

Project Description



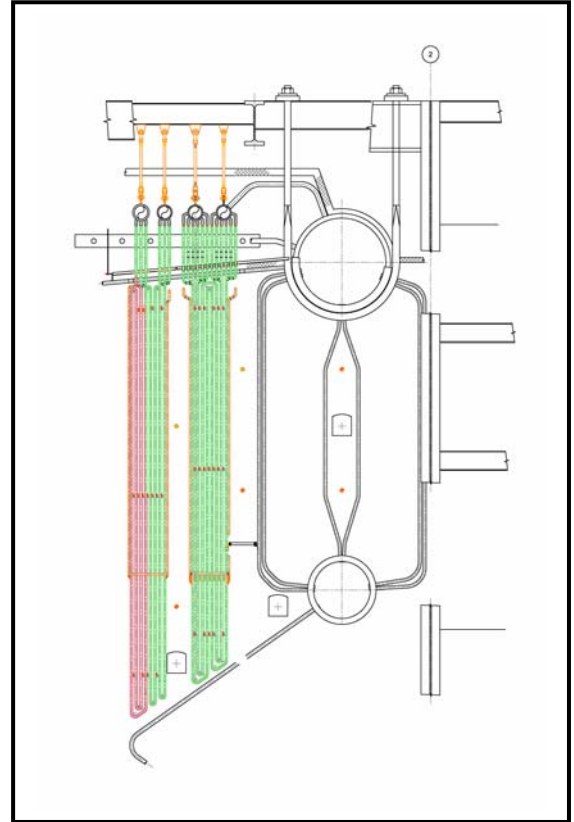
*Power Boiler Superheater Upgrade
Weyerhaeuser Company
Campti, Louisiana*

Project Scope

JANSEN designed and supplied a superheater upgrade replacement on a vintage 1991 Zurn boiler at the Weyerhaeuser mill in Campti. The unit burns mainly hog fuel as well as small amounts of mill sludge and plastic materials. The unit had originally been designed for an MCR rate of 500,000 lb/hr at 1,250 psig and 900°F temperature. However, the unit had always been operated at a steam outlet pressure of 600 psig and 700°F.

In order to maximize the use of a new turbine generator (to be installed), the mill wishes to operate the boiler at steam outlet conditions of 1,250 psig and 950°F. In addition, corrosion and wall thinning had been found mainly in the existing secondary superheater, thus making the superheater unsuitable for continued use at the higher operating pressure.

In order to meet the customer's goals, JANSEN designed new primary and secondary superheater sections. The primary superheater was a replacement in-kind with the exception that wall thickness was increased to provide better corrosion allowance. The secondary superheater included additional surface area to meet the higher operating temperature. Portions of the secondary section included alloy 625 weld overlay for corrosion resistance and the wall thickness was increased to provide greater corrosion allowance. New thermocouples were also supplied.



Results

The new superheater was installed in May of 2008 and has achieved the guaranteed operating performance.

