

## Main Topics



### Aerosols & Particles

- environmental relevance
- occupational safety
- particle synthesis

### Air Quality & Gas Treatment

- filtration and sorption
- process development
- CFD simulations

### Circular Economy & Water Technology

- mechanical & thermal processes
- reactive & oxidative processes
- process development

### Analysis & Measurement Techniques

- trace analysis
- development of instruments
- process digitalisation



# Compressed Air Filters

## Tests According to ISO 12500



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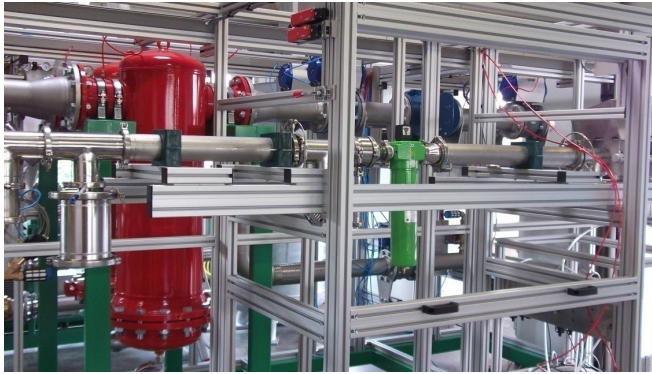
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# Compressed Air Filters - Test According to ISO 12500

## Test Rig



Testfacility for ISO 12500 Part 1 & 3 (oil aerosols and particulates; flow rate from 30 m³/h up to 3000 m³/h)

- ISO 12500-1 (oil aerosol)\*
- ISO 12500- 2 (oil vapour)
- ISO 12500- 3 (particles)\*
- ISO 12500- 4 (water separation)



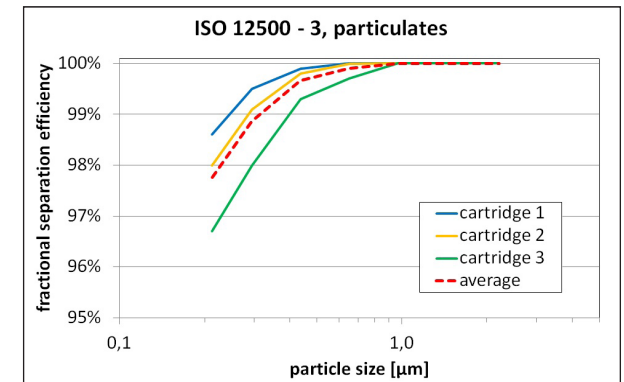
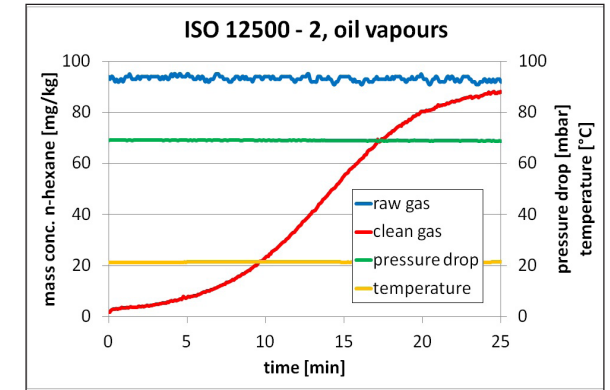
Compressed air filters

Parameters marked with \* are accredited according to DIN EN ISO/IES 17025:2018. The accreditation is only valid for the scope specified in the annex of accreditation certificate no. D-PL-19759-01-03 by the Deutsche Akkreditierungsstelle GmbH (DAkS) from 30.11.2022 (accreditation for ISO 12500-3 has been approved, updated certificate pending).

## Technical Specifications

- Temperature: 20 °C ± 5 °C
- Inlet pressure: 8 bar (a) ± 100 mbar
- Test flow rate: 30 m³/h - 3000 m³/h ± 2 %
- Oil aerosol inlet conc.: 10 mg/m³ - 40 mg/m³
- Max. oil vapour conc.: 1000 mg/kg ± 50 mg/kg
- Test flow rate water: 25 %, 50 %, 75 %, 100 %, 125 % of rated flow
- Water concentration: 2 ml/min (water) per l/s (air)
- Pressure dew point: ≤ + 10 °C (oil aerosols and particulates)
- Pressure dew point: ≤ - 40 °C (oil vapours)

## Exemplary Results



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