SMARTTECH3D
UNIVERSE

SMARTTECH3D
Optical measurement systems

Raw data image - cloud of points.

SMARTTECH3D UNIVERSE is a 3D scanner that combines high accuracy of measurement for reverse engineering and the possibility of scanning realistic color texture necessary for digitizing objects.

SMARTTECH UNIVERSE is a complete hardware and software solution enabling creation of 3D documentation of any objects and further processing of the measurement results, e.g. for 3d printing. Solid aluminum housing and supporting structure inside the scanner made of carbon fiber, provide the best protection and stability of the sensitive optics. No need for each time calibration and a certificate confirming the accuracy of the device makes the 3D scanner a reference measurement tool both in the technical and natural sectors.
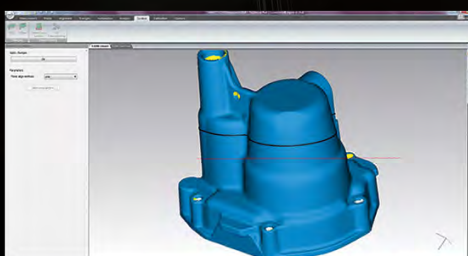
Small dimensions of the device allow you to carry the 3D scanner in the hand luggage of the aircraft.
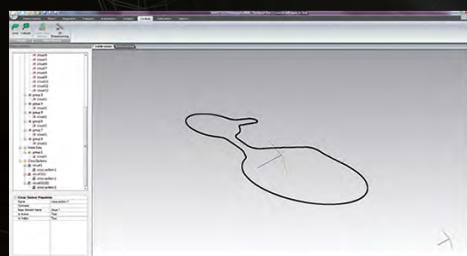
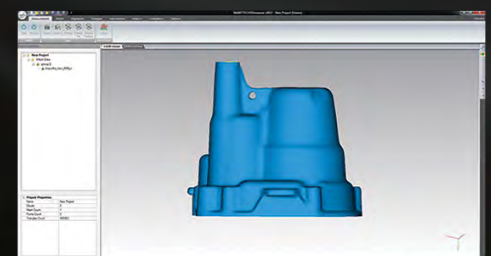## WHAT'S NEW IN SMARTTECH3Dmeasure:

JUST ONE CLICK AWAY
Predefined automation - „one click" from raw data to printable 3D model (STL file) or realistic texture 3D model for web presentations in just „one-click"

generated triangle mesh
with cross-section selection

Cross section performed
on mesh model

Ready-made .STL model optimized
for 3D printing

The 3D scanner is equipped with the **SMARTTECH3Dmeasure** software, which supports 300 million measurement points. During the scanning process, the 3D scanner obtain information about the shape of the object in X, Y, Z coordinatesnd realistic texture mapping at each measurement point (RGB colors). The software allows to automatic calculation of surface area and perimeter. Thanks to advanced functions and intelligent algorithms - creating documentation and 3D models has never been so easy and convenient. In addition, the new functionality of changing the „sensor sensitivity" parameter allows to 3D scan of dark objects.

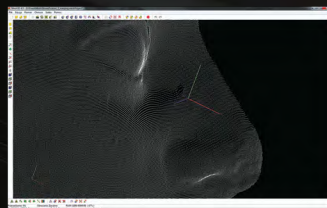## SOLID ALUMINUM HOUSING WITH THE SUPPORT PLATE OF CARBON FIBRE

PROFESSIONAL TRIPOD
POSITIONING LASERS
ROTARY TABLE
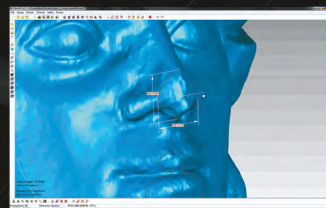AUTOMATIC SHADELESS SYSTEM

The universal mobile **SMARTTECH3D UNIVERSE** scanner combines the precision of geometric measurements with a realistic texture reproduction. The perfect tool for both work of modern engineering and the humanities.
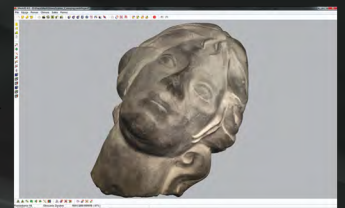

3D scanning process

3D scanning results
Point cloud (X, Y, Z with RGB)

Wirtual object analysis

Virtual museum and publication of objects on the Internet

Technical specification	2 Mpix			5 Mpix			10 Mpix		
Scanning technology	White LED structured light			White LED structured light			White LED structured light		
Measuring field [mm^2]	150x200	200x300	300x400	150x200	200x300	300x400	150x200	200x300	300x400
Distance between points [mm]	0,125	0,188	0,250	0,078	0,117	0,156	0,052	0,078	0,104
Sampling [points/mm^2]	64	28	16	164	73	41	369	164	92
Accuracy [μm]	50	60	80	50	60	80	50	60	80

New - **SMARTTECH UNIVERSE Lite** version is available in the price of 9900 EUR, set includes:

- Scanning head (without positioning lasers and the ability to collection the color of the scanned object)
- Professional tripod
- Manual rotary table and a set of markers
- Transport case
- SMARTTECH3Dmeasure software - controlling the measurement and enabling the scanning results to be processed

Our Clients: