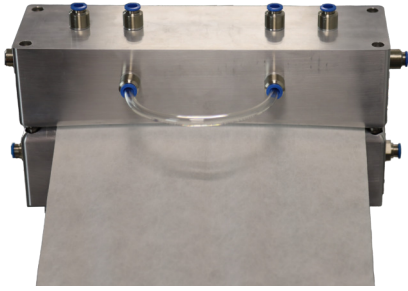


P-MFP inline 2300



Inline penetration test concerning the quality of the filter material directly during production

Description

The P-MFP inline monitors the quality in penetration and pressure drop in production facilities of masks and filter material. The device is integrated directly into the production line and continuously measures the quality of the filter medium. In case of insufficient quality, a signal is sent.

A salt aerosol is introduced on the filter material during the running production. The system works with a salt aerosol in medical quality and extremely low mass concentration, much lower than in room air. Therefore the hygienic requirements in medical mask production are fulfilled.

The special design of the slide for the material guiding (individually customised to the production machine) as well as the controlled air volume flows ensure constant aerosol concentration and thus reliable measurements of penetration and pressure drop.

The detection of penetration is realised with the scattered light aerosol photometer Promo LED 2300. Up-downstream selection is controlled automatically and the raw gas concentration is monitored automatically.

The continuous display of penetration and pressure drop of the filter material used or produced in the machine realises the quick and early information of variations in Quality in the production and saves time and decreases production cost.

Special benefits:

- Easy adjustment of test parameters as e.g. test air flow and generator air flow
- Definition of own quality limits for penetration in two steps (warning and stop/alarm)
- Continuous monitoring of pressure drop (warning and stop/alarm)
- Continuous monitoring of penetration and concentration (warning and stop/alarm)
- Automatic working of the system (up/downstream selection) after defining test parameters
- Reduction of calibration efforts to just some minutes
- Short start-up duration - after just 5 Minutes the system is running fully independent
- Integration into process control systems via digital signal interface is possible (warning and stop/alarm)

MFP Inline consists of

P-MFP inline 2300



- **Control unit: Promo LED 2300** - Highly precise Aerosol photometer with size detection from 145 nm up to 100 μm with newest LED technology
- **Sensor package:** Including aerosol generator, air flow control and differential pressure sensors.
- **Test slide:** module for precise material guiding incl. measuring connections

P-MFP inline 2300



Benefits

- continuous quality statement
- reduction of rejects
- improvement of production efficiency

- increase of internal cost efficiency
- quality improvement and increased safety of the final product
- future-proof: works with any type of aerosol without adjustments
- easy to integrate into existing equipment
- low maintenance

P-MFP inline 2300



Datasheet

<i>Parameter</i>	<i>Description</i>
Volume flow	1 – 27.6 m ³ /h (pressurized operation), others on request
Power supply	115 – 230 V, 50/60 Hz
Dimensions	customized
Inflow velocity	on request
Differential pressure measurement	0 – 1,200 Pa, (others on request)
Test area of the medium	customized
Aerosols	Salts (e.g. KCl, NaCl), liquid aerosols (e.g. DEHS)
Compressed air supply	6 – 8 bar

P-MFP inline 2300



Applications

- Inspection of filter material (melt blown) directly in the production line
- Quality assurance in mask production
- Continuous display of defects

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