XYZAX MJU NEX

Dedicated catalog is available.

Compact CNC coordinate measuring machine which realizes energy saving with stable measuring accuracy

MIRFIED



Laptop PC Model (Optional only with Calypso)

The monitor arm specification integrated into a desktop computer (standard model for the domestic market of Japan) further saves space

Compact Design (Eliminated 40% of footprint) *Comparison with our existing machines

The most compact footprint in its class. It enables to select an installation space easily.

Hybrid Guideway Technology Energy Saving Performance:75% less air consumption *Comparison with our existing machines

High rigidity linear guideways on X-, Y (right)- and Z-axes and a reliable air bearing on Y (left)-axis employ hybrid guideway technology. Moreover, it achieves one-forth of air consumption compared with our existing machines. It enables to start with only electricity using a compact air compressor (option).

Eliminate 73% of power consumption Eliminate 73% of CO₂ emission from power consumption

*Comparison with our existing machines

Reduction of power consumption contributes to cut running costs. This environmentally-friendly machine also reduces the CO₂ emission resulting from power consumption.

XYZAX mju NEX 5/8/4-C6 Monitor arm specification for the domestic market of Japan* *The standard specification for markets outside of Japan is the computer rack-type

A new line-up of 5/8/4 size with Y-axis measuring range of 760 mm

A new size with Y-axis measuring range of 760 mm is offered to enable measurement of larger workpieces.



Environment Resistant Design

Bellows are equipped against dust on X-and Y-axes as standard. An air bearing prevents dust from Y-axis (left).

Z-axis scale is mounted on Z-axis column inside of Z-cover for steady air condition. Temperature compensation is implemented as standard.

Smallest Stylus Ball Diameter: Φ 0.3 mm

Stylus with smallest ball diameter is appropriate for measurements of small workpieces and extra small holes.

*For conditions at the time of use, see the note for the specifications table on the next page.



Probe System



Automatic touch trigger probe corresponding to Max. 300 mm extension. Horizontal rotation angle: ±180° Vertical rotation angle: 0 to +105° Indexing steps: 7.5°step <For TP200B> Stylus length: Max. 100 mm with GF Stylus Extension bar: Max. 200 mm



Automatic touch trigger probe utilizes power of Coordinate Measuring Machine (TP20 Built-in) Horizontal/vertical rotation angle: 15° steps



Deliverable through common door frame

Compact design makes it possible to deliver through a common door. As it is not necessary to break the wall for delivery, no extra cost is required.

Type of transportation Item		Standard transport dimension	Minimum transport dimension	Separated transport dimension
mju NEX 5/5/4 size	Depth (mm)	1090	1000	1090
	Width (mm)	1080	1033	1080
	Height (mm)	2112	2096	1570
mju NEX 5/8/4 size	Depth (mm)	1410	1320	1410
	Width (mm)	1080	1033	1080
	Height (mm)	2112	2096	1595



PH1/TP20

Vertical rotation angle: Fixed at optional angle Extension bar: Max. 200 mm <For TP200B>

Horizontal rotation angle: 15° step Vertical rotation angle: Fixed at optional angle (Maximum permissible error of length measurement: E0, MPE (µm) 2.2 + L/250)

SCR200/MCR20 module change rack (Option)

Module change rack enables automated changing of TP20/TP200B stylus modules and improves measuring efficiency. MCR is designed to store up to six TP20 probe modules for automatic changing under measurement program control and to protect them from dust.



