



***LIH WOEI &
SHAPER KING®***

WOOD WORKING / CNC ROUTER

Typical applications:
plastics, aluminum, cabinet doors,
solid wood doors and panel type furniture.

公司簡介

利偉木工機械創業於1985年，自行設計及研發一系列的CNC複合加工機與仿型機，擁有專業的焊接組立部門、配電部門、軟體及機械教學部門，提供最高品質的售後服務，此外，利偉的專業設計部門，可提供客製化CNC以滿足客戶需求，也因此在各個領域上累積豐富的經驗。機台精度為正負兩條，可運用在鋁業、木業、高科技產業、塑料業、造船業及醫療業等等。我們是解決問題的專家！

Company Profile

Establish in 1985, Lih Woei carpentry machine co., ltd. specializes in design and manufacturing of various type of CNC Router and automatic copy shaping machines.

We have our own Welding assembly department, Power distribution department CAM and teaching department. We provide the highest quality after-sales service. Moreover, we have our own mechanical designer, in this way, we could provide customized machine based on customer's demand. Lih Woei has a lot of experience in various fields such as aluminum industry, wood industry, high-tech technology, plastic industry, shipbuilding industry, medical industry.

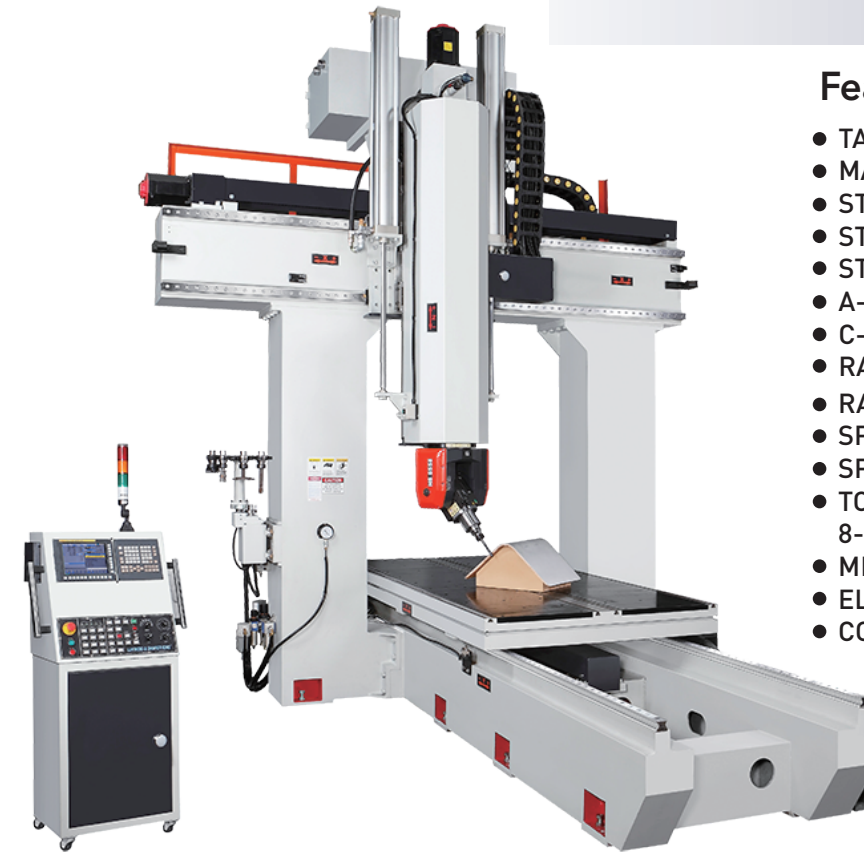
We are great problem solvers!



Precision 5-Axis CNC Machining Center

Features:

- TABLES SIZE: 1250x2470mm
- MAX. WORKING SIZE: 1250*1250mm
- STROKE X-AXIS: 2500mm, SERVO: 4.5KW
- STROKE Y AXIS:1250mm, SERVO:4.5KW
- STROKE Z AXIS: 800-1000 mm ; SERVO:4.5KW
- A-AXIS:[+] [-]120° SERVO: 800W , FANUC
- C--AXIS: [+] [-]245° SERVO: 800W
- RAPID X & Y AXIS: 45M/ Min
- RAPID Z AXIS: 20M/Min
- SPINDLE POWER" ITALY/ HSD15KW
- SPINDLE SPEED: 6000~24,000RPM
- TOOL AUTO. CHANGE MODE & CAPACITY: 8-POSITION DRUM TYPE ATC
- MEASURE ROUTER BIT OF TOOL: 1PC
- ELECTRICITY HANDLE-WHEEL: 1PC
- CONTROLLER: FANUC 31i (5 AXIS CONTROLLER)



