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# SOBEKK

## PRODUCT CATALOG

Customer-focused & Striver-oriented

# SOBEKK

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# Company Introduction

## SOBEKK Precision Instruments Co., Ltd.

SOBEKK (Dongguan) Precision Instruments Co., Ltd. is a high-tech company engaged in the research, development, production and sale of various kinds of optical precision instruments with providing industrial automation solutions and nonstandard optical instruments customization. Founded in 2014, it located in Chinese Manufacturing City—Dongguan. We have more than 30 employees, including 15 technicians with bachelor degree and 2 senior engineers. Our factory was awarded the title of Private Technology Enterprise of Dongguan & title of Patent Cultivating Enterprise in 2016. Meanwhile, it gets 4 National Utility Model Patents&Appearance Patents. Now, we have launched E, EP, W, S, ACNC, AZCNC, AMCNC, INSIGHT nine series of video measuring system, coordinate measuring machine and various high-precision testing machines. Our production capacity amounts to over 2000 sets per year.

Sales centers and after-sales service centers have been set in Dongguan, Xiamen, Ningbo, Kunshan, Tianjin, Chongqing, Wuhan etc. covering the main developed regions in China mainland, also we have an R & D center in Taichung of Taiwan and an International Trade Department in Dongguan. Our products have been sold to Thailand, Vietnam, Malaysia, Korea, Canada, India, UK etc.

**Goal:** to be the most stable video measuring machine supplier in China

**Value:** Customer-focused & Striver-oriented



# Product Contents

■ AM- CNC Automatic bridge vision measuring machine .....	P02
■ AG-CNC Automatic High precisiin Vision Measuring Machine .....	P03
■ AZ-CNC Automatic vision measuring machine .....	P04
■ A-CNC Automatic vision measuring machine .....	P05
■ AC-CNC Automatic vision measuring machine .....	P06
■ S-Series Semi-Automatic Vision Measuring Machine .....	P07
■ E-Series Manual Vision Measuring Machine .....	P08
■ W-series Horizontal Vision Measuring Machine .....	P09
■ Extended Function and Option Device .....	P10
■ Optical Projector Series .....	P11
■ Q- Instant Vision Measuring System .....	P12
■ Metallographic Tool-Make Microscope .....	P13
■ Optical Microscope Series .....	P14
■ Metallographic Microscope .....	P15
■ Measuring Software .....	P16
■ Application Field .....	P18

# AM-CNC

AM- CNC Automatic bridge vision measuring machine

## Features:

- Sturdy bridge type construction with long-travel automatic vision measurement. Granite base keeps machine movement steadily.
- Auto-focus for height measurement, touch probe can be fixed.
- 4-axis CNC controls, full-automatic measurement
- Being equipped with navigational body tube performs a function of map navigation. (automatic zoom lens optional)
- Programmable 4 rings 8 segments ring light for surface illumination, LED light for profile illumination
- "RENISHAW" metal linear encoder with high resolution of 1.0μm
- "THK" precision linear guideway & ground ball screw
- "DAHENG" special frame grabber with high-definition ensures the image sharpness of measurement



## AM-CNC Specification:

Model	AM500CNC	AM600CNC	AM800CNC	AM1000CNC	AM1500CNC
Measuring range(mm)	500x400x200	600x500x200	800x600x200	1000x800x200	1500x1200x200
Weight (kg)	1100	1450	1800	3300	4300
Max. load (kg)	30	30	30	30	30
Accuracy of X-Y axis	3+L/200μm				
Accuracy of Z axis	5+L/200μm				
XYZ resolution	1μm				
Repeatability (mm)	0.003				
Linear encoder	metal linear				
Moving speed (mm/s)	X-Y: 500 Z: 100				
Camera type	1.3M pixel digital industrial color camera				
Liner guide	Taiwan"HIWIN" P grade linear guideway				
Optics	6:5:1 continual zoom lens				
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X				
Software	SBK-CNC full-automatic measuring software				
Control system	SBK4000 fully closed-loop control				
Profile illumination	LED cold lighting,256 level programmable brightness adjustment				
Surface illumination	4 rings 8 segments LED cold lighting with segmented independent control & 256 level programmable brightness adjustment				
Motor	"PANASONIC" synchronous AC servo motor				
Operated mode	software + joystick				
Option device	Renishaw MCP probe, Keyence laser measure probe, Auto GPS lens				

# AG-CNC

AG-CNC Automatic High precision Vision Measuring Machine

## 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 lens tube performs 4-axis auto-measurement.
- Adopting high-definition "DAHENG" frame grabber ensures the image sharpness of measurement
- Japan "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



