

L series

Camshaft Measuring Instrument

The instrument adopts high-precision air float main axis as the rotating reference, double air float column as the moving reference, and the workpiece is vertically clamped to measure camshaft lift error, peach-tip angle error, crankshaft diameter and other elements.



Measurement Functions

Radial runout error, roundness error and waviness error of the camshaft neck(the assembly reference of the camshaft).

Error of the peach type of the camshaft (including end section, creeping section, lift section, etc.).

The phase angle between the keyway (or locating pin) of the camshaft and the reference peach.

The phase angle between each peach type of the camshaft and the reference peach.

The adjacent error, maximum lift and height of the profile of each peach type.

Velocity profile and acceleration profile of each peach type.

Roundness error and runout error of the base circle of each peach type.

Eccentricity of the cam support neck relative to the axis of the instrument or the axis of the workpiece.

Technical Parameters

Item		Product Model		
		L-1000	L-2000	L-3000(Crankhaft)
Measuring range	Max measuring length	450mm	850mm	1200mm(Extendable)
	Worktable diameter	140mm	200mm	
	Load capacity	20kg	40kg	80-480kg (Customizable)
	Measuring way	Half auto/Full auto		
	Sensor range	22mm	25-120mm	120mm (Extendable)
Accuracy of air float axis and top fixture axis		≤0.08μm		
Accuracy of circular grating system		±18"	±18"	±5"
Grating displacement sensor accuracy		±0.5μm	±0.2μm	±0.1μm
Grating displacement sensor resolution		0.1μm	0.1μm	0.05μm
Straightness of air float column		0.5μm/100mm		
Straightness of sensor air float column		0.5μm/100mm		
Horizontal air float guide straightness		0.5μm/100mm		
Probe type		Knife probe, 2 ball probe, 4 ball probe, roller probe, flat probe, tilt probe, etc.		

The above parameters are the default configuration, other configurations can be optional upon the order