

AZ-CNC SERIES

VIDEO MEASURING MACHINE



specialize manufacture 15 years



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AZ-CNC Vision Measuring Machine



3 AXIS CNC CONTROL

VIDEO MEASURING MACHINE

DIGITAL COLOR CCD

AUTO-GPS LENS

LENOVO COMPUTER

Features

- Measuring table is made of aerospace aluminum alloy with high rigidity. Suitable for high-speed movement, this material is very light and with low inertia to ensure the long-term stability of the machine.
- Imported key components with rigorous, normative assembling and adjustment
- 4-axis controls, full automatic measurement
- Being equipped with full automatic zoom body tube performs 4-axis auto-measurement.
- Adopting high-definition “DAHENG” frame grabber ensures the image sharpness of measurement
- “THK” high precision linear guideway and ground ball screw
- “RENISHAW” metal linear encoder with high resolution of 0.5μm
- Adopting “RENISHAW” probe system realizes 3D contacted measurement

Model	Voltage input	Power
AZ300-CNC	220V	1200W
AZ400-CNC	220V	1200W

Specification

Model	AZ300-CNC	AZ400-CNC
Measuring range(mm)	300*200*180	400*300*180
Machine size(mm)	1450*1050*1650	1600*1200*1650
Weight(kg)	450	500
Max. load(kg)	25	25
Accuracy of X-Y axis	2+L/200μm	
Accuracy of Z axis	5+L/200μm	
XYZ resolution	0.5μm	
Repeatability(mm)	0.002	
Moving Speed(mm/s)	X-Y:400 Z:100	
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X	
Control system	SBK4000 fully closed-loop control	
Operated mode	Software+"joystick"	

Main Parts

Name	Picture	Name
CCD		3M pixel digital CCD
Optics		Auto GPS Lens
Surface illumination		*LED cold light*256 level programmable *Brightness adjustable*segmented independent control
Bottle illumination		*LED cold light *Parallel light *256 level programmable *Brightness adjustable
Linear Guide		Japan "THK" SP grade linear guideway
Motor		Japan "PANASONIC" synchronous AC servo motor
Screw Rod		Japan "THK" ground ball screw
Linear scale		England "RENISHAW" metal linear Resolution 0.5um
Limit switch		Japan "Omron" limit switch

Joystick		XYZ axis life of more than 500 million times.
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Optional Part

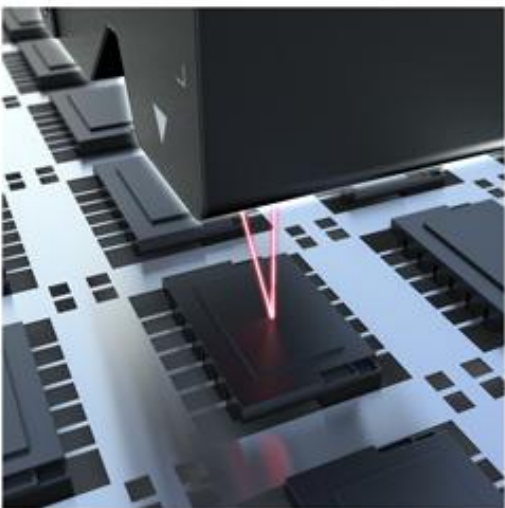
1. Renishaw MCP probe

It's mainly used for the measurement such as: Spatial height, spatial flatness, cylinder, cone, spherical point, spatial surface, it's contact measurement.

