PERFECT JET

TRAVELLING COLUMN VERTICAL/HORIZONTAL MACHINE CENTER
VERTICAL MACHINE CENTER
DEEP HOLE DRILLING & BORING MACHINE
FLOOR TYPE BORING & MILLING MACHINE
CNC & CONVENTIONAL BED-TYPE MACHINE
DOUBLE COLUMNS MACHINING CENTER
CUSTOMIZED MACHINE

PING JENG MACHINERY INDUSTRY CO., LTD.
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Tel：04-2572-2520 (Rep.)　Fax：04-2572-2525 / 04-2572-2741
E-mail：ping.jeng@msa.hinet.net

201605

PERFECT JET

品正機械 PJM

PING JENG MACHINERY INDUSTRY CO.,LTD

床台型電腦 / 傳統銑床系列

CNC&CONVENTIONAL BED-TYPE MACHINE

Profile

PERFECT JET

Mission: Sincerity Progress Harmony

Vision : Cultivate Good Karma in the business, Benefit All People

History of Timeline

1981~Ping Jeng Company starts in Taichung, Taiwan. Capital 2.1 million.Launch :RD-600&600BL

1982~As costumer needs to produce Bed Type Milling Machine:BM-2Vand Radial Drill Machine: CNC-RAMILL-VI.

1983~Launch: BM-3V&BM-4V。

1984~Launch:BM-3MV&BM-4MV。

1985~Launch:BM-3DS&4DS

1986~Launch:CNC-MGD-500&1000。

1987~Launch:CNC-MGD-1015&1020

1988~Launch:CNC-MGD-1520&1525，TRAK-3S(BM-22VDA)

1989~Launch:DH-1500&3000&6000. Cooperate with American well-known NC Company and entered the U.S. market with CNC Milling Machine successfully. Capital increasing to 19.8 million.

1990~Launch:CNC-MGD-613&813，TRAK-5S(BM-24VDA)

1991~Launch:CNC-MGD-816&820

1992~Launch:CNC-MGD-1016&1020，TRAK-2S(BM-21VCA)

1993~Launch:CNC-51-VI/GA/GF(BM-1687). Expand European market & start to develop Box Ways machining centers. CE -TUV of Germany Authentication approved for CNC Milling Machines. Capital increasing to 30 million.

1994~Launch:CNC-61-VI/GA/GD(BM-2087)

1995~Launch:CNC-71-VI/GA/GD(BM-2587)，CNC-81-VI/GA/GD(BM-3087)

1996~Launch:MCV-64BT

1997~MCV-85B&85G

1998~MCV-100B&100G

1999~Launch:MCV-168G&168B.All plants destroyed by 921 earthquake and almost forced to close down the business; after financing and capital increasing to 68 million, and enable to reconstruct the plants.

2000~Launch:MCV-86&116B. Merge a machinery company and acquire related technical staffs and some outstanding European agents.
Develop Linear Guide Way machine center.

2001~Launch:MCV-127B &147B&147G



2002~Launch:MB-4R372 -4axes ROUTING. & MCV-M8 & M6

2003~Launch:CNC-24MA(740) CNC-34/36/46MB (1050-1350)，MCV-M10. Attend EMO and international exhibitions actively to expand global market.

2004~Launch:CNC-12ME(QCM)，MCV-M11. CE-TUV of Germany Authentication approved for all machine tools and successfully expanded Turkey and East Europe.

2005~ Launch:MB-1207/1210，MCV-M5. As Europe market need to R&D the Moving Column machining centers serial. New CIS & Logo – PERFECT JET & implement ERP management and target management.

2006~Launch:MHD-2678，DH-3100，MCV-M7

2007~Launch:MV-107P&107U，MV-64P&64U. Italy well-known machinery dealer ask to be the exclusive agent for Moving Column serial and sign up 10 machines per year quota.

2008~Launch:MV-86P&86U, MB-1220.

2009~Launch:MCV-2010G, MV-308. R&D Submicron high precision machining center, and joint program of Ministry of Economic Affairs.

2010~Launch:MV-308-5X, MCV-188G.

As European Auto parts and Aero parts market needs, to develop 5-axis swiveling head MV-308-5x and gain the Patent.







2011~Launch:MH-1500D, MH-800P, MCV-435 v . MCV-435 v is launched in TIMTOS Exhibition and wins Grand Award and IENA in Germany invention competition for Grand Champion Award also. Capital increasing to 168 million.

2012~Launch:MH-1213, MH-500P, MH-630P, MCV-2510B/G

2013~Launch:BM-1620, CNC-GD-4axes, CNC-GD-6axes, CNC-GD-8axes

All machines are developed in-house. We have an outstanding R&D team who is dedicated to researching and developing new machines many years with expertise. Using AUTOCAN R14 software and AUTODESK3D/ INVENTOR SERIES.

COMPANY SCOPE:
Land Area:30000m²，Factory Area:16000 m²，Office Area:22000 m²，Capital increasing to 168 million.

Patent









Perfect World, Perfect Jet, Perfect Efficiency:
Creating job opportunity and supporting educational constitution are the main principles of Ping Jeng.
To build a better society, Ping Jeng keeps doing its best to benefit the community for now and the future.





Geagraphic Location 地理位置 全視圖



CONVENTIONAL / CNC BED TYPE MILLING MACHANES

傳統CNC電腦/床台型銑床系列

PERFECT JET

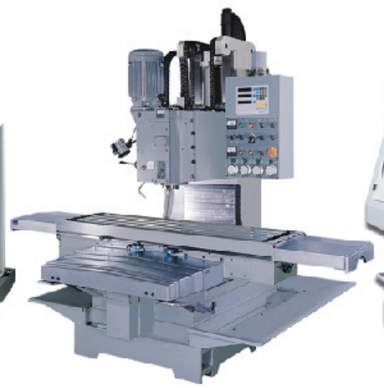
Designed and Built with Excellent Quality, Efficiency and Accuracy







CNC-71-MB



BM-51-GA



CNC-46-MB



CNC-36-MB



CNC-24-MA



CNC-12-ME



CNC-12-ME(半罩)

CNC MILLING MACHANES BED TYPE SERIES
CNC床台銑床系列

PERFECT JET

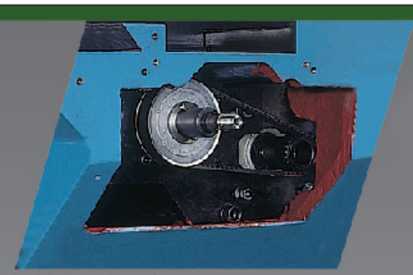
床台型銑床加上自動換刀系統：

以簡單傳統的設計理念，發揮最優異的工能與可靠的操控性。符合人體工學，合乎經濟效益的垂直中心，亦取代了必需更換配件，耗時又不經濟的傳統驅動工具，擁有廣泛的鑽孔攻牙銑切功能。無論何時何地都能讓你信賴的機器。

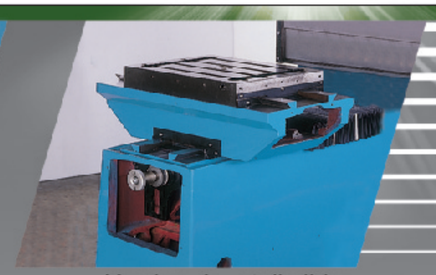
Using the simple principle designed machine, to developes excellent function and reliable machined ability.
Cohere with ergonomics, and efficiency replace waste time and waste manpower.
This is a economic machie which with drilling, milling, tapping and cutting function.



