



AccuFLEX

Coordinate Measuring Machines







Our Approach Sets Us Apart

What sets us apart is that we not only construct coordinate measuring machines, but our metrologists use the same coordinate measuring machines every day to measure parts for our clients.

We know first-hand the accuracy, speed, and flexibility required to inspect high-volume, tight-tolerances and complex geometries.

That's what we built into every AccuFLEX series CMM.

You'll find with our new, enhanced line of AccuFLEX CMMs, the possibilities are unlimited.

CMMs Designed for Every Industry

Our line of AccuFLEX CMMs ensures a high level of accuracy and unmatched flexibility while providing the best value in the market.

Made to Measure's comprehensive portfolio includes bridge, shop floor, horizontal and gantry models to serve a wide range of industries and applications.

Every CMM comes with either Modus or Verisurf software. Where a specific software is preferred, the AccuFLEX series open-platform allows virtually any software to be utilized.

AccuFLEX is powered by Renishaw controllers and amplifiers, permitting any of Renishaw's probe technology to be operated including the 3-Axis PH10, 5-Axis PH20 and REVO-2 system Nikon's L100 and LC15DX laser scanners can also be integrated into any AccuFLEX CMM system.

This flexibility and accuracy create the ideal configuration at a very affordable price, resulting in the lowest total cost of ownership.



Accredited Laboratory for Calibration & Dimensional Inspection



Constructed for Exceptional Results

AccuFLEX CMMs feature:

- All granite construction offering unwavering performance and thermal stability.¹
- Durable Renishaw gold-plated scales, with +/-.012 μm/mm linearity over 60mm, give superior dependability and provide repeatability as low as 1.9 μm.
- Renishaw controllers provide compatibility for all Renishaw sensors and probe heads and are I++ DME compliant, allowing integration with most CMM software.
- Your choice of any Renishaw probe head technology including the 3-axis PH10, 5-axis PH20, and the revolutionary REV0-2 probe head system.
- Gather non-contact measurements at the highest accuracy level with Nikon's L100 and LC15DX CMM laser scanners.
- Tsunami's Air Filtration System
 eliminates virtually all contaminants from
 your compressed air system, supplying
 reduced down time and longer CMM
 lifespan.
- Hard coat anodized, diamond-lapped, aluminum cylindrical air bearings deliver the ultimate in stability and speed.²
- Powerful desktop computer with the **newest Intel processor** provides the best in speed and performance.
- Custom computer workstation to accommodate all your inspection and programming needs.

Excluding the AccuFLEX atlas and enduro CMMs.

Expect a Superior Experience

Made to Measure not only delivers an exceptional CMM, but also an unrivaled, superior turnkey experience.

Financing

Made to Measure partners with several industry-leading financing companies to offer financing options that best fit your requirements.

Shipping

Whether your company is in the United States or overseas, Made to Measure will coordinate shipment of your CMM, guaranteeing the utmost care, and a safe and swift delivery.

Installation and Calibration

Upon delivery, every CMM is professionally installed and calibrated to ISO 10360 standards by a Made to Measure CMM Service Engineer to ensure your equipment performs optimally.¹

Training & Consultation

A complimentary three-day software and CMM training session is offered at our Chicago area training center or online.² Metrology training and consultation are also available to elevate any CMM operator's or programmer's proficiency.

Warranty

Made to Measure offers one of the best warranties in the industry. Every new CMM installed comes with a 24-month all-system warranty from the date of installation.

Customer Support

Our U.S. based customer support team is readily available, guaranteeing a quick response and industry leading expertise.

¹ Installation expenses do not include machine placement and/or rigging.

² Not available on the AccuFLEX enduro CMM.

² Travel expenses not included. Valid for one year.



AccuFLEX elite

THE FLEXIBILITY AND ACCURACY THAT IS IDEAL FOR JOB SHOP REQUIREMENTS.

Bridge CMM

The AccuFLEX elite is our traditional bridgestyle CMM. This cost-efficient machine provides uncompromising accuracy and versatility. It will be your company's workhorse.

