GO!SCAN 3D ™

THE FASTEST AND EASIEST 3D SCANNING EXPERIENCE

CREAFORM

AMETEK®
ULTRA PRECISION TECHNOLOGIES

The Go!SCAN 3D™ product line offers our easiest portable 3D scanning experience, providing fast and reliable measurements. With these handheld 3D scanners, you can even capture 3D data in full color.

You need simplified, quick, and accurate 3D scanning? The Go!SCAN 3D scanners were designed with you in mind. Through a very efficient process, these self-positioning systems can be used by anyone without requiring any prior experience or background, and provide visual guidance as you are scanning. Their innovative technology bypasses preparation steps and specific setups, provides a very fast measurement rate, and does not require manual data post-processing.

Highly versatile, they can be used for a wide range of applications, helping professionals throughout the entire product development process.

EASY. FAST. RELIABLE. INTRODUCING THE GO!SCAN 3D SCANNERS.

CREAFORM 3D SCANNERS
ACCURACY. PORTABILITY. SIMPLICITY.

GO!SCAN 3D

The easiest 3D scanning experience, generating fast and reliable measurements.

HANDYSCAN 3D

The truly portable metrology-grade 3D scanners delivering highly accurate measurements.

METRASCAN 3D

The most complete 3D scanning solution for metrology-grade measurements on all materials.

THE GO!SCAN 3D SCANNERS: YOUR BEST ALLY AT ALL STAGES OF YOUR PRODUCT LIFECYCLE MANAGEMENT

Concept

Requirements and specifications ❯ Concept design ❯ Concept prototyping

Requirements and specifications
- Competitive product analysis
- Measurement of product environment or connecting/Surrounding parts
- Measurement of existing parts for aftermarket or custom equipment

Concept design
- Clay model measurement/Reverse engineering
- Models and mock-ups measurement/Reverse engineering
- Styling and aesthetics

Concept prototyping
- Integration of prototype modifications into CAD file
- Form study, proof-of-concept prototypes
- Ergonomy prototypes

Design

CAD design ❯ Prototyping ❯ Testing, simulation and analysis

CAD design
- 3D scan-to-CAD
- Reverse engineering (extracting design-intent)
- Packaging design

Prototyping
- Rapid prototyping/Manufacturing
- Integration of prototype modifications into CAD file
- Prototype inspection

Testing, simulation and analysis
- Finite element analysis (FEA)
- Interference analysis
- Deformation, geometry analysis

Manufacturing

Tooling design ❯ Assembly/Production ❯ Quality control
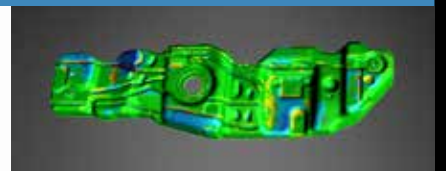

Tooling design
- Reverse engineering of dies, molds, fixtures, jigs and patterns
- Update of CAD file to reflect as-built tooling measurements
- Tooling validation/Inspection

Assembly/Production
- Virtual assembly
- Tool/Robot path programming
- Part assessment before machining

Quality control
- First article inspection (FAI)
- Part-to-CAD inspection
- Supplier quality inspection

Servicing

Documentation ❯ Maintenance, repair and overhaul (MRO) ❯ Replacement/Recycling

Documentation
- As-built documentation of parts/Tooling
- Marketing presentations, 3D training systems, serious gaming
- Digital archiving

Maintenance, repair and overhaul (MRO)
- Wear and tear analysis
- Custom repairs/Modification
- As-built documentation of parts/Tooling before maintenance

Replacement/Recycling
- Reverse engineering for developing replacement/Restoration parts
- Planning of complex assemblies disassembly/Dismantling

OTHER APPLICATIONS

Museology, heritage preservation, restoration, digital archiving, 3D scanning for research, analysis and publishing, multimedia, entertainment, computer graphics and special effects.

CREAFORM 3D SCANNING

ALL OF THE CREAFORM PORTABLE 3D SCANNERS FEATURE INNOVATIVE AND EXCLUSIVE TECHNOLOGIES:

TRUsimplicity™
VERY SIMPLE 3D SCANNING PROCESS

TRUportability™
3D SCANNING WHERE YOU NEED TO GO

TRUaccuracy™
ACCURATE MEASUREMENTS IN REAL LIFE OPERATING CONDITIONS

USER-FRIENDLY: NO EXPERIENCE REQUIRED, UP-AND-RUNNING IN MINUTES.

NO RIGID SETUP REQUIRED: BOTH THE PART AND THE SCANNER CAN BE MOVED DURING SCANNING.