(Fully Guard +Chip Auger)
CNC-12ME全罩+捲屑機



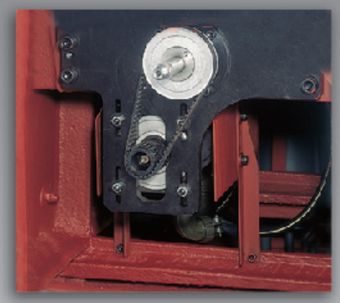
X軸伺服馬達 Servo motors with encoders



Harden dovetail slides
X．Y軸滑道鳩尾鑿系列



CNC-12ME
(SEMI Guard)



Belt driving HTD-5M
Y軸皮帶 HTD-5M



Spirdle
12000RPM



8T/10T Carousel type ATC
10支刀日內瓦輪換刀系統



OP:
Built-in spindle
2.8KW-24000 RPM
2.3KW-30000 RPM
2.0KW-60000 RPM
內藏式主軸

CNC MILLING MACHANES BED TYPE SERIES
CNC床台銑床系列

PERFECT JET



CNC-24-MA

最經濟的選擇

精度，穩定 取代中心切削機的功能

The best economic choice,
with precision
replace machining
center function

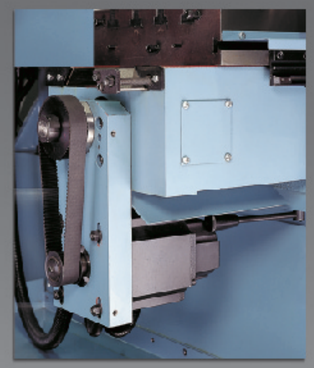


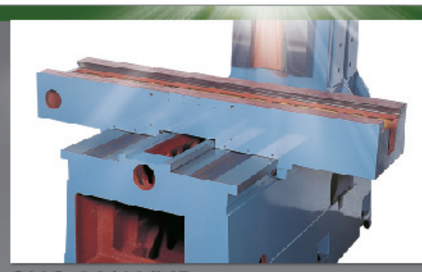
CNC-24-MA+GF



CNC-36-MB
(SEMI Guard)

X/Y/Z belt drive
all axis movements
are extremely ridged
through powerful
servo motor
三軸皮帶傳動1:2





CNC-36/46/MB
Extra Wide &
Strong Base Standard
CNC-36/46-MB
強壯底座鞍座精度穩定

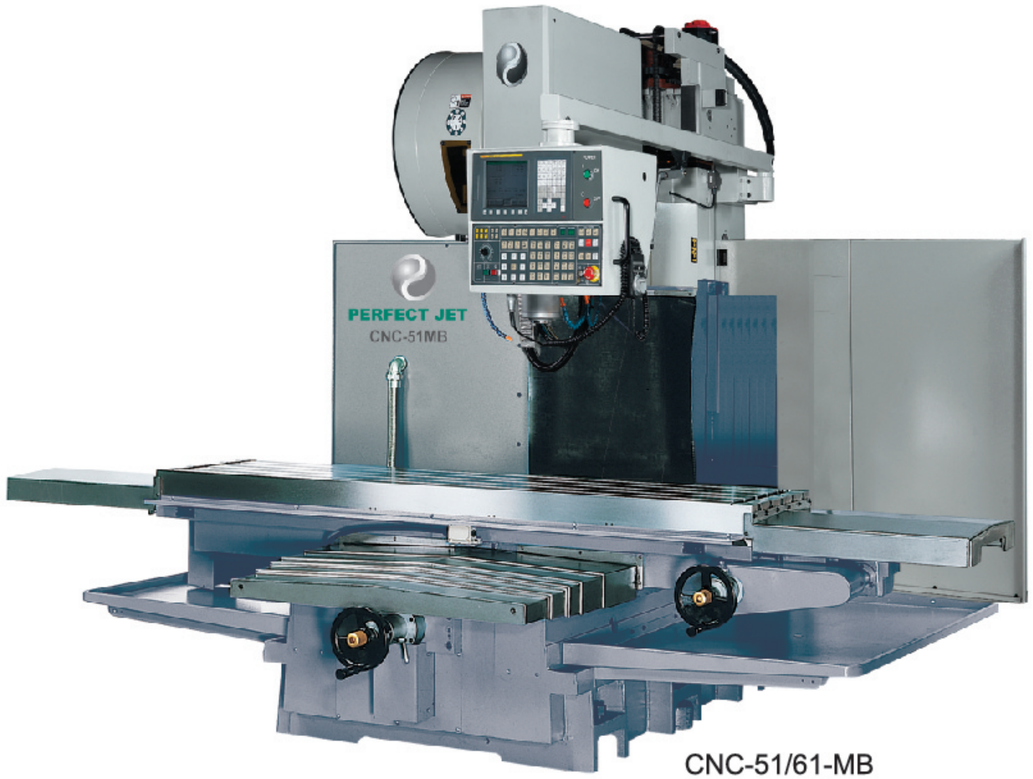


CNC-46-MB

Fully Guard (24/36/46 only)
24/36/46 全罩

CNC MILLING MACHANES BED TYPE SERIES
CNC床台銑床系列

PERFECT JET



CNC-51/61-MB



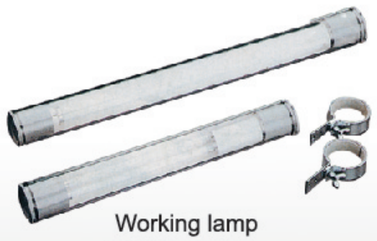
CNC-71/81MB



CNC-71/81MB Fully Guard

CNC MILLING MACHANES BED TYPE SERIES
CNC床台銑床系列

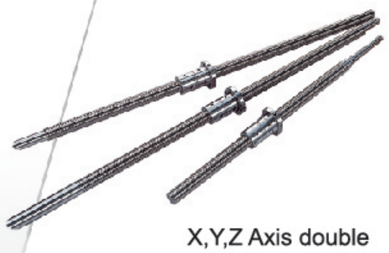
PERFECT JET



Working lamp
LED燈



Optimally designed modular high-speed spindle. (8,000/10000rpm)
主軸 (BT#40)
直徑70mm，精密度P4級斜角
滾珠軸承8,000/10000rpm



