

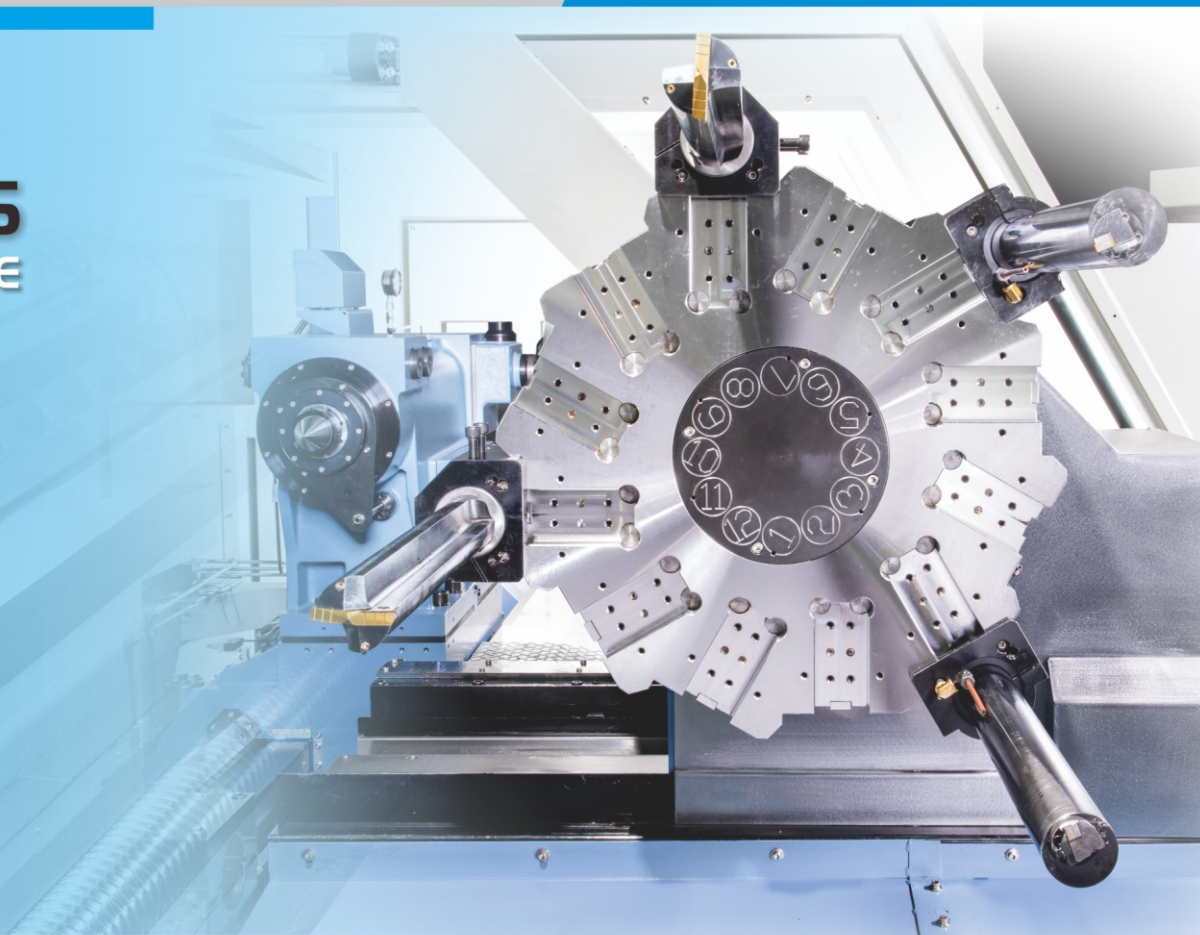


MULTI RAIL
HEAVY DUTY CNC LATHE

MFB-40 series

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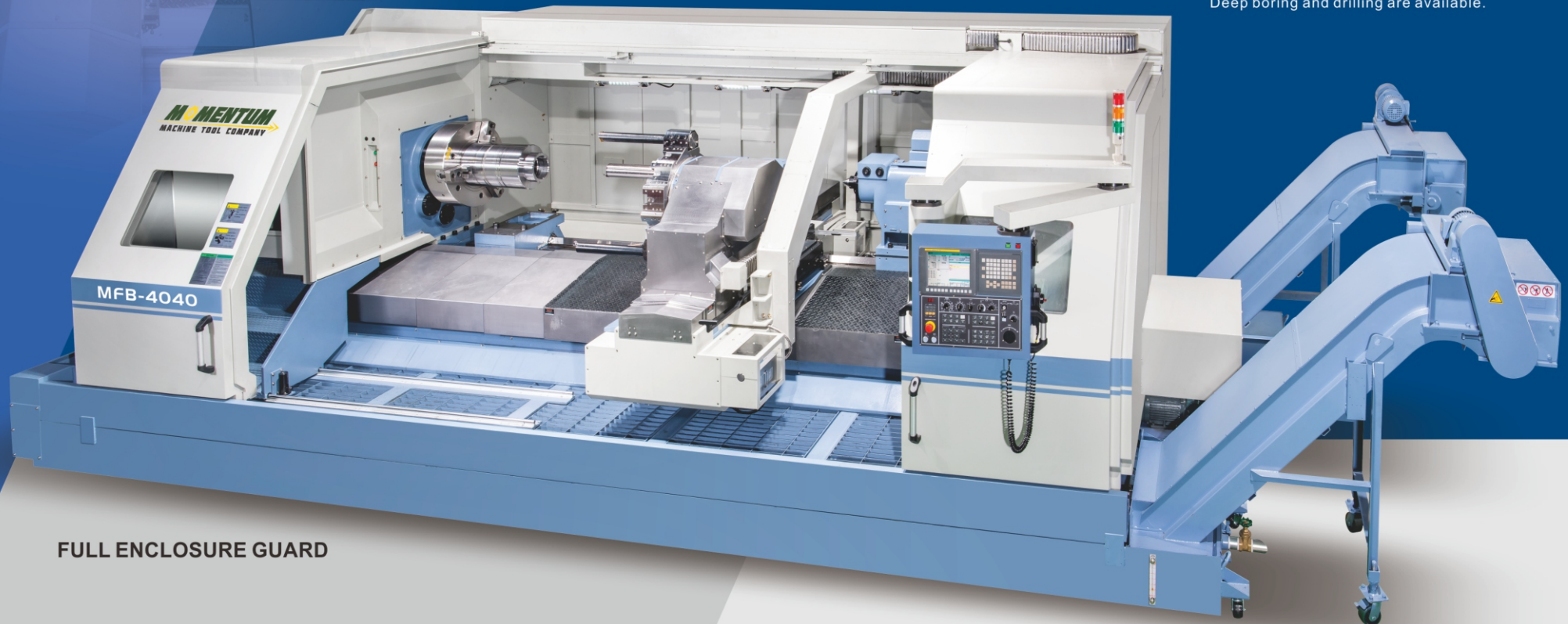
MULTI RAIL HEAVY DUTY CNC LATHE



MFB-40 series

- ▶ Max. Turning dia: Ø1020 mm
- ▶ Between Center: 2060 ~ 5120 mm
- ▶ Turret: 12 Station
- ▶ Bed width: 1340 mm
- ▶ Spindle bore: Ø160 / Ø230 / Ø305 / Ø360 mm
- ▶ Tailstock quill dia: Ø200 mm

- The MFB-40 series is designed to enhance great machining capacity, making it suitable for large shaft and pipe machining in traffic and energy industries, etc.
- Multi-rail bed design with greater span lead to a dramatic increase in cutting stability and accuracy.
- Programmable sub carriage and boring bar attachment are installed on cross slide. Deep boring and drilling are available.



FULL ENCLOSURE GUARD

MFB-40 series

1 V WAY AND 2 BOX WAY FOR TAILSTOCK, SUB CARRIAGE AND STEADY REST

2 BOX WAY FOR MAIN CARRIAGE

X2 axis

X1 axis

Z axis

FLAT BED WITH MULTI RAIL CONSTRUCTION

- Bed is designed with 5 ways to eliminate interference between the carriage and steady rest.
- Construction combines super-finish, ground-hardened solid box ways on all axes with high grade Meehanite castings to deliver outstanding accuracy with excellent vibration damping capabilities.
- One-piece fabricated bed is scientifically rib reinforced and ruggedly constructed for outstanding rigidity and vibration-dampening.
- Bed is manufactured from Meehanite cast iron and stress relieved for deformation-free.
- Massive bed constructive assures greater stability.

CARRIAGE AND CROSS SLIDE

- The carriage and cross slide move on box ways for increased stability in heavy cutting.
- Automatic lubrication to the carriage and cross slide ways reduces heat and wear while ensuring smooth movement.
- X1 axis is driven by servo motor and transmitted through ball screw.
- X / Z axis ball screw are protected by telescopic guard.



MFB-40 series



12 STATION HYDRAULIC TURRET

- The hydraulic turret is a compact construction with high rigidity to withstand heavy cutting.
- Bi-directional, random tool selection.



