Coast Guard, Dept. of Homeland Security

§ 53.01–10

Scope (modifies HG–100).

(a) The regulations in this part apply to steam heating boilers, hot water boilers (which include hot water heating boilers and hot water supply boilers), and to appurtenances thereto. The requirements in this part shall be used in conjunction with section IV of the ASME Boiler and Pressure Vessel Code (incorporated by reference; see 46 CFR 53.01–1). Table 54.01–5(a) of this subchapter gives a breakdown by parts in this subchapter of the regulations governing various types of pressure vessels and boilers.

(b) Service restrictions. (1) Boilers of wrought materials shall be restricted to a maximum of 103 kPa gage (15 psig) for steam and a maximum of 689 kPa (100 psig) or 121 °C (250 °F) for hot water. If operating conditions exceed these limits, design and fabrications shall be in accordance with part 52 of this subchapter.

(2) Boilers of cast iron materials shall be restricted to a maximum of 103 kPa gage (15 psig) for steam and to a maximum of 206 kPa gage (30 psig) or 121 °C (250 °F) for hot water.

(c) Hot water supply boilers. (1) Electrically fired hot water supply boilers that have a capacity not greater than 454 liters (120 gallons), a heat input not greater than 58.6 kilowatts (200,000 BTU per hour), and are listed as approved under Underwriters’ Laboratories UL 174 or UL 1453 (both incorporated by reference; see 46 CFR 53.01–1) are exempted from the requirements of this part provided they are protected by a pressure relief device. This relief device need not comply with §53.05–2.

(2) Oil fired hot water supply boilers shall not be exempted from the requirements of this part on the basis of size or heat input.

(d) Exhaust gas type boilers shall be restricted to a working pressure equal to or less than 103 kPa gage (15 psig) for steam and to a maximum of 206 kPa gage (30 psig) or 121 °C (250 °F). The design temperature of parts exposed to the exhaust gas must be the maximum temperature that could normally be produced by the source of exhaust gas. This temperature shall be verified by testing or by the manufacturer of the engine or other equipment producing the exhaust.

(e) Heating boilers whose operating conditions are within the service restrictions of §53.01–10(b)(1) may be constructed in accordance with section I of the ASME Boiler and Pressure Vessel Code (incorporated by reference; see 46 CFR 53.01–1). In addition, these heating boilers must:

(1) Be stamped with the appropriate ASME Code symbol in accordance with PG–104 through PG–113 of section IV of the ASME Boiler and Pressure Vessel Code;