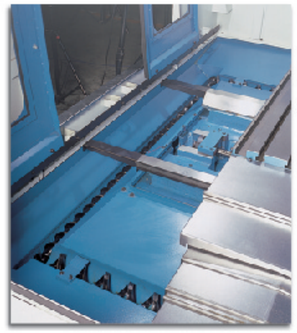
X,Y,Z Axis double nut ballscrew C-3
X,Y,Z 三軸鋼珠螺桿雙帽C-3



Equipped with high reliability lubrication pump and solenoid valves.
歐規進口三點組合空壓控制器



Powerful air and wash down gun are conveniently built-in.
風槍、水槍不佔空間。



3-sets chip Augers
螺旋捲屑機 (特殊配件)



Dual vertical coolant pumps are concealed inside the machine to provide for a compact design.
直立式高流量泵浦



Wash-down nozzles makes chip clean up easy.
貼心設計，鐵屑後沖方便。



Separating system for oil and water.
回收設計 油水分離，清理便利。



Oil skimmer : (op)
Eco-friendly coolant disposal system.
油水分離機 效率極佳又耐用。



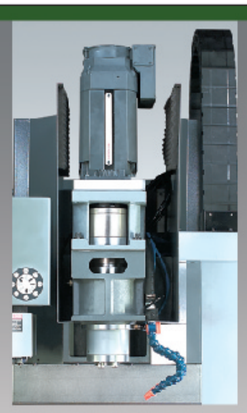
16T/20T tool carousel type ATC
16/20pcs日內瓦輪式換刀系統
(BT-40)(op)



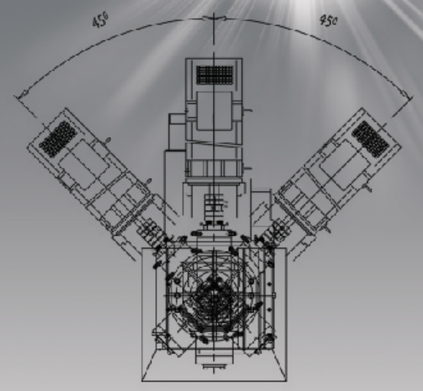
Quick and reliable Arm type ATC (24/30 tools)
24、30pcs刀臂式快換刀系統(BT-40#50)(op)

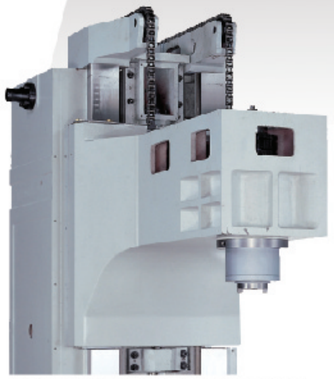


Advantages of a direct-coupled spindle as compared to a built-indesign *High rigidity* Good heat dissipation*High reliability at a lower cost *15,000 rpm (op)
主軸浮動式退刀防止刀具撞擊主軸，延長
軸承壽命採高剛性直結式主軸與內藏式
高速主軸優點之比較：
1.剛性高 2.熱源分散 3.故障低、價格合理
4.維修快速、省時 5.12000.15000轉/分



Direct-drive
12000-15000rpm
MD:系列直傳頭





Head of Milling Machine
MA:BT40-20
(6000-10000RPM)OP
MB:BT40-55 MC:BT50-55
中心切削機頭部



ϕ110 Quill head
VI:NT40 3800 rpm
ϕ110管炮塔頭



6 Steps: Gear head
93-608 rpm
(op8/4p1200 rpm 12Steps)
GA:NT50

RECOMMENDED TYPES OF CHIP CONVEYORS

Cutting Shape	Material	Stainless Chip Conveyor	Screw Type Conveyor
Metallic Chip		○	○
Cast Chip		○	
Curly Aluminum Chip		○	○
Aluminum Chip		○	○
Non-Metallic Chip		○	



Scraper Type (op)
Chip Conveyor



Chain Type (op)
Chip Conveyor



Gear Milling Head Can be Swivelled L/R 45° for Angular Machining.
GB:NT50 重切削



Horizontal Milling Head Attachement is Optional
GC:NT50
(For GA /GB head only)
主軸端90°接頭

CNC MILLING MACHANES BED TYPE SERIES
CNC床台銑床系列

PERFECT JET

規格表SPECIFICATIONS:

	MODEL	單位	CNC-12ME	CNC-24MA	CNC-36MB	CNC-46MB	CNC-51MB	CNC-61MB	CNC-71MB	CNC-81MB
行程 Travel	X/Y/Z axis	mm	300*300*250	750*400*530	1000*500*570	1300*500*570	1600*800*635	2000*800*635	2500*800*635	3000*800*635
	Spindle nose to table surface	mm	100-400	100-670	90-660		170-805			
	Spindle center to column surface	mm	428	470	540		850			
	X/Y/Z way span	mm	356/300/306	286/390/420	306/620/470		460/1000/470			
	Position/Repeatability accuracy	mm	±0.005							
	Ball bar accuracy	mm	≦0.01							
主軸 Spindle	Spindle taper		BT-30	BT-40			BT-40 / OP BT-50			
	Spindle transmission		皮帶BELT							
	Spindle speed	rpm	12000	8000/(OP10000)			8000 / OP 6000			
控制器 Control	CNC control		As customer's choice							
	Spindle motor	KW	3.75	5.5/7.5			7.5/11(OP11/15)			
	X/Y/Z motor	KW	0.75/0.75/0.75	1.0/1.0/1.0	1.3/1.3/1.3		2.0/2.0/2.0		3.5/3.5/2.0	
工作台 Table	Table size(WxL)	mm	356*500	320*1270	400*1270	400*1500	700*1900	700*2300	700*2800	700*3300
	T-slots(WidthxNo.xPitch)	mm	16*4*80	16*4*63	16*5*63		18*6*105			
	Table load	KG	400	500	700		1000			
進給 Feed	Rapid feed rate(X/Y/Z)	M/min	7/7/7							
	Cutting feed rate	M/min	1-4000							
	Min. input increment	mm	0.01							
刀庫 Magazine	Max.tool dia./with adjacent too	mm	OPφ80	φ100						
	Max.tool weight	KG	OP 4	7						
	Max.tool length	mm	200	250						
	Tool selection		Carousel type (OP:Automatic random Arm type)							
	Tool capacity		OP 10	16 (OP:24)						
	Pull stud	degree	45°							
	Tool changing time(T. toT.)	sec	2.5-3.4 (arm type)							
馬達 Others	sdpindle oil cooler	L	5							
	Lubrication capacity	L	2							
	Heat exchanger	wait	40x2							
	Coolant tank	L	40		90		130			
	Pneumatic unit	kg/cm²	6							
	Power	KVA	6	10	13		22			
重量尺寸 Weight & Dimension	N.W./G.W.(Approximate)	KG	1700/1900	2500/2700	3700/3900	3900/4100	6300/6800	6600/7200	8400/9000	8700/9400
	Floor space(LxWxH) Full guard	M	2.85/2.56/2.39	3.24/3.22/2.68	4.29/3.25/2.73	4.89/3.25/2.73	7.27/4.09/2.99	7.93/4.09/2.99	8.7/4.16/2.99	9.8/4.16/2.99
	Packing(LxWxH) Full guard	M	2.28/1.97/2.25	2.28/2.69/2.55	2.28/3.35/2.55	2.28/3.87/2.55				

Specifications subject to change withour notice.

