

# Four Checkpoints to Add Value to Your Boiler Inspection

## Safety Note

**Reducing risk is not just a matter of saving money, production, or code compliance. It's a matter of protecting lives.**

**1. Verify that no gas is leaking from the vent valve on double block and bleed systems.**

We find this problem in about 5% of all the boilers we test and inspect. Although that's not a lot of valves, it is a problem for the ones leaking. A leaking vent valve not only costs money in lost fuel, but also can impact the operation of the burner.

The check is simple – although it does involve getting to a vent line termination which may be on a roof or outside of a building. Once there, you simply place a latex glove over the end of the vent line and make a good seal with your hand or a rubber band. Hold it over the termination for about 30 seconds and see if it starts to fill. Remember to do this simple test while the boiler is in operation and the vent valve is in the closed position.

**2. Understand obsolete and recalled components are out there.**

Let your customer know that there are such things as obsolete and recalled components, along with warnings from manufacturers about issues they have discovered. You can print and download this information free from Honeywell Combustion Safety's website and logging into our Client Center.

**3. How does the flame look?**

Remember that fuel/air ratio problems lead to wasted dollars as well as potential safety concerns. Unfortunately, understanding what a flame should look like versus what it is today can be a difficult thing to do because of the wide variety of burner makes and styles out there. Every boiler will have a somewhat unique flame pattern and color, and low NOx burners will look completely different from standard burners.

Look for a clean burn with no soot or smoke being produced, no damage to the burner mechanics or burner throat, no flame impingement, and a uniform flame envelop. Also, ask to see when the last time someone tuned the burner.



The documentation should include the result of flue gas analysis and list the amount of O<sub>2</sub>, CO and NOx being produced. If it has been over a year since the last tuning, recommend getting someone to adjust it.

#### 4. Verify proper interlock and valve tightness testing has been completed.

Here's a trick that our technicians use: Take a good hard look at the leak check ports on the automatic valves. If the plugs look like they have never been removed, then chances are this testing is not either being done on an annual basis or it is not being performed correctly.



Ask to see the most recent testing and inspection records. The documentation of testing should include information such as the make, model and set point of the device tested and whether the device functioned or not.

A simple service report with a box checked does not suffice. If the site is conducting this testing on their own, check to make sure the boiler log or other form of PM tracking is being completed fully.

Each additional step taken to ensure people operating and/or using fuel-fired equipment are kept safe is worth the time and effort. There is no measure of value that a single identified hazard can have on a facility and the people within it. Reducing risk is not just a matter of saving money, production, or code compliance; it's a matter of protecting lives.

## ABOUT US

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Honeywell Combustion Safety is a part of Honeywell Thermal Solutions, an industry leader in commercial and industrial combustion solutions. Honeywell Combustion Safety, formerly known as CEC Combustion Safety, has been in business since 1984. With engineers and staff members that sit on Code committees such as NFPA 56, NFPA 85, NFPA 86, and NFPA 87, our inside expertise is integrated within all of our practices, and our global reach ensures that customers around the world are kept safe. Honeywell offers testing and inspections, engineering & upgrades/retrofits, gas hazards management, training, and field services for all industrial facilities and different types of fuel fired equipment. By assisting organizations and their personnel with the safe maintenance and operation of their combustion equipment, Honeywell aims to save lives and prevent explosions while increasing efficiency and reliability of combustion equipment.

#### For more information

Learn more about Honeywell Combustion Safety, contact [info@combustionsafety.com](mailto:info@combustionsafety.com), visit [www.combustionsafety.com](http://www.combustionsafety.com) or contact your Honeywell Sales Engineer.

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