■For TP200B



Specifications

Model					XYZAX mju NEX	
				5/5/4	5/8/4	
Measuring range		X-axis		(mm)		510
		Y-axis		(mm)	460	760
		Z-axis		(mm)		410
Length measuring method					Linear scale system	
Minimum unit				(µm)	0.01	
Measurement accuracy*1	TP200B	Maximum permissible error of length measurement E0, MPE (µm) E150, MPE		2.2 + L/250 2.7 + L/250		
		Maximum permi R0, MPL	ssible of the repeatability ra	^{ange} (µm)		1.4
		Maximum permissible single-stylus form en PFTU, MPE		error (µm)	2.5	
	TP20	$\begin{array}{ll} \mbox{Maximum permissible error of length measurement} \\ \mbox{E0, MPE} \\ \mbox{E150, MPE} \end{array} \right)$		2.7 + L/250 3.2 + L/250		
		Maximum permissible of the repeatability range (µm)		1.8		
		Maximum permissible single-stylus form error (µm)		2.7		
	RTP20	Maximum permissible error of length measurement E0, MPE (µm) E150, MPE		2.7 + L/250		
		Maximum permissible of the repeatability range (µm)		2.0		
		Maximum permissible single-stylus form error (µm		error (µm)	3.3	
Guide system of each axis					Linear guide with air bearings	
		Material		Gabbro		
		Effective width (X) (mm)		(mm)	700	
Tabla		Effective depth (Y) (r		(mm)	900	1150
Table		Height from floor (mm)		(mm)	725	
		Flatness		Class JIS 1		
		Fixing screw f	or object to be measured	b	M10 internal screw	
Workpiece		Max. height		(mm) 520		520
workpiece		Max. mass (kg)		200		
		Max. accelera	Max. acceleration/deceleration (mm/sec ²)		1732	
Drive speed		Variable speed range (mm/sec) (mm/sec)		Auto measurement mode 0.01 to 433 (Stepless control) Jovstick and manual mode (Automatic measurement)		
				(mm/sec)	0 to 120 (Stepless control) Joystick and manual mode (Automatic measurement)	
		Measuring speed (mm/		(mm/sec)	0 to 5	
Accuracy guarantee environmental		Environment temperature (°C		(°C)	18 to 22	
		Temperature changes(°C		(°C/hour)	1.0	
temperature conditions		(°C		(°C/day)	2.0	
		Temperature gradient (°C/n		(°C/m)	1.0	
Air supply		Supply pressure / Working pressure (M		(MPa)	0.40 to 0.69 / 0.30	
		Consumption (NL/min		(NL/min)	10	
Power supply		Voltage (V/%)		AC100 ±10 (grounding required)		
External dimensions and mass	External dimensions	Power consun		(VV)	14.45	801
		Width	Monitor arm specificati	on (mm)	1145 1745 (including	data processing unit)
					1743 (including	
			Computer rack specificat	cation (mm)	1905 (including	data processing unit)
		Depth	Monitor arm specificatio		1256	1536
				n (mm)	1745 (including data processing unit) 2000 (including data processing unit)
					1256	1536
			Computer rack specific	cation (mm)	2020 (including data processing unit) 2300 (including data processing unit)
		Height		(mm)	, <u> </u>	2170
	Body mass (kg)		(ka)	660 (including data processing unit)	920 (including data processing unit)	
	Minimum ceiling height (mm)			(mm)	2320	
		Machine height at transport*2		()	2112	
	Machine heigh	nt at transport*2		(mm)		2112

*1 The testing and evaluation methods for Eo, MPE, E150, MPE and Ro, MPL confirm to JIS B 7440-2: 2013 (ISO 10360-2: 2009). Test and evaluation methods for PFTU, MPE are based on JIS B7440-5: 2013 (ISO 10360-5: 2010).

•TP20, RTP20...LF module and the standard stylus •TP200B...SF Module and Standard stylus

Standard stylus specification: Tip is \$\Phi4\$ mm, L20 mm, Renishaw made custom-order stylus

Basic System Configuration



Option

for the dollies used to move the machines.

A4 ink jet printer

•Compact wagon for printer

Notebook PC

•Stand for notebook PC integrated model

*2 Be sure to check the height of passageways, and, in particular, the height of doors and

Note: The following conditions are recommended when using a stylus of Φ 0.3 mm. •Combination of TP20/RTP20 and LF module and the stylus should be at least 20 mm in length (including the extension).

other openings to be used when the ma chine is delivered. The height of openings needs to be thespecified each machine height at transport plus about 200 mm to allow

with anti-vibration rubber, monitor arm, table for PC

- System rack
- •MCR20 module change rack
- •Modules
- •Extensions
- •Stylus
- Optional software

External View and Dimensions mju NEX





Monitor arm specification



40 -700 920 ┥│ 120

1







80

37

74

900 Air source intake 1200-3 (for PH1/TP200B) HEIO-3 (for PH10T) ker swith