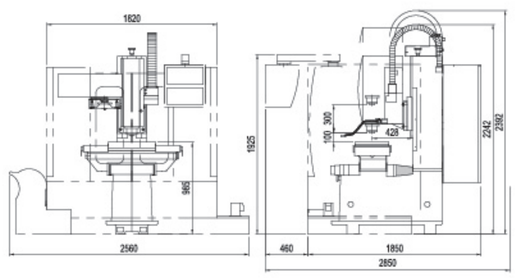
標準配件Standard accessories:

1. 三軸皮帶傳動Belt drive XYZ
2. 三軸手動輸M.P.G XYZ
3. 主軸吹氣 Spindle air blast
4. 主軸冷卻Spindle chiller unit
5. 自動潤滑系統 Auto lubrication system
6. 切削冷卻Collant unit
7. 配重錘配重Counting balance
8. 水槍、風槍、測吹風air & washing gun
9. 懸吊式操作箱Pendent operation cabinet
10. 工作燈警示燈Working Lamp Alarm light
11. 傳輸線RS-232 interface+10M cables
12. 熱交換器Heat exchanger on electric cabinet
13. 自動斷電系統 M30 auto power off
14. 水平調整螺絲 Leveling pads and adjusting screws
15. 操作維護手冊Operating manual &part list
16. 主軸頭罩吸音棉Spindle voice-proof
17. 精度檢驗報告Precision report

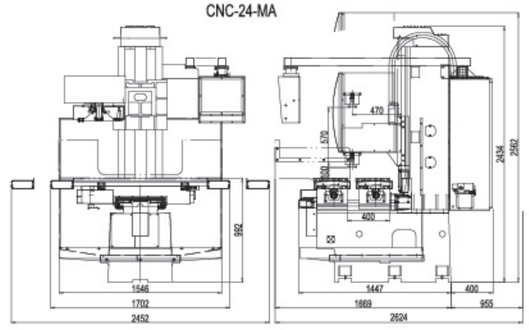
特殊配件Optional accessories:

1. 主軸環狀出水 Coolant ring around spindle system
2. 主軸中心出水 Coolant through spindle system
3. 鐵屑輸送機Chip convyor
4. 主軸錐度BT-40 to BT-50
5. 主軸加大馬力Upgrade spindle motor
6. 油水分離機Oil skimmer
7. 油路刀把 Oil tool holder
8. 乙太網路Enther+記憶卡256MB card
9. 16支日內瓦輪16T carousel ATC
10. 24/30支刀臂式24/30T Arm type ATC
11. 氣壓式配重+氣壓桶Count-weight of atm press with tank
12. 10000//12000/15000/24000RPM BY-40 only

