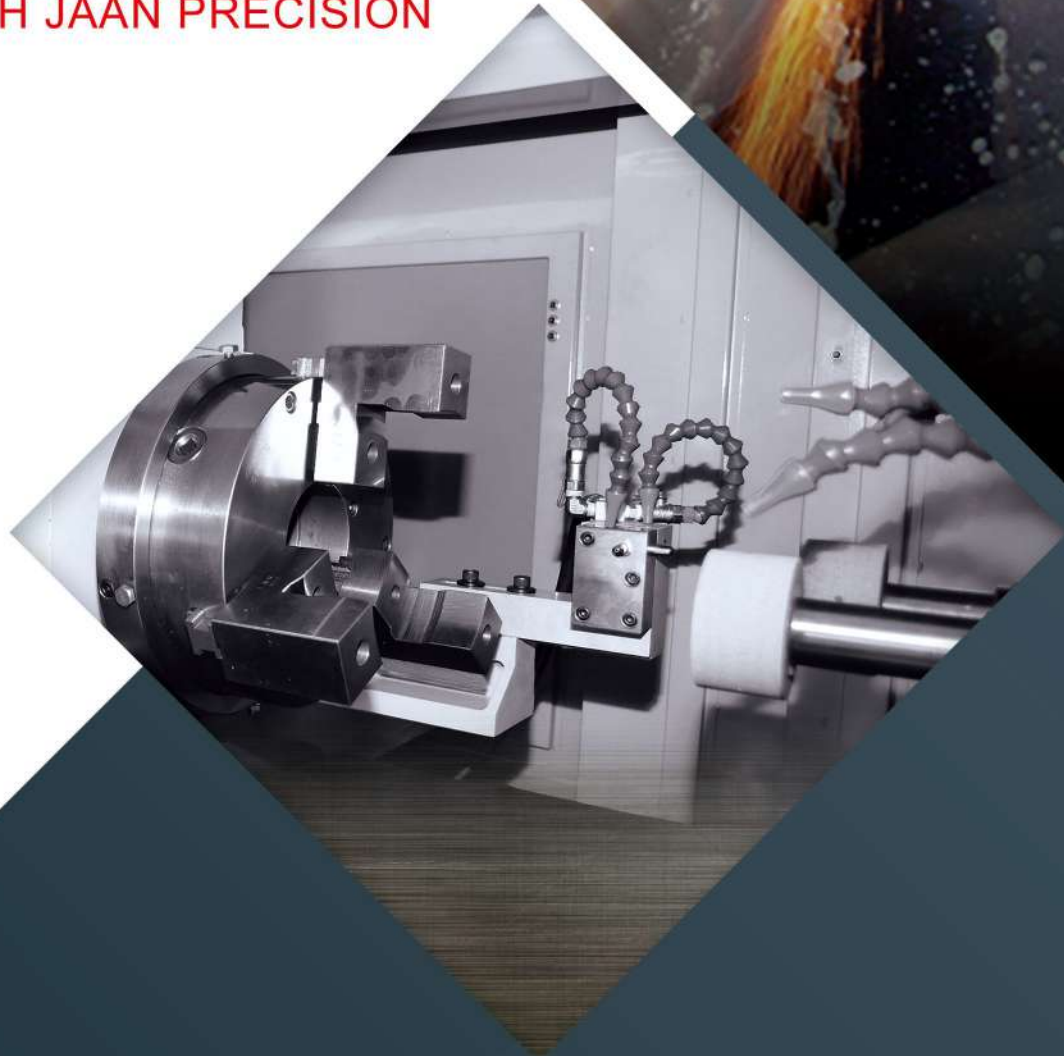




通展精機
LIH JAAN PRECISION



五大
宗旨

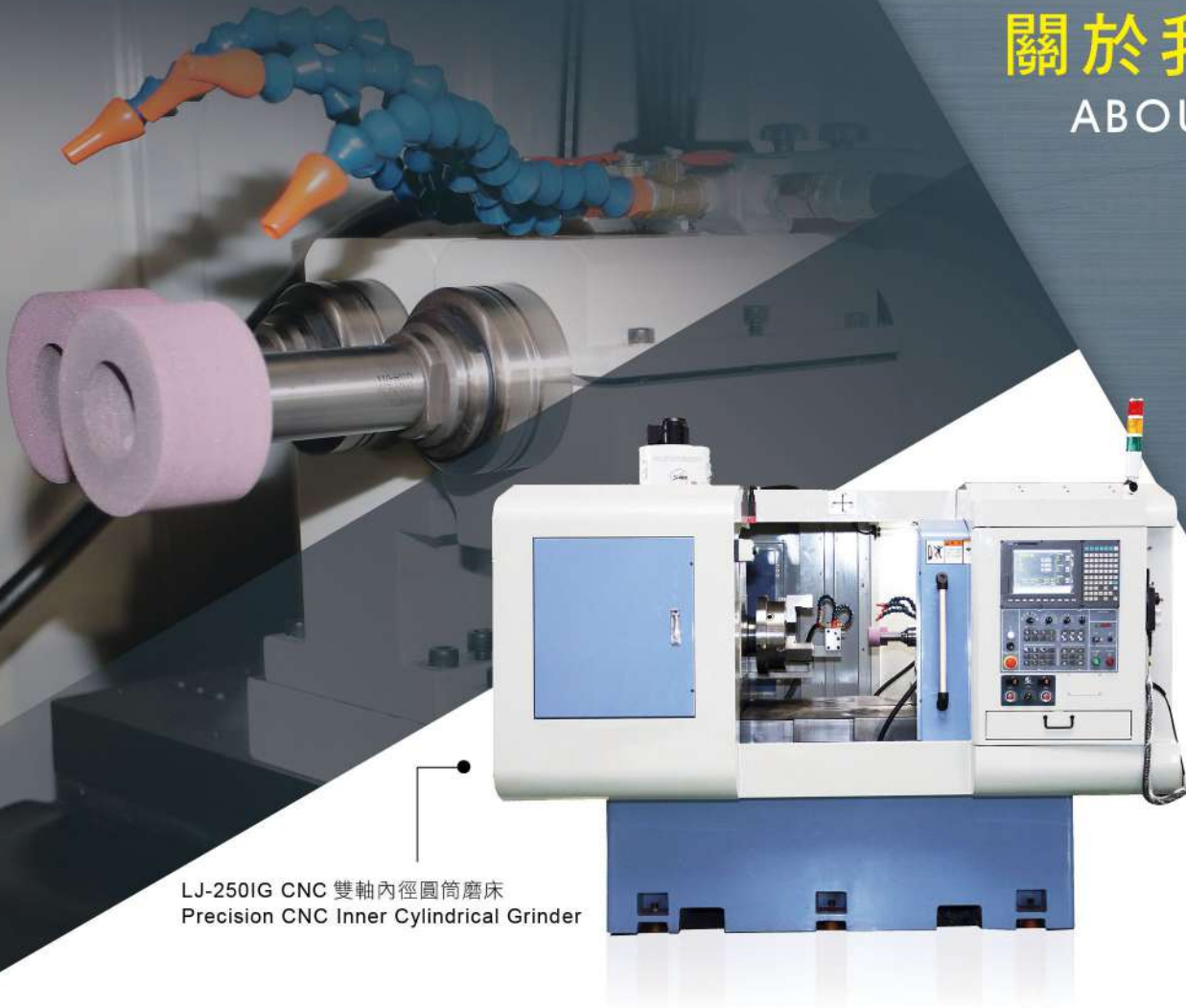
高精度 High Precision

高效率 High Efficiency

高穩定 High Stability

高剛性 High Rigidity

高耐用 High Durability



LJ-250IG CNC 雙軸內徑圓筒磨床
Precision CNC Inner Cylindrical Grinder

公司簡介 COMPANY PROFILE

通展精機工業股份有限公司：成立於西元 1984 年，為專業圓筒磨床製造公司，秉持不斷的研發及創新，並以精益求精之精神朝向高品質、高精度、高效率的經營理念邁進，以期提供給客戶更好、更高品質、高精度、高效率的服務。

Lih Jaan Precision Machinery Co., Ltd was established in 1984, the professional cylinder grinding machine manufacturing company, uphold the continuous R&D, innovation, and the spirit of excellence towards **high-quality, high precision, high efficiency** business philosophy to provide customers with higher quality, higher precision, higher efficiency services.

主要產品 PRODUCTS

- 精密萬能圓筒磨床 - 普通型
- 精密油壓圓筒磨床
- CNC 精密萬能圓筒磨床
- CNC 直進式 / 斜進式圓筒磨床
- 壓滾輪磨床
- NC 超重壓滾輪磨床
- CNC 精密螺紋磨床
- 內徑螺紋磨床
- 精密端面磨床
- 內徑油壓圓筒磨床

- Precision Cylindrical Grinder- Manual Type
- Precision Hydraulic Cylindrical Grinder
- CNC Precision Universal Cylindrical Grinder
- CNC Horizontal /Slope Type Cylindrical Grinder
- Precision Heavy Duty Cylindrical Grinder
- NC Super Heavy Duty Cylindrical Grinder
- CNC Precision Thread Grinder
- Precision Inner Thread Grinder
- Precision End Face Grinder
- Precision Inner Cylindrical Grinder

