

Steam Traps

Initial washrooms make 10% energy savings with GEM traps

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Initial Washroom Solutions, the UK's leading washroom hygiene service, is fulfilling its environmental pledge of reducing energy usage by installing the award winning Venturi orifice traps from GEM. Trialled at the company's new Reading plant, which has a number of on-site steam meters, Initial Washroom Solutions was able to verify a 10% saving in energy consumption despite there being no failures with the plant's mechanical traps.

Reading is one of three, new processing plants opened by Initial Washroom Solutions as part of a modernisation plan to improve operational efficiency. The new purpose built plants, which serve the dual role of Service Centres and processing plants, contain some of the latest environmentally friendly and energy efficient machinery, making them some of the most modern plants of their kind in the UK.



As the plant was opened 13 months ago, GEM engineers were quite surprised to find that the site's mechanical traps were all still fully operational. However Senior Engineer, Michael Butt, had past experience of the failure rate of mechanical traps and was keen to make energy and maintenance savings. He agreed to monitor the GEM steam traps over an extensive trial period. This was achieved utilising the company's onsite steam meters that are used to measure the 5 tonne boiler and other steam equipment. One meter in particular is used to measure the amount of steam consumed by Initial's eight new, water-efficient Revolution processing machines, which use steam to process an average of 80 to 90 towels per hour.

"The steam metering results were crucial in this exercise and confirmed that we are achieving the predicted 10% savings in gas consumption and are making a 14% reduction in steam", said Michael Butt, Senior Engineer at Initial Washrooms Reading. "These savings will provide us with a total payback within 12 months".

Such has been the success of the GEM traps at Initial Washroom Solution's plant in Reading that the company has now exchanged the mechanical steam traps in its other two new processing plants in Birmingham and Glasgow to GEM.

"We are also aware that because of the GEM's Venturi orifice design we will never experience trap failure and the resultant loss of live steam," continued Michael Butt. "I would have no hesitation in recommending GEM to any other organisation utilising steam as a heat transfer fluid", he concluded.

Instead of utilising a valve mechanism to close off steam, the highly efficient GEM steam traps use the patented Venturi orifice design to effectively drain condensate from the steam system. As the GEM steam traps have no moving parts to wedge open or fail, it provides the ultimate in reliability necessitating only minimal maintenance and requiring no spares, testing or monitoring equipment.

Available in a wide range of sizes for a full cross section of applications, the hardwearing GEM steam traps are manufactured from corrosion resistant stainless steel and are guaranteed for 10 years, obviating the need for repair or replacement. The GEM steam traps provide a fast payback - on some processes within a matter of days - from reduced energy costs and increased equipment reliability due to a reduction in damaging steam within the condensate system. In addition it improves product processing by enhancing the quality of steam which in turn reduces equipment repairs, downtime and replacement costs.

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