



OUWIN

Vertical Machining Center
立式加工中心



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Travel, table size, load 行程、工作臺尺寸、負載

Table size工作臺尺寸	Unit	MV855	MVP866	MVP1166
Long (X)長	mm	1000	950	1200
Width (Y)寬	mm	500	600	600
Load 負載	kg	500	600	800

Travel 行程	Unit	MV855	MVP866	MVP1166
X-axis travel (left and right) X軸行程(左右)	mm	800	800	1100
Y-axis travel (front and back) Y軸行程(前後)	mm	500	600	600
Z-axis travel (up and down) Z軸行程(上下)	mm	550	600	600

MVP Series

MVP Series is satisfy customers' needs of high-speed, high-accuracy and high-rigidity cutting equipment.

Feature

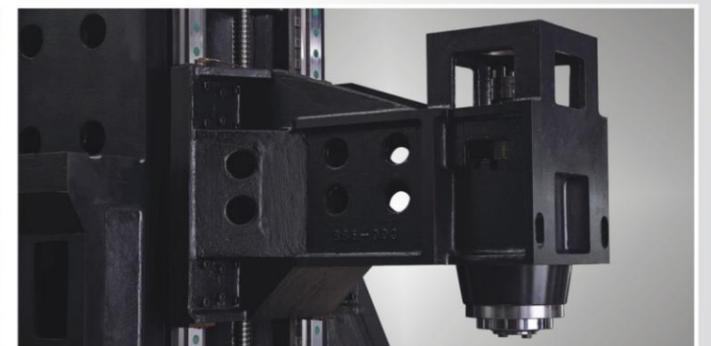
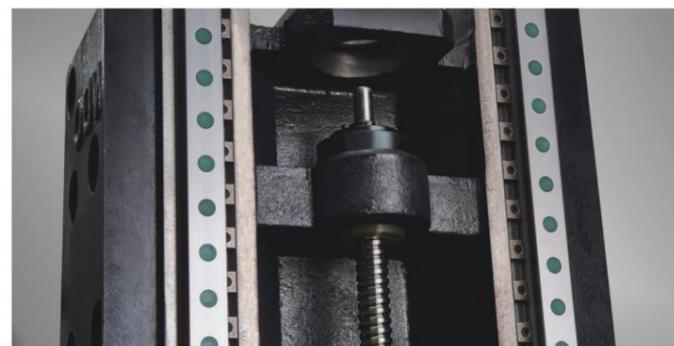
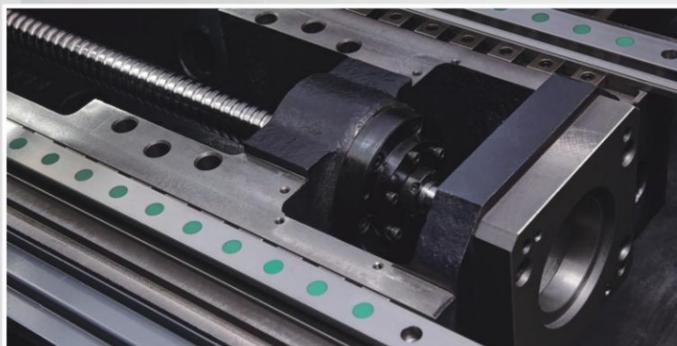
1. Heavy , wide-body structure and high standards machine accessories ensures high-rigidity and high-accuracy of machine.
2. 45mm ultra-heavy load, high accuracy, low friction coefficient roller linear guide ways, the overall motor base together with diaphragm coupling can provide the high keen dynamic performance.
3. Increasing the bottom supporting point of the machine and enlarging the horizontal screws can better absorb the processing load and the appropriately transfer a part of load to the ground.
4. The machine body is made by best Meehanite cast iron, and all major contact surface are all scrapped by excellent skill , which not only improve the overall performance of the machine, but also prolong the working life of the machine.

MVP系列

满足高转速、高精度、高刚性切削客户的需求。

特點

1. 重型寬體結構機身及高標準的機床配件能確保機床高剛性和高精度。
2. 45mm超重負荷、高精度、低摩擦系數的直線滾柱導軌、整體式電機坐搭配膜片式聯軸器提供更敏捷的高動態性能。
3. 增加機床底部支撐點和加大水平螺絲可更好的吸收加工負載并適當的轉移一部分到地面。
4. 機身采用優質米漢納鑄鐵、重要結合面都精密鏟花研配，這樣不僅能提高機床的整體性能，還可以延長機床的使用壽命。



All parts are precise manufactured, careful adjustment and strict assembly.

