# **Automatic Image Measuring Instrument -SLA Series**

### Reasons for choosing

- Equipped with 1:8 telephoto lens tube, the same design concept and process as LA series optical system, and equal to the best lens tube in the world lens tube, maintenance cost is very low.
- The use of granite structure, fixed bridge, mobile table structure, precision ball screw, reduce abbe error.
- Diversified light source design, to solve the problem of measurement, visible, clear, reliable and stable.

# Measurement scheme

#### Mobile phone parts

The complex measurement can solve the measurement difficulties such as external dimension, width dimension of mating edge, contour dimension and mating surface at one time. More efficient and accurate detection.

#### LCD panel

Measurement of transparent, reflective, low contrast surface, high precision to complete 2D size detection, height size detection, contour size detection.

### Automotive electronics

The size of inner hole was measured by contact type, small holes and narrow ribs were measured by optical magnification focusing, and the curved opening boundary of optical contour was scanned

#### The connector

Coaxial light facilitates measurement of blind holes, and SBK-Inspec software arrays are automatically programmed for measurement and evaluation.

## ● PCB

PCB bend and warpage measurement, hole position solder film thickness, chip height and Angle after insertion.

#### The SLA series advantage:

adopts stable fixed bridge structure, use high-end central processing unit, it has high precision and abundant configura-

- Equipped with 1:8 high resolution automatic coaxial optical
- Equipped with high anti-interference metal linear ruler.
- Equipped with full closed-loop control system.

# Wide range of applications, strong practicability

Widely used in: automotive electronics, mobile phone parts, precision machining, metal processing parts, plastic parts, liquid crystal panels and related components to provide composite measurement solutions.

- Small square grooves and small holes make it easy to measure through holes and surface profiles using optical probes.
- Specify coordinate position points, evaluate flatness and measure side bore dimensions using contact probe.



## Powerful LED ring lighting

The lens is equipped with double-layer 8-direction LED circular lighting. The inner ring is fixed and the outer ring can be raised and lowered, allowing you to see more boundaries than normal lighting.

### Equipped with high precision, high magnification precision optical design

Adopt 1:13 telecentric coaxial lens tube, excellent distortion elimination design, fully ensure the accuracy of size measurement within the window, object square resolution of 2um or less, support 2/3 target camera, the same rate can get a wider field of vision, detection efficiency improved by more than 90%, new structure design and process optimization. The service life of the lens is increased to 200%, and the magnification rate is increased by 100% above the same optical measuring machine, realizing the easy measurement of any product.



### Contact probe system

Holes or grooves on the side of parts are measured with contact probe

SLA series is equipped with 1:13 high resolution automatic coaxial optical system, integrating non-contact image, laser and contact probe detection functions, which can comprehensively ensure the accuracy of two-dimensional size, height size and spatial size of precision workpiece processing process. According to the process needs of different products, different hardware and software can meet the different production needs of upstream and downstream processes in 3C industry, liquid crystal industry, medical industry, semiconductor industry and so on, and improve production efficiency.



aser measuring

The flatness. thickness and contour of the parts

# Specification:

Model	SLA300	SLA400	SLA500
Measuring range (mm)	300*300*200	400*400*200	500*500*200
X, Y axis precision(µm)	1.8+L/200	1.8+L/200	2.0+L/200
Z axis accuracy (µm)	4.5+L/200	4.5+L/200	4.5+L/200
X, Y vector precision(µm)	2.5+L/200	2.8+L/200	3.0+L/200
Max load weight (kg)	25kg	30kg	
Resolution	0.5um metal linear scale		
X, Y axis max speed	400mm/s		
X, Y max acceleration	800mm/s		
Z axis maximum speed	50mm/s		
Optical zoom	0.6 ~ 5X(1:8) automatic coaxial optical system, 24X-200X		
Imaging device	2.0Mpexl (1/2inch ) gigabit color digital camera		
Motor	Panasonic servo motor		
Light source	programmable adjustment: LED coaxial reflection light source /4 ring 8 partition LED reflected light source / Light source spherical integral parallel light path transmission light source		
Expansion and upgrade (Optional)	laser sensor /3D probe system/liftable light		