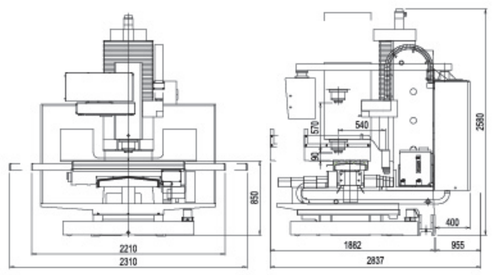
CNC-12-ME



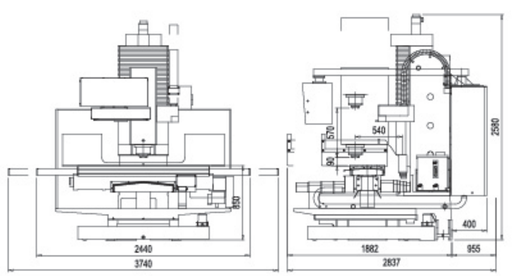
CNC-24-MA



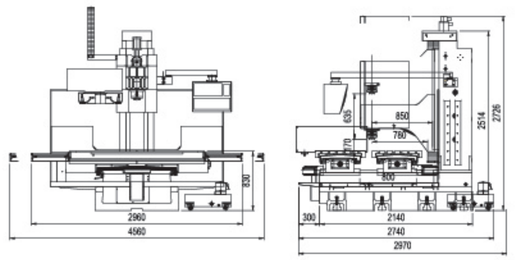
CNC-36-MB



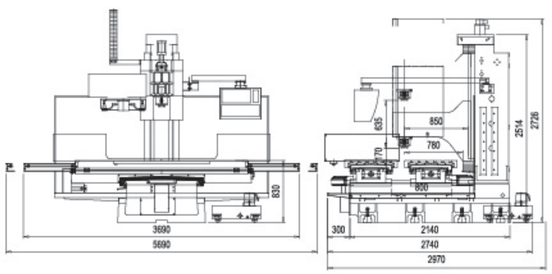
CNC-46-MB



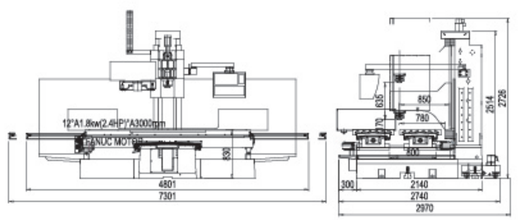
CNC-51-MB



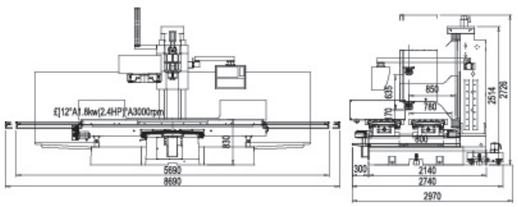
CNC-61-MB



CNC-71-MB

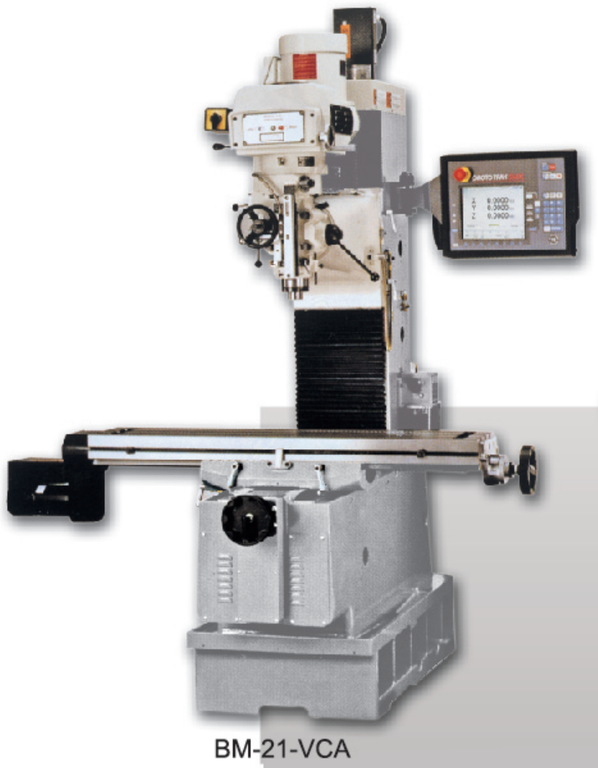


CNC-81-MB

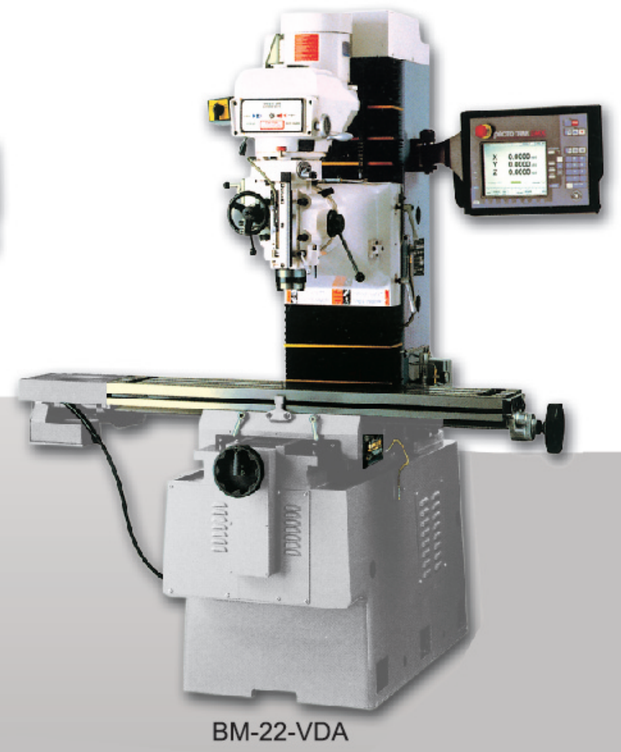


CONVENTIONAL MILLING MACHANES BED TYPE SERIES

傳統床台型銑床系列 (OP.CNC PC Base)



BM-21-VCA



BM-22-VDA



M-22-VDB



BM-22-VIB



BM-23-VDB



BM-24-VDA



BM-33-VDB

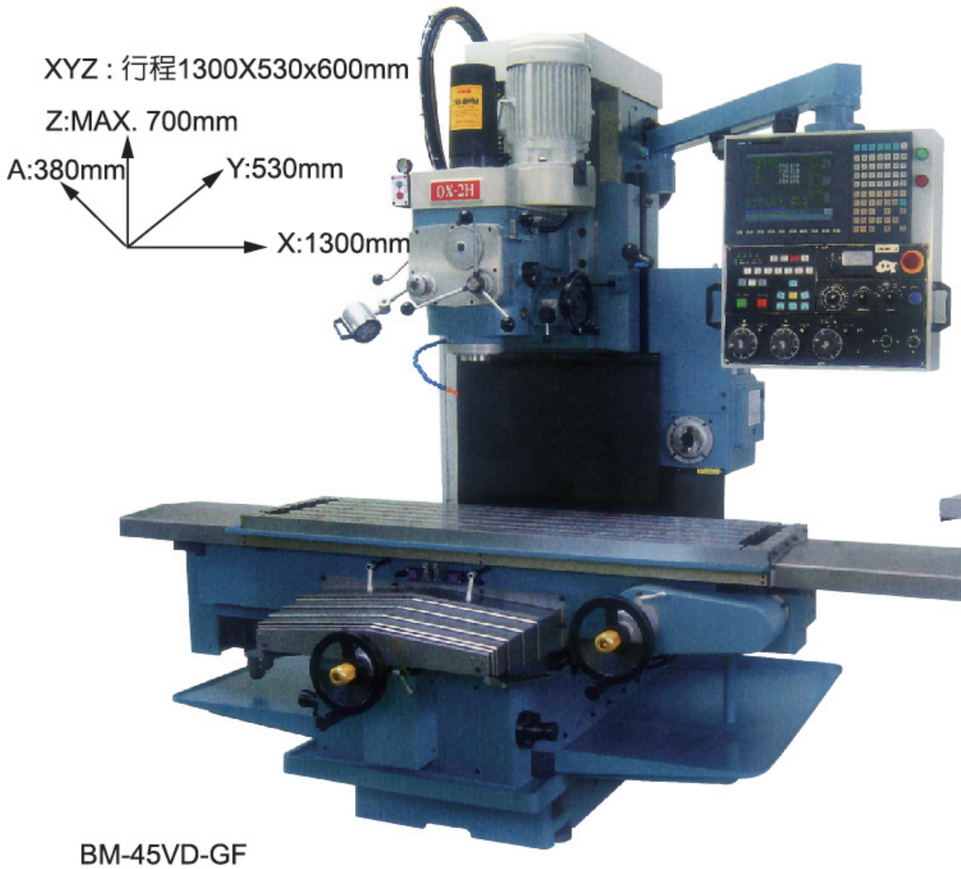


BM-43-VDB

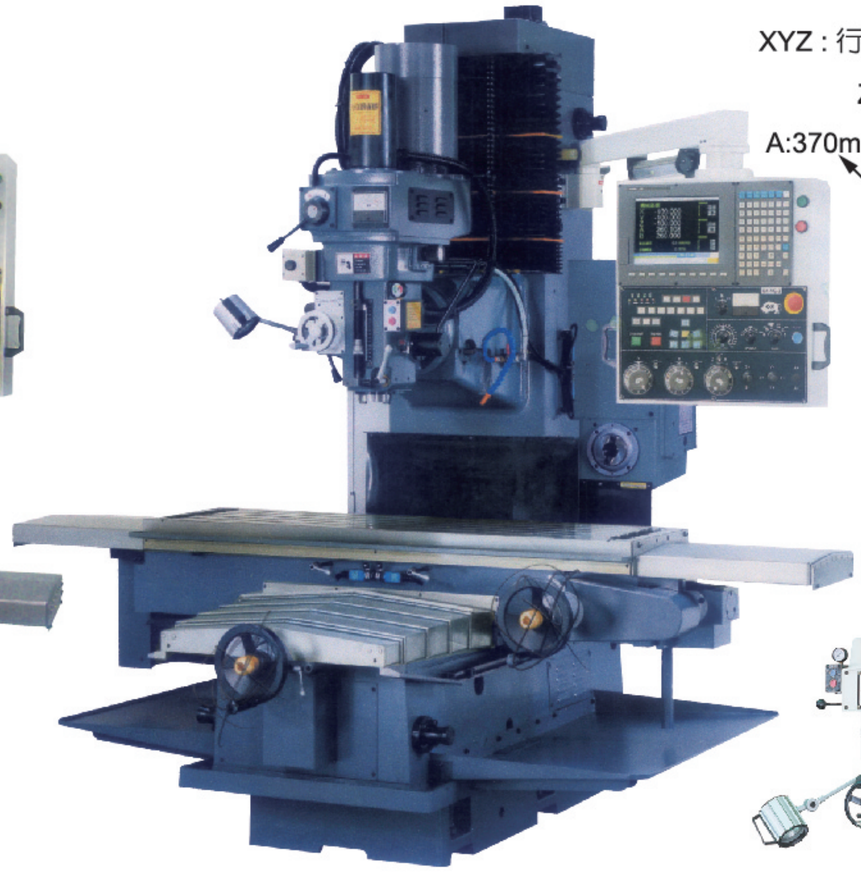
CONVENTIONAL MILLING MACHANES BED TYPE SERIES