## AG-CNC Specification

Model	AG300CNC	AG400CNC
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	1.5+L/200μm	
Accuracy of Z axis	optical: 2+L/250μm, laser: 1.5+L/250μm	
XYZ resolution	0.0001mm	
Repeatability (mm)	XY :1μm, Z: Optical 3μm, laser 1.5μm	
Moving speed (mm/s)	X-Y: 400 Z: 100 ( high precision move 0-60mm)	
Camera type	1.3M pixel digital industrial color camera	
Liner guide	Japan"THK" SP grade linear guideway	
Screw rod	"THK" ground ball screw	
Optics	6:5:1 continual zoom Auto GPS lens	
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X	
Software	SBK-CNC full-automatic measuring software	
Control system	SBK4000 fully closed-loop control	
Profile illumination	LED cold lighting,256 level programmable brightness adjustment	
Surface illumination	4 rings 8 segments LED cold lighting with segmented independent control & 256 level programmable brightness adjustment	
Motor	"PANASONIC" synchronous AC servo motor	
Operated mode	software + joystick	
Option device	Renishaw MCP probe, Keyence/Omron laser measure probe	

## AZ-CNC Automatic vision measuring machine



### 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 lens tube performs 4-axis auto-measurement.
- Adopting high-definition "DAHENG" frame grabber ensures the image sharpness of measurement
- Japan "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

### AZ-CNC Specification

Model	AZ300CNC	AZ400CNC	AZ500CNC
Measuring range(mm)	300*200*180	400*300*180	500*400*180
Machine size(mm)	1450*1050*1650	1600*1200*1650	1800*1400*1650
Weight (kg)	450	500	650
Max. load(kg)	20	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		
Linear encoder	"RENISHAW" metal linear		
Moving speed (mm/s)	X-Y: 400 Z: 100		
Camera type	1.3M pixel digital industrial color camera		
Liner guide	Japan"THK" SP grade linear guideway		
Screw rod	"THK" ground ball screw		
Optics	6:5:1 continual zoom Auto GPS lens		
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X		
Software	SBK-CNC full-automatic measuring software		
Control system	SBK4000 fully closed-loop control		
Profile illumination	LED cold lighting,256 level programmable brightness adjustment		
Surface illumination	4 rings 8 segments LED cold lighting with segmented independent control & 256 level programmable brightness adjustment		
Motor	"PANASONIC" synchronous AC servo motor		
Operated mode	software + joystick		
Option device	Renishaw MCP probe, Keyence laser measure probe		

## A-CNC Automatic vision measuring machine

### 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 & adjustment
- 3-axis CNC controls; full-automatic measurement.
- Being equipped with a navigational body tube realizes the function of map navigation.
- Adopting high-definition frame grabber ensures image sharpness of measurement.
- "HIWIN" SP level precision linear guideway and "TBI" ground ball screw
- High-resolution exposed linear encoder with resolution of 1μm



### A-CNC Specification:

Model	A300CNC	A400CNC	A500CNC
Measuring range(mm)	300*200*180	400*300*180	500*400*180
Machine size(mm)	1450*1050*1650	1600*1200*1650	1800*1400*1650
Weight (kg)	450	500	650
Max. load(kg)	20	25	25
Accuracy of X-Y axis	3+L/200μm		
Accuracy of Z axis	5+L/200μm		
XYZ resolution	0.5μm		
Repeatability (mm)	0.003		
Linear encoder	glass linear scale		
Moving speed (mm/s)	X-Y: 400 Z: 100		
Camera type	1.3M pixel digital industrial color camera		
Liner guide	Taiwan "Hiwin" SP grade linear guideway		
Screw rod	"TBI" ground ball screw rod		
Optics	6:5:1 continual zoom auto lens		
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X		
Software	SBK-CNC full-automatic measuring software		
Control system	SBK4000 fully closed-loop control		
Profile illumination	LED cold lighting,256 level programmable brightness adjustment		
Surface illumination	4 rings 8 segments LED cold lighting with segmented independent control & 256 level programmable brightness adjustment		
Motor	Japan AC servo motor		
Operated mode	software + joystick		
Option device	Renishaw MCP probe, Keyence /Omron laser measure probe		

## AC-CNC Automatic vision measuring machine



### Features:

- Imported key components with rigorous, normative assembling & adjustment
- 3-axis CNC controls, full-automatic measurement
- Equipped with high-definition detent lens
- High-definition frame grabber
- Precision "HIWIN" P level linear guideway "V" type cross roller guideway; high-precision linear drive screw rod made by Germany
- High-accuracy linear scale with resolution of 1um

