

Hot Water Boilers

Annual Preseason Major Maintenance

- Secure and drain boiler every two years.
- Open fireside and waterside for cleaning and inspection.
- Inspect refractory.
- Clean and inspect gauge glass.
- Clean fire inspection glass.
- Disassemble, clean and inspect low water cutoff control(s). Check annually.
- Reassemble boiler and low water cutoff control(s) with new gaskets.
- Clean fuel nozzles or gas burner tubes.
- Clean combustion blower fan wheel and air dampers.
- Lubricate combustion blower motor bearings.
- Clean and adjust ignition electrodes.
- Inspect, lubricate, and tighten all linkage / jackshaft components.
- Check operation of low water cutoff and feed control(s).
- Check and verify settings of operational controls.
- Test and verify proper operation of all operating and limit controls.
- Visually inspect condition of safety relief valves for tampering and leakage.
- Combustion testing:
 - Test the following (where applicable): proper fuel pressure, fuel/air ratio, CO², CO, EFF, and NO_x.
 - Adjust burner controls as required to obtain proper combustion.
 - Check burner and / or boiler for proper gas input by clocking flow meter where applicable.
- Check operation and calibration of operating controls and safety devices.

Seasonal Startup

- Review manufacturer's recommendations for the boiler and burner startup.
- Check auxiliary equipment operation.
- Inspect burner boiler and controls prior to startup.
- Start burner. Check operating controls. Test safety controls and pressure relief valve. ■ Perform combustion tests and adjust burner for maximum efficiency.
- Log all operating conditions.
- Visually inspect condition of safety relief valves for tampering and leakage.

Scheduled Maintenance - to be performed during the operating season and include the following inspections and adjustments:

- Test low water cutoff and exercise pressure relief valve.
- Blow down, test low water cutoff and feed control(s).
- Check for water, steam and fuel leaks.
- Check setting and test operating and limit control.
- Blow down water level sight glass and confirm water level.
- Visually inspect condition of safety relief valves for tampering and leakage.

Written Reports

Provided to the customer representative following each regular inspection or emergency call and report any uncorrected deficiencies noted.

