



Designation: A1099/A1099M – 17

Standard Specification for Modified Alloy Steel Forgings, Forged Bar, and Rolled Bar Commonly Used in Oil and Gas Pressure Vessels¹

This standard is issued under the fixed designation A1099/A1099M; 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.

1. Scope

1.1 This specification covers modified high-strength alloy steel forgings and rolled and forged bar for oil and gas pressure vessels and oilfield equipment. See [Appendix X1](#). Oil and gas product specifications for which this material is intended include, but are not limited to, the following:

1.1.1 API 6A Specification for Wellhead and Christmas Tree Equipment and Errata,

1.1.2 API RP 6AR Recommended Practice for Repair and Remanufacture of Wellhead and Christmas Tree Equipment,

1.1.3 API 16A Specification for Drill-Through Equipment,

1.1.4 API 16R Specification for Marine Drilling Riser Couplings,

1.1.5 API 17D Specification for Subsea Wellhead and Tree Equipment and Errata,

1.1.6 API 8C Specification for Drilling and Production Hoisting Equipment.

1.2 Supplementary requirements are provided for use when additional testing or inspection is desired. These shall apply only when specified individually by the purchaser in the order.

1.3 In the case of conflict between a requirement of this specification and a requirement of referenced general specifications, this specification takes precedence. In the case of conflict between a requirement of the product specification or a requirement of this specification and a more stringent requirement of the purchase order or contract, the purchase order or contract take precedence. The purchase order or contract requirements shall not take precedence if they, in any way, violate the requirements of the product specification or this specification, for example, by the waiving of a test requirement or by making a test requirement less stringent. In the case of conflict in terminology between API standards and Terminology [A941](#), Terminology [A941](#) definitions shall be applied.

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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1.4 *Units*—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 nonconformance with the standard.

1.5 This specification is expressed in both inch-pound units and in SI units; however, unless the purchase order or contract specifies the applicable *M* specification designation (SI units), the inch-pound units shall apply.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[A370](#) Test Methods and Definitions for Mechanical Testing of Steel Products

[A388/A388M](#) Practice for Ultrasonic Examination of Steel Forgings

[A534](#) Specification for Carburizing Steels for Anti-Friction Bearings

[A700](#) Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment

[A788/A788M](#) Specification for Steel Forgings, General Requirements

[A941](#) Terminology Relating to Steel, Stainless Steel, Related Alloys, and Ferroalloys

[A961/A961M](#) Specification for Common Requirements for

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.