

Contracer

High precision + High-function + High operability = Contracer

Contracer CV-2100 SERIES 218 — Contour Measuring Instruments

MeasurLink® ENABLED
Data Management Software by Mitutoyo

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Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink® (refer to page A-25 for details).



An inspection certificate is supplied as standard. Refer to page U-9 for details.

Contour Measuring System enabling measurement that is fast, accurate, and easy.

- The operation flow is significantly shortened by arranging the controls for stylus position change, measurement start/stop and return on the front of the drive unit.



Centralized front control panel

- Fine and coarse X-axis positioning can be performed easily by using the jog shuttle that covers the whole measuring range.



Motor-driven jog shuttle

- The quick-vertical-motion stand allows operators to swiftly and easily move the drive unit to and from the measurement height without having to push or pull (only for CV-2100M4).



Quick-vertical-motion stand

- The detector unit (Z1 axis) is equipped with a highly accurate arc scale. This scale directly tracks the arc locus of the stylus tip so that the most accurate compensation can be applied to the scale output, which leads to higher accuracy and resolution. Operators are free from bothersome operations such as measurement magnification switching and calibrating each magnification as required for analog instruments.



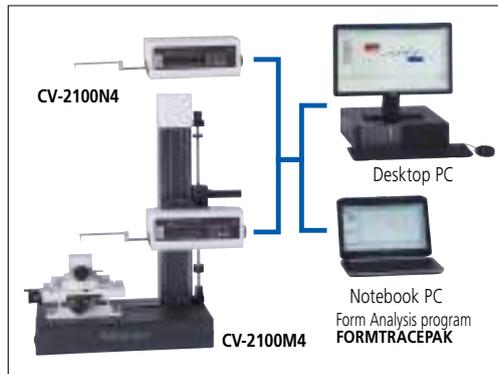
Highly accurate arc scale



Refer to the Contracer CV-2100 Series Brochure (E15020) for more details.



CV-2100M4



Optional Column Stand for CV-2100N4

- Allows the use of the CV-2100N4 in a fixed configuration.

218-042

Base material: Granite
Inclination range: $\pm 45^\circ$
Vertical travel: 320 mm
Mass: 110 kg

Note: While the appearance of the natural stone measuring table varies according to the source, the high stability for which this material is known can always be relied upon.



SPECIFICATIONS

Model No.		CV-2100M4	CV-2100N4
Measuring range	X axis	100 mm	
	Z1 axis (detector unit)	50 mm	
Z2-axis (column) travel range		350 mm	—
X-axis inclination angle		$\pm 45^\circ$	—
Resolution	X axis	0.1 μm	
	Z1 axis	0.1 μm	
Drive method	X axis	Motor (0 to 20 mm/s)	
	Vertical travel (Z-axis column)	Manual (Quick-vertical-motion, fine)	—
Measuring speed		0.02, 0.05, 0.1, 0.2, 0.5, 1.0, 2.0, 5.0 mm/s	
Straightness (when the X axis is horizontal)		2.5 $\mu\text{m}/100\text{ mm}$	
Accuracy (20 °C)	X axis	$\pm(2.5+0.02L)\ \mu\text{m}$ L = Measurement Length (mm)	
	Z1 axis	$\pm(2.5+[0.1H])\ \mu\text{m}$ H = Measurement height from horizontal position within $\pm 25\text{ mm}$	
Measuring direction		Both pulling and pushing directions	
Measuring face direction		Downward direction	
Measuring force		30 \pm 10 mN (3 gf)	
Traceable angle (using the standard stylus)		Ascent 77°, Descent 87° (according to surface property)	
External dimensions (WxDxH)		745x450x885 mm	651x143x138.5 mm
Mass		145.8 kg	5.8 kg

Note 1: While the appearance of the natural stone measuring table varies according to the source, the high stability for which this material is known can always be relied upon.

Note 2: For the CV-2100N4, a manual column stand (optionally available) or custom fixture is required.