

Coast Guard, Dept. of Homeland Security

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(b) The material approved for incorporation by reference in this part and the sections affected are:

American Society of Mechanical Engineers (ASME) International

Three Park Avenue, New York, NY 10016-5990
ANSI/ASME CSD-1-1982 with Addenda CSD-1a-1984, Controls and Safety Devices for Automatically Fired Boilers, November 15, 198463.10-1; 63.15-1; 63.20

American Society for Testing and Materials (ASTM)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM F 1323-98, Standard Specification for Shipboard Incinerators.....63.25-9

International Maritime Organizations (IMO)

Publications Section, 4 Albert Embankment, London, SE1 7SR United Kingdom
Resolution MEPC.59(33), Revised Guidelines for the Implementation of Annex V of MARPOL 73/7863.25-9

International Organization for Standardization

Case postale 56, CH-1211, Geneve 2009
Shipbuilding-Shipboard Incinerators-Requirements, 13617 (1995).....63.25-9

Underwriters' Laboratories, Inc. (UL)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995

ANSI/UL-174, Standard for Household Electric Storage Tank Water Heaters, Seventh Edition, April 18, 1983 (Revisions through March 1988)63.25-3

ANSI/UL-296, Standard for Oil Burners, Seventh Edition, August 22, 1980 (Revisions through August 1985)63.15-5

ANSI/UL-343, Standard for Pumps for Oil Burning Appliances, Sixth Edition, July 17, 198663.15-5

ANSI/UL-1453, Standard for Electric Booster and Commercial Storage Tank Water Heaters, Third Edition, February 5, 198863.25-3

American Gas Association

1515 Wilson Boulevard, Arlington, Virginia 22209

ANSI/AGA Z21.22-86 Relief Valves and Automatic Shutoff Devices for Hot Water Supply Systems, March 28,

1986.....63.25-3

[CGD 88-057, 55 FR 24238, June 15, 1990, as amended by CGD 95-072, 60 FR 50463, Sept. 29, 1995; CGD 96-041, 61 FR 50728, Sept. 27, 1996; CGD 97-057, 62 FR 51044, Sept. 30, 1997; CGD 95-028, 62 FR 51202, Sept. 30, 1997; USCG-1999-6216, 64 FR 53225, Oct. 1, 1999; USCG-1999-5151, 64 FR 67180, Dec. 1, 1999]

Subpart 63.10—Miscellaneous Submittals

§ 63.10-1 Test procedures and certification report.

Two (2) copies of the following items must be submitted to the Commanding Officer, U.S. Coast Guard Marine Safety Center, 400 Seventh Street SW., Washington, DC 20590-0001.

(a) Detailed instructions for operationally testing each automatic auxiliary boiler, its controls, and safety devices.

(b) A certification report for each automatic auxiliary boiler which:

(1) Meets paragraph CG-510 of ANSI/ASME CSD-1a; and

(2) Certifies that each automatic auxiliary boiler, its controls, and safety devices comply with the additional requirements of this part.

Subpart 63.15—General Requirements

§ 63.15-1 General.

(a) Each automatic auxiliary boiler must be designed and constructed for its intended service according to the requirements of the parts referenced in § 54.01-5, Table 54.01-5(A) of this chapter.

(b) Controls and safety devices for automatic auxiliary boilers must meet the applicable requirements of ANSI/ASME CSD-1/CSD-1a, except Paragraph CG-310.

(c) All devices and components of an automatic auxiliary boiler must satisfactorily operate within the marine environment. The boiler must satisfactorily operate with a momentary roll of 30°, a list of 15°, and a permanent trim of 5° with it installed in a position as specified by the manufacturer.

(d) An electrical control used to shut down the automatic auxiliary boiler must be installed in accordance with § 58.01-25 of this chapter. This device

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must stop the fuel supply to the fuel burning equipment.

(e) Mercury tube actuated controls are prohibited from being installed and used on automatic auxiliary boilers.

§ 63.15-3 Fuel system.

(a) Firing of an automatic auxiliary boiler by natural gas is prohibited unless specifically approved by the Marine Safety Center.

(b) Heated heavy fuel oil may be used provided the heaters are equipped with a high temperature limiting device that shuts off the heating source at a temperature below the flashpoint of the oil and is manually reset. When a thermostatically-controlled electric oil heater and a level device is used, it must meet the requirements of part 111, subpart 111.85 of this chapter.

NOTE: An auxiliary boiler may be safely ignited from the cold condition using unheated diesel or light fuel oil and subsequently shifted to heated heavy fuel.

(c) The fuel oil service pump and its piping system must be designed in accordance with § 56.50-65 of this chapter. All materials must meet the requirements of part 56, subpart 56.60 of this chapter. The use of cast iron or malleable iron is prohibited.

(d) The fuel oil service system (including the pump) must meet the pressure classification and design criteria found in § 56.04-2, Table 56.04-2 of this chapter.

(e) When properly selected for the intended service, fuel pumps meeting the performance and test requirements of ANSI/UL 343 meet the requirements of this section.

§ 63.15-5 Strainers.

(a) Strainers must be installed in the fuel supply line. Each strainer must be self-cleaning, fitted with a bypass, or be capable of being cleaned without interrupting the fuel oil supply.

(b) The strainer must not allow a quantity of air to be trapped inside which would affect the rate of fuel flow to the burner or reduce the effective area of the straining element.

(c) The strainer must meet the requirements for strainers found in ANSI/UL 296 and the requirements for

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fluid conditioner fittings found in § 56.15-5 of this chapter.

§ 63.15-7 Alarms.

(a) An audible alarm must automatically sound when a flame safety system shutdown occurs. A visible indicator must indicate that the shutdown was caused by the flame safety system.

(b) Means must be provided to silence the audible alarm. The visible indicators must require manual reset.

(c) For steam boilers, operation of the lower low water cutoff must automatically sound an audible alarm. A visual indicator must indicate that the shutdown was caused by low water.

(d) For a periodically unattended machinery space, the auxiliary boiler trip alarm required by 46 CFR 62.35-50, Table 62.35-50 satisfies the requirements for the audible alarms specified in this section.

§ 63.15-9 Inspections and tests.

All automatic auxiliary boilers must be inspected and tested in accordance with the requirements of part 61 of this chapter.

Subpart 63.20—Additional Control System Requirements

§ 63.20-1 Specific control system requirements.

In addition to the requirements found in ANSI/ASME CSD-1/CSD-1a, the following requirements apply for specific control systems:

(a) *Primary safety control system.* Following emergency safety trip control operation, the air flow to the boiler must not automatically increase. For this condition, postpurge must be accomplished manually.

(b) *Combustion control system.* A low fire interlock must ensure low fire start when variable firing rates are used.

(c) *Water level controls and low water cutoff controls.* Water level controls must be constructed and located to minimize the effects of vessel roll and pitch. Float chamber low water cutoff controls using stuffing boxes to transmit the motion of the float from the chamber to the external switches are prohibited. No outlet connection other than pressure controls, water columns,