Project Description

Power Boiler Superheater Upgrade/Replacement
Kimberly-Clark
Everett, Washington

Project Scope
Kimberly-Clark (K-C) operates and maintains a mixed wood fueled boiler owned by the Snohomish Public Utility District (SPUD). The No. 14 Boiler was designed to generate 435,000 lb/hr of steam at 850°F and 825 psig. The secondary superheater had experienced erosion/corrosion problems and K-C and the SPUD issued a request for proposals to replace the existing secondary superheater with a unit that would minimize the erosion and corrosion problems. Improved steam temperature control was also a project goal.

Jansen was the successful bidder and provided a design-construct package that completely replaced the existing secondary superheater with a new unit. The new unit was a new design that utilized Type 310 stainless steel tubing with increased spacing between elements and increased depth. In addition, new sootblowers were added and an auxiliary steam attemperator system was provided. The design of the new superheater had to take into account very restrictive construction access.

Jansen was the prime contractor and provided project management, design, engineering, materials procurement, fabrication, delivery and installation. The boiler modifications were completed in November 2004.

Results
The superheater was installed on schedule and within budget. The superheater performance has met all of the project guarantees. There have been no forced outages due to tube failures in the secondary superheater since its installation.

Note: This plant was closed permanently in 2012.