



Hosokawa Micron can help you cut Energy Costs making you Green and putting you in the Black

A new Performance Improvement Service offered to processors by Hosokawa Micron Ltd in conjunction with Knowledge Process Solutions Ltd (KPS) can not only improve your green credentials but save you money straight from the bottom line. If your business is wasting energy it may be causing avoidable pollution leading to climate change as well as depleting the world's fossil fuel reserves. But wasting energy also reduces your profitability. Most companies can save 10% of energy costs simply by good housekeeping but to save more than that energy management needs to be an ongoing process. Never has the maxim, 'you can't manage what you don't measure' had more poignancy than in today's economic climate.

There are many examples of energy guzzling equipment within any processing plant, take for example dryers, fans, pumps, boilers, refrigeration equipment, air compressors, mixers and centrifuges but there is scope for energy savings. However because of the complexity of the process, potential improvements may not be recognised or, if identified, there may be fears of adverse affects such as inconsistent product quality or increased maintenance, arising from any operational changes. With the advent of SCADA and PLC systems a whole raft of operational data is available but up until now the problem has been in analysing that data.

Number Crunching

A range of computational techniques are now available with the ability to identify hidden patterns, turning information overload into useful knowledge to recognise possible process improvements and potential energy savings.

Hosokawa Micron Ltd, a leader in powder and particle technology in partnership with KPS, a leading supplier of data mining and rule based process modelling software to the process industries, have developed a number of intelligent software technologies to not only do the number crunching but which also use their processing expertise to good use by understanding and applying any performance improvement actions highlighted.

Energy Monitoring and Targeting

Energy Monitoring and Targeting is a standard approach to energy management based on information available and is based on defining energy accountable areas and monitoring those areas. The new Performance Improvement Service from Hosokawa Micron and KPS means you do not need to buy expensive monitoring systems and software as the service includes remote process monitoring and analysis of existing data sources.

Benchmarking

Where manufacturers operate the same processes at a number of different locations or on different production lines the analysis can be used to compare the performance of these processes and identify areas of overconsumption of raw materials or energy.

Case Study

Following continuous crystallisation of potassium chloride a drying process utilising oil fired rotary dryers was operated by a large mineral refinery to produce a dry powder for use as a fertilizer. Consuming significant amounts of fuel the rotary dryers were identified as a potential source for cumulative energy savings.

The dryer is capable of handling 60 tonnes/h of wet product (6% by weight moisture) and its duty is to dry the product by vaporising the water content.

Over 900 hours of operational data was collected and analysed. As a result of these results actions were taken to significantly improve the dryer temperature control. This has realised a fuel cost saving of £47,000 a year.

With easy access to understandable information from your plant and the benefit of practical processing technology expertise the Hosokawa Micron Performance Improvement Service, really can provide you with energy saving that impact on your profits and improve your green credentials at the same time.