

AGM Series Optical Communication Chip Package Size Detection Solution

Semiconductor chip package high precision testing equipment
Mainly meet the length and width of the front packaging shell, flatness; Gold wire diameter, arc length and arc height in the process of packaging, wire rack spacing and width of packaging.

Machine construction

The gantry consists of a solid aluminum frame and a moving platform, with a gantry structure mounted directly on the main body of the frame and specially reinforced in structural strength. CCD and telecentric optical system are fixed to prevent vibration while the machine is in operation.

Light source

The parallel light source is installed directly below the CCD and fixed on the main structure of the machine to ensure that the CCD receives the parallel light. The workpiece is scanned vertically to complete the size measurement.

Open type measuring platform

The loading platform of the machine is designed to open on three sides, which is convenient for placing multiple pieces of parts with both hands at the same time. The measuring platform can be extended 100% out of the protective shell for easy integration with the robotic arm. When the machine is not in use for a long time, the measuring platform can also be completely moved into the protective shell to prevent dust accumulation.

Measurement software:

- Measure element :length ,width , height , hole distance , spacing, pin distance, thickness, arc, diameter, radius ,groove, angle.
- Support WIN7 7 WIN10 microsoft OS.
- Can import CAD , and output DXF, EXCEL , WORD.
- Automatic contour scanning,With reference and non-reference contour scanning function.
- The software calculation function combined with the function formula directly performs complex calculations on the measurement results and automatically calculates the maximum and minimum values.
- Multiple data output methods:output all elements, output tolerance elements, output out-of-tolerance elements.
- Geometric tolerance values such as position, concentricity, roundness, straightness, flatness, verticality, etc.
- Provide multiple levels of password protection to protect the integrity of the workpiece program and measurement data.

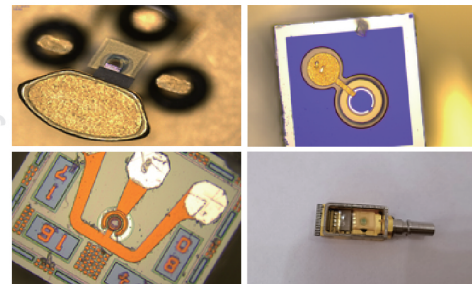
Semiconductor chip packaging high-precision testing equipment is Sobekk(SUNPOC group) for small and precise semiconductor products for high-precision and high-efficiency measurement testing equipment. The design concept is to simplify by complexity. 8x or 13X object telecentric lens barrel is equipped with 10X/0.3 high resolution objective lens to achieve precise and accurate measurement requirements.



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Professional applications, special for semiconductor measurement

Widely used in: COC package (eutectic patch, welding line accuracy), COB/BOX package, TO46/TO33 package, TO56/TO38, crystal ball and other optical communication industry, flat panel display (flexible screen), LED (EMC package, backlight package, RGB package) chip stick position, pad height and other precision size measurement.



Optical communication TO measurement scheme

- Measure the position size of the chip
- Measure the XY position of the chip
- Measure chip concentricity after capping
- Measure the concentricity and height of the eutectic chip and the size of the welding pad
- Measure the height of pad and arc
- PCB chip and substrate, chip height and angle after insertion.
- State line height

Specification:

Model	AGM200	AGM300
Measuring range (mm)	200*200*150	300*300*150
X, Y axis precision(μm)	1.5+L/200	1.6+L/200
Z axis accuracy (μm)	2.0+L/200	2.0+L/200
X, Y vector precision(μm)	2.0+L/200	2.5+L/200
Max load weight (kg)	25Kg	
Resolution	0.1um metal linear scale	
X, Y axis max speed	100mm/s	
X, Y max acceleration	600mm/s	
Z axis maximum speed	30mm/s	
Optical zoom	0.6 ~ 5X automatic coaxial light lens (1:8) 10X metallographic objective	
Optical ratio	183x-1124x	
Imaging device	2.0Mpxl (1/2 inch) gigabit color digital camera	
Motor	Panasonic servo motor	
Programmable light source	Led Coaxial reflection source, spherical integral parallel light path transmission light source (white light)	
Expansion (optional)	5X,20X metallographic objective/Pneumatic isolation device	