# Cambs Compressors Solution

# Spring cleaning your compressed air system As the unprecedented wet weather of the winter finally starts to dissipate, the daylight

# A QUICK GUIDE TO AIR COMPRESSOR SPRING MAINTENANCE

# The Curse of the Engineer

The 'curse of the engineer' and why problem solving is in our DNA at Cambs Compressors.

#### Compressed air is everywhere!

SPRING

You only need to read our newsletters and articles to get a feel for how diverse our client base is. Each industry sector has it's own needs and issues when using compressed air, which makes our work so interesting.

#### The compressed air challenges we face are wide and varied

This is why problem-solving skills are the most valuable asset our people can have. Since forming Cambs Compressors there's always been an abundance of complex situations and problems to be solved. Which is why I've always surrounded myself with positive people, people who have the same DNA and come together to solve the challenges presented.

#### The Curse of the Engineer or just the Cambs Compressors mindset?

Suppress the symptoms to give you some respite until the root cause is identified, but we do have engineers with 'fix the symptom' mindset. Because once you know the root cause, the problem be solved and it can be prevented in future, too. So if you want a compressed air solution, Cambs Compressors are the team for you.

As the unprecedented wet weather of the winter finally starts to dissipate, the daylight hours increase week by week, spring must be in the air. So it's time to spring clean your compressed air system to keep it running efficiently throughout the warmer months.

A Quick Guide to Air Compressor Spring Maintenance Whilst you may enjoy the warmer weather, your compressed air system does not. If left unchecked, warmer weather can cause a number of problems for your compressed air system and this could lead to reduced efficiency right through to costly downtime. Making sure your air compressor is running at optimum condition requires proper and consistent maintenance. Failing to maintain your air compressor can have very costly implications and can lead to irreversible damages.

- 1 Temperature and Ventilation
- 2 Coolers and Filters
- 3 Check your compressed air treatment equipment

#### Regular inspections are the key to minimising issues

An air compressor is a well-oiled machine that is relatively low maintenance but just because it is low maintenance, should not mean it does not deserve a good hard look from time to time. Above are just a few areas to consider. In order to give your compressed air system a thorough once over, spring is the ideal time to get your compressed air system serviced to ensure it is in tip top condition and ready for the challenges that the warmer months will bring.



# What is the most cost-effective technology for drying compressed air?

# How do you size air lines?



Every compressed air system worldwide has differing application needs and usage demands. Compressed air systems account for a significant portion of a facility's overall operating costs. However, by selecting the right compressed air dryer for the application and making sure that dryer is using energy in proportion to the demand wherever possible, can yield major savings over the life of the system.

#### The right type of compressed air dryer plays a significant impact on energy savings.

There are two categories of air dryers – refrigerated dryers and desiccant dryers – both are widely used in industrial applications. There isn't a one-size-fits-all dryer solution, so both categories have their place in the market. Moisture creation in a compressor is unavoidable, but if properly treated, it will prevent damage to pneumatic machinery, air motors, valves and any other components, as well as avoid possible contamination of the end products.

#### Which compressed air dryer is right for you?

Selecting the proper dryer to treat wet compressed air is largely dependent on the specific requirements and moisture tolerance levels of the machines that utilise compressed air. Most industrial and manufacturing facilities can achieve such requirements with a refrigerated air dryer, while spray paint operations, laboratories and certain printing and pneumatic tool users require a desiccant dryer to supply critically dry air.

#### Refrigeration drying is the most costeffective technology

Due to their large energy-saving potential, refrigeration dryers provide the most economical method for drying compressed air. Their basic principle is based on condensation via cooling. The DRYPOINT RA refrigeration dryers by BEKO Technologies are equipped with a BEKOMAT condensate drain as standard and prevent costly compressed air losses. Compressed air refrigerated dryers are suitable for use in industry, craft trades and workshops. Pressure dew points are between +3°C and + 10°C.



