

UNIMETRO BASIC SERIES

Full Manual Vision Measurement Machine

Vision measurement machine is an instrument used for accurate physical dimension measuring, accuracy up to micron level, which is an optical measuring instrument using the camera to capture the image of the work piece, analyse the image pixel and calculate the 2D dimension with the measuring software. It is a popular model fit for most of the accurate 2D dimension measuring application and end users from different industries, as Mold, Electronics, Semiconductor, Plastic Injection, 3C products, Medical care, Aviation...etc. It is an important instrument used in your products quality control process, ensuring your products dimension accuracy, makes your products more competitive.

BASIC Series vision measurement machine is designed and developed by UNIMETRO, which is the most common model for most of the factories manufacturing accurate parts. It is fit for small quantity samples measuring application. 3 axis manual control, with user friendly software, allows the operator to manage using the machine in very short time.

UNIMETRO®



Product Characteristics:

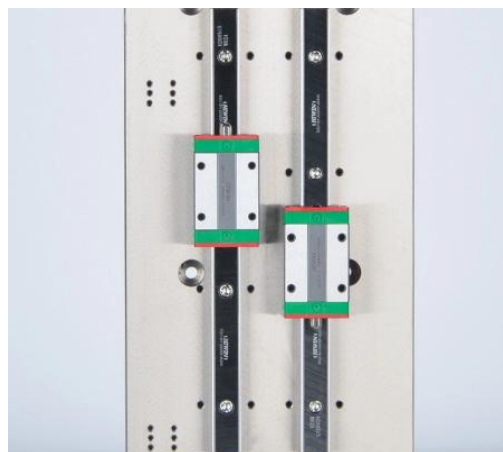
◆ Quality details control

- Granite base and column, excellent stability;
- Aluminum work stage, make the motion control fast reacting and flexible;
- Using HIWIN linear guide way and high-precision linear guide rail, with aluminum work stage and hard anodizing surface processing, ensures the high dynamic performance and long life cycle usage of the machine.
- Integrated control system, embedded with motion control, and all signal control as illumination and linear scale reading, ensures the performance of the machine is extremely stable.



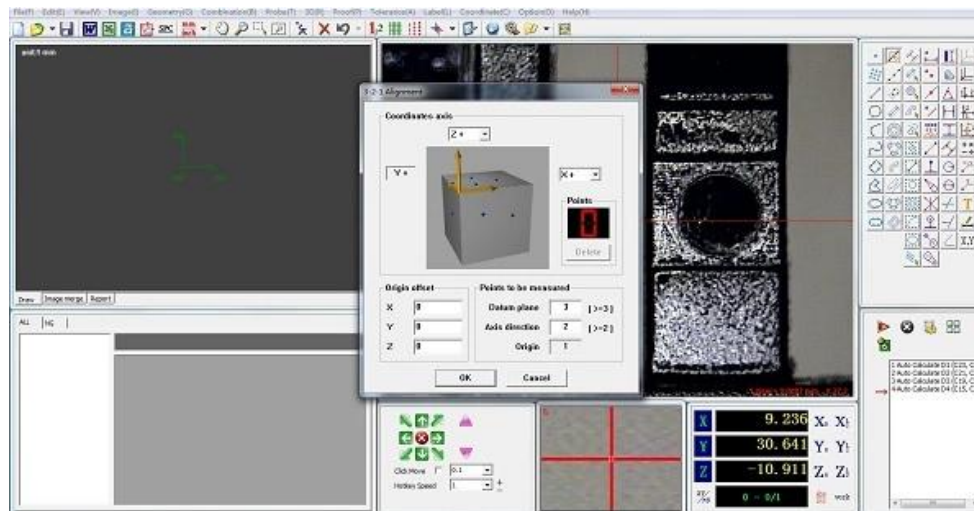
◆ High performance configuration

- XYZ three axis manual control and accurate positioning;
- 0.5 um high precision glass linear scale to ensure the positioning accuracy and measurement accuracy of the system;
- Industrial grade high resolution CCD camera to meet the needs of clear observation and accurate measurement;
- 0.7-4.5X manual dented zoom lens with high repeatability
- 3 rings 8 section LED ring light software control and programmable
- Parallel light path LED contour light software control and programmable



◆ Efficient measurement software

- BASIC Series vision measurement machine is compatible with multiple option of powerful measuring software. Which are with diversified measuring function, can measure geometric elements such as points, circles, lines, angles, angles, etc., as well as dimensions such as distance, roundness, straightness, concentricity, etc.
- Simple and easy to understand operation interface makes measurement more simple and efficient;
- CAD file input and comparing, easy output of measuring report, and SPC analyse of the measuring results data.



◆ Flexible expansibility

- Multi types of non-contact sensors and fast fixturing system are for option, which can satisfy different measuring requirement from different customers
- Green color button light is available for the BASIC series, which makes the series more flexible and powerful to different parts with different kinds of materials or shapes, offers more powerful measuring application.
- Thanks to the flexible expansibility of BASIC series, it is compatible with touch probe, non-contact measuring sensors and robot arm, highly increase the measuring efficiency,



◆ Parameter

Product Name		BASIC Series Automatic Vision Measuring Machine					
Model		BASIC 200	BASIC 300	BASIC 400	BASIC 500		
X/Y/Z-axis Travel		200x100x150mm	300x200x200mm	400x300x200mm	500*400x200mm		
X/Y/Z-3 axis Linear Scale		Glass Linear Scale Resolution: 0.5um(0.1μm Optional)					
Guidance Mode		HIWIN linear linear guide way					
Accuracy		2.5 + L / 100			3.0 + L / 100		
Repeatability		±2.5um			±3um		
Video System	CCD	Industrial grade high resolution CCD camera					
	Lens	0.7-4.5X manual dented zoom lens with high repeatability					
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 illumination					
	Surface	0~255 Stepless adjustable 3-ring 8-division LED surface illumination					
Measuring Software		UNIMETRO 2D Manual Measuring Software					
Load Capacity		25Kg					
Working Environment		Temperature 20℃±2℃, Humidity Range<2℃/hr, Humidity 30~80%, Vibration<0.002g, <15Hz					
Power Supply		220V/50Hz/10A					
Ddimension(W*D*H)mm		550*540*930	600*740*980	700*840*980	800*940*980		
Net Weight		140Kg	190Kg	240Kg	350kg		

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

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

* Field of view(mm) = (diagonal*Horizontal*Vertical)

* 0.5X or 2X objective is optional available, and realize image magnification: 13X~86X or 52X~344X.