High Precision Fully-Auto Video Measuring Machine

EVA Series

High Accuracy
≤ 2.2 + L/200um

Less Error
Within 2um

Real-Time Navigation
Rapid Locating of Sample Position

Intelligent Illumination
8-Division LED Ring Light

Advance Software
EV Measuring

Auto Measurement
Fast Operation of Measurement

Auto Focus
Reduce Time and Effort

Characteristics

High precision Grade 00 granite base and column, with stable expansion of the physical properties, to ensure high stability and accuracy

High precision optical grating ruler from the world's top brand from Germany, Heidenhain with the accuracy of 0.001mm. High accuracy that comes with great stability.

Precision linear guide, grinding ball screw and three-axis servo motor to ensure smooth operation and precise positioning. The motor is noise-free during operation.

High definitive automatic continuous zoom lens and high resolution color digital camera, to ensure clear image without distortion

With programmable 4-ring 8-division LED cold illumination and contour LED parallel illumination and internal intelligent light adjustment, it can automatic control the brightness of the light

Specifications

Model	EVA -3020	EVA -4030
X/Y-Axis Travel	300 x 200mm	400 x 300mm
Glass Table	360 x 260mm	460 x 360mm
Workbench	460 x 360mm	560 x 460mm
Dimension (W x D x H)	825 x 580 x 1070mm	960 x 710 x 1090mm
Load Capacity	35kg	
Net Weight	190kg	270kg
Z-axis Travel	High-precision Linear Guide, Working Travel 200mm	
X/Y/Z-axis Travel	0.001mm; Optional 0.0001mm	
Accuracy	X/Y-Axis Accuracy: ≤ 2.2 + L/200 (μm); Z-Axis Accuracy: ≤ 4 + L/50 (μm) [L= Length (mm)]	
Repeatability	2μm	
Main Structure	High Stability Grade 00 Granite	
Grating Scale	Heidenhain (GERMANY) RSF high precision grating scale, with the accuracy of 0.001mm	
Motor	Three-axis Servo Motor; Optional: Joystick	
Illumination System (Programmable)	Surface: Stepless Adjustable 4 -ring 8-division LED Cold Illumination	
	Contour: LED Parallel Illumination	
CCD	High Resolution 520TV Color CCD Camera (SONY Sensor)	
Motorized Zoom Lens	MT High Resolution Automatic Zoom Stereo Lens	
	Magnification: 0.7X ~ 4.5X; Video Magnification: 30X ~ 225X	
Working Distance	90mm	
Field-of-View	10.6 – 1.6mm; Optional Lens 0.5X & 2X	
Measuring Software	EV Measuring	
Power Supply	220V ± 10% (AC) 50Hz	

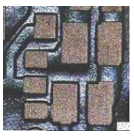
Optional Accessories

Touch Probe

After the equipment is installed with probe, it can be used to measure the following parameters:

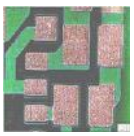
- Height, width, length
- The angle between the two sides
- Vertical angle of cone
- Diameter of cylinder
- Chamfer
- Straightness, flatness, roundness, cylindricity
- Verticality, parallelism, inclination, and so on.

