

Spindle

Different type of milling or Mill-Turn spindle are available for various machining application.

主軸系統

不同型式之銑削或銑俥主軸可供選用，以適應不同之加工需求

Rigid Construction

All major structural parts are manufactured from Meehanite cast iron with maximum material stability annealed and vibratory stress relieved. Finite Element Analysis is also conducted to optimise the machine structure and structural parts ratio. This results in more stable support and superior force distribution during cutting.

高剛性結構

整機採用米漢納鑄鐵鑄造，材料穩定，並經退火與振動內應力消除，並採用有限元素分析達到最佳化的強健結構與比例，使加工時擁有最穩定的支撐與完美的力流線。

Work Table

2-Axis Direct-Drive Swivel Rotary Table (Table speed 100 rpm or 800 rpm), or Direct-Drive Mill-Turn table are available for various 5-Axis milling and turning application.

工作台

雙軸直驅式搖擺旋轉工作台(工作台轉速100 rpm 或800 rpm)，或單軸直驅式銑俥旋轉工作台可供選用，以適應不同之五軸銑削及俥削的加工需求。

Chip Removing System

Two tunnels formed between machine base and table, combined with two chip augers makes chip removing more efficiently to the right side of machine.

排屑系統

底座與工作台間形成兩個排屑隧道，搭配兩組捲屑機，使得切屑能更有效的被排至機器右側。

High Efficiency Feed System

Three axes are mounted with high precision roller type linear ways, providing high feed rates up to 48 m/min. In addition, the best machining accuracy and reduced moving time can be achieved.

高效率進給系統

三軸向採用高精度滾柱線軌，提供48 m/min的高進給與高速度，保證最佳加工精度與最少的位移時間。

Central Lubrication System

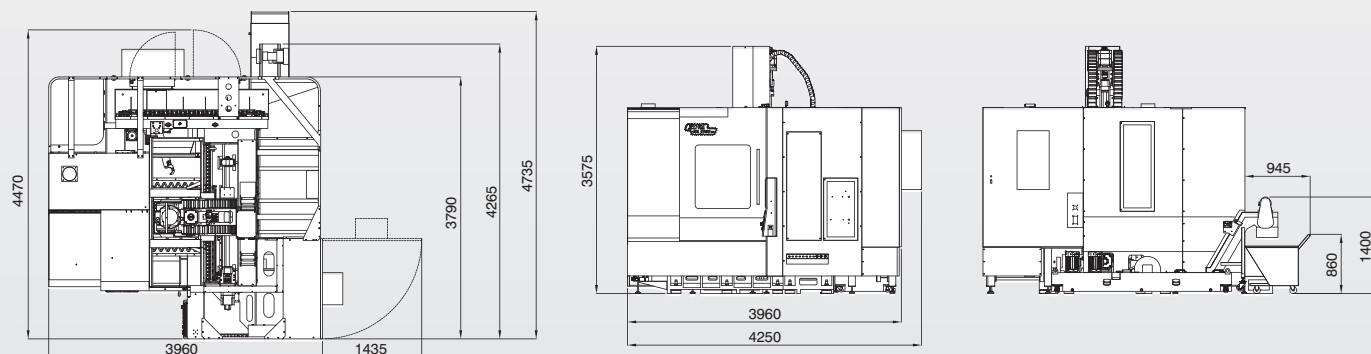
Central lubrication system employs a proportional oil distributor to ensure oil is properly delivered to each drive periodically.

