PPS Pennine Pneumatic Services Ltd
Compressed Air Specialists

Case Study

SPECTRUM YARNS

Company: Spectrum Yarns, Slaithwaite, Huddersfield, West Yorkshire

Established in 1982, Spectrum Yarns is a textile yarn manufacturing company, exporting worldwide. Using natural fibres, the company spins yarns across a wide range of products, from technical airline cloth to supremely fine yarns for suit cloth.

Project date: July-August 2015

Project overview:
Installation of an Atlas Copco GA90VSD compressor

What was needed:
The factory was running on a Sullair LS20S – 125 HAC 2001 90kw fixed speed load-unload compressor, purchased in 2000, with two Sullair 16BS-60 ACAC compressors as back up. The compressors were not operating efficiently and there was potential for energy and cost savings.

What we did:
In 2011, PPS installed data logging equipment, which showed that there were compressed air leaks and inefficient electrics. Further data logging identified potential energy savings of £29K and PPS advised the replacement of the Sullair LS20S with a new Atlas Copco GA90VSD compressor.

In 2013, PPS installed a compressor control system priced at £4,911 to reduce energy consumption on Spectrum's existing compressors by an estimated 63,550kwhrs pa, saving £5,500 pa.

In 2015, the compressor was re-logged and energy savings of £23,423 were estimated. "PPS data logged our compressed air system on a couple of occasions, demonstrating real-time information proving that huge savings could be made," says Richard Stoker, Technical Manager of Spectrum Yarns. "We know Atlas Copco to be an established recognised brand and were confident about the outcome. Even higher savings would be made by curing the leaks and reducing the volume of pressure, as advised."

Why PPS?:
David Jones made a prospecting call at the factory and was able to put forward recommendations to reduce the company's energy bills.

Key benefits:
The post-install data log of 18-24 April 2016 has confirmed savings of 357,984kwhrs pa. Although compressed air use at the factory can fluctuate, calculating this result at 9.31p kwhr over 48 weeks pa, the new machine offers an annual saving of £33,328. Meanwhile, total carbon reduction is estimated at 194,027kgCo2 pa (194 tons).

"The controls are really easy to read and it's easy to monitor and adjust the machine," says Richard Stoker. "We were able to reduce the pressure from 7.8 bar to 6.7, which is a huge energy saving. The compressor is positioned in the factory's original engine room – a huge open space. Previously the temperature inside this room was always hot, but now it's cold as there's no excess heat from lost energy."

He continues: "PPS gave us a great deal on the compressor and service contract. For no capital outlay, just a monthly fee, we've got a brand new compressor, fully maintained."

Another happy customer:

"PPS offers a very personable service and the process was simple and effortless. David is very professional as well as knowledgeable and talks a lot of sense but doesn't use complex terms – he made it easy to understand the benefits.

The machine was supplied on time, and delivered and installed professionally – there was nowhere to find fault. I would definitely be happy to recommend the company; in fact I already have."

Richard Stoker, Technical Manager, Spectrum Yarns