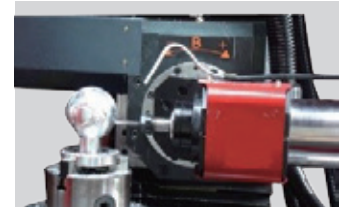
Precision Mini 5-Axis CNC Machining Center

Features:

- MACHINE SIZE :75*70*172CM (L* W*H)
- SPINDLE/ WORK TABLE:
 - a.MAX. SPEED: 24000RPM
 - b.MAX. POWER : 750W
 - c.TABLE DIAMETER:φ130mm
- Stroke
 - a.TRAVEL: X:200mm; Y:150mm; Z:220mm; B: (+) 110° ~ [-30] ° C: 360°
 - b.SERVO: DELTA 20BIT, ZAXIS WITH BRAKE MOTOR RESOLUTION : 20 BIT/ REV
 - c.REPEATABILITY: X/Y/Z: [+] [-]3μm B/C: [+] [-] 20/ARC SEC



The Mini 5 Axis can customized axis direction.



RTCP



Twin Table CNC Router

With Twin Table Machine You Will Be Able To

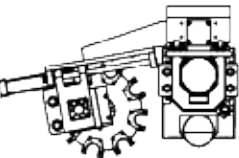
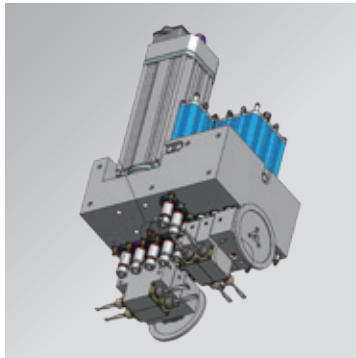
- Working a single program on two different tables.
- Working two different program on two different tables.
- Attached aggregate, boring or cutter head.

Features:

- Italy HSD high frequency motor 12HP
- High efficiency drum type ATC, 8 position
- Table size:2400x1600mmx2 (Customized size available)
- Max working height: 400mm
- Rapid X & Y Axis: 80M/min
- Rapid Z Axis: 20M/min
- Distance between Axis & Axis :900-2400mm
- Servo motor: 3KW
- Vacuum absorb system 7.5HP
- Controller: SYNTECH (highest)
- X,Y,Z axis used by highly intensity ball screw
- Auto tool measurement system
- Full working area auto lubrication system

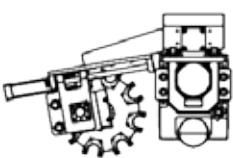
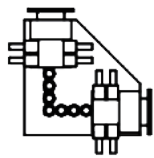


可客製主軸數量或增加選配特殊頭，如鉋刀頭或複合頭。
The spindle can be changed and customized, the table dimension can be also customized.



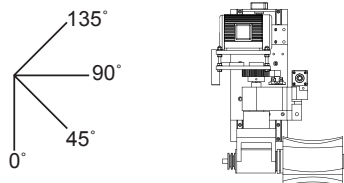
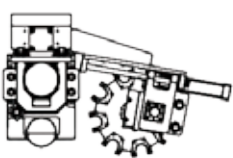
ST+ Drill bank

One Italy brand HSD spindle with 8 pos. tool change carousel.
One Boring unit with 7 vert. drills, 2 grooving saw+ 8 hor.
Drill unit as options.



Double ST

Two Italy brand HSD spindle with 8 pos. tool change carousel.

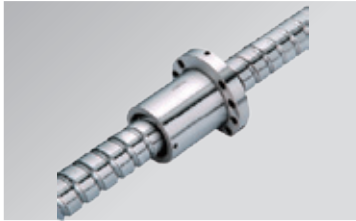


ST+ Cutter Unit

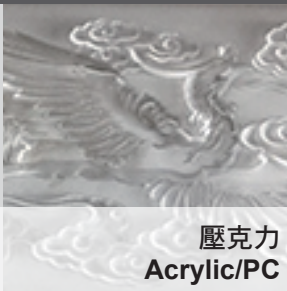
One Italy brand HSD spindle with 8 pos. tool change carousel.
One Cutter Unit with 4 angels



