

# 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, or burden and fraction separation efficiency during application of the burden and 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  $\mu\text{m}$
- Measurement of  $C_{n\text{ max}} = 10^6$  particles/ $\text{cm}^3$  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  $\text{mg}/\text{m}^3$  (ISO Fine) or > 5000  $\text{mg}/\text{m}^3$  (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/product/mfp3000c>



### MFP 3000 FTD

Version with additional test duct for 400  $\text{cm}^2$  filter test area

<https://www.palas.de/product/mfp3000ftd>

## FEATURES

<https://www.palas.de/product/mfp3000>  
Measurement of fraction efficiency and pressure loss vs. volume flow

- Use of the Promo<sup>®</sup> 3000 aerosol spectrometer

## DATASHEET

Aerosols	Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS)	Test area of the medium	100 cm <sup>2</sup>
Measurement (size)	range 0.2 – 40 µm	Measurement (mass)	range Up to 1,000 mg/m <sup>3</sup> (depending on the version)
Volume flow	1 – 35 m <sup>3</sup> /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)		