

Millstar VH Series Traditional Milling Machine Advantages:

- With electronic MPG automation technology, the 3 axes can be independently operated thereby reducing mistakes, saving manpower and making for easy maintenance.
- The MPG micro feed, with high precision, efficient ball screw and AC servo-motor to fully upgrade your machining.
- Ergonomic design of the interface provides easier operations when machining. The VH series provides more exact feedback control to increase feeding stability.
- The Vertical & Horizontal double-spindle features an integrated structural design. The distance of center lines are narrowly reduced by 60%, allowing multi-surface milling works can be finished in one setup without the problem of tolerance accumulation. This design has been patented.
- Spindle temperature rise protection systems, oil cooling device coupled with the structural design of the non-contact labyrinth path (dust-proof, anti-wear, anti-temperature rise, anti-oil spill) temperature control in less than $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$. (Above design has been patented, too.)
- The VH series has got three patents, work pieces from 1000 kg up to 3000 kg for 5-side simultaneous machining.
- All in one: Highest flexibility with Vertical and Horizontal machining.

BED TYPE VERTICAL & HORIZONTAL MILLING MACHINE

床式立橫兩用銑床

VH系列傳統銑床位階提昇實際體現

- 以「電子式MPG」自動化技術、獨立三軸操控減少誤動作、能夠節省人力，並具備維修容易的特性。
- MPG微量進給，搭配高精度、高效率之滾珠螺桿，及伺服馬達，在質量構面、加工構面，位階全面升級。
- 人機介面之設計，符合人體功能化運作、回饋控制更為精良，提高進給穩定度。
- 立臥兩用雙主軸一體式結構設計，中心距離窄形化(比分離式縮減60%以上)，可一次裝夾、多面加工，無累積公差之虞。(已獲專利)
- 主軸溫升防護系統、潤滑油冷卻循環裝置加上非接觸式與迷宮式路徑結構設計(防塵、防磨耗、防溫升、防漏油)可溫控在 $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 以內。(已獲專利兩項)
- 本機型擁有三項專利加持、更實質體現機器，附加價值之磅礴氣勢。



FEATURES

- The machine column is manufactured from high quality cast iron FC-30, tempered for long term accuracy.
- FC-30 cast iron table is tempered, hardened and precision ground.
- The spindle is precision machined from SCM-21 alloy steel, tempered and carbon treated, ensuring maximum stability for heavy duty cutting.
- X and Y axes are driven by an AC servo motor for smooth traverse.
- X and Y axis slideways are precision ground, and coated with Turcite-B wear resistant media.
- The knee is power elevated and has rapid traverse function.
- X and Y axes employ precision ball screws.
- The drive gears in the powerful vertical head are hardened and precision ground for maximum wear resistance and low noise running.
- Equipped with an automatic lubricator for lubrication to 3-axis slideways, feed screws, gears and bearings, ensuring high working efficiency and long service life of parts.
- The coolant tray effectively prevents cutting fluid leakage.
- Employs high pressure coolant pump for efficient chip removing.
- Halogen work light.

