



# AIR LEAK SURVEYS

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

[th.rs-online.com/energy-services](http://th.rs-online.com/energy-services)



## 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 facilities<sup>1</sup>. 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.**

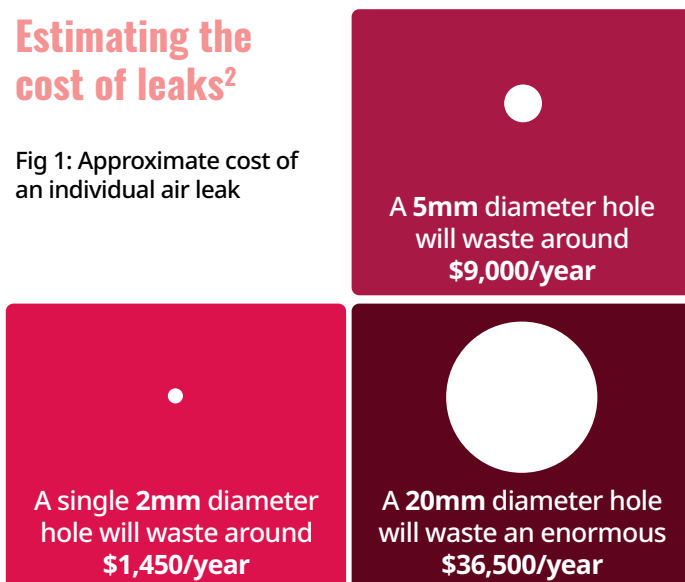
One of the most cost-effective ways to get the most out of your compressed air system is to repair leaks.

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<sup>2</sup>

Fig 1: Approximate cost of an individual air leak



<sup>1</sup> - Source, Energystar.gov, OIT Energy Tips; Determine the cost of compressed air for your plant.

<sup>2</sup> - Calculation assumes 8760 hours per year, 100 pounds per square inch gauge (PSIG) system, and £0.05 per kWh. Qualifying criteria and minimum order quantities may apply for some services. Orders placed through services are subject to additional terms and conditions. See website for details.

## OUR SOLUTION

A 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

## TESTING WITH THE INDUSTRY'S BEST: FLUKE PRECISION ACOUSTIC IMAGER

An RS Maintenance Solutions energy loss auditor will attend. 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.

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