

§ 54.01-1

- 54.05-15 Weldment toughness tests—procedure qualifications.
- 54.05-16 Production toughness testing.
- 54.05-17 Weld toughness test acceptance criteria.
- 54.05-20 Impact test properties for service of 0 °F. and below.
- 54.05-25 [Reserved]
- 54.05-30 Allowable stress values at low temperatures.

Subpart 54.10—Inspection, Reports, and Stamping

- 54.10-1 Scope (modifies UG-90 through UG-103 and UG-115 through UG-120).
- 54.10-3 Marine inspectors (replaces UG-90 and UG-91, and modifies UG-92 through UG-103).
- 54.10-5 Maximum allowable working pressure (reproduces UG-98).
- 54.10-10 Standard hydrostatic test (modifies UG-99).
- 54.10-15 Pneumatic test (modifies UG-100).
- 54.10-20 Marking and stamping.
- 54.10-25 Manufacturers' data report forms (modifies UG-120).

Subpart 54.15—Pressure-Relief Devices

- 54.15-1 General (modifies UG-125 through UG-137).
- 54.15-3 Definitions (modifies appendix 3).
- 54.15-5 Protective devices (modifies UG-125).
- 54.15-10 Safety and relief valves (modifies UG-126).
- 54.15-13 Rupture disks (modifies UG-127).
- 54.15-15 Relief devices for unfired steam boilers, evaporators, and heat exchangers (modifies UG-126).
- 54.15-25 Minimum relief capacities for cargo tanks containing compressed or liquefied gas.

Subpart 54.20—Fabrication by Welding

- 54.20-1 Scope (modifies UW-1 through UW-65).
- 54.20-2 Fabrication for hazardous materials (replaces UW-2(a)).
- 54.20-3 Design (modifies UW-9, UW-11(a), UW-13, and UW-16).
- 54.20-5 Welding qualification tests and production testing (modifies UW-26, UW-28, UW-29, UW-47, and UW-48).

Subpart 54.23—Fabrication by Brazing

- 54.23-1 Scope (modifies UB-1).

Subpart 54.25—Construction With Carbon, Alloy, and Heat Treated Steels

- 54.25-1 Scope.
- 54.25-3 Steel plates (modifies UCS-6).
- 54.25-5 Corrosion allowance (replaces UCS-25).

46 CFR Ch. I (10-1-13 Edition)

- 54.25-7 Requirements for postweld heat treatment (modifies UCS-56).
- 54.25-8 Radiography (modifies UW-11(a), UCS-57, UNF-57, UHA-33, and UHT-57).
- 54.25-10 Low temperature operation—ferritic steels (replaces UCS-65 through UCS-67).
- 54.25-15 Low temperature operation—high alloy steels (modifies UHA-23(b) and UHA-51).
- 54.25-20 Low temperature operation—ferritic steels with properties enhanced by heat treatment (modifies UHT-5(c), UHT-6, UHT-23, and UHT-82).
- 54.25-25 Welding of quenched and tempered steels (modifies UHT-82).

Subpart 54.30—Mechanical Stress Relief

- 54.30-1 Scope.
- 54.30-3 Introduction.
- 54.30-5 Limitations and requirements.
- 54.30-10 Method of performing mechanical stress relief.
- 54.30-15 Requirement for analysis and computation.

AUTHORITY: 33 U.S.C. 1509; 43 U.S.C. 1333; 46 U.S.C. 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; Department of Homeland Security Delegation No. 0170.1.

SOURCE: CGFR 68-82, 33 FR 18828, Dec. 18, 1968, unless otherwise noted.

Subpart 54.01—General Requirements

§ 54.01-1 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. The material is also available for inspection at the Coast Guard Headquarters. Contact Commandant (CG-ENG), Attn: Office of Design and Engineering Systems, U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE., Washington,

DC 20593-7509. The material is also available from the sources listed below.

(b) *American Society of Mechanical Engineers (ASME) International*, Three Park Avenue, New York, NY 10016-5990:

(1) ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, Rules for Construction of Pressure Vessels (1998 with 1999 and 2000 addenda) (“Section VIII of the ASME Boiler and Pressure Vessel Code”), 54.01-2; 54.01-5; 54.01-15; 54.01-18; 54.01-25; 54.01-30; 54.01-35; 54.03-1; 54.05-1; 54.10-1; 54.10-3; 54.10-5; 54.10-10; 54.10-15; 54.15-1; 54.15-5; 54.15-10; 54.15-13; 54.20-1; 54.20-3; 54.25-1; 54.25-3; 54.25-8; 54.25-10; 54.25-15; 54.25-20; 54.30-3; 54.30-5; 54.30-10; and

(2) [Reserved]

(c) *ASTM International*, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, 877-909-2786, <http://www.astm.org>:

(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 (Reapproved 2007)^{e1}, Standard Specification for Pressure Vessel Plates, Alloy Steel, Nickel (“ASTM A 203”), (approved November 1, 2007), incorporation by reference approved for § 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 Tran-

sition 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; USCG-2012-0832, 77 FR 59777, Oct. 1, 2012; USCG-2012-0866, 78 FR 13249, Feb. 27, 2013; USCG 2013-0671, 78 FR 60148, Sept. 30, 2013]

§ 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.