



低重心設計

軸向加速度**0.7G**

極高穩定性及切削剛性

Low Center Of Gravity

Axisl Acceleration **0.7g**

Ultra-high Stability And Rigidity

機台規格 Specifications

THF-1100

工作台 Table	工作台尺寸 Table Size	mm	1200 x 600	
	T型槽 T Slot	mm	CD100 x 18 x 5	
	最大荷重 Max. Table Load	kgs	500	
行程 Travel	X軸 X Axis	mm	1100	
	Y軸 Y Axis	mm	660	
	Z軸 Z Axis	mm	610	(810)
	主軸鼻端到工作台距離 Dis. From Spindle Nose To Table	mm	100~710	(100~910)
	主軸中心至Z軸伸縮護蓋距離 Dis. From Spindle Center To Z Axis Telescopic Cover	mm	660	

優異切削剛性 高穩定加工精度

Excellent Rigidity And Highly Stability Machining Accuracy

- 大跨距加寬立柱及底座設計，增加切削剛性、高速運行不晃動。
- Wide-span in column and base, increase the rigidity and ensure the highest stability during high speed movement.

高剛性主軸箱

High Rigidity Headstock

- 採用6滑塊滾柱線軌，大跨距設計，增加切削剛性及動態精度。
- Wide-span structure with roller type linear guideway. Improve rigidity and dynamic accuracy.

刀庫功能、容量提升(選購)

ATC function and capacity Improvement(Opt.)

- 可進行刀具壽命管理、群組呼叫，不需停機即可繼續生產，免人工更換刀片，提高效率。
- 第二刀庫設計，加大刀庫容量。提供模組化刀庫即時加裝可能。
- Tool life management, group management.
- Double tool magazine design, increase the capacity of the tool magazine, can be replaced by module.

效率提升

Efficiency Improve

- 軸向加速度提升至0.7G，有效縮短加工時間。
- 快速位移48M/min。
- Axial acceleration are raised to 0.7G, reduce processing time effectively.
- Rapid Feedrate 48 M/min.

動態精度提升

Dynamic Accuracy Improve

- 機台低重心，Y軸三軌道設計，大幅提升動態精度。
- Low center of gravity, 3 wide-span roller type linear guideways on Y axis, greatly improve dynamic accuracy.

