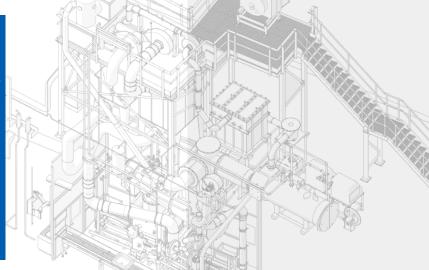


## **Precious Metal Incinerator**

EnerTherm Engineering Ltd have designed a unique batch incinerator for a famous Jewellery watch manufacturer. This bespoke design encompasses a feed in-out system bar scanned for all trays of waste to be incinerated. A dual chamber incineration system in conjunction with sorbent treatment allows minimum emission which complies with strict OPAIR regulation. Bespoke filtration and mixing systems have allowed for a reduction in dust emissions. A complete heat recovery bypass heat exchanger system allows for optimum production of hot water for site during winter summer period. The overall process enables the client to recover the equivalent of £45k of gold monthly.



Working in conjunction with our customer, we have managed the design and execution of a bespoke batch solid waste incinerator for precious metal, recovering the equivalent of £45K gold per month.



The multi batch incinerator has been designed to deal with several types of waste from the customer. A recipe system also supervised by an IR camera handles the various types of waste to ensure complete incineration. The control system reacts specifically to each waste type adjusting sorbent flow rate to ensure complete neutralization of acid.

A large amount of process / CFD simulation had to be carried out through the design phase to check key design parameters would allow for delivering throughput and key emission parameters (residence time of solid particles).

EnerTherm Engineering has also developed a reporting system linked to the customer SAP system, which provides daily/weekly/monthly info required to ensure emissions are within a tolerated range.

EnerTherm Engineering delivered a unique solution to this customer in a dual language environment. Managing both the design and a multiple fleet of subcontractors, whilst meeting customer expectation and budget constraints.

EnerTherm Engineering excels in this environment and has managed to develop over the years some multi-design skills which allow for managing bespoke and elaborate projects.

15 Minute Meeting

ENERTherm

**1**5 min

"EnerTherm Engineering – Thrive To Optimise"









