

(Approved by the Office of Management and Budget under OMB control number 2130-0181)

[CGFR 68-82, 33 FR 18828, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9976, June 17, 1970; CGD 77-147, 47 FR 21809, May 20, 1982; 55 FR 696, Jan. 8, 1990; CGD 88-057, 55 FR 24236, June 15, 1990; CGD 85-061, 55 FR 41917, Oct. 16, 1990; CGD 95-027, 61 FR 26000, May 23, 1996; USCG-2000-7790, 65 FR 58460, Sept. 29, 2000; USCG-2003-16630, 73 FR 65165, Oct. 31, 2008]

§ 54.01-10 Steam-generating pressure vessels (modifies U-1(g)).

(a) Pressure vessels in which steam is generated are classed as “Unfired Steam Boilers” except as required otherwise by paragraph (b) of this section. Unfired steam boilers must be fitted with an efficient water level indicator, a pressure gage, a blowdown valve, and an approved safety valve as required by § 54.15-15. Unfired steam boilers must be constructed in accordance with this part other than when the pressures are more than 206 kPa (30 psig) or the temperatures of the working fluid are more than 454 °C (850 °F) when such boilers must be constructed in accordance with part 52 of this subchapter.

(b) Vessels known as “Evaporators” or “Heat Exchangers” are not classified as unfired steam boilers. They shall be fitted with an approved safety device as required under § 54.15-15 and constructed in accordance with this part.

(c) An evaporator in which steam is generated shall be fitted with an efficient water level indicator, a pressure gage, and a blowdown valve.

[CGFR 68-82, 33 FR 18828, Dec. 18, 1968, as amended by CGD 81-79, 50 FR 9436, Mar. 8, 1985; CGD 95-012, 60 FR 48044, Sept. 18, 1995; USCG-2003-16630, 73 FR 65166, Oct. 31, 2008]

§ 54.01-15 Exemptions from shop inspection and plan approval (modifies U-1(c)(2)).

(a) The following classifications are exempt from shop inspection and plan approval requirements of this part:

(1) Vessels containing water at a pressure not greater than 689 kPa (100 pounds per square inch gauge or “psig”), and at a temperature not above 93 °C (200 °F) including those containing air, the compression of which serves only as a cushion. Air-charging lines may be permanently attached if the air pressure does not exceed 103 kPa (15 psig).

(2) Hot water supply storage tanks heated by steam or any other indirect

means when none of the following limitations is exceeded:

(i) A heat input of 58 kW (200,000 B.t.u. per hour);

(ii) A water temperature of 93 °C (200 °F);

(iii) A nominal water-containing capacity of 454 liters (120 gallons); or

(iv) A pressure of 689 kPa (100 psig).

The exemption of any tank under this subparagraph requires that it shall be fitted with a safety relief valve of at least 1-inch diameter, set to relieve below the maximum allowable working pressure of the tank.

(3)(i) Vessels having an internal operating pressure not exceeding 103 kPa (15 psig) with no limitation on size. (See UG-28(f) of section VIII of the ASME Boiler and Pressure Vessel Code (incorporated by reference; see 46 CFR 54.01-1.)

(ii) Cargo tanks of pressure vessel configuration are not included in the exemption in paragraph (a)(3)(i) of this section.

(4) Class I, II, and III pressure vessels that meet the requirements of § 54.01-5(c)(3) and (c)(4).

(5) Condensers and heat exchangers, regardless of size, when the design is such that the liquid phase is not greater than 689 kPa (100 psig) and 200 °F (93 °C) and the vapor phase is not greater than 103 kPa (15 psig) provided that the Officer in Charge, Marine Inspection is satisfied that system overpressure conditions are addressed by the owner or operator.

(b) For fluid conditioner fittings see § 56.15-1 of this subchapter.

[CGFR 68-82, 33 FR 18828, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9977, June 17, 1970; CGFR 70-143, 35 FR 19906, Dec. 30, 1970; CGD 77-147, 47 FR 21810, May 20, 1982; USCG-2003-16630, 73 FR 65166, Oct. 31, 2008; USCG-2010-0759, 75 FR 60002, Sept. 29, 2010]