MAINTENANCE SOLUTIONS

Ultrasonic air leak inspections can help create massive financial and carbon savings with a rapid payback period.

COMPRESSED AIR IS NOT FREE

The truth is quite the opposite, with a typical industrial air compressor costing >$87,000/year in electricity costs alone, with compressors accounting for as much as 30% of total electricity used in some facilities1. Leaks from components such as unions, valves, fittings and couplings not only waste energy, but can also negatively impact both the performance and the lifespan of your compressed air system.

It is estimated that on average, approximately 40% of industrial compressed air is lost to leakages.

One of the most cost-effective ways to get the most out of your compressed air system is to repair leaks.

Adopting a plant-wide ultrasonic air leak survey is a great way of both identifying and quantifying the size and cost of those leaks, utilising local site energy cost information and detailing equivalent CO2 savings.

Armed with this information, a more systematic approach to cutting compressed air costs can be applied, allowing prioritisation of repairs based on the size of leak, expected cost of repair or expected payback.

Estimating the cost of leaks[2]

Fig 1: Approximate cost of an individual air leak

RS AIR LEAK SURVEYS

An RS Maintenance Solutions energy loss auditor will attend site and perform a non-intrusive fault-finding survey of your compressed air systems using airborne ultrasonic technology. This method will both identify the fault and assess its severity in terms of cost.

A full itemised report is then generated, with detail of leak size, cost and estimated payback time if remedial work is carried out.

Benefits:

- Reduce energy usage
- Itemised cost benefit detail
- Improve compressor lifespan
- Prioritise repairs
- Reduced energy bills
- Demonstrable ROI
- Training services offered
- Equipment available for purchase

1 – Source, Energystar.gov, OIT Energy Tips; Determine the cost of compressed air for your plant.
2 – Calculation assumes 8760 hours per year, 100 pounds per square inch gauge (PSIG) system, and £0.05 per kWh

RS AIR LEAK INSPECTIONS

FLUKE ii910 PRECISION ACOUSTIC IMAGER

Our auditors use the industry-leading Fluke ii910 Sonic Acoustic Imagers to conduct the surveys.

It allows technicians see sound as they scan hoses, fittings, and connections for leaks. Its built-in acoustic array of tiny sensitive microphones generates a spectrum of decibel levels per frequency.

Plus these devices can detect electrical partial discharge (PD)—a serious issue on insulators, transformers, switch gears, and high-voltage powerlines.

Quickly, easily and confidently monitor your equipment for partial discharge.

- Training services are offered
- Equipment available for purchase (See RS Stock Number 206-6117)

CONTACT US

To organise your Air Leak Survey or ask us for more information about the RS range of Service Solutions to support your business:

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