

Banbros

Believes in Quality

VISION MEASUREMENT MACHINES

and ANALYZER SYSTEM



Banbros
Believes in Quality

- Value
- Versatility
- Performance



THE PRECISION MEASUREMENT PEOPLE

The Vision Measurement Machine adopts a High resolution, ultra-low distortion enlarging system combined by a high-resolution CCS and telecentric lens. The machine enlarges accurately a part together with high precision worktable and grid scale to measure, check and view the part.

By means of various high efficient automatic measuring functions provided by the measuring software. It is possible to enlarge the part as big as 20-125 times of the part size. It's working efficiency is largely higher than a traditional optical projector.

The Machine, equipped with the color CCD Vision magnifying system, displays the part in different color/material on a computer screen with results much better than a traditional optical projector. It is especially suitable for measuring a curve or a hyperfine part etc. that can't be measured by a slide caliper rule or another kind of gauges.

The machine worktable can be placed on a high precision datum marble platform. Because of its optical system it is much simpler than an optical projector, It is extremely easy to achieve high geometric accuracy and measurement accuracy.

Banbros owns a complete series of Vision Measurement Machines from manual type machine, NC type automatic measurement machine, to CNC fully automatic measurement machine with off-line programming, high speed and efficiency function in order to meet different customer's requirements.

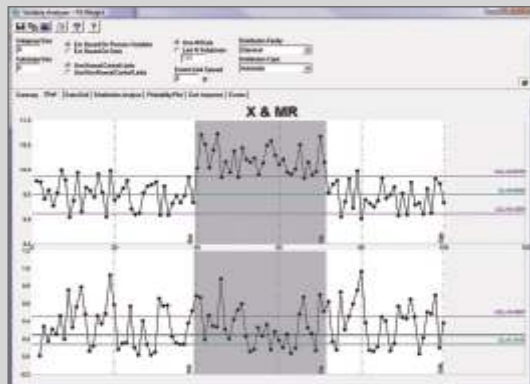
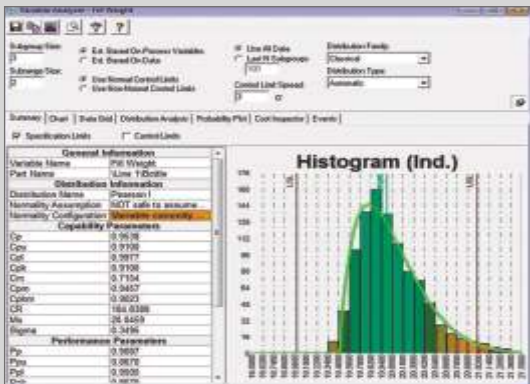
All Banbros Vision Measurement Machines are compatible with RENISHAW high accuracy touch trigger probe to measure parts in Z-axis or simple-3 Dimensional measurement.

SPC statistical analysis software is a standard configuration for all Banbros Vision Measurement Machines. It allows customers to carry out scientific analysis for the production flow to find error trend in the flow and problems in the operations. In addition, all measurement results may be exported to popular office software, such as Excel, Word to make customers save results conveniently for working out a quality inspection report or analyzing further.

Banbros Vision Measurement Software can export results in image file DXF to the popular CAD software, e.g., AutoCAD, Master CAM etc. to facilitate customers to copy the results. Vice-versa, image files in DXF may also be loaded into Banbros Vision Measurement Software to compare measurement results visually.

SPC STATISTICAL ANALYSIS SOFTWARE

All Banbros Vision Measurement Machines are equipped with SPC analysis software to allow customers to analyze the measurement results in order to find the error trend in the production flow and have a chance to find problems in the production process on time to make a correction. This will avoid serious errors and waste in each production stage. The SPC Statistical analysis software provides a series of chart patterns & methods for management, such as Xbar-R, Xbar-S, Xmed-R, R-Rm etc, as well as a number of diagram representation methods, for example, vertical, horizontal, 3-dimension, connection diagram etc. to improve quality management considerably.



BC Series (manual)



- optical magnification : 0.7-4.5X
- vision magnification : 18-120X
- Video system : 1/3" CCD camera
- Rason 2D measuring software with SPC.
- Acer computer with 18.5" LCD and licensed Window-XP.

SPECIFICATIONS:

MODEL	BC-2010	BC-3020	BC-4030
Working Mode	Manual	Manual	Manual
X-Axis Travel	250mm	300mm	400mm
Y-Axis Travel	100mm	200mm	300mm
Z-Axis Travel	150mm	150mm	200mm
Accuracy	(4+L / 200)µm		
Resolution	0.001mm		
Repeatability	2µm		



EV Series (manual)

- Optical magnification : 0.7-4.5X
- Vision magnification : 25-145X
- Z axis motorized, with auto focus function
- Software Easson 2D version 6.0 with SPC.
- Acer computer with 18.5" LCD and licensed Window-XP.



