

12 New Year's resolutions to boost air compressor performance



Check demand vs supply

If the output of a compressed air system exceeds the demand, it is wasting energy and creating unnecessary costs. This can be avoided through specifying and installing variable speed air compressors, which work strictly in accordance with the system's air demand by producing the exact volume of compressed air at the precise pressure required.

Remote monitoring

By implementing remote monitoring, manufacturers can increase plant efficiency and reduce unplanned downtime and maintenance costs. One such example of a proven remote monitoring systems is the BOGE airstatus remote diagnostic tool. This allows for the remote monitoring and managing of complex systems and plants and allows users to quickly and easily analyse and control the status of up to 32 compressors from anywhere in the world.

Locate and repair air leaks

Leakages occur in almost every compressed air network and can account for up to 40 percent of compressed air costs. By conducting a full system survey leaks can be detected and repaired to reduce energy wastage and costs.

Upgrade legacy systems

Old and outdated systems are common in the world of manufacturing, and in most cases they are a hindrance to performance and productivity. While modernising and upgrading can be challenging, implementing new, more effective technologies can reduce service and cut maintenance costs.

Generate specialist gases onsite

Many businesses that require specialist gasses such as nitrogen and oxygen purchase their specialist gas from an external provider, at a higher purity and cost than is necessary. However, generating specialist gasses onsite can create cost saving opportunities as well as improve the flexibility and reliability of supply.

Learn more about industry 4.0

Industry 4.0, otherwise known as the fourth industrial revolution, is the move of manufacturers and producers towards digitisation. Pioneering technology such as the Internet of Things is being developed to redefine and simplify the communications between man and machine, enabling businesses to improve efficiency and performance.



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Move to status based maintenance

While many manufacturers still use a system of planned or routine maintenance, there is a better option: status based maintenance, whereby the condition of parts within a compressed air system are routinely monitored and replaced only when deterioration has occurred. This option creates a cost saving opportunity since parts are only changed when they need to be. In addition, condition monitoring can flag up problems before failure occurs, helping to prevent unexpected and costly shut-down.

Comply with pressure systems regulation

In the event that pressure systems fail in use, they can cause serious injury or death to people nearby and cause severe damage to property. To prevent this, regulations are in place to minimise the risks associated with systems or equipment that contain a liquid or gas under pressure. To protect people, property, and the health of the business, it is essential that manufacturers comply with these regulations.

Upgrade dryers that use banned R22 gas

In 2015 it became illegal to maintain and service compressed air dryers that use R22 gas. While manufacturers can still operate these dryers, at some point they will fail and production and output will be affected. There's no benefit to waiting for the dryer to breakdown when it's going to be replaced anyway, so the best option is to be proactive and upgrade prior to failure.

Get a heat recovery system

With rising electricity prices to contend with, the need for businesses to improve energy efficiency and cut energy use is growing in importance. Air compressors demand high volumes of energy, and of this a high percentage of the energy used is turned to heat and wasted. However, by installing an intelligent heat recovery system, such as BOGE Duotherm, up to 94% of the generated heat can be recovered and used for another purpose elsewhere in the plant.

Analyse air compressor system data

Analysing compressed air system data such as flow rate, pressure and temperature can highlight the true costs to manufacturers of their compressed air systems and identify opportunities to improve efficiency and productivity as well as avoid expensive downtime and lost production.

Ask the experts for advice

You aren't alone in the fight for greater air compressor performance and efficiency. Compressed air systems experts, whether that's your local distributor or a systems manufacturer, can help specify the right system and technology for any environment or application.

