



Standard Specification for Copper Alloys in Ingot Form¹

This standard is issued under the fixed designation B30; 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 reappraisal. A superscript epsilon (ε) indicates an editorial change since the last revision or reappraisal.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope*

1.1 This specification establishes the requirements for copper alloys in ingot form for remelting for the manufacturing of castings having the Copper Alloy UNS No. designation, commercial designations and nominal composition shown in [Table 1](#) and [Table 2](#).

1.2 A cross reference of Copper Alloy UNS Nos. and copper alloy casting specifications is given in [Table 3](#).

1.3 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.

2. Referenced Documents

2.1 The following documents of the issue in effect on date of material purchase form a part of this specification to the extent referenced herein:

2.2 ASTM Standards:²

- [B22/B22M](#) Specification for Bronze Castings for Bridges and Turntables
- [B61](#) Specification for Steam or Valve Bronze Castings
- [B62](#) Specification for Composition Bronze or Ounce Metal Castings
- [B66](#) Specification for Bronze Castings for Steam Locomotive Wearing Parts
- [B67](#) Specification for Car and Tender Journal Bearings, Lined
- [B148](#) Specification for Aluminum-Bronze Sand Castings
- [B176](#) Specification for Copper-Alloy Die Castings

¹ This specification is under the jurisdiction of ASTM Committee B05 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.05 on Castings and Ingots for Remelting.

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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.

- [B194](#) Specification for Copper-Beryllium Alloy Plate, Sheet, Strip, and Rolled Bar
- [B208](#) Practice for Preparing Tension Test Specimens for Copper Alloy Sand, Permanent Mold, Centrifugal, and Continuous Castings
- [B271/B271M](#) Specification for Copper-Base Alloy Centrifugal Castings
- [B369](#) Specification for Copper-Nickel Alloy Castings
- [B427](#) Specification for Gear Bronze Alloy Castings
- [B505/B505M](#) Specification for Copper Alloy Continuous Castings
- [B584](#) Specification for Copper Alloy Sand Castings for General Applications
- [B763/B763M](#) Specification for Copper Alloy Sand Castings for Valve Applications
- [B770](#) Specification for Copper-Beryllium Alloy Sand Castings for General Applications
- [B806](#) Specification for Copper Alloy Permanent Mold Castings for General Applications
- [E8/E8M](#) Test Methods for Tension Testing of Metallic Materials
- [E29](#) Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- [E54](#) Test Methods for Chemical Analysis of Special Brasses and Bronzes (Withdrawn 2002)³
- [E62](#) Test Methods for Chemical Analysis of Copper and Copper Alloys (Photometric Methods) (Withdrawn 2010)³
- [E76](#) Test Methods for Chemical Analysis of Nickel-Copper Alloys (Withdrawn 2003)³
- [E255](#) Practice for Sampling Copper and Copper Alloys for the Determination of Chemical Composition
- [E478](#) Test Methods for Chemical Analysis of Copper Alloys
- [E581](#) Test Methods for Chemical Analysis of Manganese-Copper Alloys

³ The last approved version of this historical standard is referenced on www.astm.org.

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