MFP 3000







The MFP filter test rig is a modular filter testing system for flat filter media and small mini-filters.

This enables you to determine the pressure loss curve on the medium without a dust coating, fraction separation efficiency, orburden and fraction separation efficiency during application of the burdenand the gravimetric separation efficiency within shortest times – reliably and therefore cost-effectively.

The MFP 3000 operates in suction mode. This ensures a particularly uniform formation of the dust cake even at high inflow speeds.

BENEFITS

- Virtually simultaneous particle measurement in the raw gas and clean gas
- Particle size measurements from 0.2 40 μm
- Measurement of $C_{n \text{ max}} = 10^6 \text{ particles/cm}^3 \text{ without dilution}$
- 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
- Highest raw gas concentrations of up to > 1000 mg/m 3 (ISO Fine) or > 5000 mg/m 3 (ISO Coarse) with measurement of the fraction separation efficiency for burden tests
- Sequence programs for pressure loss measurements, measurements of fraction separation efficiency and burden measurements
- · Easy to operate
- 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

APPLICATIONS

- For filter media and small filter elements
- Product development and during production monitoring
- Testing based on ISO 11155-1 / DIN 71460-1 (cabin air filters)
- Testing based on ISO 5011 (engine pre-air filters)
- Testing based on ISO 16890 (room air filters)

MODEL VARIATIONS



MFP 3000 C

Version for testing filter media better than DIN 71460 and ISO 11155-1 road vehicle interior filters

https://www.palas.de/en/product/mfp3000c



MFP 3000 FTD

Version with additional test duct for 400 cm² filter test area

https://www.palas.de/en/product/mfp3000ftd

FEATURES https://www.palas.de/en/product/mfp3000

 Measurement of fractional efficiency and pressure loss vs. volume flow



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)	0.2 – 40 μm	Measurement range (mass)	Up to 1,000 mg/m³ (depending on the version)
Volume flow	$1 - 35 \text{ m}^3/\text{h}$ - suction mode	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	2.500 • 680 • 1.550 mm (H • B • T)		

NORMS AND CERTIFICATES

ISO 5011, ISO/TS 19713, DIN 71460, ISO 11155-1, EN 779, ASHARE 52.2, ISO 16890