

Commercial Laundry



Laundry



United Kingdom



GEM Steam Traps

Overview

This customer is saving substantially in energy costs and maintenance following the replacement of its mechanical steam traps with the GEM venturi orifice steam traps. The 100 GEM Traps installed throughout the laundry provided the customer with a payback in less than 12 months on energy savings alone.

Impact

- ▶ \$58,000/year in energy savings
- ▶ \$8290/year in maintenance savings
- ▶ Short payback of less than 12 months
- ▶ Elimination of inconvenient maintenance schedules
- ▶ Solution to trap failure in Tunnel Washing Machines



Solution

Steam is used extensively throughout the laundry in the operation of a wide range of equipment including tunnel washing machines, tumble dryers and steam presses. Prior to the installation of the GEM Traps, the customer found that maintenance and replacement of failed traps was costing around \$8,500 a year.

In particular it was found that the mechanical traps on the Tunnel Washing Machines, a steam heated rotating cylindrical washing machine, malfunctioned as the machine went through its 360° cycle passing live steam. Having struggled to find a steam trap that would work successfully with the Tunnel Washing Machines, the Chief Engineer looked around for a solution. The answer came with the GEM venturi orifice steam trap which has no moving parts to be affected by gravity.

Following the success of the GEM Traps with the Tunnel Washing Machines, the Chief Engineer organised Thermal Energy International to carry out a full survey of the laundry.

Now with the GEM Traps installed throughout the laundry, the customer is saving around \$58,000 in energy costs alone, and has a permanent low-maintenance solution that is guaranteed not to fail for 10 years.

“As the laundry is in operation from 6:00 am until 10:00 pm, five days a week, it meant that the maintenance and replacement of traps had to be undertaken on weekends, which was inconvenient. Since we installed GEM Traps throughout the site, not one has failed, and maintenance and replacement costs are a thing of the past.” said the customer’s Chief Engineer.



- ▶ GEM™ steam traps are the most efficient and reliable steam traps on the market
- ▶ A permanent, low maintenance steam trapping solution With no moving parts to break or fail
- ▶ Implementation of the technology typically reduces steam costs by 10% to 20%
- ▶ Average payback ranges from one to two years