KNEE TYPE MILLING MACHINE

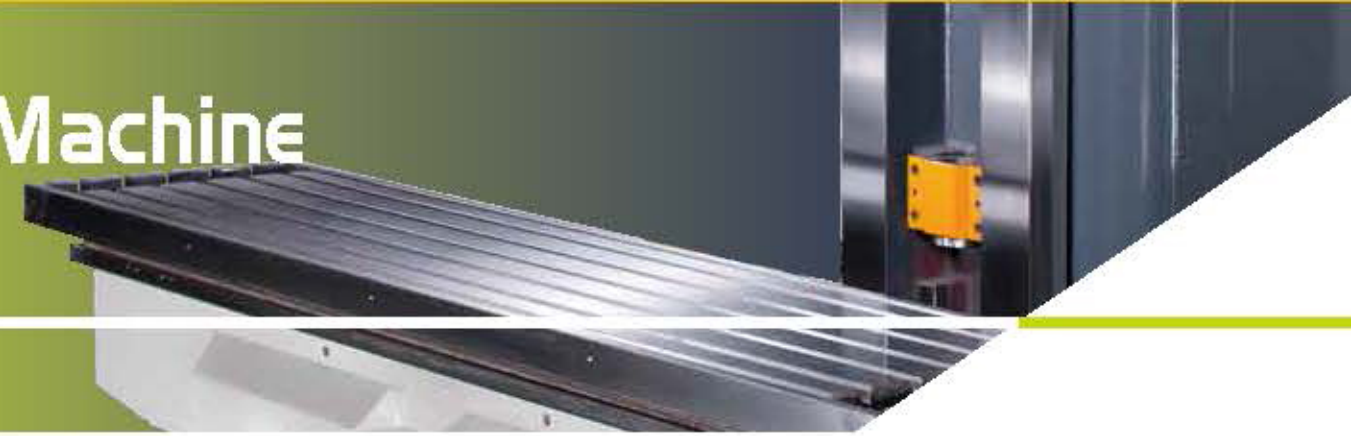
全系列膝型銑床

機械特性

- 機身採用FC30高級鑄鐵製成，經調質處理，確保長期精度。
- 工作台採用FC30高級鑄鐵製成，經調質硬化處理，及精密研磨。
- 主軸為SCM-21合金鋼精密加工而成。經調質滲碳處理，重切削穩定性優異。
- X,Y軸採用AC伺服馬達驅動，動作順暢。
- X,Y軸滑道精密研磨，並貼附Turcite-B耐磨片。
- 升降座為電動快速升降。
- X,Y軸採用精密滾珠螺桿傳動。
- 強力立銑頭傳動齒輪，經熱處理硬化，精密研磨，耐磨耗，運轉噪音低。
- 採用自動注油器，可定時自動潤滑三軸滑道，螺桿，齒輪及軸承，確保高率加工及增加壽命。
- 配備防濺水盤以防切削液外洩。
- 本機配有高壓切削液泵浦，切削除屑效果更佳。
- 配備石英工作燈。

Bed Type Vertical & Horizontal Milling Machine 床型立橫兩用銑床VH Series

VH450/480/550/650B/780



HY-VH450

- 工作台尺寸 Table size: 1500 x 450 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1100 / 720 / 780 mm
- 最大工件載重 Max. loading weight 1000 kgs
- 主軸轉速 Spindle speeds 45- 1500 rp (Variable)
- 主軸錐度 Spindle taper NT#50
- 主軸馬達 10 HP Spindle motor
- 軸心至機柱滑動面距離 Spindle center to slide way: 450 mm



HY-VH480

- 工作台尺寸 Table size: 1900 x 500 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1300 / 850 / 780 mm
- 最大工件載重 Max. loading weight 1500 kgs
- 主軸轉速 Spindle speeds 45-1500 rpm (18 speeds)
- 主軸錐度 Spindle taper NT#50
- 主軸馬達 10 HP Spindle motor
- 軸心至機柱滑動面距離 Spindle center to slide way: 480 mm



HY-VH550

- 工作台尺寸 Table size: 1900 x 500 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1500 / 900 / 790 mm
- 最大工件載重 Max. loading weight 1500 kgs
- 主軸轉速 Spindle speeds 45-1500 rpm (18 speeds)
- 主軸錐度 Vertical & horizontal spindle taper NT#50
- 主軸馬達 10 HP spindle motor
- 軸心至機柱滑動面距離 Spindle center to slide way: 550 mm



HY-VH650B

- 工作台尺寸 Table size: 2200 x 600 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1700 / 1050 / 950 mm
- 最大工件載重 Max. loading weight 2000 kgs
- 主軸轉速 Spindle speeds 45- 1500 rpm (18 speeds)
- 主軸錐度 Vertical & horizontal spindle taper NT#50
- 主軸馬達 15 HP spindle motor
- 軸心至機柱滑動面距離 Spindle center to slide way: 650 mm