中央潤滑系統

採用比例式潤滑油分配器，確保定期供應各單元的需求油量。

DIMENSIONAL DRAWING 外觀尺寸圖

Unit: mm



KA-1060 sr/srt/mt

CODE	項目	KA-1060 sr (5 Axes)	KA-1060 srt (5 Axes)	KA-1060 mt (4 Axes)
Table Type	工作台型式	Swivel Rotary Table / Milling (搖擺旋轉工作台/銑削)	Swivel Rotary Table / Mill-Turn (搖擺旋轉工作台/銑俥)	Mill-Turn Table (銑俥旋轉工作台)
(X/Y/Z) Traverse range	行程範圍(X/Y/Z)	600/1060/600 mm	600/1060/600 mm	600/1060/600 mm
Traverse range (A/C)	行程範圍(A/C)	+/- 120° / n x 360°	+/- 120° / n x 360°	- / n x 360°
Table size	工作台尺寸	ø500 mm	ø500 mm	ø1000 mm
Max. table load	工作台最大負荷	500 kg	300 kg	1000 kg
Distance spindle nose to table top	主軸鼻端到工作台距離	165 mm	165 mm	102 mm
T slot size	T 型槽尺寸	6 x 14H8 mm	6 x 14H8 mm	12 x 18H8 mm
Spindle taper	主軸刀把型式	BT40	HSK-T100	HSK-T100
Max. spindle speed	主軸轉速	15000 rpm	10000 rpm	10000 rpm
Spindle power (Rated / Maximum)	主軸輸出功率 (額定/最大)	8.5/33.5 Kw	15/37.7 Kw	15/37.7 Kw
Spindle torque (Rated / Maximum)	主軸輸出扭力 (額定/最大)	20/80 Nm	96/240 Nm	96/240 Nm
Rapid traverse speed (X/Y/Z)	快速位移速度 (X/Y/Z)	48/48/48 m/min	48/48/48 m/min	48/48/48 m/min
Max. speed Tilting axis (A Axis)	傾斜軸 (A軸) 最大轉速	50 rpm	50 rpm	-
