



Standard Specification for High Magnesium Aluminum-Alloy Products for Marine Service and Similar Environments¹

This standard is issued under the fixed designation B928/B928M; 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 covers high magnesium aluminum-alloy products in the mill finish condition that are intended for marine hull construction and other marine applications where frequent or constant direct contact with seawater is expected and for similar environments (**Note 1**). Aluminum alloy products covered by this specification include the alloy-temper of flat sheet, coiled sheet, and plate shown in Table 2 [Table 3] and Table 4 [Table 5], and alloy-temper of extruded profiles shown in Table 6 [Table 7].

NOTE 1—There are other aluminum alloy-temper products that may be suitable for use in marine and similar environments, but which may not require the corrosion resistance testing specified by B928/B928M. See Specification **B209** or **B209M** for other aluminum sheet and plate alloy-temper products. For other aluminum extruded alloy-temper products see Specification **B221** or **B221M** and/or other relevant specifications for aluminum extruded products.

1.2 Alloy and temper designations are in accordance with ANSI H35.1/H35.1 (M). The equivalent Unified Numbering System alloy designations are those of Table 1 preceded by A9, for example, A95083 for 5083 in accordance with Practice **E527**.

1.3 The values stated in either SI units (Table 3 and Table 5) or inch-pound units (Table 2 and Table 4) 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 each other. Combining values from the two systems may result in non-conformance with the standard.

1.4 For acceptance criteria for inclusion of new aluminum and aluminum alloys in this specification, see **Annex A2**.

1.5 *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.*

¹ This specification is under the jurisdiction of ASTM Committee **B07** on Light Metals and Alloys and is the direct responsibility of Subcommittee **B07.03** on Aluminum Alloy Wrought Products.

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2. Referenced Documents

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

2.2 ASTM Standards:²

- B209** Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- B209M** Specification for Aluminum and Aluminum-Alloy Sheet and Plate (Metric)
- B221** Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- B221M** Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric)
- B557** Test Methods for Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products
- B557M** Test Methods for Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products (Metric)
- B660** Practices for Packaging/Packing of Aluminum and Magnesium Products
- B666/B666M** Practice for Identification Marking of Aluminum and Magnesium Products
- B881** Terminology Relating to Aluminum- and Magnesium-Alloy Products
- B985** Practice for Sampling Aluminum Ingots, Billets, Castings and Finished or Semi-Finished Wrought Aluminum Products for Compositional Analysis
- E29** Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- E34** Test Methods for Chemical Analysis of Aluminum and Aluminum-Base Alloys
- E50** Practices for Apparatus, Reagents, and Safety Considerations for Chemical Analysis of Metals, Ores, and Related Materials
- E527** Practice for Numbering Metals and Alloys in the Unified Numbering System (UNS)

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.

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