

KAESER CONTRIBUTIONS TO CUSTOMER ENERGY EFFICIENCIES

Energy Efficiency Business trip of the Federal Office of Economics in Germany

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Johannesburg

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(Project Manager)



KAESER
COMPRESSORS

HISTORY



Electrical & Mobile
Compressor factory (Coburg)



Blower Factory (Gera)

Established: Coburg, 1919
Founder: Carl Kaeser Sr.

ORGANIZATIONAL STRUCTURE

3rd generation family-owned company

Management Board:



Thomas Kaeser

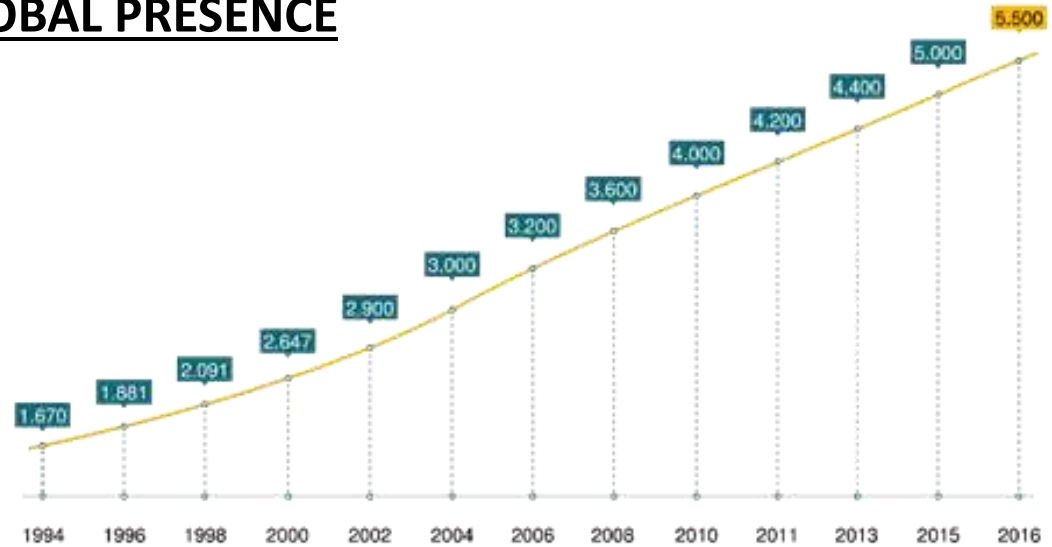


Tina-Maria Vlantoussi-Kaeser

GLOBAL PRESENCE



Global sales and distribution: branch offices and exclusive sales partners in over 100 countries



