



## Commercial Boiler System Maintenance Check List

Check ☐ when complete      ⌚ Log labor hours as needed.

### Daily

- ☐ Check sight-glass water level / system pressure (steam vs hydronic).
- ☐ Observe flame quality & burner sound.
- ☐ Blow-down gauge glass & LWCO
- ☐ Record feed-water chemistry and make-up volume (O&M Manual B pre-start item 6).
- ☐ Walk boiler room for leaks, vibration, or alarms.

### Weekly

- ☐ Trip low-water cut-off by draining water column—burner must shut down
- ☐ Exercise manual shut-off valves in the fuel train, then leak-test.
- ☐ Inspect burner linkage pins & air-damper travel.
- ☐ Prime steam traps or open hydronic auto-vents as applicable.

### Monthly

- ☐ Clean combustion-air inlet filter.
- ☐ Inspect refractory; vacuum burner fan screens.
- ☐ Lubricate fan/blower and pump bearings.
- ☐ Review chemical logs; adjust sulfite/nitrite as needed.

### Quarterly

- ☐ Perform full combustion analysis; adjust O<sub>2</sub>/CO<sub>2</sub> and draft.

- ☐ Brush fireside tubes; descale waterside if indicated.
- ☐ Bubble-test safety shut-off valves.
- ☐ Check condensate temperature (< 200 °F) or expansion-tank pressure.

### **Semi-Annual**

- ☐ Remove and inspect ignition electrodes & UV scanner; replace if pitted.
- ☐ Meg-ohm test burner-motor windings; tighten control-panel terminals.
- ☐ Verify all pressure/temperature gauges against a calibrated standard.

### **Annual / Out-of-Service**

- ☐ Drain, lock-out, open manways; inspect tubes, drums, refractory.
- ☐ Hydro-pressure-test boiler and external piping.
- ☐ Remove, test, or replace safety valves; file certificates.
- ☐ Burner teardown: replace nozzle/electrodes, clean blower wheel.
- ☐ Re-calibrate transmitters, flame-safeguard, and limit switches.
- ☐ Review the year's logs to refine the PM program.