HY-VH780

- 工作台尺寸 Table size: 2600 x 700 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 2000 / 1200 / 1000 mm
- 最大工件載重 Max. loading weight 3000 kgs
- 主軸轉速 Spindle speeds 45- 1500 rpm (18 speeds)
- 主軸錐度 Vertical & horizontal spindle taper NT#50
- 主軸馬達 15 HP spindle motor
- 軸心至機柱滑動面距離 Spindle center to slide way: 780 mm



Half cover for work table (opt).
工作台半護罩(選配)

* Picture shown coolant tray and chip guard are optional.

*以上照片所示水盤及擋屑板為選配

Bed Type Vertical Milling Machine 床型立式銑床V Series

V520/V580/V680/V850



HY-V520

- 工作台尺寸 Table size: 1500 x 450 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1100 / 500 / 500 mm
- 最大工件載重 Max. loading weight: 1000 kgs
- 主軸轉速 Spindle speed: 45-1500 rpm (Variable speed)
- 主軸錐度 Vertical spindle taper: NT50
- 主軸馬達 Spindle motor: 10HP
- 軸心至機柱滑動面距離 Spindle center to slide way: 520mm



HY-V580

- 工作台尺寸 Table size: 1900 x 500 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1300 / 560 / 550 mm
- 最大工件載重 Max. loading weight: 1500 kgs
- 主軸轉速 Spindle speed: 45-1500 rpm (18 steps)
- 主軸錐度 Vertical spindle taper: NT50
- 主軸馬達 Spindle motor: 10 HP
- 軸心至機柱滑動面距離 Spindle center to slide way: 580 mm



HY-V680

- 工作台尺寸 Table size: 1900 x 500 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1500 / 660 / 600 mm
- 最大工件載重 Max. loading weight: 2000 kgs
- 主軸轉速 Spindle speed: 45-1500 rpm (18 steps)
- 主軸錐度 Vertical spindle taper: NT50
- 主軸馬達 Spindle motor: 10HP
- 軸心至機柱滑動面距離 Spindle center to slide way: 680 mm



HY-V850

- 工作台尺寸 Table size: 2200 x 600 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1700 / 800 / 600 mm
- 最大工件載重 Max. loading weight: 2000 kgs
- 主軸轉速 Spindle speed: 45-1500 rpm (18 steps)
- 主軸錐度 Vertical spindle taper: NT50
- 主軸馬達 Spindle motor: 15HP
- 軸心至機柱滑動面距離 Spindle center to slide way: 850 mm

* Picture shown coolant tray and chip guard are optional.

* 以上照片所示水盤及擋屑板為選配

Bed Type Vertical Turret Head Milling Machine 床型立式砲塔頭兩用銑床VT Series

VT550/VT630



HY-VT550

- 工作台尺寸 Table size: 1500 x 450 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1100 / 520 / 600 mm
- 最大工件載重 Max. loading weight: 1000 kgs
- 主軸轉速 Spindle speed: 75-3600 rpm (16 steps) STD.
80-3800 rpm (Variable speed) OPT.
- 主軸錐度 Vertical spindle taper: NT40
- 主軸馬達 Spindle motor: 5HP Pole change motor
- 軸心至機柱滑動面距離 Spindle center to slide way: 550 mm



HY-VT630

- 工作台尺寸 Table size: 1900 x 500 mm
- X/Y/Z軸行程 X / Y / Zaxis travel: 1300 / 600 / 650 mm
- 最大工件載重 Max. loading weight: 1500 kgs
- 主軸轉速 Spindle speed: 75-3600 rpm (16 steps) STD.
80-3800 rpm (Variable speed) OPT.
- 主軸錐度 Vertical spindle taper: NT40
- 主軸馬達 Spindle motor: 5HP Pole change motor
- 軸心至機柱滑動面距離 Spindle center to slide way: 630 mm



NT40

- TURRET TYPE HEAD**
- 16-step speeds 75-3,600 rpm (Std.)
 - Variable speeds 80-3,800 rpm (Opt.)

