



Standard Terminology Relating to Yarns and Fibers¹

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1. Scope

1.1 This standard is a compilation of terminology developed by Committee D-13.58 on Yarns and Fibers.

1.1.1 This terminology, mostly definitions, is unique to fibers and yarns used in the textile industry. Terms that are generally understood or adequately defined in other readily available sources are not included.

1.1.2 Subcommittee D13.58 has jurisdictional responsibility for every item in this standard. The standards in which the terms and definitions are used are listed by number after the definition. The wording of an entry cannot be changed without the approval of 13.58 subcommittee. Any changes approved by the subcommittee and main committee are then directed to subcommittee D13.92 on Terminology for subsequent changes or additions to Terminology D123.

1.1.3 This terminology standard is not all inclusive of the terms under the jurisdiction of subcommittee D13.58. Other terminology standards under the jurisdiction of subcommittee D13.58 are D 3888, D 4466, and D 4848.

2. Referenced Documents

2.1 *ASTM Standards:*

D 123 Terminology Relating to Textiles²

D 3888 Terminology Relating to Open-End Spinning³

D 4466 Terminology for Multicomponent Textile Fibers³

D 4848 Force, Deformation and Related Properties of Textiles³

3. Terminology

3.1 Alphabetical listings of terms with subcommittee 13.58 jurisdiction and attribution for each term.

American grain count, n —a direct yarn numbering system for expressing linear density, equal to the mass in grains per 120 yards of sliver or roving. **D 2260**

beam, n —*in textiles*, a large spool containing many ends of yarn wound parallel, and used for such purposes as weaving or warp knitting. **D 2258**

beam set, n —*in textiles*, one or more beams of yarn in a single shipment to be further processed together for a specific end use. **D 2258**

bench marks, n —marks placed on a specimen to define gage length, that is, the portion of the specimen that will be evaluated in a specific test. **D 76**

boundary friction, n —friction at low sliding speeds (0.02 m/min or less) where lubrication occurs under thin-film lubricant conditions. **D 3412**

broken filament, n —*in multifilament yarn*, breaks in one or more filaments. **D 3990**

bulk shrinkage, n —a measure of potential stretch and power of stretch yarns or a measure of bulk of textured-set yarns. **D 4031**

bunch, n —a defect in a yarn characterized by a segment not over 6 mm ($\frac{1}{4}$ in.) in length that shows an abrupt increase in diameter caused by more fibers matted in this particular place. (See **slug**, **slub**.) **D 2255**

cable twist, n —the construction of cabled yarn, cord, or rope in which each successive twist is in the opposite direction to the preceding twist; an S/Z/S or Z/S/Z construction. **D 1423**

calibrate, v —to determine and record the relationship between a set of standard units of measure and the output of an instrument or test procedure.

DISCUSSION—This term is also commonly used to describe the checking of previously marked instruments, an operation more properly described as a description of verification. **D 76**

capacity, n —*for tensile testing machines*, the maximum force for which the machine is designed.

DISCUSSION—Capacity is the maximum force the tester-frame and the drive system can exercise on the specimen without inadmissible deformations of the tester-frame, etc. Within its capacity, there are available load-cells with different full-scale ranges which may be chosen to select an appropriate full-scale range for a special test. **D 76**

case, n —*in textiles*, a shipping unit, usually a carton, box, bale, or other container holding a number of yarn packages. **D 2258**

clamp, n —that part of a testing machine used to grip the specimen by means of suitable jaws. **D 76**

cockles, n —*in yarns*, irregular, thick, uneven lumps. **D 2255**

coefficient of friction, n —the ratio of the tangential force that

¹ This terminology 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 *Annual Book of ASTM Standards*, Vol. 07.01

³ *Annual Book of ASTM Standards*, Vol. 07.02