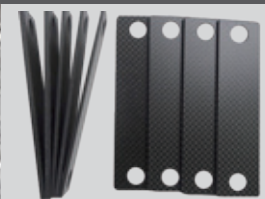
精密型線軌(Dia45)
Precision linear guide way



精密型螺桿(Φ 50)
Precision ball screw



壓克力
Acrylic/PC



碳纖維/玻璃纖維
Carbon



工程塑膠
Plastic



橡膠泡棉
EVA



人造石
Engineered stone



鋁
Aluminum



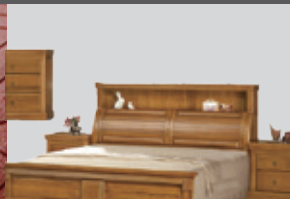
銅
Copper



軟地墊
Floor mat



木頭
Wood



電木
bakelite

Features:

- Table size: 1250*2470mm (customized available)
- Stroke X Axis : 2470mm
- Servo motor: 1KW*2PCS + Planetary Reducer
- Stroke Y Axis : 2470mm , Servo motor: 1KW
- Stroke Z Axis : 300mm , Servo motor: 1KW
- Max. working area: 1250mm*2470mm*300mm
- Rapid speed X & Y Axis: 55M/min
- Rapid speed Z Axis: 20M/min
- Spindle speed:1000 ~ 24000RPM, 12HP (Italy HSD 9kw)
- Tool change mode & capacity: 8-position drum type ATC
- Tool holder taper: ISO-30/ER-32
- Lih Woei format for X axis helical rank with grinding quality.
- Auto tool measurement system
- Include a 7.5HP Vacuum pump
- Full working area lubrication system
- Y,Z axis use highly intensity ball screw
- Vacuum zone: Auto 1 or 2 zones
- Customized available

LH-481-S LH-510-S

CNC 4' x 8' / CNC 5' x 10'
Machining Center
(One Spindle with One ATC)
單主軸 單刀庫



LH-481-SA

CNC 4'x8' Machining Center
with Roller Hold Down
增加壓輪功能



LH-484
CNC 4'x8'
Machining Center
with Four spindles
四主軸 無刀庫

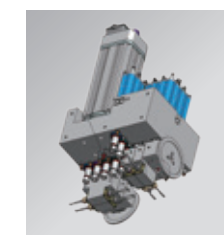


單主軸選配複合頭
One spindle + drill head
(7 drill+4 side drill+ 2 saw)

LH-6204
CNC 6'x20'
Machining Center
with Four spindles
and Four ATC
四主軸 四刀庫



傘型刀庫
Drum type ATC



複合頭
7 drill+4 side drill+
2 saw



日本精密型行星減速器
Japan brand Planetary
Reducers



真空幫浦
Vacuum pump



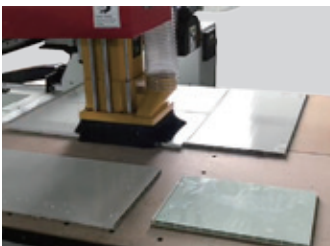
LH-510-2S+cutter

CNC 5'x10' Machining Center
(Cutter head rotates 0° 45° 90° 135°)
單主軸 選配特殊頭刨刀頭



LH-5101-S

CNC 5'x10' machining center
(Customized CNC table with 71 pins)
71支靠料客製CNC



LH-5102-S

CNC 5'x10' Two Spindles
Machining Center
(Two spindles with two ATC)
雙主軸雙刀庫



LH-442

CNC 4'x4'
Machining Center
加裝安全護蓋



LH-510-2TS

CNC 5'x10' Machining Center
(One spindle with two ATC)
單主軸 雙刀庫



LH-8402

CNC 8'x40' Machining Center
(Extended type available)
40尺加長型CNC

Features:

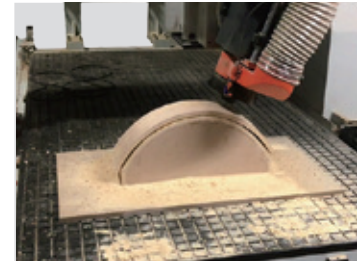
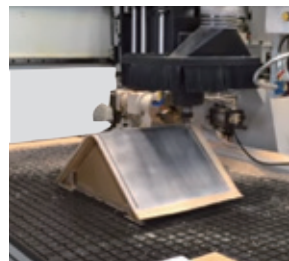
- Table size: 1250*2470mm
 - Max. working area: 1250*2470mm
 - Stroke X Axis : 2470mm
 - Stroke Y Axis : 1250mm
 - Working height: Max. 800mm
 - Servo motor(X/Y/C): 1.5KW
 - Servo motor(Z): 1KW
 - Rapid speed X & Y Axis: 55M/min
 - Rapid speed Z Axis: 20M/min
 - Tool change mode & capacity: 8tools, linear type ATC
 - Spindle speed:1000 ~ 24000RPM, 12HP (Italy HSD 9kw)
 - Vacuum pump:7.5HP
- (For more information please email us)

