METROLOGY
SOLUTIONS

# MaxSHOT3D™

## UNMATCHED ACCURACY ON LARGE-SCALE METROLOGY PROJECTS


reddot design award
winner 2017

CREAFORM

AMETEK®
ULTRA PRECISION TECHNOLOGIES

# PHOTOGRAMMETRY OPTICAL COORDINATE MEASURING SYSTEM

**Creaform's MaxSHOT 3D™ line-up is a game changer for product development, manufacturing, quality control and inspection teams that need the highest measurement accuracy and efficiency for large-scale projects and parts from 2 to 10 m. Imagine achieving accuracy better than 0.015mm/m. Gain peace of mind knowing that your measurements are always right on the dot.**

**What's more, thanks to sophisticated, proven user guidance technology and easy-to-use software, users of all levels—even non-metrology experts—can use the MaxSHOT 3D. Contrary to traditional photogrammetry, the MaxSHOT 3D features automatic feedback before measurement. Never take a bad image again!**

**If you consistently work on large-scale projects, the MaxSHOT 3D is your go-to solution to slash budget-busting measurement mistakes, improve product quality, increase process efficiency, and minimize overall operating costs.**


Intuitive controls and operations for ultra-short training and learning curves

Multi-function buttons for easy interaction with VXelements software

**40%** more accurate

Metrology-grade volumetric accuracy of **0.015 mm/m**

Highly comfortable, ergonomic design developed specifically for photogrammetric applications

Laser projected frame with **GO/NO-GO** feedback on measurement pictures

## SEAMLESS INTEGRATION WITH OTHER CREAFORM TECHNOLOGIES

The MaxSHOT 3D integrates all of the following Creaform technologies for large-scale projects:

**HandySCAN 3D ™**
The truly portable metrology-grade 3D scanner that delivers highly accurate measurements

**Go!SCAN 3D ™**
The easiest 3D scanning experience, generating fast and reliable measurements

**HandyPROBE ™**
The arm-free portable probing system designed for use on the shop floor

**MetraSCAN 3D ™**
Fast and accurate optical CMM 3D scanner engineered for shop floor conditions

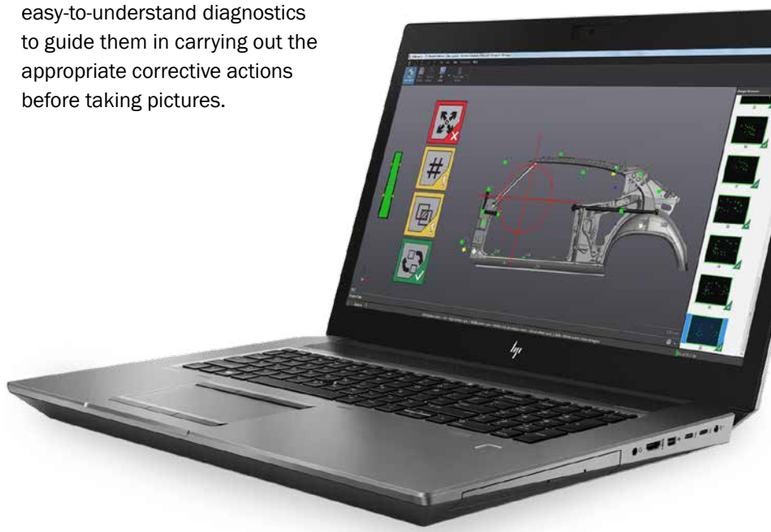
## WITH THE MAXSHOT 3D, ENSURE FIRST-TIME-RIGHT DATA ACQUISITION AND MEASUREMENTS

**NEVER TAKE A BAD PICTURE AGAIN**

The MaxSHOT 3D's laser-projected frame uses simple GO/NO-GO visual feedback to let users know if the image will be good or bad. If the image is good, a green frame will appear, indicating that it can be saved for further treatment and analysis. If it's bad, a red frame will appear, prompting users to take corrective action.

**INTUITIVE SOFTWARE DIAGNOSTIC TOOLS**

VXelements provides users with easy-to-understand diagnostics to guide them in carrying out the appropriate corrective actions before taking pictures.



## OPTICAL PROBING ACCESSORIES

Use your MaxSHOT 3D as an optical probing device and get direct 3D measurements for various types of features: hole location, edge location, surface points, etc.

## TECHNICAL SPECIFICATIONS

| | | MaxSHOT Next™ | MaxSHOT Next™\|Elite |
|---|---|---|---|
| **VOLUMETRIC ACCURACY** (1) | | 0.025 mm/m | 0.015 mm/m |
| **AVERAGE DEVIATION** (2) | | 0.008 mm/m | 0.005 mm/m |
| **VOLUMETRIC ACCURACY** (when combined with) | **HandySCAN 307™** (3)<br>**HandySCAN BLACK™** (3)<br>**HandySCAN BLACK™\|Elite** (3) | 0.020 mm + 0.025 mm/m | 0.020 mm + 0.015 mm/m |
| | **Go!SCAN SPARK™** (4) | 0.050 mm + 0.025 mm/m | 0.050 mm + 0.015 mm/m |
| | **HandyPROBE Next™** (5)<br>**MetraSCAN 357™** (5)<br>**MetraSCAN BLACK™** (5) | 0.060 mm + 0.025 mm/m | 0.060 mm + 0.015 mm/m |
| | **HandyPROBE Next™\|Elite** (5)<br>**MetraSCAN BLACK™\|Elite** (5) | 0.044 mm + 0.025 mm/m | 0.044 mm + 0.015 mm/m |
| **WEIGHT** | | 0.79 kg | |
| **DIMENSIONS** | | 104 x 180 x 115 mm | |
| **OPERATING TEMPERATURE RANGE** | | 5-40°C | |
| **OPERATING HUMIDITY RANGE** (non-condensing) | | 10-90% | |
| **CERTIFICATIONS** | | EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), IP50, WEEE, Laser class (2M) | |

(1) Based on the VDI/VDE 2634 part 1 standard. Performance is assessed with 35 lengths measurements taken on traceable artefacts (value = maximum deviation).
(2) Based on the VDI/VDE 2634 part 1 standard. Performance is assessed with 35 lengths measurements taken on traceable artefacts (value = average deviation).
(3) The volumetric accuracy of the system when using a MaxSHOT 3D cannot be superior to the default accuracy for a given model.
(4) The volumetric accuracy of the system when using a MaxSHOT 3D cannot be superior to the default accuracy.
(5) The volumetric accuracy performance of the system when using a MaxSHOT 3D cannot be superior to the default volumetric accuracy performance for a given model.

CREAFORM

**AMETEK GmbH**
**Division Creaform Deutschland**
Meisenweg 37
D - 70771 Leinfelden-Echterdingen
T.: +49 711 1856 8030 | F.: +49 711 1856 8099

creaform.info.germany@ametek.com | creaform3d.com

AMETEK®
ULTRA PRECISION TECHNOLOGIES

**Authorized Distributor**