

Mitutoyo

Mitutoyo Quality

High Accuracy CNC Coordinate Measuring Machine STRATO-Active Series

Coordinate Measuring Machines



STRATO-Active

- The bridge type CNC CMM offers both high performance and cost-effective measurements.
- Achieves high accuracy of $(1.2+3L/1000) \mu\text{m}^*$.
- High speed measurement at 3 mm/s.
- Suitable for measuring medium-sized workpieces accurately.
- Thermal compensation is included as standard.

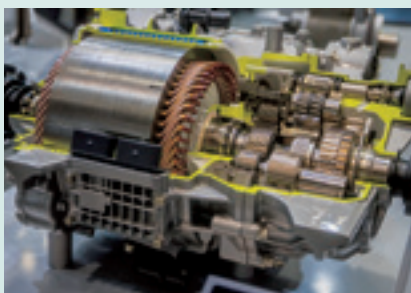


Applications

Capable of measuring high-precision parts effectively.

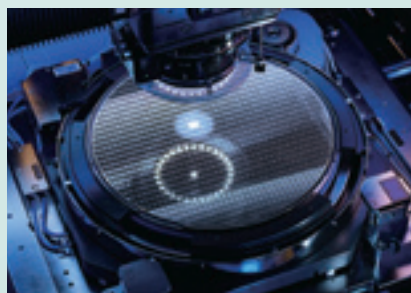
Automotive industry

E drive units for EV and FCV



Semiconductor industry

Semiconductor manufacturing equipment



Medical industry

Surgical robotic system



Specifications

Model		STRATO-Active 776	STRATO-Active 7106	STRATO-Active 9106	STRATO-Active 9166
Measuring range	X axis	700 mm	700 mm	900 mm	900 mm
	Y axis	700 mm	1000 mm	1000 mm	1600 mm
	Z axis	600 mm			
Guide system		Air bearing on each axis			
Drive speed	CNC MODE (Mode selector switch: AUTO)	Moving speed	Max. 300 mm/s (Max. combined speed 519 mm/s)		
		Measuring speed	1 to 3 mm/s		
	CNC MODE (Mode selector switch: MANUAL)	Moving speed	Max. 138 mm/s (Max. combined speed 239 mm/s)		
		Measuring speed	1 to 3 mm/s		
	J/S MODE	High speed	0 to 80 mm/s		
		Low speed	0 to 3 mm/s		
Fine speed		0 to 0.05 mm/s			
Drive acceleration		Each axis 1333 mm/s ² (Max. combined acceleration 2309)			
Length measuring method		Linear encoder			
Resolution		0.00005 mm			
Measuring table	Material	Granite			
	Size (stage)	876 × 1420 mm	876 × 1720 mm	1076 × 1720 mm	1076 × 2320 mm
	Measured object fixing method	Screw (M8 × 1.25)			
Workpiece	Maximum height	800 mm			
	Maximum mass	800 kg	1000 kg	1200 kg	1500 kg
Main unit dimensions (H × W × D)		2730 × 1465 × 1700 mm	2730 × 1465 × 2000 mm	2730 × 1665 × 2000 mm	2730 × 1665 × 2740 mm
Mass (including the installation platform and control device)		1900 kg	2150 kg	2350 kg	3050 kg
Power source	Voltage, Frequency	100 to 120 / 200 to 240 VAC, 50/60 Hz			
	Maximum power consumption	1.5 kW			

Accuracy*

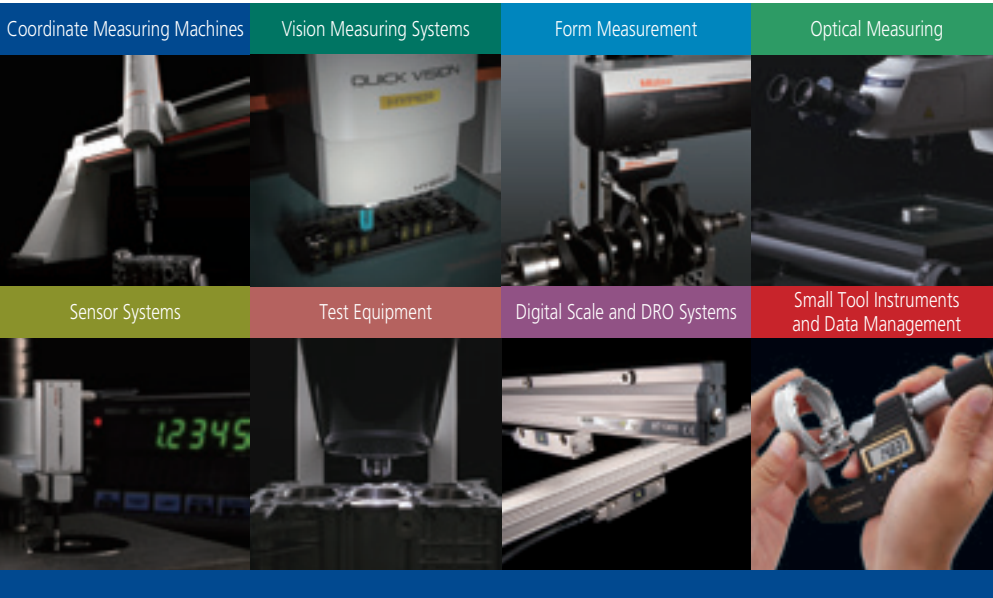
Unit: μm

Title	Symbol	Standard	
Length measurement error	$E_{0,MPE}$	ISO 10360-2: 2009 (JIS B 7440-2: 2013)	1.2+3L/1000
	$E_{150,MPE}$		1.2+3L/1000
Repeatability range of E_0	$R_{0,MPL}$		1.2
Scanning mode form error on a sphere	$P_{Form.Sph.Scan:PP:Tact,MPE}$	ISO 10360-5: 2020 (JIS B 7440-5: 2022)	2.0
Scanning mode time	$T_{Sph.Scan:PP:Tact,MPL}$		45 s
Single-stylus form error	$P_{Form.Sph.1x25:SS:Tact,MPE}$		1.2

*guaranteed when using the SP25M probe system with a ø4 × 50 mm stylus [SM25-1+SH25-1+Stylus(ø4 × 50 mm)]. L: measuring length (mm).

Guaranteed accuracy temperature

Temperature range		18 to 22 °C
Temperature change	Per hour	1.0 °C
	Per day	2.0 °C
Temperature gradient	Vertical	1.0 °C/m
	Horizontal	1.0 °C/m



Whatever your challenges are, Mitutoyo supports you from start to finish.

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed up by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.



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