

# 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.



1

**SCAN**

2

**ANALYZE**

3

**REPORT**



## 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 UP TO 0.030 mm (0.0012 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.

## EXTEND THE POWER OF YOUR SmartDENT 3D SOLUTION

### Rugged Field Pack with Wireless Tablet

NDT service companies can count on a complete accessory package especially designed to optimize field efficiency and reduce turnaround times.

#### Includes:

- Wireless tablet powered by VXremote
- Pelican rugged laptop casing adapted to field environments
- Creaform battery pack with charger for up to 8 hours of autonomy
- Magnetic support for 3D scanner and tablets
- 8-m USB 3 cable to accommodate larger work areas



### 3D Scanner External Battery: Portability Got to a Whole New Level

Delivering up to three hours of autonomy, the 3D scanner's lightweight external battery increases data acquisition efficiency. Ideal for short-term projects, it provides total freedom of movement. The external battery is the perfect tool for constrained areas.



### VXremote™: Remote Access Software Application

VXremote improves efficiency by providing fast and easy remote access to SmartDENT 3D. The rugged tablet offers quick activation and setup without any hardware. Get SmartDENT 3D's data acquisition functionalities right at your fingertips!



## CREAFORM CUSTOMER CARE

Creaform is committed to offering first-class customer service so you can get the most out of your system.

Our multilingual product specialists team will provide you with assistance to answer your immediate needs. Our fleet of leading-edge calibration tools in our service centers gives you local access to faster maintenance service and repair.

Be sure to subscribe to the Customer Care Program to take advantage of worry-free maintenance and global repair coverage for all your Creaform hardware and software. Whether you need to access our latest software releases and knowledge base or require a loaner unit while your device is being serviced, we have a plan tailored to your needs. Gain peace of mind knowing your equipment will get even better with time.

# HANDY SCAN 3D

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 300™**

**HandySCAN 700™**

<b>ACCURACY</b>	Up to 0.040 mm (0.0016 in)	Up to 0.030 mm (0.0012 in)
<b>VOLUMETRIC ACCURACY</b>	0.020 mm + 0.100 mm/m (0.0008 in + 0.0012 in/ft)	0.020 mm + 0.060 mm/m (0.0008 in + 0.0007 in/ft)
<b>RESOLUTION</b>	0.100 mm (0.004 in)	0.050 mm (0.002 in)
<b>MEASUREMENT RATE</b>	205,000 measures/s	480,000 measures/s
<b>LIGHT SOURCE</b>	3 laser crosses	7 laser crosses (+1 extra line)
<b>LASER CLASS</b>	2M (eye-safe)	
<b>SCANNING AREA</b>	225 x 250 mm (8.8 x 10 in)	275 x 250 mm (10.8 x 10 in)
<b>STAND-OFF DISTANCE</b>	300 mm (12 in)	
<b>DEPTH OF FIELD</b>	250 mm (10 in)	
<b>PART SIZE RANGE (RECOMMENDED)</b>	0.1 – 4 m (0.3 – 12 ft)	
<b>SOFTWARE</b>	SmartDENT 3D	
<b>WEIGHT</b>	0.85 kg (1.9 lb)	
<b>CONNECTION STANDARD</b>	1 X USB 3.0	
<b>OPERATING TEMPERATURE RANGE</b>	5-40°C (41-104°F)	
<b>OPERATING HUMIDITY RANGE (NON-CONDENSING)</b>	10 - 90%	
<b>CERTIFICATIONS</b>	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), IP50, WEEE	



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ULTRA PRECISION TECHNOLOGIES

Authorized distributor

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