

Is safety of compressed air systems really just about safety?

More and more companies are finding that to be competitive in this global economy they need to do more with less. So when budgets and schedules are tight, safety might not be the first priority that comes into mind when making decisions on the purchase or maintenance of a compressed air system. But is safety really just about safety? Here are 10 health & safety tips that end users should consider throughout the lifecycle of their compressed air system to make the best value of it.

1. Designed to be safe

Air compressors, their components and accessories need to meet a number of design codes and standards; machines need to be clearly CE marked and vendors should be able to provide full documentation on compliance. Proper design prevents accidental exposure to moving parts, live voltage, high pressure or chemicals that could cause injury and as a consequence down time.

2. Safe access

End users often have only limited space available to place an air compressor, yet a machine that is difficult, unsafe or impossible to access can cause serious disruption in the future when routine or unplanned maintenance needs to be carried out.

3. Experienced installation team

An experienced and reliable provider will design, install and commission an air compressor and its associated civil work, piping etc. with the selection of the most suitable materials, safety and bleed valves,

that will prevent future leaks and other undesired events that could result in injury to customer staff or down time.

4. Trained service staff

Air compressor service personnel that are regularly trained on, understand, comply with and own safety procedures are proven not only to get less frequently injured but also deliver a work in higher quality and greater efficiency resulting in a more reliable compressed air system.

5. Personal Protective Equipment

Service personnel deployed to the end user wearing Personal Protective Equipment such as safety boots, gloves and safety glasses are probably the best indicator that the compressed air system provider handles all other aspects of its business with the same due care.

6. Lockout of hazardous energy sources

Before any work, routine or unplanned, is initiated on a compressor all energy sources (compressed air, electricity and in some cases water) should be isolated. With this important step the vast majority of maintenance related disruption to other operations and injuries can be prevented.

7. Electrical safety

Air compressors can be often running on up to 600-700 volts, which means special care needs to be taken from design through installation to maintenance. A major risk of compressed air service activities is Arc Flash; the risk of this extremely high temperature electrical flash can be

mitigated if service personnel follow a rigorous safety procedure and are dressed in the correct protective clothing.

8. Road safety

Compressed air system providers with a dedicated, maintained and regularly inspected fleet will arrive in time and will deliver the products in time, saving the customer money and keeping the process lean.

9. Regular maintenance

To ensure the safe operation of an air compressor, regular maintenance intervals should be kept even if the machine is up and running without any issues. A well-scheduled visit from the service provider will also prevent or minimise disruption to connecting plant operations. As an alternative the investment of a backup unit can also be considered. This is particularly important where compressed air is critical to production and where any loss of air would cause expensive downtime.

10. Sustainable operation

Air compressors with an extended product life, lower energy consumption and longer maintenance periods will certainly act positively on mid and long-term capital and operational expenditure, but also result in less waste generated from the replacement of fluids, filters and other consumable parts for a more sustainable operation.

So is safety of compressed air systems really just about safety? Safety means better quality of services, less down time of air compressors and lean operations at the end user side.