

CASE STUDY

Energy Savings & Air Quality Improvement

The Challenge

Britvic Soft Drinks is one leading branded soft drinks manufacturers in the UK. They have a strong track record of innovation in products and packaging.

At their Beckton plant in London, the high pressure air compressor installation consisted of five oil-free Bellis and Morcom piston machines ranging from 300 to 550kW and water cooled Denco air treatment equipment.

The compressor plant was required to generate air at 40bar for blow moulding PET bottles for both Britvic and Pepsi products.

Energy costs were rising hugely and the old plant could not achieve the air quality needs of the soft drinks industry.

Results

High Pressure Compressed Air Quality Improvement

The air quality performance of the whole system is continuously monitored by the Energair air compressor management system, which provides historical data capture and alarm warnings.

This ensures that the site is always compliant with the stringent air quality requirements of the food and beverage industry. It also conforms with the compressed air quality approved code of practice for food and beverage packaging that was introduced by the British Retail Consortium and the British Compressed Air Society.

Reduced Energy Costs

Since the install, the site has validated savings of over £50k per annum.

This is due to multiple factors, including, lower system pressure drop with smooth bore stainless steel pipework, improved pipe run design and additional air receiver storage capacity both pre and post air treatment. In addition, intelligent management of compressor running and usage by capacity matching supply to demand, single pressure reference compressor control and using the right machines at the right time for peak performance,

Improved System Reliability

The Energair Intelligent Control Panel will automatically rotate the duty of the machines to level out running hours and ensure the same machines are not being overrun. The improved running structure means that fewer machines are needed to satisfy demand and that in an emergency there is standby capacity available, even at peak times.

Standby capacity has also been added into the air treatment system and air receivers ensuring 24/7 availability under all circumstances.

Maziaks' Solution

Maziaks designed, built and implemented a new installation comprising advanced starter control gear for the reutilised existing compressors, stainless steel manifold pipework, air treatment plant and galvanised wet and dry receivers.

The predicted air quality and energy management of the whole system is overseen by the Maziak installed 'EnergAir' control package, with remote PC visualisation and alarm monitoring.



New compressor starters and control



New air treatment plant

Contact

Free Phone: 0800 980 9902
Email: enquiries@maziak.co.uk
www.maziak.co.uk

Unit 1 Stanton Close
Finedon Rd Industrial Estate
Wellingborough
Northants NN8 4HN
Tel: 01933 222000
Fax: 01933 222200

