भारतीय मानक **IS 7610 (Part 1) : 2023**

Indian Standard

वस्त्रादि — मशीनरी कपड़े, ऊन — विशिष्टि

भाग 1 सामान्य

(पहला पुनरीक्षण)

Textiles — Machinery Fabrics, Wool — Specification

Part 1 General

(First Revision)

ICS 59.080.30

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March 2023 **Price Group 5**

Industrial Fabrics Sectional Committee, TXD 33

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Industrial Fabrics Sectional Committee had been approved by the Textiles Division Council.

This standard was first published in 1975. The present revision has been made in the light of experience gained since its last revision and to incorporate the following major changes:

a) Title of the standard has been modified;
b) Marking, Packaging and Sampling clauses have been modified; and
c) References to Indian Standards have been updated.

Machinery fabrics like clearer cloth, sizing flannel and plaiting cloth are made of wool fibres only or blends of wool and other fibres. This series of standards on machinery fabrics are published in the following parts:

Part 1 General
Part 2 Clearer cloth
Part 3 Sizing flannel
Part 4 Plaiting cloth
Part 5 Lapping cloth

Part 1 covers the general requirements and other particulars regarding marking, packaging, sampling and criteria for conformity of machinery fabrics. The manufacturing particulars, constructional details and other requirements of different fabrics are covered in the subsequent parts of this standard.

The composition of the committee responsible for the formulation of this standard is listed in Annex C.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TEXTILES — MACHINERY FABRICS, WOOL — SPECIFICATION
PART 1 GENERAL

(First Revision)

1 SCOPE

This standard (Part 1) covers general requirements, marking, packaging, sampling and criteria for conformity of machinery fabrics made of wool fibres only or blends of wool fibres with other textile fibres.

2 REFERENCES

The standards listed in Annex A contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards.

3 GENERAL REQUIREMENTS

The machinery fabrics shall be clean, scoured and free from any such admixture which might give fictitious weight, substance or firmness.

4 COMPOSITION OF YARN

The fibres present in the yarn shall first be identified according to the method prescribed in IS 667. The quantitative chemical analysis shall then be made by using the relevant methods prescribed in the relevant standards listed in Annex B.

4.1 The cloth shall be free from the following serious and major defects. However, on an average one major defect per 5 metre length of the piece or part thereof shall be permitted.

a) Serious Defects

i) More than one adjacent end missing in the body of the material running throughout the piece or more than 3 ends missing at a place and running over 20 cm.

ii) Undressed snarls over a length exceeding 5 percent of the length of the piece.

iii) Hole, cut or tear over 1.25 cm in size.

iv) Not properly mended smash definitely rupturing the texture of the fabric.

v) Excess or deficiency of cover due to defects in milling or raising prominently noticeable; and

vi) Cockled finish causing defective appearance in the texture of the fabric caused by such factors as irregular tension, unbalanced construction or defective processing throughout the length of the piece.

b) Major Defects

i) Weft crack or two or more missing picks;

ii) across the width of the fabric;

iii) More than two adjacent ends running parallel, broken or missing and extending beyond 10 cm;

iv) Notice able selvedge defects such as torn, cut, mended or unmanned selvedge;

v) Local milling defect and defective raising;

vi) Prominently notice able warp or weft float in the body of the fabric; and

vii) Mended hole, cut or tear up to 1.25 cm in size in the body of the fabric.

5 SEALED SAMPLE

5.1 If, in order to illustrate or specify the general appearance, feel, shade and finish, etc, of cloth, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

5.1.1 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

6 MARKING

The cloth shall be marked with the following:

a) Name of the material;

b) The legends ‘All Wool’ or ‘Blended Wool’, in the latter case the percentage of wool and other fibres be also indicated;

c) Mass (weight) (g/m^2), length and width of the piece;

d) Identification code to indicate lot number and date of production;

e) Manufacturer's name, initials or trademark; and

f) Any other information as required by the law in force or as agreed between the buyer and the seller.