- 砲塔式立銑頭**
- 主軸轉速16段75-3,600 rpm (標配)
 - 無段變速80-3,800 rpm (選配)

Common Features of Millstar Bed Type Milling Machines

寰業床式銑床共同特性



VERTICAL AND HORIZONTAL MILLING HEAD
立橫兩用銑頭



45- 1500 RPM 18 SPEED CHANGE
45- 1500 RPM 18段變速



RUGGED SADDLE
鞍座結構高剛性



SPINDLE LUBRICATION SYSTEM
主軸冷卻系統



PRACTICAL TELESCOPIC COVER
金屬防屑護蓋



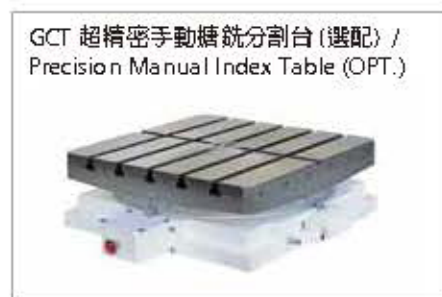
INTEGRATED AUTO LUBRICATING SYSTEM
FOR ALL SLIDEWAYS
滑道採用自動潤滑器



The Y, Z axis slideways are secured by compressed air, max. pressure of 1500 kg/cm², to avoid table movement while heavy cutting, thereby ensuring workpiece accuracy (For VH450, only Y axis is applicable for this function) (Opt.)
Y, Z 兩軸滑道採用空壓裝置固緊，最大固鎖力可達1500公斤/平方公分，即使進行重銑削工作，工作檯面無偏差滑動，確保工件成品精密度 (VH450只有Y軸可裝) (選配)。



Air power draw bar (Vertical and horizontal spindle, 450, 550, 650, 780)
氣動鎖刀裝置(立式及橫式主軸，450, 550, 650, 780)



GCT 超精密手動精銑分割台 (選配) /
Precision Manual Index Table (OPT.)

5-SIDE Machining is Available 可做五面加工

This machine can be fitted with a rotary table for easy and time saving 5-side machining.
可搭配旋轉工作台，簡單且省時地做五面加工。



- 適用於各式磨、銑、磨床等高精度加工。
- 採二片齒式聯結器定位，分割精度可達±3'，目標精度不隨使用時數之增加而改變。耐重切削。
- 使用空壓，鬆開、鎖緊，操作簡便。
- 採用 FC35 鑄鐵，並經過數次冷熱調質處理，精密度耐久不變形。
- Suitable for the high accuracy machining job like Boring-Milling and Grinding-Machine.
- Build-in 2 pieces hirth coupling for positioning, indexing accuracy ±3 sec, ensure a long-term operation and heavy cutting & boring.
- Clamping / Unclamping by pneumatic, easy operation.
- The body is made of FC-35 cast iron that will be durable without deformation.

FEATURES:

