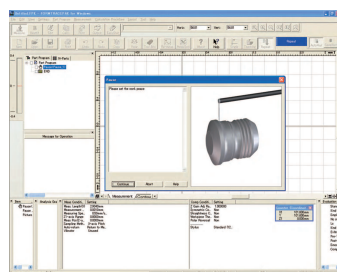


Contracer Extreme CV-3000CNC/CV-4000CNC

Series 218 - CNC Contour Measuring Instruments

- High-accuracy CNC Contour measuring instrument.
- X1, Y and Z2-axes have a maximum drive speed of 200 mm/s, which permits high-speed positioning for higher throughput potential of multiple-profile/multiple-workpiece measurement tasks.
- It is possible to perform continuous measurement over horizontal and inclined surfaces by power-tilting the X1-axis.
- The drive unit of the CV-4000CNC series is equipped with a Laser Hologage detector giving excellent accuracy and resolution in the Z1-axis.
- For models with the Y-axis table, it is possible to expand the measuring range for multiple workpieces, etc., through positioning in the Y-axis direction.
- Enables inclined plane measurements through 2-axis simultaneous control in the X and Y-axis directions.
- Since the Z1-axis detector incorporates an anti-collision safety device, the detector unit will automatically stop even if its main body collides with a workpiece or jig.
- Supplied with an easy-to-operate Remote Box, on which the user can make any movement by selecting the required axis using the two joysticks. The current axis selection is easily identified by the icon on the key top.



Formtracepak - Software

Specifications

X1-axis	
Measuring range	200 mm
Resolution	0,05 µm
Scale	Reflective-type linear encoder
Drive speed	200 mm/s (max. CNC) 0 - 60 mm/s (joystick)
Measuring speed	0,02 - 2 mm/s
Traverse straightness	2 µm/200 mm with the X-axis in horizontal orientation
Linear displacement accuracy (at 20°C)	CV-3000CNC : $\pm(1+4L/200)$ µm CV-4000CNC : $\pm(0,8+4L/200)$ µm L : Drive length (mm)
α-axis	
Inclination angle	-45° to +10°
Resolution	0.000225°
Inclination	6°/s
Z2-axis (column)	
Vertical travel	300 or 500 mm
Resolution	0,05 µm
Scale	Reflective-type linear encoder
Drive speed	200 mm/s (max. CNC) 0 - 60 mm/s (joystick)
Z1-axis (detector unit)	
Measuring range	±25 mm
Resolution	CV-3000CNC : 0,2 µm CV-4000CNC : 0,05 µm
Scale	CV-3000CNC : Linear encoder CV-4000CNC : Laser Hologage
Linear displacement accuracy (at 20°C)	CV-3000CNC : $\pm(2+14H/100)$ µm CV-4000CNC : $\pm(0,8+10,5H/25)$ µm H : Measurement height from the horizontal position (mm)
Stylus up/down operation	Arc movement
Measuring face direction	Upward/downward
Measuring force	30 mN
Traceable angle	70° using the standard stylus provided and depending on the surface roughness)
Stylus tip	Radius : 25 µm, carbide tip
Y-axis table unit	
Resolution	0,05 µm
Measuring range	200 mm
Drive speed	200 mm/s (max. CNC) 0 - 60 mm/s (joystick)
Max. loading capacity	20 kg
Traverse straightness	0,5 µm/200 mm
Linear displacement accuracy (at 20°C)	$\pm(2+2L/100)$ µm L : Length between two arbitrary points (mm)