

Ultra-high Accuracy CNC Coordinate Measuring Machine

MICROCORD

LEGEX 9106



*The culmination of 80 years of Mitutoyo technology.
Recognized as the world's ultimate high-accuracy measurement technology.*

Coordinate Measuring Machines



$$E_{0,MPE} = (0.3 + L/1000) \mu m$$

Catalog No. E16017

Mitutoyo



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The Pinnacle of CNC Coordinate Measuring Machine Technology

FEATURES

- Newly developed and designed from the elemental technology level upward. Elimination of all possible sources of measurement error far surpasses conventional equipment and results in world-leading accuracy: length measurement error $E_{0,MPE} = (0.3+L/1000) \mu m$
- Fixed bridge/moving table construction optimal for high accuracy measurement. 'Center of gravity' type drive system places the drive units near the center of gravity of each slide for best dynamic performance. Improved drive mechanism practically eliminates static and dynamic errors to ensure ultra-accurate results.
- Construction designed for thermal stability, low-expansion crystallized-glass scale, and temperature compensation function result in a guaranteed accuracy temperature range of 18 to 22°C, helping to reduce measurement environment maintenance costs.

SPECIFICATIONS

Items	Model	LEGEX 9106
Measuring range	X axis	900mm
	Y axis	1000mm
	Z axis	600mm
Measurement method		Ultra-high precision linear encoder
Maximum measuring speed		200mm/s
Maximum acceleration		980mm/s ²
Resolution		0.00001mm
Guide method		Air bearing
Measuring table	Material	Cast iron*
	Size	950x1050mm
	Tapped insert	M8x1.25mm (for workpiece clamping)
Table loading	Maximum workpiece height	860mm
	Maximum table loading	800kg
Mass (main unit)		6500kg
Air supply	Pressure	0.5MPa
	Consumption	120L/min under normal conditions (air source: 160L/min or more)

*Ceramic coated type is also available as an option.

Main unit accuracy

Probe	Length measurement error ISO 10360-2:2009(JIS B 7440-2:2013)
MPP310Q	$E_{0,MPE} = (0.3+L/1000) \mu m$

*L = measured length (mm)

Installation temperature environment

	Temperature environment
Temperature range	18 - 22°C
Rate of change	0.5K/h
Gradient	1.0K/m



(1) Photo supplied by TOYOTEC Co., Ltd.
<http://www.toyotec.com>

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Coordinate Measuring Machines

Vision Measuring Systems

Form Measurement

Optical Measuring

Sensor Systems

Test Equipment and
Seismometers

Digital Scale and DRO Systems

Small Tool Instruments and
Data Management

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