

E SERIES
VIDEO MEASURING MACHINE



specialize manufacture 15 years



PowerTech s.c.
ul. Beskidzka 23
32-615 Grojec
woj. małopolskie, Polska

E Series Manual Vision Measuring Machine



2D AND 2.5D MEASUREMENT

HIGH-DEFINATION IMAGE DISPLAY

VISION MEASURING HEIGHT FUNCTION

AUTO EDGE DETECT FUNCTION

ONLINE SPC FUNCTION

MULTIPLE OUTPUT FORMATS:WORD EXCEL CAD

Features

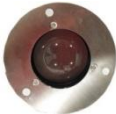
- "HIWIN" P level linear guideway and precision cross roller guideway for increased accuracy & working life
- Integrated granite base and column ensures machine stability.
- Supplied with SBK-E multifunctional 2.5D measuring software, automatic edge detection and vision height measurement function.
- Supplied with removable & dismountable 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.

Model	Voltage input	Power
E200	110-230V alternate current	500W
E300	110-230V alternate current	500W
E400	110-230V alternate current	500W
E500	110-230V alternate current	500W

Specification

Model	E200	E300	E400	E500
Measuring range(mm)	200*100*200	300*200*200	400*300*200	500*400*200
Machine size(mm)	750*1300*1500	750*130*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			
Magnification	optics zoom ratio: 0.7-4.5X; image zoom ratio: 24-158X			
Control system	SBK3000 control box, USB port, adjustable light			
Operated mode	handle wheel			

Main Parts

Parts	Picture	Specifications
CCD		SBK-HC 1/3 inches 600 line CCD
Optics		6.5:1 continual zoom step lens
Surface illumination		*LED cold light *256 level programmable *Brightness adjustable
Bottle illumination		*LED cold light *Parallel light *256 level programmable *Brightness adjustable
Linear guide		Taiwan P grade linear guideway
Linear scale		Glass linear scale resolution 1um

Optional Part

1. Renishaw MCP probe

		
	MCP Parameters	
	Induction direction	$\pm X, \pm Y, +Z$
	Positioning repeatability	$\pm 1.5\mu m$
	induction force	12g
	Probe connector	M3
	Working range	Z direction 5mm, XY direction $\pm 20^\circ$
	probe model	$\phi 1 \times 21mm, \phi 2 \times 21mm, \phi 3 \times 21mm$

