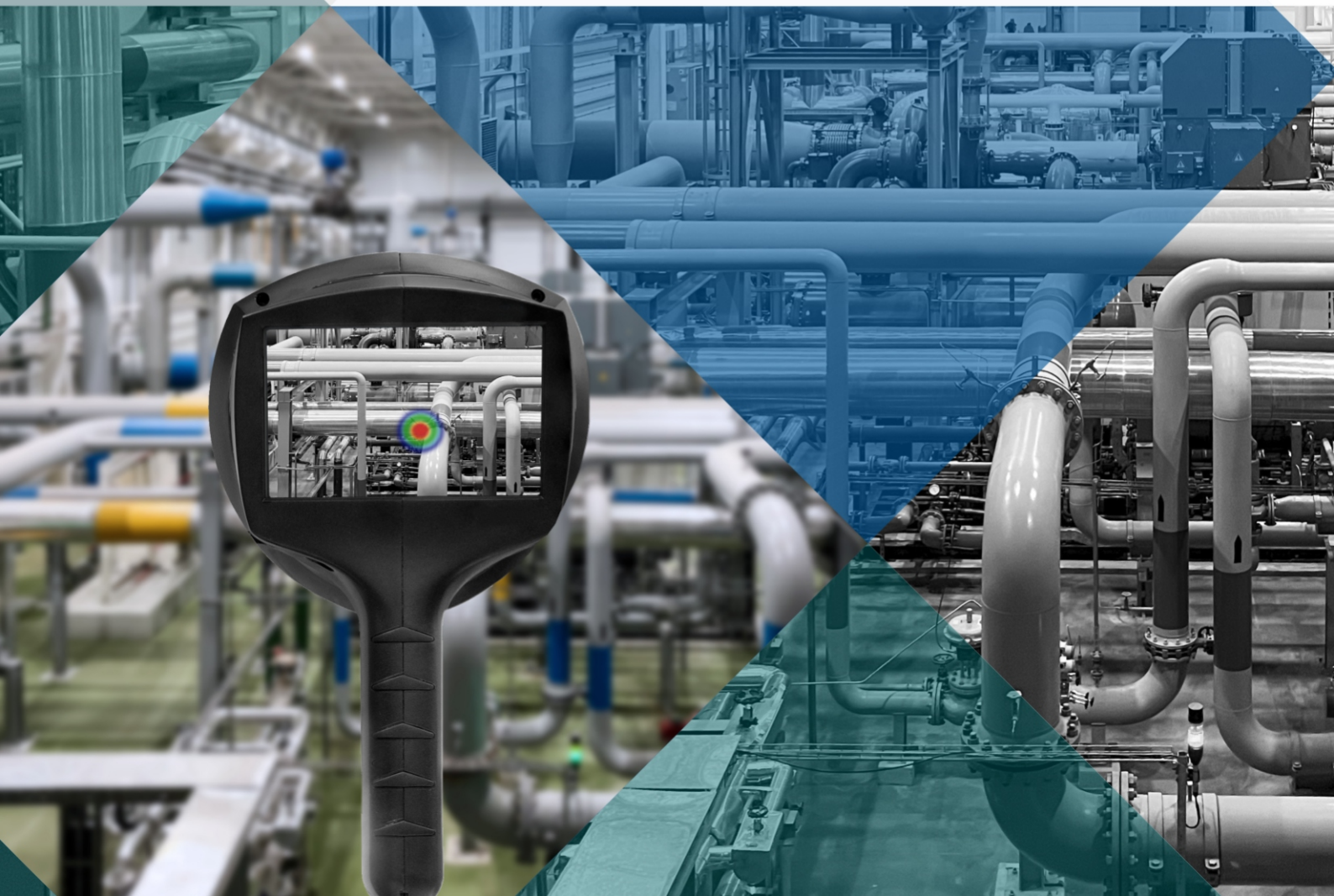




Detection of leaks in compressed  
air and other gas systems  
Acoustic imaging technology



## Acoustic imaging

Acoustic imaging technology makes visualization of compressed air (or other gas) leak possible even in noisy industrial environments. A pressurized gas outflow generates noise due to friction and turbulence, which is captured and recorded by low-noise microphones of MEMS measuring device.

The acoustic image thus generated is transposed in real time to a high-resolution digital camera image. Such a convenient presentation of the measurement results makes it possible to locate the source of the leak very quickly and accurately, even from a distance of several meters.



