

(1) ASTM A 20/A 20M-97a, Standard Specification for General Requirements for Steel Plates for Pressure Vessels (“ASTM A 20”), 54.05-10; 54.25-10;

(2) ASTM A 203/A 203M-97, Standard Specification for Pressure Vessel Plates, Alloy Steel, Nickel (“ASTM A 203”), 54.05-20;

(3) ASTM A 370-97a, Standard Test Methods and Definitions for Mechanical Testing of Steel Products (“ASTM A 370”), 54.25-20;

(4) ASTM E 23-96, Standard Test Methods for Notched Bar Impact Testing of Metallic Materials (“ASTM Specification E 23”), 54.05-5; and

(5) ASTM E 208-95a, Standard Test Method for Conducting Drop-Weight Test to Determine Nil-Ductility Transition Temperature of Ferritic Steels (“ASTM Specification E 208”), 54.05-5.

(d) *Compressed Gas Association (CGA)*, 500 Fifth Avenue, New York, NY 10036:

(1) S-1.2, Pressure Relief Device Standards—Part 2—Cargo and Portable Tanks for Compressed Gases, 1979 (“CGA S-1.2”), 54.15-10; and

(2) [Reserved]

(e) *Manufacturers Standardization Society of the Valve and Fittings Industry*,

Inc. (MSS), 127 Park Street NE, Vienna, VA 22180:

(1) SP-25-1998 Standard Marking System for Valves, Fittings, Flanges and Unions (1998) (“MSS SP-25”), 54.01-25; and

(2) [Reserved]

[USCG-2003-16630, 73 FR 65164, Oct. 31, 2008, as amended by USCG-2009-0702, 74 FR 49228, Sept. 25, 2009]

§ 54.01-2 Adoption of division 1 of section VIII of the ASME Boiler and Pressure Vessel Code.

(a) Pressure vessels shall be designed, constructed, and inspected in accordance with section VIII of the ASME Boiler and Pressure Vessel Code (incorporated by reference, see 46 CFR 54.01-1), as limited, modified, or replaced by specific requirements in this part. The provisions in the appendices to section VIII of the ASME Boiler and Pressure Vessel Code are adopted and shall be followed when the requirements in section VIII make them mandatory. For general information, Table 54.01-2(a) lists the various paragraphs in section VIII of the ASME Boiler and Pressure Vessel Code that are limited, modified, or replaced by regulations in this part.

TABLE 54.01-2(a)—LIMITATIONS AND MODIFICATIONS IN THE ADOPTION OF SECTION VIII OF THE ASME BOILER AND PRESSURE VESSEL CODE

Paragraphs in section VIII of the ASME Boiler and Pressure Vessel Code ¹ and disposition	Unit of this part
U-1 and U-2 modified by	54.01-5 through 54.01-15.
U-1(c) replaced by	54.01-5.
U-1(d) replaced by	54.01-5(a) and 54.01-15.
U-1(g) modified by	54.01-10.
U-1(c)(2) modified by	54.01-15.
UG-11 modified by	54.01-25.
UG-22 modified by	54.01-30.
UG-25 modified by	54.01-35.
UG-28 modified by	54.01-40.
UG-84 replaced by	54.05-1.
UG-90 and UG-91 replaced by	54.10-3.
UG-92 through UG-103 modified by	54.10-1 through 54.10-15.
UG-98 reproduced by	54.10-5.
UG-115 through UG-120 modified by	54.10-1.
UG-116, except (k), replaced by	54.10-20(a).
UG-116(k) replaced by	54.10-20(b).
UG-117 replaced by	54.10-20(c).
UG-118 replaced by	54.10-20(a).
UG-119 modified by	54.10-20(d).
UG-120 modified by	54.10-25.
UG-125 through UG-137 modified by	54.15-1 through 54.15-15.
UW-1 through UW-65 modified by	54.20-1.
UW-2(a) replaced by	54.01-5(b) and 54.20-2.
UW-2(b) replaced by	54.01-5(b) and 54.20-2.
UW-9, UW-11(a), UW-13, and UW-16 modified by	54.20-3.
UW-11(a) modified by	54.25-8.
UW-26, UW-27, UW-28, UW-29, UW-47, and UW-48 modified by	54.20-5.
UB-1 modified by	54.23-1
UB-2 modified by	52.01-95(d) and 56.30-30(b)(1).