Machine Display

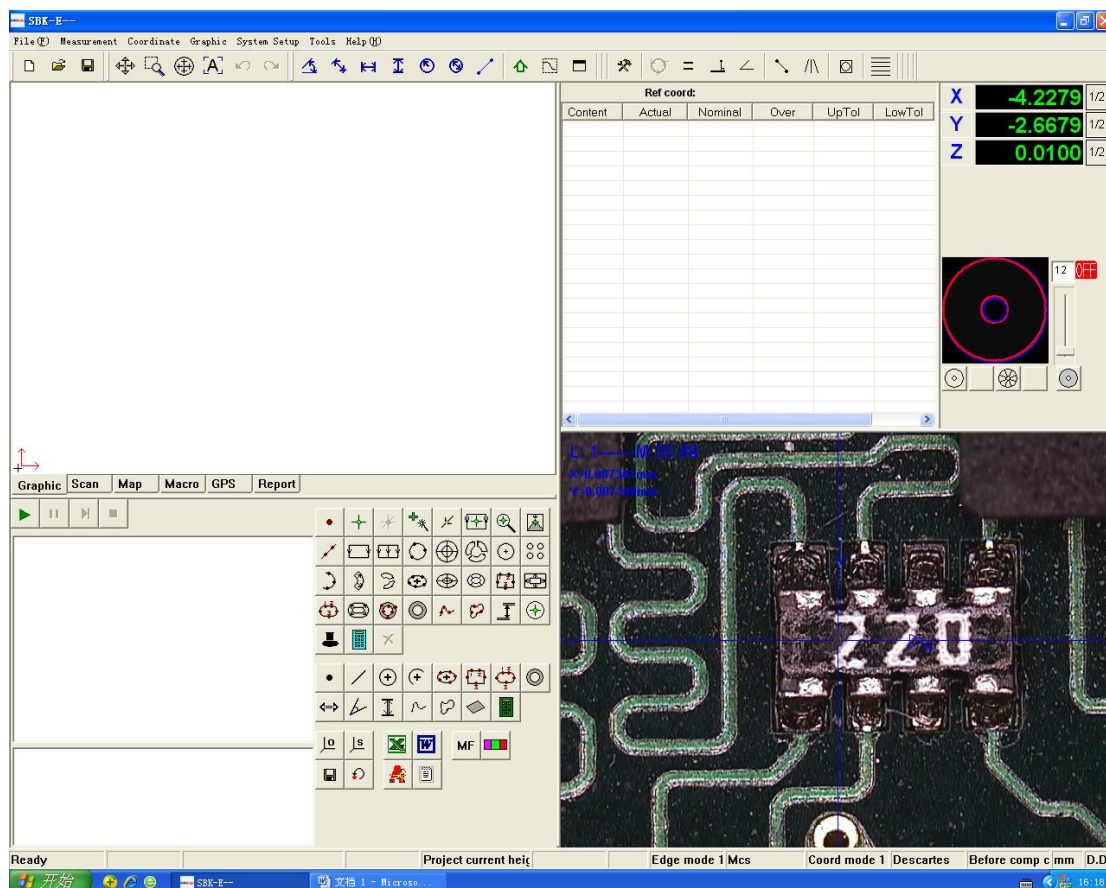


Inner wiring



Software (SOBEK-E manual 2.5D)

Software interface



Software Main Function

- **Element measurement**, It can measure 12 elements (point, line, circle, arc, ellipse, rectangle, groove, ring, distance, angle, open cloud line, closed cloud line)
- **Macro measurement function**, to associate some of the measurement construction commands to a button, reduce the number of users to operate the mouse, improve work efficiency.
- **Automatic capture measurement**, using the mouse circle to hold the edge of the workpiece, the line, circle, or arc can be obtained automatically
- **Element structure**, The construction of elements provides 10 construction methods: translation, rotation, extraction, combination, parallelism, image recognition, symmetry, intersection.
- **Rich display results**, The measurement results of various elements show that the amount of information is large enough to meet the needs of various customers
- **Can display optical magnification and screen magnification**,
- **Coordinate system**, the multiple coordinate system can be set up according to the drawing, and the coordinate transformation of each coordinate system can be realized.
- **User program**, Unrestricted user program recording, editing, saving, and exhaling function, The user program can record and edit all the user actions to achieve the replication measurement and greatly improve the measurement efficiency.
- **Auxiliary dimming**, The dimming indicator will indicate to the user what time the best light intensity, measuring error caused by light is avoided
- **Graphic function**, With perfect graphics processing and display function (zoom, translation, window display, partial enlargement and full screen display)
- **Annotation function**, It can directly mark the angle, distance, X direction distance, Y direction distance, circle (ARC) radius, circle (ARC) diameter and arc length in the drawing area and image area element graphics
- **System error correction**, The software has a system error correction function.
- **Scan function**
- **Large MAP function**, The workpiece can be divided into many areas to take pictures, form a large map, and can be tagged on the map.
- **Language conversion**, Support all languages
- **Report function**, The measurement data can be exported to Excel, Word, AutoCAD and TXT.

(More software function please check the software manual)

Computer

Brand: Industry computer	
CPU: 2.5G	
RAM: 2G	
Hard Disk: 1000G	
Monitor: 19.5 inch	

Packaging (Wooden Case)



Model	Packaging Size (mm)	Gross Weight (kg)
E200	1430*1120*910	285
E300	1430*1120*910	285
E400	1600*1070*1230	421

