

PROXIMA

5-Axis CNC Machine Tool Series

PROXIMA TECHNOLOGY CO., LTD.

The World's Most Trusted
CNC Machine Tool Manufacturer

Vertical & Horizontal 2-in-1 Machining Center

PM-LW1000

PROXIMA

High Precision

The accuracy of vertical &horizontal machining center is higher than that of ordinary CNC milling machines and CNC machining centers.

High Efficiency

Vertical and horizontal machining centers have higher processing efficiency than traditional machining equipment, which can greatly improve production efficiency.

Greater Flexibility

Vertical and horizontal machining centers can perform a variety of machining methods and are suitable for different machining needs.



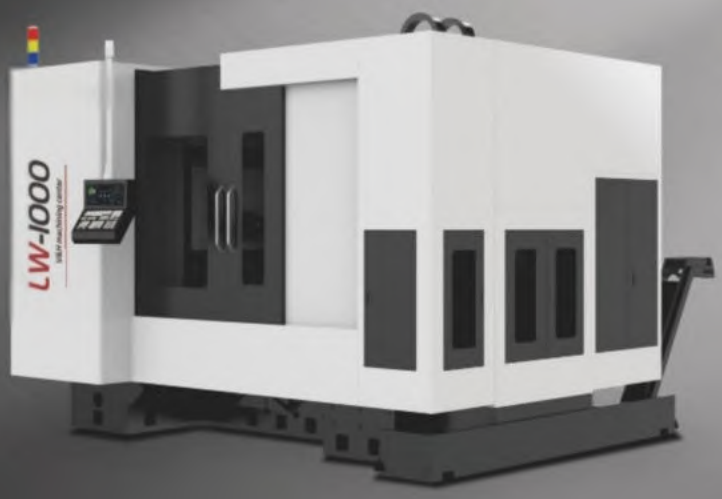


Table of Main Parameters

Stroke	Vertical	Horizontal
X-Axis Stroke	1600mm	1600mm
Y-Axis Stroke	1600mm	1000mm
Z-Axis Stroke	700mm	1600mm
B-Axis Stroke (Rotation Angle)	360°	
Workbench Size (B-Axis Bench Top)	1000x1000mm	
Distance from Spindle Nose to Workbench Top	200~900mm	/
Distance from Spindle Nose to Workbench Center	/	200~1800mm
Distance from Spindle Center to Workbench Top	/	0~1000mm
B-axis Turntable Parameters		
Min. Split Angle	0.001°	
Reduction Ratio	1:180	
Max. Speed	11.1rpm	
Spindle Parameters	BT50-Ø150 8000rpm	BT50-Ø190 6000rpm
Accuracy		
X/Y/Z-Axis Positioning Accuracy	0.016 / 0.016 / 0.010	0.016 / 0.012 / 0.016
B-Axis Positioning Accuracy	15sec	
X/Y/Z-Axis Repeated Positioning Accuracy	0.012 / 0.012 / 0.006	0.012 / 0.008 / 0.012
B-Axis Repeated Positioning Accuracy	6sec	
Others		
Tool Magazine Capacity	BT50-24T	BT50-24T
Tool Magazine Type	Vertical Type	Horizontal Type
Total Weight	25000kg	
Dimensions (L*W*H)	5453*4617*4500	

5-Axis Linkage Blade + U-Axis

PM-11VU

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High Precision

A pressure sensor is used for U-axis pre-tightening, delivering more accurate pre-tightening force to better guarantee workpiece accuracy. It ensures the contour of the blade profile (inlet duct and exhaust edge) is within 0.05 mm, avoiding over-cutting or distortion.

High Efficiency

Complex-surface machining for blades can be realized to improve machining efficiency via the linkage motion of XYZ and AB axes.

High Rigidity

It adopts heavy-duty, high-rigidity machine-tool structures to withstand high-momentum and inertia forces, ensuring machine stability and machining accuracy





Table of Main Parameters

Stroke	Parameters
X/Y/Z/U-Axis Stroke	1100 / 600 / 700 / 600mm
Max. Rotary Diameter of A-Axis	Ø500mm
B-Axis Rotation Angle	±90°
U-Axis Turntable Surface Spacing	400~1000mm
A/ B-Axis Turntable	
Table Size	250mm
Center Hole Diameter/Center Height	45 / 160mm
A/B-Axis Speed	200 / 25rpm
A/B-Axis Rated Torque	259 / 1280Nm
Max. Cutting Torque (Brake)	1700Nm
Braking Torque	600Nm
Spindle	
Taper Hole Size	HSK-A63
Max. Speed	18000rpm
Rated Torque/Rated Power of Spindle	105Nm / 30kW
Accuracy	
X/Y/Z-Axis Positioning Accuracy	±0.005mm / 300mm
A/B-Axis Positioning Accuracy	±5 / ±6sec
X/Y/Z-Axis Repeated Positioning Accuracy	±0.003mm
A/B-Axis Repeated Positioning Accuracy	4 / 8sec
Others	Linear Grating Ruler: Standard
Tool Magazine Capacity	24T
Tool Magazine Type	Arm Type
Total Weight	14000kg
Dimensions (L*W*H)	3600*3500*3000mm

