

# NEW SITA SurfaSpector

Fast evaluation of surface wettability in manufacturing processes by measuring the contact angle

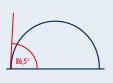


The SITA SurfaSpector is a new hand-held measuring device for testing the wettability of metal, glass and plastic surfaces, e.g. after surface treatment or cleaning. The device combines an objective measurement with simple handling and enables a fast evaluation of the surface.

- Automated measuring procedure including drop placement, drop detection and direct determination of the contact angle
- Handy sensor head for measuring at various parts geometries
- Simple operation via touchscreen
- Mobile use without PC directly at the plant or in the process
- Limit value monitoring in measuring profiles usable for various applications
- Optional PC software SITA-SurfaceLog for advanced measurement data visualization and export

## Measuring principle





A drop of water is precisely placed at the surface by an automatic dosing unit. The drop is illuminated from the side. A shadow of the drop is projected onto an inclined measuring surface. The projection is recorded from above by a high resolution camera and the picture is corrected for perspective. The drop shape is determined and the contact angle calculated. The lower the contact angle, the higher the wettability.

## Technical data

#### Contact angle

Measuring range  $5^{\circ}...175^{\circ}$  Resolution  $0.1^{\circ}$ 

#### Measuring method

Optical determination of the contact angle of a sessile drop (1  $\mu$ I)

Min. sample size 5 x 5 mm

### Power supply and interfaces

Battery power min. 6 h operating time
USB Data transfer, power supply

#### Operation

Display 5"-TFT-display with touchscreen

Resolution 800 x 480 pixel

Test liquid ultrapure water, 5 ml water reservoir

(for 5000 measurements, refillable)

## **Applications**

- Quality assurance after parts cleaning
- Wettability inspection
- Testing of surface activation, e.g. after a plasma treatment and many more applications in surface analysis





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