



Designation: B124/B124M – 17

Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes¹

This standard is issued under the fixed designation B124/B124M; 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.

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 and copper alloy rod, bar, and shapes intended for hot forging. The following coppers and copper alloys are involved:

Copper UNS Nos.	Copper Alloy UNS Nos.	Copper Alloy EN 1412 Nos.
C11000	C27450	C49350
C14500	C27451	C49355
C14700	C27453	C49360
	C28500	C61900
	C35330	C62300
	C36500	C63000
	C37000	C63200
	C37700	C64200
	C46400	C64210
	C46500	C65500
	C46750	C67500
	C48200	C67600
	C48500	C69150
	C48600	C69240
	C49250	C69300
	C49255	C70620
	C49260	C71520
	C49265	C77400
	C49300	C87700
	C49340	C87710
	C49345	

NOTE 1—Additional information about forging practice and forgings produced from these alloys is given in [Appendix X1](#) and in Specification [B283/B283M](#).

1.2 *Units*—The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

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 appro-*

priate safety and health practices and determine the applicability of regulatory requirements prior to use.

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

[B249/B249M](#) Specification for General Requirements for Wrought Copper and Copper-Alloy Rod, Bar, Shapes and Forgings

[B283/B283M](#) Specification for Copper and Copper-Alloy Die Forgings (Hot-Pressed)

[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

[E75](#) Test Methods for Chemical Analysis of Copper-Nickel and Copper-Nickel-Zinc Alloys (Withdrawn 2010)³

[E76](#) Test Methods for Chemical Analysis of Nickel-Copper Alloys (Withdrawn 2003)³

[E121](#) Test Methods for Chemical Analysis of Copper-Tellurium Alloys (Withdrawn 2010)³

[E478](#) Test Methods for Chemical Analysis of Copper Alloys

2.2 Other Standards:

[EN 1412](#) Copper and Copper Alloys—European Numbering System⁴

[EN 12165](#) Copper and Copper Alloys—Wrought and Unwrought Forging Stock⁴

[ISO 3110, Part 2](#) (TC 26 Ref. No. N 670 E/F) Determination of Aluminum Content: Flame Atomic Absorption Spectrometric Method⁴

¹ This specification is under the jurisdiction of ASTM Committee B05 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.02 on Rod, Bar, Wire, Shapes and Forgings.

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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.

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

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

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