TABLE 54.01-2(a)—LIMITATIONS AND MODIFICATIONS IN THE ADOPTION OF SECTION VIII OF THE ASME BOILER AND PRESSURE VESSEL CODE—Continued

Paragraphs in section VIII of the ASME Boiler and Pressure Vessel Code ¹ and disposition	Unit of this part
UCS-6 modified by	54.25-3.
UCS-56 modified by	54.25-7.
UCS-57, UNF-57, UHA-33, and UHT-57 modified by	54.25-8.
UCS-65 through UCS-67 replaced by	54.25-10.
UHA-23(b) and UHA-51 modified by	54.25-15.
UHT-5(c), UHT-6, and UHT-23 modified by	54.25-20.
UHT-82 modified by	54.25-20 and 54.25-25.
Appendix 3 modified by	54.15-3.

¹The references to specific provisions in section VIII of the ASME Boiler and Pressure Vessel Code are coded. The first letter, such as "U," refers to division 1 of section VIII. The second letter, such as "G," refers to a subsection within section VIII. The number refers to the paragraph within the subsection.

(b) References to the ASME Boiler and Pressure Vessel Code, such as paragraph UG-125, indicate:

U = Division 1 of section VIII of the ASME Boiler and Pressure Vessel Code.

G = Part containing general requirements.

125 = Paragraph within part.

(c) When a paragraph or a section of the regulations in this part relates to material in section VIII of the ASME Boiler and Pressure Vessel Code, the relationship with the code will be shown immediately following the heading of the section or at the beginning of the paragraph, as follows:

(1) (Modifies U ____.) This indicates that the material in U ____ is generally applicable but is being altered, amplified or augmented.

(2) (Replaces U ____.) This indicates that U ____ does not apply.

(3) (Reproduces U ____.) This indicates that U ____ is being identically reproduced for convenience, not for emphasis.

[CGFR 68-82, 33 FR 18828, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9976, June 17, 1970; CGFR 72-59R, 37 FR 6188, Mar. 25, 1972; CGD 72-206R, 38 FR 17226, June 29, 1973; CGD 73-254, 40 FR 40163, Sept. 2, 1975; CGD 77-147, 47 FR 21809, May 20, 1982; CGD 85-061, 54 FR 50963, Dec. 11, 1989. Redesignated by CGD 88-032, 56 FR 35822, July 29, 1991; USCG-2003-16630, 73 FR 65164, Oct. 31, 2008]

§ 54.01-5 Scope (modifies U-1 and U-2).

(a) This part contains requirements for pressure vessels. Table 54.01-5(a) gives a breakdown by parts in this subchapter of the regulations governing various types of pressure vessels, boilers, and thermal units.

(b) Pressure vessels are divided into Classes I, I-L (low temperature), II, II-L (low temperature), and III. Table 54.01-5(b) describes these classes and sets out additional requirements for welded pressure vessels.

(c) The requirements for pressure vessels by class are as follows:

(1) Class I-L and II-L pressure vessels must meet the applicable requirements in this part.

(2) Pressure vessels containing hazardous materials as defined in §150.115 of this chapter must meet the requirements of this part or, as applicable, the requirements in 49 CFR parts 171-177 or part 64 of this chapter.

(3) Except as provided in paragraph (c)(4) of this section, Classes I, II, and III pressure vessels not containing hazardous materials must be designed and constructed in accordance with the requirements in Section VIII, division 1, of the ASME Boiler and Pressure Vessel Code (incorporated by reference; see 46 CFR 54.01-1) and must be stamped with the ASME "U" symbol. These pressure vessels must also comply with the requirements that are listed or prescribed in paragraphs (d) through (g) of this section. Compliance with other provisions in this part is not required.

(4) Classes II and III pressure vessels that have a net internal volume of less than 0.14 cubic meters (5 cubic feet) and do not contain hazardous materials must be stamped with either the ASME "U" or "UM" symbol. Compliance with other provisions in this part is not required.

(d) Pressure vessels described in paragraph (c)(3) of this section must—