HOSPITAL

BENEFITS

- £11,800 a year in energy savings
- Rapid payback of less than 2 years
- Compliance with Carbon Management Plan
- Reduction in water vapour losses
- Improved volume of condensate return

GEM® Traps Retrofitted to Hospital Laundry

The Hospital, part of NHS Trust, is expected to save over £11,800 per year in energy expenditures following the installation of GEM Traps.

The hospital's laundry was experiencing poor condensate return as well as water vapour losses through evaporation from the hot well. Thermal Energy International carried out a survey of the laundry's steam traps using an infrared thermometer. Results revealed that over 26% of the mechanical traps had failed partially open, causing problems within the system. Based on the survey findings, the hospital would be able to save over £11,800 each year in energy and maintenance costs alone, providing a short-term payback of less than 2 years.

The GEM Traps are also helping the hospital to reduce its carbon emissions in line with the Trust's Carbon Management Plan which commits the Trust to reducing its CO_2 emissions by 16% between 2010 and 2013 and to making energy savings of £0.71 million over the same three-year period. Under the Government's CRC Carbon Reduction Scheme, large energy users such as hospitals will start to buy allowances for each tonne of carbon dioxide at a rate of £10 per tonne per annum. As a consequence, participants successful in reducing energy consumption will not only save money on energy bills, they will also need to purchase fewer allowances.

"We considered chemical treatment, but decided to also explore the GEM Traps as we were also finding that a significant proportion of the laundry's steam traps were failing. As the GEM Traps come with a 10-year guarantee we thought this might prove the solution. Over a ten year period the hospital has the potential to save £118,000 on gas alone based on present costs."

- Head of Engineering and Estates Standards