

**Fully automated filter testing during production**

**Production tester**



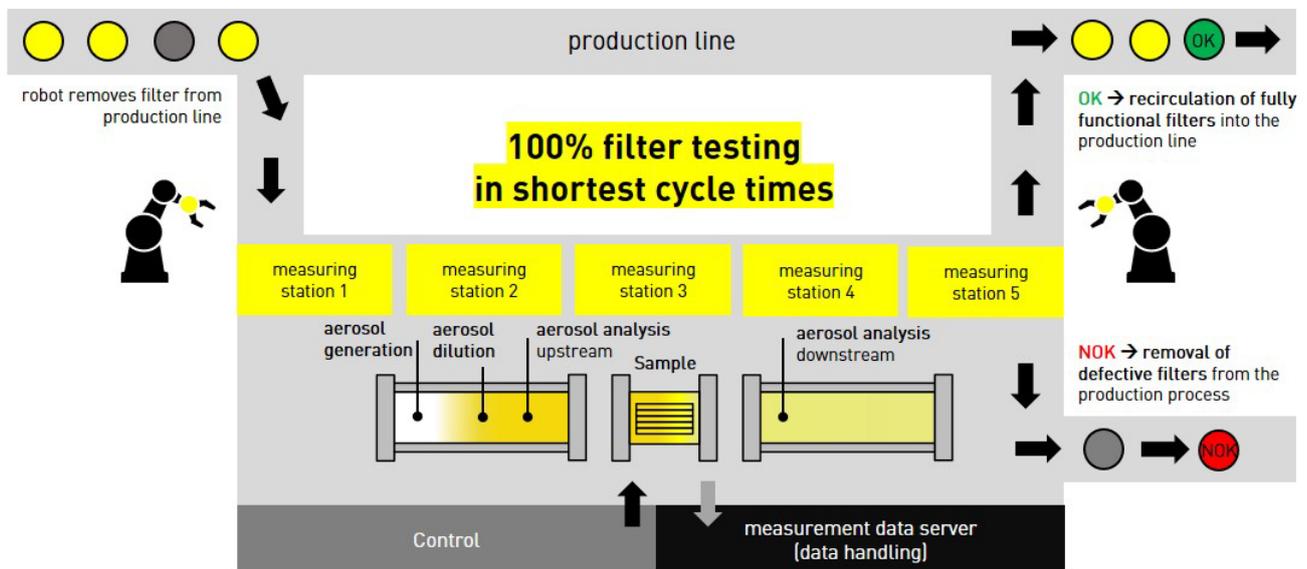
## Initial Situation

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 (realization by customer)



Measuring stations for fully integrated quality control of medical filters

### Technical data

Test Volume Flow Rate	28,3 l/min .... 1200 m <sup>3</sup> /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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