# Figuring the correct pipe size for your compressed air distribution system is an important task.

Pipe that is sized too small can create big pressure losses and reduce operating efficiency. Replacing piping is costly. On average, 70% of a contracted piping job goes for labour and 30% for materials.

### Your air line distribution needs to be designed

If you are investing in an air compressor system, restricting the flow anywhere in your system could make it significantly underperform or cost you a lot more in energy costs to run that compressor over its lifetime. You need to consider appropriate sizing of all components of your air system and design in some future proofing with capacity, fitting selection, etc.

#### It pays to get the professionals in to design and install your compressed air piping

In order for a compressed air system to operate properly and cost effectively, it should be carefully designed to meet the needs of your applications. Once designed, it should be professionally installed to get the maximum out of your investment, having a single company manage the design, supply and installation means you can rest assured the solution is totally supported and you are not caught holding the costs of an error somewhere. Cambs Compressors team of pipework engineers are experienced in designing and installing all types of compressed air systems, all in accordance with the British Compressed Air Society's latest best practice, health and safety guidelines and industrial standards.

#### Compressed air in window manufacturing



Why one of the UK's largest fabricators of PVC-u and aluminium windows, doors and conservatories chooses Cambs Compressors for its compressed air solutions.

### Our manufacturing is dependent on compressed air

As the UK's largest fabricator of PVC-U and aluminium products, Tradelink is a world-class manufacturer first established in Cambridgeshire in February 1992. As the business grew so did the number of employees and the offering. Tradelink now offer one of the best production facilities and product offerings in the industry, that is backed by a customer service and delivery function to match.

#### Continuous improvement at the heart of the business

With continuous improvement at the heart of the business and the central focus for every employee, product quality and service are constantly being reviewed and enhanced. Cambs Compressors have provided the expertise to ensure Tradelink operate their manufacturing compressed air function, efficiently and cost effectively.

# Eco-friendly with oil-free air compressors



Oil-free industrial air compressors are both efficient and environmentally friendly because they consume less energy as they compress air and do not emit or produce any harmful or hazardous waste, making them incredibly green.

### Buyers are measuring your sustainability and environmental impact

In a world where the procurement criteria is increasingly focused upon sustainability and environmental impact, demand for oilfree air compressors is increasing. Oil free compressors are cooled and lubricated by water injection, so they do not need to use oil. The simplicity and reliability of the equipment, combined with the reduced maintenance needs is making them more desirable. Oil-free air technology helps you to avoid expensive filter replacements, cuts the cost of oil condensate treatment and reduces energy loss from pressure drop in filters.

### You may be entitled to an incentive or grant to go green

Many companies may not know how much their compressor is truly costing them. It would be nice to get an energy efficiency upgrade to lower your monthly energy bill and save money. However, you may be hesitant to make the upfront investment to save. Luckily, there are rebates and incentives available for you to invest in an efficiency upgrade for a new, greener air compressor. Cambs Compressors can help you understand your true current running costs plus identify the greener options to help you become more eco-friendly.

# Benefits of air compressor preventative maintenance

# PREVENTATIVE MAINTENANCE SAVES YOU MONEY!



If you want your air compressor and its attachments to last longer and perform with greater efficiency, then you need to engage in a preventative maintenance programme designed by a trained professional.

## Preventive maintenance makes it possible to detect problems at an early stage

Preventive maintenance makes it possible to detect problems at an early stage before they do serious system damage and lead to costly repairs and downtime. A trained compressed air engineer can identify small hiccups that can cause irreversible damages to your system when not taken care of immediately. They can also perform the proper preventive maintenance measures to make sure your system is running at its best. Detecting problems at an early stage before they do serious system damage and lead to costly repairs and downtime.

#### A preventative maintenance programme

designed for your compressed air system Each compressed air system is unique, from the combination of components, pipelines and air distribution to how your operations utilise the energy source. Preventive maintenance consists of inspections of all consequential system components — some according to a daily schedule, others on a weekly, monthly, quarterly or annual basis — to ensure everything works as it should. If you detect problems early, you can take steps to rectify matters. This is why the preventative maintenance programme must be designed by a trained professional.

