



PMFT SYSTEM FOR RESPIRATORY MASK TESTING

Reliable | Precise | Future proof.

Made in Germany.



How could the **PMFT system** help you right now?

The Palas® respiratory mask filter test rig PMFT 1000 allows a reliable control of the filter performance and enhances quality assurance.

Application example: R&D departments of larger companies

PMFT 1000 (M) helps you to evaluate the penetration and corresponding FFP-/KN- & KP-class as well as the indication of resistance (differential pressure) with regard to corresponding FFP-/KN- & KP-class.

This enables R&D departments to make statements about the efficiency of the protective mask and influence its quality. A quick export without stopping at customs is made possible.

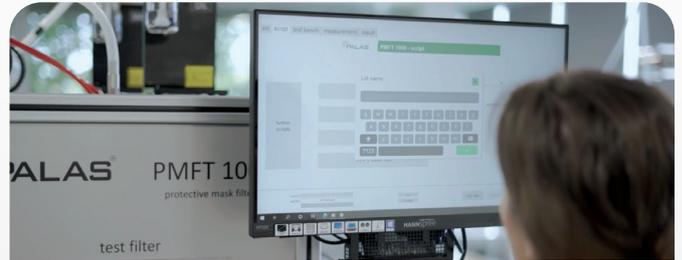
Application example: New producers of respiratory face masks

Many companies have retooled and started production of respiratory face masks. Our machine allows you to check your ongoing production to ensure that quality standards are being adhered to. This will guarantee you a clean supply chain management with your end customers.

Application examples



(NEW) PROTECTIVE MASK



TESTING INSTITUTES



GOVERNMENT



CUSTOMS



INDUSTRY



FILTER MEDIA MANUFACTURERS

How does it work?

Our proven technology allows us to count particles of very small sizes. The device can **detect and measure in the size range of viruses and bacteria**. The fractional efficiency is tested, e.g. the efficiency in the whole size range of 100 nm up to 5 μm (size range spectrometer 100 nm up to 40 μm^*).

PMFT 1000 (M) is future proof: It works **with any kind of aerosol** without any kind of adjustments. It is able to measure differential pressure, e.g. as well within different air flows.

Thanks to the individual face mask adapter, PMFT 1000 (M) can be used **for all kinds of face masks** and is also easy to handle.

It is capable of fast quality assurance and also helps to continuously optimize the R&D process.



*145 nm - 40 μm (PMFT 1000 M)

The systems

PMFT 1000

- Exact analysis of filter mask efficiency from 100 nm up to 5 μm (size range spectrometer: 100 nm up to 40 μm)
- 8 size channels for efficiency from 100 nm and 180 nm
- Attractive 2 years maintenance package available

PMFT 1000 M

- Exact analysis of filter mask efficiency from 145 nm up to 5 μm (size range spectrometer: 145 nm up to 40 μm)
- Air flow adjustable between 1 – 35 m^3/h
- Can be operated as Mas-Q-Check with optional Mas-Q-Head (see "Bundle")

Bundle: PMFT 1000 M incl. Mas-Q-Check

For a comprehensive measurement of the efficiency of your protective masks, this bundle is ideal: Test the fractional efficiency (PMFT 1000 M) as well as the protective effect with regard to leakage (Mas-Q-Check).



Why is it so effective?

There are only very few officially certified companies to test respiratory masks.

Inevitably, this creates a large backlog, you may have to wait quite some time for the test results of your masks and with each testing cycle, you would incur additional costs.

Our testing system works perfectly to compliment these institutions.

You can easily check your production lots against these set standards which gives you:

- **Flexibility**
- **Speed of testing**
- **Safety**

The operation of the test rig is better than the standards EN 143, EN 149 and EN 13274-7 as well as in accordance with GB 2626. PMFT 1000 (M) does not only test the total efficiency as required by the standard but also the fractional efficiency in the size range between 100 nm and 180 nm (PMFT 1000 M: 145 nm and 180 nm).

Technical features

Measuring range (size)	0.10 – 40 µm (PMFT 1000) 0.145 – 40 µm (PMFT 1000 M)
Volume flow	1 – 27 m ³ /h (pressurized operation)
Inflow velocity	1,5 – 70 cm/s (others on request)
Differential pressure measurement	0 – 1200 Pa
Test area of the medium	100 cm ²
Aerosols	Salts (e.g. NaCl, KCl), Liquid aerosols (e.g. DEHS), Dusts (e.g. SAE dusts; optional)
Aerosol concentrations	For SAE Fine without additional dilution up to 1,000 mg/m ³ (ISO A2 Fine)
Compressed air supply	6 – 8 bar

go green
to breathe clean.



Palas® is a leading developer and manufacturer of highprecision instruments for the generation, measurement and characterization of particles in air.

With more than 30 active patents, Palas® develops technologically leading and certified fine dust and nanoparticle analyzers, aerosol spectrometers, generators and sensors as well as related systems and software solutions. Palas® was founded in 1983 and employs more than 70 people.

Palas GmbH

Greschbachstrasse 3 b | 76229 Karlsruhe | Germany
Phone: +49 721 96213-0 | Fax: +49 721 96213-33
www.palas.de