

Accessories

All available probes fit the same mechanical mount of the standard Space Arm version and are interchangeable. The precision mount is extremely repeatable and allows switching from one probe to another without recalibration.

Touch Trigger (Electronic) Probe

- The trigger touch probe allows you to apply minimum force on the measured part.
- It is very precise, quick, and comfortable to use. Acquires points only touching the surface without triggering buttons.
- Available with many different stylus length and sphere diameters. Touch trigger probe head offered is produced by Renishaw (model LP2).



Floating Probe

- A rigid mechanical probe suspended on a spring driven by an aluminum ring that triggers the probe with a simple touch.
- The integrated force control avoids uncontrolled load on the part, improving accuracy and repeatability.
- The control ring is isolated from the stylus to avoid thermal impact.



Mechanical Probe

- The mechanical probe is the standard touch probe available with different sphere diameter.
- Points can be taken touching the part and pushing the button on board the arm's wrist.
- The smallest usable probe diameter is 3 mm to guarantee point accuracy.



Laser Fork

- Ideal for rapid measurement without direct contact with the pipe
- Available in 5 fork sizes: 30 mm, 50 mm, 80 mm, 150 mm, and 200 mm
- The smaller forks feature a laser pointer to spot small pipes during measurement.



Mobile Tripod

- The tripod is the ideal accessory to easily & quickly move the Space Arm.
- The leaflet at the base allows you to quickly switch the measurement position to mobile position and vice versa in a gradual way without shocks.
- The tripod is adjustable in height and the weight of the tripod column is balanced by a gas spring.
- The removable lateral shelf allows positioning of the laptop next to the arm.



The Leader in 3D Scanning & Measurement

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Portable CMM & 3D Scanner SURVEYOR® Space Arm

Laser Design's Space Arm successfully handles the most demanding inspection and reverse engineering applications.

The Space Arm systems feature:

- High accuracy portable arm at a competitive price
- Electronic Brake
- Temperature Compensation
- Perfect Counterbalance for easy use
- 2 Year warranty included



Made by Tomelleri Engineering and distributed by Laser Design Inc.

Portable CMM & 3D Scanner

SURVEYOR® Space Arm

LASER DESIGN INC., THE WORLD LEADER IN 3D SCANNING, introduces its next-generation technology - the SURVEYOR Space Arm. This high accuracy, portable system is the industry's fastest, most flexible, and easy to use arm.

Laser Design's SLP Laser Probe is available with scanning speeds of up to 50,000 coordinate points per second. The SLP probes were designed to be used together with the Tomelleri Space Arm and reduce the scanning motions to completely scan any kind of part or object extremely quickly.

SLP laser probes come in four laser line lengths from 1.5" (33 mm) to 10" (250 mm) which allow for scanning small highly detailed parts as well as very large parts with accuracy to +/- 0.0020".

The Space Arm System offers bundled software from the world's leading scan data processing software providers that easily process the 3D scan data for inspection reports or reverse engineering applications. Scan directly into Geomagic, Rapidform, and PolyWorks.

Probing software supported includes: Delcam PowerINSPECT, Geomagic Qualify Probe, and more coming.

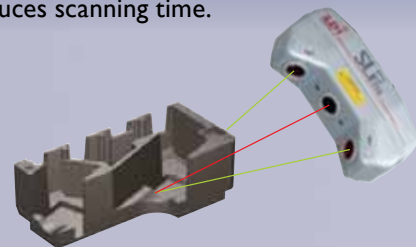
Tight integration with data processing software makes the Space Arm scanning technology and data processing software the most elegant and easy to use system on the market.

Standard with every system: 1 Mechanical Touch Probe, Carrying Case suitable for airplane travel, calibration artifact and 2 year Warranty.



Dual-Camera Sensors

SLP scanners feature two cameras that collect data simultaneously. If one camera is occluded, the other most often is not. This capability reduces scanning time.



