

Contracer CV-1000/CV-2000

SERIES 218 – Contour Measuring Instruments

- A digital arc scale is equipped in the Z-axis detecting unit. This gives you a wider range of measurement with higher resolution. No more reliance on measurement magnification.
- A data analysis system (PC system and FORMTRACEPAK software) is available.
- The CV-1000 is portable and can be carried to the machine shop for measurement of large workpieces.

Contracer CV-1000N2



Contracer CV-2000M4



Contracer CV-2000S4



Technical Data

X1 axis

Measuring range: 50 mm (CV-1000) or 100 mm (CV-2000)
 Resolution: 0.2 μ m
 Scale type: Reflective-type linear encoder
 Drive speed: 0.2, 1 mm/s and manual
 Measuring speed: 0.2, 0.5 mm/s
 Measuring direction: Backward
 Traverse straightness: 3.5 μ m/50 mm (CV-1000), 3.5 μ m/100 mm (CV-2000) with the X1 axis in horizontal orientation

Accuracy (at 20°C): $\pm(3.5+2L/100)$ μ m, L = Drive length (mm)
 Inclination range: $\pm 45^\circ$ (CV-2000)

Z2 axis (column, CV-2000 only)

Column type: Power drive (S4 type) or Manual (M4 type)
 Vertical travel: 250 mm (S4 type), 320 mm (M4 type)
 Drive speed: 1 - 5 mm/s and manual

Z1 axis (detector unit)

Measuring range: 25 mm (CV-1000) or 40 mm (CV-2000)
 Resolution: 0.4 μ m (CV-1000) or 0.5 μ m (CV-2000)
 Scale type: Arc encoder
 Accuracy (at 20°C): $\pm(3.5+4H/25)$ μ m, H: measurement height from the horizontal position (mm)

Stylus movement: Arc
 Stylus orientation: Downward
 Measuring force: 10 - 30 mN
 Traceable angle: Ascent: 77° , descent: 87° using the standard stylus provided and depending on the surface roughness

Stylus tip: Carbide, R25 μ m
 Base size (W x H): 600 x 450 mm (CV-2000)
 Base material: Granite (CV-2000)
 Mass: 5 kg (CV-1000N2), 115 kg (CV-2000M4), 130 kg (CV-2000S4)

Power supply: 100 - 240V AC $\pm 10\%$, 50/60Hz

Arc scale on the Z-axis

