PMFT 1000







The PMFT 1000 tests respirators 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 oil and NaCl
- Testing of fractional efficiency, e.g., efficiency in whole size range of 100 nm up to 3 μm
- Exact analysis of filter and filter mask efficiency for SARS-CoV-2 (size approx. 120 nm up to 160 nm) in the size range between 100 nm and 180 nm we have eight size channels
- 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 measurement of breath resistance
- Face velocity adjustable between $1.5-70\ \text{cm/s}$
- Product capable of fast quality assurance and continuous optimization in R&D (display of size distribution)
- Individual face mask adapter for your product

APPLICATIONS

- Development and production monitoring of half masks
- Test of total penetration for respiratory masks
- Exact analysis of filter mask efficiency for e.g., Coronavirus



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)	0.12 – 40 μm
Volume flow	$1 - 27 \text{ m}^3/\text{h}$ - 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 / 1:700	Test conditions according to standard	+19 – +23 °C
Dimensions	Ca. 1.800 • 600 • 900 mm (H • B • T)		