### AC-CNC Specification:

Model	AC300CNC	AC400CNC	AC500CNC
Measuring range(mm)	300*200*180	400*300*180	500*400*180
Machine size(mm)	850*1300*1550	1000*1400*1550	1200*1500*1550
Weight (kg)	260	350	450
Max. load(kg)	20	25	25
Accuracy of X-Y axis	3+L/150µm		
Accuracy of Z axis	5+L/100µm		
XYZ resolution	1.0µm		
Repeatability (mm)	0.005		
Linear encoder	glass linear scale		
Moving speed (mm/s)	X-Y: 200 Z: 100		
Camera type	SBK-HC536 1/2 inches 700 lines industrial color camera		
Liner guide	Z axis:"Hiwin" P linear guideway, XY use "V" type linear guideway		
Screw rod	Z axis:"TBI" ground ball screw rod, XY use normal screw rod		
Optics	6.5:1 continual zoom step lens		
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X		
Software	SBK-CNC full-automatic measuring software (simply versions)		
Control system	SBK4000 fully closed-loop control		
Profile illumination	LED cold lighting,256 level programmable brightness adjustment		
Surface illumination	4 rings 8 segments LED cold lighting with segmented independent control & 256 level programmable brightness adjustment		
Motor	China "Tiger" synchronous AC servo motor		
Operated mode	software, can option standard CNC software with"joystick"		
Option device	Renishaw probe,Auto zoon GPS lens, standard CNC software,joystick		

## S-Series Semi-Automatic Vision Measuring Machine

### Features:

- Z-axis adopts servo motor driving, to realize motorized autofocus & improve the error and the manual operability of machine.
- Granite base with sturdy frame construction
- Bridge type construction for large work-piece that requires small measuring range
- Autofocus & semi-automatic measurement solve the problems of geometrical measurement
- "HIWIN" P level linear guideway and precision cross roller guideway for increased accuracy & working life
- High-definition detent zoom lens and high-resolution CCD performs high-definition measurement.
- Supports different file formats of data output such as Word, Excel, CAD etc.



### S-series Specification:

Model	S500	S600	S800
Measuring range(mm)	500*400*200	600*500*200	800*600*200
Machine size(mm)	1200*900*1500	1400*1100*1500	1800*1400*1500
Weight (kg)	300	350	400
Max. load(kg)	20	25	25
Accuracy of X-Y axis	3+L/150µm		
Accuracy of Z axis	5+L/150µm		
XYZ resolution	1.0µm		
Repeatability (mm)	0.005		
Linear encoder	glass linear scale		
Moving speed (mm/s)	X-Y: manual Z: 100		
Camera type	SBK-HC536 1/3 inches 700 lines industrial color camera		
Liner guide	Z axis:"Hiwin" P linear guideway, XY use "V" type linear guideway		
Screw rod	Z axis:"TBI" ground ball screw rod, XY use normal screw rod		
Optics	6.5:1 continual zoom step lens		
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X		
Software	SBK-JCNC semi-automatic measuring software (simply versions)		
Control system	SBK3000 control box		
Profile illumination	LED cold lighting,256 level programmable brightness adjustment		
Surface illumination	LED cold lighting with segmented independent control & 256 level programmable brightness adjustment		
Z axis Motor	China "Tiger" synchronous AC servo motor		
Operated mode	software and handle wheel		
Option device	0.5X, 2X extend lens		

## E-Serial Manual Vision Measuring Machine



### Features:

- Taiwan "HIWIN" P level linear guideway and precision cross roller guideway for increased accuracy & working life.
- Integrated granite base and column ensures machine stability.
- Supplied with SBK-E multifunctional 2.5D measuring software, automatic edge detection and vision height measurement function.
- Supplied with removable & dismantable console support table .
- High-definition detent step zoom lens and high-resolution CCD performs high-definition measurement.
- Supports different file formats of data output such as Word, Excel, CAD etc. DXF import for quick inspection.
- S300, S400, S500 the Z axis is with motor move and auto focusing.
- EP serial is with Renishaw probe 3D measurement

### E-series Specification:

Model	E200	E300	E400	E500
	/	S300 Z axis auto	S400 Z axis auto	S500 Z axis auto
	EP200 3D probe	EP300 3D probe	EP400 3D probe	EP500 3D probe
Measuring range(mm)	200*100*200	300*200*200	400*300*200	500*400*200
Machine size(mm)	750*1300*1500	750*1300*1500	900*1400*1500	1100*1125*1650
Weight (kg)	300	300	400	530
Max. load (kg)	20	25	25	30
Accuracy of X-Y axis	3+L/200µm			
Accuracy of Z axis	5+L/200µm			
XYZ resolution	1.0µm			
Repeatability (mm)	0.003			
Linear encoder	glass linear scale			
Camera type	SBK-HC536 1/3 inches 600 lines industrial color camera			
Liner guide	Z axis: Taiwan"HIWIN" P grade linear guideway; XY use "V" type linear guideway			
Optics	6:5:1 continual zoom step lens			
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X			
Software	SBK-E manual 2.5D measure software			
Probe	Renishaw MCP probe (EP model)			
Z axis motor	China "Tiger" synchronous AC servo motor (S model)			
Control system	SBK3000 control box, USB port, adjustable light			
Profile illumination	LED cold lighting,256 level programmable brightness adjustment			
Surface illumination	LED cold lighting with segmented independent control & 256 level programmable brightness adjustment			
Operated mode	handle wheel			
Option device	Renishaw MCP probe, 0.5X, 2X extend lens			

## W-series Horizontal Vision Measuring Machine

### Features:

- With "HIWIN" P level linear guideway and precision cross roller guideway for increased accuracy & working life
- Supplied with SBK-E multifunctional 2.5D measuring software, automatic edge detection and vision height measurement function.
- Supplied with removable & dismantable console support table
- High-definition detent step zoom lens and high-resolution CCD performs high-definition measurement.
- Supports different file formats of data output such as Word, Excel, CAD etc. DXF import for quick inspection.



