

# ACCRETECH XYZAX SVF NEX

Full renewed design of our long-selling machines,  
 RVF series Newly improved entry model of manual type,  
 high precision 3D measuring machine.

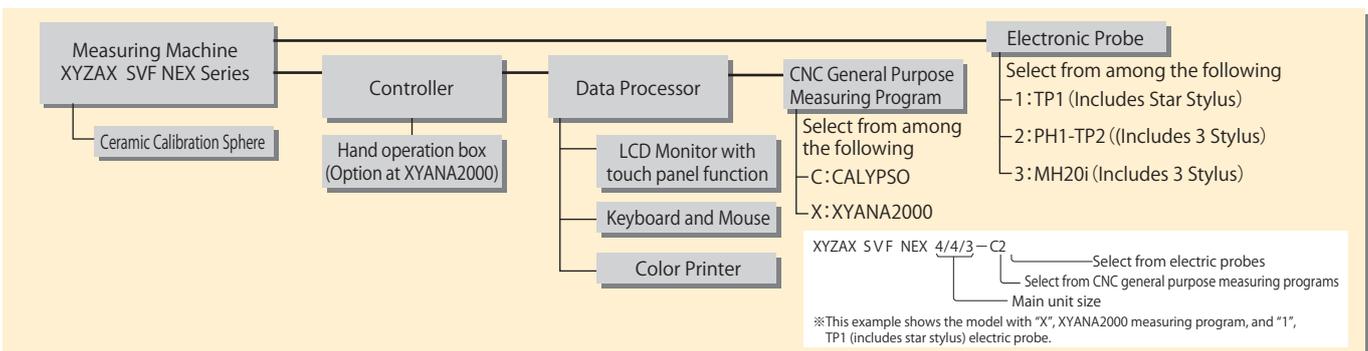


XYZAX SVF NEX 6/5/3-X3

\*PC rack and swing probe is optional



## Basic System Configuration



## AI (Artificial Intelligence) Function

Measured geometric forms are detected automatically (geometric form AI), which eliminates the need to specify form elements for each measurement for greatly enhanced efficiency. Automatically detected geometric form elements are: points, straight lines, circles, flat surfaces, ellipses, spheres, cylinders and cones.

A coordinate system AI function and coordinate system assist function make coordinate system settings as easy as performing a series of measurements.

- The coordinate system assist function comes with 20 pre-registered settings that make it possible to perform measurements by following the instructions that appear on the screen.
- The coordinate system AI function configures settings automatically in accordance with measuring elements and coordinate system settings.

Measuring Example	Conventional Approach	AI
Hole-to-Hole Center Point Measuring 		
Hole-to-Axis Coordinate Difference 		
Measuring of Intersect and Intersect Angle of the Axis of a Core and a Cylinder 		

## Light weight design that does not cause fatigue even in long hours of measurement

Aged, surface-hardened aluminum alloy is used for the X-guide and Z-axis, which are finished to a high level of straightness accuracy. Since moving parts are lightweight, there is less inertia to overcome when measuring, which reduces operator fatigue.



## Braking Function (option)

The braking function facilitates manual operation using a centering microscope. The effects of air bearing inertia are suppressed to allow minute positioning.

## High Rigidity Maisonette Bridge Structure

Since Y-axis is the basis for measurement accuracy, its guide is required to be stable. The machine features a table with precision finished sides and Maisonette bridge structure (guides on both sides of the table) with a spring mechanism. This provides high rigidity and allows stable measurement accuracy to be maintained over long periods.



## Knob-based Smooth Fine Feed

An X,Y, and Z-axis adjustment knob is positioned for easy operation. Smooth, fine feed of 0.5 mm per rotation are particularly effective when measuring with a microscope or ITV camera.



## Z-axis Terminate Switch Provided as Standard

Measure, terminate, and intermediate point operations switches are freely selectable during operation. This allows continuous operation without removing your hand from the Z-axis.



## Color LCD Monitor with Touch Panel Provided as Standard (XYANA2000)



All functions appear as color icons on the LCD monitor screen for simple operation, even for inexperienced users. A movable rack (optional) allows the monitor to be moved easily to the desired measuring position.

