MFP NANO PLUS



The MFP Nano *plus*has been specially designed to determine the separation efficiency of HEPA and ULPA filter media in accordance with DIN EN 1822-3 and ISO 29463-3. In the form of the U-SMPS, a modern and powerful nanoparticle measuring device with a measurement range from 5 nm to 1 μm is used for particle size and quantity analysis.

With the aid of the universal aerosol generator UGF 2000, defined aerosol distributions matched to the MMPS range can be produced with DEHS or salt (NaCl / KCl). Thanks to the movable dilution cascades, the test rig can be changed from salt aerosols to DEHS aerosols within a very short time, with no need for cleaning.

BENEFITS

- Fractional separation efficiency measurement from 20 nm
- Internationally comparable measurement results in accordance with DIN EN 1822-3 and ISO 29463-3
- Simple use of different test aerosols, such as NaCl / KCl or DEHS (others on request)
- Easily movable 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
- High reproducibility of the testing method
- Easy to operate; even by untrained personnel
- Short set-up times, fast throughput times
- 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
- Reliable operation

APPLICATIONS

- For filter media and small filter elements
- Product development and production control
- Test possibilities with regard to EN 1882-3 (HEPA/ULPA) and ISO 29463-3
- Fractional efficiency measurement in the range from approx. 20 nm up to 1 μm

FEATURES

- Measurement of fractional efficiency and pressure loss vs. volume flow
- Use of the U-SMPS system
- Customized filter adapters and adaptations in the air duct possible
- Checking of volume flow and pressure loss using a perforated plate

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)	U-SMPS: 10 – 800 nm
Volume flow	0.48 – 5.76 m^3/h - pressurized operation
Power supply	115 – 230 V, 50/60 Hz
Differential pressure measurement	0 – 2,500 Pa (others on request)
Inflow velocity	1.3 – 16 cm/s (others on request)
Compressed air supply	6 – 8 bar
Dimensions	Approx. 760 • 2,100 • 985 mm (H • W • D)

NORMS AND CERTIFICATES

EN 1822-3, ISO 29463-3