### W-Series Specification:

Model	W200	W300
Measuring range(mm)	200*100*200	300*200*200
Machine size(mm)	950*845*1285	1050*845*1285
Weight (kg)	150	190
Max. load (kg)	20	20
Accuracy of X-Y axis	3+L/200µm	
Accuracy of Z axis	5+L/200µm	
XYZ resolution	1.0µm (option 0.5um, 0.1um scale)	
Repeatability (mm)	0.003	
Linear encoder	glass linear scale	
Camera type	SBK-HC536 1/3 inches 600 lines industrial color camera	
Liner guide	Z axis: Taiwan"HIWIN" P grade linear guideway; XY use "V" type linear guideway	
Optics	6:5:1 continual zoom step lens	
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X	
Software	SBK-E manual 2.5D measure software	
Control system	SBK3000 control box, USB port, adjustable light	
Profile illumination	LED cold lighting,256 level programmable brightness adjustment	
Surface illumination	LED cold lighting with segmented independent control & 256 level programmable brightness adjustment	
Operated mode	handle wheel	
Option device	0.5X,2X extend lens	

## Extended Function and Option Device



### 3D Probe Measuring

#### Features:

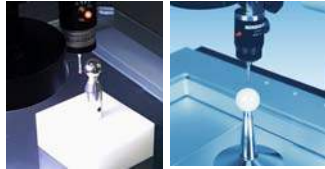
- The probes are mainly used for contact measurement, the image combine with the probe, complementary advantages, can use for the measurement of: spatial height, spatial flatness, cylindrical, cone, sphere, spatial point, spatial surface. these machines are widely used in the measurement of: auto part measurement for high precision requirement; mould parts measurement.

#### Matching machine model:

A-CNC	AC-CNC	AZ-CNC
AM-CNC	S	E

#### Recommend brand:

UK Renishaw



## Laser / White Light Scanning Measuring

- the laser and white light sensor are mainly applied in non-contact measurement, these machine are widely used in: Mobile panel, The LED back-light module, Auto for high precision measurement requirement, Mould parts measurement.

#### Matching machine model:

A-CNC	AC-CNC	AZ-CNC
AM-CNC	S	E

#### Recommend brand:

Japan Keyence Japan OMRON



## Optical Projector Series

This digital type high-precision projector is a highly efficient measuring instrument integrating light, machine and electricity. It can be widely used for industries such as mold manufacturing, metal work pressing, electronics, instrument, horologe, as well in universities, research institutes and metering examination departments.

### Vertical $\phi$ 300mm profile projector

Model	SP-3015B (Erect Image)	SP-3020B (Erect Image)
Metal stage size:	340×152mm	400×225mm
Glass stage size:	190×75mm	210×112mm
Travel—X, Y axis:	150×50mm	200×100mm
Z axis travel:	80mm	80mm
Over dimensions:	480×780×1150mm	380×806×1065mm
Weight:	135kg	180kg
Projection screen: effective diameter (mm):	$\phi$ 300mm, working scope > $\phi$ 300 (internally marked with asterisk-shaped line)	
Projection screen's rotation angle:	0~360°	
Resolution of rotation angle:	0.01° or 1'	
Accuracy of the rotary angle:	6'	
Object lens's magnification:	10× (standard) 20× (optional) 50× (optional) 100×	
View-field of object (mm):	$\phi$ 30 $\phi$ 15 $\phi$ 6 $\phi$ 3	
Working distance for object (mm):	75 69 26 26	
Resolution of X Y:	0.001mm(digital display)	
Accuracy:	(3+L/75) $\mu$ m	
Stage support	3kg	
Data processor:	DS-401 or DS600	
Ascent and descent mechanism:	45° oblique tooth gear	
Profile light source	12V/100W tungsten halogen lamp	
surface light source	24V/150W tungsten halogen lamp	
Power supply:	110V/220V (switch) ; 50/60HZ( switch)	
Optional accessories:	attached RS232 interface, optional 2D measuring software	



