

Commitment to energy efficiency pays off for UK's largest manufacturer of vacuum cleaners.

The value of energy surveys was underlined recently at Numatic International following the visit of a consultant from the South West and Action Energy Scheme.



The findings of the survey have resulted in the fitment of six Enigin iMEC QFE soft starters to moulding machines at Numatic's plant. These units are delivering savings of up to £351 per annum, in the best case, on the operation of the moulding machines, a figure that ensures payback for the QFE unit of just one year. Numatic International is the UK's largest manufacturer of vacuum cleaners, floor polishing machines and janitorial equipment. Located in Chard in the South West of England, the company employs 650 people, operates 24 hours a day and produces over 3,000 products per day.

As part of its ongoing drive to efficiency, Numatic recently invited a consultant from the Government Office for the South West and Action Energy Scheme to conduct an energy audit at its manufacturing plant. One of the focus areas of the audit was the large kW motors used on the company's plastic moulding machines. The motors, ranging from 30kW to 75kW, were all controlled by Star/Delta

starters, a popular arrangement for AC motors, but one which does not provide any opportunities for energy saving during motor running.

Following the survey a recommendation was made to run a test programme on the moulding machine motors to determine the savings in running costs that could be achieved using soft starters. The tests compared the KWH figure of the motor with the soft starters in bypass and also (in Fairford's case) in standard energy optimising mode.

The results were positive in every case. The average saving across the six motors was £165 per annum: the largest saving being £351 on a 37kW motor and the lowest £92-40 on a 55kW machine. These figures were arrived at using data from Numatic regarding annual hours run of the machines and the unit cost of electricity (0.048p). Based upon these projected savings, six of Enigin's iMEC energy optimising soft starters were ordered by Numatic and are now in full operation at the plant.

"The positive outcome of our energy analysis and test procedure highlights the latent savings to be had in any manufacturing organisation," says Andrew Smith of Numatic International.

"As a company we are accredited to ISO:14001, for our Environmental Management Systems. This underlines our commitment to achieving energy efficiency, both to fulfil our environmental obligations and to help offset the consistent rise in the cost of energy."