

ACCURACY
HIGH

SPEED
RIGIDITY



機台規格 Specifications

THX-850

工作台 Table	工作台尺寸 Table Size	mm	1000 x 460
	T型槽 T Slot	mm	CD80 x 18 x 5
	最大荷重 Max. Table Load	kg	500
行程 Travel	X軸 X Axis	mm	850
	Y軸 Y Axis	mm	510
	Z軸 Z Axis	mm	610
	主軸鼻端到工作台距離 Dis. From Spindle Nose To Table	mm	140 ~ 750
	主軸中心至Z軸伸縮護蓋距離 Dis. From Spindle Center To Z Axis Telescopic Cover	mm	500

優異切削剛性 高穩定加工精度

Excellent Rigidity And Highly Stability

- 強化加寬立柱，並採用 X 型肋骨設計，增加切削剛性、高速運行不晃動。
- Strengthened and widened column, X type ribs design, increase the rigidity and ensure the highest stability during high speed movement.

Y 軸 3 軌道動態精度升級

Y-axis 3 Slideway Dynamic Accuracy Upgrade

- Y 軸 3 軌道的剛性表現，大幅升級加工精度。
- With the rigid performance of the Y-axis 3 rails, the machining accuracy is greatly upgraded.

精度壽命提升

Improve Accuracy Life

- 下鎖式刀庫設計，提升機台幾何精度。
- Tool magazine sit on the column, improve the geometric accuracy of the machine.

三軸冷卻系統提升生產良率

Full-Time Three-axis Cooling System

- 三軸導螺桿全時間冷卻，減少熱伸長誤差，提升生產良率。
- The three-axis lead screw is cooled all the time, reducing thermal elongation errors and improving production yield rate.