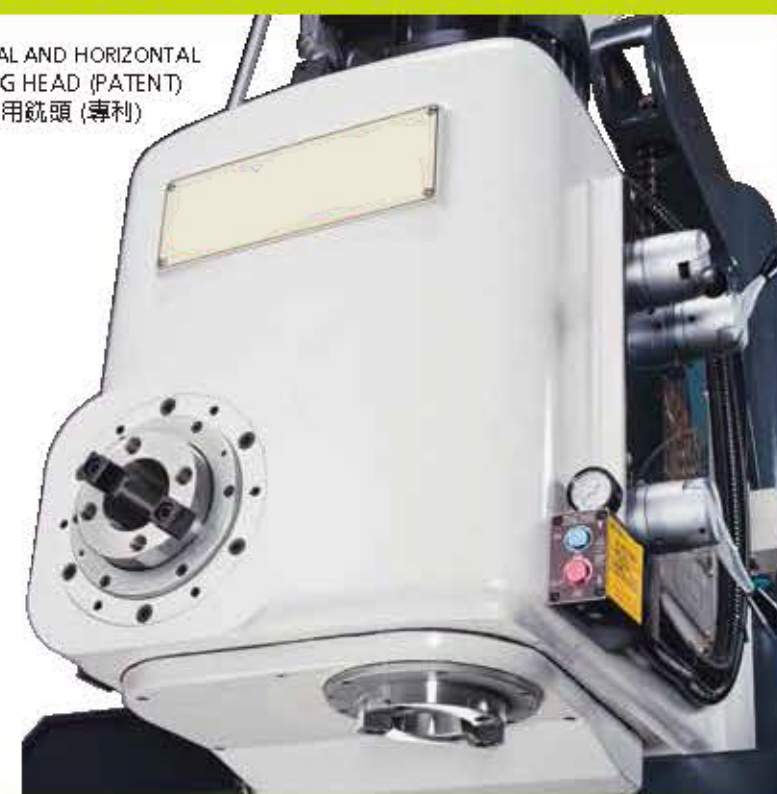
- Equipped with automatic lubrication system.
- Equipped with cooling system.
- Limit switches are provided on all traverses for safety.
- The ways are hardened, precision ground, then coated with Turcite-B.
- The table is fully supported in full traverse without overhang problems.
- Simultaneous rapid traverse for 3 axes is available (except VH450 series).
- All castings are FC 30 high quality material, anneal treated to relieve internal stress.
- All slideways are protected by telescopic covers to prevent scratching.
- Oversized column ensures maximum rigidity and stability. Widely spaced base structure.
- Y, Z-axes are pneumatically locked for fast and accurate positioning.
- Centralized control panel minimizes operation fatigue while permitting efficient operation.
- Short distance between vertical and horizontal spindles provide increased capacity especially for multiple face machining.

VH.V.VT SERIES Bed Type Vertical & Horizontal 床式立橫銑床 VH450/VH480/VH550/VH650B/VH780 V520/V580/V680/V850, VT550/VT630

機械特性:

- 本機裝置自動潤滑器。
- 配備冷卻系統。
- 所有行程附極限開關，確保行程安全。
- 滑道經硬化處理，精密研磨，並貼覆Turcite-B耐磨片。
- 工作台行程具全程支撐特性，無懸垂問題。
- 3軸同時快速移動為選購配備。
- FC30高級鑄鐵結構，經退火處理消除內應力。
- 滑道以金屬伸縮護蓋保護，有效避免灰塵及鐵屑傷害滑道。
- 超大立柱構造，展現優異的機械剛性及穩定性。
- 底座滑道寬闊，穩定性佳。
- Y, Z兩軸滑道採用空壓裝置固緊，可快速精確的鎖定滑動面。
- 集中式操作面板，可免除操作上之疲憊，提高生產效率。
- 立、橫兩主軸中心距離小，可加大多面同時加工之長度。

VERTICAL AND HORIZONTAL
MILLING HEAD (PATENT)
立橫兩用銑頭 (專利)



Syntec PC-Based Controller

Based on high end IPC and embedded designed, Offers front panel plug and play CF card and USB reader with WinCE OS and Ethernet interface. Also provides customized HMI screen design, maximum 8 axes control, suitable purpose for machine centers and 5-axes machines.

新代數值控制器

新代系列之控制系統採用先進的開放式架構，內置高性能工業計算機，配置10.4寸液晶螢幕，結合伺服軸、主軸、手輪軸，內建PLC及USB界面CF CARD讀取裝置。且有低價格、高性能、結構簡單、易于使用、可靠性高的特點。完全無風扇設計，使用鋁擠散熱片、整機完全模塊化、并將內部配線最精簡化、控制器可靠度大為提升。



More efficiency and more convenience of application when you change to the CNC controller on Bed-Type Milling Machine.

昇級為CNC控制器
使床式銑床操作更有效率
、提升操作便利性 !!



