



金格科技股份有限公司
TOPKING TECHNOLOGY CO., LTD.

CNC外圓磨床-直進斜式砂輪

CNC CYLINDRICAL GRINDING MACHINE-
Plunge grinding with angular G.W.

X-3550P



金格科技X-P系列CNC外圓磨床獨具特色，搭載直進式研磨和斜式砂輪頭座，彰顯端面研磨的卓越性能。可同時進行端面和外徑研磨，可搭配180mm寬型砂輪，實現高效的一次性加工，極大提升生產效率。該系列具有強化型結構本體，搭載重型主軸和尾座，確保堅固的支撐。X軸和Z軸的十字形滑台設計有助於縮小佔地面積和軸向行程，進一步提高整體機床效能，為客戶提供最適切可靠的加工解決方案。

The TOPKING X-P series CNC External Cylindrical Grinder combines plunge grinding and an angular wheelhead for exceptional end-face grinding. It handles both end-face and outer diameter grinding with a 180mm wide wheel, boosting production efficiency. With a reinforced structure, heavy-duty spindle, and tailstock, it ensures robust support. The X and Z axes' cross-slide design minimizes footprint and axial travel, enhancing overall efficiency and providing reliable grinding solutions.

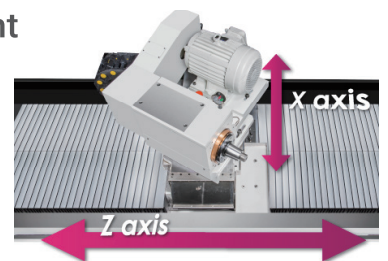
■ 產品特色 Product Highlight

滑軌採用1V1平面設計，經過高頻淬火和精密磨削處理，提高了耐磨性和穩定性。雙軸系統採用高剛性硬軌搭配大尺寸滾珠螺桿，增強了承載能力，確保砂輪頭平穩移動。

The guideway is flat with 1V1 flat design, treated for enhanced wear resistance and stability through high-frequency hardening and precision grinding. A dual-axis system with high-rigidity box way sliders and large ball screws enhances load-bearing capacity and ensures smooth wheel head movement.

工作台始終固定於底座上，搭配X軸與Z軸十字滑台設計，減少行程，提升加工速度與穩定性。

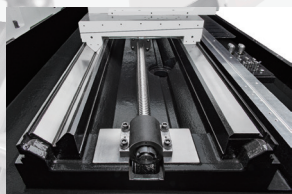
The worktable is consistently anchored to the base, featuring a cross-slide design for the X and Z axes, minimizing travel and improving processing speed and stability.



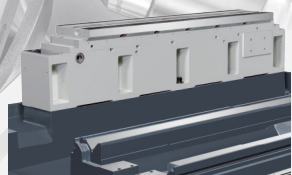
十字滑台設計與軸向移動
CROSS-SLIDER DESIGN &
AXIS GUIDANCE

X軸與Z軸結構採用十字滑台形式設計，不僅能夠靈活操作，同時有效地縮小佔地面積。

The X and Z axes are designed with a cross-slide structure, allowing for flexible operations and effectively reducing the overall footprint.



高剛性滑軌設計
HIGH RIGIDITY SLIDWAY



工作台 WORK TABLE

TOPKING

型號 Model		X-3550P	X-35100P
能力 Capability	工作臺最大旋徑 Swing Over Table	Ø350 mm	
	兩頂心間最大距離 Distance Between Centers	650 mm	1150 mm
	最大研磨直徑 Max. Grinding Diameter	Ø350 mm	
	最大研磨長度 Max. Grinding Length	500 mm	1100 mm
	兩頂心間最大承受重量 Max. Load Held Between Centers	150 kg	
中心高(工作臺面至頂針中心) Center Height (from table to center tip)	185 mm		
砂輪 Grinding Wheel	尺寸(外徑 x 寬 x 內徑) Size (O.D. x Width x I.D.)	Ø610 x 50(opt.:180) x Ø203.2 mm	
	線速度 Linear Velocity	45 m/sec	
工作台 Work Table	旋轉角度 Swiveling Angle	0° ~ 3°	
工作主軸頭 Work-head	旋轉角度 Swiveling Angle	Fixed Type	
	頂針斜度 Center Tapper	MT. No. 4	
	主軸轉速 Spindle Speed	10 ~ 300 rpm	
尾座 Tailstock	工作主軸負荷(含夾具) Max. Load of Spindle (tool holder included)	35 kgs (Max. Length: 150 mm)	
	中心頂針規格 Center Tapper	MT. No. 4	
	中心頂針移動方式 Center Moving	Manual type	
	尾座軸移動距離 Tailstock Stroke	25 mm	
X軸行程 X axis Travel	最大移動距離 Max. Travel	270 mm	
	快速移動速度 Rapid Feedrate Speed	6000 mm/Min	
	自動切入速度 Auto. Feeding Speed	0.001 ~ 2000 mm/Min	
	最小設定值 Min. Feeding Setting	0.001 mm	
Y軸行程 Y axis Travel	最大移動距離 Max. Travel	800 mm	1380 mm
	快速移動速度 Rapid Feedrate Speed	6000 mm/Min	
	自動切入速度 Auto. Feeding Speed	0.001 ~ 2000 mm/Min	
	最小設定值 Min. Feeding Setting	0.001 mm	
馬達 Motor	砂輪主軸 Grinding Wheel Spindle	11 kW	
	工作主軸 Workhead Spindle Motor (servo motor)	1.8 kW	
	X軸-砂輪軸座進給 Wheelhead Feed X-axis (servo motor)	1.5 kW (MITSUBISHI) / 1.4kW (FANUC)	
	Z軸-工作臺進給 Table Feed X-axis (servo motor)	3.5 kW (MITSUBISHI) / 4.4kW (FANUC)	
	潤滑油壓 Lubrication Hydraulic Motor	0.37 kW	
	油壓泵浦 Hydraulic Pump	0.37 kW	
容器容量 Tank Volume	潤滑油箱 Lubrication Tank (Guideway)	30 L	
	動力油箱(選配) Lubrication Tank (Optional)	30 L	
	水箱 Coolant Tank	30 L	
機器 Machine	淨重 Net Weight	8000 kg	9000 kg
	中心高(地面起至頂針中心) Center Height (from floor to center tip)	1250 mm	