效率升級

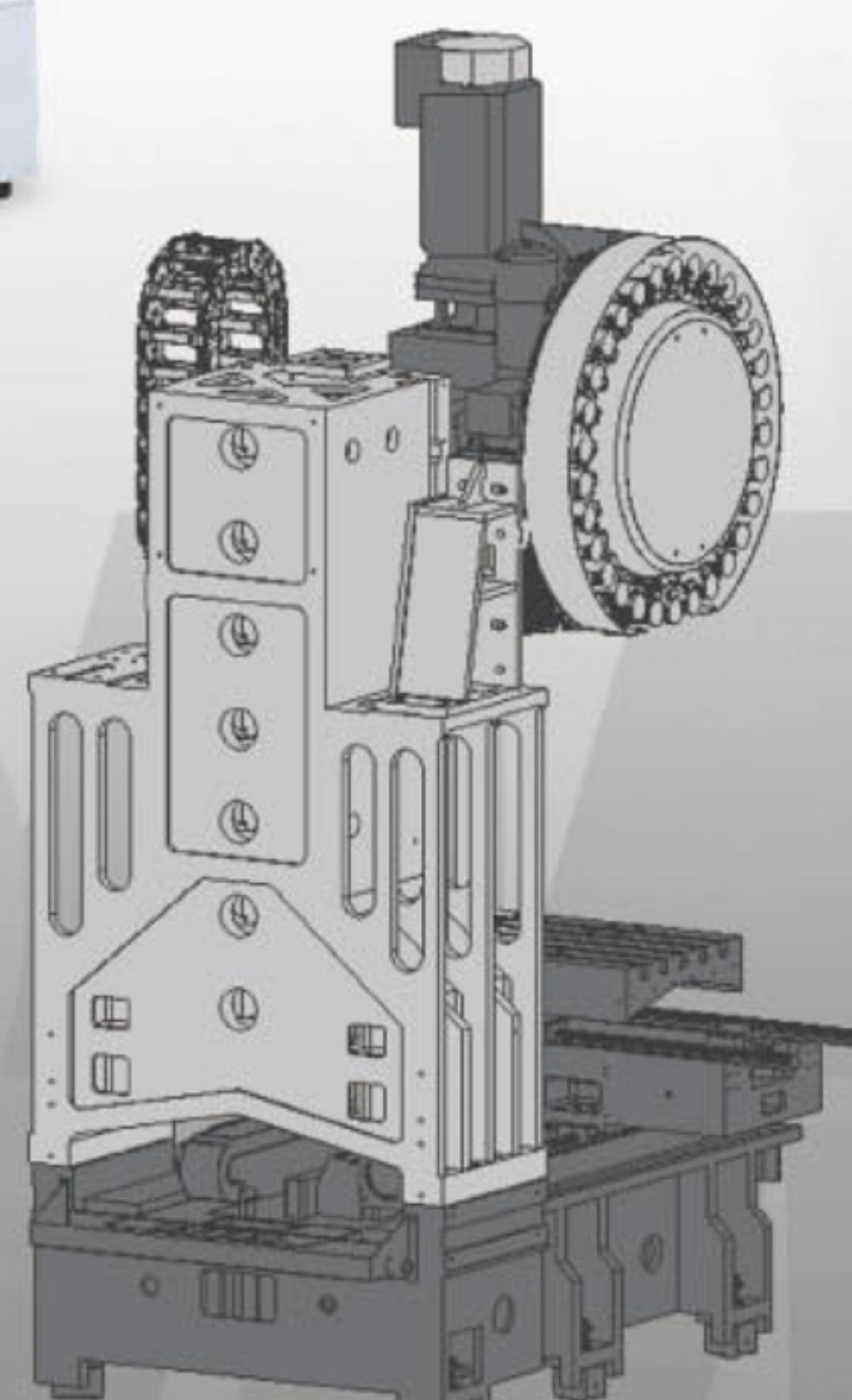
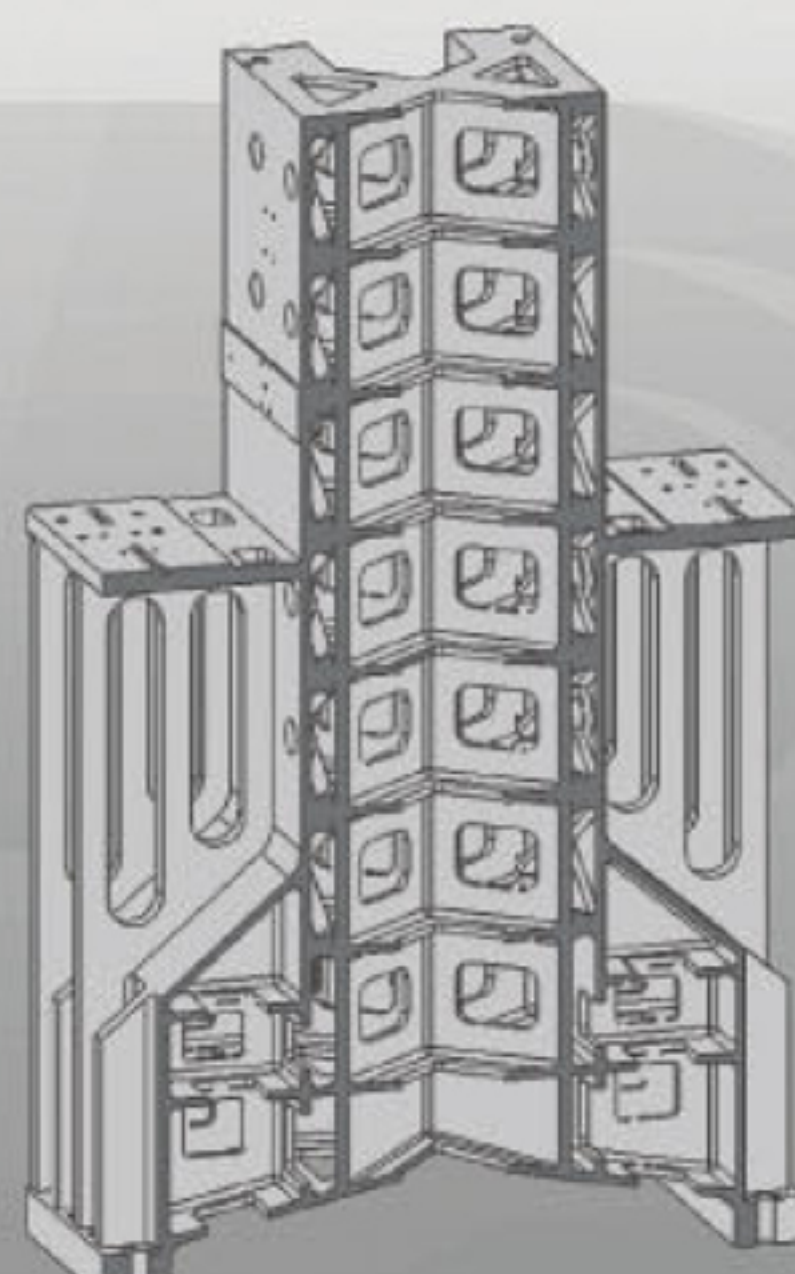