傳統床台型銑床系列 (OP.CNC PC Base)

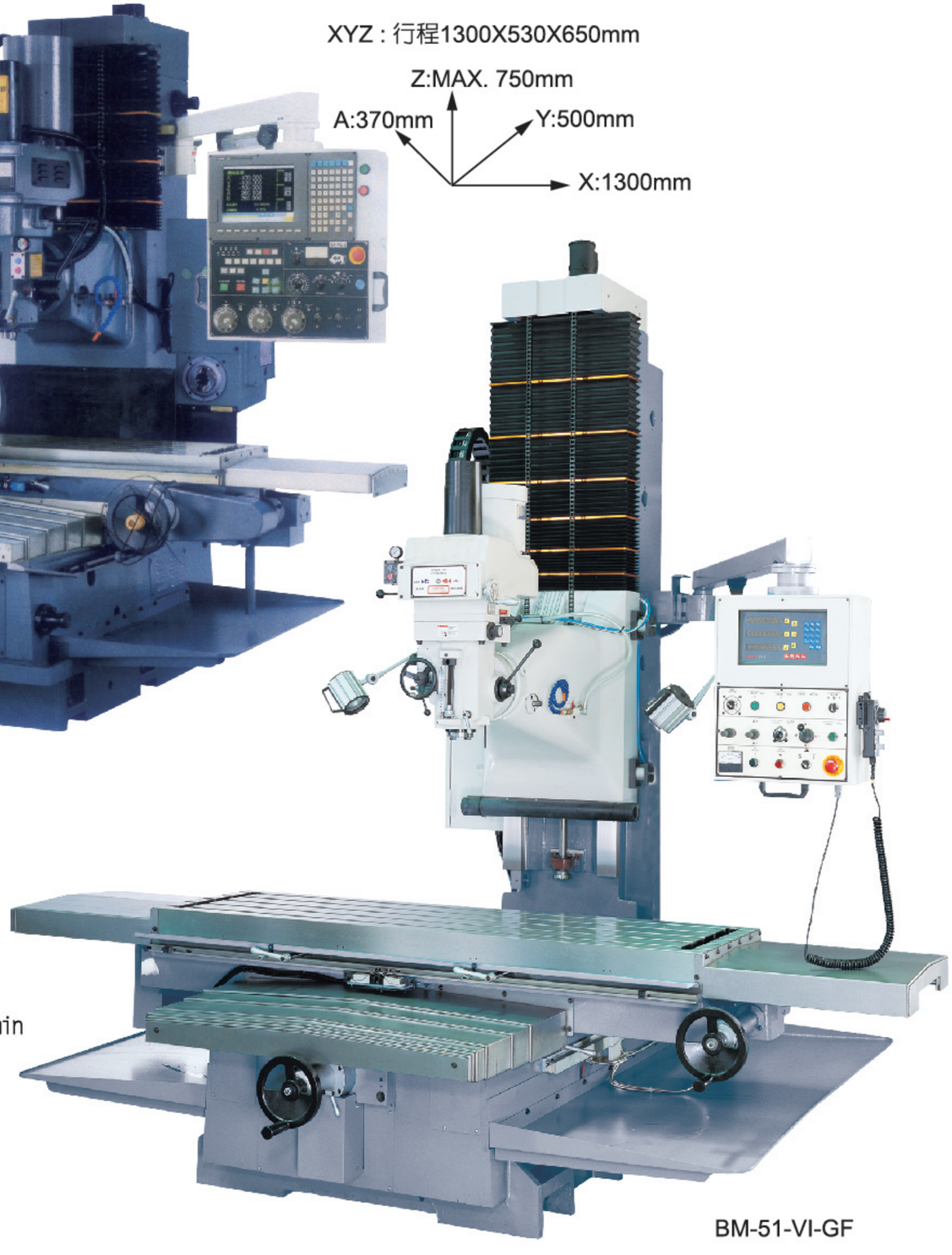
PERFECT JET



BM-45VD-GF



BM-45VI-GF



BM-51-VI-GF

規格　Specification

工作台尺寸 Table size:1500x400mm
左右行程 Longitudinal travel:1300mm
前後行程 Cross travel:530mm
Y軸軌道寬 Y slide way width:620mm
Z軸高 Slide high:MAX 750mm
Z軸軌道寬 Slide way width:420m
滾珠螺桿 Ballscrew:P=5　C3級

主軸斜度 Spindle taper:NT#40(B1)
立主軸5HP變頻無段 Vertical Spindle 5HP Frequency Stepless:
立主軸砲管伸縮行程 Spindle Barrel Telescopic Travel:140mm/min
低速Low Gear 57~432RPM/高速High Geer424~3000RPM
主軸簡易攻牙裝置 Spindle Simple Tapping Device
橫主軸齒輪6速5HP變頻無段 Hori.Spindle 6 Gear:12~1472 RPM
淨重 Net weight:3700kgs