產品介紹

Products



精密萬能圓筒磨床 - 普通型

Precision Cylindrical Grinder-Manual Type

本機採用手動研磨進給、左右採用馬達傳動控制磨床。

This model adopts manual grinding feeding X axis and motor drive is adopted on Z axis.

規格表 SPECIFICATION

機型 MODEL	LJ27-500	LJ27-800
	研磨能力 Grinding Capability	
最大研磨長度 Max Grinding Length	500 mm	800 mm
最大研磨直徑 Max Grinding Diameter	250 mm	
最大研磨重量 Max Grinding Weight	100 kg	
中心高 Heights of Center	135 mm	
	砂輪座 Wheelhead	
砂輪尺寸 Grinding Wheel Size	φ 355x25~50x φ 101.6(127)	
砂輪轉速 Grinding Wheel Speed	1500,1700 RPM	
砂輪最大周數 Max Grinding Linear Velocity	45 M/S	
砂輪座最小移動量 Min Movement of Wheelhead	0.005 mm	
	工件主軸 Work Spindle	
夾具最大孔徑 Max Chuck Size	7" φ 58	
主軸轉速 Spindle Speed	40~360 RPM	
主軸台迴轉度 Spindle Swing Angle	± 45°	
主軸錐度 Spindle Taper	MT#4	
	尾座 Tailstock	
尾軸孔錐度 Tailstock Quill Taper	MT#4	
尾軸行程 Tailstock Quill Stroke	30 mm	
	工作台 Worktable	
工作台行程 Worktable Stroke	500 mm	800 mm
工作台最快速度 Max Table Moving Speed	5000 mm / min	
工作台迴轉角度 Table Swing Angle	10° 7°	9° 6°
	馬力 Motor Power	
砂輪馬達 Grinding Wheel Motor	5HP(3.7kw)	
主軸馬達 Main Spindle Motor	1/4HP(0.2kw)	
工作台馬達 Worktable Motor	1/8HP(0.1kw)	
冷卻馬達 Cooling Pump	1/8HP(0.1kw)	
砂輪軸潤滑馬達 Lubricant Motor	1/8HP(0.1kw)	
機械規格 Machine Size		
機械尺寸 (長 x 寬 x 高) Machine Dimensions (LxWxH)	228x144x158	278x144x158
機械重量 Machine Net Weight	2200 kgs	2300 kgs