- All granite construction for stable performance.
- Zero hysterisys (zero-drag) belt drive for smooth repeatable movement.
- Choice of 3-Axis PH10, 5-Axis PH20, REV0-2, and scanning probe options.
- Open-platform accepts any CMM software.

Industries Best Served

- Medical
- Aerospace
- Plastics
- Machining

х	Y	Z	T1 Accuracy MPEe (18°C - 22°C)	
500/600mm	600/800/1000mm	400/500mm	2.2 + L/350 μm	
800mm	1000/1500/2100mm	600mm	2.2 + L/300 μm	
1000mm	1200/1500/2000mm	800mm	2.5 + L/300 μm	
1000mm	1500mm	1000mm	2.9 + L/300 μm	
1200mm	1500/2000mm	800/1000mm	2.9 + L/300 μm	
1200mm	2500mm	1200mm	$3.5 + L/250 \mu m$	
1500mm	2000mm	1000mm	3.2 + L/250 μm	
1500mm	2500/3500mm	1200/1400mm	3.5 + L/250 μm	
0.1 μm				
Motorized/CNC				
Air Bearings On All Axes				
700 mm/sec				
1200 mm/sec ²				
	500/600mm 800mm 1000mm 1000mm 1200mm 1200mm 1500mm	500/600mm 600/800/1000mm 800mm 1000/1500/2100mm 1000mm 1200/1500/2000mm 1000mm 1500mm 1200mm 2500mm 1500mm 2000mm 1500mm 2000mm 1500mm 401 401 401 401 401 401 401 401 401 401	500/600mm 600/800/1000mm 400/500mm 800mm 1000/1500/2100mm 600mm 1000mm 1200/1500/2000mm 800mm 1000mm 1500mm 1000mm 1200mm 1500/2000mm 800/1000mm 1200mm 2500mm 1200mm 1500mm 2000mm 1000mm 1500mm 2500/3500mm 1200/1400mm 0.1 μm Motorized/CNC Air Bearings On All Axes 700 mm/sec	



8

AccuFLEX enduro

SHOP FLOOR DURABILITY AND ECONOMY.

Production Floor CMM

The AccuFLEX enduro is a ruggedly designed CMM built to withstand the harsh conditions of the shop floor. Thanks to its compact size, it can be easily positioned next to your production line for added convenience and efficiency. And this operator friendly CMM does not require a trained metrologist to run it.

- No dedicated air supply required.
- Automatic temperature compensation.
- Choice of most Renishaw probe heads including 3-axis PH10, 5-axis PH20, PH6M and scanning probe options.
- Open-platform accepts any CMM software.

Industries Best Served

- Manufacturing
- Fabrication

AccuFLEX enduro Specifications	X	Y	z	T1 Accuracy MPEe (18°C - 22°C)
Measuring Range & Accuracy	700mm	600mm	500mm	2.5+L/300
Resolution	0.1 μm			
Mode of Operation	Motorized/CNC			
Guidance	High Precision Linear Guideways			
Max. 3D Positioning Speed	700 mm/sec			
Max. 3D Acceleration	1200 mm/sec ²			



AccuFLEX horizon

HORIZONTAL
ARM CMM FOR
MEASURING
LONG/TALL
COMPONENTS
AND SUB
ASSEMBLIES.

Horizontal CMM

The AccuFLEX horizon is our horizontal arm CMM, ideal for measuring parts that are exceptionally long or tall including body-in-white components and sub-assemblies. This flexible machine is constructed of a granite base, spring balanced Z-axis and an advanced composite Y-axis for stability. You will discover it is one of the best-value CMMs on the market today.

- Available in single or dual arm configurations.
- Suitable for the shop floor environment
- Choice of 3-Axis PH10, 5-Axis PH20, REV0-2, and scanning probe options.
- Open-platform accepts any CMM software.

