

The Layer Check LC 1000 enables a non-contact measurement of the coating thickness of powder & liquid paint directly after application. This leads to reduced costs, optimised quality & process reliability.



#### YOUR BENEFITS AT A GLANCE:

- **Considerable material savings**, since unnecessary repeat coating is avoided. This results in significant **cost savings** and protects the environment.
- The **quality control** ensures that the workpieces are not undercoated, enabling the user to prevent rejects and system downtimes.
- Constant measurement ensures seamless **logging** during the coating process. The data can be used locally or transferred to a database.



#### Powder coating

With powder coating, the layer thickness can be determined in good time before the curing process and readjusted as required. This allows material savings of up to 30% and also increases productivity.

#### Liquid coating

Even with liquid coating, measurements can be carried out before the material dries. This means consistent coating results, material and time savings and a quality that is always second to none.

#### Non-contact & non-destructive measurement

Patented technology (Advanced Thermal Optics) for non-contact and non-destructive layer thickness measurement at a distance of up to 50 cm \*\* from the workpiece. The measuring distance and measuring angle can vary.

#### Prompt corrections possible

Even with coatings that are still wet or have not yet been cured, the layer thickness can be determined and corrected if necessary.

#### Measurement during the coating process

For uninterrupted production, the measurement can be carried out while workpieces are moving through the coating system.

#### Workpieces with complex geometries

The Layer Check LC 1000 determines the layer thicknesses easily, even on workpieces with crooked surfaces, on insides and edges.

#### Different materials

Measurement of the layer thickness on metal, plastic, MDF, CFRP, glass and many other materials.

#### Suitable for nearly all paints

Suitable for your specific requirements with a one-off calibration.

## Technical data

Characteristics	Values
Measuring distance	5 - 50 cm **
Measuring point	Ø 2 - 50 mm *
Scope of measurement:	
Powder coating without curing	1 - 1,000 µm
Powder coating after curing	1 - 1,000 µm
Powder coating before curing	1 - 1,000 µm
Liquid coating	1 - 200 µm
Duration of measurement	20 ms - 2,000 ms **
Measuring interval	2 - 8 s (optional: 1 - 4 s) ***
Measuring interval in continuous operation:	
Standard model	10 s
Robot/lift model	1 s
Movement of the measured object	15 m/min **
Standard deviation	< 0.5% */**
Angle tolerance	+/- 60° **
Mains connection	IEC 320-C14
Mains voltage	230 V AC, 50 Hz
Fuse	10 A
Power consumption	max. 2,000 W
Operating temperature:	
Standard model	5 - 30 °C
Robot/lift model:	
Measuring head	5 - 50 °C
Measuring device	5 - 25 °C
Humidity	< 60%
Size & weight:	
Standard model	38 x 51 x 20 cm / 16 kg
Robot/lift model	25.3 x 20.4 x 16.8 cm / 5.2 kg
Interface:	
Ethernet	yes
External control	yes

\* dependent on distance / focal length

\*\* dependent on model, coating material, substrate material and layer thickness

\*\*\* dependent on energy settings

## Typical areas of application

- Metal coatings, such as for the automotive and transport industry, white goods and much more
- Plastic material
- MDF panels
- Corrosion protection
- Metal construction



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