精密油壓圓筒磨床 LJ27 / LJ37

Precision Hydraulic Cylindrical Grinder

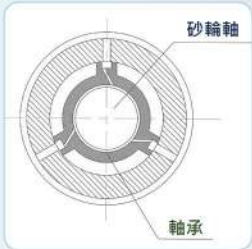


LJ27, LJ37 系列適用於研磨圓柱形、圓錐形零件，工件直徑在 20 mm~350 mm 之小型零件，機構設計可達成少量多樣加工需求並可依加工需求搭載附屬內孔研磨裝置、NC 人機伺服、CNC 控制器高。

LJ27 and LJ37 series are suitable for small size grinding cylindrical and conical parts with diameter of 20 mm ~ 350 mm. The design of the machine can meet a small number of different processing needs and can be equipped with Subsidiary Internal Grinding, NC servo and CNC Controller.

規格表 SPECIFICATION

機型 MODEL	LJ27				LJ37			
	研磨能力 Grinding Capability							
最大研磨長度 Max Grinding Length	600 mm	1000 mm	1500 mm	2000 mm	600 mm	1000 mm	1500 mm	2000 mm
最大研磨直徑 Max Grinding Diameter	250 mm				350 mm			
最大研磨重量 Max Grinding Weight	150 kg				150 kg			
中心高 Heights of Center	135 mm				185 mm			
	砂輪座 Wheelhead							
砂輪尺寸 Grinding Wheel Size	φ 406x25~75x φ 152.4 (127)				φ 406x25~75x φ 152.4 (127)			
砂輪轉速 Grinding Wheel Speed	1500,1700 RPM				1500,1700 RPM			
砂輪最大周數 Max Grinding Linear Velocity	45 M/S				45 M/S			
砂輪座最小移動量 Min Movement of Wheelhead	0.001 mm				0.001 mm			
	工件主軸 Work Spindle							
夾具最大孔徑 Max Chuck Size	7" φ 58				9" φ 70			
主軸轉速 Spindle Speed	40~360 RPM				40~360 RPM			
主軸台迴轉度 Spindle Swing Angle	±45°				±45°			
主軸錐度 Spindle Taper	MT#4				MT#4 (5)			
	尾座 Tailstock							
尾軸孔錐度 Tailstock Quill Taper	MT#4				MT#4 (5)			
尾軸行程 Tailstock Quill Stroke	30 mm				30 mm			
	工作台 Worktable							
工作台行程 Worktable Stroke	400 mm	650 mm	1000 mm	2000 mm	400 mm	650 mm	1000 mm	2000 mm
工作台最快速度 Max Table Moving Speed	5000 mm / min				5000 mm / min			
工作台迴轉角度 Table Swing Angle	9° 4'	7° 3'	5° 2'	3° 1'	9° 4'	7° 3'	5° 2'	3° 1'
	機械規格 Machine Size							
機械尺寸 (長 X 寬 X 高) Machine Dimensions (LxWxH)	228x150x160	228x350x170	-	-	228x280x170	228x380x170	-	-
機械重量 Machine Net Weight	2200 kg	3500 kg	-	-	2800 kg	3500 kg	-	-



三 高剛性砂輪主軸 High Rigidity Wheel Spindle

高剛性砂輪主軸採用通展自行開發生產之銅襯套式動靜壓軸承。即使經過長時間高速、重切削條件下，仍能保持穩定之高精度表現。

High rigidity grinding wheel spindle is equipped with Lih-Jaan copper bush type hybrid bearing. Provide stable high-accuracy even after long time heavy grinding.



三 油膜吸震設計 Vibration-Absorbing Design

砂輪主軸強制潤滑系統具有良好的制震性能，動壓軸承所產生的油膜壓力，隨研磨作業自動吸收研磨時產生之震動，確保研磨精度。

The forced lubrication system of the grinding wheel spindle features vibration absorbing function. The oil film pressure, created by the hydrodynamic bearings, automatically absorbs vibration according to the current working condition.



三 多樣化加工機構 Diversified Processing Mechanism

主軸台可 120° 旋轉，砂輪台可左右 30° 旋轉，主軸轉速為無段變速。並可定住與正逆轉，適合中小型，多樣化外圓筒加工。

Spindle table can be 120° rotation, grinding wheel table can be rotated about 30° (R&L), the spindle speed made in stepless. Also can be fixed and reversing, suitable for small and medium-sized, diversified cylinder processing.

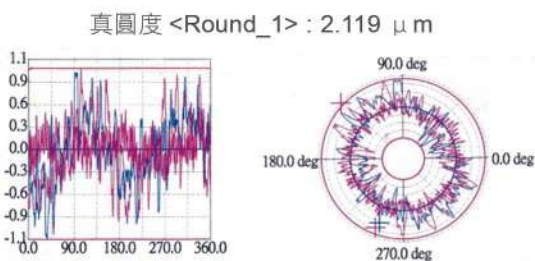
延伸應用 EXTENDED APPLICATION



可搭配 NC 實現半自動需求。
Pair with NC to fulfill semi-automatic need.

可搭配多款廠牌 CNC：西門子、發那科、新代及三菱，也可以進階搭配自動手臂完成全自動化需求。
Pair with variety controller brands：Siemens, FANUC, SYNTEC and Mitsubishi and so on. Moreover, this model can pair with automatic arm to fulfill the fully automatic production.

精度 ACCURACY



加工範例 WORKPIECE SAMPLE



CNC 直進式 / 斜進式圓筒磨床 LJ30 / LJ30(A)

CNC Horizontal/Angular Type Cylindrical Grinder



LJ30/LJ30(A) 系列 CNC 直進式 / 斜進式圓筒磨床廣泛適用於直徑範圍在 280mm 內之工件。並可搭配多款廠牌 CNC：西門子、發那科、新代及三菱，也可以進階搭配自動手臂完成全自動化需求。

LJ30 / LJ30 (A) Series CNC Horizontal/Angular Type Cylindrical Grinding Machines are widely used for workpieces with diameters in the range of 280mm and pair with variety controller brands : Siemens, FANUC, SYNTEC and Mitsubishi and so on. Moreover, this model can pair with automatic arm to fulfill the fully automatic production.