New Generation Milling PC-Based/CNC

床型數控銑床

VH450/VH480/VH550/VH650B/VH780
V520/V580/V680/V850.VT550/VT630

INTEGRATED CONTROL PANEL 集中式控制面板

With new generation Syntec PC Base (Std), or Mitsubishi/Fanuc controller (Opt.) AC servo motor/Ball screw on 3 axes and RS 232 interface (Std). Increase user's machining to be more accurate are effective.

採用新一代的新代PC Base 控制器(標準)或三菱/發那科控制器(選用配備)。搭配AC伺服馬達與3軸滾珠螺桿，RS232介面(標準)，讓使用者加工更快速精準，更有效率。



Mitsubishi controller



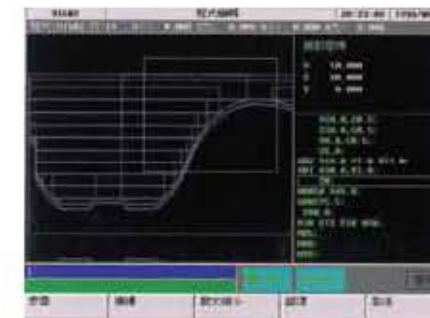
Fanuc controller

User Friendly Interface

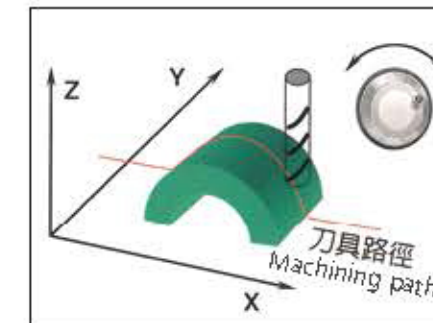
Easy to use, user can learn to operate the machine easily, at the first time.

友善的操作介面

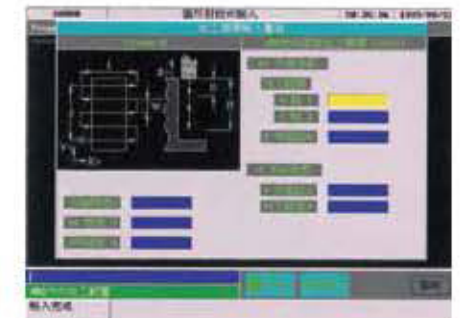
操作者易用易學的操作介面，使用這接觸機器第一時間立即學會操作。



Program Simulation Drawing
Simulate program machining path before machining and also simulate the machining path on-line to check the status.
方便的圖形模擬功能，提供預先模擬，檢查加工路徑，或于加工中觀察切削位移狀態。



Hand Wheel Simulation
Use hand wheel to simulate machining. Control the machining position and feedrate by hand wheel rotation.
試加工過程中，可以手輪前進後退控制實際機臺加工速度及方向。



Work Sheet
Record machining information to manage workpiece and machining time.
工件表單中記錄加工履歷詳細資料，便于驗證加工時間及機器使用率。

