



Powerful & Precision CNC Lathes

CNC LATHE MACHINE



FEL-2400/2800/3200ENC

CNC LATHES

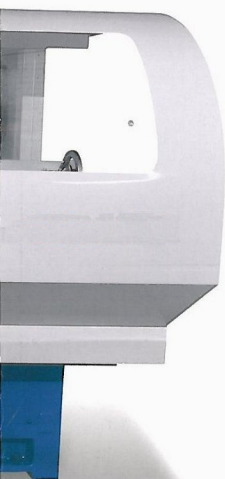


- Providing two electronic manual control handwheels for X.Z axis where it's mounted on the moveable control pendant. (Opt.)



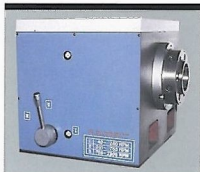
Powerful Flat Bed CNC Lathes

- This m/c is a powerful & precision CNC lathes and bed is adopted hi-rigidity rib Structure designs & coupled with hi-tensile meehanite castiron which are annealed treatment to eliminate internal residual stress, the bed way are high frequency heat treated, precision ground etc.,
- Three point support on the spindle and inspected by dynamic balancing, the spindle gear is a module 3 & wided that is very suitable heavy duty cutting and Being with 3 steps speed shifting, Especially, that can be full power output even as the spindle speed at low gear, large cutting force.
- The carriage is coated with Turcite-B which provide low friction & vibration and ensure smooth movement & accuracy.
- Adopted central lubricating system which can be lubricated slide way & ball screw, but the headstock is adopted forced lubricating & oil bathed combined.
- Manual tailstock and coupled with 1:1 & 1/4:1 feed shifting.
- The visual window of sliding safety door be adopted the reinforced glass at inner layer and out layer for polycarbonate which can be protected the failed workpieces, hi-safety.

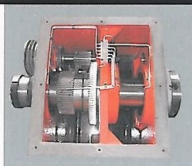


強力平床式 CNC 車床

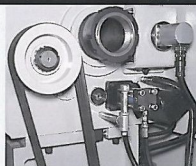
- 本機為強力型精密CNC車床，床身採高剛性之肋骨結構，配合米漢納鑄鐵鑄造，經退火處理，以消除殘留內應力，並經高週波熱處理及精密研磨等。
- 主軸箱為三點支撐設計，並經力學平衡校正。齒輪為模數3，齒寬大，適合重切削並有三段變速，主軸轉速於低檔時，仍可以全馬力輸出，切削力強大。
- 床鞍則黏貼Turcite-B 具低摩擦及減震，進行平穩、滑順，以確保機台精度。
- 採中央給油潤滑系統方式，能自動潤滑滑動面及滾珠螺桿，主軸箱潤滑系統則採用泵浦強制給油方式。
- 手動式尾座，配有1:1及1/4:1進給變換。
- 活動門之視窗採內層為強化玻璃，外層為PC，以防止工作物飛出，安全性高。