精度壽命提升

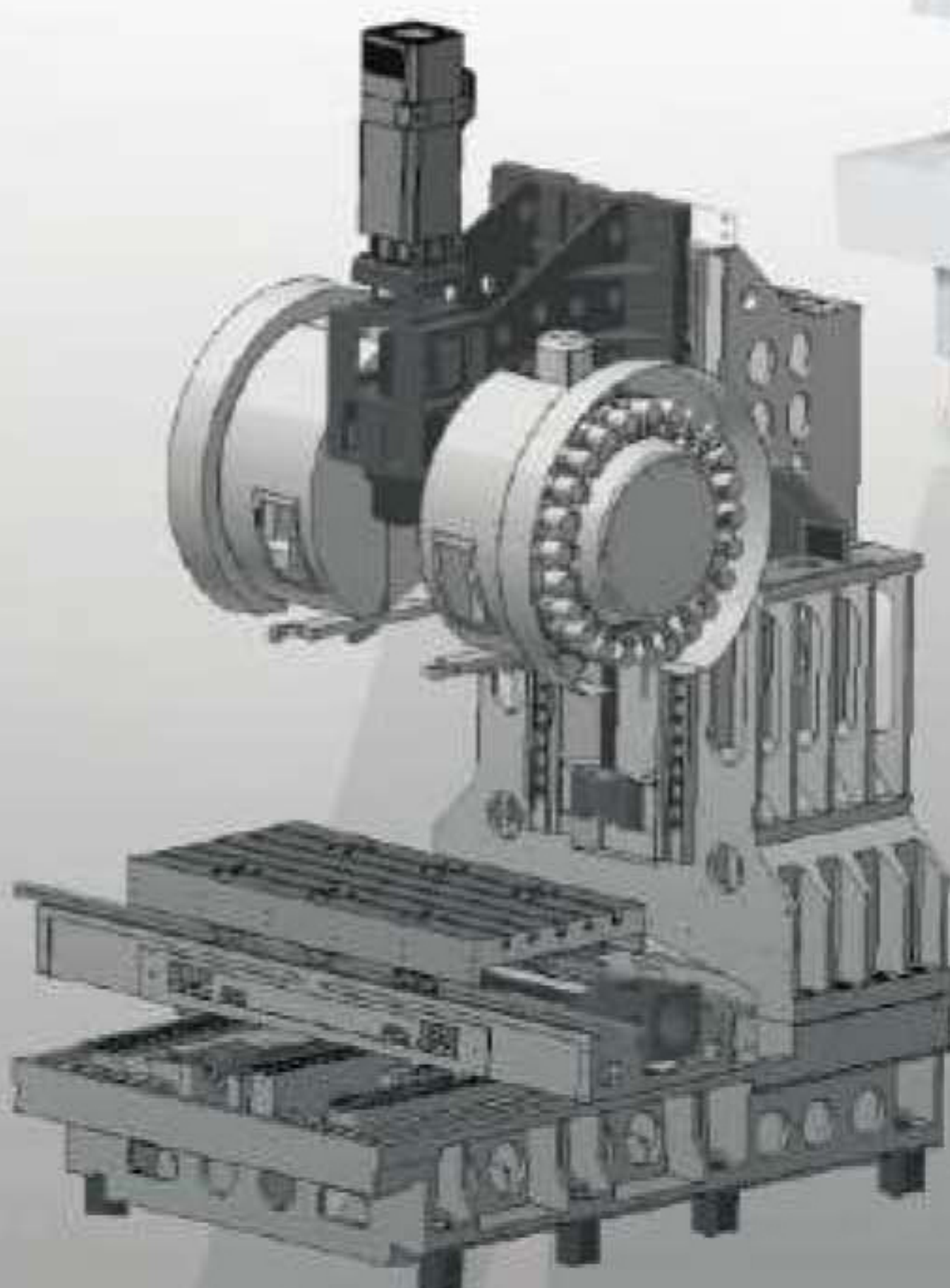
Accuracy Life Improve

- 下鎖式刀庫設計，排除刀庫重量影響精度。
- Tool magazine sit on the column, it can eliminate the influence from the weight of the tool magazine.

Z軸行程加大

Large Z Axis Travel

- 標準Z軸行程610mm，可選購Z軸行程810mm，主軸鼻端至工作台距離100~910mm。
- Standard Z axis travel is 610mm, 810mm is option, spindle nose to table will be 100~910mm.



全時溫控系统

Full Time Temperature Control System



- 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.)

