



"Eddy's Boilerhouse News"
By Eddy Emerson, Emerson Boiler

NEWS LETTER ASME CSD-1 Controls and Safety Devices for Automatically Fired Boilers – Series CSD-1 letter 2.

CSD-1 Part CG General states the following in paragraph CG-110 Scope, "the rules of this Standard, covers requirements for assembly, installation, maintenance, and operation of controls and safety devices on automatically operated boilers directly fired with gas, oil, gas-oil, or electricity."

This code addresses boiler and burner controls. The boiler pressure vessel construction is covered in section I, II, IV, V and IX of the ASME code. The code applies to boilers having an input of 400,000 to 12,500,000 btu's. Boilers above 12,500,000 btu's fall within the scope of NFPA 85, Boiler and Combustion Systems Hazard Code.

Several questions have arisen that are addressed in the General Provisions. One such question has to do with the need for a flame observation port. The code states, "Observation ports shall be provided to permit direct visual inspection of the pilot, main burner flame, and boiler furnace." If that sight glass gets so dirty that you cannot see the flame, clean it. If the sight is broken don't replace it with a metal plate and block the view.

Several of the controls manufacturers have said that only controls that bear a label by a nationally recognized testing agency such as, UL, FM or CSA is accepted by CSD-1. They are correct; paragraph CG-310 states exactly that. This means that those "re-built controls" should not be installed on a boiler.

A couple of other items that should be noted in the CG – General section are the requirements that the "boiler ... burner manufacturers shall furnish detailed instructions on maintenance and service procedures for the fuel burning system or for electrically heated units, including controls and safety devices installed with the unit."

An operational test is also required. Paragraph CG-440 says, "The operation of control systems and safety devices installed in accordance with this Standard shall be tested by the installing contractor prior to release to the owner/user." CSD-1 Appendix C is a non-mandatory but acceptable data report. This is a very easy report to follow.

The last thing has to do with lockout procedures. The code states, "Safety controls that can electronically reset without local, manual intervention, such as when power or control input to the device is interrupted and then restored, shall not be permitted." No resetting your flame safeguard control over the internet.



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