



Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes¹

This standard is issued under the fixed designation B 210; 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 drawn seamless tubes in straight lengths and coils for general purpose and pressure applications in alloys (Note 2), tempers, and thicknesses shown in Table 1. Coiled tubes are generally available only as round tubes with a wall thickness not exceeding 0.083 in. and only in nonheat-treatable alloys.

1.2 Alloy and temper designations are in accordance with ANSI H35.1. The equivalent Unified Numbering System alloy designations are those of Table 2 preceded by A9, for example, A91100 for aluminum designation 1100 in accordance with Practice E 527.

NOTE 1—See Specification B 483 for aluminum-alloy drawn tubes for general purpose applications; Specification B 234 for aluminum-alloy drawn seamless tubes for condensers and heat exchangers; and Specification B 241/B 241M for aluminum-alloy seamless pipe and seamless extruded tube.

NOTE 2—Throughout this specification, use of the term *alloy* in the general sense includes aluminum as well as aluminum alloy.

1.3 A complete metric companion to Specification B 210 has been developed—Specification B 210M; therefore, no metric equivalents are presented in this specification.

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

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 234 Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes for Condensers and Heat Exchangers³

B 241/B 241M Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube³

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-210 in Section II of that Code.

³ Annual Book of ASTM Standards, Vol 02.02.

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 660 Practices for Packaging/Packing of Aluminum and Magnesium Products³

B 666/B 666M Practice for Identification Marking of Aluminum and Magnesium Products³

B 918 Practice for Heat Treatment of Wrought Aluminum Alloys³

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications⁴

E 34 Test Methods for Chemical Analysis of Aluminum and Aluminum-Base Alloys⁵

E 55 Practice for Sampling Wrought Nonferrous Metals and Alloys for Determination of Chemical Composition⁵

E 215 Practice for Standardizing Equipment for Electromagnetic Examination of Seamless Aluminum-Alloy Tube⁶

E 227 Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Point-to-Plane Technique⁵

E 527 Practice for Numbering Metals and Alloys (UNS)⁷

E 607 Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Point-to-Plane Technique, Nitrogen Atmosphere⁵

E 716 Practices for Sampling Aluminum and Aluminum Alloys for Spectrochemical Analysis⁵

E 1004 Practice for Determining Electrical Conductivity Using the Electromagnetic (Eddy-Current) Method⁶

E 1251 Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Argon Atmosphere, Point-to-Plane, Unipolar Self-Initiating Capacitor Discharge⁵

2.3 ANSI Standards:

H35.1 Alloy and Temper Designation Systems for Aluminum³

H35.2 Dimensional Tolerances for Aluminum Mill Products³

⁴ Annual Book of ASTM Standards, Vol 14.02.

⁵ Annual Book of ASTM Standards, Vol 03.05.

⁶ Annual Book of ASTM Standards, Vol 03.03.

⁷ Annual Book of ASTM Standards, Vol 01.01.

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