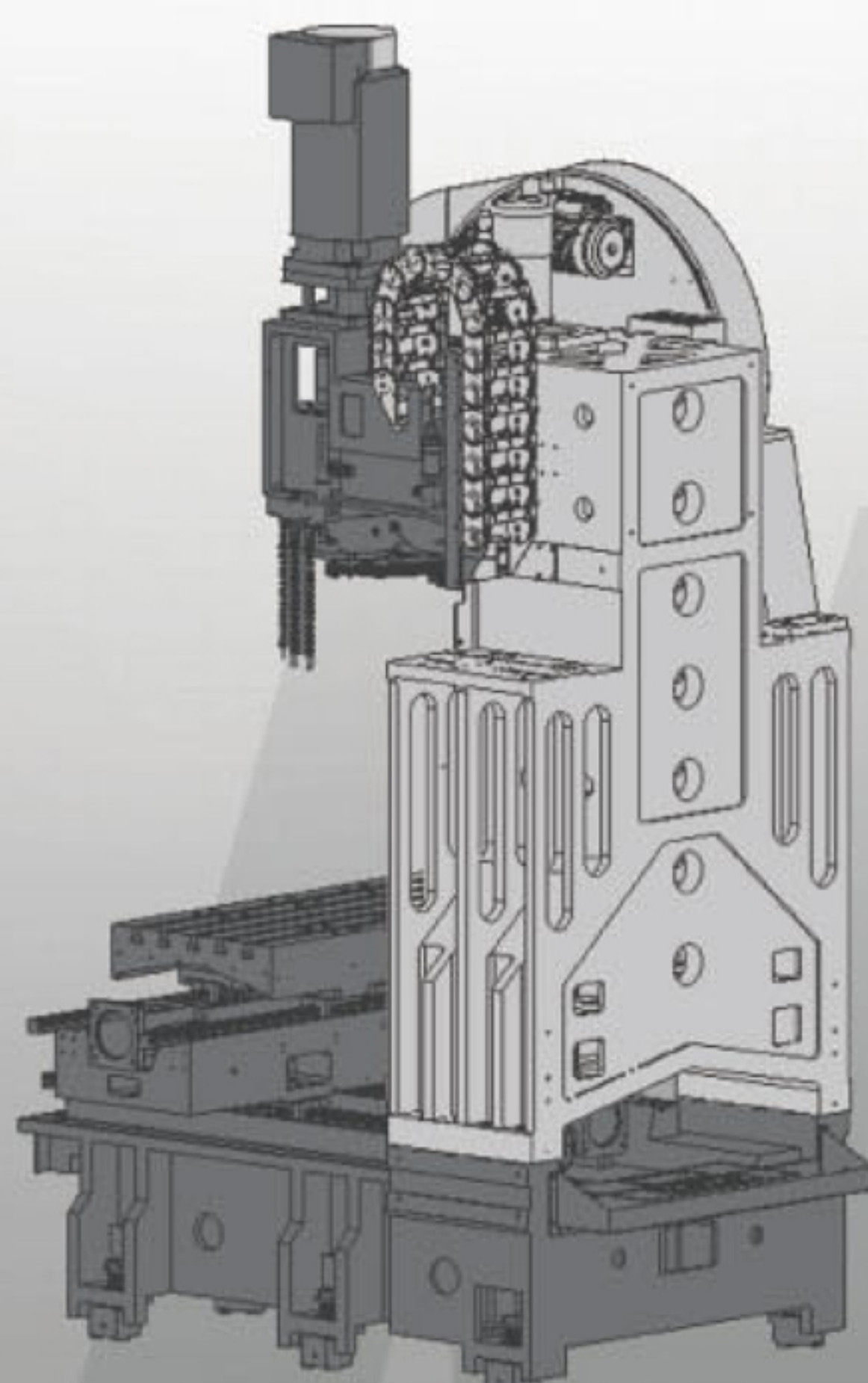
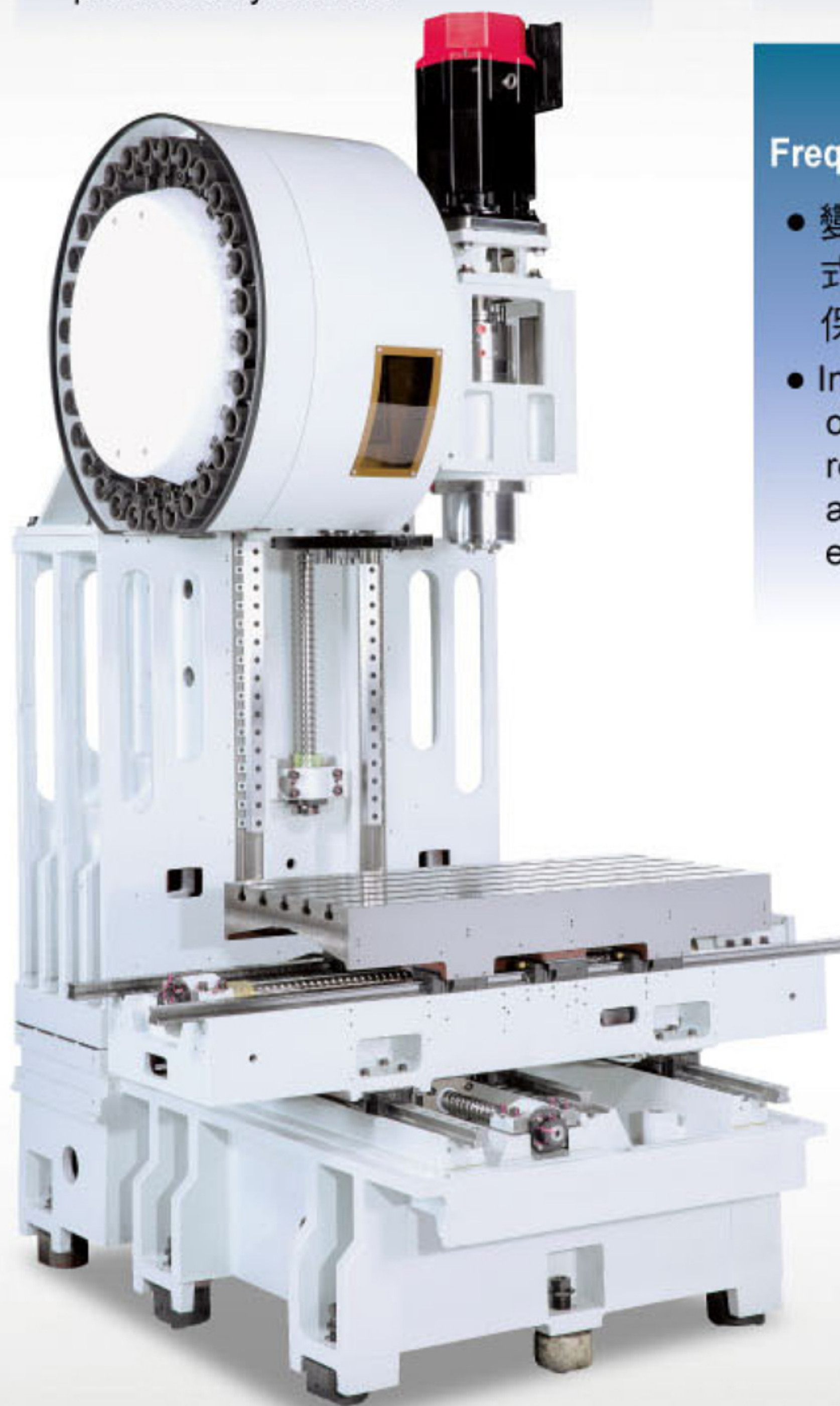
Efficiency upgrade