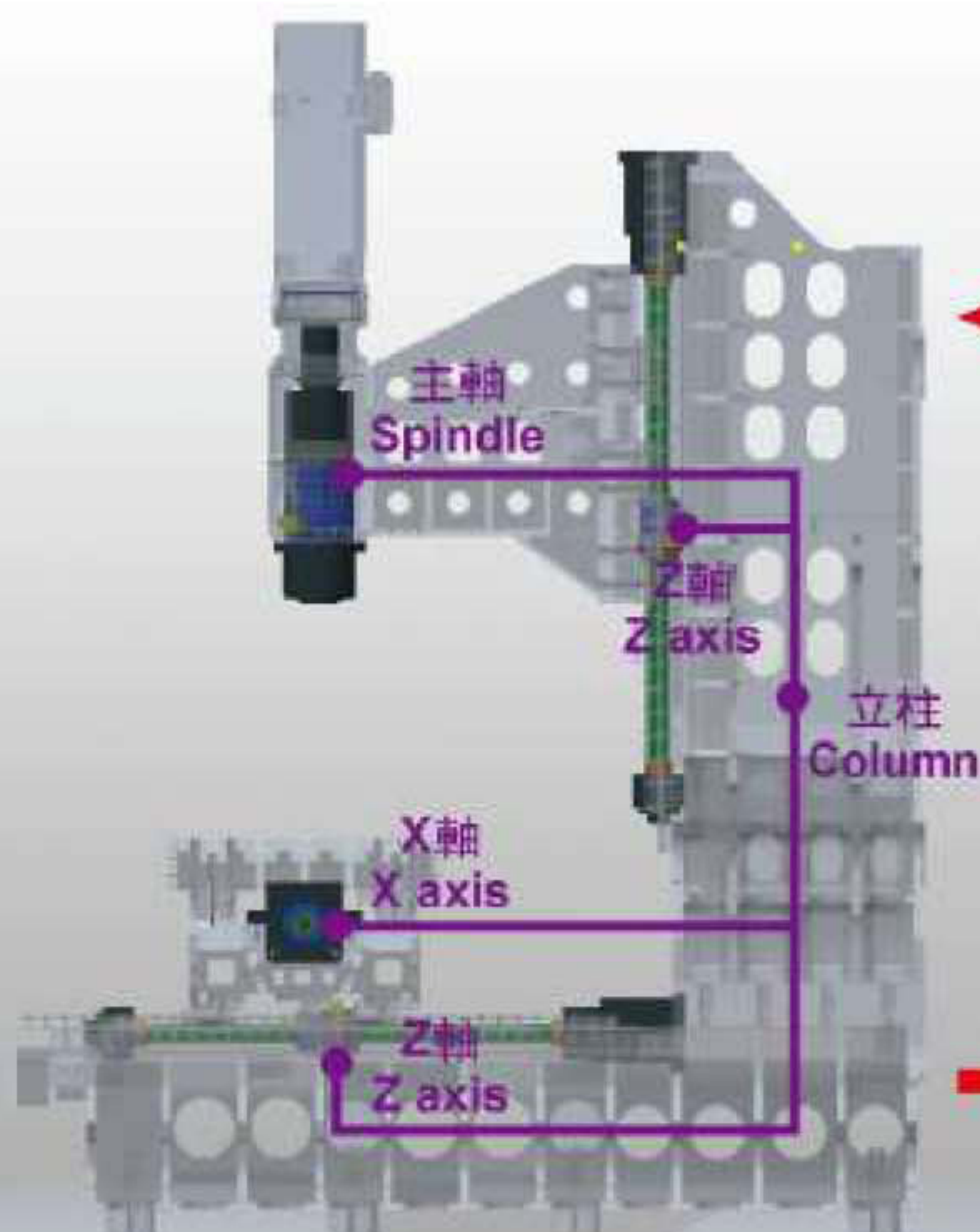
- 三軸螺桿配置冷卻系統，有效抑制熱伸長量，大幅減少冷熱機誤差，提升加工精度及穩定性。
- Ball screw cooling system can reduce thermal elongation effectively, improve cutting accuracy and stability.

- 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。
- 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.