### Horizontal $\phi$ -350 $\phi$ 400mm Profile Projector

Model	SP-25	SP-26
Projection screen	$\phi$ 350 mm	$\phi$ 400 mm
Rotation range	360°	360°
Objective Magnification Power	10X 20X 50X 100X	10X 20X 50X 100X
Object Visual Field	$\phi$ 35mm $\phi$ 17.5mm $\phi$ 7mm $\phi$ 3.5mm	$\phi$ 40mm $\phi$ 20mm $\phi$ 8mm $\phi$ 4mm
Object Working Distance	88 mm 81 mm 54 mm 45mm	88 mm 81 mm 54 mm 45mm
Range of X-coordinate (mm)	200mm	250mm
Range of Y-coordinate (mm)	150mm	150mm
Resolution	0.001 (mm)	0.001 (mm)
Load capacity of the worktable(kg)	10kg	15kg
Worktable area (mm)	400x150mm	450x150mm
Stroke of Z-coordinate (Focusing)	0-80 (mm)	0-80 (mm)
Accuracy of the instrument	(3+L/75) $\mu$ m,	
Transmission lighting	24V 150W Halogen tungsten lamp	24V 150W Halogen tungsten lamp
Reflecting lighting:	24V 150W Halogen tungsten lamp	24V 150W Halogen tungsten lamp
Overall sizes of the instrument (mm)	687×443×942	687×443×942
Mainframe weight	150 kg	150 kg





## OT Series Features:

- Reliable measurement only by pressing the start measurement button.
- Measurement time will be reduced from 5 minutes to 5 seconds.
- Auto-measurement breaks through the traditional measurement limitation!
- A new measurement way-- "Place and Press"
- No need for positioning, focus adjustment, work stage adjustment and data record.



press the key ensure the measurement

## OT-Series Specification:

Model	QT50	QT70	QT80	QT120	QT150
Field of View(mm)	69*51	92*68	104*77	166*123	201*151
Magnification	0.267	0.2	0.177	0.111	0.09
Accuracy	3um	5um	5um	8um	12um
Repeatability	2um	2um	2um	3um	5um
Machine Size(cm)	40*46*90	40*46*90	55*63*130	90*60*150	90*60*185
Weight(kg)	30	38	55	120	180
CCD	3.0 Mpxl	5.0 Mpxl	8.0 Mpxl	12.0 Mpxl	12.0 Mpxl
Measuring speed	≤5s (withn100mm)				
Optics	Double telecentric lens				
surface illumination	Zoomable ring light source				
Profile illumination	Parallel Telecentric coaxial light source				
Z Axis travel	50mm				
Auto Focus	Yes				
Software	SBK-OT Soft				
Operation environment	Temperature:20°C±5°C, Humidity:40-75% Vibration: <0.002g, lower than 15HZ				
Voltage & Power	220V/50HZ/3A, 150W-300W				
warranty	1 year				

## Metallographic Tool-Make Microscope

### Features:

MC-Series metallographic tool-maker ,microscope adopts the latest Z-axis automatic measuring system which is researched & developed by the SOBEKK itself. With the automatic focusing system, the repeatability can reach 1.5 UM by using the most advanced optical fiber high-definition camera, which is the highest accuracy of optical measurement for z-axis measurement of the microscope in China.

With the automatic focusing system of Z axis, it greatly reduces the complexity of manual operation.

The MC-Series metallographic microscope is equipped with the latest MX infinite distance correction optical lens or NIKON's latest CF160 infinite high resolution optical lens.

Under the observation of a high magnification, the resolution of the workpiece will be increased , and the working distance of the standard high ratio can reach 1mm.

The five-hole circumvolve nosepiece can be used for the bright field observation. The bright & dark field or bright & dark field with DIC is available also.

The lamp source adopts the international advanced LED lighting to minimize the thermal expansion error that caused by the use of halogen bulb in the past.

Different circumvolve nosepieces can be selected according to your test requirements.

By using the integrated MM controller interface support, the latest DP - E1 data processor or SC counter and SBK-MAX data processing software,

the MC-300/400 can provide you with excellent geometric data processing & storage capacity.

With Electronic handwheel gear device for coarse and fine tuning, it makes the instrument semi-automatic to improve the accuracy.

Applications: precision mould measurement, microelectronic observation and measurement, TFT liquid crystal inspection and measurement, 4"/5"/ 6"/8"/12" semiconductor wafer inspection and measurement.