5-Axis Linkage Blade + U-Axis

PM-15VU

PROXIMA

High Precision

True zero-backlash transmission delivers high positioning accuracy and high repeated positioning accuracy. Equipped with a suitable encoder, it can achieve positioning accuracy of ±5 arc-sec and repeated positioning accuracy of ±2 arc-sec.

High Efficiency

Adopting direct-drive motor, the speed can easily reach over 100 RPM or higher. It features fast acceleration and high machining efficiency. The positioning time for 0-360° rotation is approximately 0.4-0.8 s.

High-Gloss Performance

High machining speed brings excellent surface finish with ultra-low roughness. Surface roughness can reach Ra 0.2-0.4 or even lower.





Table of Main Parameters

Stroke	Parameters
X/Y/Z/U-Axis Stroke	1500 / 550 / 700 / 1100mm
Max. Rotary Diameter of A-Axis	Ø600
B-Axis Rotation Angle	±90°
U-Axis Turntable Surface Spacing	500~1600mm
A/B-Axis Turntable	
Table Size	320mm
Center Hole Diameter/Center Height	70 / 360mm
A/B-Axis Speed	125 / 25rpm
A/B-Axis Rated Torque	780 / 1280Nm
Max. Cutting Torque (Brake)	1700Nm
Braking Torque	760Nm
Spindle	
Taper Hole Size	HSK-A63
Max. Speed	18000rpm
Rated Torque/Rated Power of Spindle	105Nm / 30kW
Accuracy	
X/Y/Z-Axis Positioning Accuracy	±0.005mm / 300mm
A/B-Axis Positioning Accuracy	±5 / ±5sec
X/Y/Z-Axis Repeated Positioning Accuracy	±0.003mm
A/B-Axis Repeated Positioning Accuracy	4 / 6sec
Others	Linear Grating Ruler: Standard
Tool Magazine Capacity	24T
Tool Magazine Type	Horizontal Chain Type
Total Weight	18000kg
Dimensions (L*W*H)	4500*3000*2950mm

5-Axis Linkage Blade + U-Axis

PM-20VU

PROXIMA

High Precision

True zero-backlash transmission delivers high positioning accuracy and high repeated positioning accuracy. Equipped with a suitable encoder, it can achieve positioning accuracy of ±5 arc-sec and repeated positioning accuracy of ±2 arc-sec.

High Efficiency

Adopting direct-drive motor, the speed can easily reach over 100 RPM or higher. It features fast acceleration and high machining efficiency. The positioning time for 0-360° rotation is approximately 0.4-0.8 s.

High-Gloss Performance

High machining speed brings excellent surface finish with ultra-low roughness. Surface roughness can reach Ra 0.2-0.4 or even lower.





Table of Main Parameters

Stroke	Parameters
X/Y/Z/U-Axis Stroke	2000 / 650 / 850 / 1100mm
Max. Rotary Diameter of A-Axis	Ø700mm
B-Axis Rotation Angle	±90°
U-Axis Turntable Surface Spacing	1100~2200mm
A/B-Axis Turntable	
Table Size	450mm
Center Hole Diameter/Center Height	70 / 270mm
A/B-Axis Speed	120 / 25rpm
A/B-Axis Rated Torque	1200 / 1476Nm
Max. Cutting Torque (Brake)	1944Nm
Braking Torque	2200Nm
Spindle	
Taper Hole Size	HSK-A100
Max. Speed	12000rpm
Rated Torque/Rated Power of Spindle	206Nm / 35kW
Accuracy	
X/Y/Z-Axis Positioning Accuracy	±0.005mm / 300mm
A/B-Axis Positioning Accuracy	±5 / ±10sec
X/Y/Z-Axis Repeated Positioning Accuracy	±0.003mm
A/B-Axis Repeated Positioning Accuracy	4 / 6sec
Others	Linear Grating Ruler: Standard
Tool Magazine Capacity	24T
Tool Magazine Type	Arm Type
Total Weight	22000kg
Dimensions (L*W*H)	7500*4000*4500mm

5-Axis Cradle
PM-Y350

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Features

It supports multi-axis coordinated control and multi-direction machining in one setup. It eliminates tedious repeated re-clamping operations on conventional CNC machine tools and guarantees machining accuracy of workpieces.

It supports multiple machining modes, capable of milling, drilling, tapping and other machining operations, as well as advanced functions including micro-hole machining and chamfering.







