GET A WHOLE

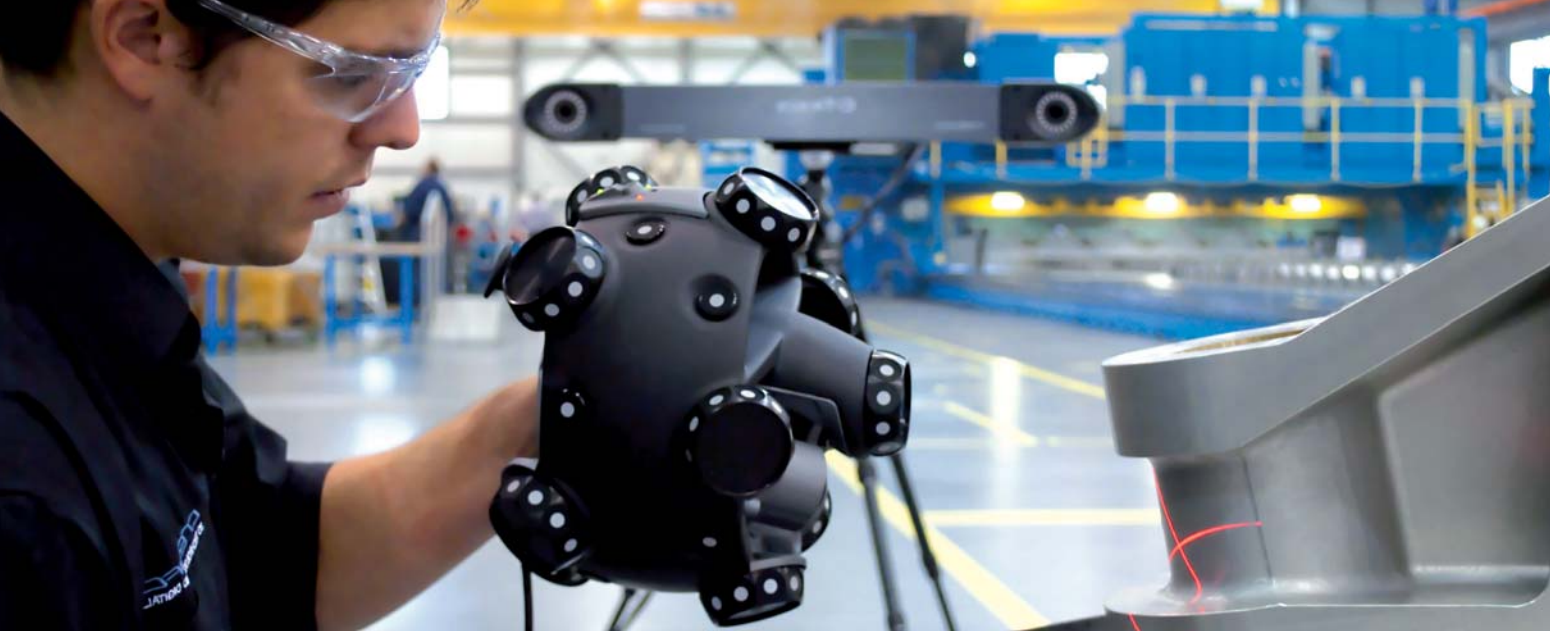
NEW MEASURE OF THINGS!

METRA™ SCAN

METRA™
SCAN

THE ARM-FREE HANDHELD MetraSCAN™ 3D SCANNING SYSTEM AND THE C-Track™ DUAL-CAMERA SENSOR FORM A UNIQUE DUO THAT GENERATES THE MOST ACCURATE MEASUREMENTS IN THE LAB AND ON THE SHOP FLOOR. COMBINED WITH THE HandyPROBE™, THIS COMPLETE AND POWERFUL INSPECTION SOLUTION INCREASES THE RELIABILITY, SPEED AND VERSATILITY OF THE MEASUREMENT PROCESS.

COMPARED WITH OTHER 3D SCANNERS ON ARTICULATED ARMS, THE MetraSCAN OPTICAL 3D SCANNING SYSTEM ALLOWS TOTAL FREEDOM OF MOVEMENT FOR SIGNIFICANTLY INCREASED PRODUCTIVITY AND QUALITY!



