EXAscan™

HANDY 3D SCAN™

THE EXACT SCAN,
EVERY TIME!

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INTRODUCING THE EXAscan™, THE HIGH RESOLUTION SCANNER FROM THE HANDYSCAN 3D™ LINE OF TRULY PORTABLE, SELF POSITIONING HANDHELD LASER SCANNERS BY CREAFORM.

BASED ON THE SAME BREAKTHROUGH TECHNOLOGY THAT HAS MADE THE HANDYSCAN 3D BRAND SO SUCCESSFUL, THE EXAscan SELF-POSITIONING HANDHELD SCANNER OFFERS INCREASED RESOLUTION AND ACCURACY. THE EXAscan MAKES IT POSSIBLE TO CARRY OUT EXACTING 3D SCANNING PROJECTS WITH A LEVEL OF DETAIL AND ACCURACY THAT NO OTHER HANDHELD SCANNING SYSTEM CAN ACHIEVE. THE EXAscan IS DEFINITELY THE MOST FLEXIBLE, FREEFORM INSPECTION DEVICE ON THE MARKET.

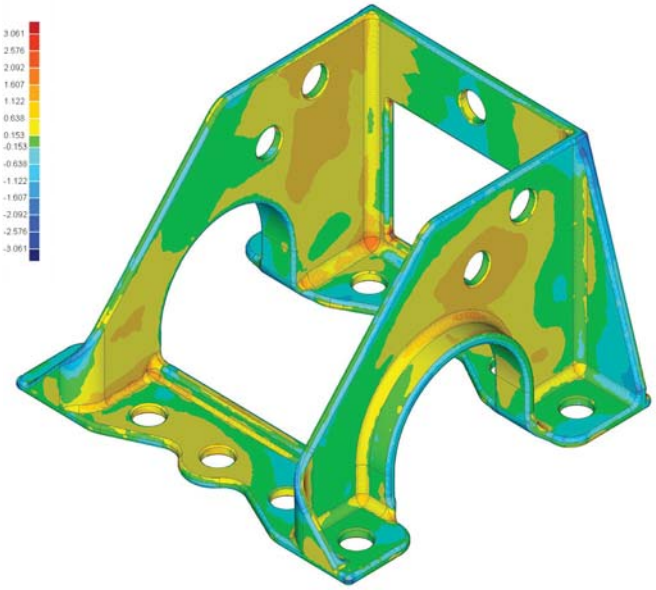
APPLICATIONS & SOLUTIONS

_ Inspection:

The EXAscan laser scanner is the perfect inspection tool for analyzing and reporting geometric dimensioning and tolerancing (GD&T). The direct .stl files generated can easily be imported into inspection software and quickly processed.

The EXAscan can help you with the scanning and measuring of objects of any sizes in various environments, generating inspection and colorimetric reports and:

- Non contact inspection
- First article inspection
- Supplier quality inspection
- Part-to-CAD inspection
- Conformity assessment of 3D models against the original parts/production tooling
- Conformity assessment of manufactured parts against originals.



_ Reverse Engineering & Styling, Design & Analysis:

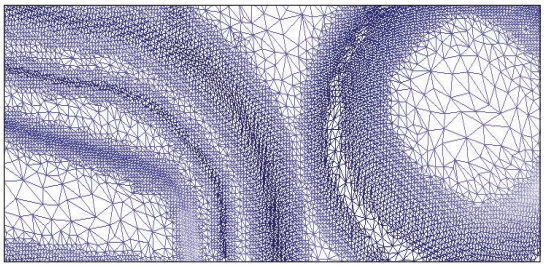
Facilitates surface reconstruction, class A surfacing, 3D modeling, clay model digitizing, mechanical design, tooling & jigs, maintenance, repair & overhaul (MRO) and finite element analysis (FEA).

