

CASE STUDY

When Energy Efficiency is Paramount

The Challenge

As soon as Surrey Envelopes knew they needed to relocate their printing plant to Derby, they contracted the Nottingham branch of Airchannel to supply the most efficient compressed air and vacuum air system available for the new factory.

Airchannel's solution

As well as supplying equipment, Airchannel looked at every aspect of the energy requirements as Surrey Envelopes were keen to save as much energy as possible.

We designed a waste heat recovery system that removed hot air from the vacuum system, filtered it and returned it to heat the factory during colder months.

A dual compressed air system was designed comprising a CompAir L50

and L45SR compressor. The L45SR is the primary supply system, and is perhaps the most efficient compressor on the market today. Volume flows are precisely controlled to meet the factory's continually changing demands. This ensures that they use the energy required to do the job and no more.

Airchannel also supplied a range of supplementary equipment including thermal mass refrigerant air dryers, a vertical air receiver and oil and water separation filters.

To create the vacuum system, Airchannel engineers travelled to the closed factory and examined the old system, then calculated the requirements of the new plant. They designed an acoustic room which houses 10 Rietschle vacuum pumps and a Becker variable speed vacuum pump that vary in capacity from 11kW to 37kW.

Results

To maintain quality and reliability, each unit in the new facility is equipped with a computerised monitoring system that ensures their smooth and efficient operation.

Maximum efficiency at any level of demand cuts energy costs and saves money. This is achieved by varying the speed of the drive motor with a level of efficiency which cannot be matched by any other comparable system.

Representing value over the complete life cycle of the equipment, Airchannel has designed, supplied and installed the most energy efficient compressed air solution available.

Client Testimonial

Commenting on the success of the contract Jeff Greenleaf, Director of Surrey Envelopes said "We were aware of Airchannel's expertise in this field, and their work on the new factory has enhanced this reputation. The heat recovery system has meant we haven't had to put the heating on in the factory, which is an amazing feat."



Contact

Free Phone: 0800 526 581
Free Fax: 0800 328 7514
www.airchannel.co.uk

Head Office

Stirling Road Industrial Estate
Dykehead Road
Airdrie
ML6 7UJ
Tel: 01236 756171
Fax: 01236 751210

