

# FARO

Circle 10	Actual	Nom	Dev
Center.x	958.280mm	958.216mm	0.064mm
Center.y	-733.963mm	-734.310mm	0.347mm
Center.z	451.054mm	451.201mm	-0.147mm
Diameter	102.573mm	102.000mm	0.573mm
Circularity	0.445mm	0.000mm	0.445mm



2 1.505 ↑

1 -0.974 ↓

QUANTUM<sup>S</sup> MAX

A Beginner's Guide

# All-in-One Contact Measurement and 3D Scanning

# Your Challenges With Traditional Measurement Tools

The world relies on measurement to operate, and for hundreds of years this has been accomplished by the tools of the time. First there were hand tools such as calipers and micrometers, which provided basic measurements but struggled with more complex dimensions (like organic shapes).

Since the 1960s, coordinate measuring machines (CMMs) have been used to capture complex geometries with a higher rate of accuracy using a measurement bed, a probe, a computer and software to operate the probe. For CMMs however, measurement was confined to the range of the probe on the bed, and the probe could only move in three axes, limiting its maneuverability.



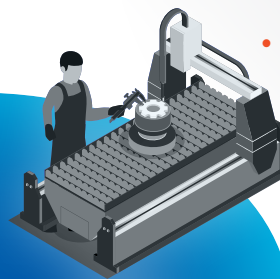
## Gantry-Type Coordinate-Measuring Machines (CMMs)

- You need to bring the parts to a laboratory.
- There's difficulty measuring complex geometries and organic shapes.
- The CMM is difficult to operate.
- There is a high initial cost for your company.



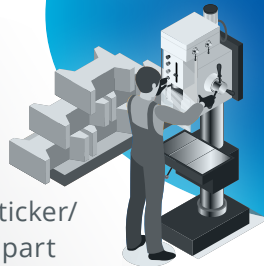
## Manual Tools (Such as Calipers and a Micrometer)

- Two-dimensional measurement is the only type of data possible to gather.
- Human error is unavoidable.



## Handheld Scanners

- You must sticker/spray each part for scanning.



## Wireless CMMs

- There are concerns about the accuracy of your measurements, because they are so easily affected by the environment.



For companies looking to capture precise measurements that are repeatable by all employees, these are constant problems with the traditional measurement devices.

# What Can the FARO® Quantum Max ScanArm and Quantum Max FaroArm® Do?

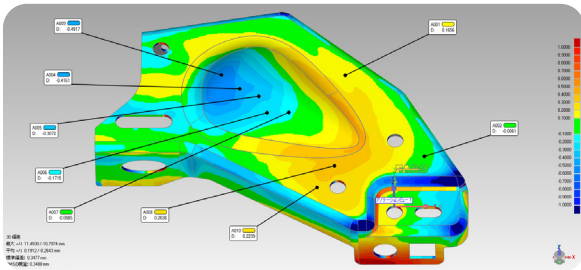
Precision measurement reduces scrap, rework and inspection bottlenecks.

**Maximize your team's value and productivity by over 30%** with the enhanced performance and scanning capabilities of the Quantum Max.



## 3D Laser Scanning

- Color map comparison with master data, cross-sectional shape verification, and more.
- Reverse engineering (modeling and CAD conversion).



## Contact 3D Measurement

- Pitch, angle, geometric tolerance, distance from coordinate system (XYZ), and more.

## Anyone can Perform High-Precision Measurements

- The Quantum Max moves like an arm, making it possible to handle workpieces with complex shapes.

## Reduced Fatigue

- Patented internal counterbalancing allows you to operate with a single hand and without fatigue.

## Can Measure Parts of Various Sizes

- From palm-size parts to large parts, the Quantum Max can measure it all with a maximum reach of 4.6 meters.

## No Need for Stickers or Sprays for Scanning

- Continuous Light Rectification (CLR) technology lets you scan dark, reflective or translucent surfaces with the Quantum Max ScanArm, reducing preparation time and clean-up time.

## Measure Anywhere

- An ergonomic design allows for easy transport, set up and operation, even in the most challenging measurement environments.
- The ScanArm and FaroArm have temperature overload sensors that continuously monitor the temperature of the device for continuous, optimum performance.

## Improved Work Efficiency

- Measurements can be taken without moving the instrument or parts with FARO 8-Axis (Rotating Table) to be save time. \*Only FARO





Scan to  
learn more  
about the FARO®  
Quantum Max



Contact your local Sales representative or visit [www.FARO.com](http://www.FARO.com) to learn more.

**FARO Global Headquarters**  
250 Technology Park, Lake Mary, FL 32746, USA  
US: 800 736 0234 MX: +52 81 4170 3542  
BR: 11 3500 4600 / 0800 892 1192

**FARO Europe Regional Headquarters**  
Lingwiesenstr. 11/2  
70825 Korntal-Münchingen, Germany  
00 800 3276 7253

**FARO Asia Regional Headquarters**  
No. 3 Changi South Street 2, #01-01 Xilin  
District Centre Building B Singapore, 486548  
+65 65111350