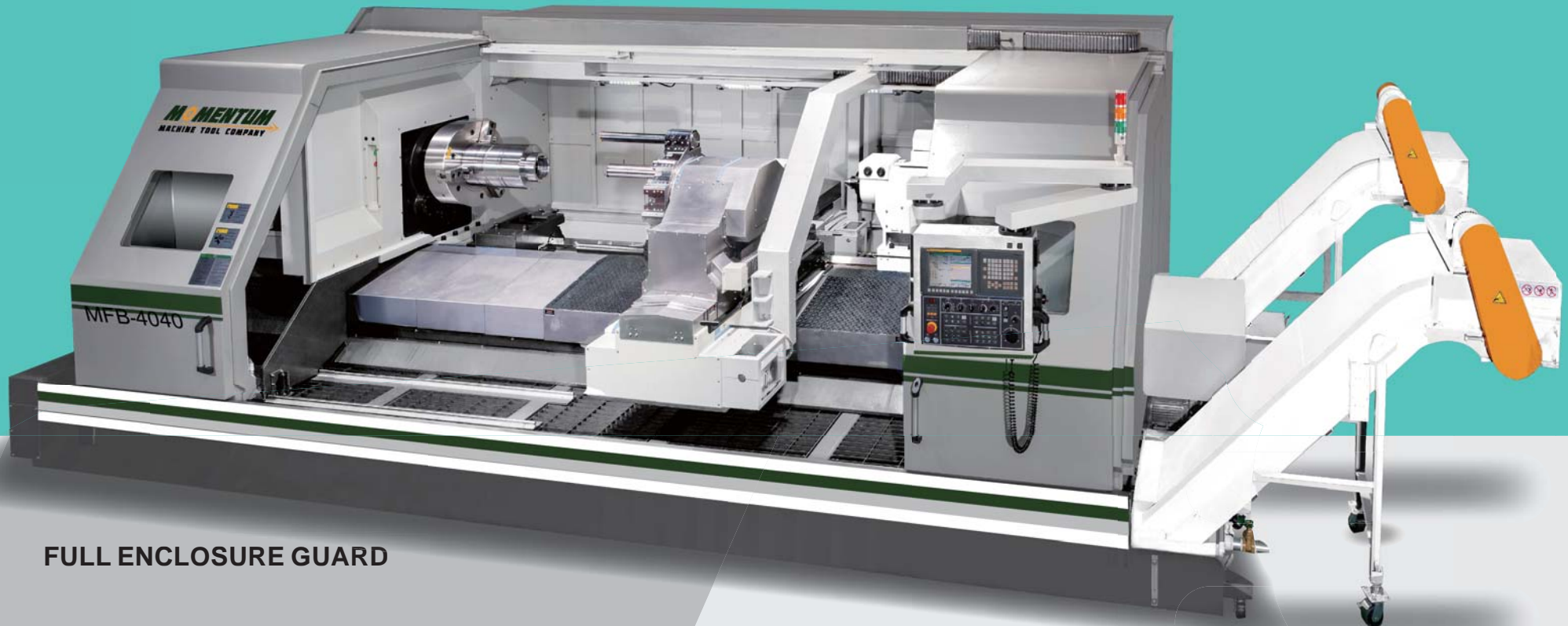


# MFB-40 series



- ▶ Max. Turning dia: Ø1020 mm
- ▶ Between Center: 3020 ~ 6060 mm
- ▶ Turret: 12 Station
- ▶ Bed width: 1385 mm
- ▶ Spindle bore: Ø230 / Ø280 / Ø310 / Ø355mm
- ▶ Tailstock quill dia: Ø230 mm  
( only suitable for boring attachment )

- 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.

