

PROJECT CAPABILITIES



DISPOSAL OF HVLC DNCG IN RECOVERY/POWER BOILERS USING JANSEN HIGH ENERGY COMBUSTION AIR NOZZLES™



Injection of High Volume Low Concentration (HVLC) dilute non-condensable gases (DNCG) in the boiler using the Jansen High Energy Combustion Air Nozzles™ can be practiced in different ways:

- In a recovery boiler, global mixing of the DNCG stream with all secondary and/or tertiary air through all new nozzles. On a power boiler, global mixing with all overfire air (OFA).
- Local mixing of the DNCG stream with air to selected new nozzles on the secondary and/or tertiary air levels, or OFA.
- Separate injection (using blower), without air mixing, through a selected number of new nozzles.

The benefits of installing Jansen air nozzles for DNCG disposal in the recovery/power boiler are many:

- Work includes initial process evaluation to determine best location and method of injection.
- Injection method, system, and nozzles are custom designed for each application.
- Nozzle has clean, open discharge with high jet velocity, and no back flows or tube impingement.
- Nozzle tips are corrosion resistant.
- Rapid combustion of DNCG components; no emissions excursions.
- Boiler stability is not affected.
- Nozzles have shown no/low maintenance.
- System has easy shut-off capability.

Selected References (see next page)



Selected References

Appleton Papers - Roaring Spring, PA
Bowater, Inc. - Calhoun, TN
Bowater, Inc. - Catawba, SC (2 units)
Georgia-Pacific Corporation - Camas, WA
Georgia-Pacific Corporation - Clatskanie, OR
Georgia-Pacific Corporation - Old Town, ME
International Paper Company - Texarkana, TX (2 units)
Mead Paper - Escanaba, MI
Mead Paper - Chillicothe, OH
Stone Container - Portage-du-Fort, PQ
Westvaco Corporation - Silsbee, TX
Weyerhaeuser Company - Campti, LA