## Leak detection

In a typical industrial environment:

- 0.032 l/min at 3 bar from 3 m
- 0.05 l/min at 3 bar from 10 m
- Absolute minimum detection in quiet environments  
0.016 l/min at 1.2 bar from 0.3m

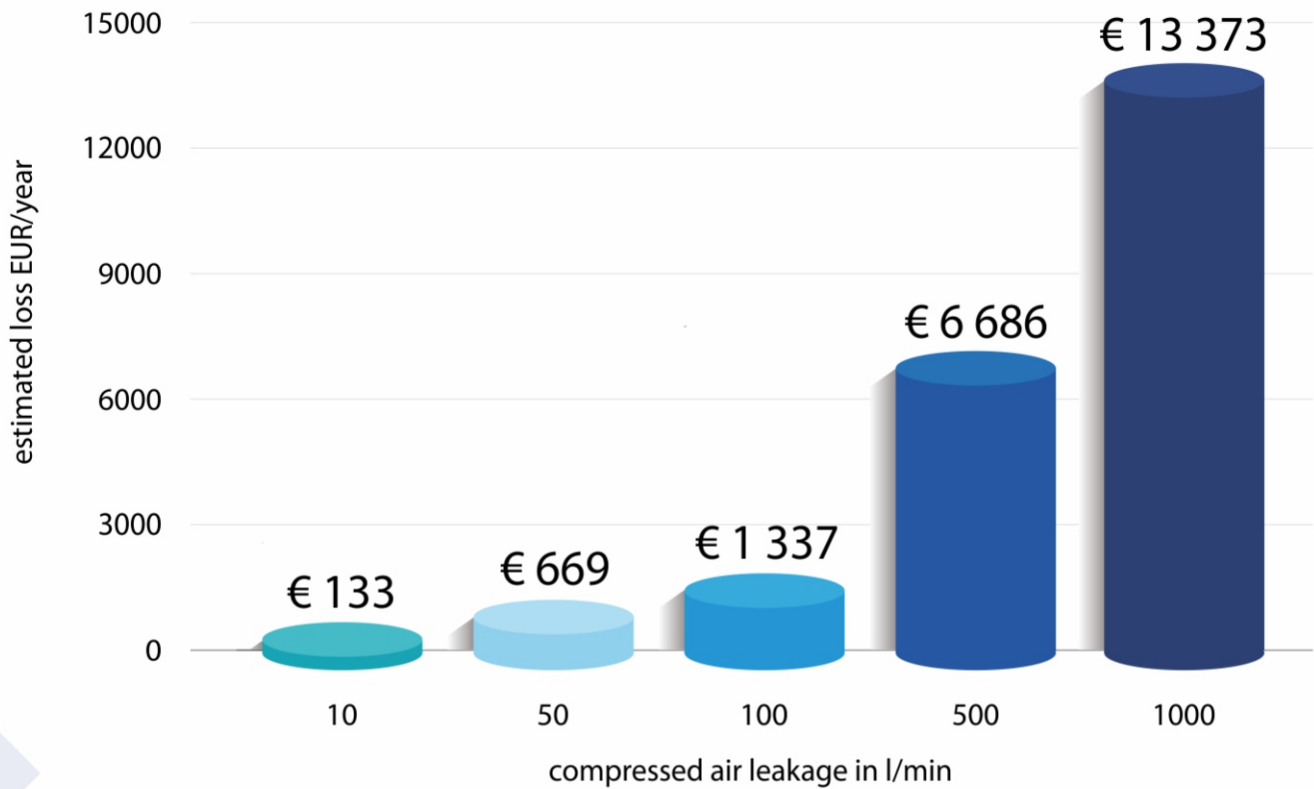
## Quick inspection of compressed air systems

Our service for inspecting compressed air and other industrial gas systems, includes detecting leaks, determining savings potential, as well as fixing leaks.

### The use of the acoustic imaging method:

- significantly reduces system inspection time,
- increases the production efficiency,
- improves safety,
- reduces compressor repair and replacement costs,
- reduces gas emissions into the environment,
- reduces energy consumption costs.

## Potential for savings



1 m<sup>3</sup> of compressed air with a pressure of 7 bar, is charged with an energy consumption of about 111 Wh. Assuming that the price of energy is € 0.1/kWh, the production of compressed air is a cost of € 0.13/m<sup>3</sup>. The cost of using compressed air is estimated at € 0.025/m<sup>3</sup>.

## Sample inspection reports for compressed air systems



### Air leak detected

Estimated size of leak 14l/min  
Estimated annual cost 167 €/year

### Properties

Distance 5m  
Level 52.9 dB  
Date of creation 8.2.2018  
Device AC1DEMO3  
Device label AC100003\_00055\_180208\_1153\_0024

Image ID 3000



### Air leak detected

Estimated size of leak 41l/min  
Estimated annual cost 501 €/year

### Properties

Distance 10m  
Level 61.4 dB  
Date of creation 9.2.2018  
Device AC1DEMO3  
Device label AC100003\_00071\_180209\_1234\_0040

Image ID 3002



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