

PULP AND PAPER



BENEFITS

- ▶ In excess of 80,000 MMBtu/year waste heat recovered
- ▶ \$1,000,000 in fuel savings per year
- ▶ Greenhouse Gas Reductions (CO₂) of 8,350 tons/year
- ▶ Reduction in Nitrogen Oxides (NO_x) by 16 tons/year
- ▶ Elimination of 92 tons/year of Sulphur Dioxide (SO₂)

FLU-ACE® Condensing Heat Recovery from Paper Dryer Exhausts

Thermal Energy International (TEI) implemented a FLU-ACE® Condensing Heat Recovery System on the paper machine dryer section exhaust at the mill. It is a second stage of heat recovery – the first stage is an air to air preheater. The system was designed to recover up to 20 MMBtu/h of waste heat energy that would otherwise be exhausted to the atmosphere. The “free energy” from the exhaust is used to heat and preheat boiler plant make up, deckle showers, chemistry water, vacuum sump and outside air make-up

The project delivered significant annual energy cost savings of over \$1,000,000 and a fuel use reduction of over 20%. In addition it provided the benefits of water conservation (condensed water is returned to the process) and end of pipe particulate matter control.

The project was implemented on a turn-key basis and was completed on budget and on schedule, with the system going into commercial operation in 2006.

Recognized by Pulp and Paper Technical Association of Canada (PAPTAC) in 2006, the project was presented with their Energy Conservation Award as one of the best examples of energy conservation opportunities applied in Canada.

“Recovering every bit of waste heat was not important years ago, it is now ...”

- President and COO