

HMT 1000



Quality assurance and the development of filters/separators/traps should preferably be performed under test conditions relevant to the actual conditions encountered in practice. For this reason, oil separators must be tested at high temperatures of up to 120°C and, depending on the type of application, at high pressures. With the modular test system HMT 1000, oil separators (e.g., for the separation of blow-by aerosols in internal combustion engines or the separation of oil mist downstream of compressors) are quickly and accurately characterized and, in particular, successfully tested under practically relevant conditions through isothermal particle measurements up to 120°C:

- Fraction separation efficiency
- Burden/hold time
- Total separation efficiency / gravimetric analysis
- Pressure loss

For many years, numerous companies worldwide have profited from the advantages of the heatable and pressure-resistant Palas® test components for isothermal and isobaric particle size and particle quantity measurements on oil mists.

HMT 1000 filter test rigs have been used internationally with great success in the industry since 2001.

BENEFITS

- Measurement and evaluation of fraction separation efficiency and burden
- Isothermal and isobaric measurement
- All components can be heated to 120°C
- High reproducibility of the testing method
- Internationally comparable measurement results thanks to the widespread use of the measurement system
- Cleaning and calibration can be performed autonomously by the customer
- Easy to operate, even untrained personnel can be instructed quickly in the use of the equipment
- Modular layout offers increased flexibility
- Validation of the clear function of individual components and the overall system during pre-delivery acceptance testing and upon delivery
- Reliable operation
- Short set-up times, extremely low-maintenance
- The unit will reduce your operating costs

APPLICATIONS

- Quality assurance for oil separators
- New and further development of oil separators, e.g. coalescence separators, cyclonic separators and other inertia separators, electrofilters and filter combinations, e.g. for
 - Blow-by aerosols
 - Oil mist downstream of compressors
 - Cooling lubricants on machine tools
 - Aerosols for minimal quantity lubrication

MODEL VARIATIONS



HMT 1000 P

Heatable modular testing system for oil nebulizers better as ISO 17536 with +/- 200 mbar control

<https://www.palas.de/product/hmt1000p>

DATASHEET

Measurement range (number C_N)	Up to 10^7 particles/cm ³ with LDD100 H
Measurement range (size)	0.18 – 40 μm
Volume flow	1 – 25 Nm ³ /h, 1 – 85 Nm ³ /h (others on request)
Differential pressure measurement	0 – 5,000 Pa (others on request)
Compressed air supply	6 – 8 bar
Dimensions	Approx. 1,600 • 2,000 • 800 mm (H • W • D)



Further information:
<https://www.palas.de/product/hmt1000>