REVscan™

HANDY 3D SCAN™

REV UP YOUR SCANNING POWER!

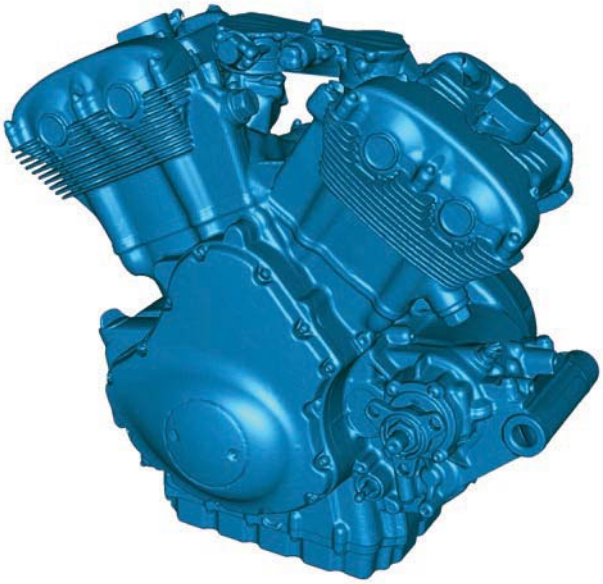
REV™ SCAN

REVscan™

CATCH THE REVOLUTION IN 3D SCANNING WITH THE REVscan™, PART OF THE HANDYSCAN 3D™ LINE OF SELF-POSITIONING SCANNERS BY CREAFORM.

HERE IS THE REVscan™, THE INNOVATIVE SELF-POSITIONING HANDHELD SCANNER THAT HAS COMPLETELY CHANGED THE WAY REVERSE ENGINEERING, DESIGN, SHAPE ACQUISITION AND 3D INSPECTION ARE DONE. POWERFUL, ACCURATE AND TRULY PORTABLE, THE REVscan DEFINITIVELY MAINTAINS ITS TECHNOLOGICAL EDGE.

APPLICATIONS & SOLUTIONS



_ Reverse Engineering & Styling, Design & Analysis:

The REVscan laser scanner allows companies to meet their requirements for creating or recreating new designs from existing and sometimes obsolete products or components, or even old parts that may have been developed without the use of CAD. The REVscan has proven particularly efficient at accelerating and facilitating the product design, creation and prototype analysis processes, while reducing related costs.

The REVscan turns out to be very powerful for tasks such as:

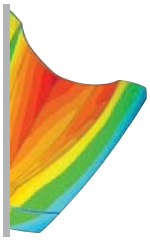
- Surface reconstruction
- Class A surfacing
- 3D modeling
- Mechanical design
- Clay model digitizing
- Tooling & jigs development
- Maintenance, repair & overhaul (MRO)
- Finite element analysis (FEA)

_ Medical Applications:

Non contact, non invasive process. Generation of 3D digital files from body parts or existing objects, orthotics and prosthetics, aesthetics and plastic surgery, body part measurements and reproduction, diagnosis and follow-ups.

_ Inspection:

Scanning and measuring of objects of any size, in various environments. Non contact, first-article and supplier quality inspection, colorimetric reports and overall conformity assessment of parts.

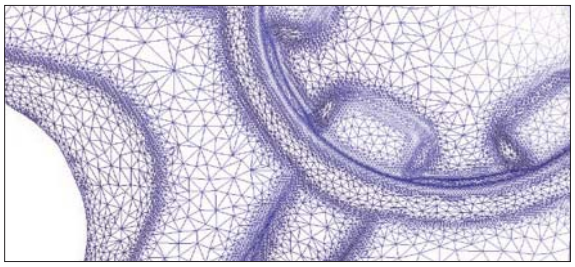


_ Other applications include

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

BENEFITS

- **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, over 360°.
- **Truly portable:** Fits in a case the size of a carry-on, easy to carry on the job site or from plant to plant.
- **High accuracy**: Yields some of the highest data quality available in laser scanning technology.
- **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.

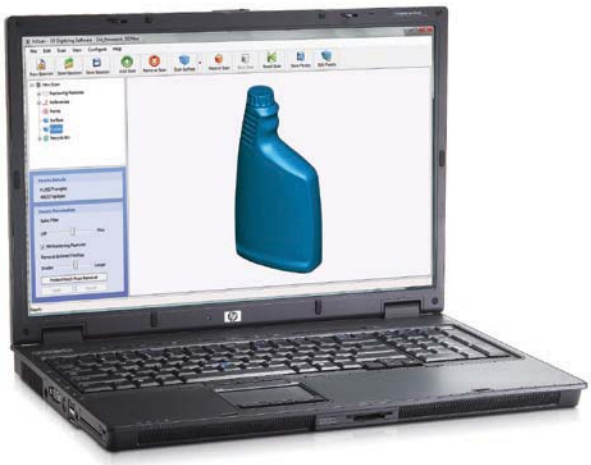


- **Affordable:** Competitively priced, no time-consuming setups and no CMM arm or other external tracking devices are required, very low maintenance device.
- **Handheld device:** The device's shape and weight distribution allows for use on extended periods without leading to musculo-skeletal problems.

- **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

Many industries have welcomed with great interest the introduction of the REVscan laser scanner. This innovative device has proved to be extremely useful and powerful in industries such as **aerospace**, **automotive**, **biomechanics**, **consumer products**, **education**, **heritage preservation & architecture** as well as **manufacturing applications**.



