

# BOILER WASTE HEAT RECOVERY



*Steam Boiler System*

**Problem:** An existing facility was exhausting waste heat from two process steam boilers. Each of the two flue stacks released approximately 826,000 BTUH which resulted in unnecessary additional expense.

**Solution:** Project Technologies & Services (PTS) installed two direct contact economizers on the flue stacks of the existing boilers. The waste heat was transferred to a closed loop water system, preheating 50 gallons per minute of water from 55°F to 110°F. Preheating the water reduced the energy required for the cooking process, lowering the production costs.

PTS conducted the installation during normal hours of operation and minimized the disruption of production. However, the project required an extended weekend outage. PTS worked with the customer to plan the ideal time for this outage.

As a result of the project, the customer will save approximately \$80,000/year, and the project had a payback period of only 1 year and 9 months.