

3D Fully Auto Vision Measuring Machine

MVH Series



Four-axis Motorized



Auto Zoom



Auto Focus



Auto Light



Auto Measurement



MCP Probe

+ Introduction

MVH is equipped with outstanding achievement of vision, control, optical and software and design with optimized mechanical structure, it has high accuracy and great stability performance, can realize four-axis motorized control and it is equipped with auto zoom lens and probe, powerful function and simple operation, which can meet with high accuracy measurement requirement of modern industry measurement.

+ Characteristic

- Four-axis CNC fully auto close loop control, auto measurement;
- "00" grade "JINANQING" marble base and pillar, stable and reliable;
- Imported H grade linear guide, grinding ball screw and AC servo motor, ensure accuracy stability of system position;
- Imported open type linear scale, resolution is 0.1um, high accuracy, great stability;
- High definition color industry digital camera, ensure clear observation and stable measurement requirement;
- 12.5X continue auto zoom lens, precision auto zoom, only need to make pixel calibration once time;
- Programmable 5-ring 8-division LED surface illumination, contour parallel LED illumination, can realize 256 grade brightness adjustment intelligently;
- With proprietary fully auto measuring software iMeasuring 4.2, powerful function, simple operation;
- With imported touch probe, realize 3D measurement;
- Can set auto measurement, and finish batch measurement with high efficient;
- Laser and coaxial illumination and other parts are optional;
- Optional FexQMS Measuring Data Analysis and Real-time monitoring software which enhance program control and reduce material consumption.

■ MCP Probe



+ Specifications

Product Name		3D Fully Auto Vision Measuring Machine									
Model		MVH-3020P			MVH-4030P			MVH-5040P			
Code#		525-360			525-370			525-380			
X/Y-axis Travel		300x200mm			400x300mm			500x400mm			
Load Capacity		25Kg			25Kg			20Kg			
Dimension		1200x780x1650mm			1350x880x1650mm			1420x980x1650mm			
Weight		380Kg			450Kg			600Kg			
Z-axis Travel		200mm									
X/Y/Z 3-axis Linear Scale		High Accuracy Metal Linear Scale, resolution: 0.0001mm									
Guidance Mode		Imported H grade linear guide, double-track double slider guide									
Operation Mode		Joystick controller, Mouse operation, automatic detection program									
Measurement Accuracy*		XY-axis : $\leq 2 + L/200(\mu\text{m})$ Z-axis : $\leq 5 + L/200(\mu\text{m})$									
Repeatability		$\pm 2\mu\text{m}$									
Video System**		High definition 2/3" Color CCD Camera 12.5X continue click zoom lens; optical magnification: 0.58X-7.5X; video magnification: 12X~156X									
Field of View(mm)	Lens Magnification	0.58X	1.0X	2.0X	3.0X	4.0X	5.0X	6.0X	7.0X	7.5X	
(Diagonal * Horizontal * Vertical)	2/3" CCD	18.97x15.17x11.38	11.00x8.80x6.60	5.50x4.40x3.30	3.67x2.93x2.20	2.75x2.20x1.65	2.20x1.76x1.32	1.83x1.47x1.10	1.57x1.26x0.94	1.47x1.17x0.88	
Illumination	Contour	LED Parallel Contour Illumination									
	Surface	5-ring 8-division 0~255 grade continue adjustable									
Software System		iMeasuring 4.2 Fully Auto Measuring Software									
Working Environment		Temperature 20°C \pm 2°C, Humidity Range <2°C/hr, Humidity 30~80%, Vibration <0.002g, <15Hz									
Power		220V/50Hz/10A									

* L is measuring length, unit is mm, the mechanical accuracy of Z-axis and focus accuracy is greatly related to the surface of the workpiece.

**Magnification is approximate value, it is related to the dimension of monitor and resolution.

Customers can choose 0.5X or 2X optional objective, and realize image magnification: 6X~78X or 24X~312X.