_ Other applications:

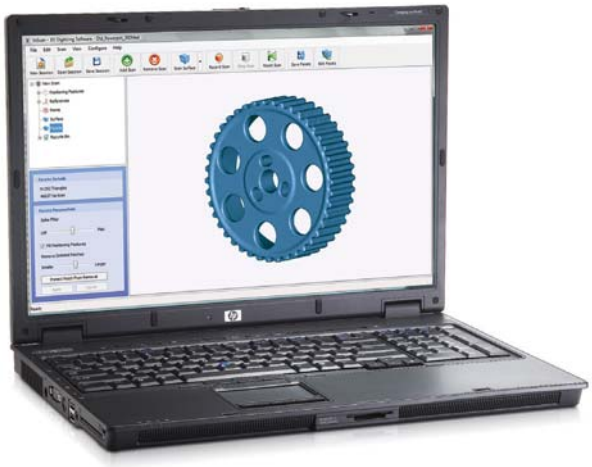
Include 3D scanning of existing objects, 3D archiving, complex shape acquisition, measurements archiving, damage assessment, medical application, digital models and mock-ups, packaging design and rapid prototyping.

BENEFITS

- **High resolution**: EXAmines every detail and delivers an incredibly high resolution.
- **Very high accuracy**: Offers unequalled accuracy, for an EXAct 3D representation of the object.
- **True automatic multiresolution**: The new Decimate Triangles slider makes it possible to keep a higher resolution when needed, while keeping larger triangles on flat surfaces, thus producing lighter STL files.
- **Dual scanning mode**: The top-mounted press button enables the operator to switch between normal and high resolution scanning modes. Normal resolution is useful for large parts and time sensitive scans, while high resolution is best for demanding and complex surfaces.



- **Self-positioning**: No external tracking or positioning devices are needed. The innovative positioning targets allow the operator to move the object any way he wants.
- **First truly portable device of its kind**: Fits in a case the size of a carry-on, easy to carry on the job site or from plant to plant; provides ease of use and great flexibility during scan sessions.



- **Affordable**: Competitively priced, no time-consuming setups and no CMM arm or other external tracking devices are required, very low maintenance device.
- **Handheld device**: The device's shape and weight distribution allows for use for extended periods without leading to musculo-skeletal problems.
- **Versatile and user-friendly**: Allows the scanning of objects of virtually any size, shape or color in confined spaces. Very short learning curve, no extensive training.

INDUSTRIES

There is virtually no limit to what the innovative EXAscan laser scanner can do. By all means, it proves to be extremely useful and powerful in industries such as **aerospace**, **automotive**, **biomechanics**, **consumer products**, **education**, **heritage preservation & architecture** as well as **manufacturing applications**.

VxScan™

Each EXAscan comes with VxScan™, Creaform's proprietary data acquisition software that powers the Handyscan 3D laser scanners line-up. This software provides true automatic multiresolution and real time 3D rendering visualization. VxScan is easy to learn and use, and offers powerful options such as enhanced direct .stl generation, surface reconstruction, surface optimization algorithms, improved compatibility (64 bits) and more!

TECHNICAL SPECIFICATIONS

Weight	1.25 kg (2.75 lbs)
Dimensions	172 x 260 x 216 mm (6.75 x 10.2 x 8.5 in)
Measurement	25,000 measures/s
Laser Class	II (eye-safe)
Resolution in x, y, z axis	0,05 mm (0.002 in)
Accuracy	Up to 40 µm (0.0016 in)
ISO	20 µm + 100 µm/m
Depth of field	30 cm (12 in)
Output formats	.dae, .fbx, .ma, .obj, .ply, .stl, .txt, .wrl, .x3d,.x3dz, .zpr

COMPATIBLE SOFTWARE

Paired up with the following CAD/post-processing software, the EXAscan laser scanner delivers great performance:

- CATIA V5: HSM™, the Handyscan Scanning Module for CATIA V5, is available from Creaform
- Geomagic: The plug-ins for STUDIO and QUALIFY are provided with VxScan
- PolyWorks: Plug-ins are available from Innovmetric for the IMEdit & IMInspect modules
- µLog XG, Metrolog XG and Metrolog V5: Plug-in included with µLog XG. For the other two software, it can be purchased from Creaform and metrologic group
- Rapidform: The Handyscan 3D interface is included with every installation of XOS, XOR and XOV

Other software platforms: Please contact our specialists at info@creaform3d.com

DASSAULT SYSTEMES | Software Partner

Included:

Carrying case
Calibration plate
Ergonomic support
FireWire cable
ExpressCard connecting card
Power supply
2,500 positioning targets
1-year warranty on parts and labour

Optional:

Field Pack (for outdoors, in-the-field scanning)
Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the scanner's optimum performance)
Magnetic, reusable scanning positioning targets
Target applicator
Etc.

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