

CHEMICAL PLANT

United Kingdom



PROJECT BENEFITS

- ▶ Eliminated cost of replacing failed traps
- ▶ Short payback of just 5 months
- ▶ Highly reliable - 10 year no fail guarantee
- ▶ Removed unnecessary parts from the system
- ▶ Significantly lower condensate temperature
- ▶ Improved condensate return volume



GEM™ Steam Traps Retrofitted to Batch Reactor

As part of a steam optimization project on one of its process plants, the specialist chemical manufacturing plant decided to review its condensate trapping system associated with the internal coils of a batch reactor, utilizing 10% of the site's steam demand.

Mechanical Traps Drop the Ball

The company was dissatisfied with the three existing ball float traps which, at £1900 each, were costly to install. The mechanical traps required replacing every two years, and they were prone to corrosion. In addition, without regular routine monitoring, the company was not always able to identify when the traps were faulty.

After a review of the project with Thermal Energy International (TEI), management decided to replace all three traps with GEM Traps. Following the successful commissioning of the reactor, the company decided to replace five ball float traps on a condensate recovery project associated with heater banks on a fluid bed dryer system with GEM Traps.

GEM Success Leads to Trap Conversion

The plant achieved steam savings of 12% from its batch reactor following the installation of GEM Traps. With the success of the initial installation which provided the company with a payback in only five months, the company installed GEM Traps on a condensate recovery project, and is now retrofitting GEM Traps across the entire site.

“Once again, the GEM Traps made a significant contribution to the success of this project. We are now carrying out a series of energy saving projects across the site which will result in us replacing all the inverted bucket traps with the GEM Traps.”

- Senior Process Engineer