



Standard Specification for General Requirements for Stainless Steel Wire and Wire Rods¹

This standard is issued under the fixed designation A555/A555M; 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 specification covers general requirements that shall apply to stainless wire and wire rods. Wire rods are a semifinished product intended primarily for the manufacture of wire. Wire is intended primarily for cold forming, including coiling, stranding, weaving, heading and machining as covered under the latest revision of each of the following ASTM specifications: [A313/A313M](#), [A368](#), [A478](#), [A492](#), [A493](#), [A580/A580M](#) and [A581/A581M](#).

1.2 In case of conflicting requirements, the individual material specification and this general requirement specification shall prevail in the order named.

1.3 General requirements for flat products other than wire are covered in Specification [A480/A480M](#).

1.4 General requirements for bar and billet products are covered in Specification [A484/A484M](#).

1.5 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.

1.6 Unless the order specifies the applicable metric specification designation, the material shall be furnished in the inch-pound units.

2. Referenced Documents

2.1 ASTM Standards:²

[A262 Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels](#)

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 [A01.17](#) on Flat-Rolled and Wrought Stainless Steel.

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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.

[A313/A313M Specification for Stainless Steel Spring Wire](#)
[A368 Specification for Stainless Steel Wire Strand](#)
[A370 Test Methods and Definitions for Mechanical Testing of Steel Products](#)
[A478 Specification for Chromium-Nickel Stainless Steel Weaving and Knitting Wire](#)
[A480/A480M Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip](#)
[A484/A484M Specification for General Requirements for Stainless Steel Bars, Billets, and Forgings](#)
[A492 Specification for Stainless Steel Rope Wire](#)
[A493 Specification for Stainless Steel Wire and Wire Rods for Cold Heading and Cold Forging](#)
[A580/A580M Specification for Stainless Steel Wire](#)
[A581/A581M Specification for Free-Machining Stainless Steel Wire and Wire Rods](#)
[A700 Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment](#)
[A751 Test Methods, Practices, and Terminology for Chemical Analysis of Steel Products](#)
[E112 Test Methods for Determining Average Grain Size](#)

2.2 Federal Standard:³

[Fed. Std. No. 123 Marking for Shipment \(Civil Agencies\)](#)

2.3 Military Standards:³

[MIL-STD-129 Marking for Shipment and Storage](#)
[MIL-STD-163 Preservation of Steel Products for Domestic Shipment](#)

2.4 Other Standard:⁴

[Primary Metals Bar Code Standard](#)

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

³ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

⁴ Available from Automotive Industry Action Group (AIAG), 26200 Lahser Rd., Suite 200, Southfield, MI 48033, <http://www.aiag.org>.

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