機台溫度監控

Machine Temperature Monitor System



CNC監控
CNC Monitor

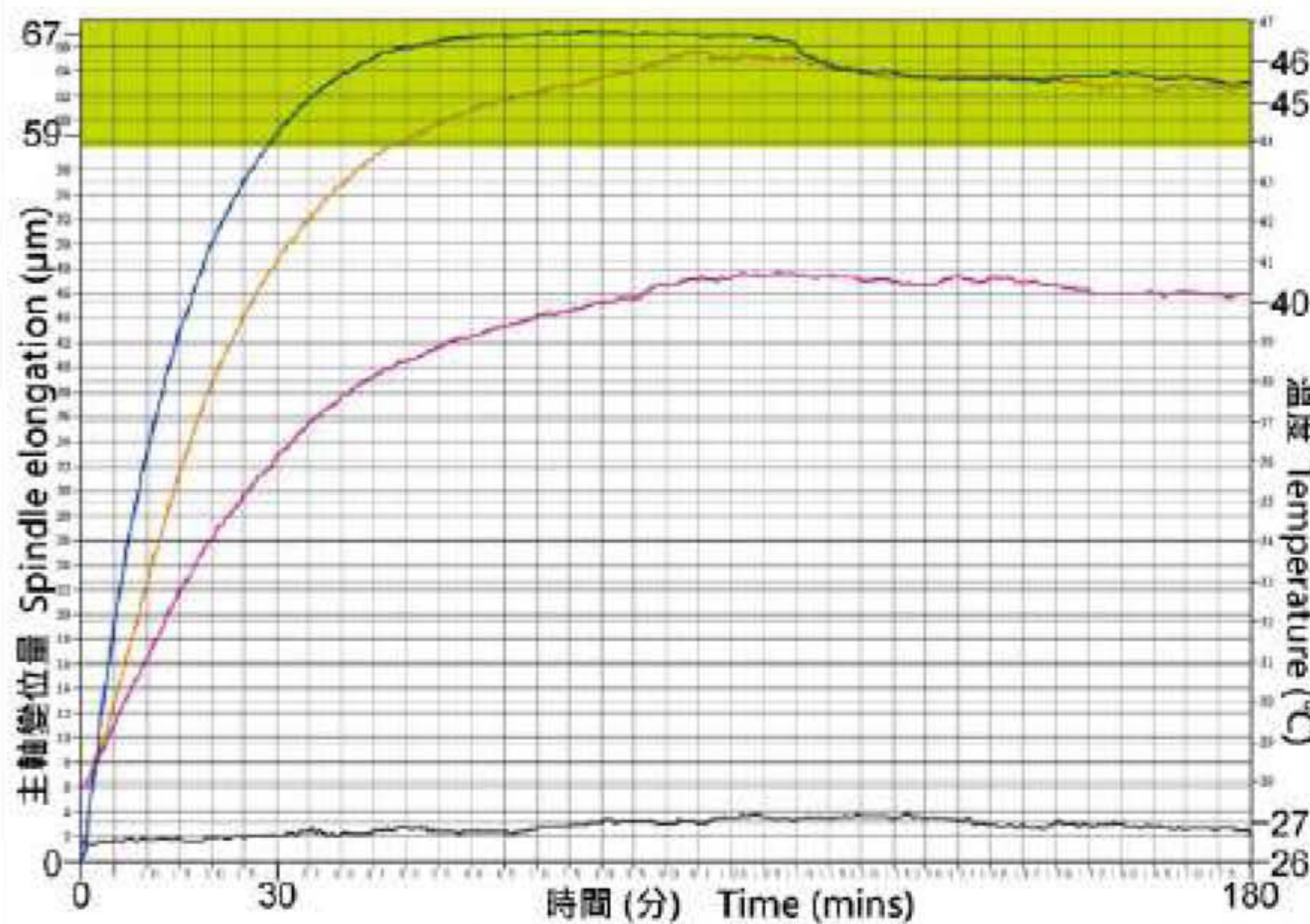


- 提供適當的冷卻能力，穩定各軸精度。
- Provide proper cooling to stabilize the accuracy of each axis.

- 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.

