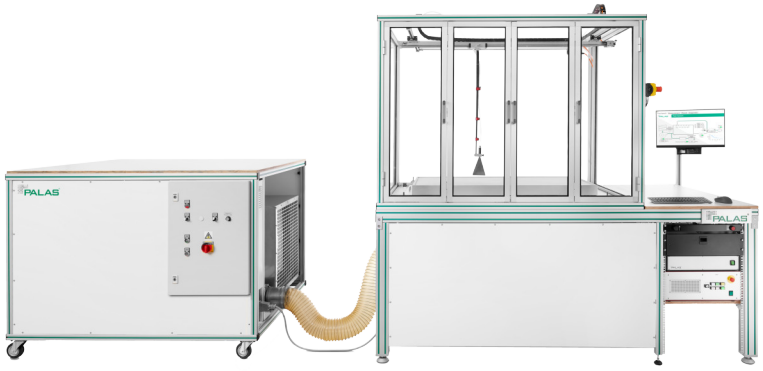
LFT 3000



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

- local filter efficiency according to ISO 29463-4, and
- total separation efficiency according to ISO 29463-5.

The LFT 3000 combines the requirements of both ISO standards with ease of use and a fast test cycle. It is computer-controlled and uses appropriate software to perform the test and to quickly and easily detect possible leak locations.

工作原理

AUTOMATIC LEAKAGE SCAN TEST FOR HEPA/ULPA FILTERS

The test system consists of the following components:

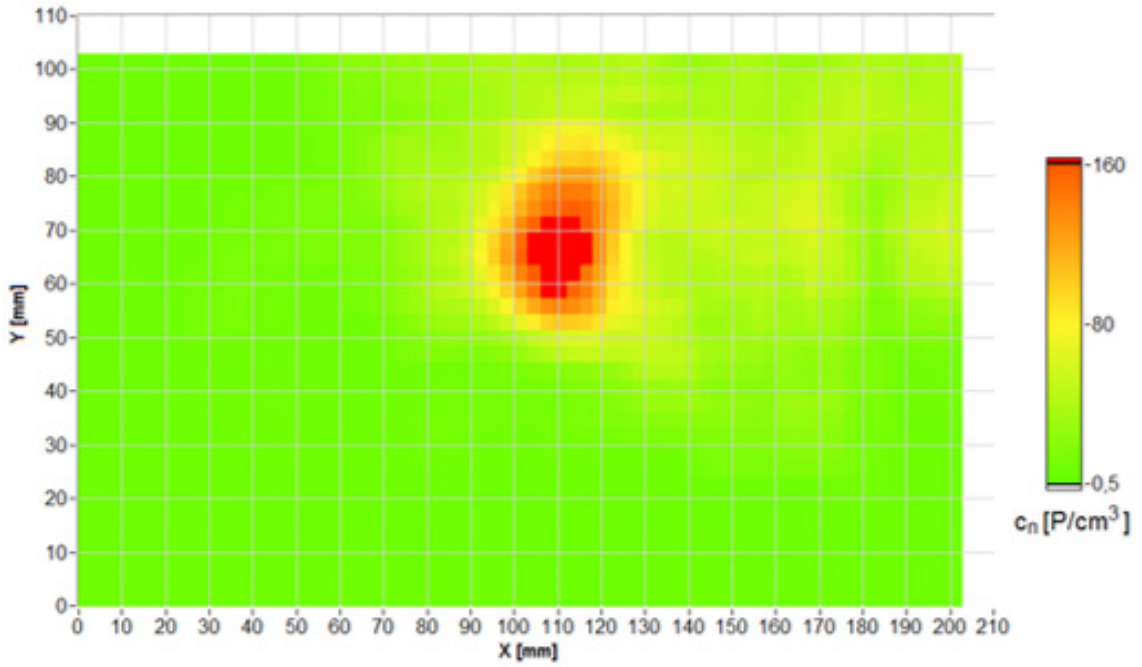
- Supply air duct with volume flow measurement and raw gas sampling
- Horizontal filter holder (adapter for different filter sizes)
- Aerosol generator and raw gas side dilution
- Scan system with sampling and integrated particle counters
- Control and evaluation unit including software on Windows interface

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

One advantage of the LFT system is that the test parameters for the test object are automatically calculated from the filter class specifications and the associated volume flow. The settings and the sequence are saved and can be retrieved at any time for repeat measurements. The pressure loss is then recorded by scanning the filter surface.

