MFP 1000

The MFP filter test rig is a modular filter testing system for flat filter media and small filters. The MFP 1000 can be used to determinepressure loss curve on the medium without a dust coating,fraction separation efficiency, orburden and fraction separation efficiency during application of the burdenwithin shortest times – reliably and therefore cost-effectively.

The corresponding aerosol generator can be used depending on the standard or application.

Benefits

- Particle size measurements from 120 nm
- Internationally comparable measurement results
- High reproducibility of the testing method
- Easy use of different test aerosols, e.g. SAE Fine and Coarse, NaCl/KCl, DEHS
- Sequence programs for pressure loss measurements, measurements of fraction separation efficiency and burden measurements
- Short set-up times
- Cleaning and calibration can be performed by the customer
- Easy use of the measurement technology components – even in other applications
- Mobile setup, easy to move on castors
- Validation of the clear function of individual components and the overall system during pre-delivery acceptance testing and upon delivery
- Low-maintenance

Features

- Measurement of fractional efficiency and pressure loss vs. volume flow
- Use of the Promo® 1000 aerosol spectrometer
- 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

- For filter media and small mini-filters
- Product development and during production monitoring
- Fast and cost efficient testing of fractional efficiency with dust, oil or salt based on ISO 11155-1 (cabin air filters), ISO 5011 (engine pre-air filters), EN 779/ Ashrae 52.2/ ISO 16890 (room air filters)

Model Variations

MFP 1000 HEPA
Version with additional dilution for measuring high filter efficiencies
https://www.palas.de/product/mfp1000hepa

https://www.palas.de/product/mfp1000

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)	0.12 – 40 μm	Measurement range (mass)	Up to 1,000 mg/m^3 (depending on the version)
Volume flow	1 – 35 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	5 cm/s – 1 m/s (others on request)
Compressed air supply	6 – 8 bar	Dimensions	1,800 • 600 • 900 mm (H • W • D)