

BPI Films achieves 66% energy savings

A massive saving in energy costs is being achieved by a Kent based manufacturer of plastic film, following the installation of ACS 600 drives from ABB

- 66% reduction in energy
- Improved reliability
- Less downtime

Problem

BPI Films of Sevenoaks in Kent produces around 13,000 tons of plastic film a year for customers in the food and medical packaging industries who laminate it to other substrates.

As part of a continuous programme to improve quality and energy efficiency at the plant, the company decided to look at the energy consumption of its slitter-rewinder machine, operated with the use of old hydraulic gears.

The hydraulic gears were proving to be inefficient and unreliable and were subject to breakdown and constant maintenance, wasting energy and money. The hydraulic system also suffered from oil leaks, which constantly needed attention, and costs were rising.

The slitter-rewinder machine, used to rewind film produced by other machines, was fitted with ABB motors but without encoders or drives.

Solution

An ABB energy audit revealed that replacing the hydraulics with a variable speed drive on the slitter-winder machine would deliver large energy savings. The subsequent installation of two ACS 600 drives from ABB resulted in a 66 percent reduction in energy consumption.

One is used as the main drive of the machine, regulating the speed of the machine by driving a rubber covered roller, while the other drives the winder core shaft.

Using ABB's winder software, the main drive receives signals from the winding machine, processes the input and produces the desired motor speed and torque. This maintains the correct tension in the material, taking account of the changing diameter of the reel.



BPI Films is saving 66% costs on a slitter-rewinder machine following the installation of ABB variable speed drives

Equipment: Two ACS 600 drives



The ABB ACS 600 drives have reduced the demand of the principal motor

Benefits

The main drive has reduced the demand of the principal motor from 22A per phase to 7A per phase, a saving of 66%. Even with the winder core shaft motor being driven, used to give extra torque when

winding sticky materials, the overall saving is 33%.

The ACS 600 drives used on this application feature ABB's Direct Torque Control (DTC), which overcomes the limitations other AC drive technologies have in providing accurate torque across the speed range.



To find out more about ABB's energy saving plan, visit: www.abb.co.uk/energy

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**

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
<hr/>		
Company		
<hr/>		
Address		Postcode
<hr/>		<hr/>
Tel	Fax	Email
<hr/>	<hr/>	<hr/>

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

