

PartSens



PartSens is a portable particle counter that directly measures and counts particles and dust on surfaces while leaving the surface unchanged. The unique technology makes acp inspection systems the perfect solution for companies requiring clean surfaces at product level and in the production environment.

Surface Particle Counter

Applications

- Detection of process-related contamination generated during manufacture
- 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 cleaning processes
- Inspection of work Pieces after cleaning
- Inspection of test samples passed through a process
- Particle size and count Ranges from 5µm up to >1.000µm

Inspection Technologies

Particle analysis	Particle size and count
Result view	Particle distribution histogram, cumulative and distributive
Protocol	Thermal print, Images on USB-flash memory
Particle classification	Classification according to ISO-Code 16232 (VDA 19)
Measurement duration	< 5s
Interfaces	USB, RS232, External video out, Extension port
User Interface	Menu driven touch screen, Live image
Dimension W x L x H	390mm x 300mm x 120mm
Protection class IP	IP 54

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.

PartSens

Inspection Technologies



Inspection systems for instant detection of particles

Particle and Dust detection

Glancing light technology offers reliable and reproducible highly accurate results without extensive test procedures using microscopes or indirect sample taking methods such as filter analysis, vacuum or liquid transfer. Particle size and count is determined within seconds.

Viewing the surface in real-time, the image processing software automatically counts and sizes particles. This data, including the live-screen, can be immediately viewed on the integrated screen, printed or stored for future reference and comparison. The real image allows detection of size, location and shape of existing particles.

PartSens can be configured to detect particles on various material surfaces such as aluminum, steel, stainless steel, silicon, glass or plastic.

PartSens may be set up to a given measuring task by individually defining alarm thresholds and is immediately ready to use.

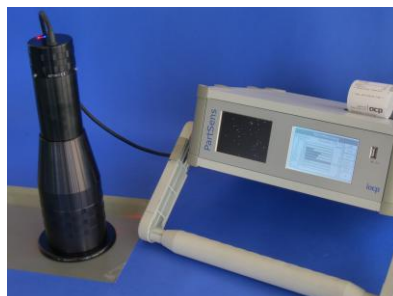
PartSens

The PartSens measurement system is a completely equipped unit for the measurement of **particles and dust** on technical surfaces in the production area.

Characteristics

- Measuring particle size distribution and count
- Portable and compact design
- Non-destructive inspection
- Single- and series-measurements
- Direct measurement on surfaces
- Repeatable measurement
- Battery operation optional
- Saving data and live images on USB-flash memory
- Fast and reliable operation
- Maps particle size, particle location and particle shape on surface
- Easy user interface using touch screen
- Integrated protocol printer

Measuring head versions



Detection limit	2µm
Resolution	8.5µm
Measurement area	7mm x 5mm
Footprint	31mm
Dimension Ø x h	60mm x 75mm
Weight	350g
Illumination λ	617nm
Optical system	Compact
Protection class IP	IP 54

Detection limit	25µm
Resolution	25µm
Measurement area	20mm x 15mm
Footprint	120mm
Dimension Ø x h	120mm x 310mm
Weight	2000g
Illumination λ	617nm
Optical system	Telecentric
Protection class IP	IP 54

External monitor

