

Principle and Components

The ABP 115 test rig performs test according to ISO 5011 (test of inlet air cleaners). Results are:

- Differential pressure related to air flow rate
 - Differential pressure of filter
 - Restriction (relative pressure against ambient)
- Dust loading capacity (related to differential pressure increase, f.l. 20 hPa)
- Gravimetric efficiency

Considering new discussions on additions to the standard also

- Particle measurement
 - downstream dust concentration
 - fractional efficiency
- Water tests

can be done. The filter element will be mounted in the filter housing and connected to the test rig. The ambient air will be sucked in at desired flow rates and the dust feeder disperses the test dust. Differential pressure increase and separation efficiency will be obtained.

The test rig contains the following components:

- Dust feeder SAG 420 on movable rig with housing, ISO standard and heavy-duty injector, online weighing for mass flow control
- Piezometer tubes for differential pressure measurement
- Absolute filter housing for pocket filters
- Scales for weighing absolute filters and filter samples with data transfer
- Scavenging line for running tests with precleaners
- Sensors for differential pressure, air flow rate, temperature and relative humidity
- Very powerful flow rate unit with radial blower or side channel blower, controlled by frequency inverter and throttle flap



Dust feeder SAG 420 with scale and housing



Scales with housing



Blower unit with radial or side channel blowers

Many optional components also are available:

- Stabilization vessel with different connection flanges
- Additional pressure sensors to measure complete air inlet systems

Specifications

- Water injection system and water separators
- Particle measurement
- Universal panel filter holder
- Dust feeder SAG 410 for soot



Stabilization vessel and universal panel filter holder



Water injection system and water separator

Special Advantages

- Mass flow control of dust dosing
- Precise flow rate measurement
- Powerful flow rate unit
- Many Components to be chosen according the needs
- High grade of automation, mostly automated test runs with complete operator guiding, data handling and protocols

Specifications

Air flow rate	0.5 m ³ /min up to 20 m ³ /min (side channel blower) or up to 50 m ³ /min (radial blowers), at standard conditions
Differential pressure	max. 150 hPa at test sample
Loading dust	ISO 12103-A2 (Fine), ISO 12103-A4 (Coarse), Soot
Compressed air supply	6 bar
Power supply	400 V AC, 63 A

We also remodel old test rigs. This may have many advantages:

- Use good working components (blowers, all kind of flow rate measurement, dust feeders)
- Get a fully automated test rig
- Save much money

QMS certified to
DIN EN ISO 9001.



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For more information please
visit our website at
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