所有零部件都經過精確的制造、精心的調整和嚴格的組裝！

Rigidity 剛性

Motor base and bearing pedestal are completely casted on the machine body, so they are stable, lower resonance and strong rigidity.

電機座、軸承座整體澆鑄在機身上，穩固、吸震性好、剛性強。

Cutting feed rate 切削進給速度

GOO(X/Y/Z) :

MV855:48/48/48/m/min

MVP866:36/36/30 (48/48/36)m/min

MVP1166:36/36/30/m/min

Pre-straining 3-axes ballscrew, enhancing rigidity and reducing the deformation, so the accuracy is stable and lasting.

預拉緊三軸滾珠絲杆，增強剛性減小變形量，精度穩定持久。

Accuracy and load 精度及負載

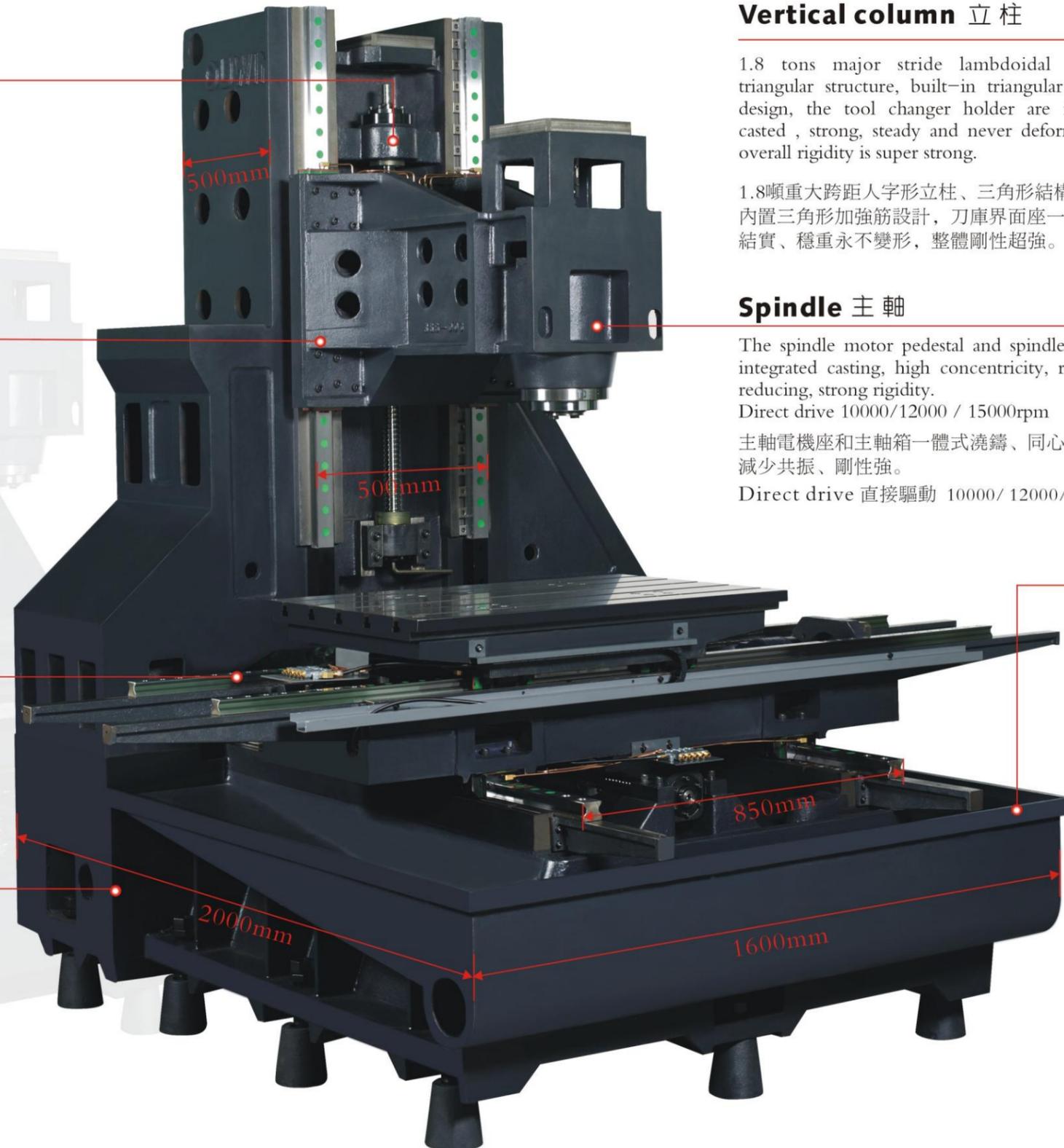
Adopting ultra-heavy roller linear guide ways, the workpiece can get excellent tolerance accuracy and geometric accuracy

