

Boiler Instructions SDS+RTD Revised: December, 2015 Phone: 888-337-2253 Fax: 630-264-9741 www.deltaproducts.com

Full boiler cleanings work best, using the standard flow of the boiler for the implementation of the cleaning agent. Utilizing the standard flow process significantly reduces the labor and downtime time for set up. Labor and time to returning the boiler to service is easy with a full boiler cleaning.

The use of the boiler feed system to flush the boiler until 'clear' mitigates the risks of un-dissolved deposits from accumulating in the tubes.

Considerations for the preparation of your boiler

- 1) Isolate the boiler allowing for a bottom introduction of cleaning agents, to discharge.
- 2) Allow for a high side discharge to allow and CO<sub>2</sub> production to be vented during circulation.
  - a. Pockets of CO<sub>2</sub> will prevent the cleaning agent's ability to contact the deposit, limiting the effectiveness of the cleaning project.

Cleaning process overview

- A. Drain boiler
- B. Isolate boiler with a low side inlet and high side outlet.
- C. Open all drains and hose pipe to an open recirculation vessel.
  - a. Provide a local valve at recirculation vessel. (Recirculation vessel is typically the Frack tank, or tote)
- D. Set up the circulation pump sized for the application, purging the resulting CO<sub>2</sub> to the recirculation vessel. A minor amount of CO<sub>2</sub> will be created during the cleaning process.
- E. Fill the boiler with water (less than 120F) and test the circulation system ensuring a leak free operation.
- F. Re-Empty the boiler, or drain to make room for the introduction of cleaning agents
- G. Introduce the cleaning agents into the boiler
- H. Monitor the cleaning process until cleaning is complete
- I. Drain the boiler
- J. Remove the pump system from the boiler
- K. Using the boiler feed system, flush boiler until 'clear'
- L. Remove any boiler piping installed for cleaning and return the boiler to service.

