LFT 2000



ISO 29463-1 requires for all HEPA /ULPA filters with an efficiency of 99.95% or higher (ISO 35H/H13) the following test to ensure filter quality:

- local efficiency according to ISO 29463-4
- overall efficiency according to ISO 29463-5

The LFT 2000 combines the requirements of ISO 29463-4 Annex F for Class 35 H filters with a simple manual test procedure.

The system manually detects possible leakage points easily and quickly with the appropriate software.

The output of the test report is for local filter efficiency as well as for leak detection.

Operation principle

Manual scantest for HEPA/ULPA Filter

The test system consists of the following components:

- Supply air duct with volume flow measurement and raw gas sampling
- Horizontal filter holder (adapter for different filter sizes)
- Aerosol generator and dilution on the raw gas side
- Sampling and integrated particle counter for manual scanning by hand in the clean gas
- Data evaluation with test protocol on Windows interface

First, the intake air flows through the built-in filter at a defined volume flow rate. In the process, the particle counter measures the particle concentration and size on the raw gas side.

Subsequently, the pressure drop is measured with a scan over the filter surface. At the outlet side, the operator guides the sampling probe across the downstream side of the filter. Thus, he scans the local emission and size of the particles in the clean gas using the particle counter. Leakage points are thus detected quickly and easily.

The test report is generated after successful testing of the local filter efficiency.

Extensions/Accessories

Aerosol generation

We recommend the PLG 2100 H with Laskin nozzle for the highest constancy in aerosol generation

Particle counters

Optical particle counters with airflow of 28 l/min (1 cfm), measurement range selectable either from 0.1 μm or 0.3 μm

Scanning Probe

Specially designed according to ISO 29463 for scanning velocities up to 5 cm/s (or 0.093 m²/min)

Scanning unit

Manual scan

″Worry-free package″ for delivery

Acceptance at Palas® as well as delivery, installation, instruction, and final approval on-site

BENEFITS

- Quick manual scanning with OPC
- Test report
- Clear leak detection
- Easy installation of filter elements
- Adapters for various filter dimensions
- Upgradable to an automatic scanning system
- Use of components for ISO 14644 In-Situ integrity testing

NORMS AND CERTIFICATES

ISO 29463-4, ISO 29463-5

DATASHEET

Volume flow	100–1,200 m^3/h
Power supply	400 V, 50 Hz
Differential pressure measurement	Up to 1,200 Pa
Compressed air supply	6 bar
Size filter element	300 x 300–600 x 1,200 mm

Applications

- Classification of HEPA/ULPA filters
- Filter test comparable to ISO 29463-4 Annex F

Mehr Informationen:
https://www.palas.de/en/product/LFT2000