7 PACKAGING

The cloth shall be packed in bales or cases in conformity with the procedure laid down either in IS 32 or in IS 741 as required.

8 SAMPLING AND CRITERIA FOR CONFORMITY

8.1 The quantity of cloth of the same type and quality delivered to a buyer against one dispatch note shall constitute a lot. The conformity of the lot to the requirements of this standard shall be determined on the basis of the tests carried out on the samples selected from the lot.

8.2 Unless otherwise sampling plan is specified in the contract or order, the sampling plan as given in Table 1 may be used for inspecting and testing of machinery fabric against this standard. The number of pieces to be selected from the lot for assessing length, width, ends, picks, fabric defects, weave and type of finish, shall be as per col (2) of Table 1. The number of test specimens to be selected for other tests shall be in accordance with col (4) of Table 1. To ensure the randomness of selection, IS 4905 may be followed:

Table 1 Sampling Plan for Machinery Fabric, Wool
(*Clauses* 7.2 *and* 7.3)

Sl No.	**Lot Size**	**Sample Size**	**Permissible No. of Defectives Samples**	**Sub-Sample Size** (to be drawn from sample)	**Permissible No. of Defectives Sub-Samples**
(1)	(2)	(3)	(4)	(5)	(6)
i)	2 to 25	3	0	3	0
ii)	26 to 90	13	1	3	0
iii)	91 to 150	20	2	13	1
iv)	151 to 280	32	3	13	1
v)	281 to 500	50	5	20	1
vi)	501 to 1 200	80	7	32	2
vii)	1 201 and above	125	10	50	3

NOTE — If sample size equals or exceeds lot size, carryout 100 percent inspection.

8.3 Criteria for Conformity

The lot shall be declared conforming to the requirements of this standard if the total number of defective samples does not exceed the permissible numbers given in col (3) or col (5) of Table 1 as applicable.

ANNEX A
(*Clause* 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	*Title*	*IS No.*	*Title*
IS 32 : 1971	Code for sea worthy packaging of woollen and worsted yarn and cloth (*second revision*)	IS 741 : 1971	Code for inland packaging of woollen and worsted yarn and cloth (*first revision*)
IS 667 : 1981	Methods for identification of textile fibres (*first revision*) (with supplement)	IS 4905 : 2015/ISO 24153 : 2009	Random sampling and randomization procedures (*first revision*)

ANNEX B
(*Clause* 3.2)

LIST OF INDIAN STANDARDS ON QUANTITATIVE ANALYSIS OF WOOL AND ITS BLENDS

IS No.	*Title*	*IS No.*	*Title*
IS 1564 : 1988	Method for quantitative chemical analysis of binary mixtures of cellulosetri acetate and certain other fibres (*first revision*)	IS 2176 : 1988	Textiles — Binary mixtures of cellulose acetate and certain other fibres — Methods for quantitative chemical analysis (*first revision*)
IS 1889 (Part1) : 1976	Method for quantitative chemical analysis of binary mixtures of regenerated cellulose fibre and cotton: Part 1 Sodium zincate method (*first revision*)	IS 2177 : 1988	Textiles — Binary mixtures of cellulose triacetate and secondary cellulose acetate fibres — Methods for quantitative chemical analysis (*first revision*)
IS 1889 (Part 2) : 1976	Cadoxen solvent method	IS 2727 : 1964	Method for quantitative chemical analysis of binary mixtures of manila and sisal fibres
IS 1889 (Part 3) : 1979	Formic acid-zinc chloride	IS 3416 : 1988	Method for quantitative chemical analysis of mixtures of polyester fibres with cotton or regenerated cellulose (*second revision*)
IS 1889 (Part 4) : 1979	Sulphuric acid method (*first revision*)	IS 3421: 1988	Textiles — Binary mixtures of acrylic certain modacrylics and certain other fibres — Methods for quantitative chemical analysis (*first revision*)
IS 2005 : 1988	Methods for quantitative chemical analysis of binary mixtures of nylon 6 or nylon 6, 6 fibres and certain other fibres (*first revision*)	IS 6503 : 1988	Method for quantitative chemical analysis of ternary
IS 2006 : 1988	Method for quantitative chemical analysis of binary mixtures of protein fibres with certain other non — Protein fibres (*second revision*)		

