



## Pulp & Paper



### **BENEFITS**

- ▶ £314,000 in energy saving
- ▶ Short payback of under 1 year
- ▶ 10 year no fail guarantee
- ▶ Reliable with no moving parts
- ▶ No requirement for stocking spare parts
- ▶ Minimized maintenance costs

### **GEM® Trap Retrofit for Paper Mill**

Energy savings of over £314,000 have been made by this paper mill. The paper mill is owned and operated by one of the world's largest manufacturers of containerboard, corrugated and solid board containers, folding cartons, and paper bags. An ISO 14001 certified organization, the paper mill constantly works to minimize its impact on the environment by reducing energy consumption.

As part of a steam optimization exercise, the paper mill's Project Manager contacted Thermal Energy International (TEI) to conduct a bucket test to demonstrate GEM® Trap's superior efficiency over existing mechanical traps on site. Subsequent to the bucket test, TEI commenced a site survey at the paper mill's three major areas: the coater machine, two paper machines, as well as the steam distribution and heater of the third paper making machine.

Following the installation of the GEM® Traps, the steam consumption was measured. An equivalent of over £105,000 in energy savings per annum was observed. Given the original investment of just above £21,000, and based upon actual savings achieved following the trap installation, it is calculated that the payback period took well under 1 year.

Furthermore, mechanical traps in two other areas of the site which house the containerboard machines were also fitted with GEM® Traps. Again, the consumption of steam was measured subsequent to the installation and was found that the reduction in steam usage equated to over £210,000 a year, yielding a payback of less than 5 months.

Over and above the substantial energy savings and short payback period, the reliability of the GEM® Traps is unrivaled. ***"Although we have now closed the Coated Paper facility, our packaging operations have been unaffected. The GEM® Traps installed in these areas of the site have not needed replacing and continue to provide us with energy savings,"*** said the Project Manager.