APPLICATIONS

The MetraSCAN is a powerful 3D scanning system. Combined with the HandyPROBE, this 3D scanning and probing system can be used for a wide range of metrology applications. Data acquired by the system may be processed in real time using any major inspection and metrology software. This highly-accurate device can carry out the following tasks:

Inspection

- Part-to-CAD analysis
- First article inspection
- Supplier product quality inspection
- Conformity assessment of 3D models against original parts or production tooling
- Conformity assessment of manufactured parts against originals
- Alignment
- Tooling certification

Reverse Engineering

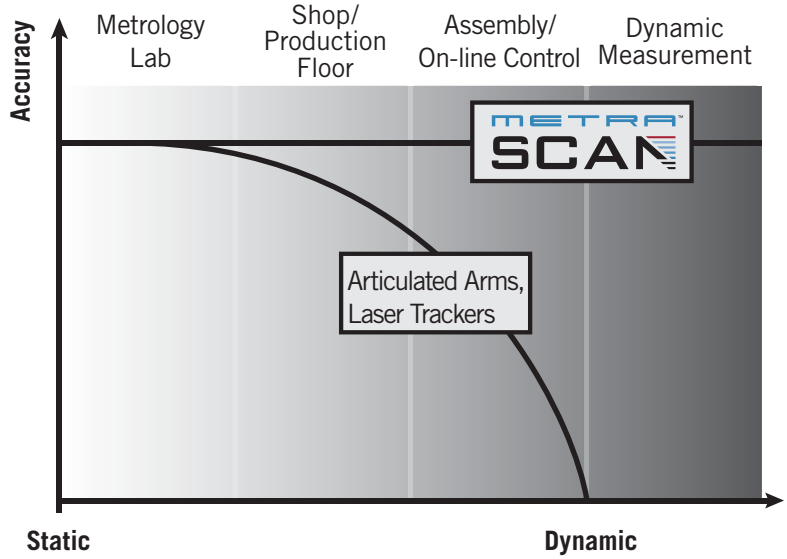
- Surface reconstruction
- 3D modeling
- Tooling & jigs development
- Maintenance, repair and overhaul (MRO)
- Finite Element Analysis (FEA)

BENEFITS

The Most Accurate Measurement Solution. Creaform's *TRUaccuracy*™ technology ensures highly-accurate measurements, regardless of the measurement environment (instability, vibrations, thermal variation, etc.) or operator skills.

- With the **dynamic referencing** mode of the C-Track, the coordinate system can be literally "locked" onto the part(s) being measured, thus maintaining part alignment during the entire 3D scanning process.
- With the **automatic alignment** function, manual operation is no longer needed during the alignment phase and root cause errors are drastically reduced.
- With the **fast user calibration** process using a **certified gauge**, the MetraSCAN delivers constant accuracy during its entire life cycle.
- With the **continuous monitoring** of **parameters** (temperature, accuracy, etc.), constant accuracy is ensured during the entire useful life of products.

TRUaccuracy™ TECHNOLOGY



MetraSCAN

Complete and Powerful Inspection Solution. Allows geometrical and free-form inspection on the same part with the same system. The **automatic alignment** capability with optical reflectors allows to scan and probe many identical parts in rapid succession.

Faster and Easier Measurement. Handheld and armless. Easy-to-learn, intuitive system with a very short learning curve. Installation in less than five minutes. Allows the measurement of parts in production without having to align every part.

Greater, Extendable Measurement Volume.
Compared with 3D scanners on articulated arms, the MetraSCAN allows a greater basic measurement volume. In addition, this volume can be easily and dynamically extended with no loss of accuracy and without **any conventional leapfrog** or additional alignment set-up involved. No need for the operator to re-align data after moving the part or the C-Track.

Truly Portable Device. The 100% portability of the MetraSCAN makes it possible to inspect or reverse engineer parts, sub-units or complex assemblies with unequalled precision, mobility and flexibility - no matter where (lab, factory, off-site, etc.).

Excellent ROI. Yields considerable productivity and operating profits in industrial coordinate measurement and control.