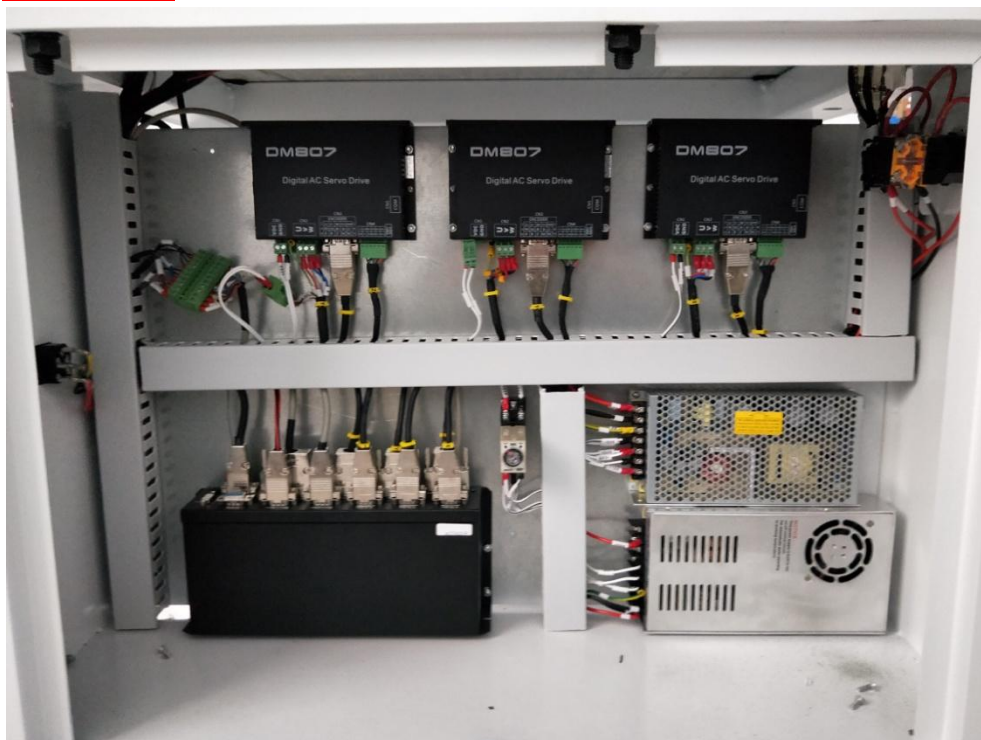
		
	MCP Parameters	
	Induction direction	$\pm X, \pm Y, +Z$
	Positioning repeatability	$\pm 1.5\mu m$
	induction force	12g
	Probe connector	M3
	Working range	Z direction 5mm, XY direction $\pm 20^\circ$
	probe model	$\phi 1 \times 21 \text{ mm}, \phi 2 \times 21 \text{ mm}, \phi 3 \times 21 \text{ mm}$

2. Keyence laser measure probe

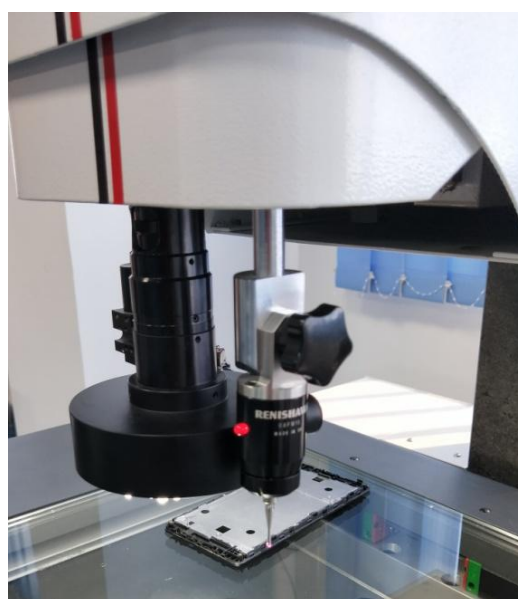
It's mainly used for the measurement such as Mobile panel, LCD backlight module, as well as automotive and mold parts for high-precision measurement requirements, it's non-contact measurement.

		
	Parameters	
	Reference distance	30 mm 1.18"(Diffuse reflection), 23.5mm 0.93"(Specular reflection)
	Measuring range	$\pm 5 \text{ mm} \pm 0.2''$ (Diffuse reflection), $\pm 4.5 \text{ mm} \pm 0.18''$ (Specular reflection)
	Linearity	$\pm 0.05\%$ of F.S. (F.S.= $\pm 5 \text{ mm} \pm 0.2''$)*1
	Spot diameter (at standard distance)	Approx. $\phi 30 \mu m \phi 0.001181''$

