

# **OPERATING DATA ANALYSIS**



ODA by Atlas Copco Gas and Process is the yearly health check for your rotating equipment. It ensures high availability for your machine and your production process.

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# OPERATING DATA ANALYSIS

Operating Data Analysis is a diagnostic test of your machine. It measures the health parameters of rotating equipment.

**P**roviding diagnostics of your turbomachinery, Operating Data Analysis (ODA) ultimately checks the 'health' parameters of your entire machine. Performing such an analysis at regular intervals – we recommend once per year – provides early detection of potential problems.

Trend analysis allows our Atlas Copco Gas and Process Aftermarket specialists to make well-founded projections on your machine's future operating behavior. Early on, the measurement results give information about imminent bearing damage, process-related deposits or impeller contamination, as well as changes in gear rolling and meshing conditions of the gearbox and oil pump.

ODA augments total preventive maintenance, but is not a replacement.

## Looking at the Two-step Measurement Process

**A complete Operating Data Analysis includes two separate measurements:**

**1** With the machine running, a set of measurements is conducted during stationary operation. The measurements resemble the conditions usually found in your production process.

**2** The second set of measurements is taken during load-changing conditions: In particular, a shutdown procedure followed by an immediate restart provides valuable data about resonance frequency stimulation. If your production processes will support this type of test, we strongly recommend it.

**The data recording provides the following measurement values\*:**

- Total vibration values
- Frequency analyses
- Trend plots for the entire duration of measurements, such as direct, amplitude and 1X with phase
- Polar and Bode plots
- Rotor orbits
- Waterfall and/or cascade plots

\*Note: Certain measurements are only possible if the machine is equipped with vibration probes.

## Scope Description

- Onsite ODA measurement, done by a specially trained engineer
- Measurement equipment is provided
- Detailed report is provided, including a discussion of our findings and a recommendation for the operator

Contact our sales engineers with questions and to request our fixed-price offer.

## Results and Recommendation

A final report will provide you with detailed documentation and explain what the measurement results mean for your process. You will receive an in-depth description of the machine's operation status as well as possible recommendations for inspection or maintenance intervention.



## OPERATING DATA ANALYSIS BENEFITS

- In-depth analysis of equipment conditions without opening or stopping the machine
- Drawing from Atlas Copco's extensive database, the measurement sets are compared to the Zero Measurement during production and earlier ODAs
- Early warning of possible failures
- Spare parts check and recommendations
- Possible to combine with an oil analysis
- Fixed-price offer



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**Atlas Copco**

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