標準配件

- 三菱 CNC 控制器 x 1 套
- 砂輪與砂輪法蘭 x 1 組
- 頂針 (2支/組) x 1組
- 砂輪修整座 (尾座固定式) x 1 組
- 砂輪吊架 x 1組
- X軸光學尺 x 1 組
- 砂輪變頻器 x 1 組
- 電器箱標準附件 x 1 組
- 全罩式鈹金 x 1 組
- 潤滑油箱 (含泵浦) x 1 組
- 冷卻水箱 (含泵浦) x 1 組
- 工作燈 x 1 組
- 工具 (含腳墊)及工具箱 x 1組

選擇配件

- 油壓尾座
- 凸輪式帶動環 (6只/組)
- 兩端支持座 (2只/組)
- 兩點支持座
- 三點式中心架
- 三爪夾頭
- 四爪夾頭
- 平衡台及棒
- 自動砂輪平衡裝置
- 備用砂輪及法蘭
- 鑽石滾輪修整機構(工作主軸台固定式)
- 鑽石滾輪修整機構(尾座固定式)
- 端面量測裝置
- 外徑自動量測
- 間隙消除 (防撞) 裝置
- Z軸光學尺
- 電磁式冷卻液除屑裝置
- 紙帶式冷卻液除屑裝置
- 油霧回收機

STANDARD ACCESSORIES

- CNC Controller (Brand: Mitsubishi) x 1 set
- Grinding Wheel and Flange x 1 set
- Carbide Tipped Work Centers (2 pcs/set) x 1 set
- Diamond Tool Holder (tailstock mounted type) x 1 set
- Jib Crane for Loading / Unloading G.W. x 1 set
- Linear Scale for X-axis x 1 set
- Grinding Wheel Inverter x 1 set
- Electric System x 1 set
- Fully Enclosed Splash Guard x 1 set
- Hydraulic System x 1 set
- Coolant System x 1 set
- Work Lamp x 1 set
- Tools (Leveling pad) and Tool Box x 1 set

OPTIONAL ACCESSORIES

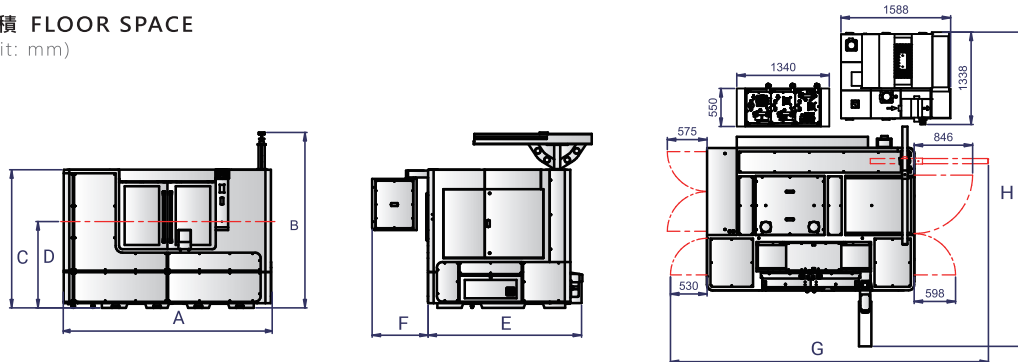
- Hydraulic Tailstock
- Cam-locked Driving Dogs
- Work Holder 2 pcs/set
- 2-point Steady Rest
- Adjustable 3-point Steady Rest
- Adjustable 3-jaw Scroll Chuck
- Adjustable 4-jaw Scroll Chuck
- Wheel Balancing Stand and Arbor
- Auto. Grinding Wheel Balancer
- Spare Grinding Wheel and Flange
- Diamond Roller Dressing Device (worktable mounted type)
- Diamond Roller Dressing Device (tailstock mounted type)
- Touch Probe Gauge
- Auto. In-Process Gauge
- Gap Control
- Linear Scale for Z-axis
- Magnetic Coolant Separator Paper Filter
- Oil Mist Collector

*本公司保有機械規格變更之權利，恕不另行通知。

* The mentioned specifications & dimensions are subject to change without notice.

占地面積 FLOOR SPACE

(單位unit: mm)



	A	B	C	D	E	F	G	H
X-3550P	3477	2541	2000	1250	2222	811	4605	4550
X-35100P	3800	2541	2000	1250	2222	1031	5205	4770



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