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Standard Specification for Labeled Length per Holder of Sewing Thread¹

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1. Scope

1.1 This specification covers requirements for the labeled lengths of sewing threads of all materials.

1.2 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D123 Terminology Relating to Textiles

D204 Test Methods for Sewing Threads

D3888 Terminology for Yarn Spinning Systems

D3990 Terminology Relating to Fabric Defects

D4849 Terminology Related to Yarns and Fibers

3. Terminology

3.1 Definitions:

3.1.1 For definitions of textile terms used in this specification, thread holder and sewing thread, refer to Terminology D4849.

3.1.2 For other textile terms used in this specification, refer to Terminology standards D123, D3888, D3990, and D4849.

4. Requirements

4.1 The average for all holders shall equal or exceed the labeled length.

¹ This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.58 on Yarns and Fibers.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

4.2 For home sewing spools, the observed length of individual holders shall equal or exceed the percent of labeled length shown in Table 1.

4.3 For ready-made bobbins, the observed length of individual holders shall equal or exceed 97 % of the labeled length.

4.4 For all other holders, when the sample size is nine or fewer, the observed length of individual holders shall equal or exceed 95 % of the labeled length. For a sample size of ten or more the observed length of one holder may be less than 95 % of the labeled length.

4.5 If the initial sample consists of fewer than ten holders and the average length measured fails to conform to the requirements of 4.1 but meets those of 4.2, 4.3, or 4.4, as appropriate, take additional specimens from the lot and test until a total of ten have been measured. Reevaluate the results of these ten specimens against the requirements of 4.1, 4.2, 4.3, or 4.4, as appropriate. If the new average conforms with the requirements of 4.1 and the individual holders with the requirements of 4.2, 4.3, or 4.4, as appropriate, consider the lot acceptable.

4.5.1 If the original lot consists of fewer than ten holders, the supplementary sample will be one half of the holders remaining in the lot following the initial sampling.

5. Sampling

5.1 *Lot*—Unless otherwise agreed upon between the purchaser and supplier, a lot shall be a discrete manufacturing unit or a billed quantity of a specific color, ticket size, and length put-up of thread. A billed quantity can consist of a single unit, a carton, box, or multiple units of either, containing a number of holders of thread.

NOTE 1—An adequate specification or other agreement between the purchaser and the supplier requires taking into account variability between shipping units, between packages, or ends within shipping unit, and between specimens from a single package so as to provide a sampling plan with a meaningful producer's risk, user's risk, acceptable quality level, and limiting quality level.

5.2 *Sample*—Unless otherwise agreed upon between the purchaser and supplier, and except for ready-made bobbins, the sample, chosen at random, shall be 10 % of the holders in the lot, with a minimum of one holder, up to a maximum of ten holders. The lot sample and laboratory sample are synonymous.

TABLE 1 Minimum Length for Individual Home Sewing Spools

Labeled Length, m	Minimum % Allowed
0 to 40	98.5
Over 40 to 85	98
Over 85 to 140	97.5
Over 140 to 300	97
Over 300 to 1000	96
Over 1000	95

5.2.1 For ready-made bobbins the sample shall be as shown in **Table 2**.

TABLE 2 Sampling Plan for Ready-Made Bobbins

Lot Size, gross	Sample Size
10 or less	10 bobbins
11 through 99	1 bobbin per gross
100 or more	100 bobbins

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5.3 *Specimen*—The test specimen is a holder of thread whether a cone, tube, spool, ready-made bobbin, or other.

6. Test Method

6.1 Determine the length of each holder of thread as directed in the length per thread holder procedure of Test Methods **D204**. Use the sampling directions in this specification in place of those in Test Methods **D204**.

7. Conformance

7.1 Material that fails to conform to the requirements of this specification may be rejected. Rejection shall be reported to the supplier promptly and in writing. In case of dissatisfaction with the results of the test, the supplier may make claim for a rehearing. The terms of the rehearing shall be as agreed upon between the supplier and the purchaser.

8. Keywords

8.1 length; sewing thread

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