LH-481-R

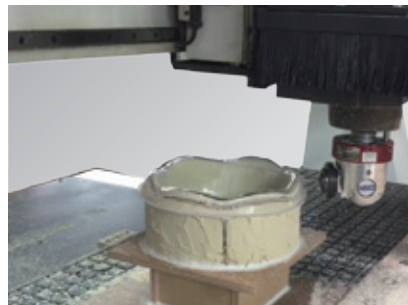
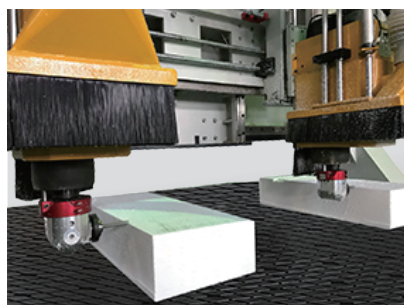
CNC 4'x 8' Machining Center
with Rotation head
四軸搖擺頭



5 Axis CNC Router

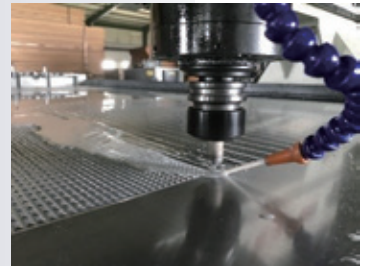


主軸旋轉C軸(義大利製) Spindle rotation axis (made in Italy)



LH-481-SS

CNC 4'x8' aluminum
type router
鋁用加工機



LH-5101-B

CNC 5'x10' Machining Center
3 Axis all in Ballscrews
三軸全螺桿

- Table size:1550*3075mm
- Servo motor X/Y/Z :4.5kw/1.5kw/1kw
- Max working area:1600*3100mm
- Max working height:300~400mm
- Spindle speed:1000~24000RPM,12HP



車床旋轉軸
Rotation lathe axis

LH-4801-5X LH-5101-5X

5 Axis CNC 4' x 8' / 5' x 10'
Machine Center
全密式五軸複合加工機



Features:

- Table size: 1220x2440mm (customized available)
- Max working height (Z): 1000mm (customized available)
- Rapid X & Y Axis: 80M/m
- Rapid Z Axis: 20M/min
- Servo motor(X/Y/Z): 1.5/1.5/1.8KW
- Tool change & capacity: 8-position drum type ATC
- Spindle: Italy HSD 10kw ; 1000-24000r.p.m
- Vacuum pump: 7.5HP
- Controller: SYNTEC or FANUC (For more information please email us)



