

SmartDENT3D™

3D SCANNING SOLUTION FOR
AIRCRAFT SURFACE INSPECTION



Maintenance, Repair & Overhaul (MRO) experts are facing added pressure to make sure that in-service aircraft are assessed carefully to ensure public safety.

Creaform offers an easy, fast, and accurate NDT solution for 3D assessments of dent damages located on aircraft surfaces. It includes a HandySCAN 3D™ scanner and SmartDENT 3D™ surface inspection software.

This dedicated software is the first on the market to offer 3D visualization. It also provides a guided workflow approach to simplify the measurement extraction of 3D scan data to get exactly the dimensions required for in-service aircraft assessments. The goal is to greatly reduce operators' impact on measurement results and shorten the time to generate final reports. It saves users time and money—without compromising diagnosis results and safety.



USER-INDEPENDENT

REPEATABLE RESULTS REGARDLESS OF THE USER'S LEVEL OF EXPERTISE.

TRUportability™

LIGHTWEIGHT, ERGONOMIC AND PORTABLE DEVICE. EASY TO TAKE FROM PLACE TO PLACE AND REACH CONSTRAINED AREAS.

REAL-TIME VISUALIZATION

AS AN OPTIMIZED REMOTE DESKTOP APPLICATION, DATA ACQUISITION CAN BE VIEWED IN REAL TIME INCLUDING COLORMAPS FOR ALL FEATURES.

TRUaccuracy™

PROVIDES RELIABLE, ACCURATE, AND REPEATABLE RESULTS OF 0.025 mm (0.0009 in) IN ACCURACY.

SPEED

80 TIMES FASTER THAN THE PIT GAUGE TECHNIQUE.

COMPLETE SURFACE INSPECTION AND RESULTS

A/W RATIO, LENGTH AND WIDTH MEASUREMENTS, CLOSEST NEIGHBORS, CLOSEST INTERNAL STRUCTURE, MAXIMUM DEPTH AND MAXIMUM DEPTH OF DENT TO CLOSEST INTERNAL STRUCTURE, ETC.

INSTANT REPORTING

ON-SITE RESULTS AVAILABLE IN DIFFERENT FORMAT TO MEET END USERS' NEEDS.

GUIDED WORKFLOW

STEP-BY-STEP PROCESS TO PERFECTLY BRIDGE THE GAP BETWEEN DATA ACQUISITION AND REPORTING OPERATIONS.

TRUsimplicity™

SHORT LEARNING CURVE AND EASY-TO-USE SOFTWARE THAT REQUIRES NO NDT CERTIFICATIONS.



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HandySCAN3D™

The handheld metrology-grade portable 3D scanner has been optimized to meet the needs of MRO engineers looking for the most effective surface inspection tools. This fast, easy-to-use, reliable, accurate and portable NDT solution makes it possible to obtain all the information necessary to put back aircraft into service in the shortest time possible.

TECHNICAL SPECIFICATIONS

	HandySCAN BLACK™	HandySCAN BLACK™IElite
ACCURACY	0.035 mm (0.0014 in)	0.025 mm (0.0009 in)
VOLUMETRIC ACCURACY (based on part sized)	0.020 mm + 0.060 mm/m (0.0008 in + 0.0007 in/ft)	0.020 mm + 0.040 mm/m (0.0008 in + 0.0005 in/ft)
MEASUREMENT RESOLUTION	0.025 mm (0.0009 in)	
MESH RESOLUTION	0.100 mm (0.0039 in)	
MEASUREMENT RATE	800,000 measurements/s	1,300,000 measurements/s
LIGHT SOURCE	7 blue laser crosses	11 blue laser crosses (+1 extra line)
LASER CLASS	2M (eye-safe)	
SCANNING AREA	310 x 350 mm (12.2 x 13.8 in)	
STAND-OFF DISTANCE	300 mm (11.8 in)	
DEPTH OF FIELD	250 mm (9.8 in)	
PART SIZE RANGE (recommended)	0.05–4 m (0.15–13 ft)	
SOFTWARE	SmartDENT 3D	
WEIGHT	0.94 kg (2.1 lb)	
DIMENSIONS (LxWxH)	79 x 142 x 288 mm (3.1 x 5.6 x 11.3 in)	
CONNECTION STANDARD	1 X USB 3.0	
OPERATING TEMPERATURE RANGE	5–40°C (41–104°F)	
OPERATING HUMIDITY RANGE (non-condensing)	10–90%	
CERTIFICATIONS	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), compatible with rechargeable batteries (when applicable), IP50, WEEE	

CREAFORM

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Authorized distributor

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