規格表 SPECIFICATION

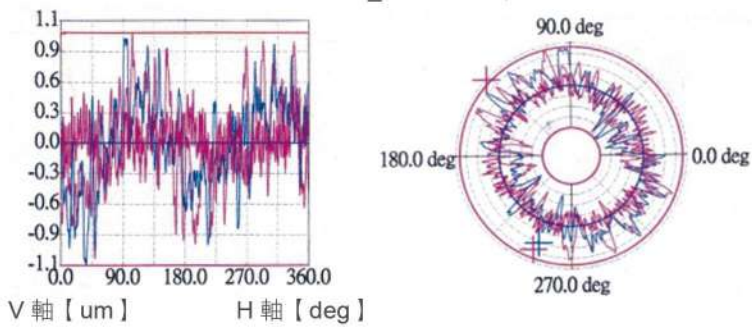
機型 MODEL	LJ30-400	LJ30-400 (A)	LJ30-600	LJ30-600 (A)
	研磨能力 Grinding Capability			
最大研磨長度 Max Grinding Length	400 mm		600 mm	
最大研磨直徑 Max Grinding Diameter	280 mm		280 mm	
最大研磨重量 Max Grinding Weight	100 kg		150 kg	
中心高 Heights of Center	150 mm		150 mm	
	砂輪座 Wheelhead			
砂輪尺寸 Grinding Wheel Size	φ 406x25~75x φ 152.4 (127)		φ 406x25~75x φ 152.4 (127)	
砂輪斜進角度 Wheel Tilt Angle	0°	30°	0°	30°
砂輪轉速 Grinding Wheel Speed	1500,1700 RPM		1500,1700 RPM	
砂輪最大周數 Max Grinding Linear Velocity	45 M/S		45 M/S	
砂輪座前後移動總行程 Total Back and Forth Stroke	標準 405:200 特別 450:175		標準 405:200 特別 450:175	
砂輪座快速進退給行程 Rapid Feed Stroke	50 mm		50 mm	
砂輪座進給總行程 Total Feeding Stroke	標準 405:160 特別 450:135		標準 405:160 特別 450:135	
	工件主軸 Work Spindle			
夾具最大孔徑 Max Chuck Size	7" φ 58		9" φ 70	
主軸轉速 Spindle Speed	40~360 RPM		40~360 RPM	
主軸錐度 Spindle Taper	MT#4		MT#4	
	尾座 Tailstock			
尾軸孔錐度 Tailstock Quill Taper	MT#4		MT#4	
尾軸行程 Tailstock Quill Stroke	30 mm		30 mm	
	工作台 Worktable			
工作台行程 Worktable Stroke	400 mm		600 mm	
工作台最快速度 Max Table Moving Speed	5000 mm / min		5000 mm / min	
工作台迴轉角度 Table Swing Angle	9° 4°		9° 4°	
	機械規格 Machine Size			
機械尺寸 (長 X 寬 X 高) Machine Dimensions (LxWxH)	239x230x		336x230x220	
機械重量 Machine Net Weight	4300 kg		4800 kgs	



三 斜進式設計 Angular Type
 斜進研磨角度達 30° 。
 Angular grinding angle up to 30° .

精度 ACCURACY

真圓度 <Round_1> : 2.119 μm



加工範例 WORKPIECE SAMPLE



重壓滾輪磨床 LJ56

Precision Heavy Duty Hydraulic Cylindrical Grinder

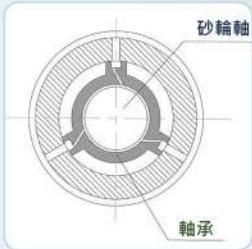


LJ56 系列適用於研磨圓柱形、圓錐形零件，工件直徑在 350 mm~550 (650) mm 之中大型零件，機構設計可達成少量多樣加工需求並可依加工需求搭載附屬內孔研磨裝置、NC 人機伺服、CNC 控制器。

LJ56 series are suitable for large and medium-sized grinding cylindrical and conical parts with diameter of 350 mm ~ 550 (650) mm. The design of the machine can meet a small number of different processing needs and can be equipped with Subsidiary Internal Grinding, NC servo and CNC Controller.

規格表 SPECIFICATION

機型 MODEL	LJ56			
	研磨能力 Grinding Capability			
最大研磨長度 Max Grinding Length	1000 mm	2000 mm	3000 mm	4000 mm
最大研磨直徑 Max Grinding Diameter	550 mm (650 mm)			
最大研磨重量 Max Grinding Weight	1000 kg			
中心高 Heights of Center	280 mm (350 mm)			
	砂輪座 Wheelhead			
砂輪尺寸 Grinding Wheel Size	φ 710x50~100x φ 203.2			
砂輪轉速 Grinding Wheel Speed	890 RPM			
砂輪最大周數 Max Grinding Linear Velocity	33 M/S			
砂輪座最小移動量 Min Movement of Wheelhead	0.001 mm			
	工件主軸 Work Spindle			
夾具最大孔徑 Max Chuck Size	10" φ 89			
主軸轉速 Spindle Speed	25~165 RPM			
主軸台迴轉度 Spindle Swing Angle	0.005			
主軸錐度 Spindle Taper	MT#5			
	尾座 Tailstock			
尾軸孔錐度 Tailstock Quill Taper	MT#5			
尾軸行程 Tailstock Quill Stroke	30 mm			
	工作台 Worktable			
工作台行程 Worktable Stroke	1000 mm	2000 mm	3000 mm	4000 mm
工作台最快速度 Max Table Moving Speed	3500 mm / min			
工作台迴轉角度 Table Swing Angle	3° 1'	2° 1'	2° 1'	1° 30'
	機械規格 Machine Size			
機械尺寸 (長 X 寬 X 高) Machine Dimensions (LxWxH)	228x390x170			
機械重量 Machine Net Weight	6000 kg			



三 高剛性砂輪主軸 High Rigidity Wheel Spindle

高剛性砂輪主軸採用通展自行開發生產之銅襯套式動靜壓軸承。即使經過長時間高速、重切削條件下，仍能保持穩定之高精度表現。

High rigidity grinding wheel spindle is equipped with Lih-Jaan copper bush type hybrid bearing. Provide stable high-accuracy even after long time heavy grinding.



