



Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube¹

This standard is issued under the fixed designation B 241/B 241M; 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 Department of Defense.

1. Scope *

1.1 This specification² covers aluminum and aluminum-alloy seamless pipe in the alloys (Note 1) and tempers shown in Table 1 [Table 2] and extruded round seamless tube in the alloys and tempers shown in Table 3 [Table 4] intended for pressure applications. The standard sizes for seamless pipe are listed in Table 16.7 of ANSI H35.2 and H35.2M. Nonstandard alloys, tempers, and sizes of pipe are produced as seamless extruded tube.

NOTE 1—Throughout this specification, use of the term *alloy*, in the general sense, includes aluminum as well as aluminum alloy.

NOTE 2—For other seamless drawn tubes, see Specification B 210 or Specification B 483. For extruded tube see Specification B 221, and for structural pipe and tube see Specification B 429.

1.2 Alloy and temper designations are in accordance with ANSI H35.1 and H35.1M. The equivalent Unified Numbering System alloy designations are those of Table 5 preceded by A9, for example, A91100 for aluminum 1100 in accordance with Practice E 527.

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

1.4 The values stated in either inch-pound or SI units are to be regarded separately as standard. The SI units are shown either in brackets or in separate tables. The values stated in each system are not exact equivalents; therefore, each system must be used independently of the other. Combining values from the two systems will result in nonconformance with this specification.

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:*

B 210 Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes³
B 221 Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes³
B 429 Specification for Aluminum-Alloy Extruded Structural Pipe and Tube³
B 483 Specification for Aluminum and Aluminum-Alloy Drawn Tubes for General Purpose Applications³
B 557 Test Methods of Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products³
B 557M Test Methods of Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products [Metric]³
B 594 Practice for Ultrasonic Inspection of Aluminum-Alloy Wrought Products for Aerospace Applications³
B 647 Test Method for Indentation Hardness of Aluminum Alloys by Means of a Webster Hardness Gage³
B 648 Test Method for Indentation Hardness of Aluminum Alloys by Means of a Barcol Impressor³
B 660 Practices for Packaging/Packing of Aluminum and Magnesium Products³
B 666/B 666M Practice for Identification Marking of Aluminum and Magnesium Products³
B 807 Practice for Extrusion Press Solution Heat Treatment of Aluminum Alloys³
B 918 Practice for Heat Treatment of Wrought Aluminum Alloys³
E 18 Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials⁴
E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications⁵
E 34 Test Methods for Chemical Analysis of Aluminum and Aluminum-Base Alloys⁶
E 55 Practice for Sampling Wrought Nonferrous Metals and Alloys for Determination of Chemical Composition⁶
E 227 Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Point-to-Plane Technique⁶

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 For ASME Boiler and Pressure Vessel Code applications see related Specification SB-241/SB-241M in Section II of that Code.

³ *Annual Book of ASTM Standards*, Vol 02.02.

⁴ *Annual Book of ASTM Standards*, Vol 03.01.

⁵ *Annual Book of ASTM Standards*, Vol 14.02.

⁶ *Annual Book of ASTM Standards*, Vol 03.05.

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