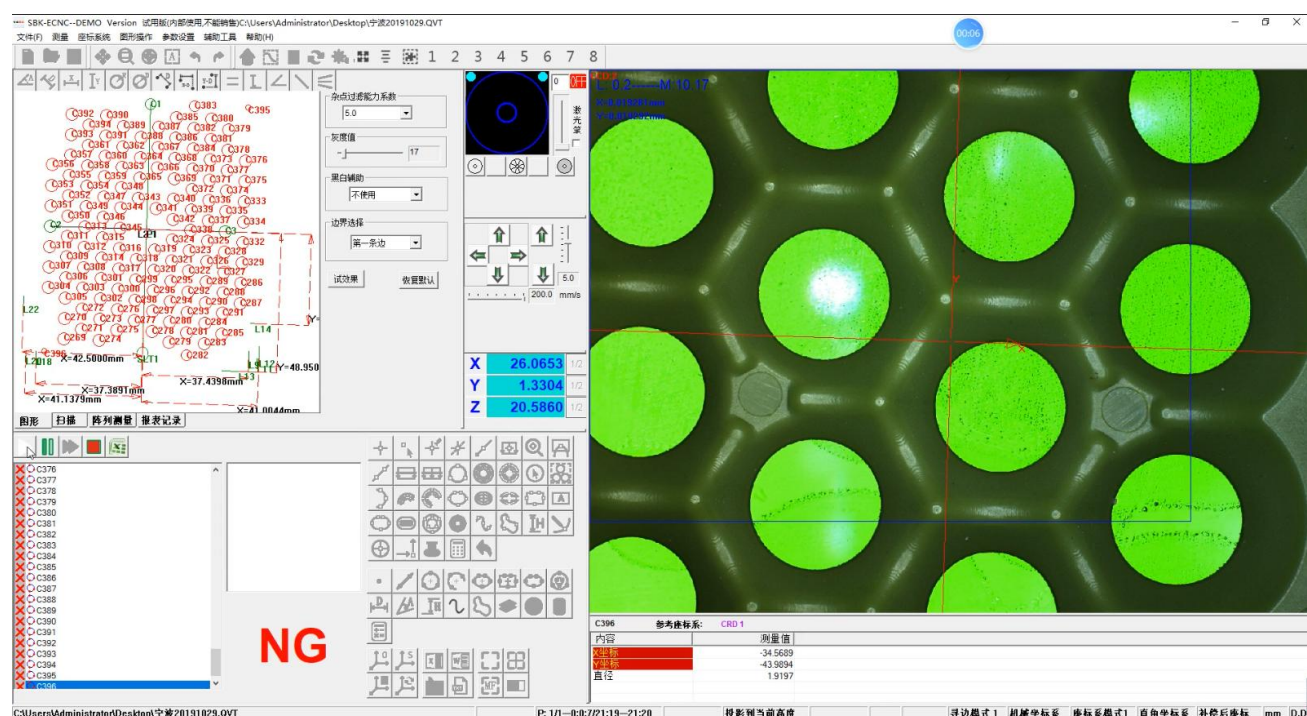
Inner wiring



Machine Display



Software (SBK-CNC Full Automatic measuring software)

