

Contour Measuring Machine >>>

High-accuracy, High-resolution Contour Measurement

CONTOURECORD 2700DX 2700SD



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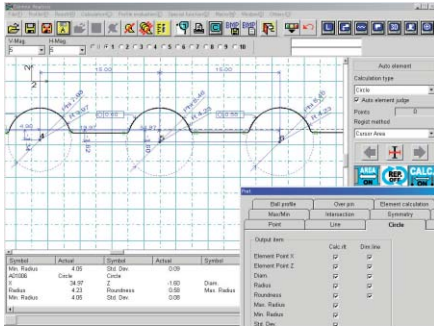


CONTOURECORD 2700SD

- We have succeeded in making the newly developed high-accuracy contour sensor lighter in weight (40% lighter than previous models).
The laser optical diffraction scale ensures high resolution over the entire range. Contours can be measured and analyzed at high accuracy and high resolution.
- A linear motor is used as the drive unit. This achieves low vibration, high accuracy and high-speed movement, and low-vibration drive ensures more stable high-magnification measurement.
- Two types are available, the DX type in an all-in-one design for improved space savings, and the conventional separate style SD type.

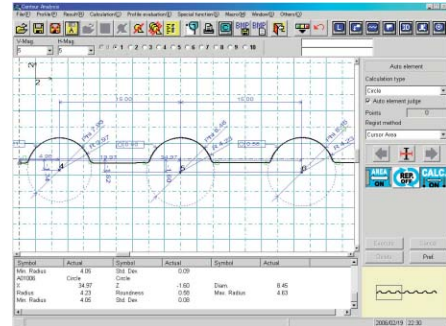
Dimension Line Automatic Output Function

Just checkmark the required dimension lines in the calculation condition setup, and dimension lines are automatically plotted together with measurement results.



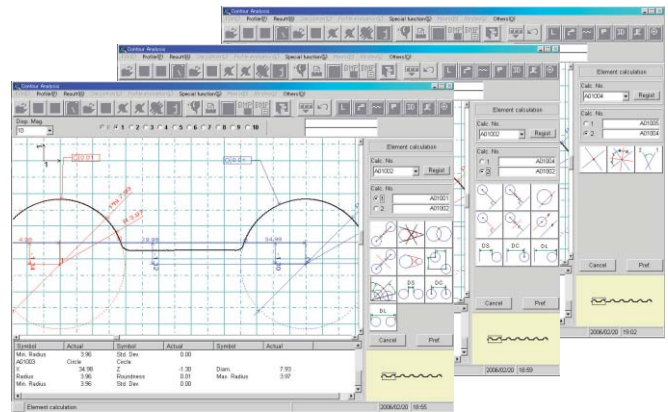
Pitch Calculation Function

The pitch between points or centers of multiple identical shapes comprising circles or straight lines can be automatically output just by specifying the desired area with the mouse. This feature can be used together with the dimension line automatic output function to improve efficiency even more.



Element Calculation Function

This function calculates a new geometrical element from any two already calculated geometrical elements. For example, ten elements that can be calculated by combining two circles are displayed as icons and calculated by selecting the output item.



Specifications

Model			CONTOURECORD 2700DX/SD
Measuring Range	Z-axis (vertical)		50mm
	X-axis (horizontal)		100mm
Accuracy	Z-axis indication accuracy (vertical)		$\pm 0.8 + 2H / 100 \mu m (\pm 1.3 \mu m/H \pm 25mm)$
	Resolution		0.025 μm
	X-axis indication accuracy (horizontal)		$\pm 1 + 2L / 100 \mu m (\pm 3 \mu m/L 100mm)$
	Resolution		0.04 μm
Straightness accuracy			1 $\mu m / 100mm$
Sensing method	Z-axis (vertical)		Laser optical diffraction scale
	X-axis (horizontal)		Moiré striped scale
Contour processing functions	Calculations		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), surface calculation, over-pin calculation, dimension line display function, calculation result/design 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, profile design value collation, best fit, design value generation, IGES/DXF conversion
		Standard settings	Zero point setting, X-axis setting, parallel movement, rotary movement
	Min. measurement pitch		0.1 μm
	Max. data points		100,000 points
	Magnification (vertical/horizontal)		0.01 to 10,000,000 (arbitrary or automatic)
Speed	Column up/down speed (Z-axis)		3 to 10mm/s
	Measuring speed (X-axis)		0.03 to 20mm/s
	Movement speed (X-axis)		0.03 to 60mm/s
Drive unit tilt			$\pm 15^\circ$ (option)
Sensor unit	Stylus/probe radius		Replaceable/0.025mmR, equipped as standard
	Measuring force		30mN or less
	Measurement direction		Pull/push both directions
	Measurement orientation		Up/down both directions
Other	Stylus traceable angle		Ascend: 77°max., Descend: 77°max. (smooth surface)
	Power source/power consumption		Single phase AC 100V $\pm 10\%$ 50/60 Hz, 300 VA
	Installation dimension		1250 (W) x 850 (D) x 1500 (H) mm
	weight		130 kg

★Dimensions and weight are for the DX-12 Type.