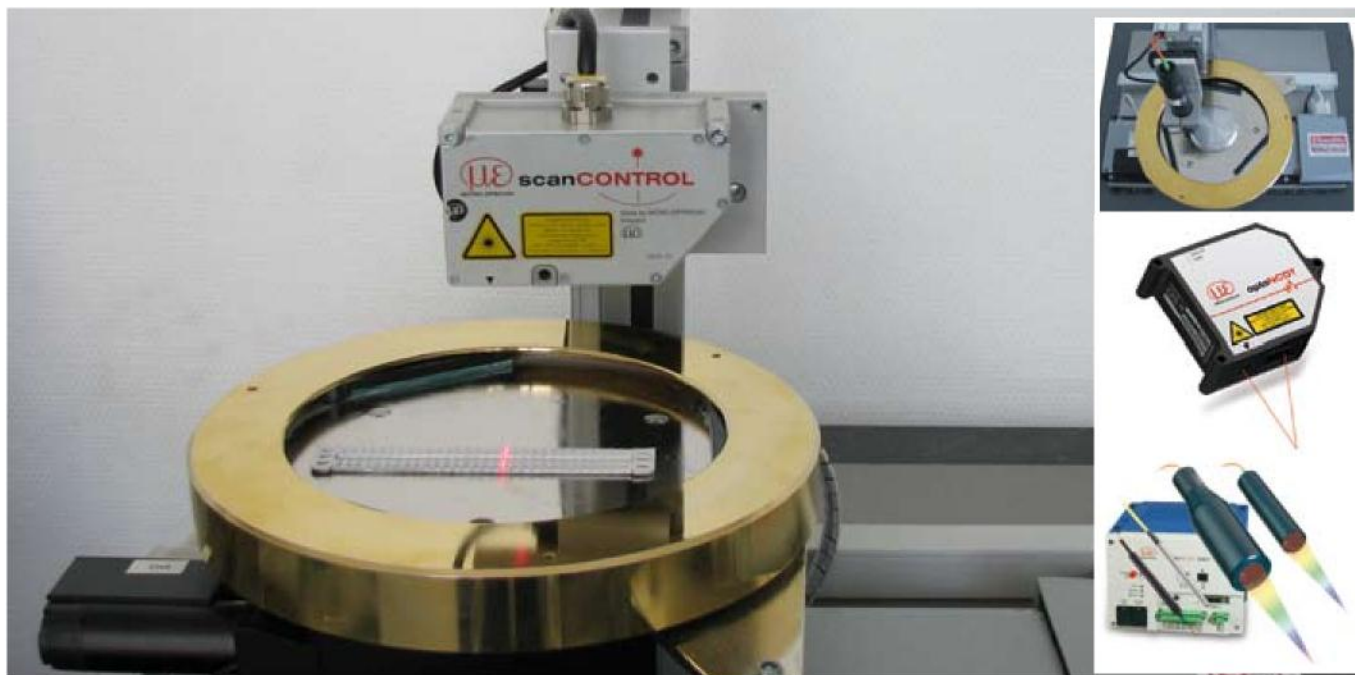


Universal surface profile and 3D parts measurement



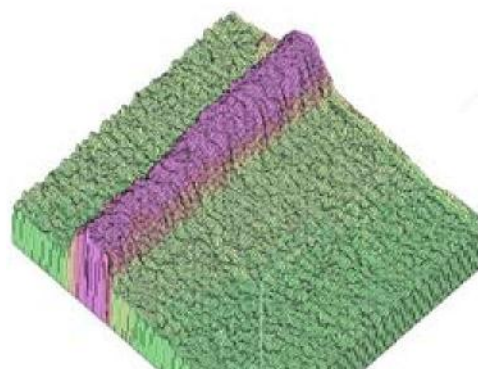
Schmidtke Electronic based in Garbsen has developed a universal measuring machine, which is capable of inspecting different objects for their surface profile or contour and for 3D part recognition. Depending on customer requirements, the measuring machine can be fitted with various sensor systems. In each case, the sensor system is located on a linear axis to enable it to be moved vertically. In the case of larger objects, the sensor can be raised or moved into the appropriate position for small measuring ranges. In each version, the measuring table is designed to traverse in two axes, which enables the target to be positioned accurately with respect to surface topography. Three positioning arms control the target so that high repeatability of measurements is achieved. The scanCONTROL profile scanner is used for fast 3D measurement to micrometre resolution. The scanner measures the object surface using a laser line. Confocal sensors enable very precise measurements by using white light and a very small spot size. These sensors are used for high precision measurements in the nanometre range.

Benefits for the customer:

- Different sensor systems to suit different applications or up to 20,000 distance values per second or 4,000 line images per second.
- Accuracy to 0.2µm

Sensors used:

- scanCONTROL 2800
- optoNCDT 2401
- optoNCDT 2220



3D image of
a weld seam
measurement