採用超重載滾柱直線導軌，工件能獲得卓越的公差精度和幾何精度。

Cast iron 鑄鐵

The machine body are made by the best Meehanite cast iron, the five main parts are processed by twice temper of natural aging and vibration aging treatment to ensure that never deformation.

機身采用最好的米漢納鑄鐵制作，五大件均經過自然時效二次回火和振動時效處理以確保永不變形。



Vertical column 立柱

1.8 tons major stride lambdoidal column, triangular structure, built-in triangular stiffener design, the tool changer holder are integrally casted, strong, steady and never deformed, the overall rigidity is super strong.

1.8噸重大跨距人字形立柱、三角形結構分布，內置三角形加強筋設計，刀庫界面座一體澆鑄，結實、穩重永不變形，整體剛性超強。

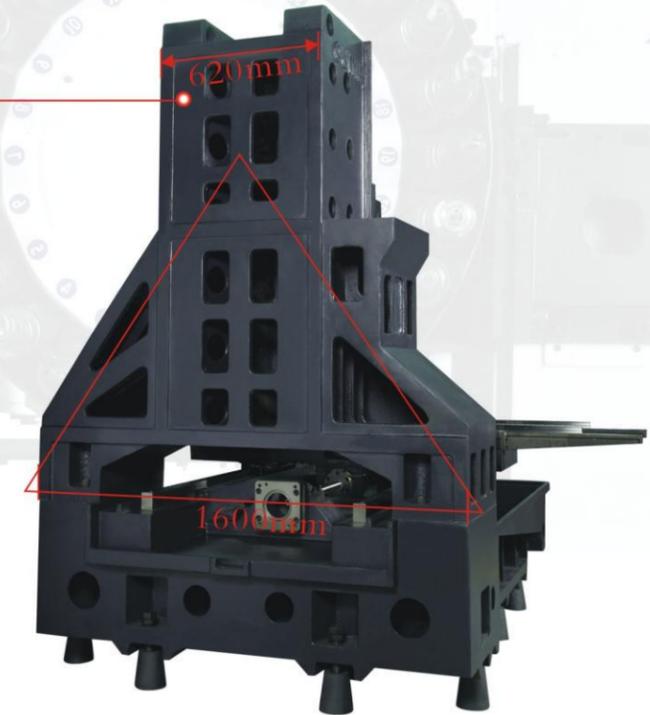
Spindle 主軸

The spindle motor pedestal and spindle box are integrated casting, high concentricity, resonance reducing, strong rigidity.

Direct drive 10000/12000 / 15000rpm

主軸電機座和主軸箱一體式澆鑄、同心度高，減少共振、剛性強。

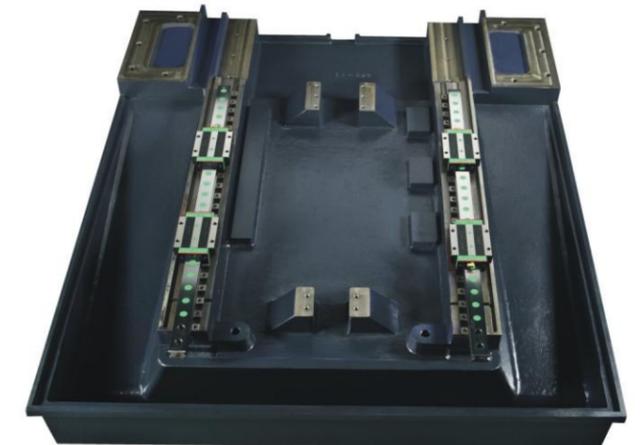
Direct drive 直接驅動 10000/ 12000/15000rpm



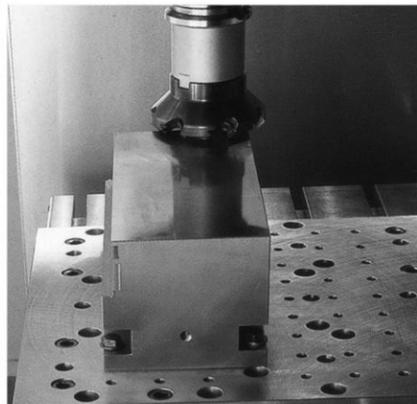
The pedestal 底座

The front and back chip flushing guard are big slant designed, 200mm drop, chip flushing guard integrated casting, The chip flushing easily and convenient for sanitation management. Junction surface of 1600mm wide span column, pedestal weighs 2 tons which are solid and stable.

