



Making a difference



A GEM FOR SAVING ENERGY AND MAINTENANCE

Energy savings of up to 55% are achievable by steam users with Gardner Energy Management's (GEM) Ruby steam trap range. A development of GEM's award winning venturi steam trap, the Ruby has been specifically produced for flange applications.

Instead of utilising a valve mechanism to close off steam for maximum energy and water conservation, the highly efficient GEM Ruby uses the patented venturi orifice design to effectively drain condensate from the steam system.

As the GEM Ruby has 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 five sizes ranging from 15mm to 50mm, the hardwearing GEM Ruby is manufactured from corrosion resistant stainless steel and is guaranteed for 10 years, obviating the need for repair or replacement. The three smaller sized GEM Ruby steam traps are available with optional filter insert. The simple design enables the GEM Ruby to be easily and quickly installed into all flanged applications with operating pressures of up to 100-bar (dependent on flange specification).

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The GEM Trap is: A Millennium Product. Prize winner of the Engineering Council's "Environment Award for Engineers". Winner of the IChemE's Excellence in Safety and Environment Award

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Ruby steam traps without an integral strainer requires a flange strainer to be installed in front of it to facilitate the easy inspection and cleaning of the trap. As the GEM Ruby gives constant rather than intermittent drainage the exchanger output is increased due to thinner condensate film ($C1 > C2$).

The GEM Ruby provides 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 condensate in steam systems. In addition it improves product processing by enhancing the quality of steam and also reducing equipment repairs, downtime and replacement costs.

The rising cost of fuel is coupled with a raft of regulations concerning energy conservation and carbon emissions. Yet it is calculated that British industry wastes an astonishing GBP 3 billion a year in energy costs purely through steam loss caused by mechanical steam traps leaking precious steam when open or backing up condensate. With the GEM Ruby there is no steam loss through a trap, fuel is conserved, reliability improved, downtime reduced and safety increased.

Ends

About GEM

Tim Gardner established Gardner Energy Management Ltd (GEM) in 1995 to manufacture and market the patented GEM Venturi Orifice Steam Trap. The product became immediately successful with orders from BAA's Glasgow Airport and Rosyth Dockyard. The company won the UK Engineering Council's Environmental Award for Engineers in 1998 and the Institution of Chemical Engineers' Best New Product in 1999. Since then the company has grown in size and stature and now has 12 full time employees and a turnover in excess of £1.5 m.