LH-3842-S

CNC 3.8Mx4.2M Machining Center
客制化CNC複合加工機

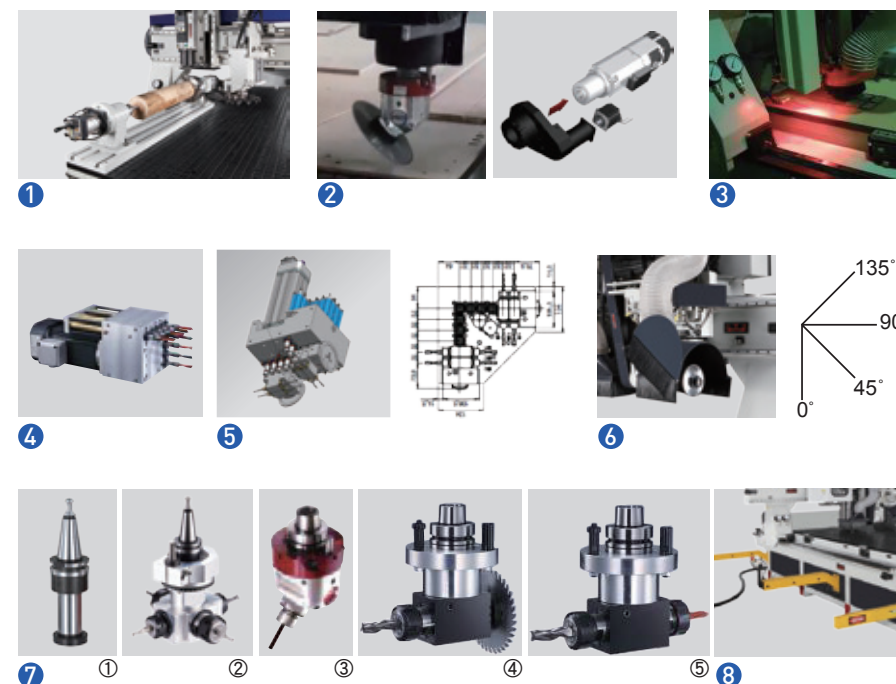


STANDARD EQUIPMENT 標準配備



- 1 ISO30/ER32 刀桿x4
ISO30/ ER32 tool holder x4
- 2 2.5D CAD/CAM
- 3 Auto length measurement system
自動量刀器
- 4 真空幫浦 7.5HP (含動力線6M)
Vacuum pump 7.5HP (include 6M wire)
- 5 傘型刀庫可放8支刀 (在物件上換刀，提高效率)
Drum type ATC (8 position)
The tool can change automatically when machine work in any position to increase efficiency.
- 6 義大利HSD 主軸 ISO30
Italy HSD spindle ISO 30
- 7 全行程自動注油器
Full working area lube system
- 8 客製化操作介面
User-Friendly Operation Provide customized interface
- 9 電線符合CE標準
The control system are with high quality electric components, and CE regulations
- 10 手輪 Hand Wheel

OPTIONAL EQUIPMENT 選購配備



- 1 車床旋轉軸
Rotation lathe axis
- 2 主軸旋轉C軸(義大利製)
Spindle rotation axis
- 3 CCD影像辨識系統
CCD image recording system
- 4 9頭排鑽(義大利製)
9 boring heads in L shape (made in Italy)
- 5 7頭排鑽+4側鑽+2鋸片功能(義大利製)
7 front boring+4 side boring and 2 saw blades(made in Italy)
- 6 側銑鉋刀(可夾持鋸片直徑350mm及旋轉立軸)
可轉角度0°、45°、90°、135°
Cutter head rotates 0°, 45°, 90°, 135° degrees
- 7 可客製特殊頭 ①②③④⑤
Customized aggregate head①②③④⑤
- 8 安全光閘 (單區或雙區)
Safety Fence (one or two zone)
- 9 客製化機型
Customized machine available.



伺服馬達及傳動系統，機台精度為正負兩條
Servo motor and transmission, and machine accuracy±0.02

- A.高響應、高解析度伺服馬達，搭配20 bit (1280000 p/rev)增量型編碼器。
B.採用重負荷、預壓式的歐規線軌，以及可以加工狀況微調導成珠子的滾珠螺桿，其中，珠子為精密研磨等級。
C.傳動齒排採用利偉標準研磨級規格齒排，具有精密級高剛性等特性，機台精度為正負兩條。
A.Servo motor with highly response and resolution characteristic, inner encoder resolution is 20 bit/1280000 P/ rev.
B.Heavy duty type linear guide way and grinding bead quality.
C.Lih Woei have our own helical gear rack specification, which is thick and durable with heat treatment and grind helical racks.



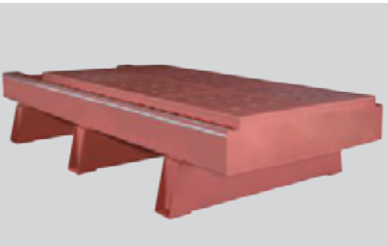
高效率換刀系統
High efficiency ATC

- A.執行換刀時，搭配高剛性台身使動作快速且連續順暢，換刀時間僅需4秒，最多可夾持8支刀。
B.如果是後刀庫直列式換刀，可夾持成型刀的最大外徑為110mm，可夾持立軸刀的厚度為100mm。關機前的刀號可在PLC暫存，縮小人為換刀所造成的撞機誤差。
A.With heavy duty machine base, Lih Woei's CNC can move efficiently and smoothly. The machine only takes 4 seconds to change tool, and our tool magazine is able to hold up to 8 tools.
B.Linear type tool magazine is able to hold profile cutter (up to dia.110mm) and rebating cutter (up to dia.100mm). Before turn off the machine, the cutter data will save in PLC.



