

Glaxo-Wellcome halve boiler energy bills with ABB drives



Over £30,000 per year is being saved at Glaxo-Wellcome in Ulverston by ABB Industrial Systems' AC drives on a steam boiler.

Electricity consumed by a 200 kW and a 150 kW fan on the boiler has been halved since the ABB drives were supplied and commissioned by Slater Drive Systems, the local ABB drives system house. The drives control the speed of the supply and extract fans to suit the boiler load enabling Glaxo-Wellcome to obtain Cube Law savings (when flow is halved, power consumption reduces by eight).

Previously, the fan motors were running at full speed with flow control by dampers, but as the 80 tonne/hour boiler ran at low loads for long

periods, Tony Wallace, the Utilities Development Manager at Ulverston, believed that energy could be saved with variable speed control.

"Our initial calculations showed that we could considerably reduce the electricity consumption of the two fans with variable speed drives," comments Wallace. "After one year of using the ABB drives, the savings exceeded our expectations and gave us a payback of just 16 months."

Additional benefits brought by the drives include improved process control and a dramatic reduction in noise. "With the new system we have noticed much faster responses to boiler load changes and the noise level in the area has reduced from 89 dba to 77 dba," adds Wallace.

ABB Drives are saving Glaxo-Wellcome £30,000 per year at their Ulverston plant.



The ACS 600 is based on ABB's revolutionary DTC drive technology.

The improved motor efficiency produced by the drive has eliminated the drain that the high starting current of the 200 kW motors put on the electrical system, which caused lights to flicker and lower power equipment to cut out.

Wallace chose ABB drives because past experience with similar units had been good and he needed a reliable system as the boiler must operate constantly to supply steam to the entire factory. Slater Drive Systems provide local technical support and training.

ABB's drives have operated reliably since installation and four more have been installed on cooling tower fans with expected savings of £15,000 per year each.

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