



Industrie Service

CERTIFICATE

TÜV SÜD Industrie Service GmbH

certifies for

Festo AG & Co.KG,

that the "Festo Energy Saving Services" represent a suitable and expedient methodology for the assessment of companies with regard to the energy efficiency of compressed air plant.

"Festo Energy Saving Services" is a service program with a modular structure, composed of the following services:

- –Compressed air energy efficiency audit in accordance with DIN EN ISO 11011
- Engineering and implementation of measures for compressed air savings
- Measures for ensuring long term savings of compressed air

The aim of "Festo Energy Saving Services" is the best possible exploitation of compressed air savings potential.

The assessment of methods by the TÜV SÜD Industrie Service GmbH relates to the compressed air efficiency audit in accordance with DIN EN ISO 11011. The compressed air efficiency audit in accordance with DIN EN ISO 11011 includes the following modules:

- Analysis of compressed air generation
- Analysis of compressed air consumption
- Analysis of compressed air quality
- Leakage location/ elimination
- Analysis of machine energy efficiency in connection with compressed air usage

The methodology developed by Festo AG & Co.KG is assessed against the DIN EN ISO 11011 "Compressed air energy efficiency audit". In addition the following are taken into account: VDI Guideline 3922 "Energy-Consulting for Industry and Business", DIN EN 15900 "Energy Efficiency Services" and DIN EN 16247-1 "Energy Audits".

The Festo AG & Co.KG has disclosed the internals of this methodology to TÜV SÜD Industrie Service GmbH. The potentialities are expertly and methodically correctly identified, evaluated, weighted and reported.

This Certificate is based on Audit Report No. 2687956 of 24.03.2017.

Dresden, 24.03.2017

Dresden, 24.03.2017

Dr.-Ing. Michael Bunk

Dipl.-Ing. (BA) Danny Neumeier