



## Summary



<b>Industry:</b>	Petrochemical
<b>Application:</b>	Pump Drive Motor
<b>Actual Saving:</b>	£2,239 per annum
<b>Payback Period:</b>	N/A



## IE3 motors reduce energy costs and Co2

ERIKS know-how provides detailed calculations of the savings that can be achieved when investing in electric motors

### ISSUE

A chemical production company in East Yorkshire identified the need to reduce their energy usage and resultant Co2 consumption.

Electric motors were identified as a significant user of energy onsite and the customer engaged ERIKS' assistance in identifying areas that energy consumption could be reduced.

### SOLUTION

In conjunction with the customer, ERIKS identified an existing 90kW electric motor used to drive a large water pump. Following investigation it was discovered that the motor was around 20 years old and had been repaired at least twice.

Based on the annual operating hours, ERIKS were able to provide robust data giving details of the electricity consumed by the existing motor and forecasting the usage of the current IE2 and IE3 alternatives.

Using this information, based on the Total Cost of Ownership, a decision was made to purchase a WEG IE3 motor. The efficiency savings offered will achieve a payback period of just under two years.

Using a five year ownership period the operating cost for the old motor was around £267,900; the new WEG IE3 motor is forecast to be in the region of £260,776. The saving achieved also translates to 71 Tonnes of Co2.

### OTHER BENEFITS

- No re-engineering costs as frame size remained the same
- Robust construction suitable for all applications

### FURTHER COMMENTS...

The motor is now installed, performing to the expected efficiency level and providing the annual cost savings as calculated. Using these calculations it is expected that the payback period for this project will be in the region of two years.

### MORE INFORMATION

#### ERIKS Industrial Services

Amber Way, Halesowen,  
West Midlands B62 8WG

Tel: 0845 006 6000

Web: [www.eriks.co.uk](http://www.eriks.co.uk)