前後衝屑大斜度設計，200mm落差，排屑槽一體式澆鑄，排屑輕鬆現場管理衛生方便。1600mm寬大跨距立柱結合面，底座重達2噸扎實穩重。



High Efficiency cutting performance 高效切削性能



MVP866 direct drive spindle BT40 – 12000 rpm AC 7.5 /11kw Material: S45C
MVP866 直接驅動主軸BT40 – 12000 rpm AC 7.5/11kw材料:S45C

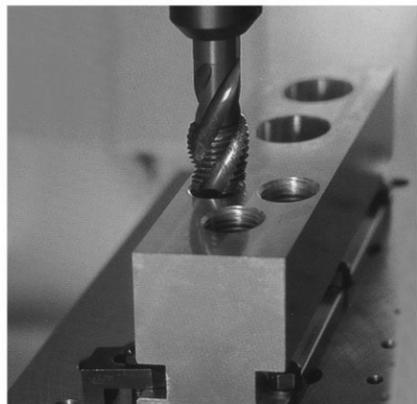
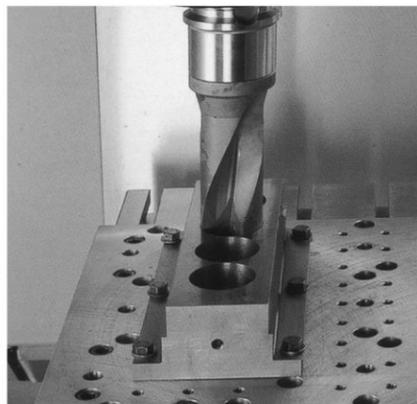
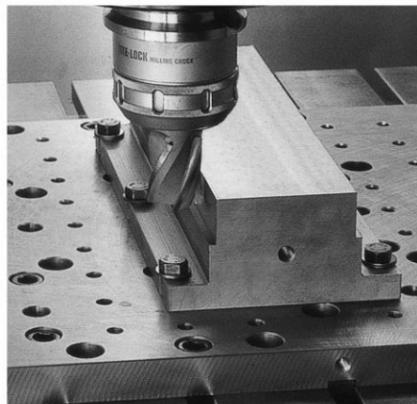
Face milling machining 面銑加工(φ50×4T)	
Spindle speed 主軸轉速	640min ⁻¹
Cutting width (A) 切削寬度(A)	40mm
Cutting depth (B) 切削深度(B)	3mm
Feed rate 進給速度	500mm/min
Cutting capacity 切削量	160cc/min
Spindle motor load 主軸馬達負載	103%
Cutting Material 被削材	S45C

End milling side machining (rough machining) 立銑側面加工(粗加工)(φ16×4T)	
Spindle speed 主軸轉速	320min ⁻¹
Cutting width (A) 切削寬度(A)	10mm
Cutting depth (B) 切削深度(B)	20mm
Feed rate 進給速度	180mm/min
Cutting capacity 切削量	56cc/min
Spindle motor load 主軸馬達負載	58%
Cutting Material 被削材	S45C

End milling side machining (super hard) 立銑側面加工(超硬)(φ20×2T)	
Spindle speed 主軸轉速	3500min ⁻¹
Cutting width (A) 切削寬度(A)	1.2mm
Cutting depth (B) 切削深度(B)	30mm
Feed rate 進給速度	2237mm/min
Cutting capacity 切削量	80cc/min
Spindle motor load 主軸馬達負載	65%
Cutting Material 被削材	S50C

Drilling machining 鑽頭加工 (φ14)	
Spindle speed 主軸轉速	2500min ⁻¹
Feed rate 進給速度	1050mm/min
Cutting capacity 切削量	208cc/min
Spindle motor load 主軸馬達負載	92%
Cutting Material 被削材	S45C