三 油膜吸震設計 Vibration-Absorbing Design

砂輪主軸強制潤滑系統具有良好的制震性能，動壓軸承所產生的油膜壓力，隨研磨作業自動吸收研磨時產生之震動，確保研磨精度。

The forced lubrication system of the grinding wheel spindle features vibration absorbing function. The oil film pressure, created by the hydrodynamic bearings, automatically absorbs vibration according to the current working condition.



三 主軸台 Main Spindle



可搭配 NC 實現半自動需求。
Pair with NC to fulfill semi-automatic need.

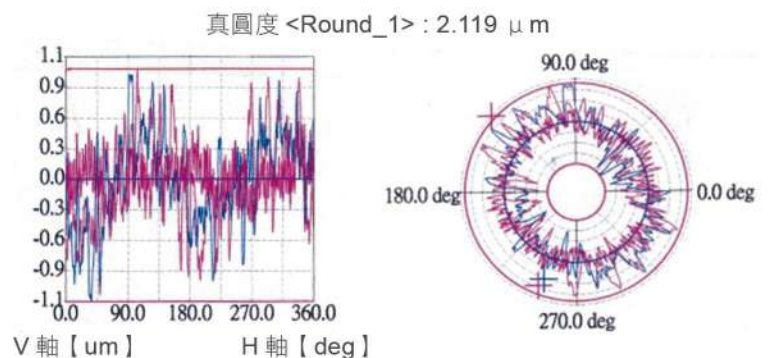
可搭配多款廠牌 CNC：西門子、發那科、新代及三菱，也可以進階搭配自動手臂完成全自動化需求。
Pair with variety controller brands：Siemens, FANUC, SYNTEC and Mitsubishi and so on. Moreover, this model can pair with automatic arm to fulfill the fully automatic production.



加工範例 WORKPIECE SAMPLE



精度 ACCURACY



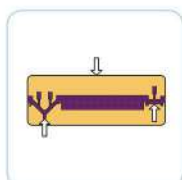
重壓滾輪磨床 LJ80 / LJ100

Precision Super Heavy Duty Hydraulic Cylindrical Grinder



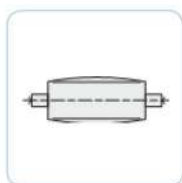
LJ80 / LJ100 NC 系列適用於研磨圓柱形、圓錐形零件，工件直徑在 650 mm~1000 mm 之超大型零件。

LJ80, LJ100 NC series are suitable for super large size grinding cylindrical, conical parts, workpiece diameter 650 mm ~ 1000 mm.



滑板強制循環潤滑使油膜平均於滑道上減低摩擦負荷，確保運動精度及壽命。

Forced lubricating system makes the oil film averaged on each area of all guide ways (V shape and squareshape), which can reduce the frictino, assure the dynamic accuracy and prolong the machine life.



中高研磨（選配）
Convex Grinding (Optional)

加工範例 WORKPIECE SAMPLE



規格表 SPECIFICATION

機型 MODEL	LJ80			LJ100		
	研磨能力 Grinding Capability					
最大研磨長度 Max Grinding Length	5000 mm	6000 mm	8000 mm	5000 mm	6000 mm	8000 mm
最大研磨直徑 Max Grinding Diameter	800 mm			1000 mm		
最大研磨重量 Max Grinding Weight	5000 kg			10000 kg		
中心高 Heights of Center	450 mm			550 mm		
	砂輪座 Wheelhead					
砂輪尺寸 Grinding Wheel Size	φ 610x50~100x φ 203.2			φ 610x50~100x φ 203.2		
砂輪轉速 Grinding Wheel Speed	890 RPM			890 RPM		
砂輪最大周數 Max Grinding Linear Velocity	30 M/S			30 M/S		
砂輪座進給速率 (X 軸) Wheelhead Feedrate (X Axis)	0~3000 mm / min			0~3000 mm / min		
	工件主軸 Work Spindle					
夾具最大孔徑 Max Chuck Size	12" φ 105			12" φ 105		
主軸轉速 Spindle Speed	5~80 (5~50) RPM			5~80 (5~50) RPM		
主軸台迴轉度 Spindle Swing Angle	非旋轉式			非旋轉式		
主軸錐度 Spindle Taper	MT#5 (6)			MT#5 (6)		
	尾座 Tailstock					
尾軸孔錐度 Tailstock Quill Taper	MT#4			MT#4 (5)		
尾軸行程 Tailstock Quill Stroke	40 (80) mm			40 (80) mm		
	工作台 Worktable					
工作台行程 Worktable Stroke	5000 mm	6000 mm	8000 mm	5000 mm	6000 mm	8000 mm
工作台進給速率 (Z 軸) Worktable Feedrate (Z Axis)	0~4000 mm / min			0~4000 mm / min		
工作台迴轉角度 Table Swing Angle	非旋轉式			非旋轉式		
	機械規格 Machine Size					
機械尺寸 (長×寬×高) Machine Dimensions (LxWxH)	900x215x205		1100x215x205			
機械重量 Machine Net Weight	24T		28T			

