Table-1	-do-	S	Two	Each control unit	In case of failure the entire batch shall be rejected

4.7	Safety Factor	4.7	-do-	S	2	Each control Unit	In case sample fails, draw 10 samples. If all the 10 samples pass, accept the batch, otherwise reject.
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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.