FAST: TYPICAL OBJECTS ARE SCANNED IN 5 MINUTES OR LESS.

PROFESSIONAL-GRADE MEASUREMENTS: ACCURACY OF UP TO 0.1 mm AND RESOLUTION OF UP TO 0.1 mm.

BUILT-IN INTELLIGENCE: ENSURES THAT 3D DATA ARE HIGH-QUALITY AND ACCURATE.

HYBRID POSITIONING: USES THE PARTS' NATURAL GEOMETRY AND COLOR.

POINT-AND-SHOOT: NO NEED TO PREPARE PARTS. JUST GO!

OPTIONAL TARGETS: POSSIBLE TO USE TARGETS TO COMPENSATE FOR AN OBJECT'S LACK OF POSITIONING INFORMATION.

3D PRINTING: MAXIMIZE THE POSSIBILITIES WITH 3D SCANNING.

**ON-THE-GO SCANNING:** FITS INTO A CARRY-ON CASE, SO YOU CAN USE IT BOTH IN-HOUSE OR ON SITE.

LIGHTWEIGHT AND SMALL: WEIGHTS UNDER 1 kg, CAN REACH CONFINED AREAS. FITS INTO A CARRY-ON.

SCAN IN COLOR: ALLOWS FOR SEAMLESS CAPTURE OF HIGH- QUALITY GEOMETRY AND COLORS SIMULTANEOUSLY.

REAL-TIME VISUALIZATION: LOOK AT THE COMPUTER SCREEN TO SEE WHAT YOU ARE DOING, AND WHAT IS LEFT TO BE DONE.

AUTOMATIC MESH OUTPUT: READY-TO-USE FILES (GEOMETRY AND COLOR), RIGHT AS YOU COMPLETE ACQUISITION.

QUICK WORKFLOW INTEGRATION: USABLE SCAN FILES CAN BE IMPORTED INTO REVERSE ENGINEERING/CAD/3D PRINTING SOFTWARE WITHOUT POST-PROCESSING.
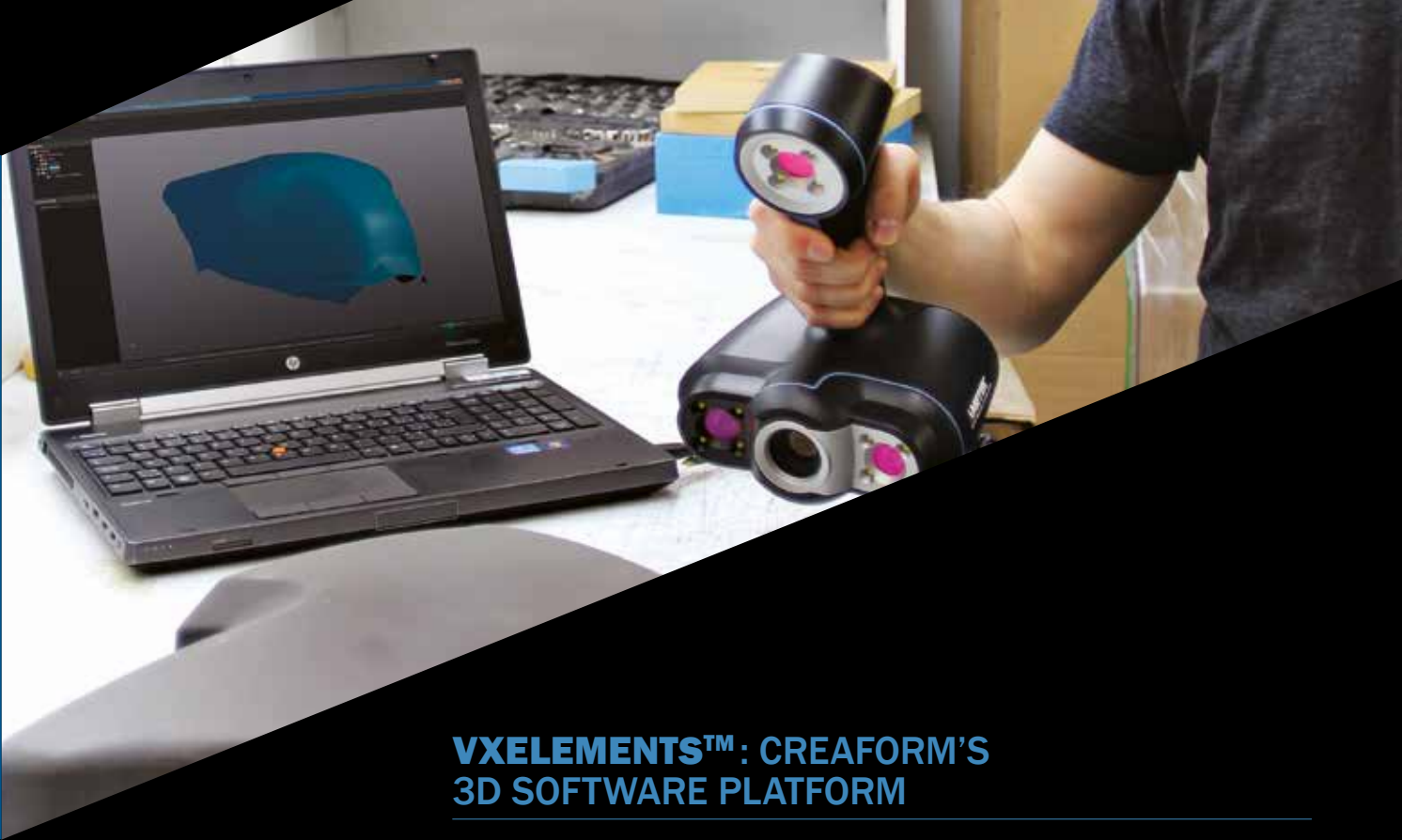
VXELEMENTS™: CREAFORM'S 3D SOFTWARE PLATFORM

