



### **BENEFITS**

- ▶ 9,67 million kW of waste heat recovered
- ▶ 10% reduction in gas consumption in fuel savings annually
- ▶ £310,000 in fuel savings annually
- ▶ Heating of process water and boiler make up water
- ▶ Over 1800 tonnes/year of greenhouse gas reduction

## **FLU-ACE® Boiler Exhaust Heat Recovery Tower**

Thermal Energy International (TEI) implemented a FLU-ACE® Condensing Heat Recovery System on the plant's boiler exhaust. The system was designed to recover up to 1465 kW of waste heat energy that would otherwise be exhausted to the atmosphere. The recovered heat, in the form of water at 60°C, is used to heat and preheat:

- Boiler plant make up water
- Plant hot water (CIP & wash water).

The project delivers significant annual energy cost savings of over £310,000 and a fuel use reduction of up to 25%. In addition it provides the benefits of:

- Increase of the overall efficiency of the boilers to 96%;
- Proportional reduction (over 10%) in all combustion related emissions and greenhouse gases;
- Reduction of particulate and acid gas emissions; and
- Recovery of 80 to 90% of the waste heat.

Implemented on a turn-key basis, the project was completed on budget and on schedule, with a verified payback under 2 years.



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