

## Multi-Channel Measurement with Mahlo

### Overview

For quality control the Qualiscan QMS system with its broad sensor portfolio is a renowned tool. Mahlo is increasingly working on multi-channel measurement to make it easier for producers to control their production processes. This enables manufacturers to calculate several measured values with a single sensor and is particularly interesting for optical measuring methods.

### Application example 1

For example, a near-infrared sensor can evaluate light absorption at different wavelengths at the same time and thus detect the individual components of a product separately. In the case of a non-woven fabric made of several types of fibre, for example, the sensors Infralot IMF or Infrascop NIR can add up all the individual values measured to form a total weight and simultaneously display the residual moisture of the web.

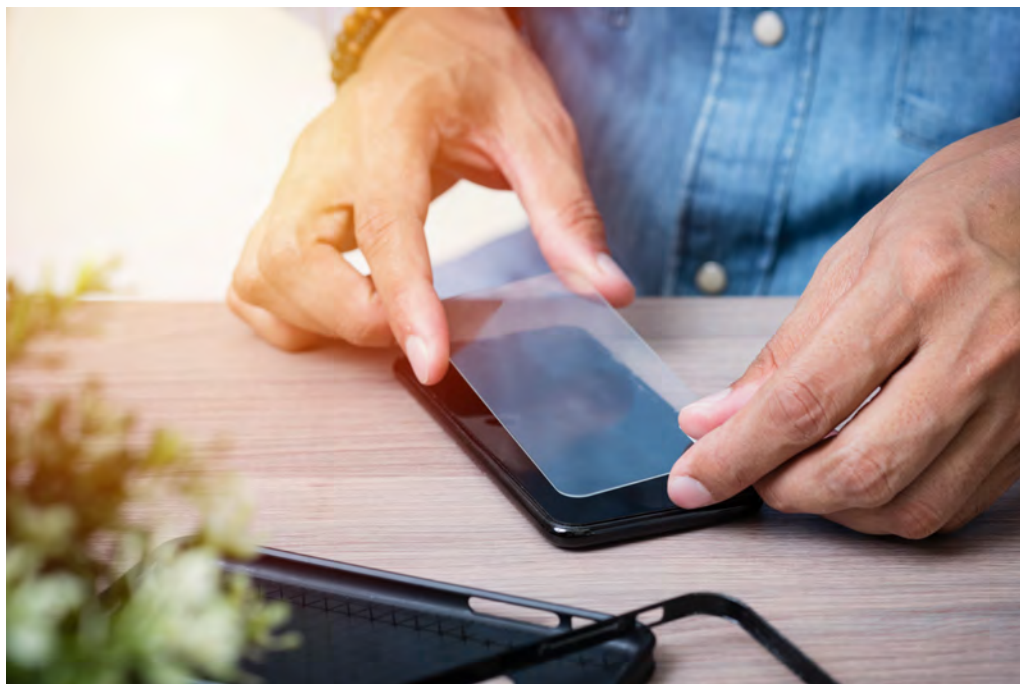


*Fig. 1: Geotextile from multi-fibre non-woven*

Besides the great advantage for the customer that only one sensor is needed, this application does not require a radiometric sensor for the basis weight. Radiation protection requirements are therefore not applicable.

### Application example 2

The white-light interference sensor Optoscope WLI can measure both the film thickness and the applied individual layers on a coated film simultaneously. A suitable example here are display films with three to five layers. Since a single sensor detects all layers or components, no difference measurement as in beta or X-ray technology is necessary. The applications for which multi-channel measurements are possible must be specified precisely in advance and, if necessary, tested in the laboratory.



*Fig. 2: Display film can consist of up to five layers.*

## Customer benefits

For the user, the multi-channel measurement results in considerably lower costs, as well as less space and installation effort without sacrificing measurement accuracy.

- Very precise measurement with fewer sensors and scanners
- Cost savings
- No additional radiation protection requirements due to omission of beta measurement

## Further Questions? Ask our expert!



Matthias Wulbeck, our product manager for QCS will be happy to help you. Just talk to us!

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*Fig. 3: Matthias Wulbeck*