

SMARTTECH3D ROBOTIZED

3D SCANNERS FOR INDUSTRY AND QUALITY CONTROL

SMARTTECH3D Robotized is a 3D scanner designed and adapted for integration with cobots and industrial robots. The special design of the scanning head with a stereoscopic camera system ensures its lightness. Thanks to this, the device guarantees the highest degree of usage comfort. Application mobility and simplicity of hardware integration combined with the highest resolution available on the market (20MP) guarantees high quality of scanned data. The SMARTTECH3Dmeasure software delivered with the 3D scanner allows complex integration of the device with robotic solutions of following producers: Kuka, Fanuc, Universal Robots, Kawasaki, Hans Robot.

Automated system features precise measurement, creation of 3D model as well as quality control reporting (pdf file) and direct mapping of deviation map onto measured object. This functionality is a universal solution for industrial, as well as archaeological and research applications.

According to the basic premise of the 4.0 industry ideology, SMARTTECH3D Robotized enables digitization and optimization of processes in the enterprise and at the same time provides effective tools for communication between different groups of users, such as engineers, management or sub-suppliers. Thanks to the elimination of the human factor, the achieved measurements are repeatable and of the highest quality.



SUPPOSED APPLICATIONS



Industrial
quality control



Creating a virtual
warehouse



3D printing
quality control



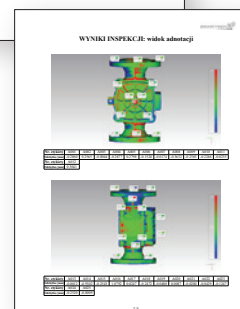
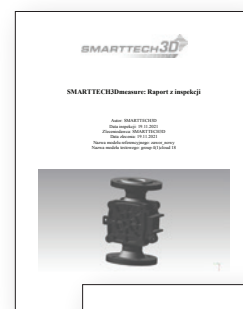
Control reports
in PDF

SMARTTECH3D measure

The measuring station is managed by the software SMARTTECH3Dmeasure installed on an efficient workstation. This dedicated software controls the entire measurement process, starting from control of operating system parameters, up to saving finished 3D model or quality report ready for presentation. Advanced application functions allow working with raw cloud data and mesh 3D models for quality control process and reverse engineering thus reducing the need the purchase to two independent devices. Metrology module enables user comparison with CAD or reference model creating a pass/fail report with value annotation and automatically generates report in PDF file.



The display of the color map of deviation directly on the measured object.



The PDF report from the quality control process.

SMARTTECH3D ROBOTIZED TECHNICAL SPECIFICATIONS

Model	12-12 MP		
Scanning Technology	WHITE/GREEN LED		
Detector resolution	12MP	12MP	12MP
Measuring field* [mm2]	225x300	300x400	455x600
Measuring depth* [mm]	120	180	240
Sampling* [pts/mm ²]	178	100	45
Accuracy[μm]	30/22	43/33	63/48

Model	20-20 MP		
Scanning Technology	WHITE/GREEN LED		
Detector resolution	20MP	20MP	20MP
Measuring field* [mm2]	200x300	260x400	400x600
Measuring depth* [mm]	120	180	240
Sampling* [pts/mm ²]	335	189	84
Accuracy[μm]	30/22	43/33	63/48

* +/- 10% value



Automatic Rotary Stage:

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