

SMARTTECH3D

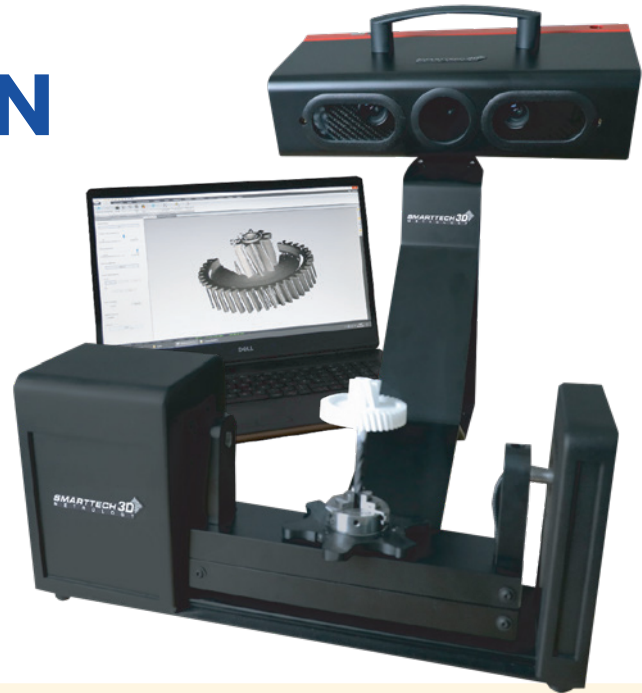
QUALITY STATION

Automated 3D Measurement System for Quality Control

The automated, compact Quality Station system provides a complete solution for quality control of geometrically complex parts.

It includes:

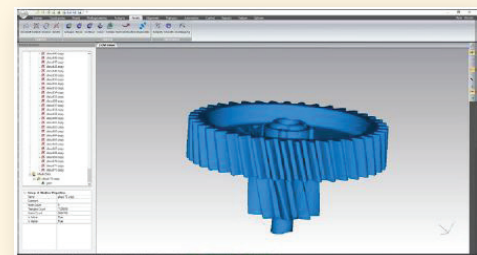
- 3D scanner equipped with two 6 MP detectors
- Tilt-rotary table
- SMARTTECH3Dmeasure software



The Quality Station provides a complete solution for inspecting geometrically complex parts. By integrating the SMARTTECH3D ON scanner with a tilt-rotary table, it performs automatic, precise measurements with no operator intervention required. SMARTTECH3Dmeasure software instantly compares the scanned part to the reference CAD model and generates a detailed control report in PDF format.

The compact design of the Quality Station allows it to fit easily on a standard desk. Its carbon fiber support structure minimizes the impact of temperature changes on measurement accuracy. The system's reverse projection feature displays deviation maps directly on the real object, providing clear visual feedback for quick repair or elimination of defective parts.

Thanks to its user-friendly operation, customizable control reports, and small footprint, the Quality Station is an ideal solution for companies working with additive manufacturing. Using structured light technology, it enables fast and accurate digitization of any shape produced through 3D printing.



3D scanning result - triangle mesh



Integrated tilt-rotary table



Industrial quality control



Creating a virtual warehouse



3D printing quality control

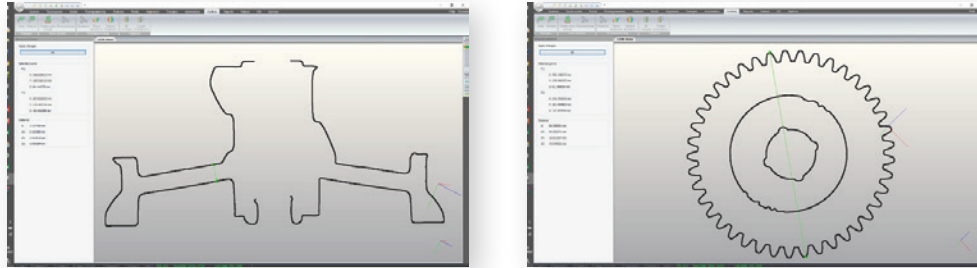


Control reports in PDF

AUTOMATED QUALITY CONTROL SYSTEM

MEASURED, COMPARE, CONTROL

The SMARTTECH3Dmeasure software includes essential tools for quality control and can be fully automated to match user requirements. It enables the creation of color deviation maps comparing scanned objects to CAD models, as well as distance, area, and volume measurements. Users can also generate cross-sections and calculate perimeters for detailed analysis. All results, including deviation maps and numerical data, can be compiled into a customizable report in PDF format.



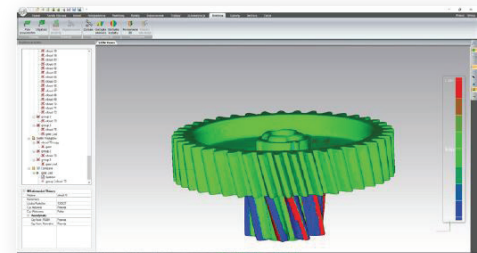
Virtual cross-section of measured objects

SHOW YOUR RESULTS DIRECTLY ON THE OBJECT

The reverse projection function allows users to display points, lines, polygons, or full color deviation maps directly on the scanned part. This feature makes it easy to highlight areas that require attention during production or inspection and simplifies communication between teams by presenting feedback visually and in real time.

EXTERNAL SOFTWARE INTEGRATION

Results from 3D scanning can be easily exported to external software for further quality control or reverse engineering. SMARTTECH3Dmeasure supports standard file formats such as OBJ, PLY, TXT, and IGES, enabling smooth integration with CAD programs. A dedicated SMARTTECH3D SDK is also available for custom development and workflow integration.



Comparison of 3D scan result to CAD model

SMARTTECH3D QUALITY STATION TECHNICAL SPECIFICATIONS

Resolution	6-6 MP	
Scanning technology	SMARTLED white/green/blue	
Measuring field [mm ²]*	150x113	200x150
Measuring depth [mm]*	75	90
Sampling [points/mm ²]*	410	230
Accuracy [μm]	31	40

* +/- 15% tolerance



Waterproof transportation case