

Sigma Smart Air

Maintenance with pinpoint precision

The Sigma Smart Air service from Kaeser is the first step to taking advantage of predictive maintenance – all that’s needed is an intelligent compressed air system.

Sigma Smart Air offers much more than most current frameworks for servicing compressed air systems, in which maintenance is performed either upon request by the customer or at established intervals. In that case, there is always the risk that service will be performed too early or too late, depending on the actual operating hours – both of which result in additional costs for operators.

With Sigma Smart Air, Kaeser Kompressoren offers a service that will deliver both predictive maintenance as well as maximum energy efficiency and availability of the compressed air supply – far beyond what could be expected of any system in the past. In order for users to benefit from real-time display of operating, service and energy data for the compressed air station, the latter must be “intelligent”, i.e. networked via the Ethernet-based Sigma Network and controlled by the Sigma Air Manager 4.0 master controller.

Sigma Smart Air enhances the powerful feature of real-time data management with Kaeser’s expert knowledge and predictive maintenance, which makes it possible to maximise compressed air supply whilst minimising life-cycle costs.

How does Sigma Smart Air work?

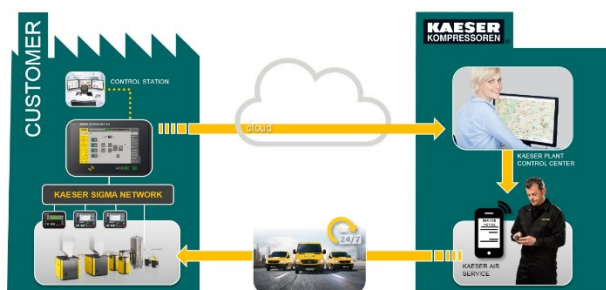
In the Sigma Smart Air concept, the physical meets the virtual world within the framework of a structural model in which the specific physical compressed air station, configured according to the operator’s requirements, is represented virtually by a “digital twin.” Real-time availability of operating data makes it possible not only to monitor compressed air station status anytime, from anywhere, but also to detect the operating ‘health’ of a compressed air station. This means potential faults can be detected in advance and appropriate maintenance measures can be automatically initiated. Ultimately, operators benefit from significantly reduced compressed air production costs, as well as dramatically enhanced compressed air availability.

Furthermore, service can be scheduled at the ideal time as needed, which saves costs otherwise required for procurement, training, logistics, service and in-house service staff. Sigma Smart Air also provides optimum cost transparency throughout the compressed air system’s entire life-cycle.

Sigma Smart Air additionally includes monitoring of key figures such as service costs, reserves and specific power and enables sophisticated energy and life-cycle management of the compressed air station throughout its entire service life. The always up-to-date energy data figures from a single source also lay the foundation for energy management as per ISO 50001.

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2.785 Keystrokes – Approved for publication, copy appreciated



Precision service for value like never before: the new Sigma Smart Air service from KAESER makes the dream a reality.



The Sigma Air Manager 4.0 provides the foundation for the new Sigma Smart Air service capability.