Max. speed Rotary axis (C Axis)	旋轉軸 (C軸) 最大轉速	100 rpm	800 rpm	500 rpm
Tool Magazine Type	刀庫型式	鏈式/換刀臂 (Chain / Arm)		
Number of Magazine pocket	刀庫刀具數量	40	32	32
Max. tool diameter	最大刀具直徑	ø75 mm	ø125 mm	ø125 mm
Max. tool diameter (Adj. pockets empty)	最大刀具直徑 (相鄰空刀)	ø130 mm	ø250 mm	ø250 mm
Max. tool length	最大刀具長度	300 mm	300 mm	300 mm
Max. tool weight	最大刀具重量	8 kg	18 kg	18 kg
Pneumatic air pressure	空壓需求	6 bar	6 bar	6 bar
Machine weight	機器重量	12500 kg	12500 kg	12500 kg
Machine dimension (LxWxH)	機器外觀尺寸 (長x寬x高)	4250 x 4265 x 3575 mm	4250 x 4265 x 3575 mm	4250 x 4265 x 3515 mm

- As the manufacturer constantly improves the machine specifications and design characteristics, above specifications are subject to change without notice.
- 本公司對產品規格、設計特性均不斷研究改進，上述規格若有變更，恕不另行通知。



KA-1060 sr/srt/mt

Gantry Type Machining Center
門型加工中心機

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KA-1060 sr/srt/mt Gantry Type Machining Center 門型加工中心機

Optional Work Table 工作台選項

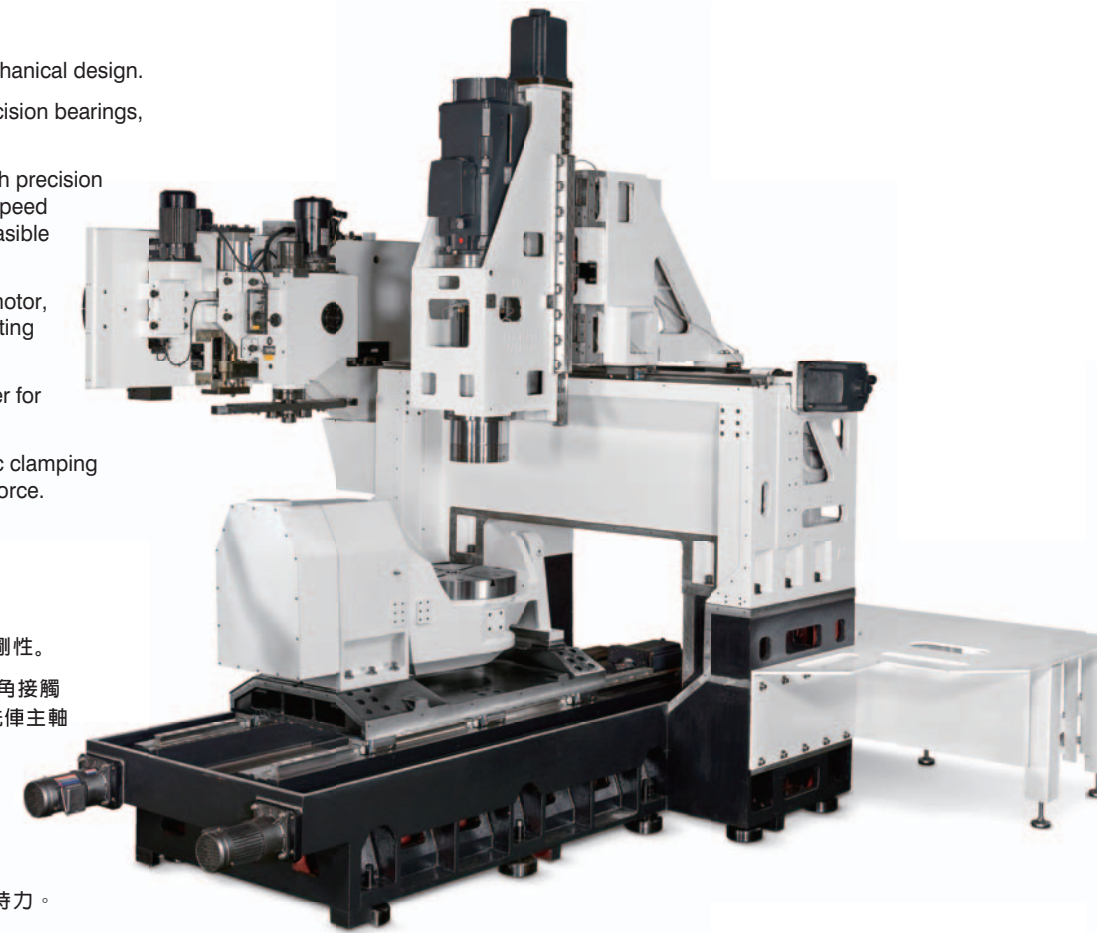
Swivel Rotary Table (sr/srt) 搖擺旋轉工作台 (sr/srt)

