



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

This standard is issued under the fixed designation B241/B241M; 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 specification² covers aluminum and aluminum-alloy seamless pipe in the alloys (**Note 1**) and tempers shown in Table 1 [Table 2] and seamless extruded round 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 H35.2(M). Nonstandard alloys, tempers, and sizes of pipe are produced as seamless extruded tube. Also included in this standard are seamless extruded pipe and seamless extruded tube for Oil & Gas Transmission previously covered under Specification B345/B345M.

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

NOTE 2—For drawn seamless tubes, see Specifications **B210** and **B210M**; for extruded tubes, Specifications **B221** and **B221M**; for drawn seamless tubes for condensers and heat exchangers, Specifications **B234** and **B234M**; for seamless condenser and heat exchanger tubes with integral fins, Specification **B429/B429M**; and for drawn tube for general purpose applications, Specifications **B483/B483M**.

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 5 preceded by A9, for example, A91100 for aluminum 1100 in accordance with Practice **E527**.

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 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 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.

Current edition approved Feb. 1, 2016. Published February 2016. Originally approved in 1949. Last previous edition approved in 2012 as B241/B241M – 12^{e1}. DOI: 10.1520/B0241_B0241M-16.

² For ASME Boiler and Pressure Vessel Code applications see related specifications 241/SB241-241M/SB241M in Section II of that code.

1.4.1 The SI units are shown either in brackets or in separate tables.

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:³

B210 Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes

B210M Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes (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)

B234 Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes for Condensers and Heat Exchangers

B234M Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes for Condensers and Heat Exchangers (Metric)

B429/B429M Specification for Aluminum-Alloy Extruded Structural Pipe and Tube

B483/B483M Specification for Aluminum and Aluminum-Alloy Drawn Tube and Drawn Pipe for General Purpose Applications

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)

B594 Practice for Ultrasonic Inspection of Aluminum-Alloy Wrought Products

B647 Test Method for Indentation Hardness of Aluminum Alloys by Means of a Webster Hardness Gage

B648 Test Method for Indentation Hardness of Aluminum

³ 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