精密端面磨床 LJ-300E

Precision End Face Grinder



LJ-300E 系列 CNC 端面磨床適用於精密刀片之加工，盤面直徑 $\phi 300$ mm，可生產多樣化、多尺寸之刀片。並可搭配多款廠牌 CNC：西門子、發那科、新代及三菱，也可以進階搭配自動手臂完成全自動化需求。針對操作人員安全精心設計，工件可在目視範圍內操作，人員與砂輪成直角配置，工件取卸方便，操作簡易。

LJ-300E series CNC surface grinding machine is suitable for precision blade processing, the disk diameter is about $\phi 300$ mm, can produce diversified, multi-size blade. Pair with variety controller brands: Siemens, FANUC, SYNTEC and Mitsubishi and so on. Designed for operator's safety, the workpiece can be manipulated in the visual range, operator and wheel settle at right angles, easy to removal of the workpiece and easy to operate as well. Moreover, this model can pair with automatic arm to fulfill the fully automatic production.



三 砂輪主軸安全機制

Wheel Spindle Safety Mechanism

高剛性之砂輪主軸，兩端以特殊動壓軸承三點支撐，當強制潤滑壓力不足時，砂輪主軸自動停止運轉，可確保主軸壽命與精度。

High rigidity of the wheel spindle, use the special dynamic pressure bearing three point support at both end side, when forced lubrication pressure is not enough, the wheel spindle automatically stop running, to ensure the spindle life and accuracy.



三 加工工件多樣化

Diversified Workpiece

主軸台之鼻端為 A6，法蘭盤可配合磁盤、三爪或夾具等具多樣夾持方法，並可 $\pm 45^\circ$ 旋轉，適合 1m/m~100m/m 之端面研磨，如三爪夾頭之外徑端面。

The A6 nose spindle, the flange plate can be matched with the disk, the three jaw chuck or the clamp with a variety of clamping methods. Also, can be rotated by $\pm 45^\circ$, suitable for 1m/m ~ 100m/m end grinding, such as 3 jaw chuck's outer diameter end face.

規格表 SPECIFICATION

機型 MODEL	LJ300E
研磨能力 Grinding Capability	
最大研磨長度 Max Grinding Length	250 mm
最大研磨直徑 Max Grinding Diameter	300 mm
最大研磨重量 Max Grinding Weight	100 kg
中心高 Heights of Center	210 mm
砂輪座 Wheelhead	
砂輪尺寸 Grinding Wheel Size	$\phi 355 \times 25 \sim 50 \times \phi 152.4 (101.6)$
砂輪轉速 Grinding Wheel Speed	1500, 1700 RPM
砂輪最大周數 Max Grinding Linear Velocity	45 M/S
砂輪座最小移動量 Min Movement of Wheelhead	0.005 mm
工件主軸 Work Spindle	
主軸轉速 Spindle Speed	40~360 RPM
主軸台迴轉度 Spindle Swing Angle	$\pm 45^\circ$
主軸錐度 Spindle Taper	MT#4(5)
工作台 Worktable	
工作台行程 Worktable Stroke	300 mm
工作台最快速度 Max Table Moving Speed	5000 mm / min
工作台迴轉角度 Table Swing Angle	$9^\circ \quad 4^\circ$
機械規格 Machine Size	
機械尺寸 (長 x 寬 x 高) Machine Dimensions (LxWxH)	225x195x155
機械重量 Machine Net Weight	2300kg

精度 ACCURACY

Mitutoyo Surface Surfer 100
DATE 2009-05-16
TIME 09:26:21

R-PROFILE
EVA-L 2.4mm
 $\lambda c = 0.8 \text{mm} \times 3$
Ra 0.03 μm
Rz 0.3 μm
Rq 0.04 μm
R-PROFILE
EVA-L 2.4mm
 $\lambda c = 0.8 \text{mm} \times 3$
 $\times 50\text{K}$
 $\times 50$



CNC 精密螺紋磨床 LJ-TG

CNC Precision Thread Grinder



LJ-TG 系列 CNC 螺紋磨床以操作便利及功能強大為其設定特點。

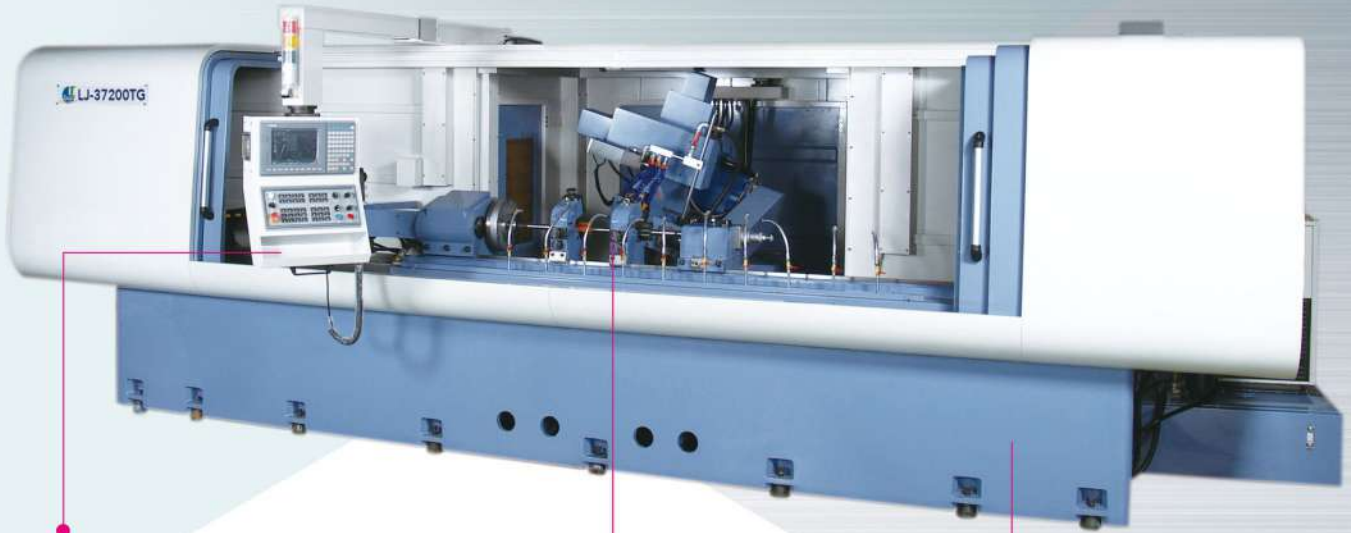
符合各式螺紋、滾珠螺桿、塑料螺桿、滾牙輪、絲攻、螺紋量規以及一般牙等等大量螺紋相關加工。並可搭配多款廠牌 CNC 控制器：西門子、發那科、新代及三菱，也可以進階搭配自動手臂完成全自動化需求。

