

# BMW gains 78% reduction in energy costs with 6 month payback

*A massive saving in electricity costs is being achieved at the vehicle pre-treatment plant in the BMW Mini factory in Oxford, following the installation of Comp-AC drives from ABB.*

- 78% reduction in energy costs
- Payback in 6 months
- £24,000 in electricity savings
- Increased flexibility



*ABB drives installed by ABB Drives Alliance partner MKE Drive Systems at BMW Group Plant Oxford are saving the company £24,000 a year in electricity costs*

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## Problem

BMW, at its manufacturing plant in Cowley, Oxford, produces around 100,000 Minis a year from its workshops, paintshops and assembly lines. It is the only place in the world where Minis are currently being produced.

In order to improve quality and energy efficiency at the factory, the company decided to look at the energy consumption of its pumps on the pre-treatment plant

**Equipment:** Twelve Comp-AC drives

**Savings p.a:** £24,000

**Payback:** 6 months

## Solution

An energy audit of the Mini pre-treatment plant, by ABB Drives Alliance partner MKE Drive Systems, revealed that the implementation of variable speed drives would deliver considerable energy savings.

Twelve Comp-AC drives ranging from 11 to 37 kW from ABB were installed. Some of the pumps on the line showed dramatic savings once properly speed controlled by the variable speed drives. The installation of an ABB Comp-AC drive to one pump resulted in a 78% reduction in power from 27 kW to 6 kW.



Mini production, base coat application, Oxford Plant

**Benefits**

Steve Edmunds, Maintenance Shift Manager for BMW Group Plant Oxford commented: "The main benefit we get is the flexibility to increase and decrease speed at will, compared to the previous method based on adjusting the pump valves. We have now found the optimum speed for the pumps and are saving about 480,000 kWhrs a year on this facility. We have standardised on ABB motors throughout the plant, so it was natural to opt for ABB when looking for a variable speed drive for the pumps on the pre-treatment plant."

The cost savings were immediate, BMW Group Plant Oxford is now saving £24,000 worth of electricity costs per year, with the extra benefit of a payback period of only 6 months, since installing the new ABB drives.

Variable speed drives achieve these energy savings by driving the motor at the speed needed by the process. This contrasts with the wasteful practice of running the motor at full speed and then choking off the output, air or water in the case of fans and pumps, with some kind of mechanical device, such as a baffle or valve.



To find out more about ABB Drives Alliance, visit: [www.abbd rivesalliance.com](http://www.abbd rivesalliance.com)

For further information on how an energy survey can save you money, call us FREE on **0800 783 7491**, or fax back the coupon below. Alternatively, you can send an email to [enquiries@gb.abb.com](mailto:enquiries@gb.abb.com)

# FAXBACK

- Please send me more information about how I can save energy at my plant
- I would like an ABB representative to contact me to discuss energy savings

Name Job title

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Company

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Address

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Postcode

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Tel Fax Email

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Your details will be held on a database and we may send information later about special offers and other products of likely interest to you. If you do not want to benefit from this service, please tick here:

Please fax your form to **020 8667 9426**; or mail to:

ABB, c/o Mill House, Wandle Road, Beddington, Croydon, Surrey CR0 4SD