Tapping machining 絲錐加工 (M16×P2.0)	
Spindle speed 主軸轉速	127min ⁻¹
Feed rate 進給速度	318mm/min
Spindle motor load 主軸馬達負載	33%
Cutting Material 被削材	S45C



Insist on quality, no compromise 堅持品質、絕不妥協

Spindle vibration testing

主軸振動檢測

Using Germany WENZEL 3D CMM machine to make sure spindle quality
使用德國WENZEL 3D CMM機器保證主軸質量

Renishaw ballbar

雷尼紹球杆儀

Optimized circular interpolation in x,y,z planes by tuning each servo drive
通過旋轉每個伺服驅動來優化內插尋圓檢測X Y Z三個平面。

Renishaw laser interferometer

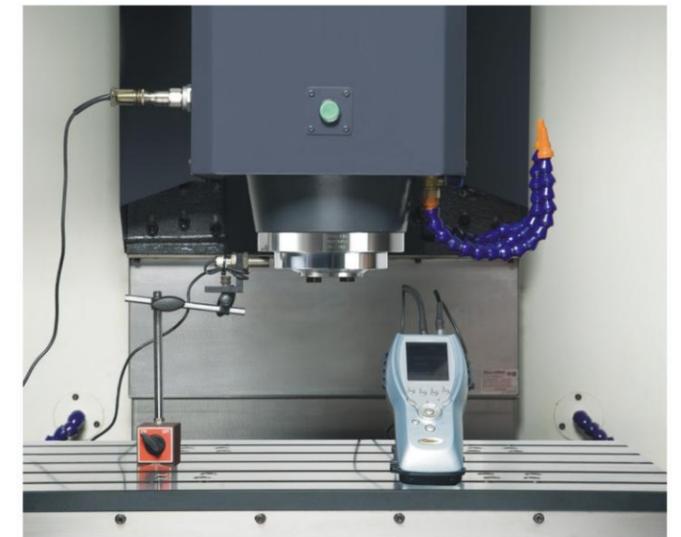
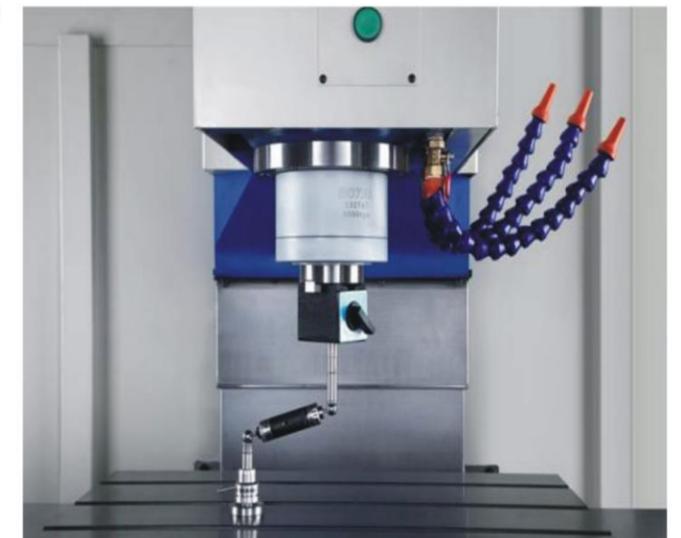
雷尼紹干涉儀

Follow German VDI3441 standard testing to ensure the positioning and repeatability accuracy.
採用德國VDI3441標準來檢測確保機床定位及重複定位精度。

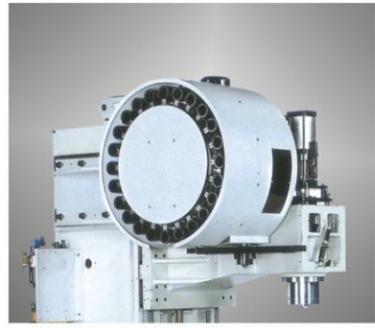
3D coordinate measurement

三次元

The main parts of the machine testing before assembly and the accuracy testing of the experiment processing parts
機床關鍵部件裝配前檢測及試加工部件的精度檢測



Standard accessories
標準配備



Full enclosed splash guard全罩式鈹金

Central automatic lubrication system
中央自動潤滑系統

Tools and Tools box 工具及工具箱

Working light 工作燈

Three-color warning light 三色警示燈

10,000 rpm spindle belt type
皮帶式10000轉主軸

Spindle purge air curtain 主軸氣幕

Spindle oil chiller
(spindle oil temperature cooler)
主軸油冷裝置(主軸油溫冷卻機)

Cleaning Gun清洗噴槍

Air gun 空氣槍

Screw type chip conveyor 螺旋排屑裝置

Rear chip flush system 後衝水裝置

Coolant through spindle 主軸環噴

Coolant liquid tank 冷卻液水箱

X / Y / Z-axis retractable cover
X/Y/Z 軸滑道伸縮護蓋

Leveling bolts and pads
水平調整塊及螺絲

Electrical control handwheel 電子手輪

Heat exchanger for electric cabinet
電氣箱熱交換器

Rigid tapping 剛性攻牙

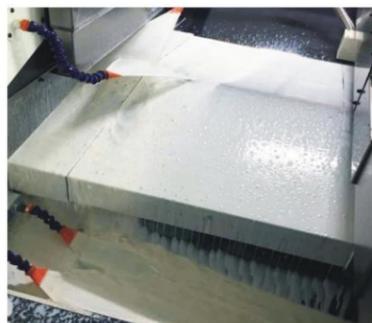
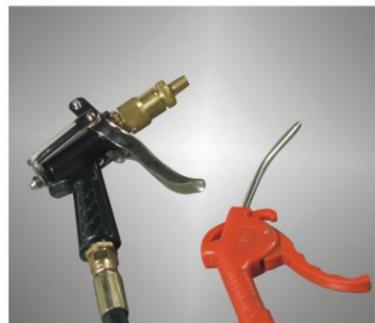
Automatic power-off function
自動斷電功能

RS232 transmission interface
RS232 傳輸介面

Mechanical and electrical operating manual
機械及電氣操作說明書

Transformer 變壓器

Arm type tool magazine ATC24P刀臂式刀庫



Optional accessories
選擇配備

MITSUBISHI controller 三菱控制器

Fanuc controller 發那科控制器

Siemens controller 西門子控制器

40 Directly coupled 10,000 rpm spindle
#40直結式10000轉主軸

40 Directly coupled 12000 rpm spindle
#40直結式12000轉主軸

40 Directly coupled 15,000 rpm spindle
#40直結式15000轉主軸

Rear chip flush system 後衝裝置
30P arm type automatic tool changer
Arm 30P刀臂式自動換刀機構

Optical linear scale 光學尺

Filter tank through spindle (20Bar)
濾罐式主軸中心出水(20Bar)

Filter tank through spindle (30Bar)
濾罐式主軸中心出水(30Bar)

Filter tank through spindle (70Bar)
濾罐式主軸中心出水(70Bar)

electrical box air conditioner (3000BTU)
電氣箱冷氣機(3000BTU)

Working measurement system
(Renishaw OMP-60)
工作量測系統(Renishaw OMP-60)

