

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

Providing 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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