

Shoot for maximum efficiency and costs savings

The Challenge

The customer has been manufacturing clay pigeons since 1982 and is market leader in the UK, exporting to many countries worldwide, with annual production in excess of 100 million clays. Based in Corby, they have been a Maziak customer for almost 15 years. They were looking to upgrade their equipment due to some reliability issues and also wanted to benefit from the important energy efficiencies and cost savings of new technology. Plus, improved energy data and performance statistics.

Maziaks' Solution

Maziak carried out a datalog and found two key issues. Firstly, as expected, the age and efficiency of the equipment was adding cost and risk, and secondly, the pressure was higher than was needed operationally. Maziak recommended a reduction in system pressure of 1bar and the installation of a new HPC ASD60SFC variable speed drive compressor. These optimised ASD compressors deliver more compressed air for less energy and are extremely versatile. The internal SIGMA CONTROL 2 compressor controller offers various communication channels and achieves unprecedented levels of efficiency. Here are some of the features of the machine:

- ◆ Flow Rate: 1.26 - 6.17 m³/minute at 7.5 bar (217 cfm)
- ◆ Super-Premium Efficiency IES2 Motor (30kw)
- ◆ Siemens Sinamatics Inverter Unit - MWP 8.5 bar
- ◆ SIGMA S26 Air End, 94.5% Efficiency on load
- ◆ 'SIGMA Control 2' Controller

A Parker SPS062 Refrigerant Dryer Unit was also installed. Thanks to the highly efficient heat exchanger (E-Pack) design, the refrigerant circuit absorbs less power and requires less refrigerant than other comparative dryers, making StarlettePlus-E the refrigerant dryer in the market with the lowest running costs and the most environmentally friendly.

Results

The customer was able to utilise the super deduction capital allowance scheme, amounting to just over £24k. As regards the pressure issue, for every 1 bar the pressure system is lowered, a 7% energy saving is made, so these savings were immediate. On top of this, the overall installation reduced annual electricity costs by just over £5k (based on £0.10 p/kW/hr) at a time when energy costs were set to spike, and with a 5 years 'No Quibble' Warranty, they have regained their peace of mind with a reliable, efficient and future-proof system.

