

Badger Fluid System Technologies

Hazards of Leakage in Compressed Air Systems

Costs

Did you know significant energy losses can stem from compressed air systems? An estimated twenty percent of all power used in American industry to generate compressed air is lost. Additional estimates state that it takes seven horsepower of electrical energy to produce one horsepower of compressed air.

System Leaks

The presence of leaks in instrument systems creates both long- and short-term problems for the equipment and system as a whole.

A leak in your system could mean insufficient pressure and can result in:

- a trip, and possible reduction in uptime
- compressors working harder, which costs you time and energy

Infiltration

An instrument air system that is not leak-tight is also susceptible to infiltration. Particulates can come from the inside of piping (especially carbon steel). If instrument air is not dry and clean, particulate and water “gum up” instruments. This can severely reduce service life, and sometimes results in permanent damage.

As moisture infiltrates your system, it can contribute to corrosion and pitting of the metals in your process. If this moisture freezes, your system can expand and contract, which can lead to further downtime.

Fugitive Emissions

Fugitive emissions are often unrecognized at their source, but can add up to alarming amounts when considered in their overall effect. Aging piping systems can tax human and financial resources, simply to ensure a system has leak-free connections.

Aiming to achieve a leak-free status means you will see a reduction in energy costs, increased uptime and a safer work environment.

So, when assessing the importance of leaks in your compressed air system, consider all these costs to accurately determine how much leaks will cost you.



Start the conversation today.

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