The Go!SCAN 3D scanner comes with VXelements, a fully integrated 3D software platform that powers our entire fleet of 3D scanning and measurement technologies. It gathers all the essential elements and tools into a user-friendly, simplified and sleek working environment. Its real-time visualization provides a simple, enjoyable scanning experience.

An optimized scan file is automatically created and available upon completion of the data acquisition step, which contributes to greatly shorten your part inspection or design process.

– **User-friendly interface:** VXelements was designed to simplify the whole scanning process to its essential core, through a powerful and simple process;

– **Surface optimization algorithm:** avoids the creation of multiple scan layers and ensures a more accurate mesh without any post-treatment;

– **Direct mesh output:** an optimized mesh can be exported in all standard formats, right as you complete acquisition. No complicated alignment or point cloud processing needed;

– **No limitation to the scan resolution:** you simply need to input a resolution value, independent from the size of the scanned object. Resolution can be changed at any time before/after the scan;

– **Real-time visualization:** the user can view the 3D surface as the object is being scanned;

– **Scan results enhancement:** hole filling, smart decimation, boundary filters, etc.
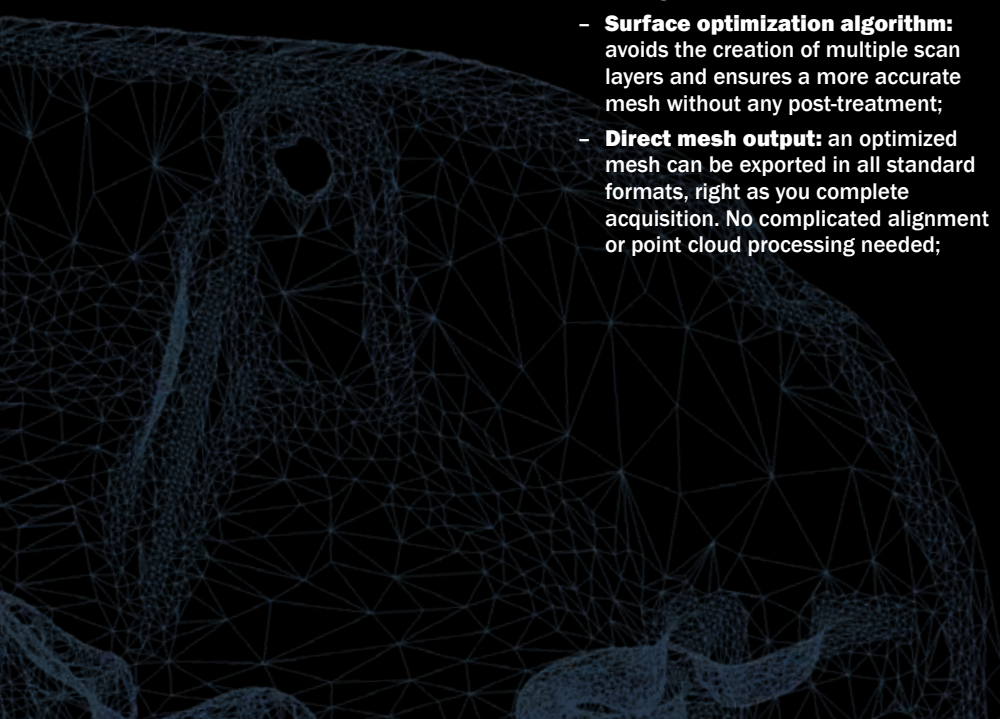
EXTEND THE POWER OF YOUR GO!SCAN 3D SCANNER

VXmodel™: Scan-to-CAD

VXmodel is a post-treatment software that directly integrates into VXelements and seamlessly allows to finalize 3D scan data for use directly in any CAD or 3D printing software. VXmodel provides the simplest and fastest path from 3D scans to your CAD or additive manufacturing workflow.