Industries Best Served

- Automotive
- Large Assembly
- Sheet Metal Fabricators

AccuFLEX horizon Specifications	x	Y	Z	T1 Accuracy MPEe (18°C - 22°C)
Measuring Range and Accuracy	2000-10000mm	1200-1600mm	1600-2500mm	$20 + L/50 \le 50 \mu\text{m}$
Resolution	0.5 μ m			
Mode of Operation	Motorized/CNC			
Guidance	High Precision Linear Guideways			
Max. 3D Positioning Speed	700 mm/sec			
Max. 3D Acceleration	1200 mm/sec ²			



AccuFLEX atlas

OPEN FORMAT CMM FOR LARGE/HEAVY PARTS.

Gantry CMM

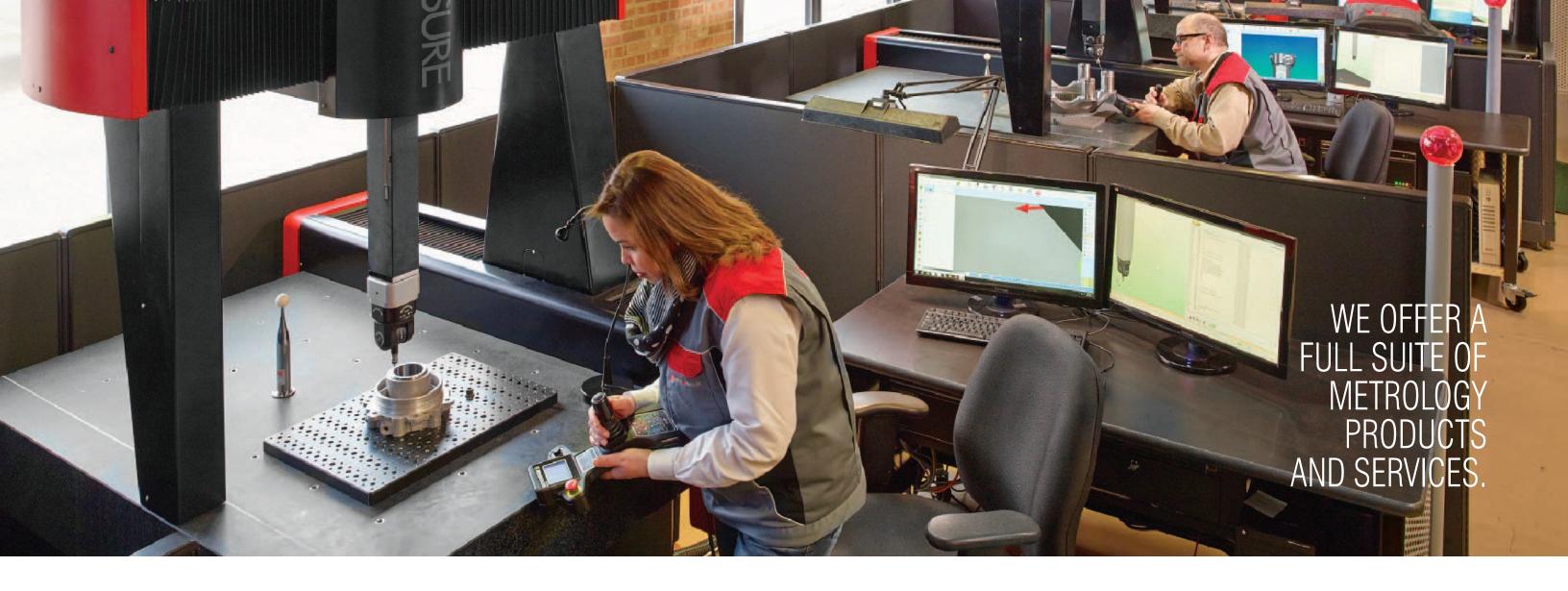
The AccuFLEX atlas has an open-access structure, which also enables easy inspection of large parts. This gantry CMM can measure huge volumes of large or heavy parts without compromising accuracy thanks to its high precision bearing in all axes.

- High precision air bearings.
- Zero hysterisys (zero-drag) belt drive for smooth repeatable movement.
- Choice of 3-Axis PH10, 5-Axis PH20, REV0-2, and scanning probe options.
- Open-platform accepts any CMM software.

