



Cambs Compressors SOLUTIONS

AUTUMN 2019

'Keeping the heart of Industry Pumping'

Compressed air, robots and prize winning potatoes



David Palmer kindly donated 3 sacks of potatoes for the Grantham to Edinburgh (G2E) charity cycle ride.

Uncle David's Potatoes have the enviable reputation for being the 'The Rolls Royce of potatoes' - Cambs Compressors help ensure the quality of these ultimate chipping potatoes leave the farm in perfect condition.

Uncle David's Potatoes from Fenland Farmers

This popular brand of chipping potatoes, is a favourite with caterers from chip shops to top restaurants. The potato is sold across the United Kingdom and Eire.

Compressed air helps grade, weigh, stitch and stack the prize crop

Uncle David's Potatoes are the first choice for anyone wanting large frying potatoes. The dry matters and sugars are monitored for fry quality and most importantly, every potato is graded to a large size, meaning these potatoes are the very best when it comes to chipping. They hold equally well for roasting, with a wonderful flesh that roasts to a gorgeous golden colour.

Why Cambs Compressors?

"Cambs Compressors have provided the compressed air solutions for my potato processing for too many years than I care to remember. The reason is simple; I don't think I could possibly get a better, more responsive service anywhere else. The equipment reliability and support I've experienced, over what's got to be more than 15 years, has been first class.

David Palmer, AKA (Uncle David)

Fenland Farming, Stretham nr Ely Cambs

Compressed air in food processing

Most of the processing and production facilities within the different segments of the UK food industry have a wide range of applications for compressed air.

Compressed air is a key utility in food processing

There are tens of thousands of food processing plants operating across a segmented food industry - all using compressed air. Food processing and packaging industries rely on compressed air to provide power for production demands which vary greatly from industry type to seasonal variations.

Compressed air considerations for food industry applications

Compressed air in the food packaging and food processing industries in the UK must be contaminant-free to ensure the protection of the food products processed in each facility. Cambs Compressor Engineering work with their customers by understanding their needs and incorporating the "UK Code of Practice for Food Grade Air Compressed Air".

If you use Compressed Air around food, a member of the Cambs Compressors team would be happy to come and talk to you and carry out a free survey to discuss this subject.



Are variable speed compressors a greener compressed air source?



6 Steps to reducing your compressed air energy costs



The first step to reduce compressed air energy costs is to measure and monitor your compressed air system's energy consumption, flow rates and operating air pressure.

Small adjustments can reduce your operating pressure and energy costs while improving flow rates and output. Here are 6 steps you can take to optimise your compressed air system and save energy costs.

- 1 Pressure Mapping**
Pressure mapping will evaluate the efficiency of the compressed air distribution system.
- 2 Flow and Pressure Measurement**
A flow and pressure measurement test accurately measures and logs the delivered flow of compressed air on any compressor make or type.
- 3 Compressor Efficiency**
Using data logging to non-intrusively measure consumed power will evaluate compressor efficiency.
- 4 Leak Detection**
Compressed air leakage is synonymous for evaporating money!
- 5 Air Quality Evaluation**
This evaluates the type of air quality required for each production process and determines if the current air quality is suitable for the application.
- 6 Health and Safety**
Evaluate system compliance with pressure systems safety regulations and condensation discharge regulations.

With more and more companies insisting on solid environmental credentials like ISO 14001 Environmental Management, it's driving manufacturers to seek out more energy efficient compressed air solutions for their production process.

Are variable speed air compressors the most eco-friendly sources of pressurised air?

A variable speed air compressor has a unique set of components that regulates the operating speed and helps users save energy. The key to the variable speed compressor is its special drive feature, which allows users to control the speed of airflow according to the needs of a project. The advantages of the variable speed design benefits users in several areas, including the following:

Constant pressure: Variable speed air compressors deliver constant pressure, as programmed by the user. When an application demands air pressure at an exact volume and consistency, the variable speed compressor will deliver this pressure without sputtering or wavering.

Protection from power surges: A variable speed compressor will produce pressurised air at the exact rates and speeds that you specify in the settings. As such, you never have to worry about the compressor delivering a random pressure jolt and drawing excess power from an outlet.

Reduced energy consumption: One of the greatest advantages of variable speed

compressors is the reduced energy consumption that accompanies such models. If you install a variable speed air compressor at your facility, you could easily see your energy bills go down each month.

