



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, optimized 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.

### Measurement During the Coating Process

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

### 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.

### 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.

### 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

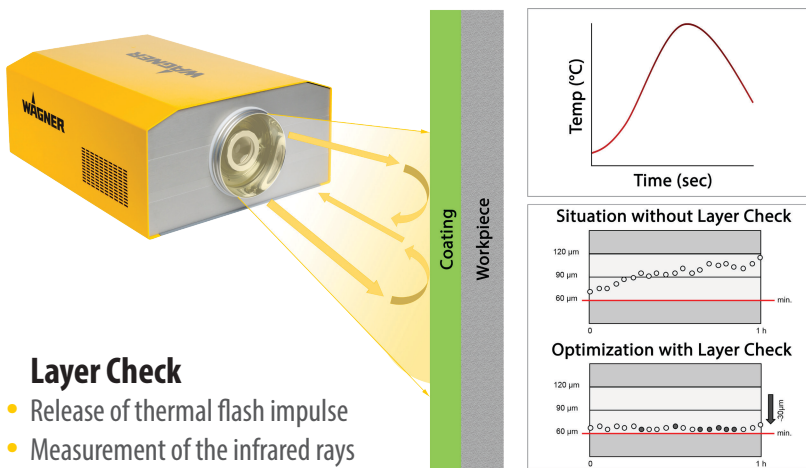
Measurement of the layer thickness on metal, plastic, MDF, CFRP, glass and many other materials.

### Suitable for Nearly All Paints

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

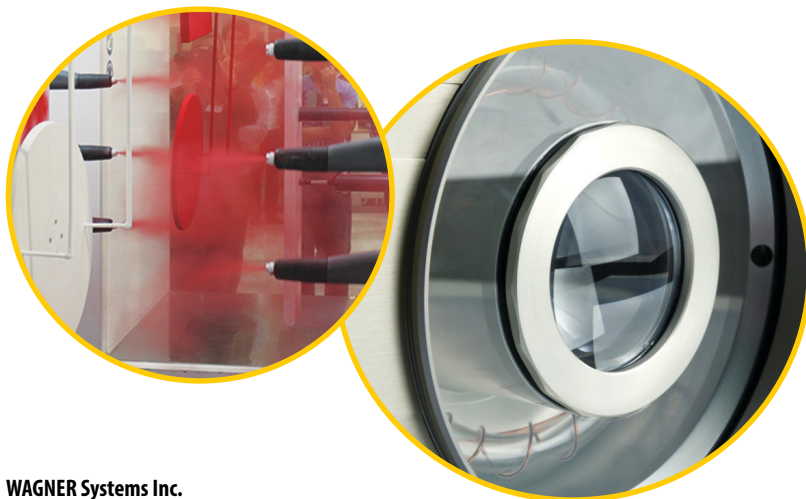
### Typical Areas of Application

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



### Layer Check

- Release of thermal flash impulse
- Measurement of the infrared rays
- Determination of the cooling curve
- Calculation of the layer thickness based on the characteristic of the cooling curve



Technical Data	
Characteristics	Values
Measuring Distance	5 - 50 cm **
Measuring Point	0.2 - 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

WAGNER Systems Inc.

**Powder Division**  
1770 Fernbrook Lane  
Plymouth, MN 55447  
T 800.473.2524  
F 630.503.2377

**Liquid Division**  
337 South Arthur Ave  
Louisville, CO 80027  
T 888.820.4498  
F 303.438.5708

www.wagnersystemsinc.com