

TEXTILES COMMITTEE

(GOVERNMENT OF INDIA, MINISTRY OF COMMERCE)

Regulations for Preshipment Inspection of Viscose Staple Fibre Yarn.

PREINSPECTION OF MATERIAL BY MILLS:

The mills are responsible for carrying out preshipment inspection of all supplies of material prior to offering the same for inspection by the Inspecting Authority so as to eliminate any material which is not upto the required standard.

It will be the responsibility of the mills to ensure that the total quantity offered for inspection is in accordance with the minimum standards prescribed in this behalf. A balance for weighing yarn bundles weighing approximately 5 kg. may be provided.

It is also necessary to furnish an offering letter as per the proforma enclosed.

GENERAL INSPECTION:

- (a) Procedure of Inspection: The Inspector shall select at random 10% of the material for quality and general inspection which will mainly consist of general appearance including unevenness, presence of snarls, neppiness, uniformity in shade or any other surface impurities, stains and knots, and weights per bundle in hanks or per package in cones or cheeses.
- (b) Drawing of Samples:
- (1) Shall be in accordance with the method of sampling as per ISI specifications for cotton yarn. A minimum number of 15 samples, each consisting of two hanks shall be necessary for tests per lot.
 - (2) If the material is offered in the form of packed bales/cases the number of bales/cases to be selected for the

purpose of drawing samples will be in accordance with the details furnished in Table I of IS: 239-1951. From among the bales/cases selected, the number of bundles/cones to be selected from these bales/cases is clearly indicated in Table II. (A copy of the relevant extracts from IS: 239-1951 is enclosed). A minimum of 15 bundles/cones will be selected from the bales/cases and weighed individually to determine the bundle weight, after which one sample measuring a minimum of one hank from each bundle/cone will be drawn for purpose of laboratory tests.

(c) Detailed inspection:

- (i) Testing of counts (as per Indian Standards Test Method vide: IS: 237-1951).
- (ii) Breaking strength (as per Indian Standards Test Method vide IS: 239-1951).
- (iii) Turns per inch (as per Indian Standards Test Method vide IS: 238-1951) if and when stipulated in the contract.
- (iv) Evenness (As indicated in Annexure-A).

The average test results of the tests indicated above shall be in conformity with the standards as specified in Annexure-A. Yarn falling below the standard shall be rejected. The declared or stamped weight of the yarn shall not be more or less than the actual weight in accordance with the Merchandise Marks Act.

(d) Marking of goods:

For the purpose of identification of goods all the quantity offered for inspection in the lot shall be stamped with the Date Seal of this Organisation at the time of inspection if the material is offered in loose state, i.e., bundles. Bundle from which samples are drawn will also bear the Inspector's Monogram. The manufacturer will pack the material in the presence of Inspector who will seal the bales/cases with the seal of the Inspection Organisation.

All the bundles contained in the bales that are opened for the purpose of drawing samples will be duly stamped with the Date Seal of this Organisation. In addition, Inspector's Monogram and 'Tested' Stamps will be affixed on the bundles from where the samples have been drawn. The material can then be packed and bales Nos. furnished to this office.

All the bales offered for inspection will be sealed with the Lead Seal at one corner of the bale, to ensure the identity of the bales that are offered for inspection.

The same procedure holds good for cones also except that the individual cones need not be stamped with the Date Seal and out of the minimum 15 cones selected for weighing, 15 hanks can be taken out, wherever the facility in the mills exists and the cones may be returned for packing.

If the material is offered in loose condition, say, either bundles or loose cones, having selected the required number of bundles/cones as per the details mentioned in the tables, all the bundles in the lot may be duly stamped with the Date Seal and mills may thereafter be allowed to pack the material and furnish the bale/case numbers which will be incorporated in the final certificate that will be issued on receipt of favourable test report and also on production of the copy of the invoices.

(e) Issue of Inspection Certificate:

An inspection certificate for the quantity passed will be issued to the manufacturer-exporter on receipt of satisfactory test report on the samples drawn as indicated in (b) above.

ANNEXURE-A

EXPORT STANDARD FOR VISCOSE STAPLE FIBRE YARN.