NC Rotary dividing plate Nc旋轉分度盤

Two-axes cradle type dividing plate
兩軸搖籃式分度盤

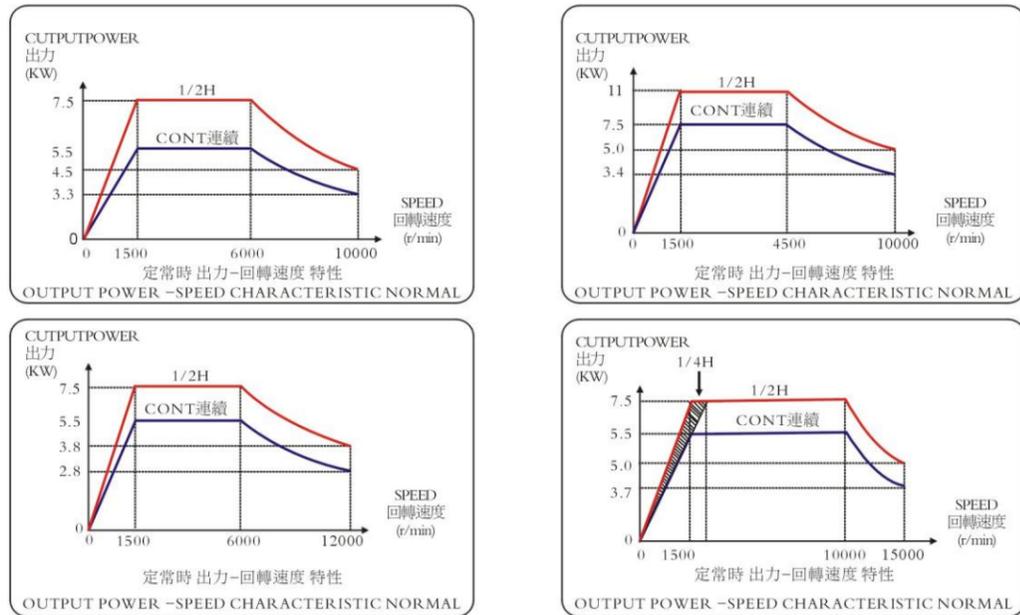
4th axis preparation
第四軸接綫介面

Oil and water seperator 油水分離機

Voltage stabilizer 穩壓器



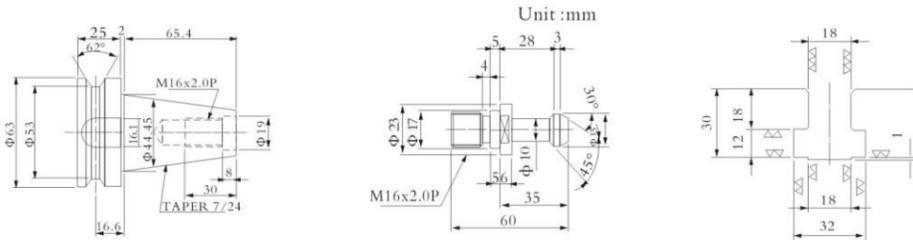
MITSUBISHI Spindle motor torque diagram 三菱主軸電機扭矩圖



