Standard Practice for Determining Ticket Numbers for Sewing Threads¹

This standard is issued under the fixed designation D 3823; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

- 1.1 This practice establishes standard ticket numbers for sewing thread regardless of fiber content or type of thread.
- 1.2 The values stated in inch-pound units are to be regarded as the standard; the values in English units are provided as information only and are not exact equivalents.
- 1.3 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

- 2.1 ASTM Standards:
- D 123 Terminology Relating to Textiles²
- D 204 Methods of Testing Sewing Threads²
- D 861 Practice for Use of the Tex System to Designate Linear Density of Fibers, Yarn Intermediates, and Yarns²
- 2.2 Military Standard:
- MIL-STD-105E Sampling Procedures and Tables for Inspection by Attributes³

3. Terminology

- 3.1 *Definitions:*
- 3.1.1 *greige thread*, *n*—unfinished sewing thread after final plying or an equivalent step in a processing sequence such as extruding, texturing or braiding.
- 3.1.2 sewing thread, n—a flexible small diameter yarn or strand, usually treated with a surface coating, lubricant, or both, intended to be used to stitch one or more pieces of material or an object to a material.
- 3.1.3 *ticket number*, *n*—the tex number assigned to a sewing thread to designate its approximate linear density.
- 3.1.3.1 *Discussion*—The ticket number is an indicator of the minimum amount of fiber present. The smaller the number, the finer the thread (lesser amount of fiber); and the larger the number, the coarser the thread (greater amount of fiber).
 - 3.1.4 For definitions of other textile terms used in this

practice, refer to Terminology D 123. For other definitions of terms relating to thread, refer to Methods D 204.

4. Significance and Use

- 4.1 This system of sewing thread ticket numbers was developed to overcome the confusion arising from the use by the thread industry of a multiple number of undefined and unrelated ticketing systems.
- 4.2 The practice is used by the thread manufacturer to determine the ticket number to be assigned to a thread. The ticket number is an indicator of the amount of raw fiber in the thread. It is based on greige thread rather than finished thread because finishing processes such as bleaching, dyeing, stretching, mercerizing, or sewing finish application significantly change the apparent thread size so that it may become an inadequate indicator of raw fiber present. Because of the foregoing it is not practical to verify the ticket number by sizing the finished thread.
- 4.3 The ticket number shall be based on average resultant yarn number and shall be designated as indicated in Table 1.

5. Sampling

- 5.1 Lot—Unless otherwise agreed upon between the purchaser and supplier, a lot shall be a discrete manufacturing unit produced in a given period of time not to exceed a calendar month.
- 5.2 Lot Sample—Select the number of specimens as directed in MIL-STD-105E using single sampling with a general inspection level of S1 and a 1.0 AQL.
- 5.3 *Laboratory Sample*—As a laboratory sample for acceptance testing, take each unit in the lot sample.
- 5.4 *Test Specimens*—From each package in the laboratory sample, take one specimen.

6. Requirements

6.1 Thread ticket numbers shall be based on average resultant yarn number and shall be designated as indicated in Table 1

7. Procedure

- 7.1 Determine in tex the resultant yarn number of the greige thread as directed in Methods D 204.
- 7.2 Over the most recent 6 months of a 1-year period in which the greige thread was manufactured, collect at least 100 pairs of data, each consisting of a tex value and the production rate at the time each tex value was obtained. If the greige

¹ This practice is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.58 on Yarn Test Methods, General.

Current edition approved Feb. 15, 1994. Published April 1994. Originally published as D 3823 – 78. Last previous edition D 3823 – 88.

² Annual Book of ASTM Standards, Vol 07.01.

³ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.