



Standard Specification for Welded Copper-Alloy Pipe¹

This standard is issued under the fixed designation B608; 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 specification establishes the requirements for arc-welded pipe for use in brackish water or seawater piping systems.

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

1.3 The following hazard statement pertains only to the test method described in 8.2 and 14.3.2 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

B169/B169M Specification for Aluminum Bronze Sheet, Strip, and Rolled Bar

B171/B171M Specification for Copper-Alloy Plate and Sheet for Pressure Vessels, Condensers, and Heat Exchangers

B846 Terminology for Copper and Copper Alloys

E8 Test Methods for Tension Testing of Metallic Materials

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

E62 Test Methods for Chemical Analysis of Copper and Copper Alloys (Photometric Methods)

E76 Test Methods for Chemical Analysis of Nickel-Copper Alloys

E190 Test Method for Guided Bend Test for Ductility of Welds

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.

E255 Practice for Sampling Copper and Copper Alloys for the Determination of Chemical Composition

E478 Test Methods for Chemical Analysis of Copper Alloys

2.2 *AWS Standards*:³

A 5.6 Covered Copper-Alloy Arc-Welding Electrodes

A 5.7 Copper and Copper-Alloy Welding Rods

2.3 *ASME Standards*:⁴

Boiler and Pressure Vessel Code, Nuclear Power Plant Components, Section III, Division I

Boiler and Pressure Vessel Code, Nondestructive Examination, Section V

Boiler and Pressure Vessel Code, Pressure Vessels, Section VIII, Division I

Boiler and Pressure Vessel Code, Welding Qualifications, Section IX

3. Terminology

3.1 For definitions of terms related to copper and copper alloys, refer to Terminology **B846**.

4. Ordering Information

4.1 Include the following information in contracts or purchase orders for product furnished under this specification:

4.1.1 ASTM specification designation and year of issue, (for example, B608 – 02),

4.1.2 Copper alloy UNS No. required (Section 5 and Table 1),

4.1.3 Dimensions required; diameter and wall thickness (Section 10),

4.1.4 Unit length required, and

4.1.5 When purchased for *ASME Boiler and Pressure Vessel Code* application (section 19.2).

4.2 The following options are available:

4.2.1 Determination of chemical composition (Section 6.1.1),

4.2.2 Transverse Guided-Bend bend test (Section 8.1),

4.2.3 Hydrostatic test (Section 8.2),

4.2.4 Radiographic examination (Section 8.3),

³ Available from American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126, <http://www.aws.org>.

⁴ Available from American Society of Mechanical Engineers (ASME), ASME International Headquarters, Three Park Ave., New York, NY 10016-5990, <http://www.asme.org>.

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