



Think Energy,
Let's Save It Together.

W: www.2ea.co.uk – Phone: 01293 521 350 – E: info@2ea.co.uk

Energy Savings Sheet Motors

2EA have produced this sheet to identify areas of potential energy savings. It consists of notes and checkpoints that can be used by managers to help reduce overall energy consumption.

Notes

The low cost of buying a motor can be deceptive. The electricity bill for a motor for just one month can be more than its purchase price. Consequently, it is important to carefully consider the options when replacing motors or installing new equipment.

Higher efficiency motors are now available at little or no cost premium compared with standard motors.

Just concentrating on the drive, itself, and forgetting the system which the drive is powering, can mean that significant low cost energy saving opportunities are missed. Critically examine the efficiency of the system being driven and reduce the load on the motor where possible.

In pump and fan applications, even a small reduction in speed using a Variable Speed Drive (VSD) can produce substantial savings. Also, speed control is a much more energy efficient method of regulating flow than throttles, dampers or re-circulation systems.

Checkpoints

Is the drive system still doing a useful job?

- Changing requirements may have eliminated the need for equipment that is still left running.

Is the motor running unnecessarily?

- The simplest way of reducing energy consumption is to switch off the motor when it is not needed. Possible techniques include manual switching off, interlocking, time switches and load sensing.

Have you specified Higher Efficiency Motors (HEMs)?

- Minimise motor losses by always specifying HEMs where feasible.

Is all equipment maintained properly? Have you given proper care and attention to the repair process?

- Otherwise this may result in a significant reduction in efficiency.

Will a change of pulley size make a difference?

- A low-cost method of saving energy by reducing speed is to change pulley sizes on belt-driven systems



Low
Carbon
Consultant



Low
Carbon Energy
Assessor