Press release

No. 603e



Press releases

Download

**High-precision measurement of technical mirrors**

**The Measuring technical mirrors is a constant challenge in the optics industry. The surface characterization of technical mirrors is of essential importance for many manufacturers. With the reflectCONTROL sensor system, automated surface inspection of reflective or shiny objects can be performed with consistently high quality. The results are output in the form of 2D images and a 3D point cloud.**

When high precision 3D measurements on glossy and shiny components are required, the reflectCONTROL sensor is the ideal choice. In particular, with flat surfaces, this technology impresses with its high measuring rates at nanometer accuracies.

The reflectCONTROL sensor captures the surface of technical mirrors with up to five million data points, allowing the measuring object to be precisely reconstructed. This allows numerous surface deformations to be identified. Indentations such as scratches, dents, notches, etc., as well as elevations such as pimples, grains and caterpillars can be visualized. All effects that change the reflectivity of the surface are shown in the amplitude image. Classic examples of this would be fingerprints or other soiling marks.

The 3D sensor uses the principle of phase-measuring deflectometry. It is characterized in particular by its extremely high z-axis resolution in the nanometer range. In combination with its large measurement area of approx. 170 mm x 160 mm, up to five million data points of the surface to be measured can be recorded within a few seconds.

approx. 1,500 characters including spaces



(PR603\_reflectCONTROL Technical mirrors.jpg)