Industries Best Served

- Automotive
- Aerospace
- Large Component Manufacturing

Measuring Range and Accuracy $1500\text{-}5000\text{mm}$ $3000\text{-}10000\text{mm}$ $1500\text{-}3000\text{mm}$ $5 + \text{L}/350 \ \mu\text{m}$ Resolution $0.1 \ \mu\text{m}$ Mode of OperationCNCGuidanceHigh Precision Linear GuidewaysMax. 3D Positioning Speed $250 \ \text{mm/sec}$	AccuFLEX atlas Specifications	X	Y	Z	T1 Accuracy MPE (18°C - 22°C)
Mode of Operation CNC Guidance High Precision Linear Guideways	Measuring Range and Accuracy	1500-5000mm	3000-10000mm	1500-3000mm	$5 + L/350 \mu m$
Guidance High Precision Linear Guideways	Resolution	0.1 <i>µ</i> m			
Thigh Thousand addonayo	Mode of Operation	CNC			
Max. 3D Positioning Speed 250 mm/sec	Guidance	High Precision Linear Guideways			
man of Footiering open	Max. 3D Positioning Speed	250 mm/sec			
Max. 3D Acceleration 430 mm/sec ²	Max. 3D Acceleration	430 mm/sec ²			



Everyday, our AUKOM Certified
Metrologists produce professional
dimensional inspection reports for
our clients representing all industries.
Made to Measure also offers a
complete suite of metrology products
and services to support those
clients, which include:

14

Metrology Services

- Dimensional Inspection We specialize in FAI's, full and partial layouts, PPAP support and large scale inspections.
- CMM Programming Our metrologists produce offline/onsite programming for PC-DMIS, Modus, MCOSMOS, Calypso, CMM Manager, Verisurf and many others.
- Reverse Engineering We evaluate and measure components to develop the drawings and 3D models.
- 3D Scanning We offer portable laser scanning for large parts, CMM-mounted laser scanning for extra precision and CT scanning to capture internal features.
- Part Sorting We provide high-volume, metrology-class inspection and sorting.

CMM Equipment

- Rebuilt CMMs Get the latest technology without spending an excessive amount on a new frame.
- CMM Software We offer several types of innovative software to enhance your team's capabilities and CMM's performance.
- CMM Upgrades Update your existing CMM with a new probe head, controller, or software to enhance your inspection abilities.
- CMM Supplies We offer numerous support tools for your CMM including styli, racks, fixturing, dryers, filters and much more.

CMM Services

- CMM Calibration Our service engineers conduct ISO 10360 calibration services traceable to NIST, ensuring optimal performance.
- Preventative Maintenance Annually, we inspect and clean your CMM to prevent avoidable malfunctions.
- Relocation Our relocation service includes decommissioning, delivery, commissioning, and calibration so you can continue inspecting as before.
- Issue Resolution/Repairs System issues are resolved quickly by our CMM Service Engineers remotely or onsite, when necessary.

Education and Development

- Training Our trainers deliver AUKOM metrology certification (metrology best practices), blueprint reading, GD&T (geometric dimensioning and tolerancing), and CMM software training onsite or at our Chicago-area training center.
- Staffing and Consulting Receive on-site staffing, blueprint review, inspection process consultation and custom-designed turn-key solutions from ASME GDTP and AUKOM Certified Metrologists.



Official AUKOM Metrology Training Provider



ASME GDTP Certified Professionals



Compliant Management of Defense-Related Data



Our partners deliver robust and innovative solutions, along with a level of expertise that enables Made to Measure to produce CMMs that deliver speed, outstanding measurement accuracy and repeatedly.

Our network of best-in-class partners include:

- Renishaw
- Tsunami
- Verisurf
- Nikon
- QX Soft/CMM Manager
- Aukom

Made to Measure

302 East Main Street

East Dundee, IL 60118

847-851-1160

info@measure911.com

www.madetomeasurecmm.com