Coaxial Light Source with Different Effect



Strong three-dimensional effect vertical light

Strong contrast ring light



Bright overall effect

Joystick Controller

Part Accessories

4-ring 8-division LED Surface Illumination

LED Parallel Contour Illumination

Zoom Lens

Video Capture Card

CCD Camera

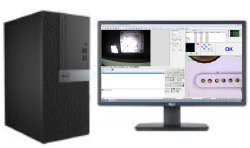
Calibration Glass Stage

Data Integration Box

Software Dongle

Workbench

Computer System



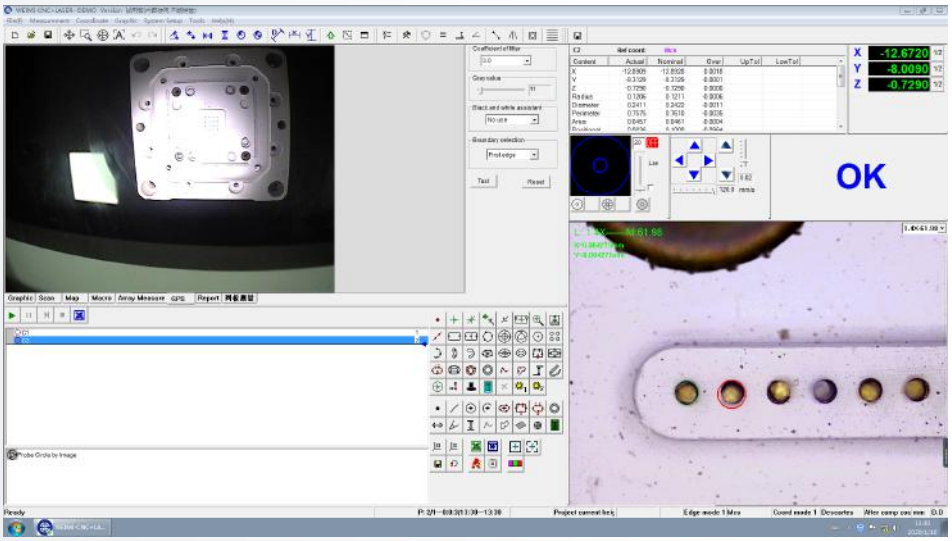
Linear Scale

AV Cable

Software Interface

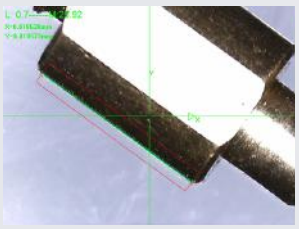
Introduction

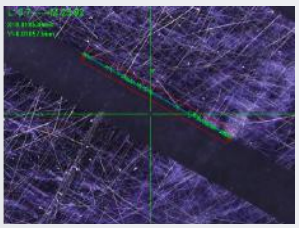
EV Measuring is a professional multisensor measuring software which combined with the developers years of experience in the measuring and software research industry. The design principle is friendly operation, powerful function, high accuracy and stability, simple maintenance.



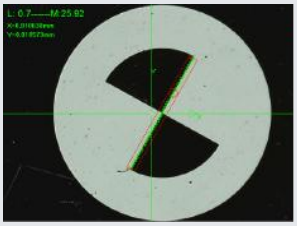
Software Function

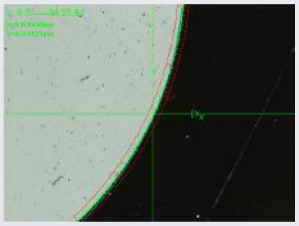
- Excellent software architecture design and fully objectoriented, to ensure the software is stable and reliable.
- Professional SPC statistical analysis software connected to measuring software, to realize that the data could automatically export to SPC database without manual operation.
- With powerful edge finder algorithm, which can help to get the edge of the shadow or dark image and ensure high accuracy.



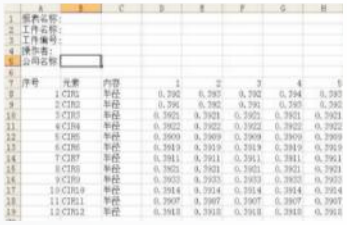


- Support with multiple language, no need to install language pack and change the software which is convenient to local customers.
- The same model of software will be permanent free to update, it can help to reduce other trouble to customer.
- The software could automatically recognize and measure line, circle, arc and other elements.

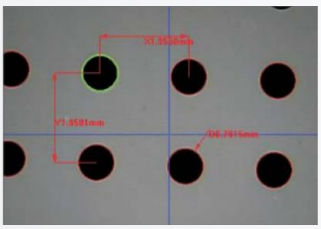


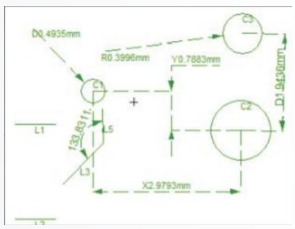


- The measuring data can auto export to TXT, WORD, EXCEL, and SPC software database without the third party software conversion and manual operation.



- The image window and drawing window can display the measured elements and marking 2D dimension, which will get the result directly.





- The software can photograph mosaic the workpiece to get a large map, then marke and measure it.

- The software can support to add simple probe based on the video measurement, to realize 3D measurement.