規格表

SPECIFICATIONS

單位:mm / Unit:mm

型式		MODEL	VT550 / VT630	V520	VH450	V580 / VH480 / VH550	V680 / V850	VH650B	VH780	
Table	工作台	工作台面積	Table size	1500 x 450 / 1900 x 500	1500 x 450	1500 x 450	1900 x 500	1900 x 500 / 2200 x 600	2200 x 600	2600 x 700
		XY軸行程	X & Y axes travel	1100 x 520 / 1300 x 600	1100 x 500	1100 x 720	1300 x 560 / 1300 x 850 / 1500 x 900	1500 x 660 / 1700 x 800	1700 x 1050	2000 x 1200
		Z軸行程	Z axis travel	600 / 650	500	780	550 / 780 / 790	600	950	1000
		T型槽(尺寸槽數間距)	T-slot (size x number x distance)	18 x 5 x 80	18 x 5 x 80	18 x 5 x 80	18 x 5 x 80	18 x 5 x 80 / 20 x 5 x 125	20 x 5 x 125	20 x 5 x 125
		三軸快速移動率	3 axes rapid feed rate	25~1500 / 30~2800 (30~6000 PC-Based)	25~1500 (30~6000 PC-Based)	25~1500 (30~6000 PC-Based)	30~2800 (30~6000 PC-Based)	30~2800 (30~6000 PC-Based)	30~2800 (30~6000 PC-Based)	30~2800 (30~6000 PC-Based)
		三軸切削進給率	3 axes cutting feed rate	1500 / 2800 (30~6000 PC-Based)	1500 (30~6000 PC-Based)	1500 (30~6000 PC-Based)	2800 (30~6000 PC-Based)	2800 (30~6000 PC-Based)	2800 (30~6000 PC-Based)	2800 (30~6000 PC-Based)
Cutting Range Reference	切削工件參考工作範圍	切削長度	Cutting length	1100	1100	1100	1300	1500 / 1700	1700	2000
		切削寬度	Cutting width	520 / 550	490	420	530 / 450 / 520	610 / 780	620	750
		切削高度	Cutting height	600 / 650	500	500	500 / 500 / 520	700	640	750
		承載重量	Loading weight	1000 / 1500	1000	1000	1500	2000	2000	3000
Vertical Spindle	立主軸	主軸轉速 (60HZ)	Spindle speed (60HZ)	75-3600 rpm 16 Steps (ST) 80-3800 rpm Variable (OP)	45-1500 rpm Variable	45-1500 rpm Variable	45-1500 rpm 18 Steps	45-1500 rpm 18 Steps	45-1500 rpm 18 Steps	45-1500 rpm 18 Steps
		主軸端孔斜度	Spindle taper	NT40	NT50	NT50	NT50	NT50	NT50	NT50
		軸端至工作台面距離	Spindle nose to table surface distance	100-700 / 100-750	100-600	0-617	95-645 / 0-583 / 0-603	150-750	0-753	0-810
		軸心至機柱滑動面距離	Spindle center to slide way surface distance	550 / 630	520	450	580 / 480 / 550	680 / 850	650	780
		主軸進給 (3段)	Quill feedrate	0.035 / 0.07 / 0.14	NA	NA	NA	NA	NA	NA
		主軸頭左右旋轉角度	Turret head swivel angle	45°	NA	NA	NA	NA	NA	NA
		主軸通心軸上下行程	Quill travel	140	NA	NA	NA	NA	NA	NA
Horizon	橫主軸	主軸轉速 (60HZ)	Spindle speed (60HZ)	NA	NA	45-1500 rpm Variable	45-1500 rpm 18 steps (VH480, VH550)	NA	45-1500 rpm 18 Steps	45-1500 rpm 18 Steps
		主軸端孔斜度	Spindle taper	NA	NA	NT50	NT50 (VH480, VH550)	NA	NT50 (VH480, VH550)	NT50
		軸心至工作台面距離	Spindle center to table surface distance	NA	NA	0-780	0-780 (VH480) / 0-790 (VH550)	NA	0-950	0-1000
		軸端至工作台面距離	Spindle nose to table edge distance	NA	NA	190	305 (VH480) / 280 (VH550)	NA	335	400
Motor	馬達	主軸馬達	Spindle motor	5HP變極馬達 Pole change motor	10HP x 4P AC	10HP x 4P AC	10HP x 4P AC	10HP x 4P AC / 15HP x 4P AC	15HP x 4P AC	15HP x 4P AC
		X軸進給馬達	X axis feeding motor	1HP x 4 P / 2HP	0.75 KW	0.75 KW	2.5 KW	2.5 KW / 3 KW	3 KW	3 KW
		Y軸進給馬達	Y axis feeding motor	1HP x 4 P / 2HP	0.75 KW	0.75 KW	2.5 KW	2.5 KW / 3 KW	3 KW	3 KW
		Z軸進給馬達	Z axis feeding motor	1HP x 4 P / 2HP	0.75 KW	0.75 KW	2.5 KW	2.5 KW / 3 KW	3 KW	3 KW
Dimensions	一段規格	淨重(約)	Net weight	3400 / 5000 kg	3800 kg	4200 kg	5200 / 5500 / 6000 kg	7000 / 7500 kg	7500 kg	13500 kg
		毛重(約)	Gross weight	4100 / 5800 kg (40"HQ)	4600 kg (40"HQ)	5000 kg (40"HQ)	6000 / 6500 / 7000 kg (40"HQ)	8000 / 8500 kg (40"HQ)	8500 kg (40"HQ)	15000 kg (20"FR)
		佔地面積(長 x 寬 x 高)	Floor plan (L x W x H)	3500 x 3100 x 2620 4280 x 3780 x 2980	3500 x 2900 x 2900	3500 x 3100 x 2750	4300 x 3350 x 2980, 4280 x 3780 x 2980 4500 x 3780 x 2980	4500 x 3780 x 3160 5180 x 4080 x 3180	5180 x 4080 x 3180	5880 x 4450 x 3180

