Closed System Labs Inc.

Ensuring longevity with chemistry.

Preoperational Cleaning & Preventive Water Treatment

FOR STEAM HEATING BOILERS

Preoperational Cleaning

Even the cleanest fabrications require preoperational cleaning to remove normal construction contaminants such as temporary protective coatings, weld lag, grease, oil and dirt. If these are not removed, they can contaminate steam and interfere with the protective function of water treatment. This alkaline boil-out method readies the boiler for water treatment.

- Check hardness of boiler feed-water using test strips provided; it should not exceed 10 ppm.
- Fill boiler to normal level with feed-water and add preoperational cleaning chemicals* to drum.
- Fire boiler, bring to normal operating pressure and hold for 1 hour.
- Turn off heat, allow boiler to cool for 15 minutes and blow-out all boiler connections for 15 seconds.
- Empty boiler; do not rinse.

*Contains trisodium phosphate (alkaline-cleaner), sodium sulfite (oxygen-scavenger); wear gloves, goggles and dust mask.

Preventive Water Treatment

As soon as cleaning is complete, treat the boiler. Leaving the boiler clean and empty leaves it open to corrosion. Taking the following steps will protect the boiler until it is placed in service.

- Open drum vent and fill boiler to normal level with feed-water.
- Fire boiler and hold at a slow boil for 5 minutes to de-aerate water.
- Add preventive water treatment* and boil for 1 minute to circulate.
- Turn off heat and slowly add feed-water until drum vent just overflows.
- Close drum vent and feed-water valves (steam stop valve should already be closed).
- Is drum pressure normal? If not, check fittings and valves for leaks.
- Drain water to normal level before returning boiler to service.

*Contains sodium sulfite (oxygen-scavenger), dipotassium phosphate (corrosion-inhibitor / pH-buffer), silicone emulsion (anti-foam).

6602 Sutton Road • Madison, Wisconsin 53711 • (608) 213-9328 • www.closedsystemlabs.com