



Fuel Systems cut energy bills at resin manufacturer

Cray Valley, a global resin manufacturer, has invested in three Fuel Systems from Maxsys to help cut energy bills generated by its boiler and heat generation plant. Installed in spring 2008 at the company's UK plant in Stallingborough near Grimsby, early calculations indicate an annual saving on fuel consumption of up to 8%, which will provide project payback in just 18 months.

The Challenge

Resins manufactured at the Stallingborough plant of Cray Valley are supplied to a wide range of customers, including paint and varnish companies as well as producers of fibre-glass sanitary ware such as shower trays and baths, along with more specialist customers making a wide variety of products such as marble effect fireplaces.

The 119 employee site is home to a pair of 2.2MW gas-fired boilers that drive separate heat generators. These heat thermal oil that is then pumped and circulated to the reactors used in the resin-making process. There is also a 1.1MW Bradlee steam boiler on site.

"We produce unsaturated polyester resins and coating resins, which all require heating in the manufacturing process," explains the company's Maintenance Manager, Ian Martin. "With the amount of fuel used along with the escalating costs of energy, this recently became an obvious area for us to target as part of our proposed objectives within the remit of ISO 14000."



The Solution

Setting a savings target of between 2 and 3%, Mr Martin was interested in the significant potential of Maxsys Fuel Systems. He comments: "I had no hesitation inviting Maxsys to come in for discussions."

"We fitted Maxsys Fuel Systems to our two gas-fired boilers as well as our steam-raising boiler, so three in total," says Mr Martin. "We agreed a 'proving' method with an independent auditor, ABB, and commenced a monitoring programme based on recording a small number of parameters several times a day over a period of three weeks before installation of the Fuel Systems."

This process was repeated after the units were fitted and the comparative results made more than encouraging reading.

The Outcome

"We've already verified an 8% saving in fuel consumption on the steam boiler alone," says Mr Martin. "As for an overall figure for all three systems combined – I'm being very conservative and estimate a 5% total saving. Based on our gas use for the period May-August 2008, I calculate payback for the project will be around 18 months. As I say, this is very conservative and could, in reality, be even better."

Additionally, Cray Valley hopes to use the systems to help achieve its Climate Change Levy targets so the company could save even more if it receives the full CCL rebate. The project fits well with Cray Valley's Sustainable Development principles.

"I can't praise the success of the project highly enough," says Mr Martin. "The team at Maxsys has been superb throughout – the installation of the three systems was completed in just two days during our Easter shutdown. This was achieved by pre-fabricating the pipe runs off-site beforehand. And now that the results are available, some of our sister sites in Europe are very interested in adopting the same practice."



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