- G00 加減速提升 30 %，最高達 36 M/min，生產效率大幅提升。
- G00 acceleration is increased by 30%, up to 36 M/min., and production efficiency is greatly increased.

變頻器控制刀庫

Frequency-Controlled Tool Magazine

- 變頻器控制刀庫馬達動作，電阻式煞車，防止煞車作動異常，確保換刀動作順暢。
- Inverter controls the movement of the tool magazine motor, resistive braking, prevents abnormal braking operation, ensures smooth tool change.



全時三軸冷卻系統 Full-time Three-Axis Cooling System



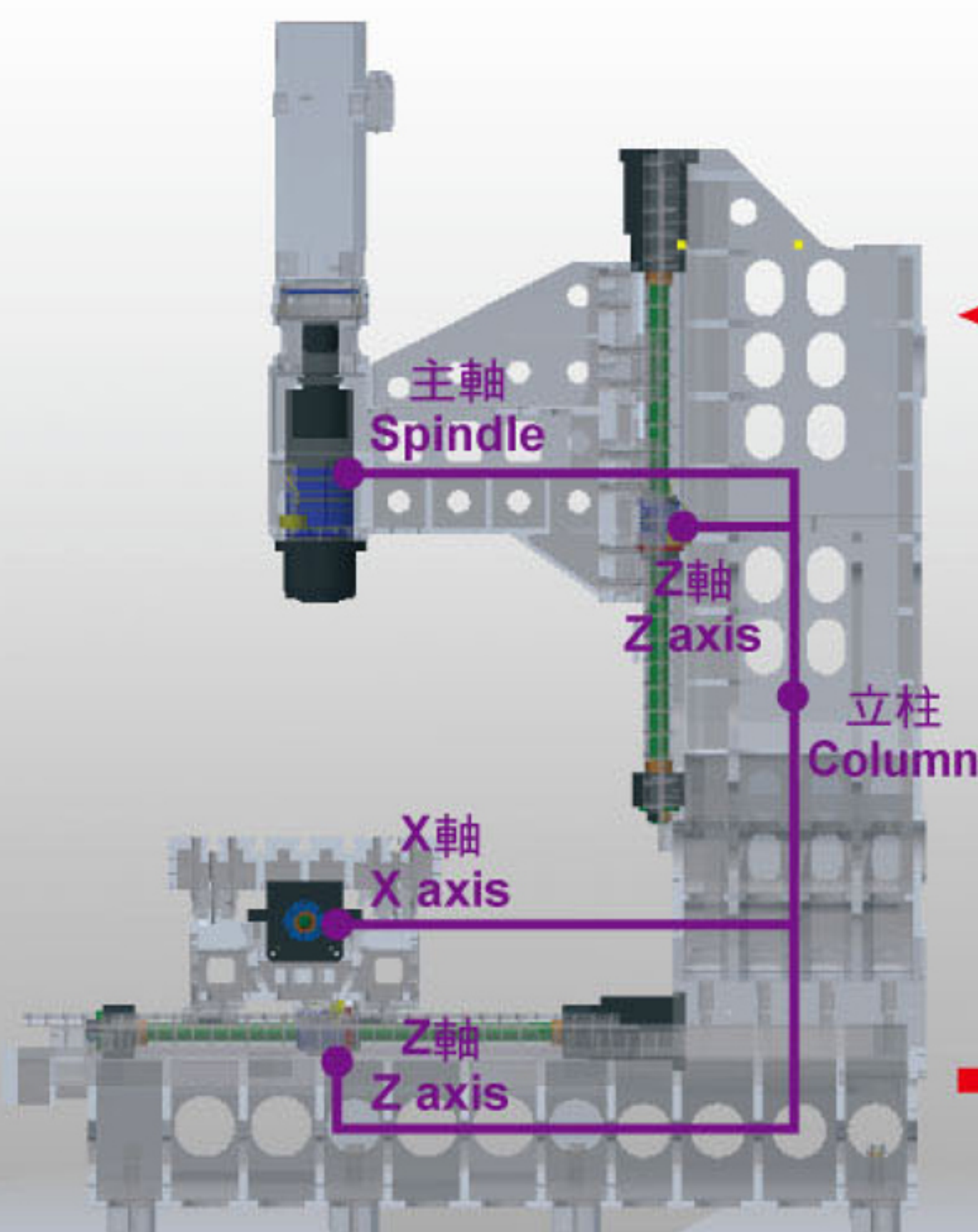
- 三軸螺桿配置冷卻系統，有效抑制熱伸長量，大幅減少冷熱機誤差，提升加工精度及穩定性。
- Ball screw cooling system can reduce thermal elongation effectively, improve cutting accuracy and stability.