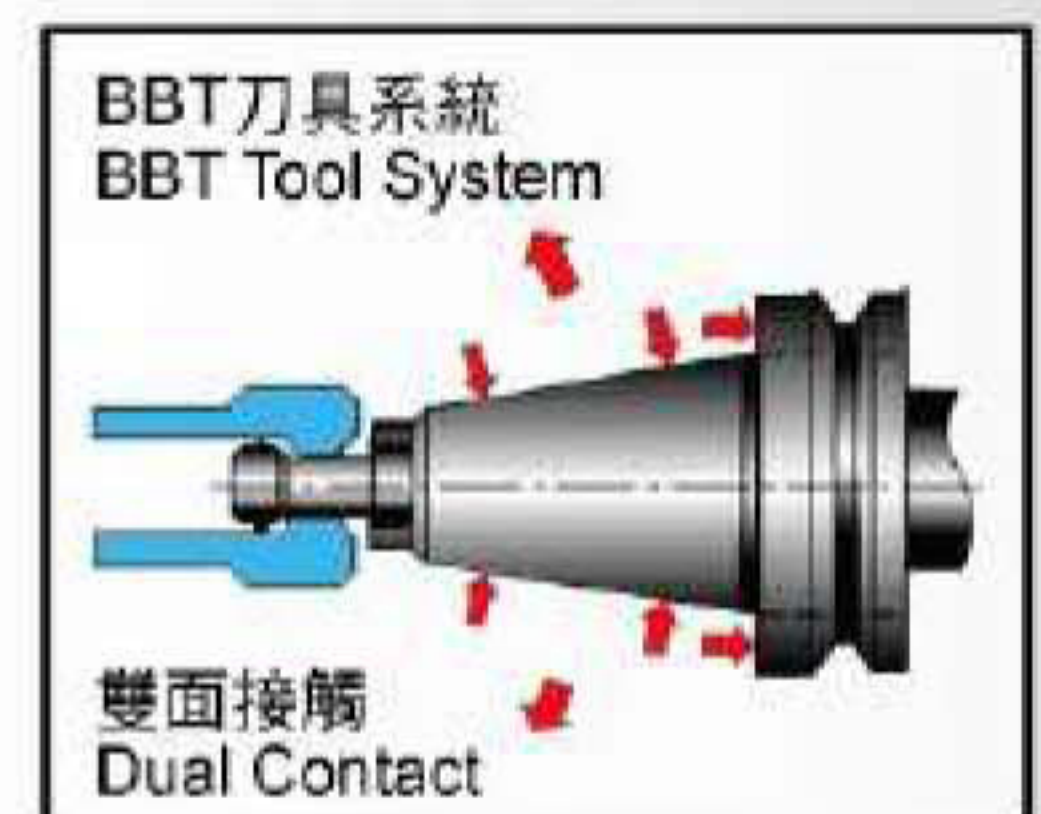
- 機台監控狀態設定為良好、普通、停機，做為機台工作及排修時程依據。
- Machine monitoring is set to be good, normal, and stop, as the basis for the work and maintenance time of the machine.