IS No.	*Title*
	mixtures of protein fibres nylon 6 or nylon 6,6 and certain other fibres (*first revision*)
IS 6504 : 1979	Method for quantitative chemical analysis of ternary mixtures of viscose rayon cotton and protein fibres (*first revision*)
IS 6570 : 1972	Method for quantitative chemical analysis of binary mixtures of jute and animal fibres
IS 8476 : 1977	Method for determination of wool content in woollen textile materials
IS 9068 : 2021/ ISO 1833-1 : 2020	Textiles — Quantitative chemical analysis — General principles of testing (*first revision*)
IS 9889 : 1988	Method for quantitative chemical analysis of binary mixtures of silk and wool or hair (*first revision*)
IS 9896 : 1981	Methods for quantitative chemical analysis of mixtures of polyolefin fibres and other fibres
IS 11870 : 1986	Method for quantitative chemical analysis of binary mixtures of poly propylene and polyethylene
IS 17269 : 2021	Identification, labelling and marking of *Pashmina* products (*first revision*)

ANNEX C
(*Foreword*)

COMMITTEE COMPOSITION
Technical Textiles for Industrial Fabrics Sectional Committee, TXD 33

Organization	*Representative(s)*
PSG College of Technology, Coimbatore	DR G. THILAGAVATHI (***Chairperson***)
Ahmedabad Textile Research Association, Ahmedabad	SHRIMATI DEEPALI PLAWAT SHRI JIGAR DAVE (*Alternate*)
Central Coir Research Institute, Alappuzha	DR ANITA JACOB SHRIMATI SUMI SABESTIAN (*Alternate*)
Director General of Quality Assurance, Mumbai	SHRI PURUSOTTAM DE SHRI ANIKET SBHUTE
DKTE Centre of Excellence in Non Wovens, Kolhapur	SHRI ANIKET SBHUTE
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Indian Technical Textile Association, Mumbai	DR ANUP RAKSHIT SHRIMATI RUCHITA GUPTA (*Alternate*)
Kirti Filtration and Automation Pvt Ltd, Vadodara	SHRI KULIN MASTURLAL SHRIMATI KIRTI MASTURLAL (*Alternate*)
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Reliance Industries Ltd, Navi Mumbai	SHRI MAHESH C SHARMA SHRI RAJENDREN SUBRAMANIAN (*Alternate*)

Organization	*Representative(s)*
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SRF Ltd, Gurugram	SHRI A. R. RAJESH SHRIMATI ANGELINA DIVYA (*Alternate*)
Textiles Committee, Mumbai	SHRI J. D. BARMAN SHRI GANESH P. BANGAR (*Alternate*)
The Bombay Textile Research Association, Mumbai	DR PRASANTA KUMAR PANDA DR SREE KUMAR (*Alternate*)
The Synthetic and Art Silk Mills Research Association, Mumbai	DR MANISHA MATHUR SHRIMATI ASHWINI SUDAM (*Alternate*)
Virendra Textiles, Noida	SHRI AMIT GUPTA
Welspun India	SHRI RAJEEV SHARMA SHRI BASUDEV BASU (*Alternate*)
BIS Directorate General	SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR AND HEAD (TEXTILES DEPARTMENT) [REPRESENTING DIRECTOR GENERAL (*Ex-officio*)]

Member Secretary
SHRI DHARMBEER
SCIENTIST 'C'/DEPUTY DIRECTOR
(TEXTILES DEPARTMENT), BIS

Bureau of Indian Standards

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Review of Indian Standards

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