



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

NEWSLETTER ASME CSD-1 Controls and Safety Devices for Automatically Fired Boilers – Series CSD-1 Letter 8

CSD-1 Part CF180 states that each main burner supply line shall be equipped with a safety shutoff valve(s) that shall comply with ANSI Z21.21 or UL 429, Standard for Electrically Operated Valves. The safety shutoff valve is simply the gas valve.

Boilers having an input greater than 400,000 btu's but less than 5,000,000 btu's, shall be equipped with two (2) safety shutoff valves in series. The valves may be in a single body or one valve with a valve seal over travel (Proof of Closure) interlock. Boilers over 5,000,000 btu's shall be equipped with two (2) safety shutoff valves and at least one (1) of the valves shall incorporate a proof of closure switch. These valves have to close within five seconds of shut down.

Gas pressure regulators, gas pressure switches and all other valve train components requiring atmospheric air pressure to balance a diaphragm must be piped to the outside. Vent and relief lines shall be piped by the installer to the outdoors at a safe point of discharge as determined by the authority having jurisdiction.

Atmospheric vent lines, when manifolded, shall be connected into a common atmospheric vent line having a cross-sectional area not less than the area of the largest vent line plus 50% of the areas of the additional vent lines.

Atmospheric vent lines shall not be connected to any common or manifolded gas vent, bleed or relief line. This means that vents and bleeds can not be connected together. Two lines will have to be piped to the outside.

I need to point out that, in this section CF-190 it states over and over, "as determined by the authority having jurisdiction". The authority having jurisdiction has some leeway here so you should always check with the inspection division if you have any questions as to how these vents and bleeds should be piped. I will repeat what I have said many times before, the inspector is not your enemy, he is your friend with only safety in mind. Work with him/her and life will be much easier.

Lastly, safety is the most important part of our duties and that includes our own safety. Safety policies and procedures are worthless unless we follow them. Accidents happen even to those who think "it won't happen to me."

Be Safe.

TRAINING CLASSES STILL AVAILABLE:

PHOENIX, AZ (DECEMBER 8, 2009) BOILER, OPERATOR & TRAINING

PHOENIX, AZ (DECEMBER 9, 2009) UNIT I

PHOENIX, AZ (DECEMBER 10, 2009) UNIT II

PHOENIX, AZ (JANUARY 25-FEBRUARY 5, 2010) 80 HOUR BIA CERTIFICATION

PHOENIX, AZ (FEBRUARY 22-26, 2010) 40 HOUR BIA RECERTIFICATION

PHOENIX, AZ (MARCH 8-12, 2010) 40 HOUR BIA RECERTIFICATION