BT40

Tool Shank and Pull Stud Dimension

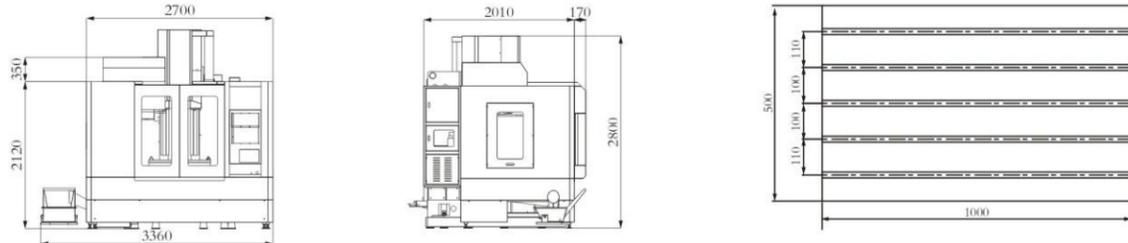
刀柄拉丁尺寸



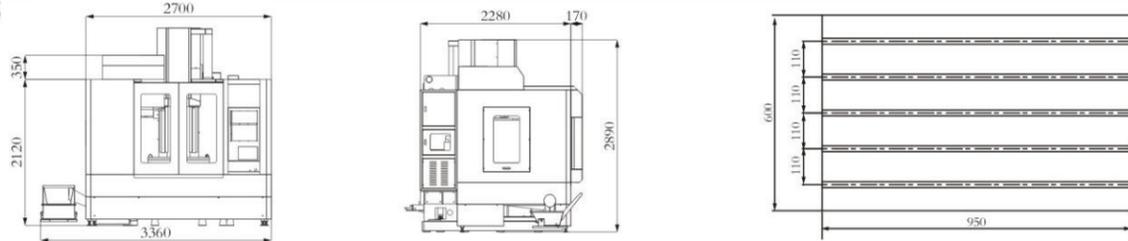
Appearance drawing machine 機器外觀尺寸圖

Table size 工作臺尺寸

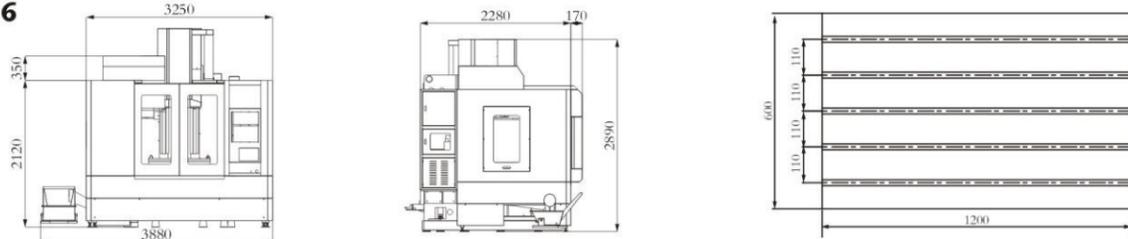
MV-855



MVP-866



MVP-1166



Processing size 加工尺寸

Model 型號	Unit 單位	MV 855	MVP 866	MVP 1166
Work table 工作臺				
Table size 工作臺尺寸	mm(inch)	1000 × 500(40 × 20)	950 × 600(38 × 24)	1200 × 600(48 × 24)
T-slots size(slot number × width distance) T型槽尺寸(槽數 × 寬度 × 間距)	mm(inch)	5 × 18 × 110(0.2 × 0.7 × 4.4)	5 × 18 × 110(0.2 × 0.7 × 4.4)	5 × 18 × 110(0.2 × 0.7 × 4.4)
Maximum load 最大負載	Kg(lbs)	500(1102.3)	600(1322.8)	800(1763.7)
Travel 行程				
X-axis travel X軸行程	mm(inch)	800(32)	800(32)	1100(44)
Y-axis travel Y軸行程	mm(inch)	500(20)	600(24)	600(24)
Z-axis travel Z軸行程	mm(inch)	550(22)	600(24)	600(24)
Distance from Spindle nose to table 主軸鼻端至工作臺面距離	mm(inch)	130-680(5.2-27.2)	120-720(4.8-28.8)	120-720(4.8-28.8)
Distance from spindle center to column surface 主軸中心至立柱端面距離	mm(inch)	525(21)	665(26.6)	665(26.6)

Spindle 主軸

Spindle taper 主軸端孔斜度	type	BT40	BT40	BT40
Spindle Speeds 主軸轉速	r.p.m	10000/12000/15000	10000/12000/15000	10000/12000/15000
Drive 傳動	type	Belt-type/Directly coupled/Directly coupled 皮帶式/直聯/直聯	Belt-type/Directly coupled/Directly coupled 皮帶式/直聯/直聯	Belt-type/Directly coupled/Directly coupled 皮帶式/直聯/直聯

Feed rate 給進

Cutting feed rate 切削給進	m/min(inch/min)	10(393.7)	10(393.7)	10(393.7)
Rapid on (X/Y/Z) axes (X/Y/Z)快移速度	m/min(inch/min)	48/48/48 1889.8/1889.8/1889.8	36/36/30 (48/48/36) 1417.3/1417.3/1181.1 (1889.8/1889.8/1417.3)	36/36/30 1417.3/1417.3/1181.1

Automatic tool changing system 自動換刀裝置

Tool Type 刀把型式	type	BT40	BT40	BT40
Tool capacity 刀具儲存容量	set	Arm 24T/24把刀臂式	Arm 24T/24把刀臂式	Arm 24T/24把刀臂式
Maximum tool diameter 最大刀徑	m(inch)	80(3.1)	80(3.1)	80(3.1)
Maximum tool length 最大刀長	m(inch)	300(11.8)	300(11.8)	300(11.8)
Maximum tool weight 最大刀重	kg(lbs)	7(15.4)	7(15.4)	7(15.4)
Tool to tool change 刀對刀換刀	sec	3.0	3.0	3.0

Motor 馬達

Spindle drive motor (Continuous operation / 30 min rated) 主軸驅動馬達(連續運轉/30分額定)	(kw/hp)	MITSUBISHI 5.5/7.5 (7.4/10.1)	MITSUBISHI 5.5/7.5 (7.4/10.1)	MITSUBISHI 7.5/11 (10.1/14.8)
Servo drive motor X, Y, Z axis 伺服驅動馬達 X, Y, Z軸	(kw/hp)	2.0/2.0/3.0 (2.7/2.7/4)	2.0/2.0/3.0 (2.7/2.7/4)	3.0/3.0/3.0 (4/4/4)

Machine floor space and weight 機器占地面積與重量

Floor space 占地面積	mm(inch)	3400 × 2200 × 2800 (106.3 × 94.5 × 110.2)	3400 × 2500 × 3000 (106.3 × 98.4 × 118.1)	3900 × 2500 × 3000 (129.9 × 98.4 × 118.1)
Weight 機器重量	kg(lbs)	5000(11023.1)	7000(15432.4)	7800(17196.1)

The above specifications are only for your reference, we reserve the right to modify them without notice.
以上規格僅供參考，本公司保留修改規格的權力，恕不另行通知。