TOPAS®
Technologie-orientierte Partikel-, Analysen- und Sensortechnik

Oil Thread Leak Test System

AFS 155

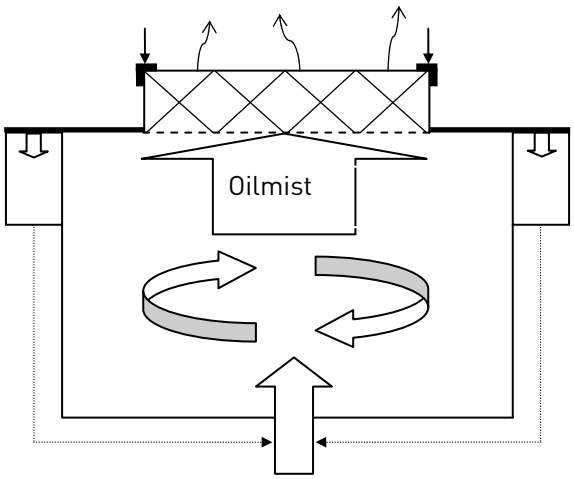
HEPA Element Test System AFS 155

The oil thread test is used for visual proof of theabsence of leakage of HEPA filters. This simplequality test procedure may be an alternative to thescan method.
The oil thread test is also applicable if the scanmethod is not fully applicable because of the filterdesign (e.g. V-shaped arrangements).
For scanning of HEPA and ULPA filters, Topasoffers the AFS 150 and AFS 152 - proven andreliable solutions.

Principle
The filter element (sample) is mounted horizontally with the upstream side down on the test bench and secured with a pneumatically operated fixing device. For testing, the filter is then exposed to a flow of a polydisperse aerosol of oil droplets (DEHS). An existing leak is made visible on a rising oil thread on the downstream side(upper side) of the filter.

Special Advantages
- Cost-effective solution for leak testing of filters ranging up to group H (filter class H13 and H14)
- Easy manual operation
- Constant test conditions according to EN 1822-4 due to pre-adjustable test parameters
- Effective testing of larger numbers with pre-adjusted test parameters
- Flexible and easily configurable filter holder in case of different filter dimensions
- Portable due tocompactsize

Application
- Quality control and assurance in filter production based on the filter oil thread testaccording to EN1822-4, Appendix A



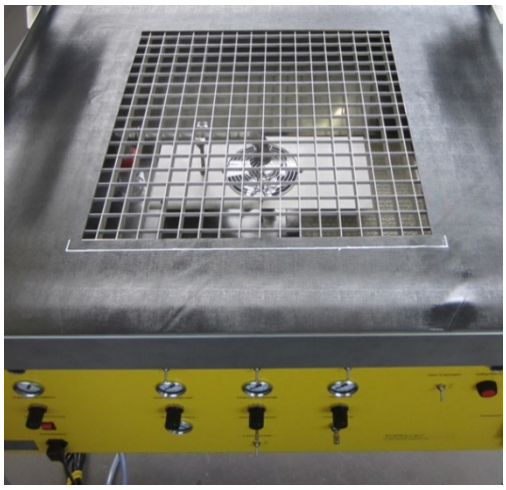
Principle: Exposing the filter to a flow and fixing the adapter plate

Specifications

Details

The system operates under overpressurecondition. The required test volume flow isadjustable and is taken from the compressed airnetwork.In the upstream flow chamber the aerosol isdistributed in a steady manner over the entire facein front of the filter sample to be tested by a radialfan.
To prevent contamination of the environment, theremaining upstream aerosol is drawn through asuction pump into a filter unit after the completionof the test.
To ensure optimum visibility of the emerging oil threads the following environmental conditions are required by the user:

- Vertical lighting of the test sample from above with a white fluorescent light source (> 4000K) or halogen lamp
- Brightness at the operation level:> 1000 Lux
- Darkened environment and black background for optimum visibility
  Prevention of uncontrolled air flows from the environment



Aerosol Generator and blower AFS 155

Technical Data

Filter dimensions (B x H x T)	min. 305 x 305 x 30 mm max. 915 x 800 x 300 mm
Aerosol volumeflow	50 - 600 l/min
Face velocity	ca.1.3 cm/s
Aerosol concentration	1.5 g/m³
Aerosol substance	DEHS
Compressed airsupply	6 bar
Power supply	230 V AC; 1 A; 50 Hz
Dimensions(LxBxH)	91 x 120 x 61 cm
Requiredworkspace (LxBxH)	ca. 100 x 120 x 150 cm
Weight	100 kg

Wir sind zertifiziert nach DIN EN ISO 9001.

12 100 11908 TMS

Besuchen Sie uns auch im Internet:
www.topas-gmbh.de

Technische Änderungen vorbehalten.

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