- 暖機時可直接確認主軸實際溫度，確保主軸熱伸長量。主軸切削時，亦可即時監看溫度變化及提供溫升保護功能。(選購)
- To check thermal elongation of spindle when warming-up machine. Monitor spindle temperature during machining, provide a safety system to protect spindle when temperature is too high.(Opt.)



- 油氣潤滑主軸可直接帶走主軸熱源，有效抑制主軸熱伸長。(選購)
- IDD spindle with oil air lubrication, can take away the heat from spindle directly, reduce thermal temperature effectively. (Opt.)

機台溫度監控(選購) Machine Temperature Monitor System (Opt.)



CNC監控
CNC Monitor

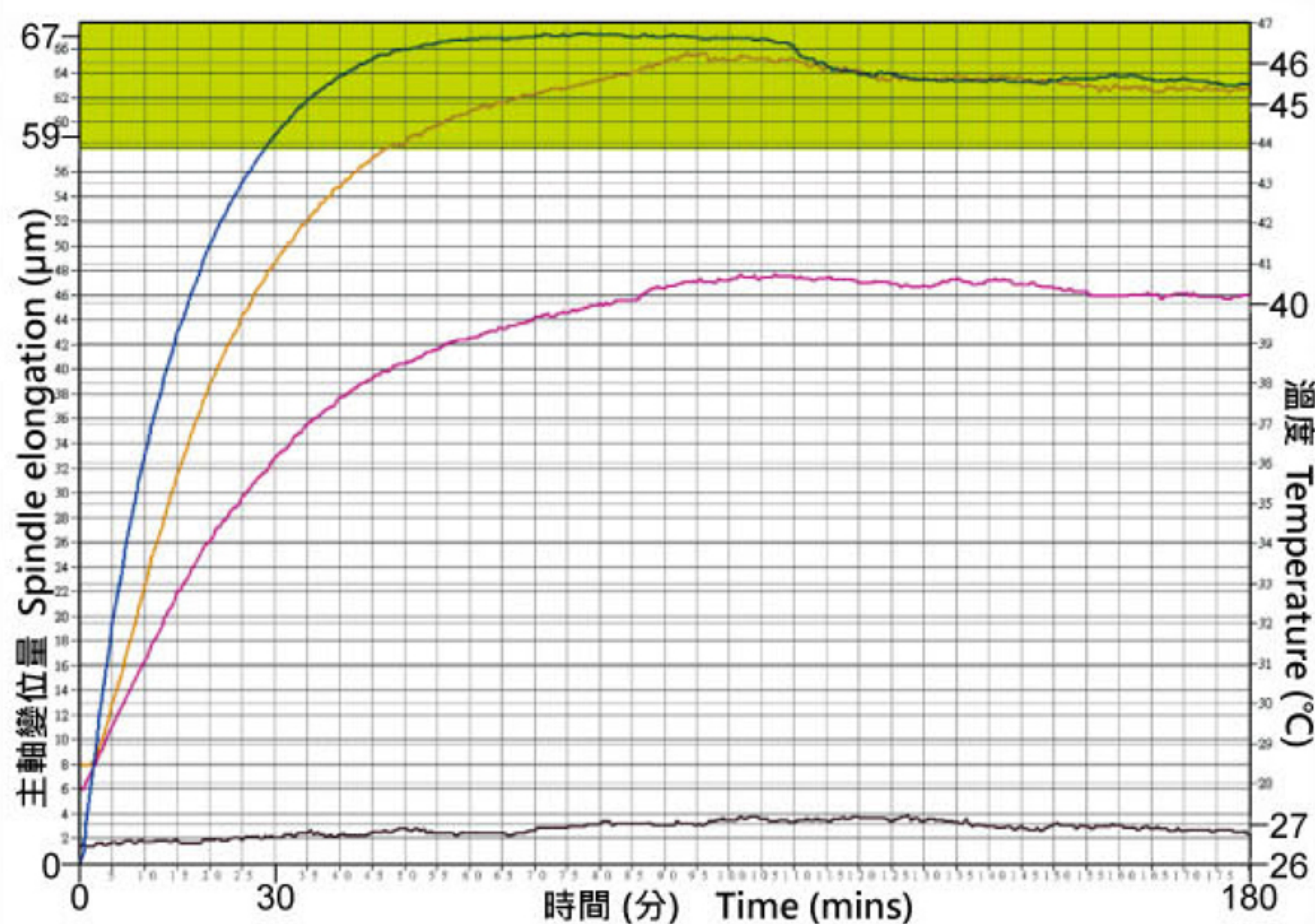


- 提供適當的冷卻能力，穩定各軸精度。
- Provide proper cooling to stabilize the accuracy of each axis.

- 工作溫度異常時，發出警告訊息，確保加工良率。
- When the temperature is abnormal, controller will show the message to ensure the processing yield.

- 機台監控狀態設定為良好、普通、停機，做為機台工作及排修時程依據。
- Machine monitoring is set to be good, normal, and stop, as the basis for the work and maintenance time of the machine.

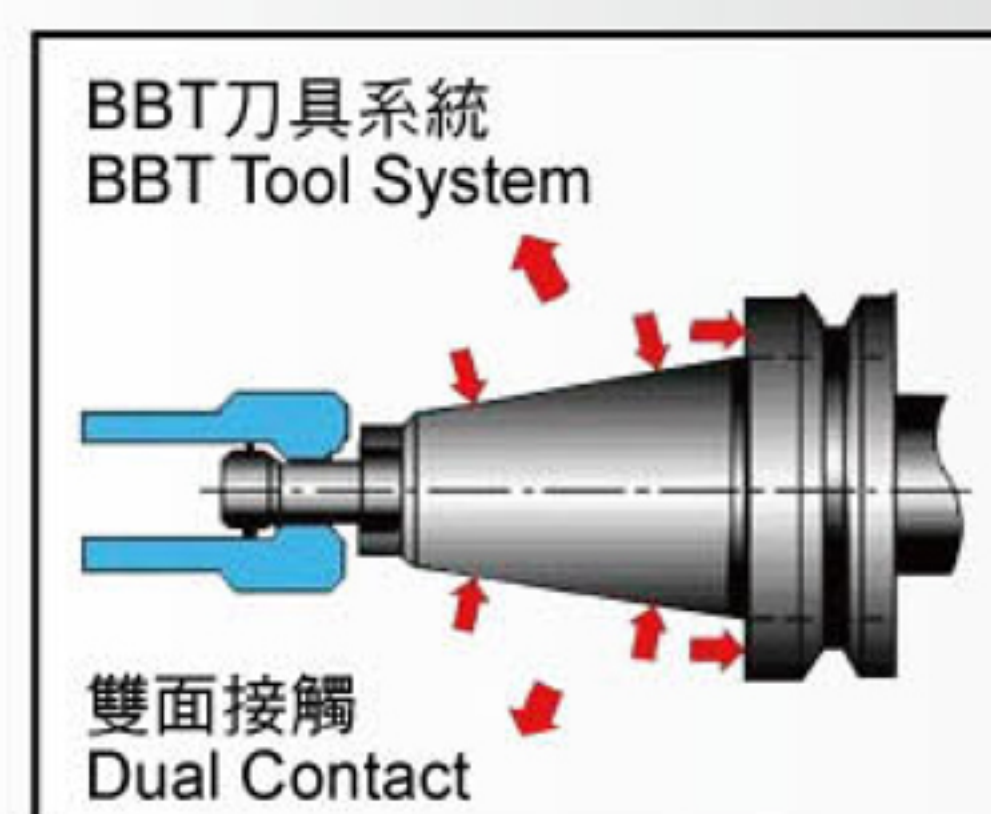
油氣潤滑主軸 (選購) Big Plus Oil-air ldd Type Spindle (Opt.)



主軸最高速度運轉30分鐘後，熱伸長量可保持在0.008mm以內。

Warm-up spindle in max. speed in 30 minutes, thermal elongation of spindle can be maintained less than 0.008mm.

- 主軸鼻端伸長量 Spindle nose thermal elongation
- 前軸承 Front bearing
- 後軸承 Rear bearing
- 室溫 Room temperature



- 主軸轉速可選購12000 / 15000 / 20000轉。
- 採用油氣潤滑可直接帶走主軸熱源，有效減少熱伸長。
- 藉由油氣常態性潤滑可連續高速運轉。
- 氣幕設計可隔絕冷卻液及切屑。

- Spindle speed 12000 / 15000 / 20000 rpm for option.
- Oil-air lubrication can take away the heat from spindle directly, reduce thermal temperature effectively.
- Oil-air lubrication spindle can work continuously.
- Air curtain design can separate coolant and chip.



循圓及雷射 Ball Bar And Laser Inspection

- 每台機台均會以循圓及雷射檢驗，依德國VDI 3441規定檢測。
- Each machine will be inspected by Ball Bar testing and Laser calibration according to VDI 3441.

