

# Manual Filter Media Test Rig MBP 116



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Performance of filter media is essentially defined by parameters such as differential pressure, gravimetric filtration efficiency and dust holding capacity. The Topas Manual Filter Media Test Rig MBP 116 can be applied to determine these filter parameters at flat sheet materials. This test rig has been designed as universal testing equipment. It combines a simple and robust setup with a manual and therefore cost efficient handling and operation.

### **Special Features**

- Reliable and timesaving testing of
  - gravimetric filter efficiency,
  - dust holding capacity,
  - differential pressure
  - fractional filter efficiency
- Simple operation in combination with a robust, space saving design, modular setup (benchtop unit and diverse options)
- Automatically or manually adjustable volume flow generation
- Holders for test filter and backup filter separately removable
- Adjustable flow rate from 1.5...18 m<sup>3</sup>/h
- Connectors for differential pressure measurement and fractional efficiency measurement
- Proven solid aerosol generator Topas SAG 410 for many types of test dusts at small feeding rates
- Customized test rig specification possible

### Applications

- Fast and uncomplicated quality assurance of flat sheet filter media in terms of a final clearance and a receiving inspection
- Performance testing of filter materials during research and development stage

## Details

### Media Test Rig

- Benchtop unit with connector for volume flow
- Vertically arranged measuring tube for dust loading of filter blank sheets with test dust (preferably ISO 12103-A2)
- Sample holder manually operated
- Flat sheet filter media, thickness up to 1.5 mm

Partial Automation of Measurement

- Differential pressure measurement
- Pressure-controlled and time-controlled switchoff function by control via PLC (Ethernet)

### Options

Solid Aerosol Generator Series SAG 410

- Dust disperser for very low mass flow
- Suitable for test dusts ISO 12103-2 A2/A4, VDI 3926-2 Pural SB/NF, soot (e.g. Evonik 101)

Measuring Table with Regulated Flow Rate Unit

- Side channel blower and Mass Flow Meter
- Flow rate: 1.5...18 m<sup>3</sup>/h
- Cost-effective sensors for quality control
- Fully automated control of test rig and testing procedure via PLC (Ethernet)

### Unregulated Flow Rate Unit

- Vacuum pump with a set of critical nozzles
- Flow rate: 1.5 ... 15.5 m<sup>3</sup>/h (Δ=0.5 m<sup>3</sup>/h)

Dimensioning of sensors acc. to ISO 5011

## **Technical Data**

Flow Rate	1.5185 m³/h *)
Face Velocity	4.250 cm/s *)
Differential Pressure Range	050 hPa
Open Filter Cross Section	100 cm²
Diameter Test Filter	125 mm
Diameter Backup Filter	125 mm
Test Dust Dosing	Solid Aerosol Generator SAG 410
Dosing Range	1.520 g/h (ISO 12103-2, A2)
Media Contacting Materials	Stainless steel, aluminum, NBR
Power Supply Benchtop Unit	N/A
Power Supply Complete Test Rig	110230 V AC, 50/60 Hz
Dimensions benchtop unit W x D x H	454 x 584 x 2000 mm
Dimensions Complete Test Rig W x D x H	650 x 1300 x 2550 mm
Weight	approx. 140 kg

\*) Customized specification of the test rig possible on request.

QMS certified to DIN EN ISO 9001.

12 100 11908 TMS

For more information please visit our website at www.topas-gmbh.de

Specifications are subject to change without notice.

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