

# SVA-A – Reduces Costs and Enhances Quality

## XYZAX SVA-A

### CNC 3D Coordinate Measuring Machines



**New series that incorporates Carl Zeiss technology**  
**Space precision compensation technology dramatically improves measuring accuracy.**  
**Thermal compensation function equipped as standard for improved environment resistance**  
**Powerful software includes AI functions as standard. (Patented in Japan and overseas)**



#### ■ Features

##### Integrates ZEISS Technology

This CNC machine combines CARL ZEISS control technology with ACCRETECH hardware.

##### High-Speed Measurements

The incorporation of a ZEISS high-performance controller has reduced the required CNC measuring time by approximately 30% (comparison with other ACCRETECH machines).

##### AI Function (patented in Japan and overseas)

An AI (Artificial Intelligence) function enables measured shapes to be automatically recognized. This dramatically reduces the number of input steps, making the machine easy to operate even for beginners.

##### Standard Temperature Compensation Function

Temperature compensation enables measurements to be made at measuring room temperatures between 16 and 26°C. This substantially reduces the operating cost for the air conditioning system.

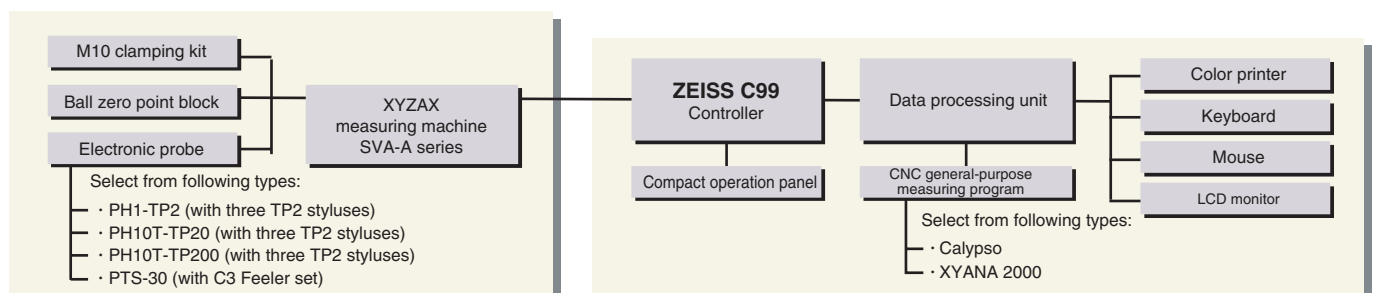
##### Compact Operation Panel

The operation panel is compact and can be used at the desired location around the measuring table.

##### Optional LCD Monitor with Touch Panel (Standard Feature with XYANA Specifications)

Placement of this optional monitor on a mobile stand enables operation at the most convenient location.

#### ■ Main System Configuration



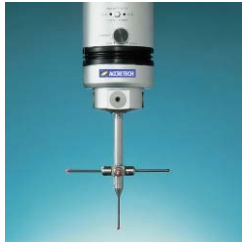
3D Coordinate Measuring Machines

## Electronic Probes

## Compact operation panel



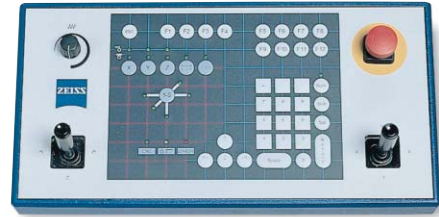
PH10T-TP200/TP20



PTS-30



PH1-TP2



### Specifications

Model		SVA600A	SVA800A	SVA1000A	SVA1500A	SVA1010A	SVA1012A	SVA1015A	SVA1215A	SVA1220A	
Measuring Range	X-axis (mm)	650	850			1000			1200		
	Y-axis (mm)	500	600	1000	1500	1000	1200	1500	1500	2000	
	Z-axis (mm)	450	600			600/800			1000		
Measuring Scale		Optical Linear Encoder									
Minimum Display Value		0.01 μm									
Measuring Accuracy	Maximum Permissible Indication Error MPE <sub>E=L</sub> L is the distance between two points (mm)	1.9+4L/1000 μm (Temperature Conditions A)			2.4+4L/1000 μm (Temperature Conditions A)		2.9+5L/1000 μm (Z600) (Temperature Conditions B)			3.5+5L/1000 μm (Temperature Conditions A only)	
	Maximum Permissible Probing Error MPE <sub>P=TP200</sub>	2.4+4L/1000 μm (Temperature Conditions B)			2.9+4L/1000 μm (Temperature Conditions B)		3.2+5L/1000 μm (Z800) (Temperature Conditions A only)			3.4 μm	
		2.2 μm (Temperature Conditions A)			2.7 μm (Temperature Conditions A)		3.2 μm (Z600) (Temperature Conditions B)			3.4 μm (Temperature Conditions A only)	
Table	Material	Granite									
	Usable Width (X) (mm)	800	1000			1150			1370		
	Usable Depth (Y) (mm)	1270	1370	1810	2310	1810(Z600) 1910(Z800)	2010(Z600) 2110(Z800)	2310(Z600) 2410(Z800)	2410	3010	
	Height from Floor (mm)	725			725(Z600), 600(Z800)			600	650		
	Flatness	JIS Class 1									
Workpiece Measured	Max. Height (mm)	620	770			770(Z600), 970(Z800)			1170		
	Max. Weight (kg)	400	800	1000	1500	1000	1200	1500	1500		
Drive Speed	Maximum Acceleration/Deceleration	1700mm/sec <sup>2</sup> (Z600), 1200mm/sec <sup>2</sup> (Z800), 700mm/sec <sup>2</sup> (Z1000)									
	Available Speed Range	CNC Measurement Mode: 0.01 - 425mm/sec (stepless adjustable) Joystick Mode: 0 - 120mm/sec (stepless adjustable)									
Guide System for Axes		Air bearing									
External Dimensions	Width (mm)	1415	1615			1765			1965		
	Depth (mm)	1440	1540	1980	2480	1980(Z600) 2080(Z800)	2180(Z600) 2280(Z800)	2480(Z600) 2580(Z800)	2580	3180	
	Height (mm)	2455	2655			2655/2930			3330	3380	
Machine Weight (kg)		1450	1600	2700	3400	3000(Z600) 3200(Z800)	3200(Z600) 3400(Z800)	3500(Z600) 3700(Z800)	4500	6300	
Air Source	Supply Pressure	0.49 - 0.69MPa									
	Air Consumption Volume	40Nℓ/min			40Nℓ/min(Z600), 60Nℓ/min(Z800)			65Nℓ/min			
Power Requirements	Voltage, Consumption	AC100V±10%, 1500VA									

\*1 MPE<sub>E</sub> (Maximum Permissible Indication Error) and MPE<sub>P</sub> (Maximum Permissible Probing Error) are based on the ISO 10360-2:2001 (JIS B 7440-2:2003) evaluation method for 3D coordinate measuring machines.

\*2 Measuring accuracy values when standard stylus (φ 4, L20mm) is used.

	Temperature Conditions A	Temperature Conditions B
Ambient Temperature (°C)	18 - 22	16 - 26
Temperature Change (°C/hour)	1.0	2.0
Temperature Change (°C/day)	2.0	5.0
Temperature Gradient (°C/m)	1.0	1.0