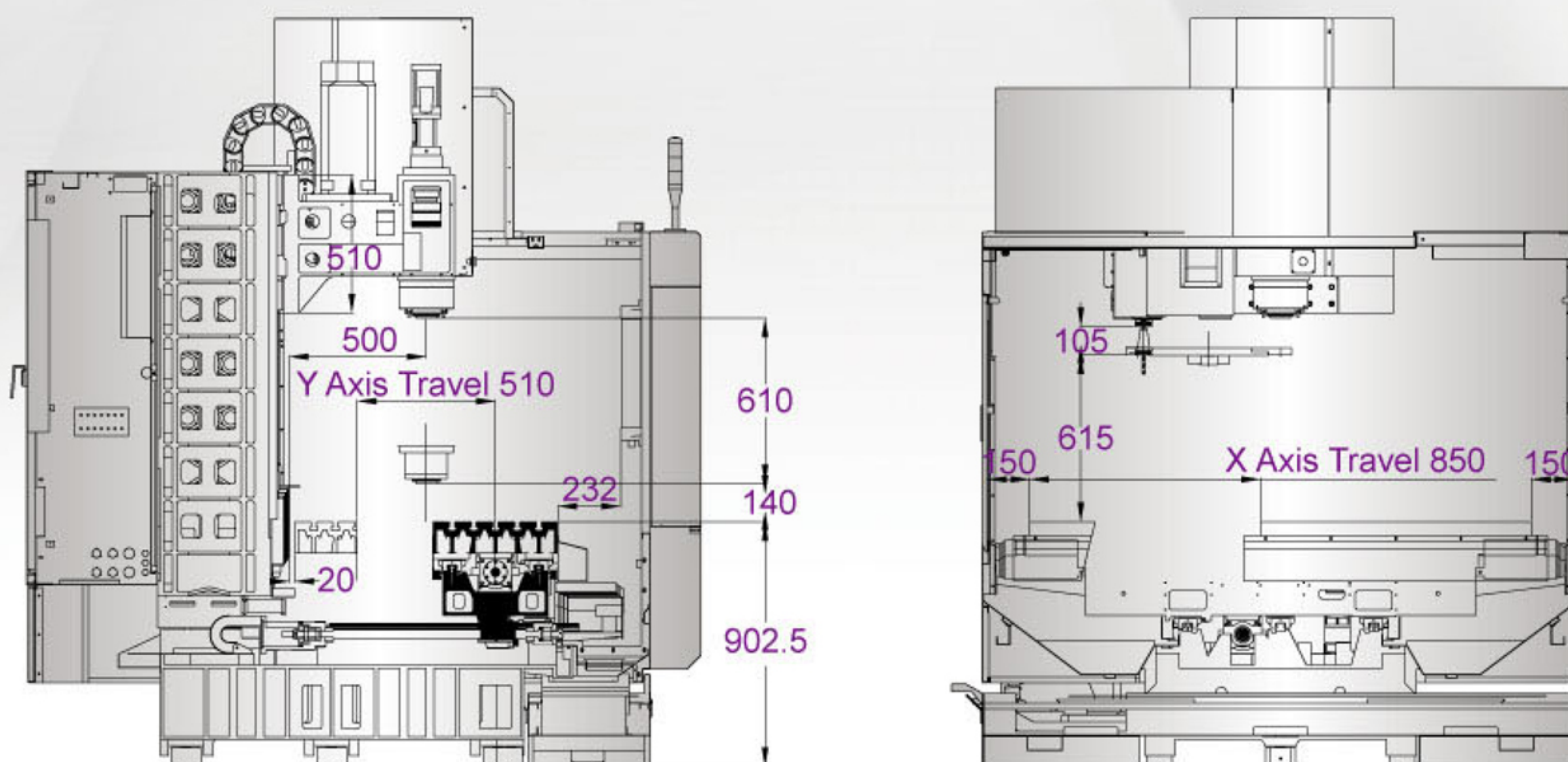


試加工工件成品 Cutting Test

- 每台機台，於組裝過程中檢驗靜態精度，調機完成後進行雷射及循圓檢驗，最後進行加工件測試，以確認組裝品質及動態精度。
- Each machine will do actual cutting performance tests to confirm the quality and accuracy before shipping.

