

SITA

Contact-free cleanliness inspection
of part surfaces by fluorescence
measurement



SITA *CleanoSpector*

Cleanliness inspection – Layer thickness monitoring

SITA *CleanoSpector*

Advantages

Features

- Check and adjustment with calibration standards
- Mobile and robust measuring device for flexible use at the process and in the laboratory
- Intuitive operation: simple and fast measuring as well as controlling
- Various spacer available for easy measurement of different part shapes

Application fields

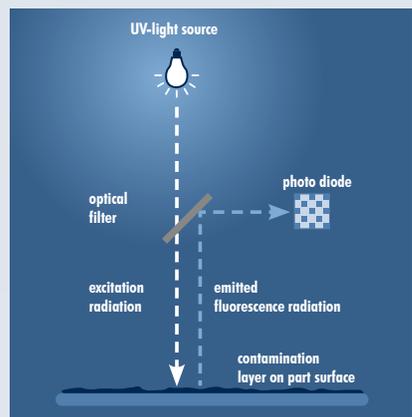
- Contact-free cleanliness inspection of metal part surfaces at the push of one button
- Quality assurance of industrial cleaning processes
- Layer thickness measurement e.g. of corrosion protection oil and primer



Benefits

- Highest product quality by monitoring limit values
- Documentation of slightest contamination on various shaped surfaces
- Efficiency by process optimization
- Customised inline inspection system (SITA clean line CI) available

Fluorescence measuring principle



Cleanly inspected

Applications



- Cleanliness inspection of metal parts after machining
- Inspection of functional surfaces after selective cleaning (laser cleaning, ultra-fine plasma cleaning, CO2 snow blasting, ...)
- Inspection for residues of release agent on aluminium die-cast parts prior to adhesive bonding
- Monitoring the cleanliness of metal parts before laser welding
- Inspection for filmic contamination on parts in medical- or vacuum technology
- Detecting residual agents and encapsulation material on bond pads before bonding
- Surface inspection on electrical contacts after stripping of isolation material
- Inspection for sufficient layer thickness when applying corrosion protection oils or when applying a primer prior to adhesive bonding



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

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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
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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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