# Cambs Compressors will design one to maximise your resources

Regardless of the size or scope of your compressor operation, it is vital to have someone within your team to oversee the more frequent preventive maintenance work on a timely and consistent schedule. The key parts to check include the filters, vents, belts and bearings, all of which could become troublesome to the system if dirt and grime build up. Applying and reapplying lubricant at timely intervals on all applicable parts of an air compressor. Cambs Compressors engineers will work with you to establish what you can take on, and design a checklist and schedule for the level and frequency of checks you are comfortable with. Optimising your resources and minimising maintenance costs by utilising your people to perform air compressor preventive maintenance in-house.

#### Optimising your compressed air system

Compressed air is one of the most expensive utilities in an industrial plant. It is a fact that compressed air is a poor way to transmit energy to an industrial machine or tool if you want superior efficiency.

**Compressed air system costs vary widely** Controlling the expansion of the air, distributing it while minimising energy loss, storing potential energy, and compressing the air efficiently. The efficiency of compressed air systems is often ignored, as there often are more important issues, like keeping the pressure at a constant reliable level and maintaining adequate air quality so that production runs smoothly. **Cambs Compressors Free Assessment** It is very common to see surprised looks on people's faces when they discover how much it is costing to run their compressed air systems, and how little mechanical energy they receive for the expenditure. Cambs Compressors engineers can provide you with an expert assessment free, this will identify inefficient equipment, maintenance procedures.



# No such thing as a boring day!





Cambs Compressors provide compressed air solutions to a range of customers who operate in Agriculture to Life Sciences and much more. No two days are the same and the team we have at Cambs Compressors are widely experienced in their knowledge of compressed air, the industry sectors we support and the challenges you face.

# The benefits this diverse experience provides our customers

Our customer support team has an in-depth understanding of what is important to you, and how your compressed air use, impacts upon your business needs. If there is an issue, you can speak with someone who understands your operations - and even if you are not a customer yet, we will have experience of your application, environment and compressed air usage.

**Trouble shooting compressed air problems** Our engineers are experienced in the different environments, and they can quickly identify common issues experienced in certain environments. It also means they have a huge knowledge base to draw upon within the team when there is an issue which proves difficult to resolve.

#### Our aim is to be the best supplier you have

Our people appreciate there is not a 'one size fits all' approach to supporting you, your business and compressed air needs. So we follow the golden rule which is 'treat others as you would like to be treated' and it has served us well. Maybe this is why we have such great customer and staff retention.

To find our more about Cambs Compressors Apprenticeships call 0800 0029601 or visit www.cambscompressors.co.uk/apprenticeships

#### Engineering apprenticeships with Cambs Compressors



#### We have been out on the road looking for the next generation of problem solvers.

### Looking for individuals who want to get paid while they learn

As Cambs Compressors expands and grows, we are constantly seeking people to join our team. The person we are looking for may or may not have achieved the best exams results, however they will have that inquisitive mind. We are looking for the 'can do' people with the right attitude to join our team.

## If you have the right attitude — we can teach you the skills

Mark Fryer, Managing Director of Cambs Compressors knows what the right attitude looks like when he sees it. "When I'm looking to add another employee to my team, I'm looking at their attitude, how they approach communication with me, what it is that moves them and how they work best. Do they value learning and skill development? I want to know if I can see them in Cambs Compressors for the long term. The benefit of identifying the right fit instead of just the skills or qualification is tremendous."

#### Attitude is forever

The right combination of attitude, culture fit, and skills are difficult to find in one person. So which one is the most important? Easy, attitude is forever.

#### Compressed Air Systems, Design, Supply, Installation and Support



Cambs Compressor Engineering Ltd, 22 Edison Road, St Ives, Cambs PE27 3LF Tel: 0800 0029601 Email: info@cambscompressors.co.uk Web: www.cambscompressors.co.uk

If you no longer wish to receive this newsletter please email unsubscribenews@cambscompressors.co.uk