



SMARTTECH3D CobotScan

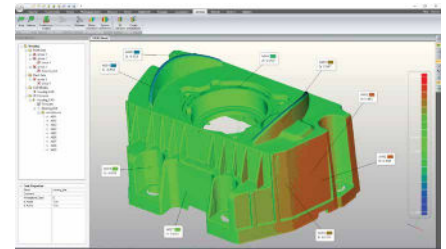
Modern coordinate
measuring machine:
efficient tool for quality control.

3D SCANNER COMPATIBLE WITH A COBOT

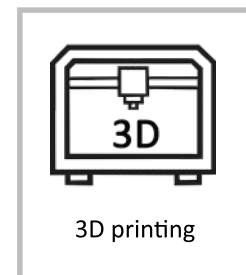
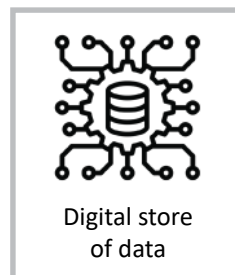
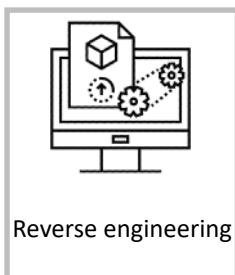
SMARTTECH3D CobotScan is an automated solution for obtaining precise documentation of any physical detail and quality inspection by comparing the actual state of an object to a reference CAD model. The device uses advanced optics and a powerful SMARTTECH3D LED TECHNOLOGY light source, combined with ease of cobot programming, for a smooth and effective measurement process. The newest technology, with its highly developed design, allowed size minimization and assured the best scanning results. Modern housing assures safety and stability of use, along with high mobility, giving users endless possibilities for professional use.

SMARTTECH3D CobotScan features:

- fully automated measuring process
- high measuring speed (5 mln points/s)
- high probing density
- easy measurement plan creation
- quick implementation
- certification attestation
- map of deviations projected on measured object
- quality control reporting (pdf)



POSSIBLE APPLICATIONS



INTEGRATION WITH A COBOT AND ROTARY STAGE



Small size of 3D scanner - 175x230x60 mm

SMARTTECH3D CobotScan is a 3D scanner designed and adapted for integration with cobots and measurement using a rotary stage module. The special design of the scanning head with a stereoscopic camera system ensures its lightness. Those features guarantee the highest degree of usage comfort, simplicity of hardware integration and high-quality mapping of complex geometry objects.

The use of the collaborative robot enables simple automation of the measurement process and does not require sticking markers on objects, increasing efficiency even with a small series of scanned products. The software functionality allows the creation of automatic control reports, documentation, and even displaying a map of deviations directly on the measured object for easy location of defects. Thanks to the elimination of the human factor, the achieved measurements are repeatable, and of the highest quality.

The measuring station is managed by the software SMARTTECH3Dmeasure installed on an efficient workstation. This dedicated software controls the entire measurement process, starting from the control of operating system parameters up to saving the obtained 3D model and finished quality report in a PDF file. Additionally, the application allows for conducting numerous processes, including the transformation of the point cloud into advanced 3D models and the automated generation of reports. Moreover, the software has an additional automatic quality control module. An easy-to-use interface enables users to create measurement plans and result edition path depending on the specific needs. Thanks to this, the system can be used both for reverse engineering and quality inspection, thus reducing the need for the purchase of two independent devices and additional costs.

TECHNICAL SPECIFICATION

SMARTTECH3D CobotScan:

Model	5-5 MP		
Scanning Technology	GREEN LED		
Detector resolution	5MP	5MP	5MP
Measuring field* [mm ²]	140x90	150x120	200x150
Measuring depth* [mm]	50	50	100
Sampling* [pts/mm ²]	330	280	165
Accuracy[μm]	18	21	25

* +/- 10% value



Automatic Rotary Stage:

- max load 15kg, diameter 200mm
- max load 80kg, diameter 500mm
- max load 300kg, diameter 500mm