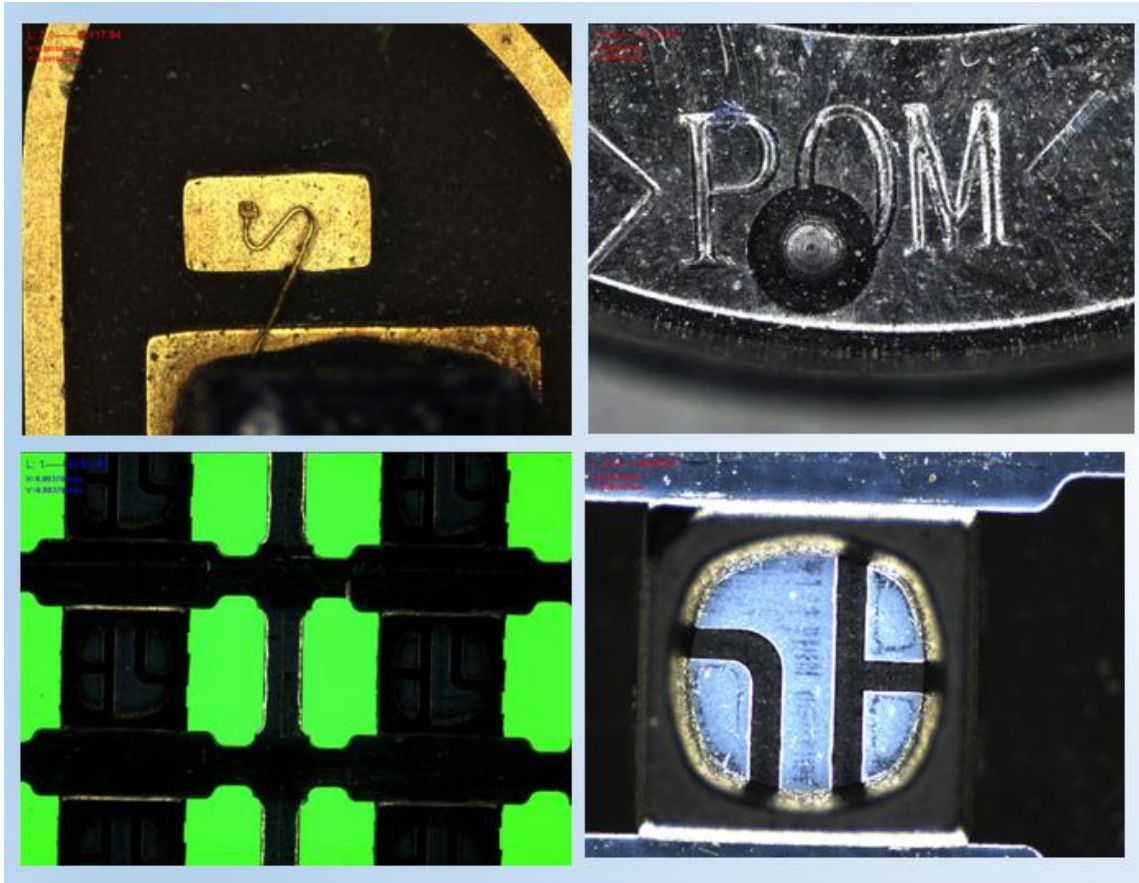


- **Element measurement**, It can measure 12 elements (point, line, circle, arc, ellipse, rectangle, groove, ring, distance, angle, open cloud line, closed cloud line)
- **Macro measurement function**, to associate some of the measurement construction commands to a button, reduce the number of users to operate the mouse, improve work efficiency.
- **Automatic capture measurement**, using the mouse circle to hold the edge of the workpiece, the line, circle, or arc can be obtained automatically
- **Element structure**, The construction of elements provides 10 construction methods: translation, rotation, extraction, combination, parallelism, image recognition, symmetry, intersection.
- **Rich display results**, The measurement results of various elements show that the amount of information is large enough to meet the needs of various customers
- **Can display optical magnification and screen magnification**,
- **Coordinate system**, the multiple coordinate system can be set up according to the drawing, and the coordinate transformation of each coordinate system can be realized.
- **User program**, Unrestricted user program recording, editing, saving, and exhaling function, The user program can record and edit all the user actions to achieve the replication measurement and greatly improve the measurement efficiency.
- **Auxiliary dimming**, The dimming indicator will indicate to the user what time the best light intensity, measuring error caused by light is avoided
- **Graphic function**, With perfect graphics processing and display function (zoom, translation, window display, partial enlargement and full screen display)
- **Annotation function**, It can directly mark the angle, distance, X direction distance, Y direction distance, circle (ARC) radius, circle (ARC) diameter and arc length in the drawing area and image area element graphics
- **System error correction**, The software has a system error correction function.
- **Scan function**

- **Large MAP function,** The workpiece can be divided into many areas to take pictures, form a large map, and can be tagged on the map.
- **Language conversion,** Support all languages
- **Report function,** The measurement data can be exported to Excel, Word, AutoCAD and TXT.

(For more software function, please check the software manual)