Table of Main Parameters

Stroke	Parameters
X/Y/Z-Axis Stroke	450 / 650 / 400mm
A (Tilt Angle)/C (Rotation Angle) Axis Stroke	±120° / 360°
Distance from Spindle Nose to Workbench Top	100~500mm
Cradle Parameters	
Disk Diameter/Center Hole Diameter	Ø350 / 50mm
T-Slot Size	12H8
A/C-Axis Speed	100 / 150rpm
A/C-Axis Rated Torque	307 / 106Nm
A/C-Axis Peak Constant Torque	583 / 203Nm
Bearing Capacity	100kg
Max. Workpiece Size	Ø 450mm
Spindle	
Taper Hole Size	BBT40
Max. Speed	15000rpm
Rated Torque/Rated Power of Spindle	20kW / 48Nm
Accuracy	
X/Y/Z-Axis Positioning Accuracy	±0.005mm / 300mm
A/C-Axis Positioning Accuracy	±5 / ±5sec
X/Y/Z-Axis Repeated Positioning Accuracy	±0.005mm
A/C-Axis Repeated Positioning Accuracy	±2 / ±2sec
Others	
Tool Magazine Capacity	24T
Tool Magazine Type	Horizontal Chain Type
Total Weight	7500kg
Dimensions (L*W*H)	3500*2500*2800mm

5-Axis Cradle
PM-Y630

Features

It adopts overhead-bridge structural design, keeping away from cutting zone to reduce vibration interference and ensure machining accuracy.

The cradle-type dual rotary table enables five-face machining in a single clamping, avoiding error accumulation from repeated re-clamping.

Equipped with high-power spindle (e.g. 30 kW) and 105 Nm continuous torque, it balances high-speed finishing and heavy-duty rough-cutting.





Table of Main Parameters

Stroke	Parameters
X/Y/Z-Axis Stroke	720 / 650 / 530mm
A (Tilt Angle)/C (Rotation Angle) Axis Stroke	±120° / 360°
Distance from Spindle Nose to Workbench Top	250~780mm
Cradle Parameters	
Disk Diameter/Center Hole Diameter	Ø630 / 50mm
T-slot Size	14H8
A/C-Axis Speed	60 / 100rpm
A/C-Axis Rated Torque	1290*2 / 600Nm
A/C-Axis Peak Constant Torque	2400*2 / 1100Nm
Bearing Capacity	850kg
Max. Workpiece Size	Ø800mm
Spindle	
Taper Hole Size	HSKA63
Max. Speed	18000rpm
Rated Torque/Rated Power of Spindle	105Nm / 30kW
Accuracy	
X/Y/Z-Axis Positioning Accuracy	±0.005mm / 300mm
A/C-Axis Positioning Accuracy	±5 / ±5sec
X/Y/Z-Axis Repeated Positioning Accuracy	±0.005mm
A/C-Axis Repeated Positioning Accuracy	±2 / ±2sec
Others	
Tool Magazine Capacity	24T
Tool Magazine Type	Vertical Chain Type
Total Weight	15000kg
Dimensions (L*W*H)	3800*4200*3700mm

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5-Axis Linkage Blade Machine

PM-970V

High-Precision Execution

Achieves outstanding positioning precision along all axes, delivering unparalleled control and exactness in intricate machining operations, which guarantees top-notch quality in finished parts.

Superior Spindle Power

Fitted with a high-performance spindle that offers substantial power and torque, boosting cutting efficiency while ensuring excellent surface finishes, even in demanding materials.

Advanced Rotary Features

The integrated fourth axis allows for intricate multi-angle machining, enhancing flexibility and enabling complex part production without repositioning. Additionally, the inclusion of a swing head facilitates dynamic orientation changes, ensuring optimal cutting angles and improving access to challenging features on large or complex workpieces.



Table of Main Parameters

Stroke	Parameters
X/Y/Z-Axis Stroke	900 / 700 / 700mm
Distance from Spindle Nose to Workbench Top	210~910mm
Table	
Work Table	1000*620mm
T-Slot	6T*18*100mm
Max. Load	700kg
Spindle	
Taper Hole Size	BBT40
Spindle Transmission	Motor Spindle
Max. Speed	16000rpm
Power of Spindle	15~18.5kW
Swing Head Angle	30° (ATC Side) / 110°
Accuracy	
X/Y/Z-Axis Positioning Accuracy	±0.005 / 300mm
X/Y/Z-Axis Repeated Positioning Accuracy	±0.005mm
Others	
Tool Magazine Capacity	24T
Tool Magazine Type	Arm Type
Total Weight	7000kg
Dimensions (L*W*H)	2800*2670*2900mm

5-Axis Crane Gantry
PM-1370V

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High-Precision Execution
Achieves outstanding positioning precision along all axes, delivering unparalleled control and exactness in intricate machining operations, which guarantees top-notch quality in finished parts.