LJ-TG series CNC thread grinder has easy to operate and powerful features as its futures. Pair with variety controller brands : Siemens, FANUC, SYNTEC and Mitsubishi and so on. Moreover, this model can pair with automatic arm to fulfill the fully automatic production.

Applicate in a wide range of thread-related grinding such as: ball screw, plastic screw, diamond roller, taps, thread gauge and general thread.

規格表 SPECIFICATION

機型 MODEL	LJ-2725TG	LJ-2740TG	LJ-3765TG	LJ-37100TG	LJ-37200TG	LJ-37300TG
研磨能力 Grinding Capability						
最大工件長度 Max Work Length bwtween Center	250 mm	400 mm	650 mm	1000 mm	2000 mm	3000 mm
最大研磨長度 Max Grinding Length	200 mm	350 mm	550 mm	900 mm	1900 mm	2900 mm
最大研磨直徑 Max Grinding Diameter	50 mm	50 mm	80 mm	100 mm	100 mm	100 mm
最大研磨重量 Max Grinding Weight	100 kg	100 kg	150 kg	350 kg	500 kg	1000 kg
中心高 Heights of Center	125 mm	125 mm	185 mm	185 mm	185 mm	185 mm
砂輪座 Wheelhead						
砂輪尺寸 Grinding Wheel Size	φ 406x10~40x φ 203.2(160)				φ 508x10~40x φ 203.2	
最小砂輪外徑 Min Wheel Outer Diameter	φ 320			φ 400		
砂輪轉速 Grinding Wheel Speed	0~2030 RPM (變頻無段變速)					
砂輪最大周數 Max Grinding Linear Velocity	60 M/S or 45 M/S (依砂輪轉速限制配置)					
砂輪軸傾斜迴轉度 Tilt Rotation Angle of Wheel	(R)±20°			(R)±25°		
工件主軸 Work Spindle						
夾具最大孔徑 Max Chuck Size	5" φ 30		6" φ 44	7" φ 58	7" φ 58	7" φ 58
主軸迴轉速率 Spindle Speed	Max : 100					
最小迴轉角度 Min Rotation Angle	0.005					
主軸錐度 Spindle Taper	MT#4					MT#5
尾座 Tailstock						
尾軸孔錐度 Tailstock Quill Taper	MT#4					MT#5
尾軸行程 Tailstock Quill Stroke	15 mm	20 mm	30 mm			
工作台 Worktable						
工作台行程 Worktable Stroke	400 mm	650 mm	1000 mm	2000 mm	3000 mm	
工作台最快速度 Max Table Moving Speed	4000 mm / min					
機械規格 Machine Size						
機械尺寸 (長 x 寬 x 高) Machine Dimensions (LxWxH)	256x268x217	388x230x240	388x230x240	660x225x220		950x220x220
機械重量 Machine Net Weight	7100 kg	5900 kg	5900 kg	9000 kg		14.5ton



專屬對話式軟體，操作便捷，輸入指定參數，電腦自動加工執行。且可配合多家控制器 FANUC、Siemens、SYNTEC 等等多家廠牌。

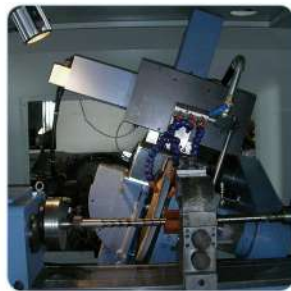
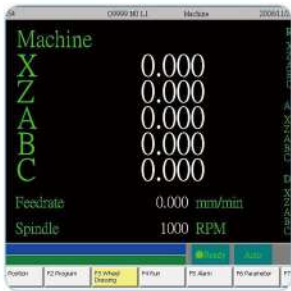
Easy to operate. Pair with variety controller brands: FANUC, Siemens SYNTEC and so on.

調整式砂輪頭設計，符合各式螺紋、滾珠螺桿、螺紋量規等等所有螺紋相關進行高精度、高效率研磨加工。

Meet all thread-related operate.
High-Precision
High-Efficiency

LJ-TG 系列螺紋磨床，機床基座採用 FC30 鑄鐵成型，結構一體成形不只高剛性、高耐用性，更能減少研磨過程的震動達到吸震效果。

LJ-TG series base with FC30 structure can reduce the vibrations to achieve shock absorption effect.