Global workforce: Approximately 5,500

LOCAL PRESENCE



Kaeser South Africa established 2005

Head office: Johannesburg

Sales & service office: Port Elizabeth & Cape Town



Geoff Houlgate
Managing Director

PRODUCT RANGE

Rotary screw compressors

Piston compressors

Portable compressors

Compressed air storage and distribution

Air-treatment

Condensate technology

Controllers

Services

Blowers

Vacuum pumps



The Complete Compressed Air System

CHECK INDUSTRY 4.0

SAM 4.0
Monitoring and
controlling



10

PLANNING & ACTING

1



Understanding your energy
policy and strategic goals

DO

Proper
Servicing and
maintenance



9

Correct system
Installation
&
housekeeping

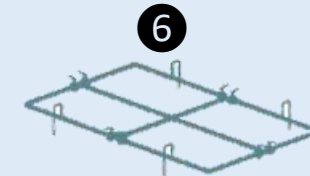


8

Heat Exchangers



7



6

Pressure Drops &
Leakages

CHECKING

2



Perform a site audit

3



Log Plant
performance with
either and ADA or
SAM

4

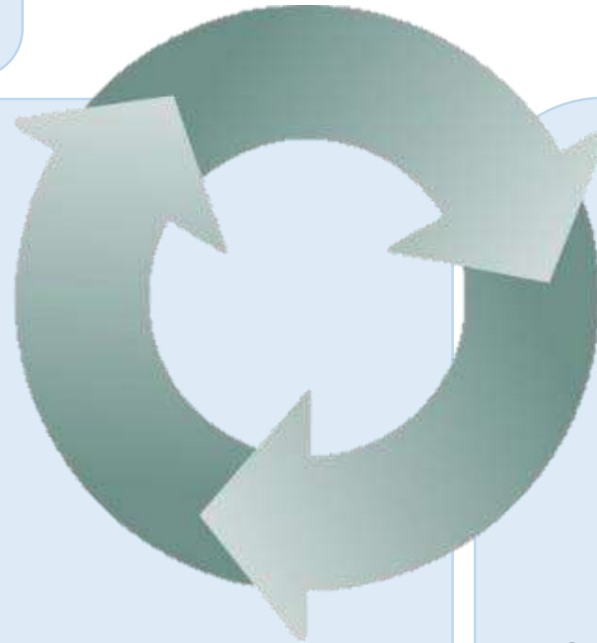


Analyze & reporting on
captured data for
correct equipment
sizing

5



KES analysis &
system comparisons



INDUSTRY 4.0

- Optimal coordination and **control of all components** within a compressed air system
- Real-time data gathering, for **predictive maintenance**
- SAM controls the various machines with the **optimum efficiency** and **precisely matches air delivery with the required airflow profile.**



Air Demand Analysis – ADA

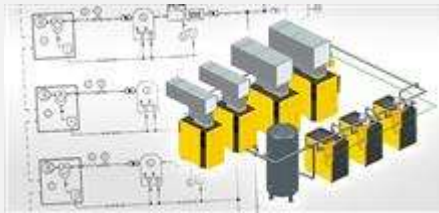
we capture **precise consumption profiles** of your system.

- We **highlight weaknesses** in your existing system.
- We **identify poorly dimensioned installations.**
- We **lay the groundwork for the next step** toward the optimal compressed air station by calculating the energy-saving potential.



The individual compressed air station

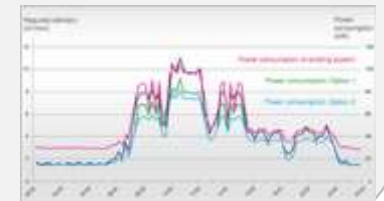
The customer will take delivery of a **tailored compressed air supply solution** that will provide outstanding efficiency and be ready to adapt to any future needs. With **CAD planning**, you can already begin your assessments, even **before the first compressor is installed.**



KAESER Energy-Saving System KESS

Using the ADA data we can:

- We then **compare several possible concepts** in order to achieve the **best possible efficiency.**
- We **take into account the performance of the station during its overall service life.**



SUPPLIER



Latest activity:

Kaeser have been identified as one of Fry's Metals valued suppliers that can assist them in maintaining and improving their SANS ISO 50001 certification



PROJECTS

Original Plant

No. compressors: 4
 No. Standby: 0
 Max Power: 410kW
 Total FAD: 71m³/min



ADA Analysis & Site Audit

- Pressure drops over both dry header and distribution back bone
- Heat recovery via both water and exhaust air.



Current Plant

No. compressors: 4
 No. Standby: 1
 Max Power: 344kW
 Total FAD: 83m³/min



KESS Analysis

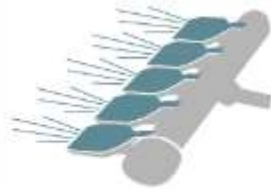
- Compared 3 solutions to each other
- Showing savings ranging between R 565 000 and R736 000 / year



Fields of application



Food processing



General industry



Beverage industry



Chemicals industry



Mining



Water management



Transportation



Burner air supply



Bulk material conveying



Marine applications

THANK YOU



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South African Office

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