

POWDERTAG THICKNESS ANALYSING GAUGE

LD5850

DATASHEET

PRODUCT DESCRIPTION

The Powder**TAG** is a photo-thermal gauge which measures film thickness non-contact and non-destructive. It complies with standard: DIN EN 15042-2. The small and robust device is suitable for fast and precise coating thickness measurement of powder coatings on metallic substrates before and after cure.

Powder**TAG** Thickness **A**nalyzing **G**auge is extremely versatile. It measures on any form, shape and dimension, on any metal substrate and in almost any angle.

The measurement system consists of a sensor and a display device. The sensor is connected via a cable to the display device.

**STANDARDS**

DIN EN 15042-2

Consult the appropriate standard for a correct execution of the test.

APPLICATION

Powder**TAG** is a non-contact production tool, developed for use at the paint-line. Because the Powder**TAG**'s pulse does not need to be perpendicular, and has a small measuring spot, the Powder**TAG** is very suitable to accurately determine the layer thickness on small, curved or hard to reach objects. Even on wire frames or small corners and edges. A LED pointer assists in determining the correct distance and location.

Due to the non-contact measuring principle parts can be tested on a slow moving line without damaging the coating. For higher line speeds it is recommended to remove the part of the line via a bypass or stop the line..

FEATURES

- Easy to operate. Just point the probe at the surface at the right distance (LED-Pointers will indicate the correct distance / location) and press the "measure" button.
- Measures any form, shape and dimension. Including wire frames or edges.
- Measures on any metal substrate such as steel and aluminium
- Measures in almost any angle
- Large measuring range, up to 300 µm.
- Extremely accurate.
- Suitable for uncured and cured powder coatings

SCOPE OF SUPPLY

The Powder**TAG** is delivered in a rugged hard carrying case

The package includes:

- A photothermal coating thickness sensor with cable
- A display unit for displaying the coating thickness readings
- Four Li-Ion batteries plus extra pack of four Li-Ion batteries
- Quad Charger for Li-Ion batteries
- Rubber harness to protect the display unit
- Verification tool
- Manual



ORDERING INFORMATION

LD5850 Powder**TAG** Thickness Analysing Gauge

ACCESSORIES

LD5852 Distance-cap (simplifies measurements of cured coatings)
LD5851 Height adjustable stand pro
LD5853 Height adjustable stand basic
LD5854 Battery Pack (set of 4 Li-Ion batteries)
LD5856 Quad Charger for Li-Ion batteries

SPECIFICATIONS

Measuring Range	1 - 300 μm^*
Accuracy	+/- 3%*
Resolution	+/- 1%*
Measuring distance	\approx 35 mm / 1.38 inch
Measuring spot	2x2 mm / 0.08x0.08 inch
Measuring speed	1024 - 2048 ms
Dimensions sensor	160 x 45 x 45 mm / 6.3 x 1.8 x 1.8 inch
Weight sensor	225 g / 7.9 oz
Dimensions instrument	80 x 180 x 43 mm / 3.15 x 7.1 x 1.7 inch
Weight instrument	700 g / 24.7 oz
Interface	USB
Battery type	4X Li-Ion AA 3,7 V
Battery lifetime	10 hours of continuous use
Substrates	All metals

** The performance-, range- and accuracy of the Powder**TAG** is depending on the structure and specific colour of the powder coating. The majority of powder coatings can be measured without any problems. In rare occasions the coating is not compatible with the photothermal technology or special settings are required.*

USE

Point the probe at the surface at the right distance. LED-Pointers will indicate the correct distance / location. When the three LED pointers merge into one spot the distance and location are correct.



Then press the “measure” button.

SPECIAL CARE

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- We recommend annual calibration

Transport and storage

The meter should always be stored and transported in the corresponding case. It should be noted that the sensor and the display unit are always placed in the appropriate compartment.

Note: Improper storage may cause damage to the meter

Carrying case and meter must be stored under the following conditions

- Do not store outdoors.
- Store dry and dust free.
- Do not expose to aggressive media.
- Protect from direct sunlight.
- Avoid mechanical vibrations.
- Storage temperature: 0 to 55 °C
- Relative humidity: max. 80%, at temperatures of 32 °C max. 50%

SAFETY PRECAUTIONS

- This product causes IR radiation. Don't stare into the light source for a long period when in use.
- Not suitable to be put in the sun or in the high light
- Avoid using it in over-high or over-low temperature environment
- Avoid humidity
- Always make sure the instrument's power is turned off while adjusting any electric component

**DISCLAIMER**

The right of technical modifications is reserved.

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.