

Project Description



*Recovery Boiler Superheater Replacement
Western Pulp Ltd.
Port Alice, British Columbia*

Project Scope

Western Pulp Ltd. operates a spent sulfite liquor (SSL) recovery boiler at the mill in Port Alice, B.C., Canada. The Combustion Engineering MU-X type unit was installed in the mid 1970s to generate 470,000 lb/hr steam at 600 psig and 725° F.

In 2001, after over 25 years of service, due to metal loss and failures, a complete replacement of the two superheater sections was warranted. Jansen Combustion and Boiler Technologies Inc. (JANSEN) first conducted an engineering evaluation to address the problem's root cause and to conceptualize modified design features for superheater arrangement and metallurgy to meet the mill's goals.

JANSEN then carried out design engineering, materials supply, and fabrication of the new primary and secondary superheater sections and two outlet headers. Selected portions of the new superheater were of composite tube material for improved corrosion resistance and extended useful life.



The replacement superheater was shipped from the fabrication shop in Vancouver to Port Alice in the Spring of 2002. Due to market conditions and plant downtime, the unit was not installed until several years later.

Results

The new superheater has been in service for many years and has performed as per design specifications.