



Designation: A29/A29M – 16

Standard Specification for General Requirements for Steel Bars, Carbon and Alloy, Hot-Wrought¹

This standard is issued under the fixed designation A29/A29M; 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 reappraisal. A superscript epsilon (ε) indicates an editorial change since the last revision or reappraisal.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope*

1.1 This specification² covers a group of common requirements which, unless otherwise specified in the purchase order or in an individual specification, shall apply to carbon and alloy steel bars under each of the following ASTM specifications (or under any other ASTM specification which invokes this specification or portions thereof):

Title of Specification	ASTM Designation ⁴
<i>Hot-Rolled Carbon Steel Bars:</i>	
Steel Bars, Carbon, Quenched and Tempered	A321
Steel Bars and Shapes, Carbon Rolled from "T" Rails	A499
Steel Bars, Carbon, Merchant Quality, M-Grades	A575
Steel Bars, Carbon, Hot-Wrought, Special Quality	A576
Steel Bars, Carbon, Merchant Quality, Mechanical Properties	A663/A663M
Steel Bars, Carbon, Hot-Wrought, Special Quality, Mechanical Properties	A675/A675M
Steel Bars for Springs, Carbon and Alloy	A689
<i>Cold-Finished Carbon Steel Bars:</i>	
Steel Bars, Carbon and Alloy, Cold-Finished	A108
Cold-Drawn Stress-Relieved Carbon Steel Bars Subject to Mechanical Property Requirements	A311/A311M
<i>Hot-Rolled Alloy Steel Bars:</i>	
Steel Bars, Alloy, Standard Grades	A322
Carbon and Alloy Steel Bars Subject to End-Quench Hardenability Requirements	A304
Steel Bars, Alloy, Hot-Wrought or Cold-Finished, Quenched and Tempered	A434/A434M
Steel Bars, Alloy, Hot-Wrought, for Elevated Temperature or Pressure-Containing Parts, or Both	A739
<i>Cold-Finished Alloy Steel Bars:</i>	
Steel Bars, Alloy, Hot-Rolled or Cold-Finished, Quenched and Tempered	A434/A434M
Steel Bars, Carbon, Hot-Wrought or Cold-Finished, Special Quality, for Pressure Piping Components	A696

⁴ These designations refer to the latest issue of the respective specifications, which appear either in the *Annual Book of ASTM Standards*, Vol 01.05, or as reprints obtainable from ASTM.

¹ This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel and Related Alloys and is the direct responsibility of Subcommittee A01.15 on Bars.

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² For ASME Boiler and Pressure Vessel Code applications, see related Specification SA-29/SA-29M in Section II of that Code.

1.2 In case of any conflict in requirements, the requirements of the purchase order, the individual material specification, and this general specification shall prevail in the sequence named.

1.3 The values stated in inch-pound units or SI units are to be regarded as the standard. Within the text, the SI units are shown in brackets. 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 may result in nonconformance with the specification.

1.4 For purposes of determining conformance to this specification and the various material specifications referenced in 1.1, dimensional values shall be rounded to the nearest unit in the right-hand place of figures used in expressing the limiting values in accordance with the rounding method of Practice E29.

NOTE 1—Specification A29/A29M previously listed dimensional tolerances for cold-finished bars; these are now found in Specification A108.

2. Referenced Documents

2.1 ASTM Standards:³

- A108 Specification for Steel Bar, Carbon and Alloy, Cold-Finished
- A304 Specification for Carbon and Alloy Steel Bars Subject to End-Quench Hardenability Requirements
- A311/A311M Specification for Cold-Drawn, Stress-Relieved Carbon Steel Bars Subject to Mechanical Property Requirements
- A321 Specification for Steel Bars, Carbon, Quenched and Tempered (Withdrawn 2007)⁴
- A322 Specification for Steel Bars, Alloy, Standard Grades
- A370 Test Methods and Definitions for Mechanical Testing of Steel Products
- A434/A434M Specification for Steel Bars, Alloy, Hot-Wrought or Cold-Finished, Quenched and Tempered

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.

⁴ The last approved version of this historical standard is referenced on www.astm.org.

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