

# Locate. Repair. Repeat.

**Compressed Air Leak Detection and Management**  
Reduce your compressed air costs

## REDUCE YOUR COMPRESSED AIR COSTS

# Detection, repair and on-going management

Unfortunately all compressed air systems will have compressed air leaks. In a new, well maintained compressed air network it is not uncommon to find a 5 to 20% leakage rate, and in older compressed air networks it can easily be 30 to 40%. Losing compressed air through leaks is a costly exercise in terms of unproductive air consumption and increased energy usage. Long-term this can lead to an increased maintenance requirement and a reduction in the useful life of equipment. Whilst unavoidable, it is possible to manage the leak rate in a compressed air system. Following a regular programme of leak detection, repair and on-going management is one of the most cost effective measures that can be taken in order to see both immediate and long-term results.

### UltraSonic leak detection

The most comprehensive method of detecting compressed air leaks is with an UltraSonic Leak Detector (USLD). Fast and accurate, a USLD is the most versatile form of leak detection and can detect leaks as small as a pinhole!

A USLD kit consists of directional microphones, amplifiers, and audio filters. As ultrasonic is a high frequency signal, the sound from a compressed air leak is both directional and localised to the source. This allows the detector to sense and therefore locate the source of leaks with relative ease.

Once leaks have been detected they are tagged, recorded and fixed in order of priority.

UltraSonic Leak Detection can be performed while the plant is running as background noise will not interfere with the results. This means no downtime.

### Continual improvement programme

Compressed air leak detection and repair will never be a one off requirement. As a compressed air system ages or changes with time it will need further attention. For long term results leak detection and repair therefore needs to be part of an on-

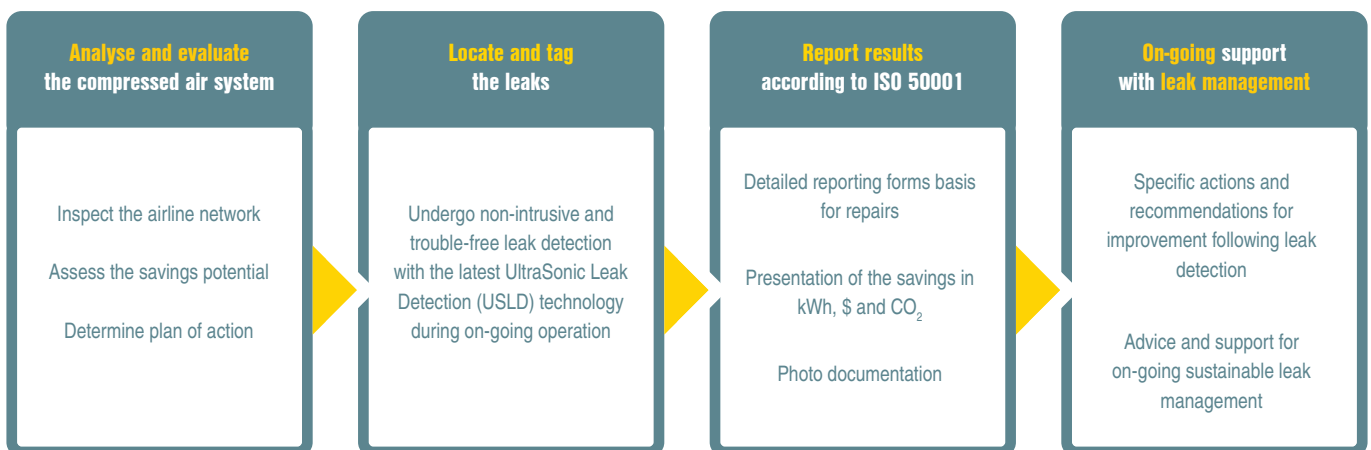


going programme.

### Compressed air leak detection & management

KAESER AIR SERVICE provides a comprehensive leak detection programme. This includes UltraSonic Leak Detection, tagging, fixing and on-going management. This can be selected as a stand alone service or integrated into a service and maintenance package.

### How it works with KAESER AIR SERVICE



## The cost of leaks

Air consumption	Leak Size (diameter)					
	0,5 mm	1 mm	1,5 mm	2 mm	2,5 mm	3,0 mm
3 bar	\$90	\$361	\$812	\$1,444	\$2,256	\$3,248
4 bar	\$113	\$451	\$1,015	\$1,805	\$2,820	\$4,061
5 bar	\$135	\$541	\$1,218	\$2,166	\$3,384	\$4,873
6 bar	\$158	\$632	\$1,421	\$2,527	\$3,948	\$5,685
7 bar	\$180	\$722	\$1,624	\$2,888	\$4,512	\$6,497
8 bar	\$203	\$812	\$1,827	\$3,248	\$5,076	\$7,309

The costs of compressed air leaks over 12 months, with the compressed air system operating 24/7. Assuming the system has a power cost of 15 cents/kW/hr

## Examples of savings potential

	Typical leakage points			
	Screw connection or Quick coupling	Blow gun compressed air tool	Compressed air hose reel	Maintenance valve
Average annual savings potential per leak (at 7 bar)	\$250 - 500	\$500 - 750	< \$600	< \$850

## Your Benefits



Immediate & verifiable **energy savings** and therefore **cost reductions**



Fully documented assessment for your energy management system to **ISO 50001** or audits



Reliable and verifiable **CO<sub>2</sub> savings** - contribute to meeting your **corporate environmental sustainability goals**



Enjoy a **payback** period of usually **less than one year**



Use of our experienced Service Technicians **relieves your own team**



Improve the **security of your compressed air supply**, increase reserves during generation, **relieve** the entire compressed air system

# The world is our home

As one of the world's largest manufacturers of compressors, blowers and compressed air systems, KAESER COMPRESSORS is represented throughout the world by a comprehensive network of branches, subsidiaries and authorised distribution partners in over 140 countries.

By offering innovative, efficient and reliable products and services, KAESER's experienced consultants and engineers work in close partnership with customers to enhance their competitive edge and to develop progressive system concepts that continuously push the boundaries of performance and technology. Moreover, decades of knowledge and expertise from this industry leading systems provider are made available to each and every customer via the KAESER group's advanced global IT network.

These advantages, coupled with KAESER's worldwide service organisation, ensure that every product operates at peak performance at all times, whilst providing maximum availability.

Closer to home, KAESER Compressors serves New Zealand from its offices in Auckland alongside a dedicated network of Authorised Sales and Service Centres strategically located nationwide.

