



# MEXICHEM FLUOR

## Runcorn, Cheshire



### Benefits

- Eliminated cost of replacing failed traps
- 20 % Steam Savings
- Highly reliable - 10 year no fail guarantee
- Removal of unnecessary parts from system
- Improved condensate return volume

## GEM® Traps Retrofitted Throughout the Site

The company is a leader in mining fluorspar and the manufacturing and supply of fluorine-based products, technologies and services. Its products are used across a number of major industries from car manufacturing, pharmaceuticals and refrigeration. As well as Runcorn, the company has manufacturing plants in Louisiana (USA), Matamoros (Mexico) and Mihara (Japan).

Following a technical appraisal, GEM Traps were selected for trial to establish if a reduction in steam consumption could be made without negative effects on plant performance and final product specification. For the purpose of the trial a small area of the facility was selected where steam was metered in order to measure and quantify potential benefits.

When deciding on the location of the trial, it was noted that there was a large the number of failed traps in a particular area. Of the 39 traps surveyed there, a total of 28 were found to have failed. Eleven traps were observed to have failed open, 6 had failed closed and 11 had failed partially open. It was calculated that these failed traps were costing in excess of £60,000/year in lost steam alone.

During a three-month trial, the performance of the GEM Traps was monitored. The findings clearly demonstrated that a 20% saving in steam had been achieved utilizing GEM Traps which were also found to be efficient in both steady state and variable load conditions. In addition, they drastically reduced the potential heat loss via radiation and convection.

TEI has installed 90 GEM Traps throughout the facility. They have provided with an early payback on energy costs and a significant reduction in carbon dioxide emissions.

**“I decided to investigate the different steam traps available on the market. The trial was so successful that Mexichem Fluor has made GEM its preferred choice of steam trap”.**

- Processing Engineer