

QUICK AND EASY TO BIG SAVINGS ON COMPRESSED AIR

With us to savings for compressed air!

Air leaking is present everywhere in industry where we use compressed air. The savings potential is very high. Compressed air as an energy source is due to inefficiency in production, typically 8 to 10 times more expensive than electricity. Compressor operation and maintenance of distribution system is the potential for very substantial savings. Based on the reviews of compressor stations and the findings in the literature we can say that it is possible to save up to 40% of electricity in the average compressor station.

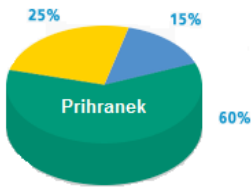
The annual cost of a leakage of compressed air.

1 € coin (size)	Annual leakage cost
1 mm (0,07m ³ /min)	392€
2 mm (0,29m ³ /min)	1.978€
3 mm (0,66m ³ /min)	2.480€
5 mm (1,87m ³ /min)	7.200€
10 mm (7,31m ³ /min)	25.200€

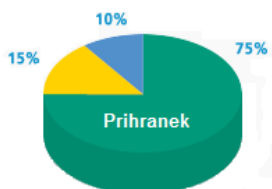
*sistem pressure 8 bar, 8000h/yr, 0,7€kWh

How much can you save with the systematic elimination of leakage

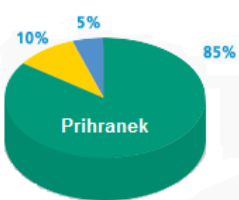
1. Year



2. Year



3. Year



- Cost of leak detection
- Cost of eliminating leakage
- Savings

The cost of a systematic detection and elimination include the cost of system solutions in search of repeated abandonment, and the choice of advanced solutions for the permanent reduction of the leakage rate.

What are the annual costs of a leak in your company?

Average consumption per minute		Leakage rate			
		10%	20%	30%	40%
m ³	kW	€	€	€	€
10	55	10.500	21.000	31.500	42.000
20	110	21.000	42.000	63.000	84.000
30	160	31.500	63.000	94.500	126.000
50	250	52.500	105.000	157.500	210.000
75	350	78.800	157.500	236.250	315.000
100	500	105.000	210.000	315.000	420.000

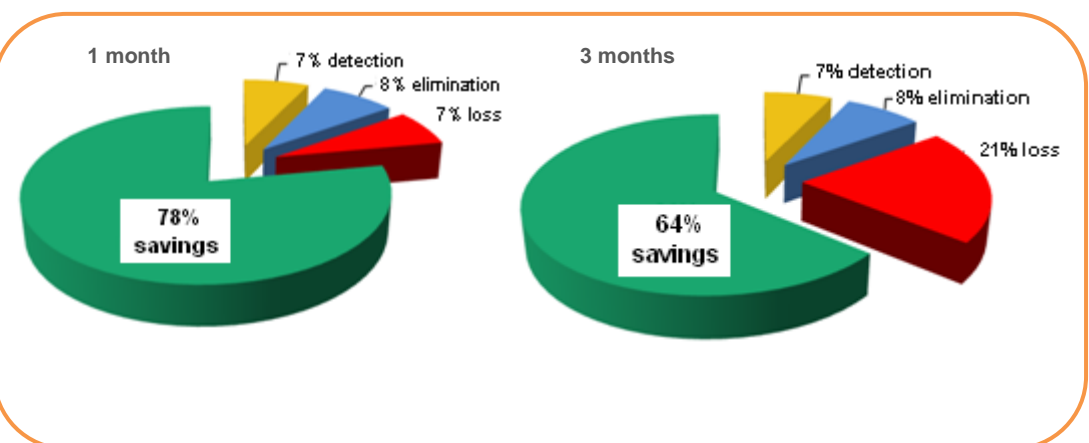
* price of compressed air 0,02€/m³, at 7 bar, 24 h, 365 daz/year



How to approach the elimination of air leaks?

First, we come to the question of logistics, whom to turn to that the process of detecting and eliminating leaks is quickly realized, as the compressed air leakage means a cost for the company every minute, every hour of the year, including during the unloaded state.

Only detecting leaks is not the main condition for saving money, or reducing production costs, important is to achieve the quickest eliminating of detected leaks. HPE team is completely focused on early detection and elimination of leakage of compressed air.



Distribution of annual savings, depending on the delay detection and elimination of leakage. (Example: the average consumption of 15 Nm³/min, 20% leakage)

Even with a delay of one month can cost more than the value of detecting leakage in three months and already far exceeds both the detection and elimination.



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Examples of air leakage locations:



Example of leak detection!

No. leaking	dB	Pressure	Description of the leaking	Repair description	Material	Cost of material no taxes*	Monthly cost of leakage
1	52	8,3	Condensate pot, poor housing screwed	re-screw the housing, replace the seal	Seal	€ 4,00	€ 19,57
7	50	8,3	On the quick coupler	Replace the quick coupler	Quick coupler	€ 9,50	€ 19,57
8	63	8,3	The pipe under the wooden floor	Repair of pipe (installation interface)	1/2" interface	€ 4,80	€ 34,26
18	58	8,3	On knee	Seal knee	Seal	€ 0,00	€ 19,57
22	45	8,3	On clamp	Tighten clamps	/	€ 0,00	€ 19,57
25	32	8,3	On the quick coupler	Replace the quick coupler	Quick coupler	€ 9,50	€ 12,23
113	46	8	On the quick coupler	Replace the quick coupler	Quick coupler	€ 9,50	€ 19,57
Total:						€ 37,30	€ 144,36

* The price of material is indicative and depends on the manufacturer and the quality.

How can leak affects the welfare of workers?

Leakage detection for many companies is mainly economic problem, but it is closely related to the overall efficiency and being in the working environment, because it contributes a lot to reduce the noise level at the workplace. It is important to understand how sound affects us physically and our work. Gauche noise in the workplace reduces the working capacity and productivity. It is generally accepted that irritation increases directly proportional to the amount of noise. Noise contains different frequency tones especially high nuisance. Because we do not hear much noise audible warning signals, or speech, and this may increase the risk of workplace accidents and cause damage to hearing. May cause headache, nausea, muscle tension, mental and physical fatigue, which in turn leads to inattention.

Why to decide to detect leaks?

For some companies, the lack of compressed air is a big challenge, to ensure continuous operation, so the lack of air compressor to purchase more capacity. Usually we suggest that you choose to invest in leak detection and elimination, thereby reduce air consumption. Often the biggest obstacle to the establishment are programs to detect leaks.

Average consumption can be reduced with leakage detection for more than 50% and that can mean, instead of five compressor then we use only three. In addition to save energy and reduce the cost of producing compressed air leak detection services, often eliminate the need for improved compressor performance.

Leak detection and elimination, makes a better assessment of the need for more efficient compressors.

Why to decide to eliminate the leak?

Studies of energy saving has shown that the maximum potential for energy savings in the compressed air system, is to detect and prevent leaks.

Most leak detection projects investments are repaid in 3-4 month period.

Energy saving is just one part of the benefits of the elimination of leaks, it can completely eliminate the need for new capacity compressors.

The reason why you should call us, is an immediate effect and the fact that the cost of leak detection and elimination is small compared with the inherent costs incurred due to system leakage.

environment care!

Compressor 200 kWh (35m3/min) produces around 940 tonnes CO2/yr.

If the leakage of 35% would represent 329 tonnes CO2/yr, which is equivalent to the emission of 360 hybrid-powered cars. Losses of this leakage amounts to about € 65,000 per year.

Call us and we will eliminate leaks in your compressed air system!



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