

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

Alternatively, other aerosol spectrometers can also be used for the filter tests.

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 ...

BENEFITS

- 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
- Flexible filter test software FTControl
- Easy to operate, even untrained personnel can be quickly trained in the use of the equipment
- Cleaning can be performed independently 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
- Reliable operation
- Little maintenance required

APPLICATIONS

- 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

DATASHEET

Aerosols	Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS)	Test area of the medium	100 cm ²
Measurement range (size)	0.09 – 40 μm	Measurement range (mass)	Up to 1,000 mg/m ³ (depending on the version)
Volume flow	0.54 – 16 m ³ /h - pressurized operation	Power supply	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)