C-TRACK 780

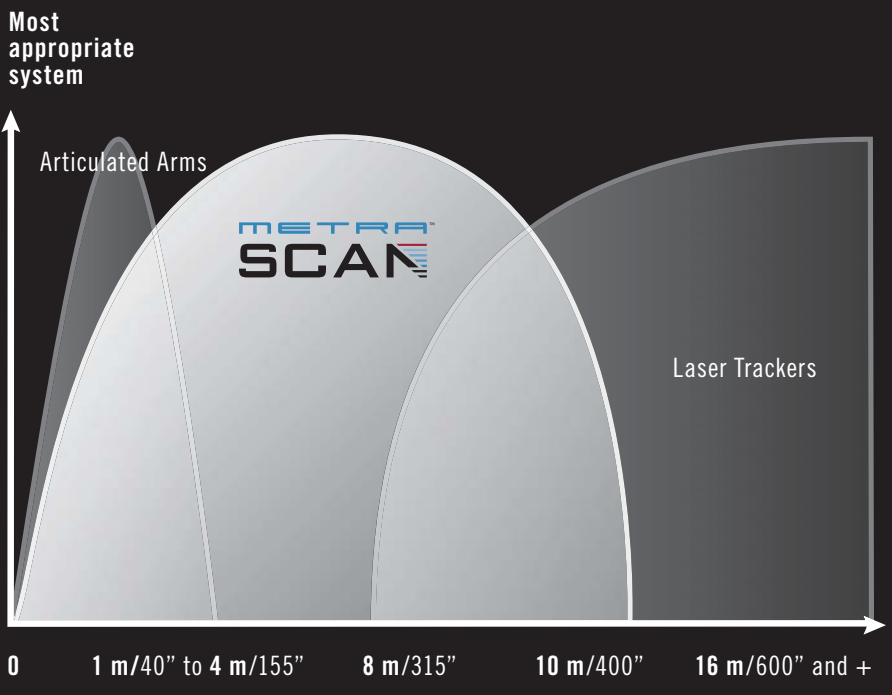
The C-Track 780 dual-camera sensor is fitted with high-quality optics and special lighting, enabling it to measure all reflectors within its operating space. In addition to tracking the reference model of the whole system, the C-Track 780 ensures the accurate localization of the MetraSCAN, and performs continuous image acquisition and transmission, lighting of reflectors, wireless communication with the MetraSCAN, management of exchanges with the computer and storage of sensor parameters.

WHY CHOOSE A MetraSCAN OVER A LASER TRACKER EQUIPPED WITH A SCANNER HEAD?

- Half the price of a laser tracker
- Shorter learning curve
- Greater portability and ergonomics (± 20 lbs lighter)
- Low maintenance cost

WHY CHOOSE A MetraSCAN OVER AN ARTICULATED ARM EQUIPPED WITH A SCANNER HEAD?

- Higher precision
- Easier to operate
- Low maintenance (no encoders, no mechanical maintenance or wear)
- No movement limitation (no mechanical link)
- Greater portability (± 20 lbs. lighter)



INDUSTRIES

- Aerospace
- Automotive and Transport Equipment Production
- Consumer Products
- Education
- Metallurgy and Metal Processing
- Machine Tool Production
- Forming, Moulding, Manufacturing, Casting and Assembling

VXelements™

The MetraSCAN 3D scanning system comes with VXelements, the all-in-one 3D data acquisition software that powers its entire fleet of 3D scanning and measurement technologies. VXelements includes three software modules: VXscan™, VXprobe™ and VXtrack™. The software gathers all the essential elements and tools into a uniform, user-friendly and intuitive working environment.

VXscan is entirely dedicated to the acquisition and optimization of 3D scanning data. It delivers high performance for that specific task, yet it is simple and user-friendly enough to suit any user's experience level.

VXprobe allows users to interact with data acquired using a HandyPROBE and share it with any other VXelements component or third-party software.

VXtrack adds dynamic tracking capability to the C-Track line of dual camera sensors. It can now record 30 3D images per second of a reflector or sets of reflectors in real time for the study of a variety of applications involving motion tracking.

TECHNICAL SPECIFICATIONS

Weight	2.05 kg (4.5 lbs.)
Dimensions	282 x 250 x 282 mm (11 x 9.8 x 11 in)
Measurement Speed	36,000 measures/sec.
Volumetric Performance (with C-Track 780)*	85µm (0.003 in)
Resolution in x, y, z axis	0.05 mm (0.002 in)
Operating Temperature Range	15-40 °C (59-104 °F)
Operating Humidity Range (non-condensing)	10-90%
Certifications	EN 301 489-1, EN 301 489-3, EN 300 220-1

*Test methods based on the ASME B89.4.22 Standard. Volumetric Performance is assessed with traceable length artifacts by measuring these at different locations and orientations within the working volume of the MetraSCAN (range/2 methods).

COMPATIBLE SOFTWARE

- Geomagic
- Rapidform
- PowerINSPECT
- Metrolog XG
- PolyWorks Inspector
- Verisurf
- Inca 3D
- Other software platforms: Contact our experts at info@creaform3d.com

INCLUDED:

- MetraSCAN 3D Scanner
- Ergonomic Support
- Recalibration Sphere
- FireWire Cable
- Carrying Case
- VXelements Software
- One-year Warranty on Parts and Labour

creaform
3D TECHNOLOGY AND DIGITAL SOLUTIONS

Head Office
5825, rue Saint-Georges
Lévis (Québec) G6V 4L2 Canada
T. 1 418 833.4446 | F. 1 418 833.9588
info@creaform3d.com | www.creaform3d.com

Authorized distributor