

Contour Measuring Instrument >>>

Enhanced Operation

CONTOURECORD 1600D



CONTOURECORD 1600D-12

* Printer is an option.

Auto Element Judgment (AI Function)

- The 1600D automatically determines the type of element (point · line · circle).

Dimension Display Function

- The actual measured values for parameters and geometric deviation can be displayed on the diagram.

Profile Synthesis Function

- The limitations on the analysis range due to the angle of the stylus are addressed with the synthesis function.

Peak and Valley Function

- This function enables the maximum workpiece point to be detected by tracing with the stylus, simplifying alignment.

Calculation Point Repeat Function

- Overall workpiece analysis can be executed after completing only one pattern analysis for workpieces where certain shapes are repeated.

Workpiece Trace Function

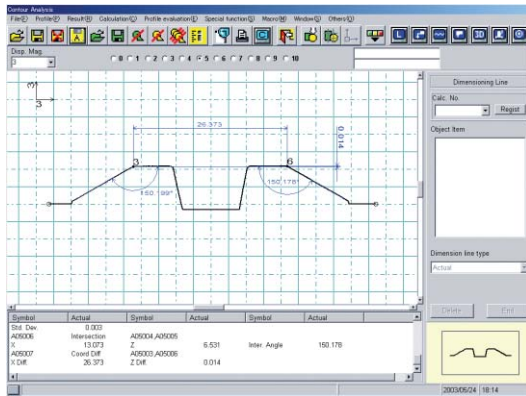
- The measuring range can be determined by tracing the workpiece once. This is effective for measurement of minute profiles.

Easy Evaluation of Part Contour

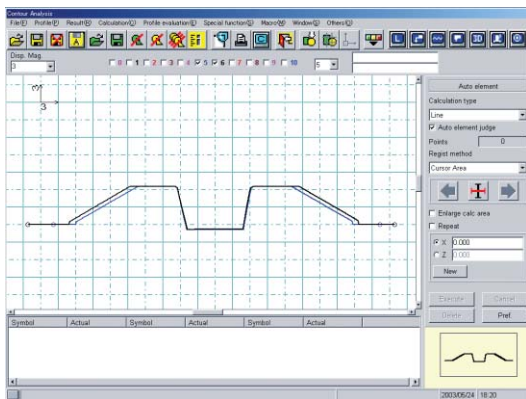
- Exact data on parts that were previously evaluated with a projector or tool microscope can be obtained in a short period of time. The measured results can be used as is for inspection reports.

High Efficiency Measurement

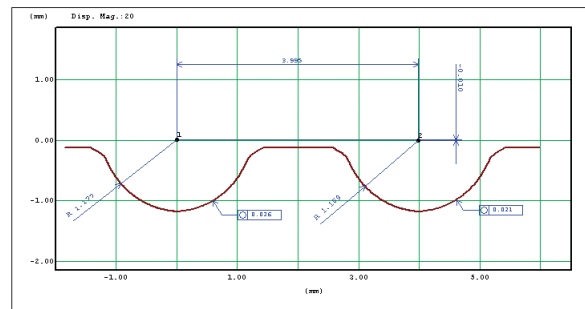
- The teaching/playback function automates the entire process, from measurement to pasting of the data into an inspection report.



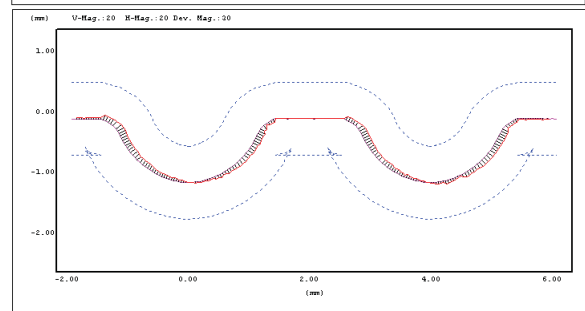
Dimension line display function



Overlap display



A08001	Circle	Circle				
Diap.	2.355	2.300	0.055	0.050	-0.050	0.005
Roundness	0.026					
A08002	Circle	Circle				
Diap.	2.338	2.300	0.038	0.050	-0.050	----
Roundness	0.021					
A08003	Coord Diff.	A08001, A08002				
X Diff.	3.995	4.000	-0.005	0.010	-0.010	--
Z Diff.	-0.010	0.000	0.010	0.010	-0.010	----



Printed data sheet

Specifications

Model			CONTOURECORD 1600D
Measuring Range	Z-axis (vertical)	50mm	
	X-axis (horizontal)	100mm (200mm for -22 System)	
Accuracy	Z-axis indication accuracy	±0.25%/full scale	
	Measuring Resolution	0.1 μm/±2.5mm, 0.4 μm/±10mm, 1 μm/±25mm	
	X-axis indication accuracy	± (1 + 2L/100) μm L: Measuring Length (mm)	
	Measuring Resolution	0.1 μm	
Straightness accuracy		1 μm/100mm	
Sensing method	Z-axis	Differential transducer	
	X-axis	Moiré striped scale	
Record	Vertical magnification	0.01 to 10,000,000 (arbitrary or automatic)	
	Horizontal magnification	0.01 to 10,000,000 (arbitrary or automatic)	
Speed	Column up/down speed (Z-axis)	3mm/s	
	Measuring speed (X-axis)	0.03, 0.06, 0.15, 0.3, 0.6, 1.5, 3, 6mm/s	
Min. measurement pitch		0.1 μm	
Max. measuring points		100,000 (Max.10 profiles)	
Stylus radius		25 μmR	
Measuring Force		30mN or less	
Measuring Feed Direction		Pull/push both directions	
Measurement orientation		Up/down both directions	
Processing functions		Point, line, circle, partial circle, ellipse, max. point/min. point, distance, coordinate difference, polar coordinate difference, orthogonal/polar coordinate difference display, intersecting elements (point-line, line-line, circle-line, circle-circle, line-ellipse), symmetric elements (point-point, point-circle, point-ellipse, line-line, circle-circle, circle-ellipse, ellipse-ellipse), coordinate control (zero point setting, X-axis setting, parallel movement, rotary movement), surface area calculation, over-pin calculation, dimension line display function, calculation result/nominal value collation, mirror reversal, profile synthesis function, macro function, automatic element discrimination, calculation point repeat function, workpiece trace function, peak and valley function, auto operation log/playback function	
Dimensions and weight	Power source	Single-phase AC100V ±10%, 50/60 Hz	
	Power consumption	380VA	
	Installation dimensions	1850 (W) × 800 (D) × 750 (H) mm	
	Weight	150kg	

*Contact us about the high-accuracy C1800DH Series.