

INDUSTRY: Electricity Generation Client
Energy Management
Product: EPower controller

inven'sys
Eurotherm



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Intelligent Control—inven'sys Eurotherm EPower controller saves energy to generate energy.

Efficiency in action.

In today's economy, energy efficiency—or, more accurately, the lack of it—is a hotly debated topic that incites passions in companies and consumers alike. Despite this high profile, one point that often evades the spotlight is the amount of energy required actually to produce the world's electricity supplies.

Those who generate the power, however, are acutely aware. They know that to control costs and preserve the quality and value of their product, the processes for generating and distributing energy must be as efficient and streamlined as possible.

To improve the efficiency and profitability of its operation, one major European electricity provider, our client deployed a solution centred on our Eurotherm proven EPower

controller technology.

The EPower controller was installed on a heat-treatment furnace site.

In this application, EPower manages the heating elements and regulates power input across the combustion process, combining improved communications and data accuracy with real-time networking and load analysis.

The EPower controller sends live furnace load and network data directly to the control room, enabling operators to modify their process strategy immediately in accordance with the incoming data feed.

Changes made to the control type, firing mode and load configuration all facilitate improved process efficiency.

Goal

- Improve energy efficiency during electricity generation
- Reduce costs

Challenge

- Controlling power usage across the whole process
- Complying with strict emissions tolerance legislation to meet European efficiency targets for 2020
- Reduction in greenhouse gasses by 20%
- Increase in usable energy efficiency by 20%

Solution

- EPower controller installed on heat treatment furnace
- Using Predictive Load Management to regulate power input
- The client's French sales force (60 engineers) will advise all customers that

the Eurotherm EPower Controller is now their Fully Endorsed Preferred Solution

Customer Benefits

- EPower meets industrial demands for energy efficiency and can reduce energy bills by 9%
- Through sophisticated sharing and shedding techniques, the EPower controller's PLM capability reduced facility-wide energy costs by providing more efficient distribution across a variety of loads and conditions.



- By preventing overshoot of nominal power, EPower enables them to stay within their contract limits. Additionally, the customer is avoiding tariffs being imposed if stringent government emissions tolerance requirements are not met consistently. The solution enables accurate record keeping that provides proof of the provider's compliance.
- The EPower controller's ability to continually and accurately predict, monitor and adjust to demand is creating more efficient energy production and distribution for the customer.

Company executives estimate that the solution will reduce energy costs by improving overall process efficiency by as much as 10%. And because no electrical parts were ever exposed, the configuration also offered a secondary safety benefit, especially to untrained personnel.

A Fusion of 40 years of technological development

- Simple thyristor load control matures to sophisticated EPower™ energy controller
- Reduces end user cost of energy with zero quality penalty
- Multi EPower systems provide reductions in CO2 emissions

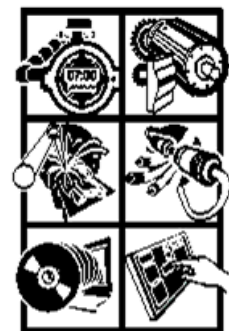
Award Winning

Engineers' Choice Award

from control engineering magazine.

Award for Innovation

from The Franco British Business Awards sponsored by Barclays bank, leading French business newspaper Les Echos, UK Trade & Investment and VisitLondon.



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Operations Management