

CombiSens & PartSens



Inspection systems for the rapid detection of particles and film depositions

Applications

- Detection of process-related contamination generated during manufacture
- Detection of required film depositions, e.g. corrosion prevention coatings
- Inspection of state of cleanliness of:
 - components
 - manufacturing environment
 - subassemblies
 - systems and equipment
- Assessment of cleaning processes
- Replacement of complex test procedures, e.g. microscopic inspection
- Evaluation of surface deposition rates
- Inspection of work pieces after cleaning

The state of cleanliness of components is an essential prerequisite when manufacturing high-quality products. Easy and rapid detection of contamination is essential for efficient productions.

particle measuring:	from 2 µm
resolution:	8,5 µm
analysis function particle measurement:	- max. particle length - number of particles per size class
data output:	according to variable standards e.g. ISO
analysis function film measurement:	relative luminance
film thickness range:	> 500 nm applikation specific
measurement area:	5 mm x 7 mm
dimensions (Ø x h) of measurement head:	60 x 72 mm
footprint of measurement head:	Ø 31 mm
alarm limit:	flexible adjustable

The unique technology and portable design make acp inspection systems the perfect solution for companies requiring clean surfaces at product level and in the production environment.

Inspection Technologies

CombiSens & PartSens



Inspection systems for instant detection of particles and film deposition.

Particle- and dust detection

Glancing light technology offers reliable and reproducible highly accurate results without using extensive test procedures using microscopes or indirectly sample taking methods such as filter analysis. Particle size and count is determined within seconds. The real image allows for the detection of location, position and profile of particles.

Detection of film deposition

The principle of the underlying optical measuring is based on the relative alteration of the luminance due to the influence of thin film depositions. A reference value is carried out on a defined surface. Conclusions about film depositions on the surface such as oil, lubricants, cooling lubricants and anticorrosives can be performed by comparing follow up measurements to the reference value.

The systems may be set up to a given measuring task by individually defining alarm thresholds.

Characteristics

- Non-destructive inspection
- Single- and series-measurements
- Portable and compact design
- Suitable for production environments
- Battery operation optional
- Fast and reliable operation
- Optional connection to custom equipment

Device Variations



CombiSens

The CombiSens Measurement system is a completely equipped unit for the combined measurement of **particles and dust as well as the detection of film deposition** on technical surfaces for production environments.

Specifications

- Detection of particle count and size
- Measuring device including measurement head
- Easy touch screen operation
- Integrated thermal protocol printer
- Real Image of the surface
- Instant detection of film deposition
- Customizable alarm thresholds
- External monitor optionally available

PartSens

The PartSens Measurement system is the measurement system for **particles and dust** in production environments. The functional range includes the whole spectrum of CombiSens features except for the detection of film deposition.