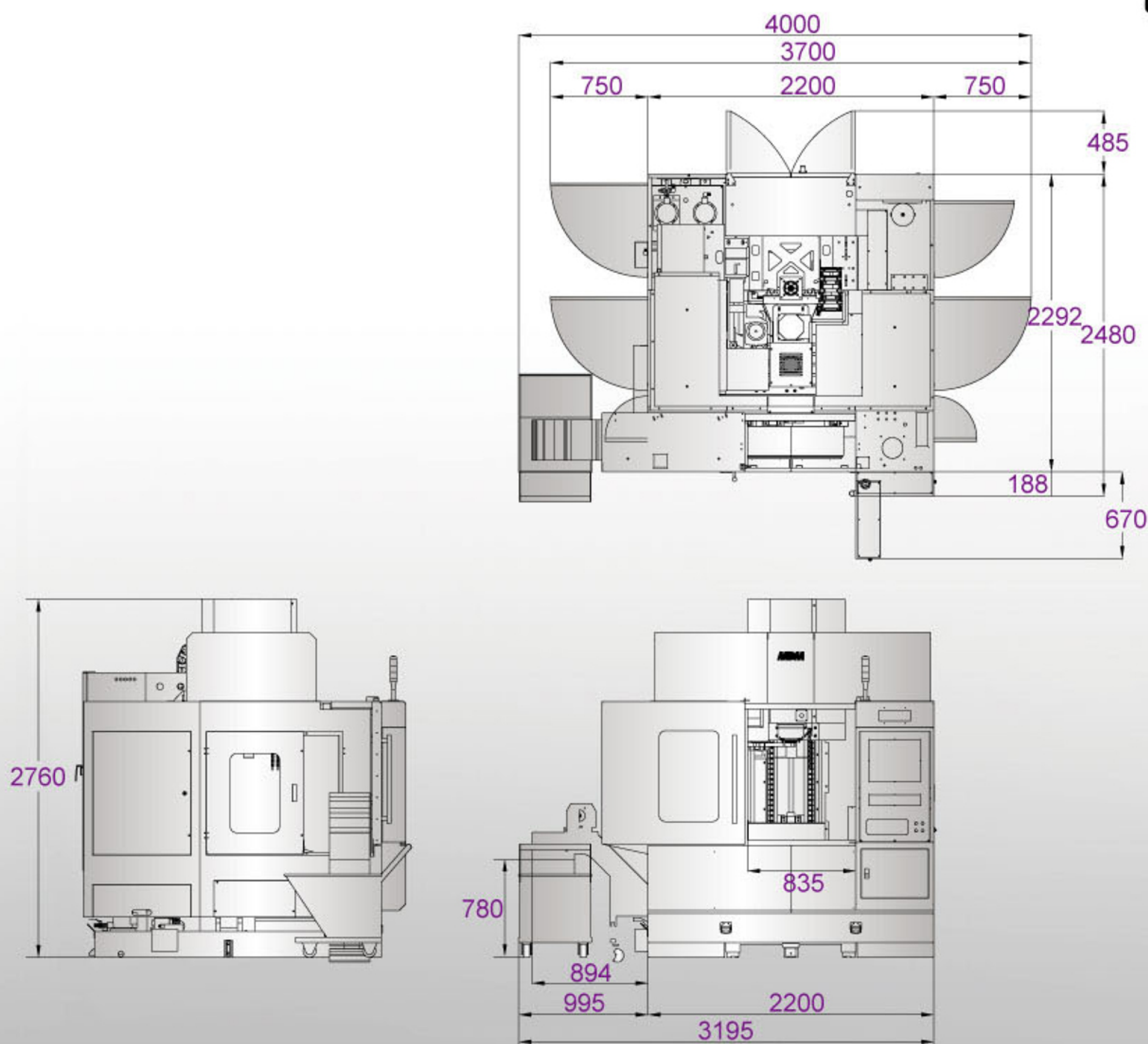
加工行程圖 Work Range

unit:mm



佔地面積圖 Floor Space

unit:mm



項目 Item	Unit	THX-850
工作台 TABLE		
工作台尺寸 Table size	mm	1000 x 460
T型槽 T slot	mm	CD80 x 18 x 5
最大荷重 Max. table load	kg	500
行程 TRAVEL		
X軸 X axis	mm	850
Y軸 Y axis	mm	510
Z軸 Z axis	mm	610
主軸鼻端到工作台距離 Dis. from spindle nose to table	mm	140 ~ 750
主軸中心至Z軸伸縮護蓋距離 Dis. from spindle center to Z axis telescopic cover	mm	500
主軸 SPINDLE		
錐度 Taper		#40
轉速 Speed	RPM	10000
馬力 Power	KW	7.5 / 11
軌道 SLIDE WAY		
形式 Type	Linear Guide Way	滾珠 BALL
軌道數量 No. of slide way		2 / 3 / 2
規格 Size of slide way		#35 / #35 / #35
滑塊數 Numbers of block		6 / 5 / 6
進給 FEEDRATE		
G01 切削進給 Cutting feed	mm/min.	10000
G00 快速移動 Rapid feedrate	M/min.	36 / 36 / 36
刀庫 ATC		
刀具數 Capacity		16 opt. 24/ 30
刀把規格 Tool shank		BT / CAT / DIN
#40 最大刀具外徑x刀長 #40 Max. tool DIA.x length	mm	75 x 300
#40 最大刀具重量 #40 Max. tool weight	kg	7
其他規格 GENERAL		
所需動力 Power capacity	KVA	25
氣壓壓力需求 Min. air pressure	kg/cm	6
機械尺寸 Machine size	mm	2200 x 2480 x 2760
占地面積-螺旋式排屑機 Max. floor space-screw type chip conveyor	mm	3700 x 3370 x 2760
占地面積-鏈板式排屑機 Max. floor space-Link belt type chip conveyor	mm	4000 x 3370 x 2760
機台高度 - 皮帶/內藏 主軸 Machine high - belt / build-in spindle	mm	2760
機台高度 - 直接 主軸 Machine high - I.D.D spindle	mm	3070
機台重量 Machine weight	kg	5200