PMFT 1000 M

The PMFT 1000 M tests face masks better than the standards EN 149/EN 13274-7 with additional accurate analysis of filter mask efficiency for SARS-CoV-2 (size approximately 120 nm to 160 nm). Both total photometric penetration and fractional efficiency are tested, e.g., the efficiency in the whole size range, respectively, the particle size-dependent penetration.

Benefits

- Test rig working principle better than EN 149 and EN 13274-7, equivalent to GB 2626, 42 CFR 84 and ASTM 2299-3 by additional software option
- Test of community masks equivalent to CWA 17553
- Includes two aerosol generators for NaCl and for oil
- Testing of fractional efficiency, e.g., efficiency in whole size range of 145 nm up to 40 μm
- Exact analysis of filter and filter mask efficiency for SARS-CoV-2 (size approx. 120 nm up to 160 nm). Efficiency also displayed at 145 nm
- Future proof: Works with any kind of aerosol without adjustments
- Further measurement of differential pressure, e.g., as well within different face velocities to simulate test of breathing resistance
- Face velocity adjustable between 1.5 – 70 cm/s
- Product capable of fast quality assurance **and** continuous optimization in R&D (display of size distribution)
- Individual face mask adapter for your product
- The software extension additionally offers:
  - Display of penetration results of the entire tolerance range of the size distribution according to EN 13274-7
  - Allows the comparison of different test institutes and test systems
  - Facilitates certification
  - Shows wide range of standards. Depending on the test operation – i.e., particle size distribution of the test aerosol – one and the same mask can perform very well or fail the test

Applications

- Reliable continuous operation in routine monitoring of half masks
- Test of total penetration for respiratory masks
- Exact analysis of filter mask efficiency e.g., Coronavirus
- Can be operated as Mas-Q-Check with optional Mas-Q-Head

DATASHEET

Aerosols	Salts (e.g. KCl, NaCl), liquid aerosols (e.g. DEHS), latex particles (PSL)
Test area of the medium	100 cm^2
Measuring range (total penetration)	0.0005 - 100 %
Measurement range (size)	0.145 – 40 μm
Volume flow	1 – 27 m^3/h - pressurized operation
Power supply	115 – 230 V, 50/60 Hz
Installation conditions	+10 – +40 °C
Differential pressure measurement	0 – 1,200 Pa
Inflow velocity	1.5 – 70 cm/s (others on request)
Compressed air supply	6 – 8 bar
Dilution factor	1 : 27
Test conditions according to standard	+19 – +23 °C
Dimensions	Approx. 1,800 • 600 • 900 mm (H • W • D)

NORMS AND CERTIFICATES

CCF (Covid Certified Filter), EN 149, EN 13274-7, GB 2626, 42 CFR 84