



To reliably determine the quality and efficiency of filter elements, it is crucial to test energy consumption (pressure drop), loading, particle separation efficiency, and total penetration.

Accurate measurement requires adaptation of the test channel with regard to flow guidance and aerosol distribution to the size of the filter elements.

Palas has over 40 years of experience in filter testing and continuously develops test rigs of the highest quality to meet various requirements.

The FET 300 enables defined testing of filter elements up to 305 • 305 mm, such as ventilation filters, HEPA/ULPA filters, vacuum cleaner filters, and car cabin filters.

Designed for optimum flow guidance, the channel can also use adapters for smaller filter elements.

Coarse filters up to ULPA filters are tested for separation via particle size and differential pressure. The FET 300 measures better ...

BENEFITS

- Measurement according to ISO 29463-5 and ISO 16890 (ISO ePM₁; ISO ePM_{2.5}) in one channel
- Double channels on request
- Particularly wide range of applications for separation efficiency measurement from 0.02 to 40 µm
- Measurement of dust storage capacity possible
- Customization possible for optimal test execution
- Horizontal design to minimize particle losses
- Easy to use for filter elements as well as for material testing (adapter required)
- Protocolled results based on the relevant standards
- Test benches tested and calibrated ex works

FEATURES

- Measurement of fractional efficiency and pressure loss vs. volume flow
- Connection of Promo[®] aerosol spectrometers and SMPS systems
- Customized filter adapters and adaptations in the air duct possible
- On-site calibration and adjustment (particle size and volume flow)
- Checking the volume flow and pressure loss using a perforated plate

APPLICATIONS

- Development
- Quality control for
 - Cabin filters
 - HEPA/ULPA clean room filters
 - Cabin air filters
 - Engine air filters
 - Compressor supply air filters
- Measurement of MPPS according to ISO 29463-5
- Measurement of the fractional separation efficiency according to ISO 16890
- Determination of the pressure loss at different volume flows
- Determination of dust holding capacity

DATASHEET

Aerosols		Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS), latex particles (PSL)	Measuring range (total penetration)	Up to 0.0005 %
Measurement (size)	range	0.02–100 μm	Volume flow	2–200 m ³ /h - pressurized operation
Differential pressure measurement	pressure	0 – 1,200 Pa selectable, 0 – 2,500 Pa selectable, 0 – 5,000 Pa selectable	Size filter element	305 • 305 • 305 mm (H • W • D)