System Accuracy

Laboratory tests show overall system accuracy on a Space Arm to be +/-0.00225" when performing an ANSI B89 ball bar test.

System Specifications

Space Arm* (6 axis arm)	Measuring Range (diameter) in ft (mm)	Volumetric Accuracy in mm (in)**	Single Point Accuracy in mm (in)**	Point Repeatability in mm (in)**	Weight in kg (lb)
Space 1.8	6.0 (1800)	0.035 (.001)	0.028 (.001)	0.020 (.001)	7.9 (17.4)
Space 2.5	8.0 (2500)	0.048 (.002)	0.036 (.001)	0.028 (.001)	8.4 (18.5)
Space 3.2	10.5 (3200)	0.060 (.002)	0.043 (.002)	0.035 (.001)	8.8 (19.4)
Space 4.0	13.0 (4000)	0.080 (.003)	0.053 (.002)	0.045 (.002)	9.5 (20.9)

Space Arm Plus (6 and 7 axis arm)	Measuring Range (diameter) in ft (mm)	Volumetric Accuracy in mm (in)**	Single Point Accuracy in mm (in)**	Point Repeatability in mm (in)**	Weight in kg (lb)
Space 1.8 Plus	6.0 (1800)	0.025 (.001)	0.023 (.001)	0.015 (.001)	8.4 (18.5)
Space 2.5 Plus	8.0 (2500)	0.032 (.001)	0.030 (.001)	0.020 (.001)	8.9 (19.6)
Space 3.2 Plus	10.5 (3200)	0.045 (.002)	0.040 (.002)	0.025 (.001)	9.3 (20.5)
Space 4.0 Plus	13.0 (4000)	0.058 (.002)	0.051 (.002)	0.030 (.001)	10.0 (22)
Space 1.8 Plus 7 Axis	6.0 (1800)	0.032 (.001)	0.029 (.001)	0.020 (.001)	8.9 (19.6)
Space 2.5 Plus 7 Axis	8.0 (2500)	0.040 (.002)	0.036 (.001)	0.025 (.001)	9.4 (20.7)
Space 3.2 Plus 7 Axis	10.5 (3200)	0.053 (.002)	0.046 (.002)	0.030 (.001)	9.8 (21.6)
Space 4.0 Plus 7 Axis	13.0 (4000)	0.066 (.003)	0.057 (.002)	0.035 (.001)	10.5 (23.1)

Space Arm Explorer* (6 axis arm)	Measuring Range (diameter) in ft (mm)	Volumetric Accuracy in mm (in)**	Single Point Accuracy in mm (in)**	Point Repeatability in mm (in)**	Weight in kg (lb)
Space serie Explorer 5.0	16.5 (5000)	0.065 (.003)	0.050 (.002)	0.040 (.002)	12.5 (27.5)
Space serie Explorer 7.0	23 (7000)	0.080 (.003)	0.060 (.002)	0.050 (.002)	14.0 (30.8)
Space serie Explorer 9.0	29.5 (9000)	0.100 (.004)	0.080 (.003)	0.060 (.002)	16.5 (36.3)

Space Arm Micron (5 axis arm-highest precision arm)	Measuring Range (cube side) in ft (mm)	Accuracy in mm (in)**	Single Point Accuracy in mm (in)**	Point Repeatability in mm (in)**	Weight in kg (lb)
Micron 250	0.7 (250)	4μ + L/50 (L/2)	---	---	14.0 (30.8)
Micron 400	1.3 (400)	5μ + L/50 (L/2)	---	---	14.0 (30.8)
Micron 630	2.0 (630)	6μ + L/50 (L/2)	---	---	14.0 (30.8)

* 7-axis coming soon

** Global uncertainty on the volume, values shown in 2sigma

Arm certified and calibrated in accordance with ASME B89, ISO 10360-2 and Guide 25 Standards



Space Arm Explorer



Space Arm Micron