

Fusion FaroArm



NEW – Higher Performance, Greater Value

1.5% performance improvement over its predecessor, the Titanium FaroArm

Temperature Sensors

Located in each joint, they allow the Arm to react to thermal variations for maximum accuracy and portability

NEW – Auto Sleep Mode

Automatically turn off unit to save energy and extend component life

NEW – Bluetooth® Cable-Free Operation

Inspect and digitise wirelessly up to 10m (30ft.) away

Internal Counterbalance

Internal counterbalancing provides comfortable stress-free usage

Multi-Probe Capability

Including various ball diameters, curved and extended probes

Universal 3.5" Quick Mount

Universal 3.5" quick mount offers "Mount-it-where-you-make-it" convenience and less downtime

Quality Without Compromise

To make your products and processes the best in the world, there isn't another portable CMM that combines the precision, durability, technology and cost-effectiveness of the Fusion FaroArm®. Higher accuracy, yet lower cost than its predecessor – with all the style of the top-of-the line Quantum FaroArm – the Fusion is the economical, all-in-one portable tool for performing inspections, tool certification, CAD-to-part analysis, or reverse engineering.

Most Common Applications

Aerospace: Alignment, Tooling & Mold 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

- ▶ Optional 7-axis availability
- ▶ Infinite rotation for non-stop measuring
- ▶ Extended-use battery
- ▶ Available in four working volumes
- ▶ Composite material construction

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Performance Specifications

Model (Measuring Range)	Single Point Articulation Performance Test (Max-Min)/2		Volumetric Maximum Deviation		FaroArm Weight		
	axis	6	7	6	7	6	7
Fusion 1.8m (6ft.)		±.036mm (±.0014in.)	±.046mm (±.0018in.)	.051mm (.0020in.)	.064mm (.0025in.)	9.3kg (20.5lbs.)	9.5kg (21lbs.)
Fusion 2.4m (8ft.)		±.043mm ±.0017in.	±.051mm (±.0020in.)	.061mm (.0024in.)	.071mm (.0028in.)	9.5kg (21lbs.)	9.75kg (21.5lbs.)
Fusion 3.0m (10ft.)		±.074mm (±.0029in.)	±.089mm (±.0035in.)	.104mm (.0041in.)	.124mm (.0049in.)	9.75kg (21.5lbs.)	9.98kg (22lbs.)
Fusion 3.7m (12ft.)		±.104mm (±.0041in.)	±.124mm (±.0049in.)	.147mm (.0058in.)	.175mm (.0069in.)	9.98kg (22lbs.)	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 in X, Y, Z. 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 - 40°C (50°F - 104°F)

Temperature Rate: 3°C/5min. (5.4°F/5min.)

Operating Humidity Range: 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-17025 : 2005
ACCREDITED
Certificate # L1147**