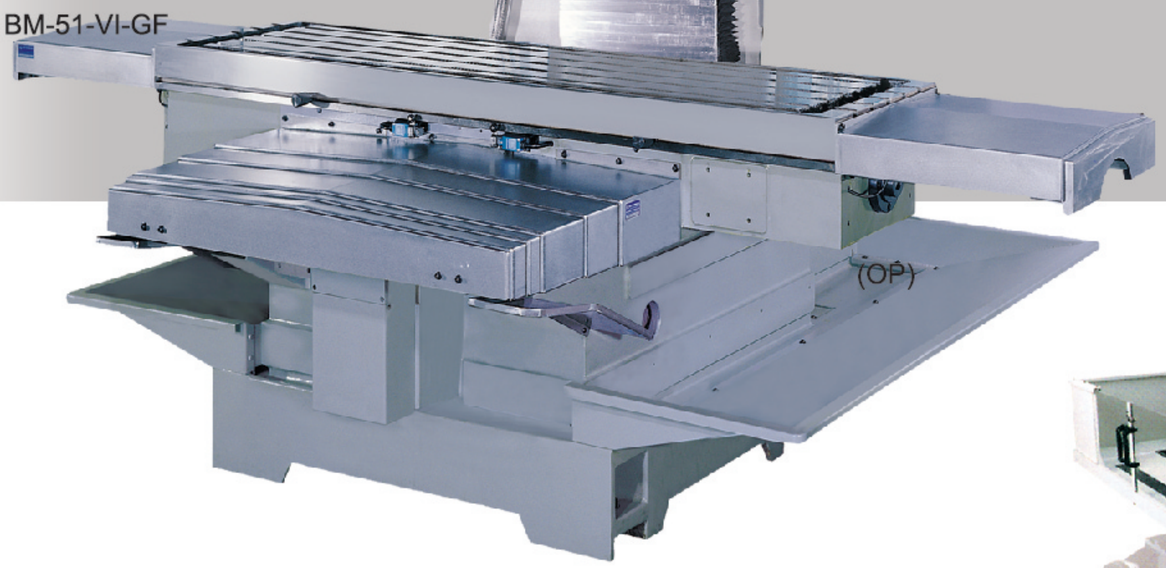
CONVENTIONAL MILLING MACHANES BED TYPE SERIES
傳統床台型銑床系列

PERFECT JET



Z1:500/Z2:300
Y1:630(op:800/1000)
X:1600
BM-53-GB





BM-51-VI-GF

BM-51/61-GA/GF

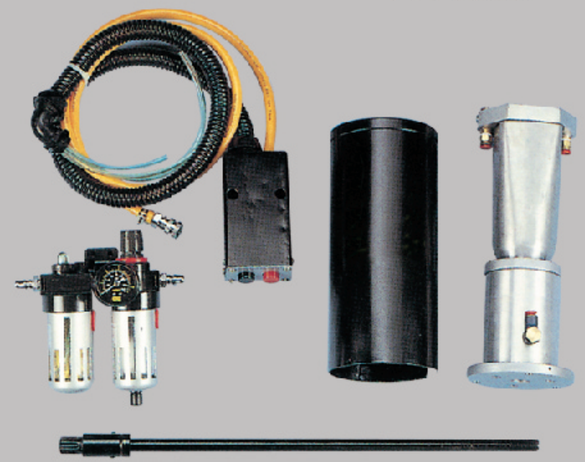
Optional Accessories
選配



1.X axis power feed
左右自動進刀



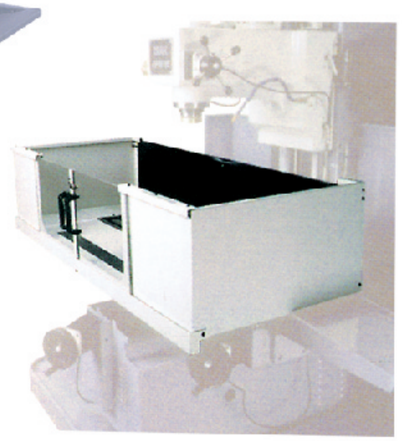
2. X/Y servo motor
軸伺服馬達



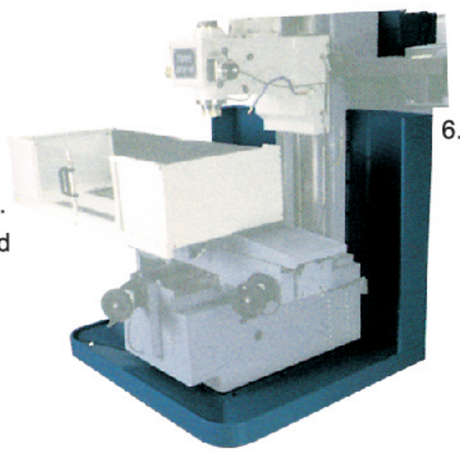
3.Power draw bar
自動拉刀



4. Glass scales
apopular brand of glass scale mounted on X/Y/Z axis 光學尺



5.Table guard provides an enclosed work. space mounted on the table.
工作台護罩



6.Column side Guarding and chip tray.
機身左右遮板與水盤

CONVENTIONAL MILLING MACHANES BED TYPE SERIES
傳統床台型銑床系列

PERFECT JET

規格表SPECIFICATIONS:

	MODEL	單位	BM-21-VC	BM-22-VD	BM-23-VD	BM-24-VD	BM-33-VD	BM-35-VI	BM-43-VD	BM-45-VI	BM-51-VI	BM-61-VI	BM-71-VI	BM-81-VI
行程 Travel	X/Y/Z axis	mm	720*380*500	800*430*550	750*420*500	1000*500*500	1000*460*760	1000*550*700	1300*460*500	1300*530*650	1600*800*650	2000*800*650	2500*800*650	3000*800*650
	Spindle nose to table surface	mm	100-600	100-650	100-600		100-860	130-830	100-600	130-830		170-820		
	Spindle center to column surface	mm	473	486	526	486	526				570	850		
	X/Y/Z way span	mm	230/300/306	245/390/280	286/390/280	306/390/280	306/620/280		306/620/420	306/620/280	306/620/420	460/1000/470		
主軸 Spindle	Spindle taper		NT-30	NT-40							NT#50/GA 9 steps			
	Spindle transmission		皮帶BELT											
	Spindle speed(60HP)	rpm	70-3900						75-3600	70-3900	75-3600			
馬達 Moter	Spindle motor	hp	3	5					7.5					
	X/Y/Z motor	kw	0.75/0.75/0.75	1/1/1			1.3/1.3/1.3					2/2/2		3.5/3.5/3.5
	Coolant pump	w	94			125								
	Auto oil lubrication	ℓ/w	2/150											
	Power demand	KVA	5	6.6		7	7.3		10					
工作台 Table	Table size(WxL)	mm	230*1245	254*1270	320*1270	306*1270	400*1270		400*1500		700*1900	700*2300	700*2800	700*3300
	T-slots(WidthxNo.xPitch)	mm	16*3*63		16*4*63	16*3*64	16*5*63				18*6*105			
	Table load	kg	400	600			800				1400			
進給 Feed	Rapid feed rate(X/Y/Z)	mm/m	6000											
	Cutting feed rate	mm/m	25-4000											
	Min. input increment	mm	0.01											
加工能力 Machining Ability	Drilling hole(head 1st)	mm	φ 25	φ 36		φ 38	φ 36	φ 38	φ 36	φ 38				
	Quill hole(spindle)	mm	φ 15	φ 20				φ 25	φ 20	φ 25				
	Drilling/boring depth	mm	300					320	300	320	400			
	Milling capacity	mm	(φ75.NO:1) 2	(φ100.NO:1) 3				(φ100.NO:1) 5	(φ100.NO:1) 3	(φ100.NO:1) 5				
	Boring capacity	mm	φ 50	φ 120				φ 160	φ 120	ψ160				
	Tapping		M14	M20				M30	M20	M30				
重量尺寸 Weight & Dimension	N.W./G.W.(Approximate)	KG	1500/1600	2100/2200	2200/2300	2400/2550	2800/3100	3050/3350	2800/2950	3250/3600	6150/6600	6450/6950	8200/8800	8600/9300
	Floor space(LxWxH) Full guard	M	2.03/1.61/2.25	2.05/1.82/2.25	2.85/1.83/2.25	1.99/1.72/2.25	2.11/1.72/2.55	2.02/1.99/2.25	2.02/1.99/2.25	2.11/2.02/2.55	2.72/2.43/2.80	2.83/2.72//2.80	3.22/2.53/2.80	3.71/2.53/2.80
	Packing(LxWxH) Full guard	M	2.60/1.46/2.25	2.70/1.67/2.38	2.45/1.68/2.41	3.21/1.84/2.28	3.21/1.96/2.53	3.74/1.84/2.28	3.74/1.84/2.28	3.74/1.96/2.53	4.56/2.87/2.71	5.71/2.87/2.71	7.21/2.69/2.71	8.21/2.69/2.71

