FARO Laser ScanArm® V2

Lightweight Construction

Provides true "measure anywhere" performance in all manufacturing environments

Fully Integrated Cabling

Provides true "measure anywhere" performance

Compact, Sealed Design

Makes the ScanArm versatile and durable in harsh manufacturing environments

Thermal Stabilizer

Ensures optimum working conditions throughout operating temperature range

Repeatable Quick-Mount

Allows for quick-probe disconnect without repetitive calibration

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 digitise 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

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Laser Line Probe V2 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 30 fps x 640 points/line = 19 200 points/sec.
Laser:	660 nm, CDRH Class II/IEC Class 2M • Temperature resistant, dimensionally stable optics • Direct compatibility with FARO 7-Axis Arm

Performance Specifications (Non-Contact)

Model	1.2m (4ft.)	1.8m (6ft.)	2.4m (8ft.)	3.0m (10ft.)	3.7m (12ft.)
Fusion		±.096mm (±.0038in.)	±.101mm (±.0040in.)	±.139mm (±.0055in.)	±.174mm (±.0069in.)
Platinum	±.068mm (±.0027in.)	±.076mm (±.0030in.)	±.080mm (±.0032in.)	±.102mm (±.0040in.)	±.123mm (±.0048in.)
Quantum		±.069mm (±.0027in.)	±.071mm (±.0028in.)	±.098mm (±.0035in.)	±.101mm (±.0040in.)

Performance Specifications (Contact)

Model (7 axis)	*Single Point Articulation Performance (Max-Min)/2*			*Volumetric Maximum Deviation*			*FaroArm Weight*		
	Fusion	Platinum	Quantum	Fusion	Platinum	Quantum	Fusion	Platinum	Quantum
1.2m (4ft.)		±.018mm (±.0007in.)			.025mm (.0010in.)			9.3kg (20.5lbs.)	
1.8m (6ft.)	±.046mm (±.0018in.)	±.026mm (±.0010in.)	±.019mm (±.0007in.)	.064mm (.0025in.)	.037mm (.0015in.)	.027mm (.0011in.)	9.5kg (21lbs.)	9.5kg (21lbs.)	9.5kg (21lbs.)
2.4m (8ft.)	±.051mm (±.0020in.)	±.030mm (±.0012in.)	±.021mm (±.0008in.)	.071mm (.0028in.)	.043mm (.0017in.)	.030mm (.0012in.)	9.75kg (21.5lbs.)	9.75kg (21.5lbs.)	9.75kg (21.5lbs.)
3.0m (10ft.)	±.089mm (±.0035in.)	±.052mm (±.0020in.)	±.039mm (±.0015in.)	.124mm (.0049in.)	.073mm (.0029in.)	.055mm (.0022in.)	9.98kg (22lbs.)	9.98kg (22lbs.)	9.98kg (22lbs.)
3.7m (12ft.)	±.124mm (±.0049in.)	±.073mm (±.0029in.)	±.051mm (±.0020in.)	.175mm (.0069in.)	.103mm (.0041in.)	.072mm (.0028in.)	10.21kg (22.5lbs.)	10.21kg (22.5lbs.)	10.21kg (22.5lbs.)

FaroArm Test Methods - (Test methods are a subset of those given in the B89.4.22 standard.)
Single Point Articulation Performance Test (Max-Min)/2: The probe of the FaroArm is placed within a conical socket, and individual points are measured from multiple approach directions. Each individual point measurement is analysed as a range of deviations. This test is a method for determining articulating measurement machine repeatability.
Volumetric Maximum Deviation: Determined by using traceable length artifacts, which are measured at various locations and orientations throughout the working volume of the FaroArm. This test is a method for determining articulating measurement machine accuracy.

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
Power Supply:	Universal worldwide voltage 85-245VAC, 50/60 Hz

Certifications: MET (UL, CSA Certified) • 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

ISO 9001 BUREAU VERITAS Certification — ANAB ACCREDITED

GSA Contract Holder

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