





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  $\mu{\rm m}$
- 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 cm/s
- Product capable of fast quality assurance **and** continuous optimization in RD (display of size distribution)
- Individual face mask adapter for your product
- Attractive two years maintenance package for availability of test rig

## **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 <sup>2</sup>
Measuring range (total penetration)	0,0005 – 100 %	Measurement range (size)	0.12 – 40 μm
Volume flow	1 – 27 m <sup>3</sup> /h - pressurized op- eration	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 re- quest)	Compressed air supply	6 – 8 bar
Dilution factor	1 : 27 / 1 : 700	Test conditions ac- cording to standard	+19 – +23 °C
Dimensions	Ca. 1.800 • 600 • 900 mm (H • B • T)		