

Customer requirements

As part of a major re-organisation to reduce energy consumption at six of its 15 sites across the UK, one of our long-standing, national clients came to us for a solution to help improve safety and efficiency on-site, as well as make cost savings. A major roof truss manufacturer, the client has partnered with DT Compressors for 20 years, so we understood the business and its use of multiple compressors and air-lines to feed production equipment. We were able to offer working solutions for the client's sites at Inverness, Uddington, and Cumbernauld in Scotland, and at Redhill, Leeds and Chorley in England.

Our solution

- **Inverness**

This site had three 5kw HPC compressors and two reciprocating 3hp compressors running different machines and air tools. We installed 40 lengths of 25mm aluminium ring around the factory, with 12 POU's to feed 10 steel air reels, along with one new Boge CL9LFDR variable speed 7.5 kw compressor. After all work was completed the compressor ran at 70% on average, saving the company around 20kw of electricity per hour. One of the 5kw HPC compressors was installed as a back-up unit.



- **Uddington**

This site had the exact blue print as the Inverness project. Two 5kw HPC compressors and one reciprocating 3hp compressor were running a number of different machines and air tools. We installed 40 lengths of 25mm aluminium ring around the factory, with 12 POU's to feed 10 steel air reels, along with one new Boge CL9LFDR variable speed 7.5kw compressor. After all work was completed the compressor ran at 70% on average, saving the company around 20kw of electricity per hour. One of the 5kw HPC compressors was installed as a back-up unit.



- **Redhill**

The Redhill site in London had a 22kw Atlas Copco compressor. This unit was only 7 bar and the client had a new saw being delivered that required 10 bar, so we provided a Boge C30 LF variable speed 22kw compressor. We also installed 32mm aluminium pipe to their existing 1" galve pipework to create a ring and installed 8 POU's with 10 new metal hose reels. We shipped a 10 bar Hydravane from one of the manufacturer's other sites to run as a back-up for service work.



- **Cumbernauld**

One of the more simple projects; we tidied up the airlines, running some new aluminium pipe to feed four hose reels, and installing a further six hose reels off of the existing pipe work. We installed the Atlas Copco 22kw from Redhill as a back-up unit.

- **Chorley**

This site was a "start again" 3-stage project. Originally, the client had three production units on one site: a 11kw HPC in shed 1, an Avelair 7.5kw in shed 2, and a 30kw HPC in shed 3.

Phase One: In shed 1 we installed two new 32mm aluminium ring mains, consisting of 40 x 6mtr lengths connecting to a 500ltr receiver, with 17 POU's and 17 hose reels with underground pipe work linking the 3 sheds, terminated with LBV.

Phase Two: We installed a new Boge C30LF and 500ltr receiver in a purpose-built compressor house within shed 2, along with 36 x 6mtr of 32mm ring main, 14 POU's and 11 hose reels.

Phase 3: Installed a 500ltr receiver and 36 x 6mtr of 32mm ring main, 14 POU's and 15 hose reels.

The completed project with the whole site running off the 30kw VSD compressor at 50-60%, saved the manufacturer in excess of 30kw of electricity per hour.



- **Leeds**

At the Leeds site we installed a Boge C9 LFDR 7.5kw variable speed compressor to replace the existing Atlas Copco 18kw compressor. A 5kw HPC compressor, remaining from one of the sites in Scotland, was installed as a back-up.



Summary and results

Each site is now running on the correct size of variable speed compressor, saving maximum energy. All have up-to-date pipe work, leak-free systems, and a tidy and efficient working environment. The sites have full redundancy for service work and unforeseen maintenance. By completing the improvements for the roof truss manufacturer, DT Compressors were able to help the business achieve its aims of reducing costs and improving efficiency and safety.

Clients comments and testimonial

"Having worked with DT Compressors for two decades, we knew that we could rely on their expertise. We were looking for a solution as part of our company energy-reduction programme, and the compressors played a major part in us achieving a 40% saving in electricity."