## Phototherm

Phototherm GmbH Altenkesseler Str.17/C1 66115 Saarbrücken (GER)

## **PS** Standard

PHOTOTHERMAL COATING THICKNESS MEASURING DEVICE FOR PAINT, E-COAT, ADHESIVE AND POWDER

PS Standard is a high-precision system designed for fast and nondestructive measurement of the thickness of adhesives, paint, and other coatings in the production sector.

Functional principle: A modulated laser beam slightly heats up the coating. Part of this heat flows through the coating into the substrate, the rest is re-emitted as infrared radiation. The temporal progression of the radiated heat depends on the thickness of the coating. This temporal progression is measured using an infrared detector that uses this information to calculate the coating's thickness.

PS Standard can be used to measure coating thicknesses between 5  $\mu$ m up to 100  $\mu$ m. Typically, the accuracy is usually typ. ± 1  $\mu$ m or ± 5% of layer thickness. PS Standard is well suited for the production field as it can be used to measure the thickness of coatings on all types of components. One of its special features is its ability to measure internal coatings.

With a deflection mirror, measurements of internal coatings are also possible for diameters ≥18 mm Maximum penetration depth: < 40 mm.

Of course, we are any time available for individual advice regarding your requirements and wishes.



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Maintenance at Phototherm: recommended every 5 years

Optional: suitable for inline use, suitable for robot use, explosion proof (ATEX)

Measuring range: 5 μm up to 100 μm

## Precision:

typ.  $\pm$  1  $\mu$ m or  $\pm$  5% of layer thickness

Working distance: typ. 100 mm ± 20 mm

Angle tolerance: typ. bis ± 20°

Measuring spot diameter: approx. 8 mm

Measuring time: typ. < 1 s



Exemplary, not technically binding

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