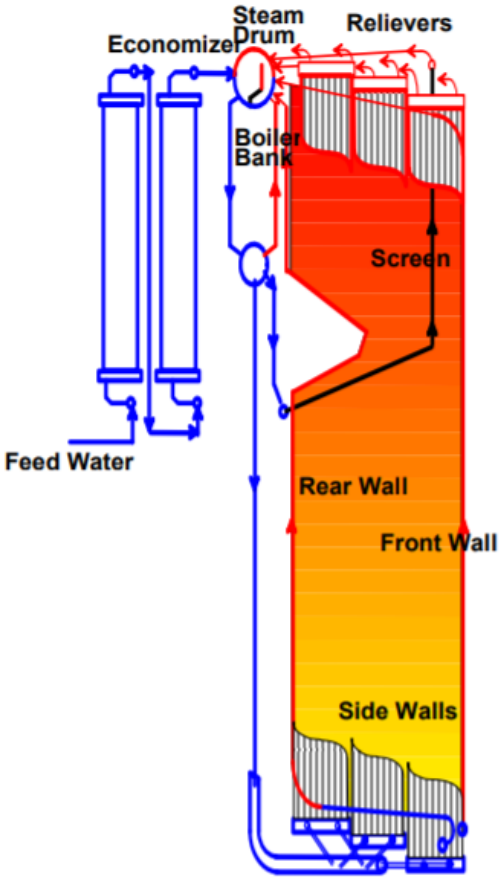
JANSEN
Combustion & Boiler Technologies, Inc.

Boiler Circulation Study

Adequate circulation of water through boiler tubes is necessary to prevent tube overheating and the potential for failures. The drivers of a circulation study on a boiler are typically one or more of the following reasons:



- To establish the maximum steaming rate at which circulation remains adequate.
- To determine if pressure part modifications are needed to support steam generation rates that are in excess of the boiler's original nameplate rating.
- To evaluate the effect of changing boiler operating conditions—such as type of fuel or operating pressure—on circulation.
- To evaluate the effect of boiler heating surface modifications on circulation.
- To uncover the factors causing repeat pressure part failures and/or tube overheating.
- To investigate the cause of excessive scale depositions inside tubes.

A valuable technique used by Jansen during its analyses of circulation conditions is the application of Ultrasonic Flow Metering (UFM).

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