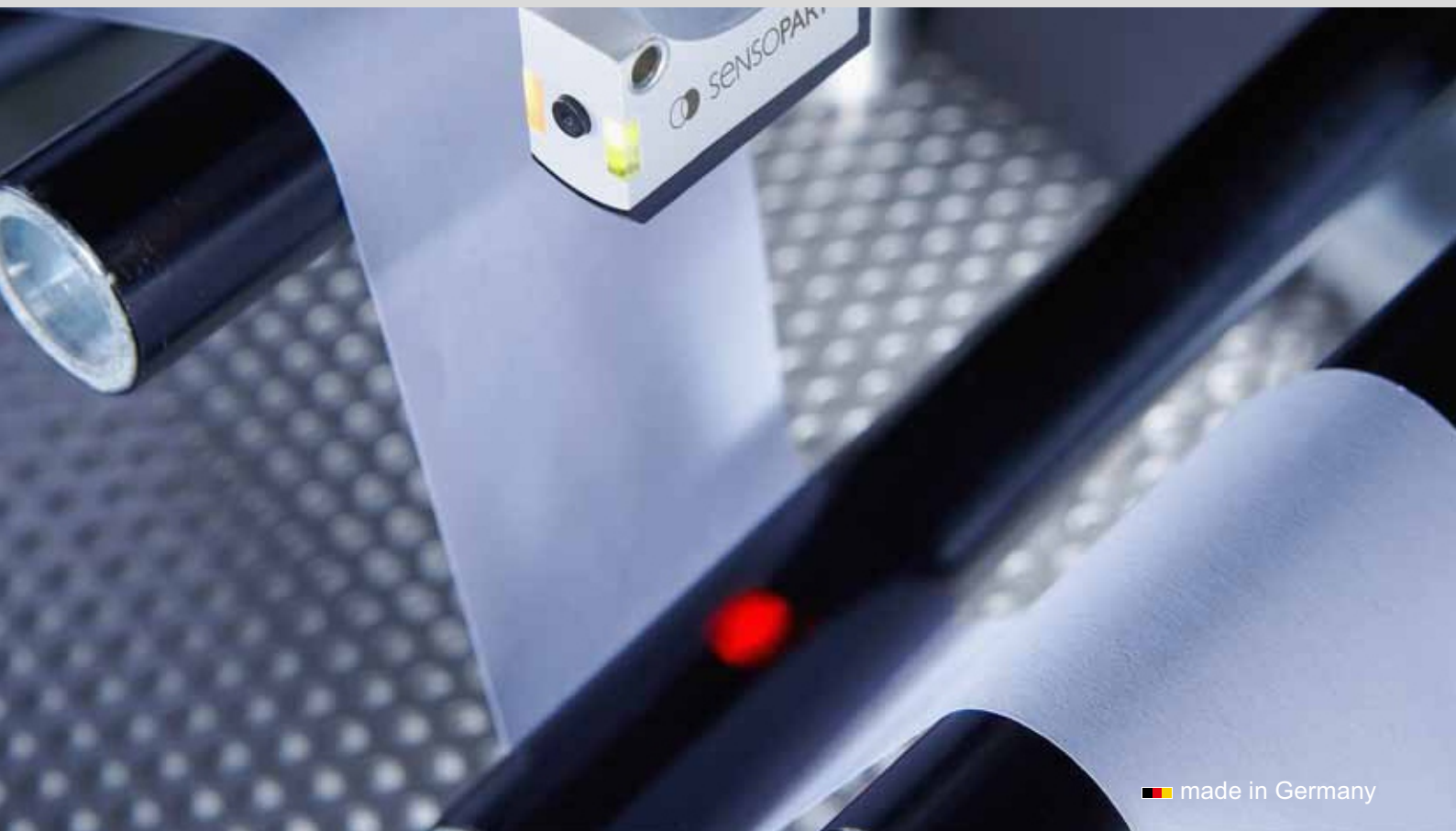


# Measurement

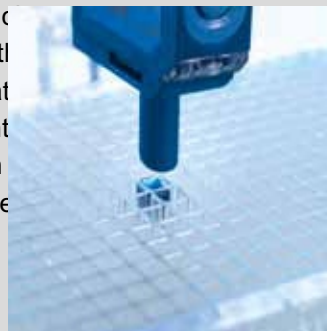
Measurement of parts, monitoring of sag, measurement of thickness and distance, measurement of path and filling level



 made in Germany

In many processes similar values, such as the distance or thickness of an object, must be determined. In such applications, the laser distance sensors of the FT 50-RLA series (which operate using the triangulation principle), and the particularly far-sight FR 90-ILA (which can measure distances of up to 250 m with millimetre accuracy using light time-of-flight technology), have proved particularly effective.

The vision sensors of our VISO Series can also be used for demanding measurement tasks. The VISO can precisely measure solar cells and detect even minimal edge breakouts. In addition, the Eyesight vision system, with a function library with over 100 functions, is available for detailed inspections of dimensional accuracy.



**Specialist for medical technology:**  
As a result of its narrow sound beam the UT 20-S ultrasonic sensor – used here for filling level measurement in the wells of microplates – allows the detection of objects through the smallest of openings and drilled holes with a diameter of less than 5 mm.



**Precise distance calculation:**  
All distances in a part can be measured and evaluated with the distance tools of the Eyesight vision system. Radii, angles and drilled holes can also be inspected in a single inspection program.



Application examples	Products
Measurement of turned parts	<b>2</b>
Monitoring sag on material webs	<b>6 7</b>
Regulating dancer rolls and monitoring sag	<b>3 4</b>
Determination of coil thickness on a packaging machine	<b>4 5 7</b>
Filling level measurement	<b>6 7</b>
Distance measurement on a robot gripper arm	<b>3 4 7</b>
Geometrical measurement of solar wafers	<b>1</b>

- 1** VISORSolar
- 2** Eyesight – freely programmable vision system
- 3** FT 25-RA – miniature distance sensor
- 4** FT 50/80-RLA – distance sensor
- 5** FT/FR 9x – laser distance sensors
- 6** UT 20 – ultrasonic sensor
- 7** FT 55-RLAP – distance sensor
- 8** Accessories