SITA

Contact-free cleanliness inspection of part surfaces by fluorescence measurement



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

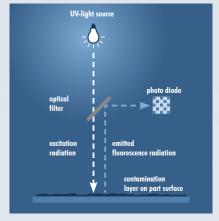
- Contact-free cleanliness inspection of metal part surfaces at the push of one button
- Quality assurance of industrial cleaning processes
 - Layer thickness measurement e.g. of corrosion protection



Benefits

- Highest product quality by monitoring limit values
- Documentation of slightest contamination on various shaped surfaces
- Efficiency by process optimization

Fluorescence measuring principle



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.

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

 $\begin{array}{lll} \mbox{Detection*} & 460 \ \mbox{nm} \\ \mbox{Measuring point*} & D = 1 \ \mbox{mm} \\ \mbox{Measuring distance*} & 4.7 \ \mbox{mm} \end{array}$

* 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-lon 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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