Features

- Double end support, high rigidity mechanical design.
- Both axes equip with Axial-Radial Precision bearings, guarantee high cutting rigidity.
- Rotary axis of Mill-Turn model (srt) with precision Axial Angular Contact Ball Bearings, speed up to 800 rpm, turning operation is feasible with Mill-Turn spindle.
- Both axes are driven by Direct Drive motor, no backlash, high precision, high rotating speed.
- High precision absolute rotary encoder for both tilt and rotary axis.
- Both axes are equipped with hydraulic clamping system to ensure powerful clamping force.

特性

- 雙邊支撐，高剛度機構設計。
- 雙軸採用高剛度軸徑向軸承，高切削剛性。
- 銑伸機型 (srt) 旋轉軸採用高精度軸向角接觸滾珠軸承，轉速可達800 rpm，搭配銑伸主軸可做車削動作。
- 雙軸直驅馬達驅動，零背隙、高精度、高旋轉速度。
- 雙軸採用高精度絕對式旋轉光學尺。
- 雙軸油壓夾持系統，確保強有力之夾持力。



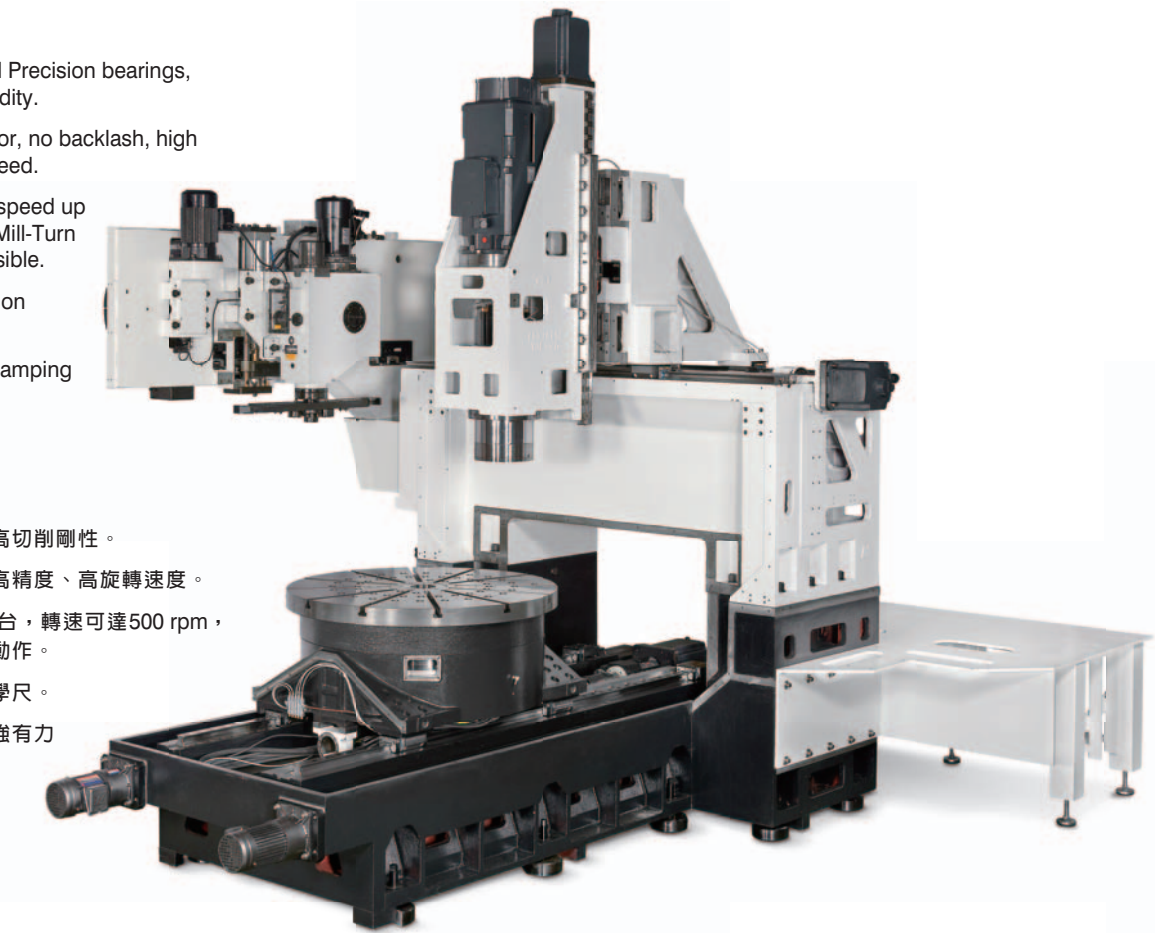
Mill-Turn Rotary Table (mt) 銑伸旋轉工作台 (mt)

Features

- Equipped with Axial-Radial Precision bearings, guarantee high cutting rigidity.
- Driven by Direct Drive motor, no backlash, high precision, high rotating speed.
- $\phi 1000$ mm Table surface, speed up to 500 rpm, together with Mill-Turn spindle makes turning feasible.
- Equipped with high precision absolute rotary encoder.
- Equipped with hydraulic clamping system to ensure powerful clamping force.

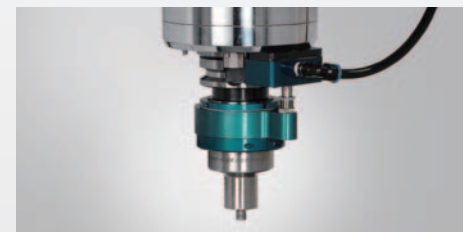
特性

- 採用高剛度軸徑向軸承，高切削剛性。
- 直驅馬達驅動，零背隙、高精度、高旋轉速度。
- 直徑1000 mm 大盤面工作台，轉速可達500 rpm，搭配銑伸主軸可進行車削動作。
- 配備高精度絕對式旋轉光學尺。
- 配備油壓夾持系統，確保強有力之夾持力。



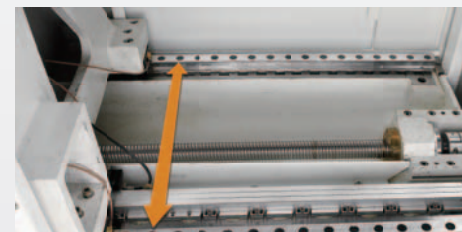
All three linear axes are equipped with high accuracy, high resolution, absolute linear scales as standard, guarantee the machine accuracy and quality.

三個線性軸標準配備高精度、高解析度、絕對式光學尺，確保機器加工之精度及品質。



With optional 40000 rpm High speed and high torque air turbine spindle make it possible to execute high speed cutting with small diameter tools. (Option)

搭配選配40000轉高轉速高扭力氣動渦輪主軸，可進行小刀徑高速切削。(選配)



Large diameter ball lead screw and wide span Roller Guide way ensure high load capacity, low friction, and low vibration movement.

大直徑滾珠螺桿及寬跨距滾柱導軌確保高承載重量，低摩擦及低震動之運動。

