

CASE STUDY

Reduced Costs & Improved Efficiency: Substantial & Substantiated

The Challenge

The flagship site of one of the UK's leading food and beverage manufacturers underwent a multi-million pound investment programme during 2012 to update its production and logistics.

Part of the site's remit for investment was to reduce cost and improve efficiency. Maziaks' track record of reducing energy costs for other soft drinks manufacturers led to an invite to survey their site and propose a plan.

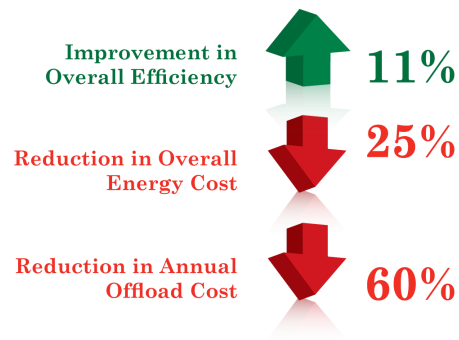
Maziaks' Solution

Drinks manufacturers use 40bar compressed air for blow moulding PET clear plastic bottles. Very quickly we were able to establish that the current 7 off 300kw 40bar air compressors needed updating. The existing compressors were unreliable with continual daily issues and this was affecting production.

Maziaks identified poor compressor control, outdated power supplies and aggressive ambient conditions as being the major causes of compressor problems. Working with Energair and the site we collected the data required to put together a project proposal.

Results

Maziaks completed this £850k project on budget and on time, without incident. The savings made from energy efficiency, heat recovery, prolonged compressor life, significantly improved system reliability and availability, have been substantial and substantiated.



Our proposal included:

- ◆ New starter panels for 4 x 300kw compressors
- ◆ Inverter control for 3 x 300kw compressors
- ◆ Intelligent control to manage the energy efficiency of all 7 machines
- ◆ Cooling water control panel
- ◆ New ventilation fan with ducting and control
- ◆ Heat recovery of waste heat to the cap store
- ◆ New switchgear at the sub-stations
- ◆ New electrical cabling throughout

The whole system was installed between Sept and Nov 2012 and overseen by our in-house CDM co-ordinator (NEBOSH-qualified under CDM 2007).

Final commissioning taking place in Dec 2012.



New PET air compressor control panel



3 off 300kw Inverters for PET air compressors

Other tangible benefits and improvements include:

- ◆ More stable delivery of pressure to site
- ◆ Reduced compressor run hours to meet the same normal air demand
- ◆ Cleaner plantroom environment
- ◆ Safer place to operate
- ◆ More accessible system for operators

The Energair Metacentre control system installed allows for the site to check its own energy costs within this plantroom going forward.

Customer Testimonial

Site Engineering Manager said "It has been a pleasure to work with Maziak on this project. At each stage, when a plan was laid out it was executed with almost military precision, an experience I have not been familiar with using other contractors. I would welcome the opportunity to work with your team in the future."

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

