SITA

Contact-free cleanliness inspection of part surfaces by fluorescence measurement

SITA *CleanoSpector*

Cleanliness inspection – Layer thickness monitoring

SITA *CleanoSpector*

Advantages

Features

- Inspection and adjustment with calibraton standards

- Mobile and robust measuring device for flexible use at the process and in the labortory

- Intuitive operation: simple and fast measuring as well as controlling

- Automatic calibration on reference surfaces
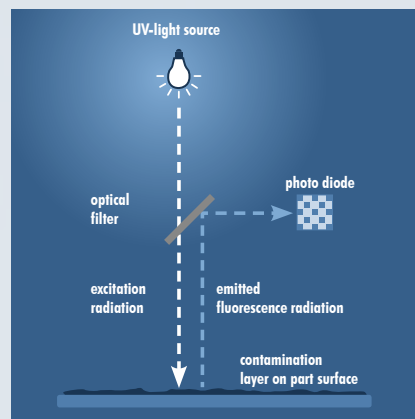
Application fields

- Contact-free cleanliness inspection of metal part surfaces at the push of one button

- Quality assurance of industrial cleaning processes

- Layer thickness measurement e.g. of corrosion protection

Benefits

- Highest product quality by monitoring limit values

- Documentation of slightest contamination on various shaped surfaces

- Efficiency by process optimization

Fluorescence measuring principle

UV-light source

photo diode

optical filter

excitation radiation

emitted fluorescence radiation

contamination layer on part surface

Cleanly inspected

Applications

- Cleanliness inspection of metal parts after machining

- Monitoring the cleanliness of automobile pistons before coating

- Incoming and outgoing control of housing parts for lubricants and release agents after cleaning and before adhesive bonding

- Controlling the cleanliness of metal parts before laser welding

- Evaluating the cleanliness of medical implants

- Detecting residual agents and encapsulation material on bond pads before bonding

- Surface inspection on electrical contacts after stripping of isolation material

The SITA CleanoSpector assures a high part quality in surface treatment processes.

www.CleanoSpector.com

SITA *CleanoSpector*

Technical data

Fluorescence intensity

Measuring range	0…2,000 RFU (Relative Fluorescence Unit)
Max. deviation	0.5 % of measuring range
Resolution	0.1 RFU

Sensor optics

Excitation	365 nm, max. 150 mW
Detection*	460 nm
Measuring point*	D = 1 mm
Measuring distance*	4.7 mm

* standard values

Cleanliness

Measuring range	0…100 %
Resolution	0.1 %

Layer thickness

Measuring range	user-defined

Power supply

Mains adapter / USB	100…240 / 5V
Li-Ion battery	3.6 V / 1,950 mAh min. 8 h operating time
Power consumption	2.5 W max.

Interface, memory, dimension, weight

USB-interface	data transfer
Display	LCD, illuminated
Measuring profiles	254
Memory	8,000 measuring values per profile
Dimensions (HxWxD)	
Hand-held device	129x82x48 mm
Sensor head	95x50x30 mm
Weight (device)	530 g

Windows-Software SITA-ProcessLog (optional)

- Guided part inspection and graphical display of measuring points on part surfaces
- Documentation and evaluation of the part cleanliness
- Administration and analysis of saved measuring values
- Quick and easy preparation of test reports
- Controlling the measurement via PC
- Simple generation and administration of measuring profiles

Contact

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