Each REVscan 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	980 grams (2.1 lb)
Dimensions	160 x 260 x 210 mm (6.25 x 10.2 x 8.2 in)
Measurements	18,000 measures/s
Laser class	II (eye-safe)
Resolution in Z axis	0,1 mm (0.004 in)
Accuracy	Up to 50 µm (0.002 in)
ISO	20 µm + 0.2 L / 1000
Depth of field	30 cm (12 in)

COMPATIBLE SOFTWARE

Paired up with the following CAD/post-processing software, the REVscan 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
- 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
PCMCIA connecting card
Power supply
2,500 positioning targets
1-year warranty on parts and labour

Optional Accessories

Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the optimum performance of the scanner)
Target applicator

A BORDERLESS, WORLDWIDE PRESENCE

Head Office

5825, rue Saint-Georges
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MAXscan™

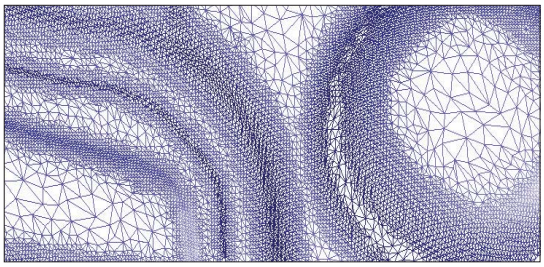
HANDY 3D SCAN™

LARGER THAN LIFE!

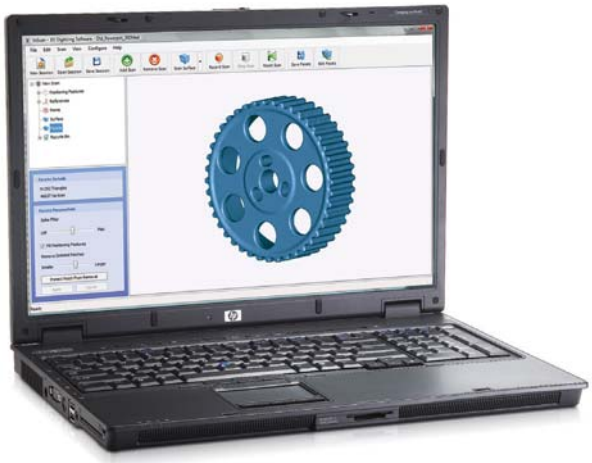
MAX SCAN™

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**.

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 lb)
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 + 0,1 L /1000
Depth of field	30 cm (12 in)

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
- PRELUDE V5 Inspect: A plug-in is available from Creaform for this software
- 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
PCMCIA connecting card
Power supply
2,500 positioning targets
1-year warranty on parts and labour

Optional:

Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the optimum performance of the scanner)
Target applicator

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FEATURES & BENEFITS

- **High resolution and accuracy:** Captures every detail and delivers high resolution and accurate geometry and textures, for an exact representation of the object.
- **Truly portable:** Fits in a case the size of a carry-on suitcase, easy to carry on the job site.
- **Automatic 100% accurate texture mapping:** The texture and geometry of the object are automatically acquired in one and the same reference system and aligned together with 100% accuracy, eliminating the alignment step usually required after scanning.
- **Adjustable and uniform texture resolution**: The output file shows uniform DPI resolution throughout the whole model, from every viewing angle, which is a great feature when scanning strong curvature forms.
- **True color acquisition:** Thanks to the built-in lighting system, the scanner acquires sRGB-calibrated colors, regardless of the ambient light conditions.
- **Optimal file size:** The resolution parameters make it possible to increase/decrease the texture and geometry resolution at will, and independently of one another, so to create files of optimum size and quality.

- **User-friendly and easy to learn:** The scanning process is virtually plug & play! No particular technical skills are required from the user.
- **Versatile:** The device can be used virtually anywhere and under any conditions, since it requires no external reference system, is light-weight and handheld.
- **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.
- **Dual scanning mode:** The top-mounted press button enables the operator to switch between color-textured geometry scanning or geometry scanning only. The latter can be selected to reduce the size of the final file, when color acquisition is not necessary.
- **Affordable system:** Competitively priced, no time-consuming setups, requires very low maintenance.

Each VIUscan comes with VxScan™, Creaform's proprietary data acquisition software that powers the Handyscan 3D laser scanners line-up. This software provides automatic 100% accurate texture mapping and real time 3D rendering visualization and ajustable texture contrast and brightness parameters. 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	1.3 kg (2.85 lb)
Dimensions	172 x 260 x 216 mm (6.75 x 10.2 x 8.5 in)
Measurements	18,000 measures/s
Laser class	II (eye-safe)
Geometry Resolution	0.1 mm (0.004 in)
Accuracy	Up to 50 µm (0.002 in)
ISO	20 µm + 0.2 L / 1000
Texture Resolution	50 to 250 DPI (user-configurable)
Texture Colors	24 bits, sRGB-calibrated
Depth of field	30 cm (12 in)
Output file formats	**Texture** .ma, .dae, .obj, .x3dz, .x3d, .zpr, .wrl, .fbx **Non Texture** .ply, .stl, .txt

COMPATIBLE SOFTWARE

The VIUscan generates various files formats that are compatible with major CAD/post-processing and animation software such as:

_ Geomagic
_ Maya
_ PolyWorks
_ RapidForm
_ 3D Studio Max
_ 3DVIA

For more information about all the software platforms compatible with the VIUscan, contact our specialists at info@creaform3d.com.

Included:

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

Optional Accessories

Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the optimum performance of the scanner)
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