## MC-Series Specification:

Model	MC-300	MC-400
Table travel range(XYZ)	300X200X150mm	400X300X150mm
Dimension	900*700*980mm	1000*800*980mm
Resolution	0.0001mm	
Accuracy	( 2+250/L) um	
Repeatability accuracy	2um	
X.Y move style	Manual handle	
Z move style	Automatic focus(servo motor)+ Manual pulse handwheel focus(min	
CCD	1/2 inch 750 line color camera	
Software	SBK-MM	
Work-table loading	20KG	
Illuminating system	21V150W cold light source transmission, 10W LED reflection	
Nosepiece	Five-hole objective rotary table (with DIC slot)	
Optical eyepiece tube	Trinocular tube	
Eyepiece	WF 10X/22	
Adaptor lens	0.5X, 1X	
Magnification	10 X -3000 X	
Bright filed lens	LWD PLAN 5X:	(N.A) 0.14, working distance :10.8mm
	LWD PLAN 10X:	(N.A) 0.25, working distance:10.0mm
	LWD PLAN 20X:	(N.A) 0.40, working distance: 4.0 mm
	LWD PLAN 50X:	(N.A)0.55, working distance: 7.5 mm
Optical system	CSiC infinity correction optical system	
Power	220V±10% , 50Hz , 0.5KW	
envirment requiry	temperature range: 22±2°C , humidity range: 30%-70%	
optional parts	100X lens, Dark-field, polarized, DIC(differential interference	



## Stereo/Video /Measuring Microscope >> Feature

- Are widely used in : school teaching in the nature science; Daily inspection of medical institutions
- The assembly, test, measuring, and quality control for precision manufacturing, especially for checking IT industry .

### Binocular zoom stereo microscope

Model No	SBK-6745
Angle of viewing head	45 Degree
Magnification	01:06.7
Eyeiece	WF10X/22mm
Magnification	6.7-45X
Interpupillary range	54-75mm
Working distance	95mm



### Trinocular zoom stereo microscope

Model No	SBK-0745L
Magnification	01:06.7
Angle of viewing head	45 Degree
Eyeiece	WF10X/22mm
Magnification	6.7-45X
Interpupillary range	54-75mm
Working distance	105mm



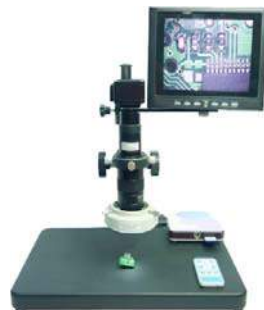
### Gimbal trinocular cameral microscope

Model No	SBK-6745LW
Magnification	01:06.7
Angle of viewing head	45 Degree
Eyeiece	WF10X/22mm
Magnification	6.7-45X
Interpupillary range	54-75mm
Working distance	95mm
Horizontal moving distance	235mm
Height of vertical upright	380mm



### Vision microscope( view, measure, store)

Model No	SBK-0745T
Magnification change	01:06.7
CCD	3 million Pixels
Magnification	27-176X
Working distance	105mm
Display	9 inches LCD
Base size	320*260*12



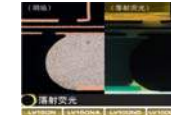
## Metallographic microscope >> Feature

- As the new series of microscope for industrial, can meet the observe requirement for development, quality management, and internal inspection of manufacturing process.
- Application field: semiconductor inspection, FPD, circuit package, circuit board, material, medical equipment, casting, metal, ceramic parts, precision mould

### LV-150N/NL/NA metallographic microscope



Board: it can use standard and high contrast DIC plate that suitable for sample observe, the series of LV-N very suitable for observing the small difference in precision mould and equipment.



Semiconductor(IC chip):the LV-N series adopt a full range of anti-glare measures for the system of objective lighting, to ensure generate a bright, high-contrast image.



Semiconductor(IC chip): It can realize the bright observation in the dark field through adopt the system of objective dark field lighting that developed by Nikon, thus to inspect the specimen' s difference and defect in a high precision way.



Board(welding spot):the LV-N series show a excellent performance for observing the specimen of organic EI or install the board that have florescenc.



### SBK-120 small metallographic microscope

Optical system	Infinite flat field optical system
Objective	Infinity flat field achromatic long working distance
Metallographic objective	4X / 0.1 / 17.3 . 10X / 0.25 / 10 . 20X / 0.4 / 5.8 . 40X / 0.6 / 2.9
Eyeiece	PL10X High focus flat field eyepiece , view field φ18mm
Observing tube	Positive Hinge trinocular, 25°incline
Illuminating system	Kohler and vertical illumination system with variable aperture diaphragm and view field variable barrier diaphragm
Illuminating	6V/24W halogen lamp
focusing	Coaxial coarse/fine adjust focusing
Objective converter	Four converter
Object Stage	Double movable platform , size 150X140mm, range : 75X50mm
Color filter	Blue, green, yellow, frosted glass sheet



### SBK-6R large metallographic microscope

Optical system	Infinite flat field optical system
Objective	Infinity flat field achromatic long working distance
Metallographic objective	5X/0.17/12, 10X/0.25/6, 20X/0.4/5, 50X/0.7/2, bright and dark field
Eyeiece	PL10X High focus flat field eyepiece , view fieldφ22mm
Observing tube	Positive Hinge trinocular, 25°incline
Illuminating system	Reflective Kohler illumination, bright and dark field, simple polarized interface, 12V/100W halogen lamp, preset center, using digital dimming, with light intensity setting and reset function, with variable aperture diaphragm
Focusing	Coaxial coarse/fine adjust focusing, coarse adjust 33mm (focusing 1mm) fine adjust 100 um/circle
Adjustable precision	1um
Max sample height	32mm
Objective converter	Five converter
Object Stage	6 " rectangular mechanical movable platform, range 158*158mm, low coaxial adjustment, with clutch control handle, can quickly move



