EP Series

PRECISION MICRO FINE HIGH SPEED MACHINING CENTER

EP-4200/EP-6200



O2 Precision Micro Fine HIGH SPEED MACHINING CENTER EP Series O3



04 Precision Micro Fine HIGH SPEED MACHINING CENTER EP Series **05**



PRECISION MICRO FINE HIGH SPEED MACHINING CENTER

High Speed Built-in Spindle

The high-speed, high-precision built-in spindle provides improved quality and productivity. The design employs ultra-precision, high-speed angular ball bearings to achieve a maximum spindle speed of 40,000 to 60,000 rpm to meet a wide range of machining needs.

Short Pitch Feed Shaft Screw

The short-pitch feed shaft screw provides improved feed thrust and quick response to motion commands, leading to the maintenance of high precision.

Standard LM Guide Rail Installation

LM Guide Rail (standard) is used to maintain high-speed operation and high precision to improve productivity and product quality. (rail & ball screw NSK standard)

Minimal Slide Cover Frictional Resistance

By minimizing the frictional resistance of the slide cover, the quality of the workpiece is improved through smooth transfer.

Forced Water Cooling for Spindle

Forced water cooling method for the spindle ensures stable spindle precision.

Linear Scale on All Axes

By installing scales (standard) on all axes (X, Y, Z), stable positional accuracy can be maintained.

Equipped with Z-axis Balance Cylinder

The Z-axis balance cylinder helps reduce the load on the Z-axis servo motor and ball screw, thereby improving the durability of the Z-axis ball screw along with excellent precision.

Automatic Grease Lubricating Device

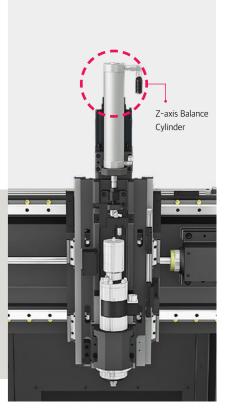
Grease lubricating device is applied as standard to prevent corruption of cutting oil and product contamination. Along with quality improvement, maintenance costs are reduced compared to oil lubricants.











O6 Precision Micro Fine HIGH SPEED MACHINING CENTER EP Series 07

Option

Additional Optional Features for All Your Needs

Integrated)

consistent quality workpieces.

Cutting Oil Cooling Device (Tank

The cutting oil cooling device minimizes the increase in the cutting oil temperature that may occur during long-term machining in the machining center, minimizing displacement by heat of tools and workpieces to maintain accurate and

Work Measuring System

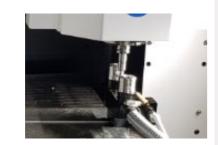
Touch Sensor Tool

The touch sensor tool measures the processing standard of the workpiece through the contact signal between the measuring device and the workpiece, and automatically sets the coordinate values of the basic coordinate system.

Laser Tool Setter

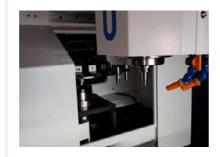
NC4F115 Kit (Renishaw) (optional)





Automatic Tool Changer

• 16 tools (standard)

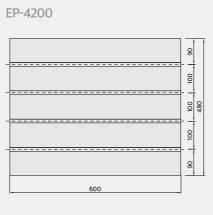


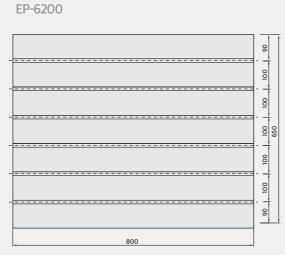
Oil Skimmer

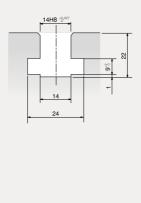
The oil skimmer improves the purity of cutting oil by purifying moisture, cutting oil, and floating substances mixed in the cutting oil tank for machine tools, and improves the cutting power and precision of machine tools by separating moisture and suspended substances.



Table unit: mm



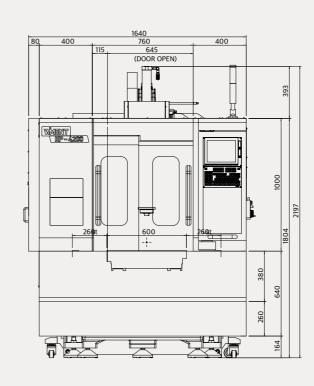


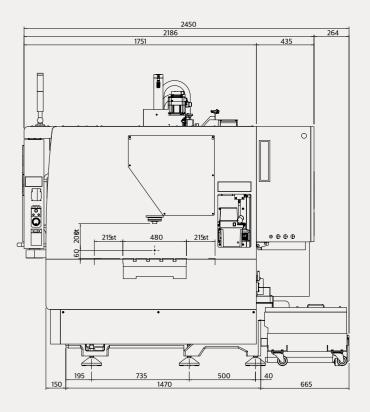


Specifications

Outline Drawing unit: mm

EP-4200





Machine Specifications

[Option]

	Doscription	Unit	ED_4	200	ED_6	200
Description		UIIIL	EP-4200		EP-6200	
Travel	X-Axis	mm	520		650	
	Y-Axis	mm	440		620	
	Z-Axis	mm	200		200	
Spindle Nose to Table top		mm	60 ~ 260		60 ~ 260	
Rapid Traverse (X/Y/Z)		m/min	20 / 20 / 20		20 / 20 / 20	
Table	Table Size	mm	600 x 480		800 x 650	
Spindle	Spindle Taper	-	HSK-E25	HSK-E32	HSK-E25	HSK-E32
	Motor Power	Kw	3.7	5.5	3.7	5.5
	Spindle Speed	r/min	46,000	38,000	46,000	38,000
	Power Trans	-	Built-in		Built-in	
	Spindle Cooling	-	Chiller cooling (water)		Chiller cooling (water)	
Machine	Flood Space (L x W)	mm	1,640 x 2,450			
	Height (H)	mm	2,270			
	Weight (std. M/C)	kg	3,250			
Controller	NC Unit	-	Mitsubishi (M80) [Siemens (808)]		Mitsubishi (M80) [Siemens (808)]	
	NC Display	-	10.4" Color LCD		10.4" Color LCD	
M/C Dimension (std. M/C)		mm	W 1,640 x L 2,200 x H 2,190			

^{*}Remark.

Machine specifications and other features are subject to change without notice

CNC Specifications

[Option]

Item	Spec.
Control Axis	3-Axis (X, Y, Z)
Least input increment	0.0001 mm
Feed rate override	0 to 200% (10% unit)
Program storage capacity	2m Byte
Number of Registered programs	400 EA
Tool offset amount	400 EA
Optional block skip	
Mirror image	
Alarm history display	
Display	10.4" LCD (color)
Language	Kor, Eng, Chn, Jpn
Program data input	G10
Program edit	
Background edit	