SPECIFICATIONS:

MODEL	BEV-2515	BEV-2515T	BEV-3020	BEV-3020T	BEV-4030	BEV-4030T
X-Axis Travel	250 mm	250 mm	300mm	300mm	400mm	400mm
Y-Axis Travel	150 mm	150 mm	200mm	200mm	300mm	300mm
Z-Axis Travel	150 mm	150 mm	200mm	200mm	250mm	250mm
Accuracy	(3+L / 200)µm					
Resolution	0.001mm					
Repeatability	2 (µm)					
Precision Measuring Head	Without Probe	RENISHAW Touch Probe	Without Probe	RENISHAW Touch Probe	Without Probe	RENISHAW Touch Probe

SPARTAN SERIES (CNC)



- Optical magnification : 0.7 - 4.5X
- Vision magnification : 25 - 145X
- Can be increased upto 12-290X by supplementary lens
- Z axis auto focus
- Software Easson 2D version 6.0 with SPC
- Acer computer with 18.5" LCD and licensed Window-XP
- X/Y/Z with step motor, 100mm/s
- Motorized auto-zoom lens & 3 supplementary lenses (0.5x, 1.5x, 2x)

SPECIFICATION:

MODEL	BSP-3020	BSP-3020T	BSP-4030	BSP-4030T
Working Mode	Automatic	Automatic	Automatic	Automatic
X-Axis Travel	300mm	300mm	400mm	400mm
Y-Axis Travel	200mm	200mm	300mm	300mm
Z-Axis Travel	200mm	200mm	250mm	250mm
Accuracy	(3+L / 200)µm	(3+L / 100)µm		
Resolution	0.001mm			
Repeatability	2µm			
Precision Measuring Head	Without Probe	RENISHAW Touch Probe	Without Probe	RENISHAW Touch Probe



AF Auto Focus
AZ Auto Zoom



(1.5x, 1.5x, 2.0x) attached lenses

Lens plays critical role in Vision Measuring

Telecentric lens is the best choice for Vision measuring. It has auto zoom function, together with a user friendly auto focused controller. If customer choose RENISHAW 3D probes as option, the controller will include one-key or 2 axis probe automatic measuring function and this can reduce the man made damage to the probe because of the failed operation.

- Magnification : 25-145x (can be increased upto 12-290x)
- Software Raddon 2D version 6.0 with SPC
- Acer computer with 18.5" LCD and licensed Windows-XP
- Workable motorized auto-zoom lens & 3 supplementary lenses (0.5x, 1.5x, 2x)
- X/Y/Z Panasonic A/C servo motor drive system, 150mm/s, with high acceleration

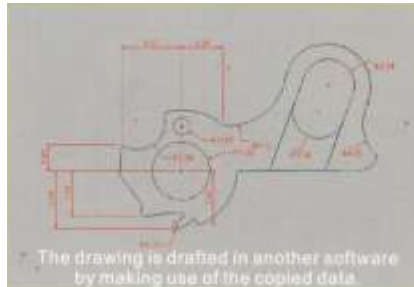
SPECIFICATIONS:

MODEL	BSP-4030 H	BSP-4030 HT	BSP-6050 H	BSP-6050 HT
Working Mode	Automatic	Automatic	Automatic	Automatic
X-Axis Travel	400mm	400mm	600mm	600mm
Y-Axis Travel	300mm	300mm	500mm	500mm
Z-Axis Travel	250mm	250mm	300mm	300mm
Accuracy	(3+L / 100)µm	(4+L / 150)µm		
Resolution	0.001mm			
Repeatability	2µm			
Precision Measuring Head	Not Available	RENISHAW Touch Probe	Not Available	RENISHAW Touch Probe

Place a part on the machine and adjust the enlargement ratio, it is easy to re-draw the part profile by making use of the auxiliary drawing function and centering the middle cross as coordinate system. The diagram file can be exported in DXF to AutoCAD, Pro-E, and UG etc. to establish a matrix.



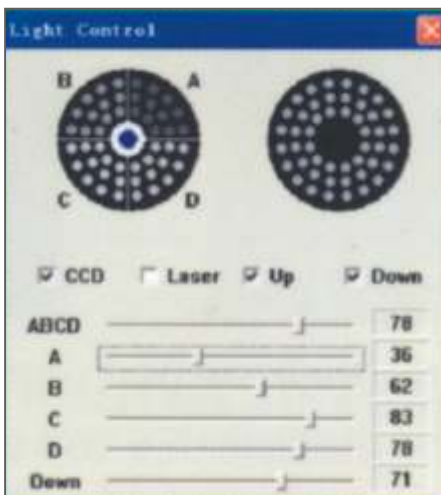
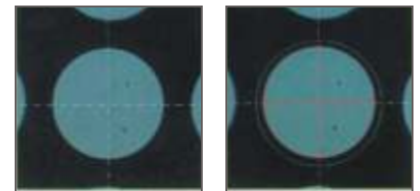
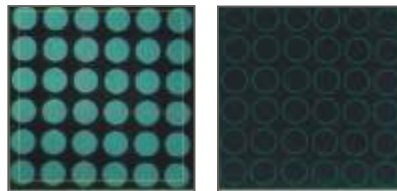
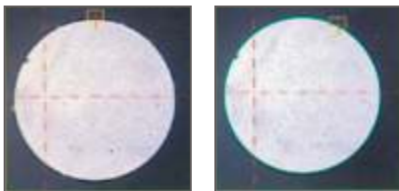
Automatic Edge Finding



Blocking



Rough edge screening & Automatic edge finding



The 4-way program controlled automatic LED light sources



Coaxial lens / probe



Five probes compensation

