

Fully automated filter testing during production

Production Tester

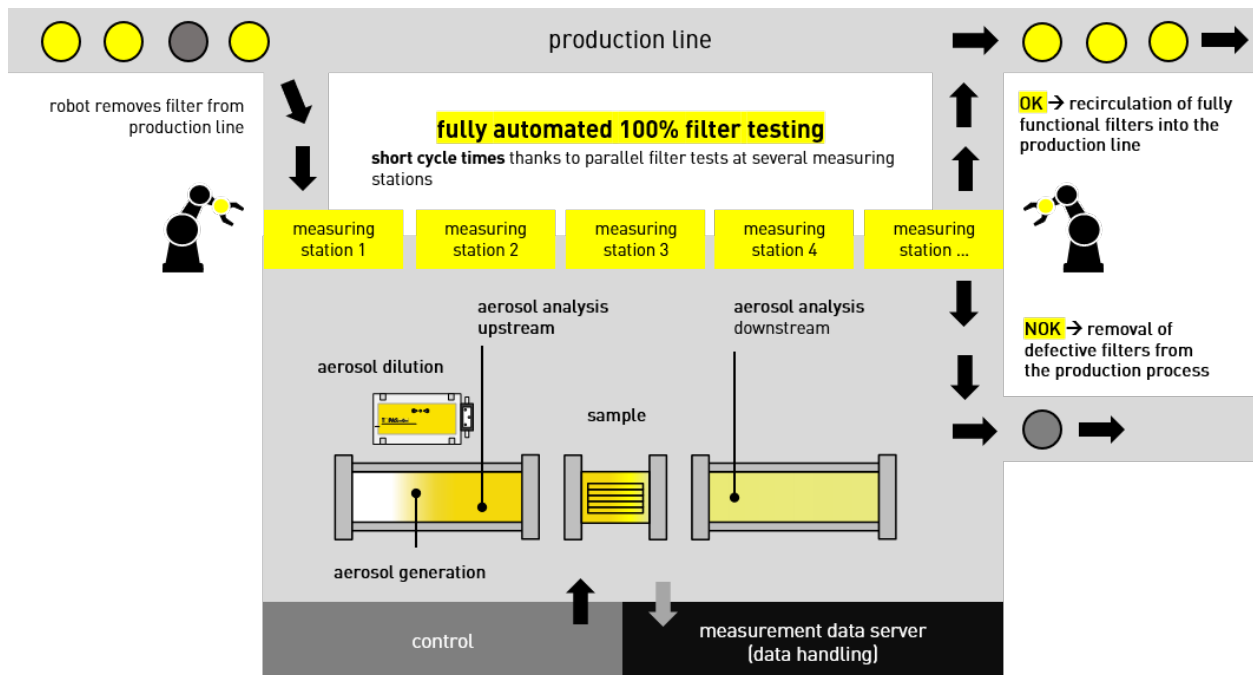
Initial Situation

Increasing quality requirements for production processes increasingly demand 100% control in filter testing. This results in very short cycle times of down to three seconds. Topas has the solution for this challenge: Our modules for fully automated filter testing can be flexibly integrated into any production line – and can be individually adapted. Our core technologies of aerosol generation, aerosol conditioning and aerosol analysis are consistently implemented in each application-specific system solution.

Advantages of fully automated filter testing

- maximum testing density through the feasibility of a 100% control
- competitive advantage through improved quality standards
- very high degree of automation in the execution of the measurement
- fully automatic data acquisition and traceable measurement data management

Operating Principle



Specifications

Possible Applications

Testing of

- integrity of medical filters
- integral efficiency measurement of HEPA filter cartridges
- production control of ceramic exhaust filters (GPF, DPF)

Technical Implementation



combination of devices for aerosol generation, aerosol conditioning and aerosol analysis

Aerosol Generation

- atomizer aerosol generators from the ATM series

Aerosol Conditioning

- dilution systems from the DIL series
- sample switching unit SYS 520

Aerosol Analysis

- optical particle counters or condensation particle counters from well-known manufacturers (application-specific)

Software

PLC software with open interface for system control and data acquisition (realisation by customer)



Measuring stations for fully integrated quality control of medical filters

Technical Data

Test Volume Flow Rate	28,3 l/min 1200 m ³ /h <i>application-specific</i>
Cycle Times	>3s, depending on the number of measuring stations
Operating Mode	24/7
Aerosol Substances	DEHS, paraffin oil



Measuring stations for fully integrated quality control of ceramic exhaust gas filters

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QMS certified according,
to DIN EN ISO 9001.



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