water energy & environment A responsible use of power

Saving energy for lighting is an easy target for energy managers. Fluoresave's products allow savings to be made without even having the effort of installing new lamps of controls. Relying on reducing the voltage once the lights are fully in operation it leads to large savings and it is now available for discharge lighting

The original Fluoresave product was aimed at fluorescent lighting and led to energy savings of around 30%. Maximum voltage is only required for the ignition of fluorescent lighting. Once it is running there is no need to keep the voltage at such a high level; yet lighting systems do just that. The Fluoresave unit reduces the voltage after ignition allowing large power consumption savings.

The model for conventional magnetic ballast fluorescent lighting delivers full power to the lighting circuit for ignition and after 2-4 minutes of monitoring the circuit when the tubes have struck and settled down, Fluoresave switches to Energy Saving Mode. This means it reduces the voltage by 15% and in doing so the current comes down similarly thus giving savings of approximately 30% and often more.

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The new D discharge model works in the same way, but because discharge lighting has a longer warm-up period on switch on, fluoresave delivers full power for 8 minutes before switching over to Energy Saving Mode to cater for that requirement. Furthermore, the new model comes factory set to reduce the voltage by 15% but has the added facility to adjust this to a 10% voltage reduction which can often give better performance particularly when lamps are in the later stages of their life. Then, when re-lamping the user has the opportunity to adjust the fluoresave unit back to 15% in order to benefit from greater savings. The D model operates with sodium, mercury, and metal halide in 12A, 20A and 32A capacity.

Saving in the order of over 20% can be expected with discharge type lighting. This adds up to a significant amount of electricity as often discharge lighting uses a high wattage lamp, 250 and 400 Watt are commonly used, therefore the savings made in Kwh and thus the electricity bill, are substantial.

An example of the size of savings that can be achieved with the model D is given by Bayer at its UK head office in Newbury. Bayer's energy consultants installed and independently recorded the results achieved with fluoresave. After comprehensive logging carried out by Bayer's consultants, the results showed a 42.99% saving on fluorescent lights used in the company's car park. This has a 9 month payback and saving of 25 Tonnes per annum of CO_2. Another example is a major national warehousing group which has an independent report on the Fluoresave products installed. An average saving of 25% was obtained for warehouse lit with sodium lighting and 40% savings on those lit with conventional fluorescent.

With Fluoresave there is now an alternative to the higher cost associated with installing and running high frequency fluorescent lighting. Fluoresave delivers savings of around 30+% without the need for modification to the light fittings or any disruption to the working environment by merely wiring the fluoresave unit into the lighting circuit.

Because the Fluoresave devices reduce the level of power used by the lighting circuits it reduces the running temperature of the lamps. This extends the life of fluorescent tubes and lamps by some 25%; reducing the costs of maintenance and disposal, a further environmental benefit.

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