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Designation: A 234/A 234M – 00a

Used in USDOE-NE Standards
An American National Standard

Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service[1]

This standard is issued under the fixed designation A 234/A 234M; 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 specification[2] covers wrought carbon steel and alloy steel fittings of seamless and welded construction covered by the latest revision of ASME B16.9, B16.11, B16.28, MSS SP-79, and MSS SP-95. These fittings are for use in pressure piping and in pressure vessel fabrication for service at moderate and elevated temperatures. Fittings differing from these ASME and MSS standards shall be furnished in accordance with Supplementary Requirement S58 of Specification A 960.

1.2 Optional supplementary requirements are provided for fittings where a greater degree of examination is desired. When desired, one or more of these supplementary requirements may be specified in the order.

1.3 This specification does not cover cast welding fittings or fittings machined from castings. Cast steel welding fittings are governed by Specifications A 216/A 216M and A 217/A 217M.

1.4 This specification is expressed in both inch-pound units and in SI units. However, unless the order specifies the applicable "M" specification designation (SI units), the material shall be furnished to inch-pound units.

1.5 The values stated in either inch-pound units or SI units are to be regarded separately as 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.

2. Referenced Documents

2.1 In addition to those reference documents listed in Specification A 960, the following list of standards apply to this specification.

2.2 *ASTM Standards:*

A 216/A 216M Specification for Steel Castings, Carbon, Suitable for Fusion Welding, for High-Temperature Service[3]

A 217/A 217M Specification for Steel Castings, Martensitic Stainless and Alloy, for Pressure-Containing Parts Suitable for High-Temperature Service[3]

A 960 Specification for Common Requirements for Wrought Steel Piping Fittings[4]

2.3 *ASME Standards:*[5]

B16.9 Steel Butt-Welding Fittings

B16.11 Forged Steel Fittings, Socket Welding and Threaded

B16.28 Wrought Steel Butt-Welding Short Radius Elbows and Returns

2.4 *ASME Boiler and Pressure Vessel Code:*[5]

Section V Nondestructive Examination

Section VIII, Division 1, Pressure Vessels

Section IX Welding Qualifications

2.5 *MSS Standards:*[6]

MSS SP-25 Standard Marking System for Valves, Fittings, Flanges, and Unions

MSS SP-79 Socket Welding Reducer Inserts

MSS SP-95 Swage(d) Nipples and Bull Plugs

2.6 *ASNT Standard:*

SNT-TC-1A(1984) Recommended Practice for Nondestructive Testing Personnel Qualification and Certification[7]

3. Ordering Information

3.1 See Specification A 960.

4. General Requirements

4.1 Product furnished to this specification shall conform to the requirements of Specification A 960, including any supplementary requirements that are indicated in the purchase order. Failure to comply with the requirements of Specification A 960 constitutes non-conformance with this specification. In case of a conflict between the requirements of this specification and

[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 A01.22 on Steel Forgings and Wrought Fittings for Piping Applications and Bolting Materials for Piping and Special Purpose Applications.

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[2] For ASME Boiler and Pressure Vessel Code applications see related Specification SA-234 in Section II of that Code.

[3] *Annual Book of ASTM Standards*, Vol 01.02.

[4] *Annual Book of ASTM Standards*, Vol 01.01.

[5] Available from ASME International, Three Park Avenue, New York, NY 10016–5990.

[6] Available from Manufacturers Standardization Society of the Valve and Fittings Industry, 1815 N. Fort Myer Drive, Arlington, VA 22209.

[7] Available from American Society for Nondestructive Testing, 4153 Arlingate Plaza, Columbus, OH 43228-0518.

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