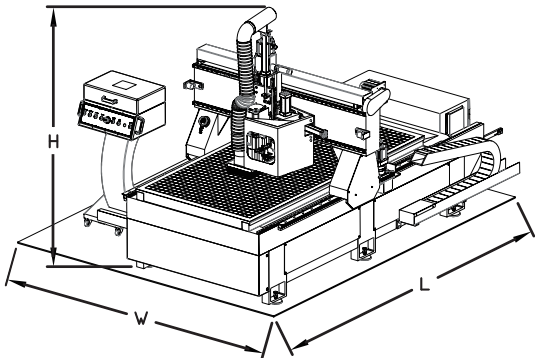
義大利進口主軸/德國進口線材及軌道鏈條
Italy HSD Spindle/ Germany brand wire and cable chain

- A.義大利製高頻主軸，其軸承材質為高剛型陶瓷，具有靜音、高轉速、高中心平衡等特性。
B.主軸可承受較大的軸向切削力及夾持立軸承型刀，達到最大加工效率。
C.主軸轉速為1000~24000r.p.m、9kw(12HP) 可滿足一般廣泛需求。
Italy Spindle which is quite, high speed and more stable. The spindle can support heavy cutting to reach the biggest working efficiency. Spindle speed: 24,000r.p.m; power:12HP, 9kw



高剛性強化結構的底座
Heavy-duty base

- A.橫梁及底座的剛性均加以強化，提供機械本身最大切削穩定度
B.高剛性的台身可縮小機台定位、加減速的時間，使高速定位更快速
C.台身結構都經過熱處理，強化材質穩定度
Heavy-duty machine base and crossbeam can make our machine more stable when processing. Lih Woei have our own helical gear rack specification, which is thick and durable with heat treatment and grind helical racks.



規格 ORDER NO	長 (L)	寬 (W)	高 (H)
LH-481-S	4470mm	2750mm	2500mm
LH-481-SA	4800mm	2800mm	2500mm
LH-481-R	4200mm	3180mm	3000mm
LH-510-S	5075mm	3050mm	2500mm
LH-840	13500mm	5100mm	2500mm

規 格	Specification	LH-481-S	LH-5101-S	LH-5102-S	LH-810	LH-5102
桌面尺寸	Table size	1250x2470mm	1550x3075mm	1550x3075mm	2465x3075mm	1550x3075mm
最大加工範圍	Max. working area	1250x2470mm	1600x3100mm	1600x3100mm	2465x3100mm	1600x3100mm
最大工作高度	Max. working height	300mm				
X軸加工	Stroke X axis	2470mm	3100mm	3100mm	3100mm	3100mm
X軸伺服馬達	Servos motor	1 kwx2pcs + Planetary Reducers 行星減速機			2 kwx2pcs + Planetary Reducers 行星減速機	
Z軸加工	Stroke Z axist	300mm; 伺服馬達 Servos motor : 1 kw			400mm;伺服馬達 Servos motor : 1 kw	300mm;伺服馬達 Servos motor : 1.5 kw
X & Y軸速度	Rapid X & Y axis	55 M / min				
Z軸速度	Rapid speed Z axis	20M / min				
主軸速度	Spindle speed	1000 ~ 24000 r.p.m.				
主軸馬力 & 數量	Spindle power & Q'ty	HSD 9 kw (12HP)x1				
真空泵浦	Vacuum pump power	7.5 HP				
工具型號	Tool holder taper	ISO #30: 4pcs				
鉋花刀彈性筒夾尺寸	Collet for router bits	ER32: Ø6mm ~ Ø20mm: 4pcs				
真空區域	Vacuum zone	單區或雙區或客製		1 or 2 zones or customized		
工具轉換 & 能力	Tool auto change mode & capacity	如有購買特殊頭， 會加裝兩只後刀庫放置特殊頭		8-position drum type ATC 傘型刀庫8支自動換刀		
9孔鑽頭以L型氣壓自動升降鑽孔	9 Boring head in Ltaper shape of motor power	2HP				
控制器	Controller	SYNTECH, fanuc, Mitsubishi, Intek , or LNC control system 新代、發那科、三菱、智研、寶元控制器				
量刀器	Measure router bit	1 pc				
工具、手冊	Tool kits, Operation manual	1 set				
CAD-CAM軟體	2.5D / 3D cam	Natural cam / Vectric / ZW3D / NX (Optional 選配)				

LIH WOEI & SHAPER KING[®]

利瑋精密科技有限公司
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