

# **LEAKAGE DETECTION**

## WHY LEAKAGE DETECTION

Compressed air is one of the most important and versatile sources of energy in manufacturing. But while the rational utilisation of energy is a fundamental principle of cost-efficient and sustainable production, it is a common issue that a significant amount of compressed air is lost in the system between source and application. Pipe connections, conditioning units, shut-off valves, quick couplers and terminal equipment are all common sources of small leaks that can have a large effect.

## SAMPLE CALCULATION FOR A **MEDIUM SIZED COMPANY**

Approx. 25% of compressed air is lost due to leaks. Installed compressor capacity: 150 kW x 6000 operating hours x € 0.40/kWh Annual electricity costs: € 360,000 **25% LEAKAGE COST:** 90,000 € PER YEAR!

A proper maintenance of your compressed air system is an essential requirement for cost-effective and sustainable operation. Donaldson can help to detect the leaks and help to keep energy costs at a minimum by optimising your compressed air operations.

#### **HOW TO SAVE ENERGY**

State-of-the-art technology is used to find and document even the smallest leaks (0.1 l/min) even at great distances. The entire piping system and terminal equipments are checked by experienced customer service engineers while

#### **Facts and features**

#### Leak detection on:

• Compressed air and pneumatic systems (up to 40 bar) and vacuum systems

- Technical gases such as nitrogen, oxygen, argon, ...
- · Leak testing of containers (including unpressurised containers) using an ultrasonic transmitter



the plant is running. Sometimes only small necessary information for the elimination of adjustments are needed, such as tightening the leaks and gives us all the information a tube connection, sealing a leaky pipe, or we need to advice an optimisation concept that is tailored to your specific needs.

> Regular servicing and preventive maintenance is the key to cost efficiency for your entire compressed air system.

### **Main Features:**

repairing a conditioning unit.

• Find out your leakage rate (I/min or cfm) and potential savings (€ /year).

The leaks are photographed, recorded in a

detailed report and tagged with the leak

symbol. The report also includes informa-

tion on possible CO<sub>2</sub> reductions, the sizes of

the leakages and the savings potential

(EURO) per leakage. This provides the

• Find the smallest leaks at large distances · Get a report in accordance with ISO 50001

# **Air Quality Audit**

measurement technologies reliably determine your compressed air quality through the analysis of compressed air, dew point

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