



# Fraunhofer

## TESTED<sup>®</sup> DEVICE

Atlas Copco Airpower n.v.  
Air compressor ZT 90 VSD-FF  
**Report No. AT 1310-673**

DUPLICATE

Statement of  
Qualification

Siloxanes in  
Compressed Air

# Statement of Qualification

**Customer:** Atlas Copco Airpower n.v.  
Boomsesteenweg 957  
2610 Wilrijk  
Belgium

## Component tested

**Category:** Process Equipment  
**Sub-category:** Pneumatic Components  
**Product name:** Air compressor ZT 90 VSD-FF

## Contamination behaviour regarding siloxanes

**Standards/Guidelines:** ISO 16017-1; ISO 16000-6  
The norms stated refer to the relevant editions applicable at the time of the tests.

**Measurement devices:**

- Measuring station:.....PerkinElmer Clarus 600, Clarus 600T, ATD 650
- Sampling pump:.....SG 350ex, GSA Messgerätebau

**Test environment parameters:** Test laboratory at Atlas Copco Airpower n.v.

**Test procedure parameters:**

- Air pressure:..... 7.1 bar
- Total air flow compressor:..... 221 L/s
- Air flow sampling:..... 10L/h
- Sampling time:..... 4 hours
- Total sampled air volume:..... 0,04 m<sup>3</sup>
- Adsorber material:..... Tenax TA

Sampling onto Tenax-TA adsorbent tubes is done in triplicate according ISO 16017-1. Analysis of the tubes is done at Fraunhofer IPA according ISO 16000-6. Field blank measurements are implemented to determine the influence of transport and storage of the adsorbent tubes.

**Test result / Classification:**  
(according to ISO 16017-1; ISO 16000-6)

Result	Classification
< 2.5 E-08 g/m <sup>3</sup>	Siloxane-free air

The compressed air from the analyzed compressor ZT 90 VSD-FF can be classified as siloxane-free air. The analyzed compressor ZT 90 VSD-FF did not contaminate the compressed air with any detectable traces of siloxanes. The limit of detection (LOD) is 2.5 E-08 g/m<sup>3</sup> for a sampling volume of 0.04 m<sup>3</sup> and 1 ng absolute mass detectable by the TD GC/MS system.

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

For further information about the test environment and parameters, please refer to the Fraunhofer IPA test report.

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