VXinspect™: Quality control software that takes it to the next level

VXinspect is an intuitive and powerful 3D inspection software designed for manufacturing companies conducting first article inspection (FAI) or quality control. Directly integrated into VXelements, Creaform's 3D software platform and application suite, VXinspect provides the simplest integration of probing and 3D scanning measurement capabilities.
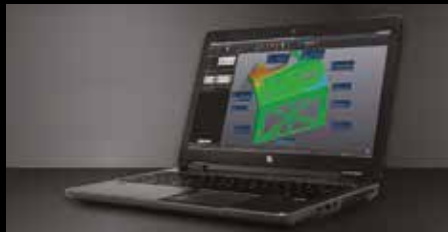
VXremote™: Remote access software application

VXremote improves your efficiency in the field by providing fast and easy remote access to VXelements. It offers quick activation and set-up and requires no hardware or server to install or maintain. You can have all its data acquisition functionalities at your fingertips... Available only with the Creaform Certified Rugged Tablet!

ACCESSORIES

INCLUDED
– Carrying case
– Calibration plate
– Power supply
– Custom USB cable
– 2 x 500 positioning targets
– 1-year warranty on parts and labor

OPTIONAL
– Certified laptop computer
– 3D scanner external battery
– Rugged tablet with VXremote
– Manual turntable

CREAFORM CUSTOMER CARE

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

Our multilingual team of product specialists 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 of 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.

CREAFORM METROLOGY AND 3D ENGINEERING SERVICES

Convinced of the quality and possibilities of the Creaform technologies, but not quite yet ready to commit and buy? Know that Creaform offers a wide range of metrology and engineering services. Our experts have earned a worldwide reputation for effectiveness and professionalism. Whether you need their help to perform 3D scanning, quality control, reverse engineering, FEA/CFD simulations, product and tool development or training services, you can count on their commitment to meet your requirements with responsiveness and adaptability.

TECHNICAL SPECIFICATIONS

	Go!SCAN 20™	Go!SCAN 50™
WEIGHT	0.93 kg	0.95 kg
DIMENSIONS (LxWxH)	154 x 178 x 235 mm	150 x 171 x 251 mm
MEASUREMENT RATE	550,000 measurements/s	
SCANNING AREA	143 x 108 mm	380 x 380 mm
LIGHT SOURCE	White light (LED)	
RESOLUTION	0.100 mm	0.500 mm
ACCURACY	Up to 0.100 mm	
VOLUMETRIC ACCURACY[1]	0.300 mm/m	
POSITIONING METHODS	Geometry and/or color and/or targets	
STAND-OFF DISTANCE	380 mm	400 mm
DEPTH-OF-FIELD	100 mm	250 mm
PART SIZE RANGE (RECOMMENDED)	0.05 – 0.5 m	0.3 – 3.0 m
TEXTURE RESOLUTION	50 to 250 DPI	50 to 150 DPI
TEXTURE COLORS	24 bits	
SOFTWARE	VXelements	
OUTPUT FORMATS	.dae, .fbx, .ma, .obj, .ply, .stl, .txt, .wrl, .x3d, .x3dz, .zpr	
COMPATIBLE SOFTWARE[2]	3D Systems (Geomagic® Solutions), InnovMetric Software (PolyWorks), Metrologic Group (Metrolog X4), New River Kinematics (Spatial Analyzer), Verisurf, Dassault Systèmes (CATIA V5 and SolidWorks), PTC (Pro/ENGINEER), Siemens (NX and Solid Edge), Autodesk (Inventor, PowerINSPECT).	
CONNECTION STANDARD	1 x USB 2.0	
OPERATING TEMPERATURE RANGE	5-40 °C	
OPERATING HUMIDITY RANGE (NON-CONDENSING)	10-90%	
CERTIFICATIONS	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), IP50, WEEE	

(1) With positioning targets or with an object presenting adequate geometry/color texture for positioning.
(2) Also compatible with all major metrology, CAD, and computer graphic software through mesh and point cloud import.

CREAFORM

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