RUGGED HEADSTOCK CONSTRUCTION

- The headstock is designed to provide exceptional rigidity for heavy cutting.
- Multi step speed change gearbox provides great torque output.
- Designed for maximum rigidity and accuracy, the MFB-40 series headstock is designed with 4-step / 3-step geared spindle offering the versatility for roughing with fine-finish capabilities in a single set-up on a variety of materials. The robust construction and oil cooling system offer the benefits of greater machining rigidity and accuracy, improved surface finish, higher cutting accuracy and extended cutting tool life.
- The oversized spindle is supported by two sets of extra heavy duty tapered roller bearings to eliminate chatter when heavy cutting.
- Standard on the MFB-40 series is a 30/37 kW AC spindle motor with a 4-speed or 3-speed gear driven spindle allowing the MFB-40 to reach full power for the ability to handle the toughest of materials and the heaviest of cuts.

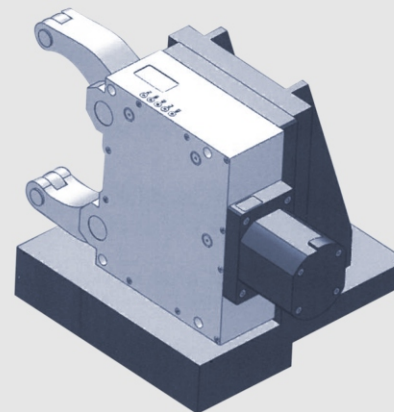


FRONT AND REAR CHIP CONVEYORS

- The use of double chip conveyors permits chips to be removed efficiently.
- The chip conveyor, coolant tank and coolant pump are integrated as one unit for easy cleaning and maintenance as well as space saving.

HYDRAULIC TAILSTOCK

- The movement of tailstock is carried out by a hydraulic motor, and transmitted through rack.
- Extra large rotary quill diameter is Ø200 mm with MT6 dead center.
- Quill travel is 200 mm.
- Quill movement: Auto / Manual.



MANUAL STEADY REST (opt.)

- Three point heavy duty needle roller bearing
- Tool can pass steady rest without interference
- Capacity: 100 ~ 300 mm, 300 ~ 500 mm

HYDRAULIC STEADY REST (opt.)

- Clamping different diameter work piece
- High concentricity
- Save time
- Motorized body movement
- Clamping and unclamping controlled by M code

Rotary quill

Hand wheel

SUB-CARRIAGE (opt.)

- The sub-carriage is programmable.
- X2 axis is driven by servo motor and ball screw.

BORING ATTACHMENT (opt.)

- The boring attachment consists of a boring bar and a support.
- Upon request, various sleeves are available.

FANUC 0i-TD CNC CONTROL

- 8.4" color screen.



OIL COOLER (std.)

- With the use of high efficiency oil cooler, a constant temperature of oil in the headstock can be achieved.
- This leads to smooth motions and prolonged life of the gear driven spindle system.

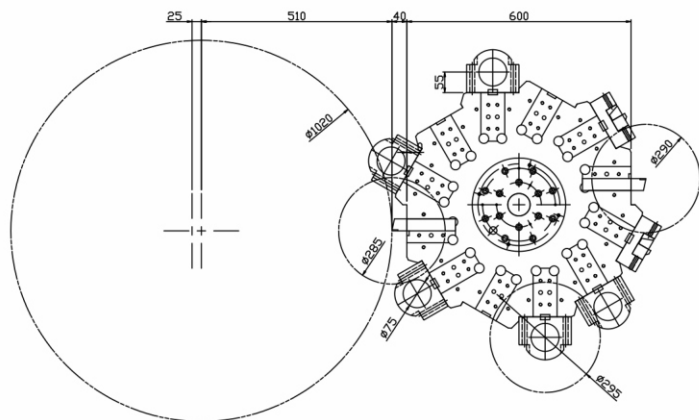


HIGH PRESSURE COOLANT DEVICE (opt.)

- It is applied when performing milling operations.
- The device delivers coolant at high pressure to the cutting edge, allowing the machine to perform deep hole drilling.

