



Maxsys Fuel System helps Scott Bader let off steam with 5.7% Gas Savings

Resin and polymer manufacturer Scott Bader says it has been a socially responsible corporation long before the term was popularised. To this end the company has ambitious energy consumption reduction targets. Helping the company to meet these is the Maxsys Fuel System, which is delivering impressive gas savings in excess of 5.7% on Scott Bader's steam raising boiler plant – offering ROI of just 14 months.

Employing 280 people across its 45 acre site at Wollaston, Scott Bader has grown considerably from its origins in 1921 as an agent for a Swiss celluloid manufacturer. Today it produces from five manufacturing sites across the world and its products can be found in every home in the UK.

The Challenge

In the UK, Scott Bader has signed up to the Chemical Industries' sector agreement (part of an umbrella agreement with the Chemical Industries Association) for the Climate Change Levy (CCL). This aims to reduce the amount of carbon dioxide emitted to the atmosphere through energy wastage and energy usage.

Figures have been submitted to the Department of the Environment estimating energy usage up to and including 2010, and Scott Bader has committed to reducing energy consumption per tonne of product produced by 13.4% over a 10 year period from 2000.



"To reduce consumption per tonne of product produced by 13.4% is a tough target," says the company's Facilities Manager Bob Savage. "While we were on target initially, the expansion set us back and we needed to consider methods of getting the company back on track. Over the next couple of years we implemented various improvements to boiler efficiency involving better control and plant process changes, but further gains were needed."

The Solution

"Maxsys assured us of a saving of at least 5% in energy consumption, with the option of having that independently verified," says Mr Savage. "This is despite the fact that our boiler was relatively new (1999). A 5% saving was obviously very attractive as it would be justifiable over an 18 month period in terms of payback."

Maxsys was invited to Scott Bader for further discussions, from which the company decided to work in partnership with Maxsys and commission a project to install the Fuel System to the company's 5000kg Robey Yorkshireman steam raising boiler with Saacke combustion system.

Maxsys arranged for ABB (world leaders in energy management) to produce a protocol that described the proposed method of measurement to quantify any change in the performance of the Scott Bader plant after the Fuel System was installed. ABB would then compare the performance of the plant pre and post installation and produce a concise, independent report documenting and quantifying the change in performance.

The Robey boiler at Scott Bader's Wollaston site is in use 24/5 with reduced loading during weekends. It was agreed that data would be collected three times every 24 hours with two readings per day at the weekends, over a 30-day period starting in October 2006. Following the completion of pre-data collection, Maxsys installed the Fuel System on 1st December 2006. ABB analysis of post data for January and February 2007 identified average gas consumption was 5.73% lower following installation of the Maxsys Fuel System.



The Outcome

"It has been calculated that the Maxsys Fuel System will save us 8,413 ft³ of gas per day," says Mr Savage. "This is better than initially thought and has helped us reduce estimated ROI from 18 months to 14 months."

The Maxsys Fuel System is helping the company fulfil the objectives listed as part of Scott Bader's UK Environmental Management Programme, which is based on four factors: achievement of the Environmental Authorisations and Licences; BS EN ISO 14001; the Climate Change Levy; and MACC2.

Scott Bader's Environmental Management Programme gained accreditation to BS EN ISO 14001 in January 2001. This recognises, understands and addresses all significant environmental impacts of the company's activities and products. Through the implementation of ISO 14001, the company has made a clear statement that environmental management is an integral part of their company agenda.

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