



MAZIAK

COMPRESSED AIR NEWS

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MAZIAK COMPRESSOR SERVICES LTD

Proactive Approach to Energy Saving



Maziaks will actively look for ways for our customers to reduce wastage and improve efficiency, thereby reducing overall production costs.

A simple product we can install to enable you to zone your air distribution system is the **AirLock™ Flow Control Valve**. This valve lets you deliver compressed air only when and where you need it. This results in zero air loss during periods of non-use, extra compressor capacity and lower operating costs. With its programmable timer, **AirLock™** can automatically shut off compressed air as you dictate.



Top Energy Saving Tips

- Find and fix air leaks. It could take a few seconds to fix and a 3mm leak will cost around £600 per year in energy alone.
- A cool compressor plant room will mean equipment lasts longer, needs less servicing and improves efficiency (by 1% for every 40C reduced).
- Reduce compressor generation pressure or system pressure by 1bar and knock 7% off energy costs.
- Zone the distribution pipework system using airlock valves to reduce air usage.
- Don't over purify in the central plant room, it could be costing you 30% more in compressed air energy costs unnecessarily.

Who are Maziaks?

Maziak Compressor Services Ltd (Maziaks) was founded 39 years ago in Burton Latimer by Sarah and Joe Maziak. James Maziak has been Managing Director since 1991 and in 2001 we moved into a new 6500sq ft purpose built unit in Wellingborough to accommodate the rapid growth of both our customer base and our employees. In 2004 we also opened a new branch in King's Lynn to service customers in Norfolk, Lincolnshire and Cambridgeshire.

Despite our truly local roots, the quality of the service we offer has led to many projects for clients all over the UK as far afield as Newcastle and Glasgow in the north and Yeovil and Poole in the south.

Our biggest asset is our people. We offer one apprenticeship each year and they

learn an enormous amount on the job working alongside engineers who have been with Maziaks for over twenty years.

Between them, our engineers have over 125 years' of collective experience installing and servicing compressed air systems of all makes and for all purposes, enabling us to provide the best possible quality service to our customers 24 hours a day, 365 days a year.

We are able to respond at short notice to customers' needs, whatever their size or location. We hold an unrivalled stock of spare parts, new and reconditioned equipment, which ensures fast response times. Added to this, we have developed long term partnerships with high quality suppliers who support us in maintaining our high standards of service.

The culture and values of Maziaks underpin all of our activities:
Customer Satisfaction • Teamwork • Professionalism • Integrity

Intelligent Compressed Air Management in Practice

The **Trinity Mirror Group** print works is one of the UK's largest newspaper printers with a large annual electricity bill. As part of a drive to cut energy use and the knowledge that nearly one third of the electricity at the site was consumed by its compressed air plant, Maziaks were asked to review the installation for possible savings.

The compressor installation at the plant was new in 2004 and although it included some relatively sophisticated controls, the configuration of the units was not making the most of their capabilities. The standard

control configuration meant that the variable speed compressor (180kW) was always the lead unit. During times of low demand, this could adjust its flow rate and energy consumption effectively, but as demand rose and the other compressors (3 x 160kW fixed speed) were switched on, control efficiency was substantially reduced.

Our recommendation was the replacement of the existing OEM compressor control unit with an EnergAir Metacentre intelligent control system. Using software that learns from previous events, this unit makes decisions about the optimum combination

of compressors to use in order to maximize overall system efficiency. For example, by minimizing the number of costly load-unload events undertaken by the fixed speed compressors.

We also made a number of other changes, including adding an intelligent flow control valve to the facility's existing compressed air accumulator system. Some of the air needs to travel more than 600m from the compressor house to its point of use, causing a substantial pressure drop. Our solution meant delivery pressure was reduced to 7.7bar from 9bar. The EnergAir installation has led to substantial energy savings, with electricity consumed dropping by 45%. These savings have been independently validated by Trinity Mirror Group's sub-metering system.

Fewer big electrical events due to less compressor switching and a more intelligent compressor duty cycle have also improved power quality at the plant and there have been cost savings on servicing which is a major benefit. Maziaks, in keeping with our proactive approach, have found a solution and delivered it to the highest standards and with incredibly positive results both in terms of cost and quality for the client.



Precise Pressure Control Valve

"We originally expected a payback period for our investment of 15 months. In fact it has paid for itself in less than six," says Kieran Flemming, commercial manager, Trinity Mirror Printing

Portable Compressed Air Houses

Our client, a waste management company, provides a range of cost and environmentally effective processing, recycling, disposal and energy recovery services for local authority and private commercial customers.

They need to deliver a clean, constant compressed air supply to the pumps at the heart of their landfill site to allow for the waste liquid (leachate) caused by the decomposing of the waste to be removed and stored.

Maziaks approached them to offer a more compact, energy efficient and hardwearing product than their existing system which in our view was difficult to maintain, more costly and less energy efficient.

Pre-assembling the whole system at our workshop prior to delivery, we designed and manufactured a purpose-built, self-contained compressor house to accommodate the new compressor, dryer, filters, condensate removal and purpose made air receiver. The whole package was a complete "plug and go" solution requiring just one electrical and one air connection, which could be disconnected and moved at a moment's notice if required.