## Intelligent professional measuring software

### Make your measurement more precise



#### Concise Interface

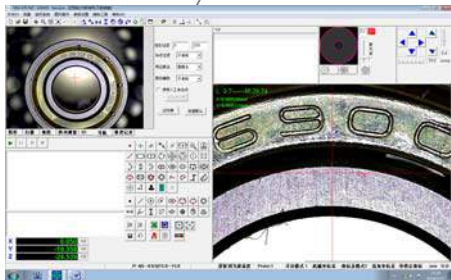
- SBK measuring software, is the latest professional software of SOBEK Corp. It's easy-to-use and user-friendly, with a quick measurement programming and operating control.

#### All-around geometrical elements measurement

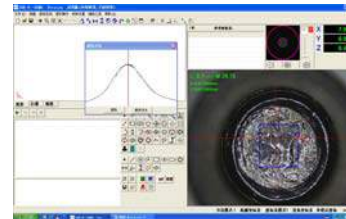
- SBK measuring software performs geometrical elements measurement such as points, lines, circles, arcs, curves, ellipses, rectangle, groove, rings, distances, angles & points group, selecting tested elements quickly. It can build center point, endpoint, intersection, two straight, parallel, perpendicular, tangent, centerline, merge line, merge circle, merge arc, providing powerful technical support for automatic measurement.

#### Powerful compatibility makes your measurement more quick and accurate.

- Surface illumination, profile illumination & coaxial lighting supported. Segmented independent controlled surface illumination performs map navigation function, making an intuitive and quick measurement. Providing CAD draft input & edit, build a coordinate for program measurement directly. Software controlled lighting. Auto-focusing, auto lighting adjustment, auto probe running.

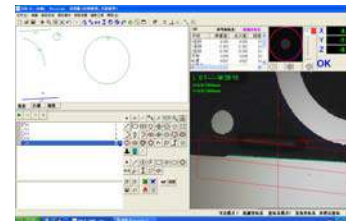


## Software Functions



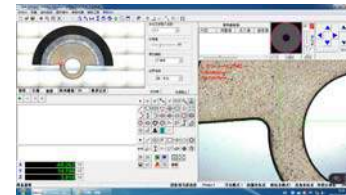
#### Precise auxiliary focusing

- Identifying the best surface of testing object for measurement automatically through software control can reduce visual error of artificial focus, increasing the accuracy and stability for measurement.



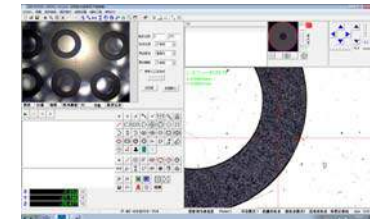
#### Automatic circle & line detection, segmented automatic detection

- Draw a circle or a line automatically; For a large work-piece, it can draw a circle or a line segmentally, that makes the measurement more precise and reduce the artificial measurement error.



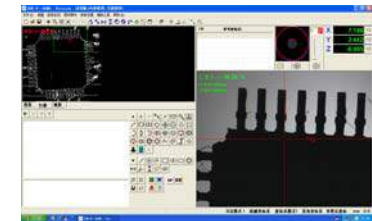
#### Full view scanning & mapping

- Software can be used for scanning the tested area of the work-piece only by selecting the diagonal of tested area, and combine all the part views into a complete image.



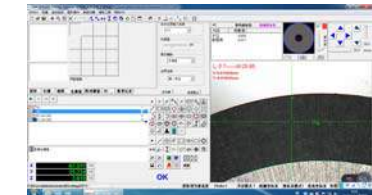
#### Vision navigation

- A wide field navigational system, can quickly locate the position of the work-piece that needs to test, reduce the trouble of detect the tested position of a work-piece and enhance the efficiency of measurement.



#### Draft comparison & template function

- Input the CAD draft of the work-piece, to compare with the real work-piece
- Supporting concentric circle measurement, grid template distance measurement, crosshair template angle measurement



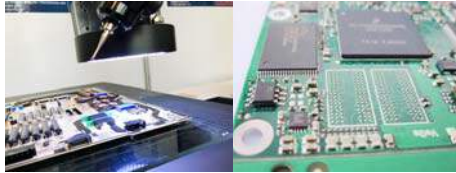
#### Marco Measurement & Elements Preset

- Preset the point, line, circle, arc, oval, rectangle, groove and ring directly by keyboard.
- Marco measurement can complete the elements combination to reduce the manual operation and increase the efficiency of measurement.

