

MFP 1000 HEPA



The MFP filter test rig is a modular filter testing system for flat filter media and small mini-filters. Pressure loss curves, fraction separation efficiency or burden can be determined within a very short period of time – both reliably and cost-effectively. With the aid of the light scattering spectrometer Promo[®] 1000, clear and reliable determination of the aerosol concentration and the particle size can be ensured, and therefore a clear determination of the fraction separation efficiency and the MPPS range for HEPA filters.

Thanks to the movable dilution cascades, the test rig can be changed over from salt aerosols to DEHS aerosols within a very short space of time, with no need for cleaning. The largely automated setup of the test sequence together with the clearly defined individual components and the individually adjustable sequence programs of the filter test software ...

优势

- Particle size measurement from 120 nm (90 nm)
- Internationally comparable measurement results
- Simple use of different test aerosols, such as NaCl / KCl or DEHS; other test aerosols on request
- Easily shiftable dilution cascades with factors of 10, 100, 1,000 and 10,000 for measurements with salt or DEHS
- Simple measurement of the fraction separation efficiency and determination of the MPPS range
- Burden measurements up to 2500 Pa with fraction separation efficiency determination possible
- High reproducibility of the test method
- Cleaning can be performed by the customer
- Short set-up times, fast throughput times
- Mobile set-up, easy to move on castors
- Clear verification of the function of the individual components and the system as a whole in the scope of pre-delivery acceptance testing and at delivery
- Little maintenance required

应用领域

- MPPS (Most Penetrating Particle Size) fractional efficiency measurements according to ISO 29463 and EN 1822
- Testing of filter media and small mini filters in product development and production monitoring
- Testing of initial efficiency according to ISO 11155-1 (cabin air filters), ISO 5011 (engine air intake filters), EN779/ASHRAE 52.2 (cabin air filters) and other standards in different versions

特点

- 分级效率及压力损失随流量变化的测量
- 采用Promo[®] 1000 气溶胶粒径谱仪
- 支持定制滤芯适配器及风道结构改造
- 提供现场校准与调整服务（涵盖粒径及流量）

技术数据

气溶胶	Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS)
滤材测试面积	100 cm ²
测量范围(粒径)	0.09 – 40 μm
测量范围(质量)	Up to 1,000 mg/m ³ (depending on the version)
体积流量	0.54 – 16 m ³ /h - pressurized operation
电源	115 – 230 V, 50/60 Hz
Differential pressure measurement	0 – 1,200 Pa selectable, 0 – 2,500 Pa selectable, 0 – 5,000 Pa selectable
Inflow velocity	1.5 – 40 cm/s (others on request)
Compressed air supply	6 – 8 bar
Dimensions	1,800 • 600 • 900 mm (H • W • D)

标准和证书

ISO 11155-1, ASHRAE 52.2, ISO 5011, ISO 16890, ISO 29463-3, EN 1822-3 (HEPA), ISO 29463-3 (HEPA), EN 779, EN 1822