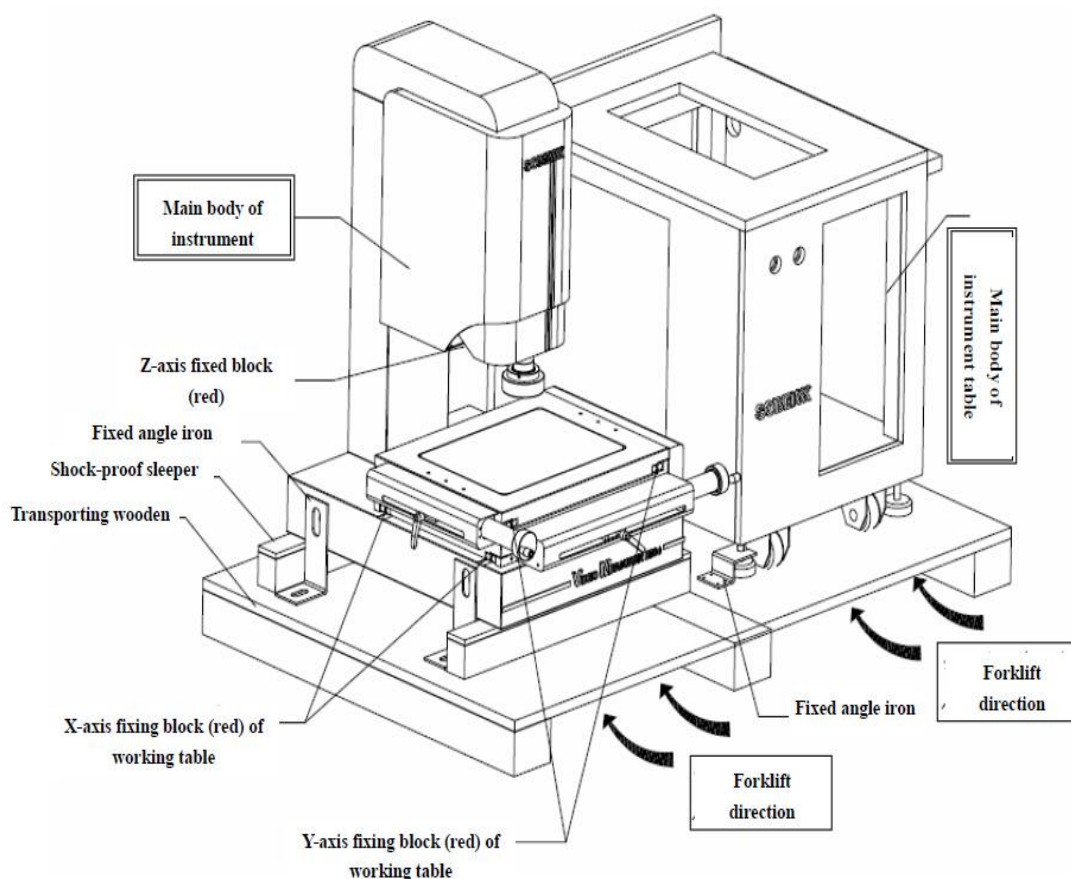
Standard Configuration List

Models and specifications	Quantity
E series host	1PC
E series manual measuring software version combination lock	1PC
E series manual measuring software installation CD	1PC
Pixel correction block	1PC
Industry computer	1PC
Instrument use manual	1PC
Software specification	1PC
Instrument factory certificate	1PC
Host power	1PC

Disassembly of Wooden Box and Installation of Instrument

(Using tools: straight screwdriver, Phillips screwdriver, adjustable wrench, 5mm Allen wrench, 6mm Allen wrench)

- 1) Remove the fixed angle iron of "instrument table" with the corresponding wrench; (the instrument table has two pieces of fixed angle iron)
- 2) Lift down the "instrument table" and stably place it on the ground, and then level the footing;
- 3) Remove the fixed angle iron of "instrument" with the corresponding wrench; (the instrument has four pieces of fixed angle iron)
- 4) Lift up the "instrument" with the "lifting handle", and then place the instrument on the instrument table. The periphery of instrument shall be flush with the instrument table;
- 5) (The instrument is heavy, so it needs to be lifted by four adult men or using a suitable forklift) Place the spirit level under the "glass of working table", and then adjust the footing to level the instrument;
- 6) Remove the fixed blocks in the X axis and Y axis of "working table", so that the working table can move in X and Y directions;
- 7) Remove the "fixed block of Z-axis" (red) so that it can move in the direction of Z-axis;



Company Detail

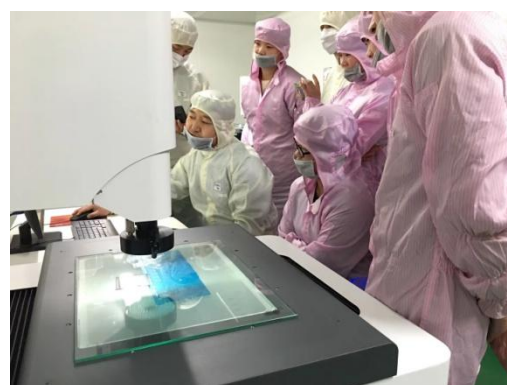
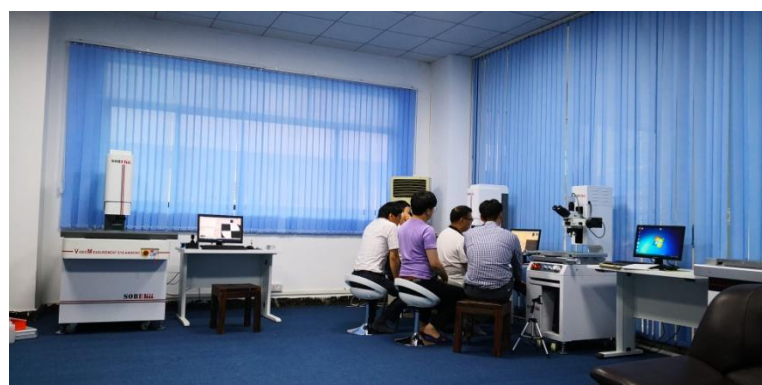
Establish time: Found in 2014, 7 sale centers and after-sale service centers, 1 R&D development center

Production capacity: 1000 set/year

Sales area: more than 30 countries and regions (Thailand, Vietnam ,Malaysia, Korea, Canada, Indian, UK, Poland, US, Mexico...)

Goal: to be the most stable video measuring machine in china

our customer:



our exhibition:





our workshop plant:



**Szkolenie oraz uruchomienie zapewnia Power Tech s.c.
Gwarancja 12 miesięcy. Opcjonalnie dostawa wraz
ze świadectwem wzorcowania PCA.
Możliwa prezentacja urządzenie w siedzibie naszej firmy.
Zapraszamy!**