Counteracting inefficiency

Achieve savings with a compressor management system



From drying to cooling and moving products to sealing packaging and much more: compressed air is essential for many work steps in manufacturing companies. However, the system efficiency of compressed air generation is often not given enough attention. As a result, many systems work inefficiently. A compressor control system can help here.

Over the lifespan of a compressed air system, many inefficiencies creep in. Reasons include oversized and poorly controlled compressors, improper use, inefficient and incorrect filtration, and leaks. As a result, there are significant hidden operating costs. And although many companies are aware that compressed air systems have great potential for energy savings, they are hesitant to solve these problems.

Although flow meters and monitoring systems are often installed to identify savings potential, the information available alone does not mean that energy is saved or the system is improved in any way. Take the flow meter for example. It is installed somewhere behind the compressor. Depending on the position, different measurements may be generated. Someone has to interpret these and ultimately make decisions about what modifications can be made to improve performance. There

Afterwards, it must be checked whether the changes actually had an impact. Flow is just one aspect of a complex compressed air system. Similar problems also arise, for example, when measuring performance.

If you want to take action regarding optimizations, you have to understand the compressed air system well enough to actually use it

to achieve improvements. It is entirely possible that the modifications will have a negative impact on energy consumption or even affect production. The problem becomes even more complex when the system has a dynamic load with large fluctuations in consumption. Most compressed air systems are very dynamic, so a change that

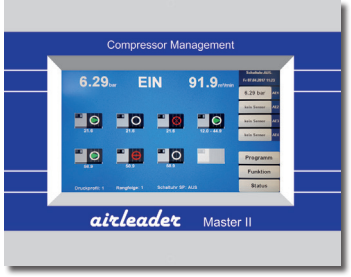
In focus
Efficiency
Sustainability
Security

Airleader in detail

- **The control can be used across manufacturers.**
- **Integrated energy data collection on each compressor provides real data. By Online monitoring will detect irregularities such as deterioration in efficiency** recognized immediately (ISO 50 001).
- **Integrated oil temperature monitoring on each compressor for early detection of thermal problems.**
- **Monitoring of compressed air auxiliary units such as: B. Dryer and condensate drain conductor as well as permanent recording and monitoring of the pressure dew point and the compressor room temperature. This avoids production errors due to poor compressed air quality.**
- **Visualization also for non-compressed air professionals.**

You can see the status at a glance
Compressed air system.

- **Good planning tool for future compressor interpretations. Avoids bad investments incorrect sizing.**
- **Long-term data storage on company premises** Server.
- **Over 10,000 references in Germany.**



works for one period of time, may not be suitable for another period of time. There is also the question of how the change will affect overall system performance.

In order to be able to assess all of these complex relationships and draw the right conclusions for system optimization, a lot of experience and sensitivity are required.

Reliable compressed air generation at a high level of efficiency

An alternative is to install a compressor management system to manage the compressed air generators to achieve the best performance at all times. Most compressed air experts agree that good system control is the key to improving overall efficiency. When implementing a compressor control system, the goal is to ensure that the system responds predictably, reliably and efficiently. This can be achieved with intelligent control that not only monitors the systems and provides operating data, but also takes control of the entire system. This ensures that the best possible combination of compressors continuously and reliably produces compressed air at the most energy-efficient level.

One such system is the Airleader Master II+ from WF Steuerungstechnik. Its

Good control of the compressed air system is key to improve overall efficiency

The current version incorporates more than 25 years of practical experience. Airleader focuses on the right combination of compressors installed to enable the system to use the least amount of energy for current needs. When demand changes, Airleader changes the combination according to the new level. Additional external system pressure sensors can be added to ensure the system responds immediately to new demands or spontaneous changes in usage.

Airleader can control virtually any brand of compressor without affecting the unit's existing controls and current setup. With Airleader, the compressed air system is continuously optimized. If something has been “over-optimized,” the compressed air system can simply be reset to the original settings. Historical data is constantly being updated so users can check how the system has been performing for months or even years. If the compressors are running optimally, other inefficiencies such as: B. Concentrate leaks and thus achieve further savings. The Airleader adapts to the respective circumstances while the user continually reduces his energy requirements.

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