精度 ACCURACY

機構精度 Mechanism

X 軸重複訂位精度：3 μ
Z 軸重複訂位精度：5 μ
C 軸重複訂位精度：±10"
※ 搭載光學尺測量

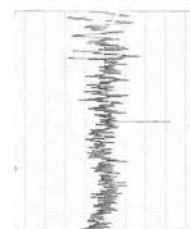
X Axis Positioning Accuracy: 3 μ
Z Axis Positioning Accuracy: 5 μ
C Axis Positioning Accuracy: ±10"
※ All with optical scale

研磨精度 Grinding Accuracy

ISO C5	
e _{2π}	8 μ
e ₃₀₀	18 μ
ISO C3	
e _{2π}	6 μ
e ₃₀₀	8 μ

微調螺絲測量精度 Drive Screw M2 x P0.25

Ver. 0.2 μm/cm
Hor. 200.0 μm/cm



加工範例 WORKPIECE SAMPLE



內徑油壓圓筒磨床 LJ-150IG

CNC Horizontal/Angular Type Cylindrical Grinder



LJ-IG 系列適用於研磨內孔圓柱形、圓錐形零件，工件內徑在 15 mm~150 mm 之小型零件，機構設計可達成少量多樣加工需求。主軸轉速標準配置為 20,000 RPM，另可依客制需求搭配如 8,000 RPM、10,000 RPM 等等。

LJ-IG series are suitable for small size inner grinding cylindrical and conical parts with inner diameter of 15 mm ~ 150 mm. The mechanism design can meet large-variety production.

The standard speed of the spindle is 20,000 RPM, and it can be matched with custom requirements such as 8,000 RPM, 10,000 RPM and so on.

規格表 SPECIFICATION

機型 MODEL	LJ150IG
	研磨能力 Grinding Capability
最大研磨長度 Max Grinding Length	150 mm
最大研磨內徑 Max Grinding Inner Diameter	φ 15~φ 150 mm
最大研磨重量 Max Grinding Weight	50 kg
中心高 Heights of Center	135 mm
	砂輪座 Wheelhead
砂輪轉速 Grinding Wheel Speed	標準型 20,000 RPM
砂輪最大周數 Max Grinding Linear Velocity	45 M/S
砂輪座前後移動總行程 Total Back and Forth Stroke	150 mm
砂輪座最小移動量 Min Movement of Wheelhead	0.001 mm
	工件主軸 Work Spindle
主軸轉速 Spindle Speed	20~100 RPM
主軸台迴轉度 Spindle Swing Angle	前 20° 後 10°
主軸台移動總行程 Total Back and Forth Stroke	150 mm
主軸錐度 Spindle Taper	MT#4
	工作台 Worktable
工作台行程 Worktable Stroke	標準 400 mm
工作台最快速度 Max Table Moving Speed	5000 mm / min
工作台迴轉角度 Table Swing Angle	0.005
	機械規格 Machine Size
機械尺寸 (長 x 寬 x 高) Machine Dimensions (LxWxH)	225x195x155
機械重量 Machine Net Weight	2300 kg



圓筒磨床附件 CYLINDRICAL GRINDER ACCESSORIES

標準附件 STANDARD ACCESSORIES	選購附件 OPTIONAL ACCESSORIES
砂輪及法蘭 Grinding Wheel and Flange	磁鐵過濾機 Coolant Filter (Magnetic Type)
砂輪修整器 Dressing Attachment	紙帶過濾機及紙袋 Coolant Filter (Fabric Type & Paper)
砂輪平衡棒 Balance Arbor	圓筒磨床專用磨輪規 Grinding Gauge
碳化鎢頂針 Carbide Tipped Center	三爪夾頭及連結板 3-Jaw Chuck and Flange
冷卻水箱 Cooling Water Tank	砂輪法蘭組 Grinding Wheel Flange
防濺裝置 Coolant Splash Guard	砂輪平衡台 Wheel Balancing Base
工具及工具箱 Tool Box	Z 軸光學尺 Z Axis Optical Scale
工作燈 Work Lamp	兩點中心架 Two Point Steady Rest
	傳動夾具 Driving Carrier

內圓磨床 INNER CYLINDRICAL GRINDER ACCESSORIES

標準附件 STANDARD ACCESSORIES	選購附件 OPTIONAL ACCESSORIES
平面皮帶 Flat Belt	紙帶過濾機及紙袋 Coolant Filter (Fabric Type & Paper)
砂輪連接棒 Connection Bar	砂輪修整器 Dressing Attachment
砂輪修整器 Dressing Attachment	三爪夾頭及連結板 3-Jaw Chuck and Flange
主軸 A6 鼻端 Spindle A6 Nose	砂輪法蘭組 Grinding Wheel Flange
鑽石修刀 #10Diamond Dresser	砂輪平衡台 Wheel Balancing Base
磁鐵過濾機 Coolant Filter (Magnetic Type)	Z 軸光學尺 Z Axis Optical Scale
三爪夾頭及連結板 3-Jaw Chuck and Flange	三點中心架 Three Point Steady Rest
冷卻水箱 Cooling Water Tank	傳動夾具 Driving Carrier
防濺裝置 Coolant Splash Guard	
工具及工具箱 Tool Box	

螺紋磨床附件 THREAD GRINDER ACCESSORIES

標準附件 STANDARD ACCESSORIES	選購附件 OPTIONAL ACCESSORIES
砂輪及法蘭 Grinding Wheel and Flange	磁鐵過濾機 Coolant Filter (Magnetic Type)
砂輪修整器 Dressing Attachment	紙帶過濾機及紙袋 Coolant Filter (Fabric Type & Paper)
砂輪平衡棒 Balance Arbor	油溫控制冷卻器 Oil Cooler Unit
碳化鎢頂針 Carbide Tipped Center	油霧回收機 Oil Mist Collector
冷卻水箱 Cooling Water Tank	砂輪修整器 Dressing Attachment
工具及工具箱 Tool Box	砂輪法蘭組 Grinding Wheel Flange
工作燈 Work Lamp	砂輪平衡裝置 Wheel Balancing System
	Z 軸光學尺 Z Axis Optical Scale
	三爪夾頭及連結板 3-Jaw Chuck and Flange
	三點中心架 Three Point Steady Rest
	傳動夾具 Driving Carrier



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