



Pharmaceuticals



BENEFITS

- ▶ 12-month payback on energy saving
- ▶ Over \$40,000 in steam savings each year
- ▶ Reduced scheduled and unscheduled maintenance
- ▶ Faster start-up time
- ▶ Decreased CO₂ emissions by 131 tons

GEM® Trap Retrofit for Pharmaceutical Facility

A global leader in technologies related to the blood and circulatory systems, the company has revealed that it has achieved a 12-month payback on Thermal Energy International's GEM Traps installed at its manufacturing facility in Italy. A total of 92 steam traps have been installed throughout the process plant, which has eliminated the problems of mechanical steam trap failure and high maintenance costs.

The facility is the company's most important site in Italy for technology, innovation and development of pharmaceutical products. Thermal Energy International was asked to conduct a survey of its mechanical traps, which were regularly failing open, partly open and closed, necessitating both scheduled and unscheduled maintenance. To corroborate its findings, Thermal Energy International undertook a metered test on a process application and then carried out a positive bucket test.

The report on the 51 steam traps surveyed found that 30% had failed, resulting in an estimated 757 tons of steam being lost each year at a cost of over \$40,000. As a result of the project, the facility would not only be saving energy and maintenance costs, it would also reduce its start-up time and decrease CO₂ emissions by 131 tons.

All mechanical traps installed on industrial steam and some clean steam applications including PSG, distillers, air conditioning units and heat exchangers have since been replaced with appropriately sized GEM Traps. Moreover, the facility plans to install additional GEM Traps as further improvements are made at the manufacturing facility.