1. Minimum breaking strength for staple fibre yarn meant for Export should have the following minimum C.S.P.

Count	Minimum CSP
20s	1800
30s	1600
40s	1300
2/30s	1700
2/40s	1500

2. Lea Strength Variation: Co-efficient of variation (%) for yarn lea strength shall not be more than 10%.
3. Actual Counts: Departure of the actual count from the nominal count shall not be more than $\pm 5\%$.
4. Count Variation: Co-efficient of variation (%) for yarn count above $\pm 5\%$ shall be considered as unsatisfactory.

5. Yarn Appearance: Evenness of the yarn shall be as per standards followed by Indian Central Cotton Committee for cotton yarn.
6. Method of Sampling: Methods of sampling and testing shall be as per ISI specifications.

EVENNESS STANDARDS OF YARN FOLLOWED BY INDIAN CENTRAL COTTON COMMITTEE.

4. APPARATUS.

- 4.1 A machine for winding the yarn on a black board at a uniform rate to give a specified number of threads per unit length (see 5.1).

5. PROCEDURE:

- 5.1 One package from the test sample (see 3.3.1.1. or 3.3.2.2.) shall be taken and a sample of yarn shall be wound upon blackboard (black on both the sides) covering an area of approximately 150 × 250 mm. with a specified number of threads per unit length. In a similar manner, one board from each of the remaining packages constituting the test sample shall be prepared. These boards shall be compared with photographic standards. Photographic standards containing four grades as A, B, C & D (see note) established by the American Society for Testing Materials (ASTM) shall be used for this purpose. These grades apply to five groups of yarn numbers for each of which there is a separate set of standards. The grouping of yarn number together with the specified number of threads per decimetre for each are given below.

Group of yarn number index (for cotton count)	Number of threads per decimetre
200 to 84 (3s to 7s)	63
84 to 36 (7s to 16.5s)	79
36 to 18 (16.5s to 32s)	102

Group of yarn number index (for cotton count)	Number of threads per decimetre
18 to 10 (32s to 65s)	150
10 to 4.8 (65s to 125s)	189

NOTE: The grading A, B, C & D indicates that Grade A is better than Grade B and that Grade B is better than Grade C and so on.

Sample falling in between two consecutive grades shall be denoted by a '+' mark after the letter designating the nearest lower grade samples better than 'A' shall be designated as 'A+' and those poorer than 'D' shall be designated as 'BG' respectively (see 7.1).

6. NUMBER OF TESTS:

- 6.1 Evaluation for appearance (see 7.1) may preferably be made by two observers on both sides of each of the five boards prepared from a sample.

7. RESULTS:

- 7.1 For the purpose of averaging the individual readings and expressing the results, the following appearance index may be used to denote the different grades.

Grades	Appearance Index
A+	1
A	2
B+	3
B	4
C+	5
C	6
D+	7
D	8
BG	9

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8. REPORTING:

- 8.1 The test result shall include;
 - (a) The average of all the observations, and
 - (b) Percentage of frequency in each grade.

(Extract from IS: 239-1951)

The total number of bales (or cases) to be taken at random from the various parts of the lot shall be in accordance with the requirements of Table I.

TABLE-I

Number of bales or cases to be selected from a lot	
No. of bales or cases in a lot	No. of bales or cases to be taken
2	1
3 to 4	2
5 to 6	3
7 to 24	4
25 to 50	5
More than 50	At least 10 percent

3.5 The number of packages to be taken at random from each selected bale (or cases) shall be in accordance with the requirements of Table II.

TABLE-II

Number of packages to be selected from a bale or a case	
No. of packages in a bale or a case	No. of packages to be taken
Up to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 125	5
More than 125	6

3.6 However, if the yarn is on pirns, the number of packages to be taken shall be doubled.

3.7 If the above procedure provides fewer than 15 or in the case of pirns fewer than 30 packages from the whole lot, further packages shall be taken from the selected bales (or cases) to bring the number of selected packages upto 15 in the case of pirns upto 30.

3.8 The packages selected as above shall constitute the test sample.

NOTE: In case other physical characteristics of the lot are also to be determined, the test sample drawn as in 3.8 shall be taken to be a sample representative of the lot for that purpose also.