油氣潤滑主軸 Big Plus Oil-air ldd Type Spindle



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



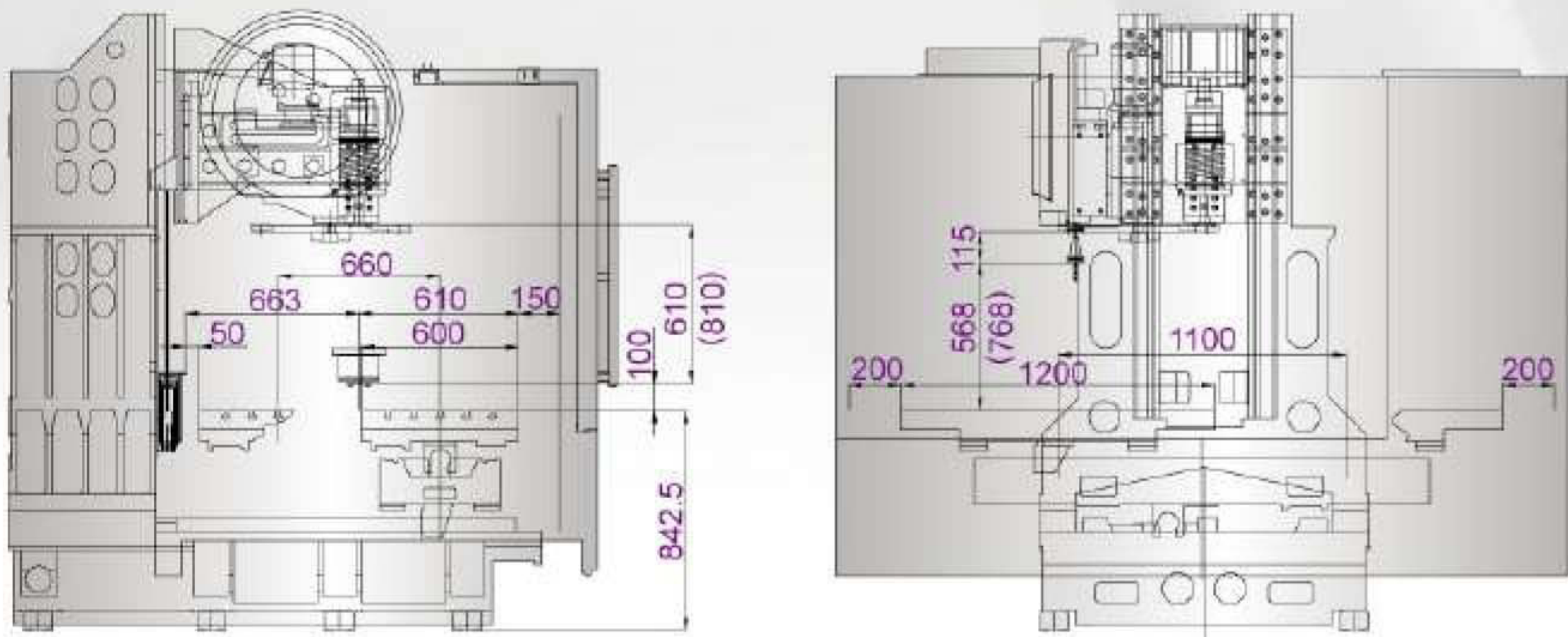
- 主軸轉速可選購12000 / 15000 / 20000轉。
- 採用油氣潤滑可直接帶走主軸熱源，有效減少熱伸長。
- 藉由油氣常態性潤滑可連續高速運轉。
- 氣幕設計可隔絕冷卻液及切屑。