Specifications subject to change withour notice.

標準配件Standard accessories:

1.三軸手動輪 XYZ Manual Hand wheel
2.三軸手鋼珠螺桿 XYZ Ballsrews
3.Z軸自動伺服馬達 Z axis auto feed servo motor
4.自動潤滑系統 Auto lubrication system
5.切削冷卻裝置 Collant system
6.配重錘配重 Counting balance
7.懸吊式操作箱 Pendent operation cabinet
8.水平調整螺絲+角墊 Leveling pads and adjusting screws
9.調整工具一組含工具箱 Tool box with adusting tools
10.操作維護手冊 Operating manual &part list
11.精度檢驗報告 Precision report

特殊配件Optional accessories:

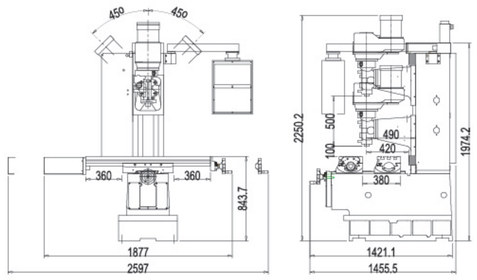
1.自動拉刀 Power draw bar
2.石英燈 Halogen work light
3.日光燈 Fluorescent lamp
4.左右進刀 X Power feed
5.前後進刀伺服馬達 Y servo auto feed
6.X軸左右伸縮護蓋 X axis telescope cover
7.Y軸前伸縮護蓋 Y axis front telescope cover
8.Y軸後伸縮護蓋 Y axis rear telescope cover
9.X軸左右鋁隔屑蓋 X axis aluminum cover
10.Y軸前後防塵皮 Y axis lubber cover
11.Y軸後、Z軸下縮捲器 Y-rear、Z-bottom roller type way cover
12.Z軸上、下空壓煞車 Z-axis air-cylinder break
13.工作台護罩 Table guard
14.底座水盤 Chip tray
15.機身左右遮板 Column side guard(L/R)
16.光學尺 Digital read out
17.橫裝置 Horizontal milling head(ψ100quill)

CONVENTIONAL MILLING MACHANES BED TYPE SERIES

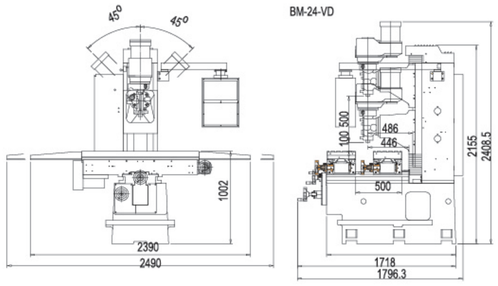
佔地面積

PERFECT JET

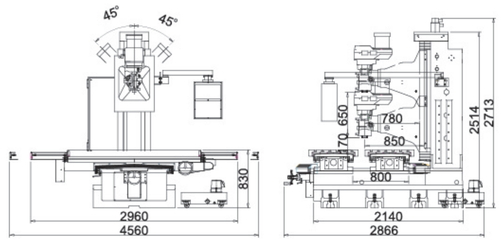
BM-21-VC



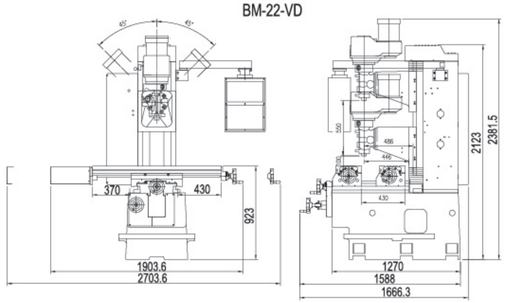
BM-24-VD



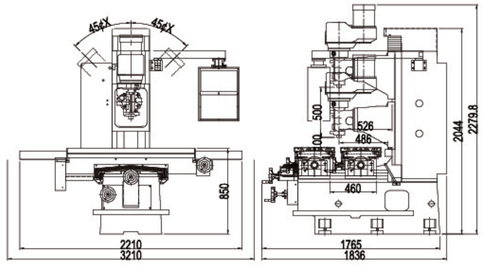
BM-51-VI



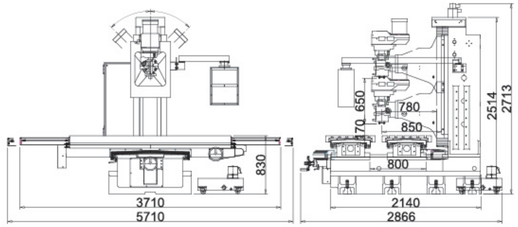
BM-22-VD



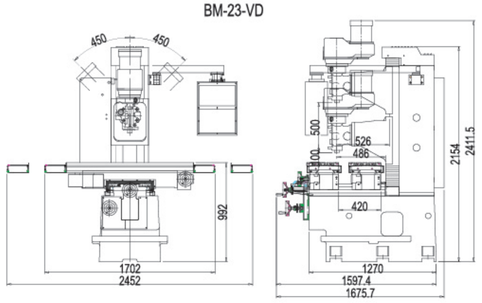
BM-33-VD



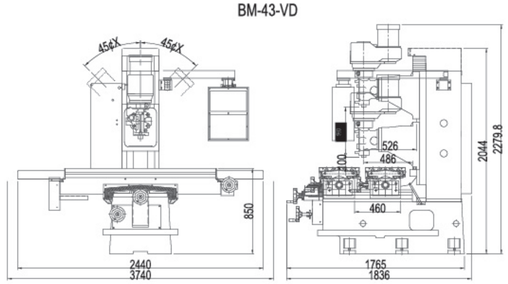
BM-61-VI



BM-23-VD



BM-43-VD



BM-71-VI

