



Standard Specification for Entrainment Separators for Use in Marine Piping Applications¹

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1. Scope

1.1 This specification covers the minimum requirements for the pressure-temperature rating, testing, and making of pressure-containing vessels for entrainment separators.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 The following safety hazards caveat pertains only to the test methods portion, Section 6, of this specification: *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *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 ANSI Standards:²

B2.1 Pipe Threads (Except Dryseal)

B16.31 Non-Ferrous Pipe Flanges

2.2 ASME Standards:³

B16.1 Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250

B16.3 Malleable Iron Threaded Fittings: Classes 150 and 300

B16.4 Gray Iron Threaded Fittings: Classes 125 and 250

B16.5 Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard

B16.11 Forged Fittings, Socket-Welding and Threaded

B16.15 Cast Copper Alloy Threaded Fittings: Classes 125 and 250

B16.24 Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves: Classes 150, 300, 600, 900, 1500, and 2500

B16.25 Buttwelding Ends

SA-278 Cast Gray Iron Pressure Vessels

SA-395-60 Cast Ductile Iron

2.3 ASME Boiler and Pressure Vessel Codes:³

Section II

Section VIII

2.4 MSS Standards:⁴

MSS-SP-51 Class 150LW Corrosion Resistant Flanges and Cast Flanged Fittings

2.5 Military Standards:⁵

MIL-F-1183 Fittings Tube, Bronze, Cast (Silver Brazings)

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *entrainment separator, n*—a mechanical device inserted in a pipeline which by centrifugal force, baffles, or other means will separate a liquid from a gas (vapor).

3.1.2 *hydrostatic test, n*—the act of filling an entrainment separator vessel with water and applying internal pressure to all parts of the vessel.

3.1.3 *master gage, n*—the calibrated gage used to verify the accuracy of the test gage. This gage shall be recalibrated traceable to the National Bureau of Standards.

3.1.4 *pressure rating, n*—the maximum working pressure of an entrainment separator when operated at a specific temperature.

3.1.5 *proof test, n*—the act of filling an entrainment separator vessel with water and applying internal pressure to all parts

¹ This specification is under the jurisdiction of Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.11 on Machinery and Piping Systems.

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² Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

³ Available from American Society of Mechanical Engineers (ASME), ASME International Headquarters, Two Park Ave., New York, NY 10016-5990, <http://www.asme.org>.

⁴ Available from Manufacturers Standardization Society of the Valve and Fittings Industry (MSS), 127 Park St., NE, Vienna, VA 22180-4602, <http://www.mss-hq.org>.

⁵ Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, <http://quicksearch.dla.mil>.