# Application Field

## I. Electronic manufacturing

- Vision measuring machine is suitable for PCB manufacturing, mobile phone manufacturing, terminal connector manufacturing, lead frame, switch, home appliance manufacturing, backlight module and so on.



PCB manufacturing

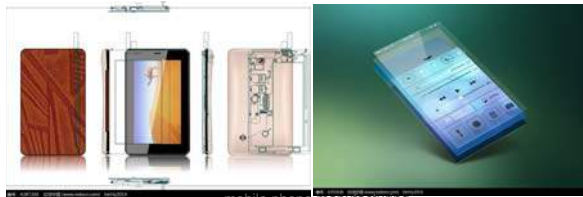
### PCB manufacturing

In the PCB industry, Vision measuring machine is mainly used in high-density PCB profile measurement. Nowadays, customers have strict requirements on the appearance of PCB on the basis of the strict requirements of electrical products performance. Its shape tolerances also tend to be harsh, so the Vision measuring machine just makes up for this gap.

In addition, if it is possible the tech can be expansion, Vision measuring machine can also be used for PCB film measuring and a high level inspection for production tools when plate making. Through the engineering data provided, checking distance between PCB and film by Vision measuring machine, then data list analysis, which can get science PCB film expansion coefficient, thus scientifically assisted in production.

### Mobile manufacturing

Mobile phone parts has the characteristics of small, thin and soft, and the measurement of these parts is required more and more accurate, more and more high quality requirements, the vision measuring machine has a powerful zoom function, focus on precision measurement of small size, all components of the mobile phone body are required for rapid measurement and detection by vision measuring machine, so achieve high quality, high efficiency of the production



mobile phone manufacturing

## II. Mechanics manufacturing

- vision measuring machine is suitable for the following products: fixture, gauge, box, stamping parts, casting, sheet metal parts, molds and other precision measurement. Sobek vision measuring machine used to measure mechanical parts's precise dimension, including position, concentricity, straightness, roundness, profile dimensions.



injection mould

manufacturing cylinder block

### Terminal connector manufacturing

Array aligned products, the measurement software does not require full scanning when programming, just uses replication, so can reduce time for programming and improve design efficiency.



terminal connector manufacturing

## III. Liquid crystal display

- Vision measuring machine is suitable for the following products: LCD panel, mobile phone panel, OLED, LED, LCD, optical fiber, touch screen, arc surface and so on.

With the improvement of living standards, display technology develop, high-definition display is used by more and more industries. LCD industry is becoming more and more high-quality. From cutting to printing, assembly, inspection, and the inspection and manufacture of related materials, each process needs to be strictly controlled.



LCD display

## IV. Precision hardware

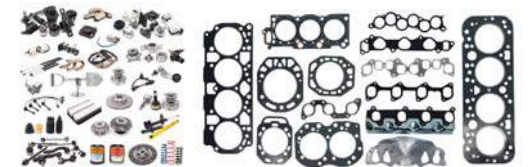
- Vision measuring machine is applies to measure following products: shaft diameter, bearing, blind holes, steel nets, cutting tools, screws, springs, sealing parts, tool-machine accessories and so on, by virtue of ours measurement technology and software technology, to satisfy the precision hardware refinement, standardization, automation, high efficiency requirements.



precision Hardware gear

## V. Auto manufacturing

- Vision measuring machine is suitable for measuring following products: engine case, plastic parts, auto pipes, cam, glass, spark plug, engine fittings, instrument panel, lamps and lanterns, and other accessories.



auto part manufacturing

## VI. Industrial materials

- Vision measuring machine is suitable for measuring following materials: magnetic materials, insulation materials, ceramic materials, glass materials, plastic materials size measurement.



soft material sealing ring

magnetic materials

# Customer succeed cases

Successfully applied to the following enterprises

**Abjen** 艾比森

艾比森

**SYTECH** 生益科技

生益科技

Electronic Components  
**TOKIN**  
A KEMET Company

东金电子科技

**wistron**

緯創資通

**TPK** ★  
touching tomorrow, today

宸鸿技术集团

**SUGAR**  
糖果手机

糖果手机

**SWACOO**

舒旺高

**大族激光**  
HAN'S LASER

大族激光

**maxon**

美晨

**SGS**

国际公证行

**POWTEK** 力科

力科

**Hisense**

海信

**TÜVRheinland**  
Precisely Right.

德国莱茵TÜV

**TURBO LIGHT**

广州宝格电子有限公司

宝格电子

**YAHUA**  
亞華

亞華

**CSOT** 华星光电

华星光电

**DIAL** 厦门达尔电子有限公司  
Xiamen Dial Electronic Co., Ltd

达尔电子

**DESAY** 德赛

德赛

**CXINH**

创新通恒

**KINGFA** 金发科技

金发科技

**dji**

大疆创新

**CEIC**

中國電科



华宇创新