Energy accounts for 75% of the lifetime cost of a compressed air system

Compressed air systems are one of the most common and energy intensive utilities in industry, representing up to 10% of the industrial energy needs. It's not just good for the planet if we make the compressed air systems more energy efficient - it has potential to dramatically reduce energy bills.

How to reduce energy costs associated with compressed air systems

Compressed air is a vital resource in your production process. There is world-wide demand for more efficient products to reduce energy and resource consumption. A sobering fact is that up to 30% of the energy used during the lifetime cost of a compressed air system is wasted. Which is why Cambs Compressors focus on pinpointing the areas where potential savings can be made in your plant.

Compressed air safety rules



The volatility of compressed air means greater safety knowledge through structured compressed air safety rules, needs to be promoted within any facility using compressed air.

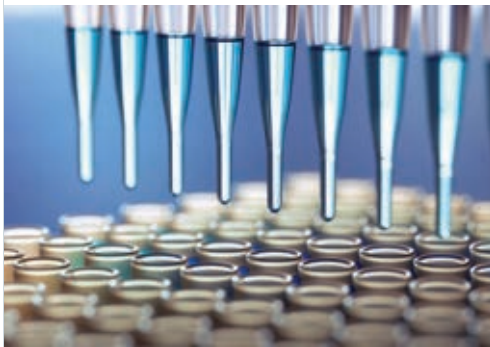
Emphasis is on raising awareness of headline dangers of compressed air

All components of compressed air systems should be inspected regularly by qualified and trained employees. However there are clear areas of risk while exploring general safety issues such as inspection, maintenance and training needs.

People using the system - they need to be aware of potential dangers of orificial bodily entry, skin penetration, explosions and optical damage caused by particles.

The major hazard of over pressurisation - and associated risks, such as blockages, failure of automatic controls, malfunctions such as overspeeding, external fires nearby, overheating and deposit accumulation.

Laboratory compressed air system design and maintenance



Located in the heart of the Science and Research community in Cambridge, Cambs Compressors are ideally situated to support the compressed air system design and maintenance needs of any organisation located there from start-ups to some of the world's leading technology businesses.

Specialists in compressed air solutions for use in laboratories and research

There are a number of different considerations when designing a compressed air system for a lab or research facility. Whether installing a new system or altering an existing plant, your compressed air system will also provide many opportunities to make financial savings and reduce your carbon footprint. Which is why it's important to have a complete understanding of the exact requirements for your compressed air needs. With an extensive client base working on non-invasive diagnostics and novel medicines to next-generation display and communications technologies, you can be sure we will understand your needs.

Need air compressor service at your biotech, industrial, pharmaceutical or college laboratory?

Cambs Compressors can offer maintenance packages and breakdown support for your existing compressed air system or help you design the most effective solution from scratch. Our services and solutions include everything you will need from design, installation and commissioning of compressors, to pipework, downstream air treatment and control systems.

Primary Engineer Celebration Event



Katie Luddy, Teacher, Great Wilbraham Primary School (top left); Mark Fryer, Cambs Compressors Managing Director and the Children of Hedgehog Class (years 3/4) Great Wilbraham Primary School.

Cambs Compressors Managing Director, Mark Fryer, was invited to take part in the judging of the Primary Engineer Celebrations Event for Great Wilbraham Primary School at The Institute of Manufacturing at Cambridge University.

Celebration Events really are where the fun begins!

This is where the pupils taking part in the Primary Engineer vehicle and fluid power projects showcase their models. The Celebration Event, which took place at The Institute of Manufacturing at Cambridge University, is to highlight the achievements of pupils and teachers from local schools. To help judge the pupils projects Mark was joined on the judging panel by colleague Craig Turner (Cambs Compressors Service Manager).

The promotion of engineering careers for pupils

"The thing which most engaged me, and persuaded me to get involved in the Primary Engineer Programmes® was the way it makes engineering exciting for the children. If we are to encourage young people to choose a career in engineering, then we need to get them excited and enthusiastic about it. This project has been an inspiring experience for the children, teachers and myself. The competition has driven the development of engineering skills within the youngsters at a

practical 'hands on' level. I hope at least a few of the children will progress with engineering as they develop into young adults as a result of this experience.

