

## PS Vision

ACTIVE THERMOGRAPHY | VISUALIZATION OF THE LAYER THICKNESS DISTRIBUTION | DRY & WET LACQUERS | INSPECTION OF PVC SEAMS, GLUING OR CAVITY SEALS



With **PS Vision** layer thickness dispensations can be tested over a large area with high accuracy in a short time. The measuring principle is based on active thermography. A powerful light source thermally energizes the object. The heat thus introduced flows through the layer into the substrate; the portion of the heat reflected at the interface layer/substrate is radiated again as infrared radiation.

The time course of the radiated heat depends on the thickness of the coating. An infrared camera determines the temporal decay; from this, the layer thickness for the entire measuring range is determined by imaging.

With the **PS Vision** layer thicknesses between 10  $\mu\text{m}$  and several 100  $\mu\text{m}$  can generally be measured; the accuracy is typically in the range of about  $\pm 5\%$  or  $\pm 1 \mu\text{m}$  and that satisfies the requirements for most layer thickness measurements.

The **PS Vision** is particularly suitable for use in the paint / coating line or in the audit.

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



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### Substrate materials:

metal, plastic, composite materials

### Maintenance at Phototherm:

recommended every 5 years

### Optional:

suitable for inline use, suitable for robot use

### Measuring range:

typ. 10  $\mu\text{m}$  to several 100  $\mu\text{m}$

### Measuring accuracy:

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

### Measured area per shot:

typ. 0,5  $\text{m}^2$  to 2  $\text{m}^2$

**Measuring distance:** typ. 1000 mm – 2000 mm  $\pm$  typ. 400 mm

### Measuring time per exposure:

typ. 1 s for paints; typ. 10 s for gluing and insulation

### Lateral resolution:

typ. several millimeters



Exemplary, not technically binding