• 由於本公司不斷的研究改進，本型錄所示機械規格特性本公司有變更之權利，恕不另行通知。 • All specifications and designs are subject to change without prior notice.

Bed Type Milling 傳統床型銑床

STANDARD ACCESSORIES 標準配備

- Automatic lubricating system 自動潤滑系統
- Cooling system 冷卻系統
- Tool box 工具箱
- Spindle draw bar screw 主軸拉桿螺絲
- Leveling pads 水平墊片
- Leveling screws 水平調整螺絲
- Air operated Y, Z axis lock (480, 550, 650, 780) Y, Z軸空壓鎖定功能(480, 550, 650, 780)
- Transformer (Export only) 變壓器(外銷專用)

OPTIONAL ACCESSORIES 選購配備

- Ball screw (X, Y) 滾珠導螺桿(X, Y)
- Air power draw bar (Vertical and horizontal) 氣動鎖刀(立、橫主軸)
- 4th axis rotary table (Manual) (1°, 5°, 15°) 第四軸旋轉工作台(手動)
- Electric magnet (400 x 800, 500 x 1000) (1°, 5°, 15°) 電磁盤(400x800, 500x1000)
- Spindle braking equipment (Vertical and horizontal spindle) 主軸煞車裝置(立、橫主軸)
- Vice (16°, 20°) 虎鉗(16°, 20°)
- End milling collet chuck set 端銑刀具夾具組
- Universal clamping set 萬能夾具組
- Coolant tray 水盤
- Chip guard 擋屑板
- Half cover for work table 半罩鍍金工作台
- 3 axes D.R.O (Fagor brand) 三軸發格光學尺
- CE norm CE標準

Bed Type Milling CNC / PC-Based 床型數控銑床

STANDARD ACCESSORIES 標準配備

- Syntec PC-based controller 新代控制器
- 3 axes ball screw 三軸滾珠螺桿
- Coolant tray & chip guard 水盤+擋屑板
- Vertical air power draw bar 立式氣動鎖刀
- Horizontal air power draw bar 橫式氣動鎖刀
- Auto lubrication system 自動潤滑系統
- Cooling system 冷卻系統
- Telescopic cover 伸縮護罩
- Leveling pad 水平墊片
- Leveling screws 水平調整螺絲
- Working condition light 雙色指示器
- RS232 interface RS232介面
- Transformer (Export only) 變壓器(外銷專用)

OPTIONAL ACCESSORIES 選購配備

- Mitsubishi or Fanuc controller 三菱或發那科控制器
- Magnetic chuck 電磁盤
- 4th axis rotary table (Manual) 第四軸旋轉工作台(手動)
- Half cover for work table 半罩鍍金工作台
- 3 axes D.R.O (Fagor brand) 三軸發格光學尺
- CE Norm CE標準