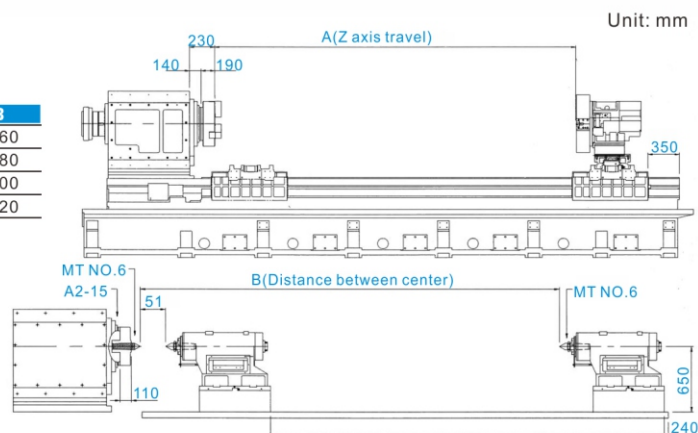


INTERFERENCE DIAGRAM

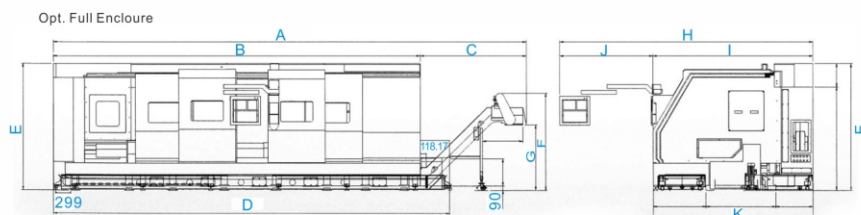


WORKING RANGE

	A	B
MFB-4020	2040	2060
MFB-4030	3060	3080
MFB-4040	4080	4100
MFB-4050	5100	5120



MACHINE DIMENSIONS



	A	B	C	D	E	F	G	H	I	J	K
MFB-4020	7300	5200	2100	5800	2550	1954	1317	5022	3169	1853	3165
MFB-4030	8300	6200	2100	6800	2550	1954	1317	5022	3169	1853	3165
MFB-4040	9300	7200	2100	7800	2550	1954	1317	5022	3169	1853	3165
MFB-4050	10300	8200	2100	8900	2550	1954	1317	5022	3169	1853	3165

MFB-40 series SPECIFICATION

MODEL	UNIT	MFB-4020	MFB-4030	MFB-4040	MFB-4050
CAPACITY					
Max swing dia.	mm (inch)	Ø1160 (45")			
Max swing over carriage	mm (inch)	Ø930 (36")			
Max. turning dia.	mm (inch)	Ø1020 (40")			
Distance between centers	mm (inch)	2060 (81")	3080 (121")	4100 (161")	5120 (201")
BED					
Width	mm (inch)	1340 (52")			
HEADSTOCK					
Spindle bore	mm (inch)	Std.: A2-11 Ø160 (6")	Opt.: A2-15 Ø230 (9")	Opt.: A2-20 Ø275 (10.8")	
Spindle speed (without chuck)	rpm	800	600	Depends on chuck size	
Chuck		Opt. Different size will effect max speed			
TURRET					
Turret type	—	Hydraulic turret			
Stations	—	12			
O.D. tooling	mm (inch)	32 (1.25")			
I.D. tooling	mm (inch)	Std. Ø50 (2") / Opt. Ø60 (2.5")			
TRAVEL					
X1 axis travel	mm (inch)	510 + 25 (20" + 1)			
Z1 axis travel	mm (inch)	2040 (80")	3060 (120")	4080 (160")	5100 (200")
Cutting feed rate	mm/rev	0.001 ~ 500			
Rapid rate	m/min	X axis : 10 / Z axis : 10			
TAILSTOCK					
Quill type	—	Rotary Quill			
Quill dia.	mm (inch)	Ø200 (7.87")			
Quill travel	mm (inch)	200 (7.87")			
Taper of quill	—	MT#6			
MOTOR					
Spindle motor	kW (HP)	α 30i (30/37 kW)			
X1 axis motor	kW (HP)	α 22i (4 kW)			
Z1 axis motor	kW (HP)	α 30i (7 kW)			
Controller	—	FANUC 0i-TD + 8.4" color screen			
MACHINE DIMENTION					
Floor space (LxW)	mm (inch)	7200 x 3165 (283" x 124")	8200 x 3165 (322" x 124")	9300 x 3165 (366" x 124")	10300 x 3165 (405" x 124")
Height	mm (inch)	2550 (100")			
Machine net weight	kg	21600	24600	27600	30600

Specifications subject to change without notice for improvents and modifications

STANDARD ACCESSORIES

- FANUC 0i-TD controller
- 12 station hydraulic turret
- Front and rear chip conveyor
- Programmable tailstock
- Oil cooler of spindle
- Rear splash guard and two front door
- Coolant pump
- Service tool box and tool kits
- Lubrication system
- Hydraulic system
- Heat exchanger

OPTIONAL ACCESSORIES

- Transformer
- Sub carriage and boring bar
- Attachment
- Air condition
- Full enclosure guard
- Steady rest
- High pressure coolant device
- Chuck