

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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