The scanning system, which is installed on the outlet side, uses the particle counter to measure the local emission and size of the particles in the clean gas. It then calculates the local filter efficiency from this. The result: leaks are detected quickly and easily.

After successful testing of the local filter efficiency, the overall separation efficiency is calculated from the local values and the test report is generated.



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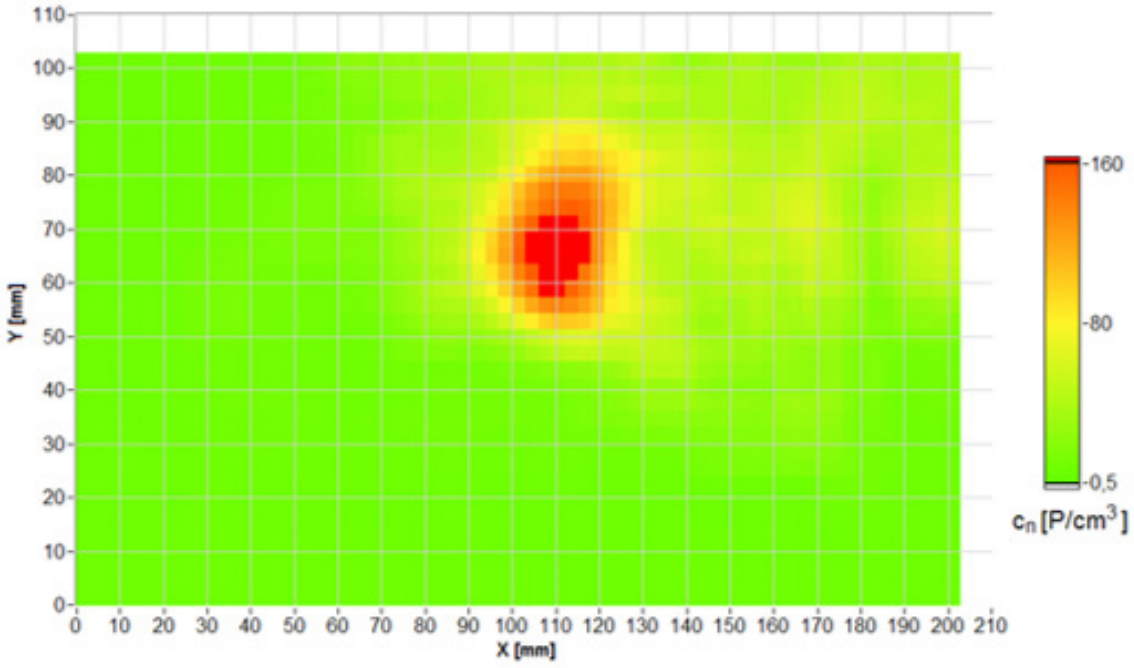

Fig. 1: Leak detection with indication of the position of the leak

In addition to local filter efficiency, overall efficiency is also part of the test report.

Extensions/Accessories

Aerosol Generation

We recommend the PLG 2100 H with laser nozzle for maximum consistency in aerosol generation.

Particle Counter

Optical particle counter with a volume flow of 28 l/min, measuring range selectable from 0.1 μm or 0.3 μm.

Scan Nozzle

Specially designed in accordance with ISO 29463 for scanning speeds up to 10 cm/s

Scanning unit

Fast traversing system with linear drive covers the entire filter area

“Worry-free package” for delivery

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

Benefits

- Quick and accurate scanning
- Automatic test report
- Clear leak detection
- Easy installation of filter elements
- Adapters for various filter dimensions

ISO 29463-4, ISO 29463-5

	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 according to ISO 29463-4/5

Mehr Informationen:
https://www.palas.de/product/LFT3000