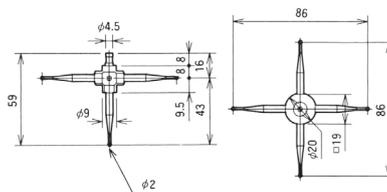
## Electronic Probes (Available as a Set)



TP1

### Star Stylus

Stylus Number 68070



PH1-TP2

### Stylus Set

Shape			
Name	PS23R	PS2R	PS17R
Diagram number	64039	64040	64042



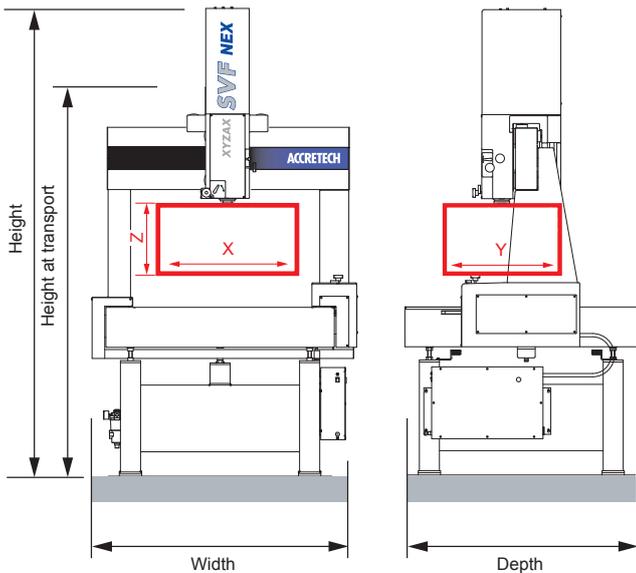
MH20i

### Specifications

Model		XYZAX SVF NEX			
		4/4/3	6/5/3	8/6/6	8/10/6
Measuring range	X-axis (mm)	400	600	800	
	Y-axis (mm)	350	500	600	1000
	Z-axis (mm)	300		600	
Minimum display value (μm)		0.01			
Measuring length scale		Linear scale			
Measuring accuracy	Max. permissible indication error MPE <sub>E</sub> (μm)	3.0 + 4.0 L/1000	4.0 + 5.0 L/1000	5.4 + 5.5 L/1000	
	L is the distance between any two points (mm)				
Table	Material	Gabbro			
	Usable range (mm)	600 x 895	800 x 1045	1000 x 1250	1000 x 1750
	Height from floor (mm)	760			
	Flatness	JIS Class 1			
	Fixing screw for object to be measured	M10 internal screw			
Workpiece	Max. height (mm)	450	450	750	
	Max. weight (kg)	300	400	600	800
Guide system of each axis		High rigidity air bearing			
Probe balancing range		0 to 1 kg (200 g each variable)			
Air supply	Supply pressure/working pressure (MPa)	0.3 to 0.69/0.27		0.4 to 0.69/0.39	
	Air consumption (NL/min)	40 (barometric pressure conversion)			
Power supply	Voltage (V/%), consumption (VA)	AC100 ±10 (grounding required), 500			

●Support of large size other than the above is also available. Please contact us for details.

### External View



### Centering Microscope

Probe Number	Specifications	
7291	7291	7296
7296		
	Total Magnification	20× 40×
	Object Lens	2× 4×
	Eyepiece	10× 10×
	Field of View	Φ 8 mm Φ 4 mm
	Working Distance	67 mm 41 mm
	Field Pattern	Erect Image Erect Image
	Crosshair Offset from Center for Reference A	0.01 mm max.
Accessories	Storage Box Transformer Edge Positioning Gauges	
Weight	Approximately 850g	

Note: In addition to standard templates, broken line, 45° divided line, and other patterns are available as special specifications.

### ITV Camera System

Probe Number	System	Monochrome ITV Camera System	Color ITV Camera System
40481	Monochrome System	Approx. 40 x (Approx. 75 x)	Approx. 80 x (Approx. 110 x)
40568	Color System	High resolution CCD Monochrome Camera	High resolution CCD Color Camera
		Working Distance: 55 mm (29 mm)	
		Field Pattern: Erect Image	
		Digital Lines: Vertical: 2, Horizontal: 2	
		Monitor: 9 inch Monochrome / 10 inch Color	
		Illumination device: Optical Fiber 80 W (Switchable) / Optical Fiber 100 W (Switchable)	
		Power consumption: 78 W / 160 W	

Note: Figures in parentheses ( ) are for 7296 centering microscope.

\*The specification and appearance are subject to change due to the convenience of the supplier.

### Dimensions

Model		XYZAX SVF NEX			
		4/4/3	6/5/3	8/6/6	8/10/6
Dimensions (mm)	Width	990	1190	1490	
	Depth	895	1045	1250	1750
	Height	2105		2705	
Machine height at transport (mm)		1780		2080	
Weight (kg)		580	770	1200	1700

\*Be sure to check the height of passageways, and, in particular, the height of doors and other openings to be used when the machine is delivered. The height of openings needs to be the machine height at transport plus about 200 mm to allow for the dollies used to move the machines.