MFP 2000

MFP filter test rigs from Palas® have already proved themselves many times over all around the world in practical applications in development and quality control.
The MFP filter test rig is a modular filter testing system for flat filter media and small mini-filters.
The MFP 2000 can be used to determine:

- pressure loss curve on the medium without a dust coating,
- fraction separation efficiency, or
- burden and fraction separation efficiency during application of the burden

within shortest times – reliably and therefore cost-effectively.
The aerosol generators are easy to interchange and coordinated with the overall system. As a result, filter tests can be performed quickly and easily with the different test aerosols.
With the aid of the light scattering spectrometer Promo® 2000, clear and reliable determination of the aerosol concentration and the particle size and therefore an accurate determination of the fraction separation efficiency can be ensured.
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 FTControl combine to deliver the high reliability of our measurement results.

Benefits

- Particle size measurements from 0.2 μm
- Internationally comparable measurement results
- Widespread distribution of the measurement system
- High reproducibility of the testing method
- Easy use of different test aerosols, e.g. SAE Fine and Coarse, NaCl/KCl, DEHS
- Flexible filter test software FTControl
- Sequence programs for pressure loss measurements, measurements of fraction separation efficiency and burden measurements
- Easy to operate; even untrained personnel can be instructed quickly in the use of the equipment
- Short set-up times
- Cleaning and calibration can be performed autonomously by the customer
- Easy use of the measurement technology components – even in other applications
- Mobile setup, easy to move on castors
- Reliable operation
- 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 mini-filters
- Product development and during production monitoring.
- Testing based on ISO 11155-1 (cabin air filters)
- Testing based on ISO 5011 (engine pre-air filters)
- Testing based on ISO 16890 (room air filters),
- EN 1822-3 (HEPA filters)
- CEN EN 143 and other standards in various 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)	0.2 – 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)