

UNIMETRO HE SERIES GANTRY TYPE

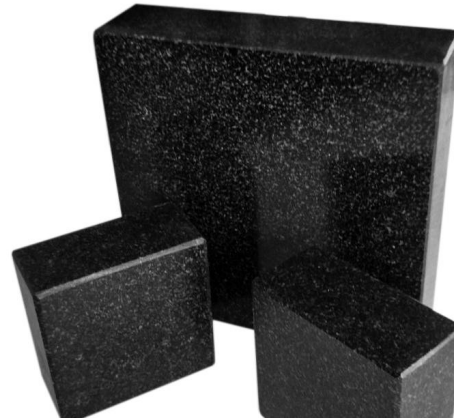
CNC Automatic Vision Measurement Machine

He series of high-efficiency gantry type automatic vision measurement system is specially designed for high-precision and large-scale measurement. It adopts fully closed mobile bridge structure to keep the measurement work fixed. It combines high-precision and high-efficiency organically to effectively detect the geometric parameters of various products. At present, it is mainly used in PCB circuit board, copper clad laminate, flat glass, liquid crystal module, knife mould, insulating material, precision sheet metal and other



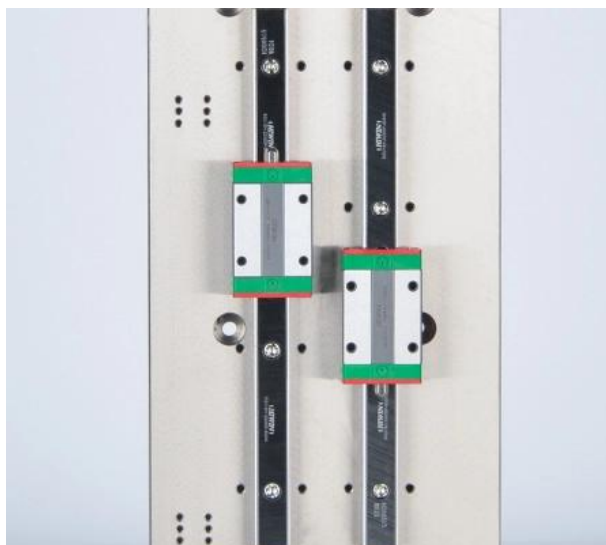
High rigid structure design:

- ◆ The whole closed frame moving bridge structure is adopted, the measuring workpiece is fixed, the bearing capacity is large, and the motion performance is good.
- ◆ Introduce finite element analysis technology into mechanical design to ensure high rigidity and high precision mechanical structure.
- ◆ Grade 000 granite base, high strength, corrosion resistance and good stability.
- ◆ Aluminum oxide surface treatment worktable, fast and flexible action control, durable and beautiful.



High precision configuration:

- ◆ RENISHAW open grating ruler, resolution 0.5um, high precision and good stability.
- ◆ Precision linear guide rail, ball screw of grinder and AC servo motor ensure the stability of positioning accuracy of machine system.
- ◆ 2M pixel high-definition color Giga digital camera meets the requirements of clear observation and stable measurement.
- ◆ 6.5x high-definition optical lens, accurate automatic zoom, fast pixel calibration.
- ◆ Programmable 5-ring 8-zone LED surface light source, transmission parallel LED contour light source system, intelligent 256 level brightness adjustment.
- ◆ Full axis CNC control, AC full closed loop servo motor drive.



Optional multi-sensor for 3D measurement:

HE series large gantry type vision measuring instrument can be equipped with a variety of 3d sensors for comprehensive 2D / 3D composite measurement. It can also be equipped with non-contact sensors such as probe and laser. It also supports RENSHAW full series of probe bracket, so that users can complete the automatic transformation of full-scale measurement on one device, greatly improving productivity.



Parameter:

Product Name		HE Series Automatic Vision Measuring Machine					
Model		HE 652	HE 862	HE1080	HE1210		
X/Y-axis Travel		500*600mm	600*800mm	800*1000mm	1000*1200mm		
Z-axis Travel		200mm (can be raised according to the requirements of customers)					
X/Y/Z-3 axis Linear Scale		RENISHAW open type Linear Scale Resolution: 0.5um (0.1 for option)					
Guidance Mode		Precision linear guide, Ball screw grinding ,double-track double slider guide.					
Operation Mode		Joystick controller, Mouse operation, automatic detection program.					
Accuracy		XYZ-axis: $\leq 2.5+L/200\mu\text{m}$					
Repeatability		$\pm 2.5\mu\text{m}$					
Video System	CCD	2M High definition 1/3" Color CCD Camera (Other pixels are optional)					
	Lens	6.5X Continuous zoom lens; Optical Magnification: 0.7X-4.5X; Video Magnification: 26X~172X(21.5"monitor)					
Field of View(mm) (D*H*V)	Magnification	0.7X	1X	2.0X	3.0X	4X	4.5X
	1/3"CCD	8.57x6.86x5.14	6.00x4.80x3.60	3.00x2.40x1.80	2.00x1.60x1.20	1.50x1.20x0.90	1.33x1.07x0.80
Illumination System	Contour	LED parallel contour LED illumination					
	Surface	Programmable 5-ring 8 sections LED surface illumination (40 sections ring light,Co-axial light,movable multi color ring light for option)					
Measuring Software		Inspect 3D Fully Auto Measuring Software					
Load Capacity		25Kg					
Power Supply		220V/50Hz/10A					
Ddimension(W*D*H)		1700*1180*1750mm	1700*1280*1750mm	1900*1480*1750mm	2100*1680*1750mm		
Net Weight		1500Kg	1800Kg	2900Kg	3200kg		

*L is the measurement length, in mm, which is closely related to the mechanical accuracy, focusing accuracy and workpiece surface condition of z-axis.

**The magnification is approximate, depending on the size and resolution of the display.

Customers can select 0.5x or 2x additional mirrors according to their needs, so as to achieve image magnification: 10X ~ 64.5X or 40X ~ 258X