- 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.

THF-1100	THF-1100S	THF-1100A	THF-1100P
10000RPM	10000/12000RPM	12000/15000RPM	12000/15000/20000RPM
皮帶式 BELT TYPE	直結式油脂潤滑 IDD TYPE - GREASE	直結式油氣潤滑 IDD TYPE - OIL AIR	直結式油氣潤滑 內藏式油氣潤滑 IDD TYPE - OIL AIR BUILT IN - OIL AIR
三軸熱制御 Ball screw cooling system	三軸熱制御 Ball screw cooling system	機台監控(主軸+三軸) Machine monitor system (Spindle + X/Y/Z axis)	機台監控(主軸+三軸) Machine monitor system (Spindle + X/Y/Z axis)
48/48/32 M/min	48/48/32 M/min	48/48/32 M/min	48/48/48 M/min

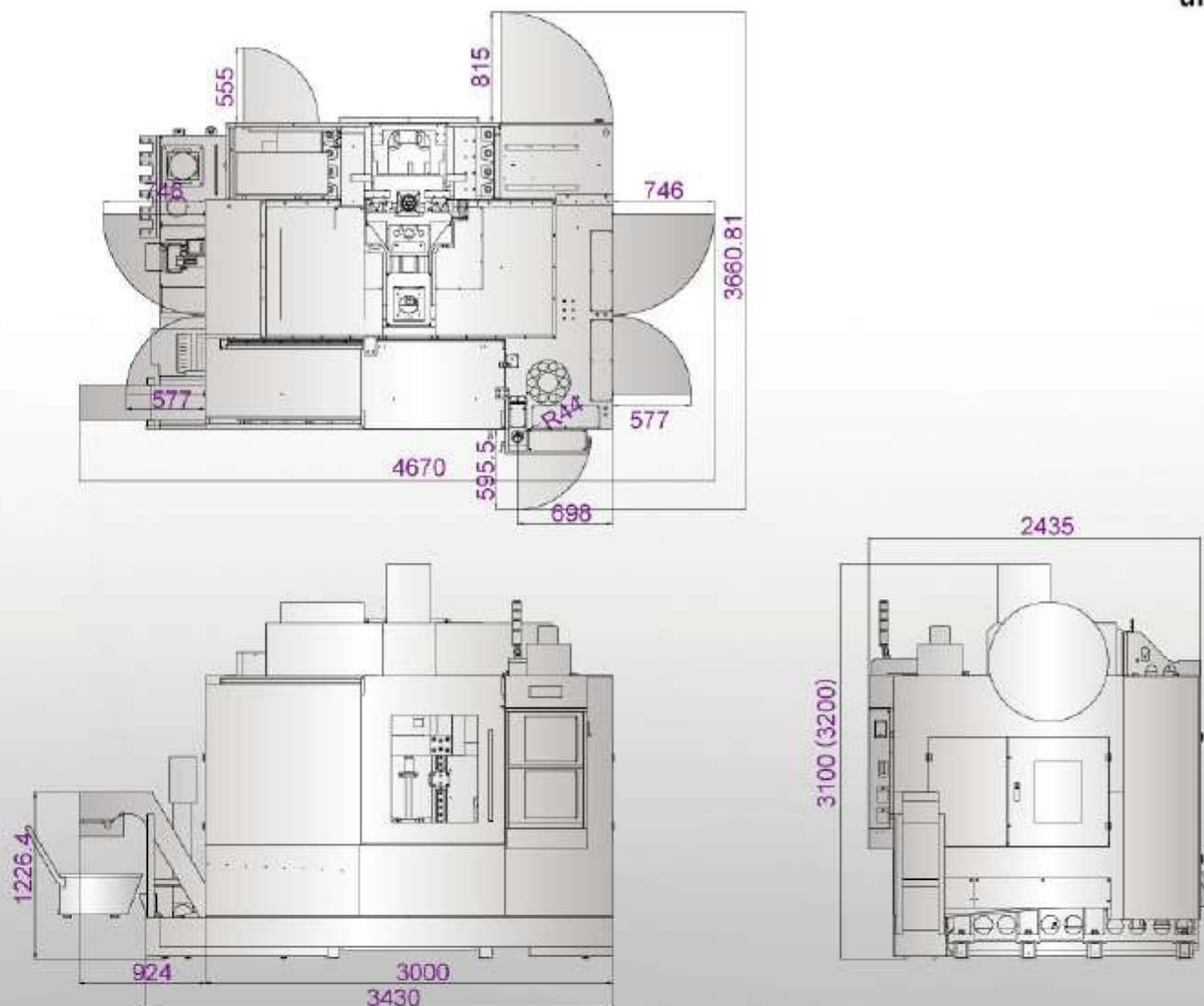
加工行程圖 Work Range

unit:mm



佔地面積圖 Floor Space

unit:mm



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主軸 SPINDLE					
錐度 Taper		#40			
轉速 Speed	RPM	10000	10000 (12000)	12000 (15000)	12000 (15000 / 20000)
馬力 Power	KW	11 / 15 / 18.5			
軌道 SLIDEWAY					
形式 Type	Linear Guide Way	Roller Type 滾柱線軌			
軌道數量 No. of slide way		2 / 3 / 2			
進給 FEEDRATE					
切削進給 Cutting feed	mm/min.	10000		20000	
快送速度 Rapid Feedrate X/Y/Z	M/min.	48 / 48 / 32	48 / 48 / 32	48 / 48 / 32	48 / 48 / 48
刀庫 ATC					
刀數 Tool No.		24			
刀把形式 Tool shank		BT	BBT	BBT	BBT
#40 最大刀長 #40 Max. tool DIA.x length	mm	75 x 300			
#40 最大刀具重量 #40 Max. tool weight	kg	6			
其他規格 GENERAL					
氣壓 Air Pressure	kg/cm	6			
機械尺寸 Machine Size	mm	3000 x 2435 x 3300			
機械尺寸 (機台最大占地面積) Machine Size(Max. floor space)	mm	4500 x 3600 x 3300			
機械尺寸 (機台最大占地面積・搭鏈板式排屑機) Machine Size(Max. floor space with chip conveyor)	mm	4670 x 3600 x 3300			
重量 Machine Weight	kg	7500			