Compressor power, cooling, heating and lighting inside the container is provided by an independent main switch board requiring only a mains feed. Plus, all weather conditions are catered for, with an oversized fan with filtered inlet and exhaust louvres and winter heating, both of which are thermostatically controlled.



Portable Containerised Compressed Air

The regional manager commented: "Maziaks' solution has provided us with a fully functional, high quality, leak free, ventilated, energy efficient point of use compressor package which we can easily move from site to site as we need."

Flexible Service Plans to suit the level of support that YOU require

Maziaks offers you a choice of four Service Plan levels, from basic, to all embracing, each with the flexibility to opt for a term of between 1 and 5 years.

Clearly the Plans have some core common features, including access to a 24/7 emergency service and prices can be fixed for up to 7 years, but here are just a few examples of differences between the Plans:

- The **Bronze** and **Silver** Service Plans offer a specified number of preventative maintenance visits and include for all labour, travel and subsistence costs, upfront.
- **Gold** Service Plans additionally include for all consumable service parts and oil upfront as a fixed price with different payment options to suit.

- **Platinum** Service Plans include all the above plus any unforeseen costs due to emergency callouts in terms of labour and parts needed.
- Same Day emergency callout is available for **Gold** Plans with notification prior to 10am. **Platinum** Plan emergencies, subject to terms, will see an engineer on site within 4 hours, regardless of time of day.
- The **Platinum** Plan includes a free annual compressor energy survey to ensure your equipment is running at optimum efficiency.



For more details and pricing of the Bronze, Silver, Gold and Platinum Service Plans, please call: **01933 222000**

Maziaks' Largest Ever Installation

In October 2007, Maziaks successfully partnered Parker domnick hunter to deliver their largest ever nitrogen generator installation in Europe.



N² Generation Plant

Rohm and Haas (UK) Ltd (R&H), a speciality materials manufacturer based in the North East were reducing the size of their site and needed to upgrade all of their utilities installations to suit the new requirements. Maziaks' proposal not only met the strict tender specification but also offered technical innovation, energy reduction and cost saving solutions which went way beyond initial expectations.

At the outset, R&H were planning to retain separate providers for compressed air purification and nitrogen generation respectively. However, we proposed to supply the complete package with the support and partnership of Parker domnick hunter, the well established and highly respected specialists of proven nitrogen gas generator systems. This enabled R&H to exit an expensive nitrogen gas supplier contract and bundle it with the compressed air package in one very cost effective 10 year contract lease plan. This also provided R&H with a Platinum Service Package – see advantages above.

The installation comprised of three 160kW Oil Free Ingersoll-Rand Nirvana variable speed rotary screw air compressors, dewpoint controlled heated desiccant dryers for instrument air quality, and a cost effective, energy efficient Parker domnick hunter MAXIGAS nitrogen gas generator system with an exceptionally low lifecycle ownership cost. The Nirvana model is unique in its design, providing oil free technological innovation, such as, infinite stop/start control giving the only true zero offload energy advantage.

The whole installation is controlled by telemetry provided by EnerAir. This sequences the use of compressors and nitrogen generator banks, collects alarms and data from all plant and pipework and displays real time system status on a local PC. All this information is also relayed back to our head office in Wellingborough for monitoring and fast responses to issues.

This ability to transparently and constantly measure the system performance has already led to a 5% improvement in energy savings since installation.



Air Treatment Package

Interest Free Energy-Efficiency Loans from the Carbon Trust

Maziak Compressor Services Limited is one of very few British Compressed Air Society (BCAS) accredited companies to conduct energy-efficiency audits. Work resulting from such an audit could be eligible for an Energy-Efficiency Loan.

Energy Efficiency Loans from the Carbon Trust are a cost effective way to replace or upgrade your existing equipment and systems with a more energy efficient set up. This means an immediate benefit from carbon, energy and cost savings. From an environmental perspective, it's an effective

way for business to cut carbon emissions and, in turn, combat climate change.

Small or medium-sized enterprises (SMEs) could borrow from £5,000 to £100,000. It is unsecured, interest free and repayable over a period of up to 4 years.

There are no arrangement fees and applying for a loan is very straightforward. Maziaks can provide details of Carbon Trust interest free loans and assist you in completing your application, or simply visit: www.carbontrust.co.uk/loans



Phone for your FREE Energy-Efficiency Audit Today!

Maziaks are offering the first ten callers a free energy-efficiency audit. Please quote ref. Mazaudit when calling 01933 222000.

So what might your audit include?

- Compressor Plant energy monitoring for 7 to 10 days
- Generation air pressure monitoring for 7 to 10 days
- Compressed air demand monitoring for 7 to 10 days
- All non-intrusive works – no downtime is necessary

- Visual survey of installation and distribution pipework

All survey results will be presented in a comprehensive, in-depth report including recommendations for action and associated costs.



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See our new website
www.maziak.co.uk

Sponsorship News

Rugby League is the fastest growing participation sport in the UK and Maziaks will be sponsoring the newly established U14 Knights junior side at the Northampton Casuals for the next two years. We will also have our logo on the shirtsleeves of the senior team who are playing in the Rugby League Conference Eastern Division throughout the summer.

This sponsorship is an extension of our six years of support for Kettering Rugby Football Club's Mini and Junior sections.

