3D SCANNING SOLUTION FOR AIRCRAFT SURFACE INSPECTION

SmartDENT3D™
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.
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.

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

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

USER-INDEPENDENT
REPEATABLE RESULTS REGARDLESS OF THE USER’S LEVEL OF EXPERTISE.

COMPLETE SURFACE INSPECTION AND RESULTS
AW/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.

SPEED
80 TIMES FASTER THAN THE PIT GAUGE TECHNIQUE.
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**HandySCAN BLACK™**

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

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

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