

## ENER·G EFFICIENCY reverses the Trend in energy wastage for Lear

**ENER·G Efficiency has dramatically cut energy consumption at the Halewood plant of global automotive products manufacturer, Lear Corporation, since replacing an ineffective Trend control system with its own state of the art solution.**

The plant manufactures and supplies car seats and a range of other interior products for leading automotive companies, such as, Jaguar at its nearby plant where the Jaguar XType and other vehicles are built.

Constructed in 2001, this modern factory is warmed by two gas fired air handling units whilst heating for the office space, located within the same building, is provided by low temperature hot water boilers and a single air handling unit. A number of extract ventilation systems also feature throughout the factory.

The building was already equipped with a Trend HVAC control system, which, in theory, should have provided energy efficient control and optimised performance of all these services. In practice, the result was quite different.

'Our fundamental issue with the Trend system was that it was being constantly overridden because no-one really understood how it worked' says Lear's HSE Co-ordinator, Gemma Folan. 'This totally undermined its effectiveness. And, because there was no ongoing maintenance of the control system, whenever our requirements on site changed, it was impossible for the system to respond to our needs. We knew that we were wasting energy and felt that this was an overhead we could, and must, reduce, especially in view of the Climate Change Levy'.



**FUEL BILL SAVINGS  
OF OVER 20%  
BY PROVIDING AN  
EASIER TO OPERATE  
& MAINTAIN ENERGY  
CONTROL SYSTEM  
WHICH IS FAR  
BETTER ATTUNED  
TO THE COMPANY'S  
REQUIREMENTS**



A key attraction for Lear in talking to ENER-G Efficiency was the company's energy saving guarantee. On every project, ENER-G Efficiency guarantees a level of annual energy savings before carrying out installation of the control system at their own expense. The customer simply pays a monthly direct debit, effectively to hire the control system. Lear Corporation simply pays for the ENER-G Efficiency control system out of the fuel savings they gain, knowing that if they are dissatisfied with its performance, they can always cancel the agreement and ask for the control system to be removed.

The new ENER-G Efficiency control system has integrated control of the factory's boilers, air handling units and extract ventilation systems. Door curtain heaters in the production area and the monitoring of three roller shutter doors are also linked into the system because of the effect their use has on factory temperature and energy consumption. This integrated control ensures that comfort levels are effectively and efficiently maintained throughout, with temperatures for the office areas held within a range of 19 to 21°C, and at 16°C on the shop floor.

At the same time, fuel consumption is minimised because the control system is now properly utilised and maintained. Central monitoring, supervision and maintenance are

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carried out from a PC at the factory. This has eliminated the need for any local manipulation and overriding of controls, or for any unnecessary and ineffective re-programming. The PC gives Lear's site engineering team a graphical overview of the HVAC equipment under control at the factory, allowing any time and temperature adjustments to be made quickly and easily eg to account for changing shift patterns, plant shutdown or holiday periods.

Using a remote connection to the control system, ENER-G Efficiency is able to monitor system performance effectively from its Manchester Head Office and provide degree day reports, technical and maintenance support to the client on a regular basis.

ENER-G Group is a leading distributed power generation and energy management company, providing clean energy initiatives with visible benefits to the environment.

As well as ENER-G Efficiency, the group's business activities include small-scale combined heat & power, renewable power generation from landfill gas, and, energy from waste.

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