

TEXTILES COMMITTEE

(GOVERNMENT OF INDIA, MINISTRY OF COMMERCE)

COMPULSORY INSPECTION REGULATION FOR MILL MADE COTTON YARN

In exercise of the powers conferred on it under Section 23 of the Textiles Committee Act, 1963 (No. 41 of 1963) read with sub-clauses (c) and (d) of sub-section 2 of section 4 of the same Act, the Textiles Committee with the previous sanction of the Central Government, makes the following Regulations establishing standard specifications for cotton yarn meant for export and specifying the type of inspection to be applied.

SHORT TITLE:

1. These Regulations may be called Mill-made Cotton Yarn Inspection Regulations, 1966.
2. (a) 'Material' means mill-made cotton yarn, other than cotton waste yarn and Cotton yarn of 3 ply and above;

(b) 'Lot' means the quantity of all cotton yarn purporting to be of one definite type and quality.

INSPECTION PROCEDURE:

3. The Inspector shall select at random from various parts of the lot, the required number of bales (or cases) in accordance with Table-I.

TABLE—I

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	10 percent

The bales shall be selected as above and examined for the general appearance. If the general appearance of the material is satisfactory all the bundles in the bale opened may be

stamped. (If the yarn is on cones, the individual cones shall not be stamped). From each selected bale or case, the required number of bundles/cones shall be drawn in accordance with Table-II.

TABLE—II

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

In the case of yarn in hanks, if the number of bundles drawn is less than 10, further bundles shall be drawn from the bales opened to bring the total number of bundles upto 10. One hank from each bundle shall be drawn as sample for laboratory tests. For the purposes of determining count and strength it shall be necessary to test 2 specimen (one lea or 1/2 lea as the case may be) from each sample hank drawn (i.e. 20 samples in all). In the case of yarn in cones, if the number of cones so drawn is less than 20, further cones shall be drawn from the cases opened to bring the total number of cones drawn upto 20. It shall be sufficient if about 1/2 hank is drawn as sample from each cone drawn and one specimen is tested from each sample selected for count and strength. (Testing for count, strength and TPI shall be carried out as per I.S. 237-1951, I.S. 239-1951 and I. S. 238-1952 respectively). When the weight of the consignment is required to be certified as per inspection findings, the entire contents of the bales/cases/bags opened for inspection shall be weighed.

CRITERIA FOR REJECTION:

4. A lot shall be considered sub-standard in either of the following events namely:

- (a) If the material does not conform to the specification particulars stipulated in the contract.
- (b) If the material does not conform to the requirements in respect of count and CSP of yarn as per the standards laid down in Table-III.
- (c) If the yarn appearance of the material does not conform to at least grade C+ in the case of hosiery yarn and grade C in the case of other yarns as per ASTM Standard or the corresponding standard of ISI or equivalent.
- (d) If the twist multiplier in respect of hosiery yarn exceeds 4 unless otherwise specified in the contract.

5. In the case of foreign buyers nominating other agencies to inspect material before shipment the material will not be reinspected by the Committee provided:—

- (i) The specifications of the foreign buyer are more stringent than the minimum quality standards laid down by the Committee, and

TABLE-III

Count	Minimum CSP		
	Other than Hosiery	Yarn	
		Spun with a twist multiplier of over 3.5 but not exceeding 4.	Hosiery Yarn Spun with a twist multiplier of 3.5 and below.
1	2	3	4
Carded 6s	730	—	—
” 10s	1150	950	950
” 12s	1150	1100	1000
” 14s	1150	—	—
” 16s	1230	1250	1000
” 18s	1250	1300	1000
” 20s	1350	1300	1000
” 22s	1350	—	—
” 24s	1380	1300	1000
” 26s	1380	1300	1200
Combed 26s	—	—	1500
Carded 28s	1380	—	—
Carded 30s	1400	1300	1200
Combed 30s	1500	—	1500
Carded 32s	1400	—	—
Combed 32s	1500	—	—
Combed 34s	—	—	1400
Carded 36s	1400	1300	1200
Combed 36s	1500	—	—
Carded 40s	1450	1250	1150
Combed 40s	1550	1530	1400
Carded 44s	1450	—	—
Combed 44s	1550	—	—
Carded 50s	1500	—	—
Combed 50s	1700	—	—
Carded 60s	1600	—	—
Combed 60s	1800	1760	—
Carded 80s	1700	—	—
Combed 80s	2000	—	—
Combed 100s	2050	—	—
Combed 120s	2100	—	—

In case of doubled yarn the applicable value of CSP shall be multiplied by 1.18.

- (ii) the standards and methods of inspection employed by the private, agency are acceptable to the Textiles Committee.

5(A) Inspection and criteria for rejection of material meant for export to specified destinations East and West Europe, U.S.A., Canada (excluding U.K.).

- (1) In addition to the normal inspection as prescribed elsewhere in these regulations material meant for export (to specified destinations) shall also be inspected for visual and hidden defects.