■ Headstock manual speed shifting 主軸箱手動變速



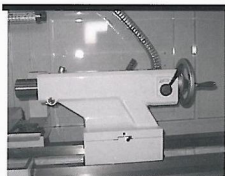
■ Headstock / 主軸箱



■ Headstock hyd. auto speed shifting 主軸箱油壓自動變速



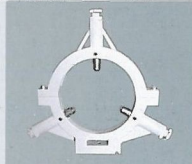
■ Rear spindle support chuck 主軸後端支撐夾頭



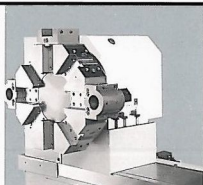
■ Manually tailstock / 手動式尾座



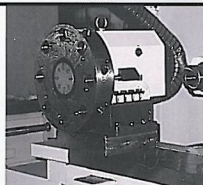
■ Follow rest / 跟刀架



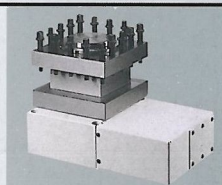
■ Steady rest / 中心架



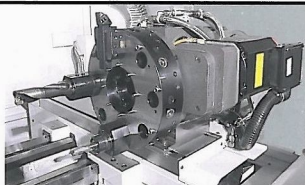
■ V8 turret / V8刀塔



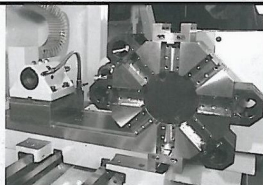
■ VDI turret / VDI 刀塔



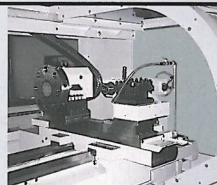
■ Four way tool post / 四方刀座



■ Driven tool system / 動力刀塔



■ V8 turret with drill tool holder
V8刀塔+鉗孔刀座



■ Twin turret / 雙刀塔

SPECIFICATIONS 規格

Item 項目	Model 型式	Unit 單位	FEL-2400ENC	FEL-2800ENC	FEL-3200ENC
Working Capacity 作業能力					
Swing over bed	床台旋徑	mm	610	720	800
Swing over cross slide	橫滑台旋徑	mm	360	460	540
Swing over gap	凹口旋徑	mm	790	900	980
Dist. between centers	兩心間距離	mm	1100 / 1600 / 2100	3100 / 4100	1100 / 1600 / 2100
Width of bed	床面寬度	mm	410		
Headstock 主軸箱					
Spindle bore	主軸孔徑	mm	$\phi 83 / \phi 105$ / $\phi 130$ / $\phi 160$		$\phi 255$
Spindle nose	主軸鼻端		A2-8 or D1-8 / A2-11 or D1-11 / A2-11		A2-15
Range of spindle speed	主軸轉速	rpm	40~2000 / 40~1500 / 40~1000		30~850
No. of spindle speed	主軸檔數		3		
Carriage 床鞍					
Cross travel (X axis)	X軸行程	mm	450		
Longitudinal travel (Z axis)	Z軸行程	mm	975 / 1475 / 1975	2975 / 3775	975 / 1475 / 1975
AC servo motor	伺服馬達	kW	X: 1 Z: 2		
Rapid feed	快速進給	m/min	X: 7 Z: 10	X: 7 Z: 8	X: 7 Z: 10
Range of feeds	進給範圍	mm / rev.	X / Z : 0.001~500		
Turret 刀塔					
No. of tools	刀具數		H4 / V8		
Tool size	刀具尺寸	mm	□ 25		
Tailstock 尾座					
Quill dia.	心軸直徑	mm	$\phi 80 / \phi 105$ (Opt.)		
Quill stroke	心軸行程	mm	180		
Tailstock taper	頂心錐度		MT#5		
Motor 馬達					
Main spindle motor	主軸馬達	HP	20 / 25 (Opt.)		30 / 40 (Opt.)
Coolant pump motor	冷卻泵浦	HP	1 / 4		
Lubricating pump	潤滑泵浦	HP	1 / 16		
Ball Screw 滾珠螺桿					
X axis	X軸		$\phi 25 \times 5 \times C5$		
Z axis	Z軸		$\phi 50 \times 10 \times C5$		
Controllor 控制器					
Compatible model	匹配機種		Fanuc / Mitsubishi / Fagor / Siemens / Syntec		
Controllable axis	控制軸數		2		

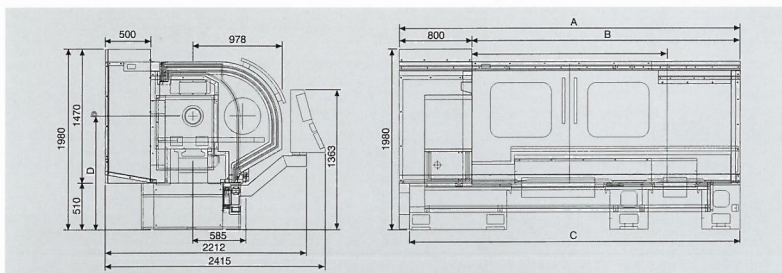
* All specification and designs are subjected to change without notice.

* 本公司保有變更設計之權利，如有更改或改進規格時不另行通知，但不影響前所售之機械品質。

Standard Accessories 標準附件	標準附件
1. FANUC Oi-T 8.4" LCD	1. 發那科 Oi-T 8.4" 彩色螢幕
2. V8 turret	2. V8刀塔
3. Cooling device	3. 冷卻裝置
4. Lubricating system	4. 潤滑系統
5. Manual triple vari-speed headstock	5. 主軸頭手動三段變速
6. Manual two step tailstock	6. 手動式兩段尾座
7. Full splash guard	7. 全罩鋸金
8. Work lighting	8. 工作燈
9. Center sleeve & centers	9. 頂心套筒及頂針
10. Tool box & tools	10. 工具箱及工具

Optional Accessories 特別附件	特別附件
1. 10".12".16" 3 jaws scroll chucks	1. 10".12".16" 三爪普通型
2. 10".12".15".18" Hyd. Chucks	2. 10".12".15".18" 油壓夾頭
3. 16".20".26" Manual 4 jaws independent chucks	3. 16".20".26" 手動四爪夾頭
4. Headstock auto Hyd. Speed shifting	4. 油壓主軸頭自動變速
5. Hyd. tailstock centers	5. 油壓式尾座心軸
6. Auto Square swivelling turret	6. 四方水平自動刀塔
7. Boring bar holder	7. 擱孔刀座
8. Bearing steady rest (40~270 mm), (150~380 mm)	8. 軸承式中心架 (40~270mm), (150~380 mm)
9. Bronze follow rest (30~140 mm)	9. 銅式跟刀架 (30~140 mm)
10. Chip conveyors	10. 鐵屑輸送機
11. V8 Driven tool system (not including tool holder)	11. V8動力刀塔 (不含刀具座)
12. Cs axis function	12. Cs 軸功能
13. Rear spindle support chuck	13. 主軸後端支撐夾頭
14. CE/CSA Approval specification	14. CE/CSA 規範
15. Transformer	15. 變壓器
16. The independent manual control handwheel for X, Z axis.	16. X, Z軸獨立手輪

DIMENSIONS 尺寸圖



Size 尺寸	Model 型式	1100	1600	2100	3100	4100
A	mm	2840	3340	3840	4840	5840
B	mm	2040	2540	3040	4040	5040
C	mm	2630	3130	3630	4630	5630
D	600 mm	1190				
	720 mm	1245				
Occupied floor 佔地面積	mm	4690 x 3600	5190 x 3600	5690 x 3600	6690 x 3600	7690 x 3600
Net weight 機械淨重	600 kgs	4700	4900	5500	6100	6900
	720 kgs	4900	5100	5700	6300	7100



Variable speed 變頻式

■ HEAVY DUTY PRECISION LATHE 重切削精密強力車床
1100 / 1600 / 2100 / 3100 / 4100 / 5100
Bore (孔徑): $\phi 83\text{mm}$, $\phi 105\text{mm}$

■ CNC Screw Cutting Machine 電腦螺桿切削專用機
1500 / 2000 / 3000 / 4000 / 5000

■ BTA DEEP HOLE DRILLING MACHINE 深孔鑽孔加工機
2000 / 3000 / 4000 / 5000 / 6000, Boring Capacity: $\phi 30-200\text{mm}$

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