Image display



Computer

Brand: Lenovo	
CPU: I3-7100	
RAM: 4G DDR3	
Hard Disk: 1T	
Monitor: 21inch	

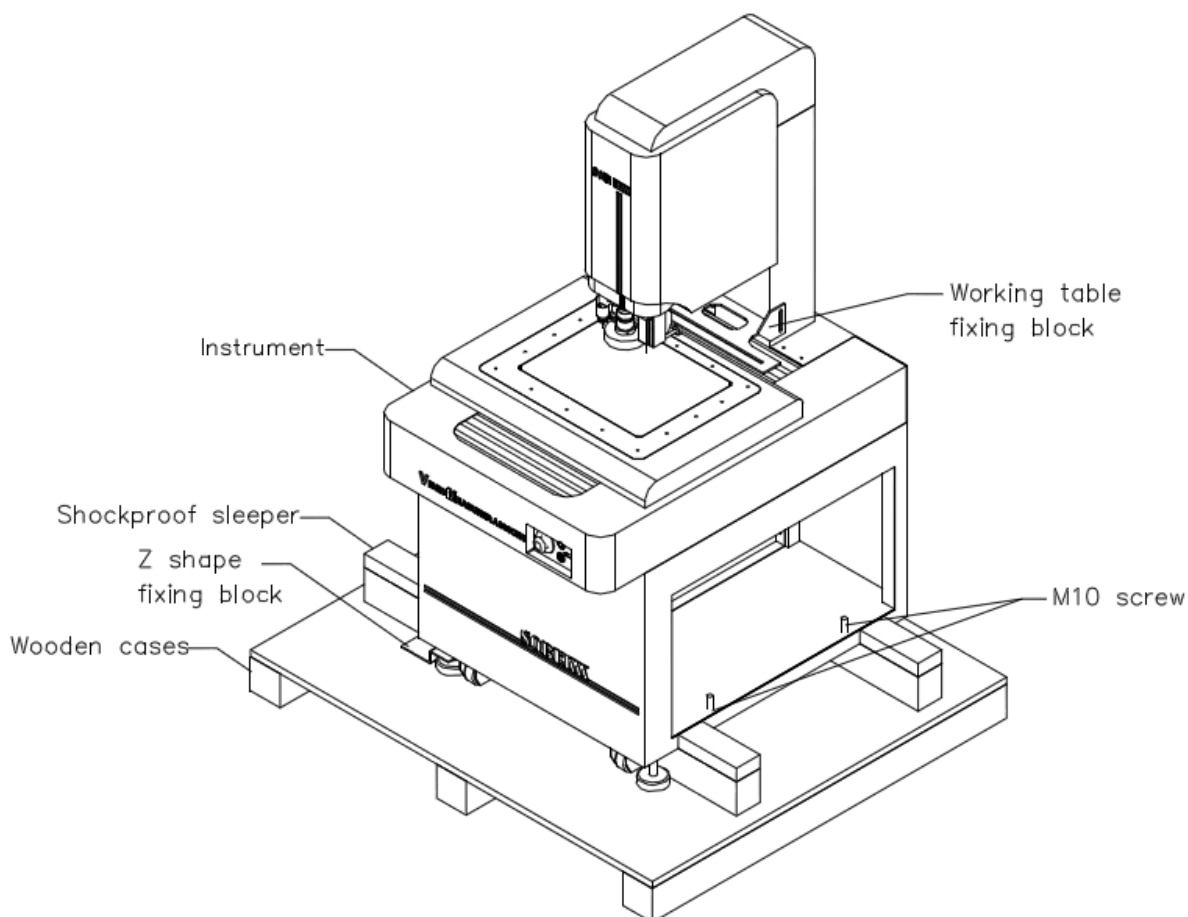
Packaging (Wooden Case)



Model	Package Size	Gross Weight
AZ300-CNC	1380*1220*1830	465KG
AZ400-CNC	1520*1520*1930	610KG

Disassembly of Wooden Box and Installation of Instrument

1. A series of cases of image measuring instrument of the main body of the instrument and the instrument table main body is not removable, the transport process in two separate fixed and transport packaging dwelling Wooden box will be relatively high, transport process should note box rollover.
2. Remove the wooden outer packaging, remove M10 screw and red Z fixed angle iron, should use the forklift overall instrument shift Wooden case base.
3. Is used in the ground casters should be formed, such as the boss had casters sink ditch should pay attention to whether the instrument will fall.
4. Take off "work table fixed block (red)" can move the workbench.
5. A series image instrument Z axis with self locking function, no use of E system with the same image measurement of the same "Z axis fixed block (red)".



Company Detail

Factory including: 7 sale centers and after-sale service centers, 1 R&D center, 1 import & export department

Production capacity: 1000 set/year

Sales area: more than 30 countries and regions (Thailand, Vietnam ,Malaysia, Korea, Canada, Indian, UK, Poland, US, Mexico...)

Goal: to be the most stable video measuring machine in china





Patent



1.Diode parallel light source

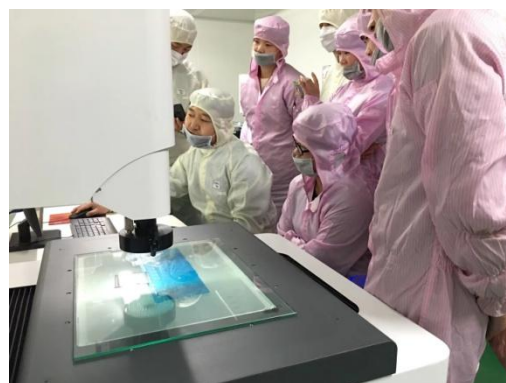
2.Glasses linear scale closed style



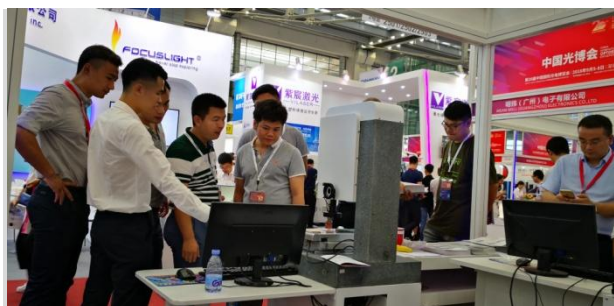
3.Glasses pressing plate device

4.Perpendicularity quickly check platform

our customer:



our exhibition:



our workshop plant:

