SITA

Black light inspection – digitalised, objective and fully documented

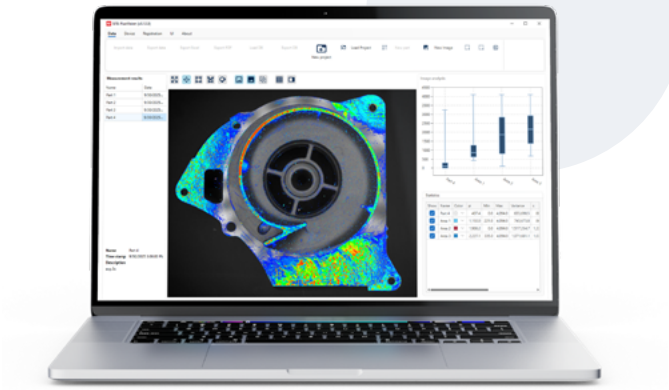


NEW

SITA FluoSpection Qube

Innovative imaging fluorescence measurement:
Cleanliness control redefined

The SITA FluoSpection Qube inspection system combines easy operation and automated analysis with highly sensitive, calibrated UV fluorescence measurement technology to precisely detect and visualize filmic contamination on parts.



Product Features

- Easy and safe operation with full shielding from UV radiation and reproducible measurement conditions
- Flexible access to the measuring chamber via lift door, height-adjustable measuring table and customised part fixtures
- Automated positioning, measurement and analysis via PC software
- Highly sensitive, calibrated measurement in RFU over a wide measurement range and with a high dynamic range
- High-resolution visualisation of the spatial distribution of filmic contamination
- Flexible evaluation of the entire inspection area as well as freely definable partial and functional areas
- Objective cleanliness assessment through limit value checking, statistical analysis and comparison of multiple parts or areas

Application Examples

- **Cleanliness inspection prior to cleanliness-critical processes** such as bonding, coating, welding, hardening and wire bonding
- **Monitoring and optimisation of cleaning processes** by detecting residual contamination and inhomogeneous cleaning results
- **Inspection of fluorescent functional coatings** with regard to application and layer distribution, for example in the case of anti-corrosion oils and primers
- **Selective analysis of critical functional areas** such as sealing, bonding and contact areas
- **Quality assurance of cleanliness-critical components** across all sectors, from metalworking to electronics manufacturing and high-purity processes such as medical and vacuum technology

Technical description

Device (HxWxD)	approx. 84 x 51 x 70 cm
Measuring table	350 x 350 mm Height adjustable for optimum measuring distance, interchangeable inserts or holders for parts mounting applicable
Max. size of test parts	300 x 300 x 300 mm Expandable with accessory options for larger components
Testing area	300 x 300 mm, by measuring at several positions and stitching to complete part

Automated positioning of the measuring unit and distance adjustment

Fluorescence measuring system

- Calibrated measurement and image area 100 x 100 mm, more than 4 million measurement points (50 μm each)
- System calibration for normalised fluorescence measurement in RFU
- Powerful data processing algorithms

Lighting

- UV LED area flood light, 100 W (>20 mW/cm²), 365 nm spectrally filtered, calibrated
- With integrated white light ring illumination

Camera

- HD industrial camera, objective with high light transmission, UV blocking filter/bandpass Filter 460 nm, calibrated
- High sensitivity by exposure times of up to 10 sec and further increase with reduced resolution

Design: augensturm | 102040 / Version 2.1

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