

MORTON®

CNC MACHINE TOOL
Heavy Duty CNC Lathe



THE LEADER IN QUALITY AND RELIABILITY

— Since 1973 —



■ Features:

- This machine is a **Powerful & Precision**.
- The **560 mm (22")** width bed is of high, Rigidity rib structure design, coupled with high tensile mechanitee cast iron which has annealed treatment to eliminate internal residual stresses. The bed ways are high frequency heat treated and precision ground.
- **Spindle** equipped with **two points bearing support**, (for 156 mm spindle bore-fitted SKF or FAG code no. 32038 & 32040 for 230 mm spindle bore-fitted SKF or FAG Code No. 32025 & 32056) and dynamically balanced. The spindle gears are **module 4** and wide enough for heavy duty cutting, and having **4 speed range** changes, allows full power output and large cutting forces when the spindle speed is in the low gear range.
- The **square groove design carriage** is coated with **turcite-B** which provides low friction & vibration and ensures smooth movement & accuracy.
- **Central lubrication system** lubricates sideways & ball screws. **Headstock** uses forced lubrication & oil bath combined.
- Manual tailstock has **1 : 1 & 4 : 1** manual feed ratios.
- The window of **sliding safety door** use **dreinforced glass** on the inner and polycarbonate on the outer layer for operation protection.

■ Standard Accessories:

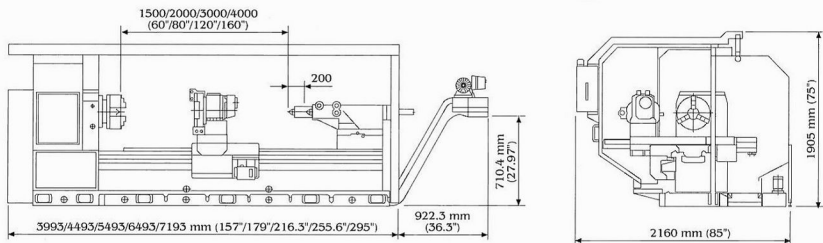
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|---------------------------------|---|
| ▶ 1. Auto Lubrication system. | ▶ 7. Carbide tipped center. |
| ▶ 2. Coolant system. | ▶ 8. Leveling bolts & pad. |
| ▶ 3. Sliding safety door guard. | ▶ 9. Tool and toolbox. |
| ▶ 4. RS-232 port. | ▶ 10. Operation & Spare part manual. |
| ▶ 5. Work light. | ▶ 11. CNC Controller operation manual and parts list. |
| ▶ 6. Adapt sleeve. | ▶ 12. Inspection chart. |

■ Options Accessories:

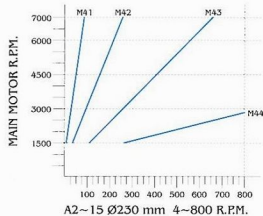
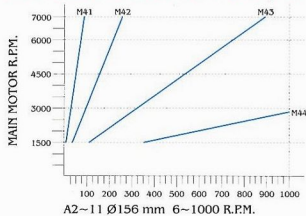
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|---|--|
| ▶ 1. 3 jaw scroll chuck A2~11 / A2~15 630 mm (25"). | ▶ 10. Chain type chip conveyer + cart. |
| ▶ 2. 4 jaw independent chuck A2~11 / A2~15 800/1000 mm (32"/40"). | ▶ 11. H4 hydraulic 4 way turret. |
| ▶ 3. 1250 (50") face plate. | ▶ 12. V8 hydraulic vertical turret. |
| 4. Steady rest: 150~380 mm (6"~15"). | ▶ 13. V12 hydraulic vertical turret. |
| 5. Steady rest: 300~530 mm (12"~21"). | ▶ 14. Double chuck system: Special execution. |
| ▶ 6. Follow rest 40~120 mm (1.6"~4.73"). | ▶ 15. Hydraulic tailstock: Quill. |
| ▶ 7. Quick change tool post. | ▶ 16. Bull nose live center. |
| ▶ 8. Hydraulic power chuck: 380 mm (15") or 45? | ▶ 17. Other controller than anilam: siemens fagor. |
| ▶ 9. Boring device: 100 mm (4") or 150 mm (6"). | ▶ 18. Interchangeable insert live center. |
| | ▶ 19. Drill chuck and arbor. |



■ FEL-3800ENC/4200ENC OVER ALL DIMENSION



■ SPINDLE SPEED RANGE (R.P.M.)



■ THE MAX. LOADING CAPACITY

Standard				
1.	2.	3.	4.	
Center i → Center	Center ↔ Center+1 Steady	Center ↔ Center+2 Steady	Chuck	
4000 kg	5000 kg	6300 kg	2000 kg	
8000 lb	11000 lb	13860 lb	4400 lb	

CNC MACHINE TOOL HEAVY DUTY CNC LATHE



■ Specifications:

ITEM	FEL-3800ENC	FEL-4200ENC
WORKING CAPACITY		
Swing Over Bed	960 mm (38")	1060 mm (42")
Swing Over Corss-side	560 mm (22")	650 mm (25.6")
Swing Over Gap	1500 mm (60")	1600 mm (63")
Dis. Between Centers	1500 mm / 2000 mm / 3000 mm / 4000 mm (60" / 80" / 120" / 160")	
Width Of Bed	560 mm (22")	
HEADSTOCK		
Spindle Bore	156 mm (6") Optional ~ 230 mm (9")	
Spindle Nose	6" Bore A2~11	9" Bore A2~15
Rage Of Spindle Speed	6~1000 rpm / 4~800 rpm / 3~600 rpm / 2~400 rpm	
No. Of Spindle Speed Range	4 step	
CARRIAGE		
Cross Travel (X-axis)	600 mm (24")	
Longitudinal Travel (Z-axis)	1250 mm / 1750 mm / 2750 mm / 3750 mm (49.2" / 68.9" / 108.3" / 147.6")	
AC Servo Motor Ratio 1:2	X-axis 14.8 μm	Z-axis 27.3 μm
Rapid Feed	10 Meter/min.	
Range Of Feeds	X-axis: 0~5 m/min	Z-axis: 0~10 m/min
TURRET		
No. Of Tools	4 Way / QCT	H4 / V8 / V12
Tool Size	32 x 32 mm (1-1/4 x 1-1/4)	
TAILSTOCK		
Quill Diameter	125 mm (5")	
Quill Stroke	300 mm (12")	
Tailstock Taper	Morse Taper No. 6	
MOTOR		
Main Spindle	AC Servo peak / continous 33 / 22 kw	
Coolant Pump	0.375 Kw (1/2 HP)	
Lubricating Pump	1.7 AMPS	
BALL-SCREW		
X-axis (Dia. x Pitch x Class)	40 mm x 5 Pitch x C-5	
Z-axis (Dia. x Pitch x Class)	63 mm x 10 Pitch x C-5	
CONTROLLERS		
Compritable Models	Anilam / Fagor / Fanuc / Siemens	
Controllable Axes	2	
Machine Net Weight	8000 kgs/8500 kgs/9500 kgs/11000 kgs (17632 lbs/18734 lbs/20938 lbs/24244 lbs)	
MACHINE OVERALL DIMENSION		
Length	4300 mm/4800 mm/5800 mm/6800 mm (170"/189"/229"/268")	
Width	2300 mm (90.6)	
Height	2250 mm (88.6"0	

• Specifications are subject to change without notice for further design improvement.



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