Coordinate Measuring Machines





Ultra-high Accuracy CNC CMM LEGEX Series

- The LEGEX Series is an ultra-high precision CNC CMM with the world's highest level of accuracy, made possible by rigorous analysis of all possible error-producing factors and the elimination or minimization of their effects.
- The fixed bridge structure and precision air bearings running on highly rigid guideways ensure superior motion stability and ultra-high geometrical accuracy.
 - It has been designed to minimize deformation affected by variable load, etc. by conducting in-depth stress analyses based on FEM structural
- analysis simulations. In addition, other technologies have been utilized in the structure of the drive unit, minimizing vibration, etc., to provide ultrahigh accuracy.
- For position detection, it has adopted an ultrahigh-precision length measuring unit (internally developed) created by combining an ultra-highprecision crystallized glass scale having a thermal expansion coefficient of 0 with a high-resolution, high-performance reflective linear encoder, thereby enabling excellent position detection for ultra-high-precision measurement.



SPECIFICATIONS

Items	Model	LEGEX 574	LEGEX 774	LEGEX 776	LEGEX 9106	LEGEX 12128*
Measuring range	X axis	500 mm	700 mm	700 mm	900 mm	1200 mm
	Y axis	700 mm	700 mm	700 mm	1000 mm	1200 mm
	Z axis	450 mm	450 mm	600 mm	600 mm	800 mm

* Custom-made model. For information about **LEGEX 12128**, contact your local Mitutoyo sales office.

Note: For measuring table, the standard specification is ceramic coating. A hand scraper version is available as a made-to-order item.

Unit: um

LEGEX Series Accuracy

	onto pin
Probe used	Length measurement error* ¹ ISO 10360-2: 2009
MPP-310Q	E0, MPE=0.28 + L/1000*2

*1 Specifications vary by configuration, size, and thermal environment.

*2 L = Measuring length (unit: mm)

Note: For **LEGEX 12128**, contact your local Mitutoyo sales office.



Refer to the **LEGEX** Series Brochure (**E16012**) for more details.