Superior Spindle Power
Fitted with a high-performance spindle that offers substantial power and torque, boosting cutting efficiency while ensuring excellent surface finishes, even in demanding materials.

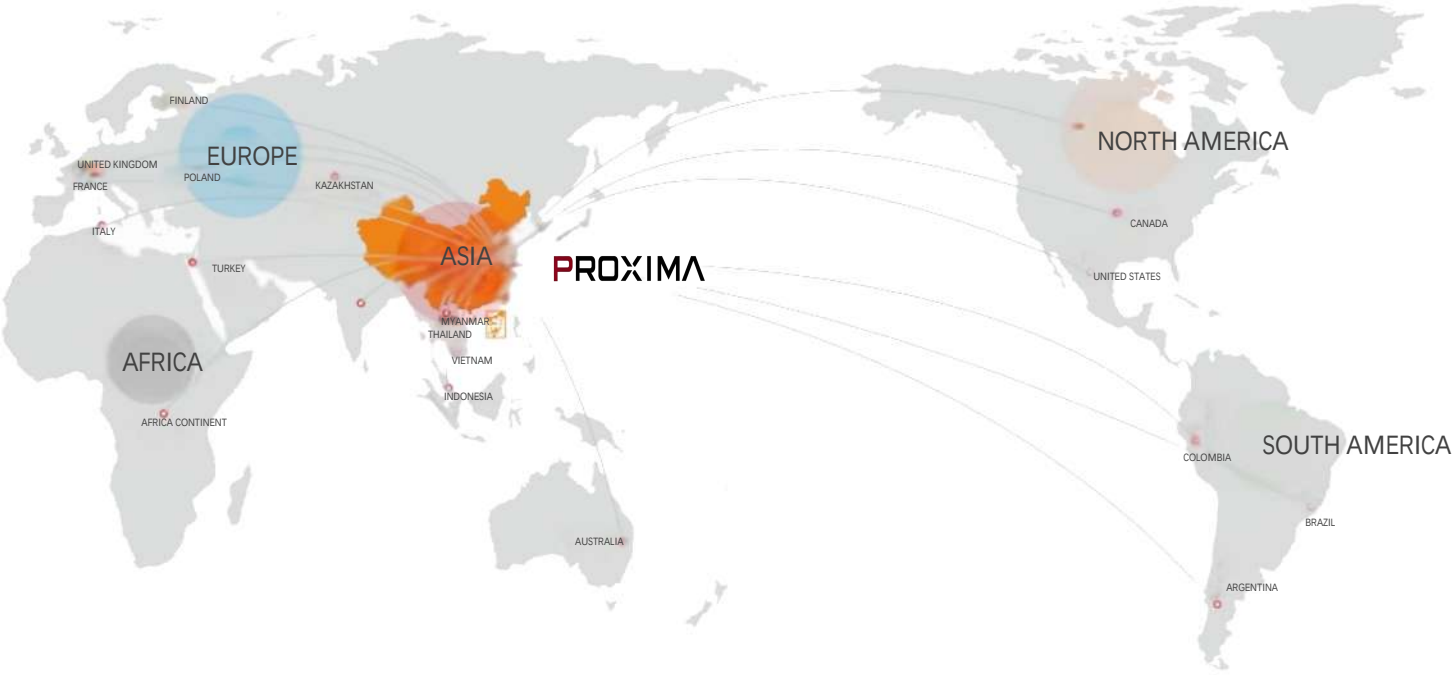
Advanced Rotary Features
The integrated fourth axis allows for intricate multi-angle machining, enhancing flexibility and enabling complex part production without repositioning. Additionally, the inclusion of a swing head facilitates dynamic orientation changes, ensuring optimal cutting angles and improving access to challenging features on large or complex workpieces.



Table of Main Parameters

Stroke	Parameters
X/Y/Z-Axis Stroke	1300 / 700 / 700mm
Distance from Spindle Nose to Workbench Top	150~850mm
Table	
Work Table	1400*650mm
T-Slot	5T*18*112mm
Max. Load	1000kg
Spindle	
Taper Hole Size	HSK-A63
Spindle Transmission	Motor Spindle
Max. Speed	16000rpm
Power of Spindle	15~26kW
Swing Head Angle	35° (ATC side) / 110°
Accuracy	
X/Y/Z-Axis Positioning Accuracy	±0.005 / 300mm
X/Y/Z-Axis Repeated Positioning Accuracy	±0.003mm
Others	
Tool Magazine Capacity	24T
Tool Magazine Type	Arm Type
Total Weight	13000kg
Dimensions (L*W*H)	4353*2818*3228mm

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