

DTP SERIES

Roundness Measuring Instrument

Accuracy up to $\pm 0.0125 \mu\text{m}$

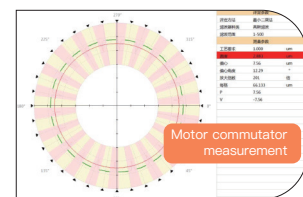
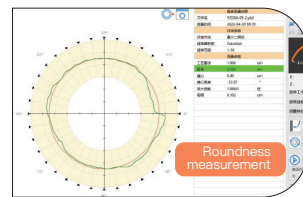
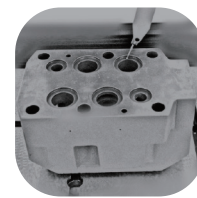
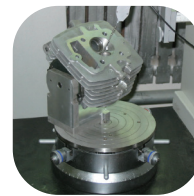
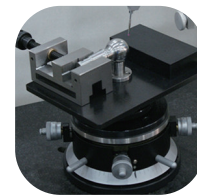
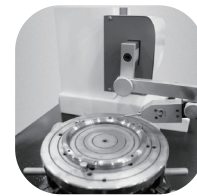
Precision circular grating

Air bearing spindle

Durable precision and never wear

14400point/R

Small force measurement and high accuracy



Measurement function

It can measure roundness, concentricity, coaxiality, flatness, parallelism, perpendicularity, eccentricity and runout of various regular and irregular ring-shaped workpieces.

Analysis function: surface waviness (W_c , W_p , W_v , W_t , W_a , W_q), spectrum analysis, wave height analysis

Roundness filtering section

1-500、1-150

1-50、1-15、15-500

Waviness filter band

3-16、17-100

Roundness evaluation method

minimum area method, least squares method, minimum external circle method, maximum internal tangent circle method

Data analysis and processing

Spectrum analysis: analyze the amplitude of different frequency components

Removal of abnormal data: remove abnormal data manually or automatically, such as burrs, holes and bulges

File management: automatic saving of survey data, SQL database

Result printing: it can be used for regular printing or exported to PDF file

Parameters

Item/Model		DTP-1000	DTP-3000	DTP-5000
Measuring range	Max measuring diameter	$\phi 300\text{mm}$	$\phi 400\text{mm}$	$\phi 700\text{mm}$
	Max measuring height	350mm	500mm	500mm
	Max depth	Use standard probe: 100mm ; The maximum measurable diameter of non-standard support is 300mm		
	Max bearing capacity	30Kg	50Kg	100kg
Air bearing spindle	Radial error of spindle	$\pm (0.025+0.0005H)$ ※	$\pm (0.025+0.0005H)$	$\pm (0.035+0.0005H)$
	Axial error of spindle	$\pm (0.025+0.0006X)$ ※	$\pm (0.025+0.0006X)$	$\pm (0.03+0.0006X)$
Workbench	Table diameter	$\phi 150\text{mm}$	$\phi 200\text{mm}$	$\phi 320\text{mm}$
	Adjustment range	调偏心 $\pm 3\text{mm}$; 调水平 $\pm 1^\circ$		
	Turning diameter	$\phi 320\text{mm}$	$\phi 420\text{mm}$	650mm
Sensor	Range	500 μm (半径差)		
	Probe shape	$\phi 2\text{mm}$ 宝石球测头 (可选购 $\phi 1\text{mm}$ 、 $\phi 0.5\text{mm}$ 测针)		
Horizontal arm	Horizontal stroke	150mm	180mm	$\phi 650\text{mm}$
	Moving speed	0.5-6mm/s或手动		

※ H: Measure the height from the table, X: Measure the radius