Mark Fryer, Cambs Compressors Managing Director

Inspiring a new generation

"Having Mark from Cambs Compressors come to our school was invaluable! Not only did it give the children some expert knowledge but it also gave them someone to aspire to be. So many children in my class have now said they would love to be an engineer when they grow up. All the children, especially the ones who went to the competition, were passionate and proud at the car they designed, created and tested. This is an experience that they will carry for them for the rest of their lives. As a school, we are passionate about continuing this and we hope to keep in touch with Cambs Compressors as they were extremely friendly, caring and helpful, especially for the class teachers (who needed all the help they could get!)."

Katie Luddy, Teacher, Great Wilbraham Primary School

24/7 Compressor breakdown support

With a 24/7 Compressor breakdown support helpline, whether you are an existing customer or not - we will respond to your need if you are in our geographic catchment.

24/7 Compressor breakdown support to get you back up and running ASAP!

There can be multiple causes of your compressor failure, but when this happens in your business Cambs Compressors are only focused on getting you back up and running as soon as possible. This starts with a quick phone call to understand the problem and then to try and rectify the issue immediately using our vast knowledge and experience - helping to prevent unnecessary fees.

24 Hour Emergency Call Out

If your compressor fault cannot be resolved over the phone, we will provide a call-out quote and assuming this is acceptable dispatch an engineer. You will need a fast response, which is why we have our own fleet of diesel mobile and electrical driven air compressors. We can provide you with a compressed air source to get you up and running should the initial investigation identify any possible delays in fixing the fault.



Sponsored bike ride raises over £20,000



Cleaning with compressed air UK regulations



Many workplace injuries occur because of the misuse of compressed air or using air guns for cleaning.

The HSE Compressed air safety book highlights the risks of cleaning with compressed air although there are no specific UK regulations preventing this activity - it is covered under the jurisdiction of the Health and Safety at Work Act 1974.

Cleaning with compressed air to remove swarf, dust and fluids

The use of compressed air to remove swarf, dust and fluids from machined components presents a number of risks to both the health and safety of those involved. What has to be emphasised is that many compressed air users may not fully realise that the operation of a compressed air system is subject to legal requirements. In its advisory role, BCAS, the UK's trade and technical association, makes it clear that the user of installed compressed air plant or the owner of mobile compressor equipment is subject to the legal requirements of the Pressure Systems Safety Regulations S.I. 2000 No 168 (PSSR).

Cleaning with compressed air and Health and Safety at Work Act 1974

Any breach of these regulations comes under the jurisdiction of the Health and Safety at Work Act 1974. This main legislation covers occupational health and safety in Great Britain with the Health and Safety Executive, local authorities, and others responsible for enforcing it.

The Naomi Fund
Because We Care



Trust House Lincolnshire
Support for victims of rape and sexual abuse in Lincolnshire

inspire+



Cambs Compressors Annthea Fryer helped raise this fantastic amount with 37 other cyclists who rode the 300 miles from Grantham to Edinburgh.

300 mile non-stop bike ride from Grantham to Edinburgh

Cambs Compressors were proud to support Annthea on her marathon G2E cycle ride which took place on the 19th July 2019. Her cycle jersey was emblazoned with our Cambs Compressors logo!

“Being involved in something like this is personally challenging but very rewarding, especially when you are a part of raising so much for the chosen charities, all of whom were picked because of their great causes and the fact they operate locally. I’m ready for a rest from the bike for a while but it’s been great fun cycling with the group.”

Annthea Fryer, Director, Cambs Compressors

The four local charities supported by G2E

- **The Naomi Fund**, proceeds go to Great Ormond Street, Heartlink Glenfield and The Kingfisher Ward and Community Team.
- **Trust House Lincolnshire**, supporting men, women and children in Lincolnshire who have been affected by rape or sexual abuse at any point in their lives.
- **Inspire+**, designed to encourage young people to be inspired towards a lifetime of sport, culture and healthy living.
- **Children’s Bereavement Centre**, supporting local children and young people aged 3-18 and their families affected by death or terminal illness regardless of race, class, sexual orientation, disability and special needs.

Compressed Air Systems, Design, Supply, Installation and Support



Compressed Air Equipment



Design & Installation Solutions



Compressor & Compressed Air System Maintenance



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