

FARO Laser ScanArm



[A] Lightweight Construction

Provides true "measure anywhere" performance manufacturing environments

[B] Fully Integrated Cabling

Provides true "measure anywhere" performance

[C] Compact, Sealed Design

Makes the ScanArm versatile and durable in harsh manufacturing environments

[D] Thermal Stabilizer

Ensures optimum working conditions throughout operating temperature range

[E] Repeatable Quick-Mount

Allows for quick-probe disconnect without repetitive calibration

[F] Ergonomic, Removable Handle

Provides comfortable stress-free usage

Proven Accuracy; Maximum Versatility!

The FARO Laser ScanArm is the first ever seven-axis contact/non-contact measurement device with a fully integrated FARO Laser Line Probe. Unlike other scanning systems, the ScanArm's hard probe and Laser Line Probe can digitize interchangeably without having to remove either component. Users can accurately measure prismatic features with the Arm's hard probe, then laser scan sections requiring larger volumes of data (more than 19,000 points per-second) — without adding or removing attachments, untangling cabling, or having to use a separate CMM.

Most Common Applications

Aerospace: Reverse Engineering, Certification, Part Inspection

Automotive: Tool Building & Certification, Alignment, Part Inspection

Metal Fabrication: OMI, First article inspection, Periodic Part Inspection

Molding/Tool & Die: Mold and Die Inspection, Prototype Part Scanning

Features

- ▶ Fully integrated 7-axis ScanArm
- ▶ Laser scan up to 19,200 points per second
- ▶ Use Laser and Hard Probes interchangeably
- ▶ Take measurements within the same software
- ▶ No attachments or tangled cables

FARO Laser ScanArm

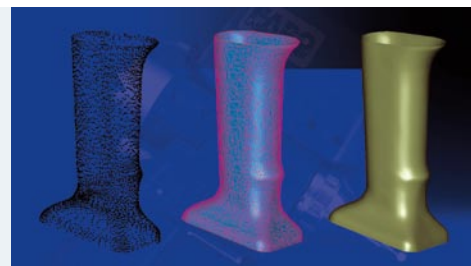
Applications



SCAN



INSPECT



REVERSE ENGINEER

System Performance

Model	1.2m (4 ft.)	1.8m (6 ft.)	2.4m (8 ft.)	3.0m (10 ft.)	3.7m (12 ft.)
Titanium	±.086 mm (±.0034 in.)	±.103 mm (±.0040 in.)	±.111 mm (±.0044 in.)	±.154 mm (±.0060 in.)	±.196 mm (±.0077 in.)
Platinum	±.068 mm (±.0027 in.)	±.076 mm (±.0030 in.)	±.080 mm (±.0032 in.)	±.102 mm (±.0040 in.)	±.123 mm (±.0048 in.)

Laser Line Probe Specifications

Accuracy: 50µm (.002")
Repeatability: ±50µm, 2σ (±.002")
Stand-off: 95mm (3.75")
Depth of Field: 85mm (3.35")
Effective Scan width: Near Field 34mm (1.34")
 Far Field 60mm (2.36")

Points per line: 640 points/line
Scan Rate: 30 frames/second
 30fps x 640points/line = 19,200 points/sec.
LASER: 660nm, CDRH Class II/IEC Class 2M

- Temperature resistant, dimensionally stable optics
- Direct compatibility with FARO 7-Axis Arm

Hardware Specifications

Operating Temp range: 10°C to 40°C (50°F to 104°F)
Temperature Delta: 3°C/5min. (5.4°F/5min.)
Humidity: 95%, noncondensing
Calibration Lifecycle: Permanent
Power Supply: Universal worldwide voltage
 85-245VAC,
 50/60 Hz

Certifications: CE compliance
 Directive 93/68/EEC, (CE Marking)
 Directive 89/336/EEC, (EMC)
 FDA CDRH, Subchapter J of 21 CFR 1040.10
 Electrical Equipment for Measurement, Control & Lab Use
EN 61010-1:2001, IEC 60825-1, EN 61326
 Electromagnetic Compatibility (EMC)
EN 55011, EN 61000-3-2, EN 61000-3-3
EN 61000-4-4, EN 61000-4-5
EN 61000-4-6, EN 61000-4-8, EN 61000-4-11

