



Standard Specification for Welded Brass Tube¹

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1. Scope*

1.1 This specification establishes the requirements for round, rectangular, and square copper alloy welded tube for general engineering applications.

1.2 *Units*—Values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units, which are provided for information only and are not considered standard.

1.3 The following hazard statement pertains only to the test method described in 18.2.3, 18.2.4, 18.2.6, and 18.2.7 of this specification: *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:²

- B153 Test Method for Expansion (Pin Test) of Copper and Copper-Alloy Pipe and Tubing
- B154 Test Method for Mercurous Nitrate Test for Copper Alloys
- B428 Test Method for Angle of Twist in Rectangular and Square Copper and Copper Alloy Tube
- B601 Classification for Temper Designations for Copper and Copper Alloys—Wrought and Cast
- B968/B968M Test Method for Flattening of Copper and Copper-Alloy Pipe and Tube
- E3 Guide for Preparation of Metallographic Specimens
- E8/E8M Test Methods for Tension Testing of Metallic Materials
- E18 Test Methods for Rockwell Hardness of Metallic Materials

¹ This specification is under the jurisdiction of ASTM Committee B05 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.04 on Pipe and Tube.

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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.

- E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- E112 Test Methods for Determining Average Grain Size
- E243 Practice for Electromagnetic (Eddy-Current) Examination of Copper and Copper-Alloy Tubes
- E255 Practice for Sampling Copper and Copper Alloys for the Determination of Chemical Composition
- E478 Test Methods for Chemical Analysis of Copper Alloys
- E527 Practice for Numbering Metals and Alloys in the Unified Numbering System (UNS)

3. Terminology

3.1 Definitions:

3.1.1 *average diameter (for round tubes only)*, n —the average of the maximum and minimum outside diameters, or the maximum and minimum inside diameters, whichever is applicable, as determined at any one cross section of the tube.

3.1.2 *coil*—a length of the product wound into a series of connected turns. The unqualified term “coil” as applied to tube is normally understood as referring to a bunched coil.

3.1.2.1 *mill length*—lengths that can be conveniently manufactured in the mills.

3.1.2.2 *mill lengths with ends*—lengths, including ends, that can be conveniently manufactured in the mills.

3.1.3 *flash or bead*—weld metal that protrudes beyond the normal wall, both inside or outside.

3.1.4 *lengths*—straight pieces of the product.

3.1.4.1 *ends*—straight pieces, shorter than the nominal length, left over after cutting the product into mill lengths, stock lengths, or specified lengths. They are subject to minimum length and maximum weight requirements.

3.1.4.2 *specific*—straight lengths that are uniform in length, as specified, and subject to established tolerances.

3.1.4.3 *stock*—straight lengths that are mill cut and stored in advance of orders. They are usually subject to established tolerances.

3.1.5 *scarfing*—the removing of flash or bead by a cutting operation.

3.1.6 *tube*—a hollow product of round or any other cross section, having a continuous periphery.

*A Summary of Changes section appears at the end of this standard