- (2) (a) In the case of yarn on cones 40 cones inclusive of the cones required for laboratory tests shall be selected from the cases or bags opened for inspection and if a sample is required for second examination, 40 more cones shall be selected from the same cases or bags.

- (b) The cones selected under clause (a), shall be examined for the following defects and any cone containing one or more of these defects shall be considered as a defective cone:—

- (i) stitches of more than one inch in length at the base,
- (ii) excessive stitches at the nose,
- (iii) soft cones in the case of yarn other than hosiery yarn,
- (iv) collapsed cones,
- (v) prominent stains inclusive of chalk and other marking on the yarn,
- (vi) cut-threads, or
- (vii) absence of tail-end where it is required (the length of the tail-end should not be less than 12 inches).

- (c) (i) 20 cones from the sample selected and free from defects mentioned in clause (b) shall be rewound on a cone winding machine at a standard tension and a speed of 500 to 600 yards per minute with a slub catcher (double bladed type) setting of two and a half times the diameter of the yarn for single yarn and three times the diameter for doubled and plied yarn and the breakages per 10,000 m. worked out.

- (ii) The diameter of yarn shall be calculated from the formula:

$$\frac{1}{28} \times \frac{1}{\sqrt{\text{English Count}}}$$

and the standard tension shall be calculated from the formula:

$$\text{Tension in grains} = (4 \times \text{lea strength required for the count}) + 28.$$

- (d) A lot shall be considered sub-standard for visual and hidden defects in the event of one or more of the following defects occurring in the samples from the lot inspected.

- (i) where the first sample selected as under clause (a) after being examined for defects specified in clause (b), is found to contain more than 6 defective cones;
- (ii) where after finding 4 to 6 defective cones in the first sample a sample selected under clause (a) is examined for the second time in a similar manner and both the samples together contain more than 6 defective cones;
- (iii) where the breakages per 10,000 m. arrived as in clause (c) exceed 3.

- (3) (a) In the case of yarn in hanks, 40 hanks inclusive of the hanks required for laboratory tests shall be selected from the bundles drawn for inspection and if a sample is required for the second examination 40 more hanks shall be selected from the other *bundles* of the bales already drawn.
- (b) The bundles selected for drawing samples for laboratory tests shall be subjected to general inspection to verify whether the make-up and the type of reeling are according to the specifications.
- (c) The hanks selected under clause (a) shall be examined for the following visual defects and any hank containing one or more of these defects shall be considered as a defective hank:
- (i) improper leasing,
 - (ii) nose and tail-end not tied with tie yarn,
 - (iii) entanglement,
 - (iv) presence of many knots with long tail-ends,
 - (v) presence of hard waste,
 - (vi) excessive presence of twistlessness, irregular twist or cork screw effects in case of plied yarns, or
 - (vii) plying of wrong counts.
- (d) A lot shall be considered sub-standard for visual and hidden defects in the event of one or more of the following defects occurring in the samples from the lot inspected.
- (i) where the make-up and/or the type of reeling examine as in clause (b) are not according to specifications;
 - (ii) where the first sample selected under clause (a) and examined defects as specified in clause (c) is found to contain more than 6 defective hanks;
 - (iii) where after finding 4 to 6 defective hanks in the first sample a sample selected under clause (a) is examined for the second time in a similar manner and both the samples together contain more than 6 defective hanks.
6. In the case of coloured yarn except where the buyer specifies standards of colour fastness there will be no inspection and tests for colour fastness.
7. When determining whether the material conforms to the specification particulars in the contract or to the requirements laid down in Table III, the following tolerances shall be allowed if no tolerances are specified in the contract:

Characteristics	Tolerances allowed	
	Hosiery Yarn	Other Yarn
Count	± 5%	± 5%
Coefficient of variation for		
(i) Count	5%	5%
(ii) Strength T.P.I.	15%	10%
(i) Single	± 10%	± 10%
(ii) Double	± 5%	± 5%

8. The bales selected for inspection under Regulation 3 shall also be inspected for their mode of packing. The packing material used in these bales shall be subjected to occasional test for quality.
9. All the bales/cases in the lot shall be marked with necessary stamps. The Inspectors shall then seal the bales/cases in the prescribed manner.
10. A certificate to the effect that the material has been inspected and passed shall be issued to the party concerned by an Officer of the Committee authorised by the Committee in this behalf, provided:

- (a) the material inspected is not considered substandard as stipulated under Regulations (4) or clause (d) of sub-regulations (2) or (3) of Regulation 5A, as the case may be, or
- (b) where inspection is done by an agency other than the Committee nominated by the foreign buyer/s after the inspection findings are submitted to the Committee by the said agency and the Committee is satisfied that the conditions of regulations (5)(i) and 5(ii) are fulfilled.

SD/-
(M. R. RAMACHANDRAN)
Secretary.