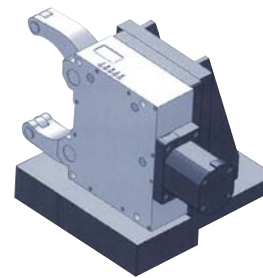


**FULL ENCLOSURE GUARD**

# MFB-40 series

## 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 37/45 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.



### 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

### HYDRAULIC TAILSTOCK

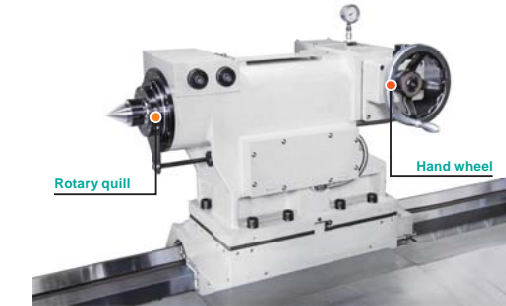
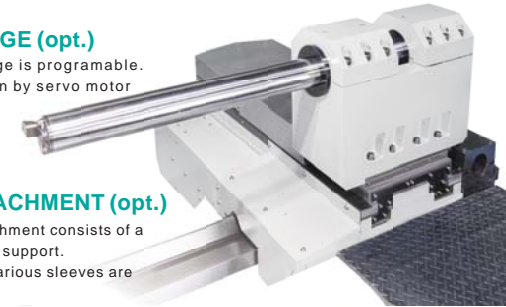
- The movement of tailstock is carried out by a hydraulic motor, and transmitted through rack.
- Extra large rotary quill diameter is Ø200 mm with MT6 dead center.
- Quill travel is 200 mm.
- Quill movement: Auto / Manual.

### 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.

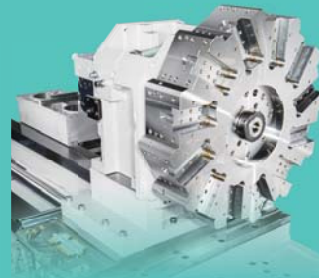
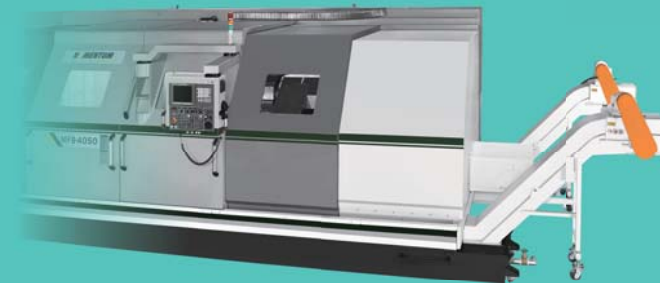


## FRONT AND REAR CHIP CONVEYORS

- 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.

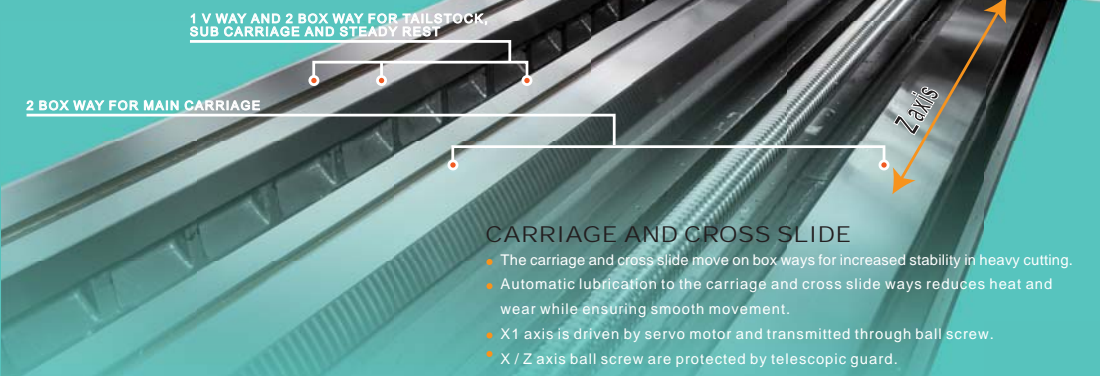
## 12 STATION HYDRAULIC TURRET

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



## 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 vibrationdamping 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.



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

2 BOX WAY FOR MAIN CARRIAGE

### 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.

### FANUC 0i-TF 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.

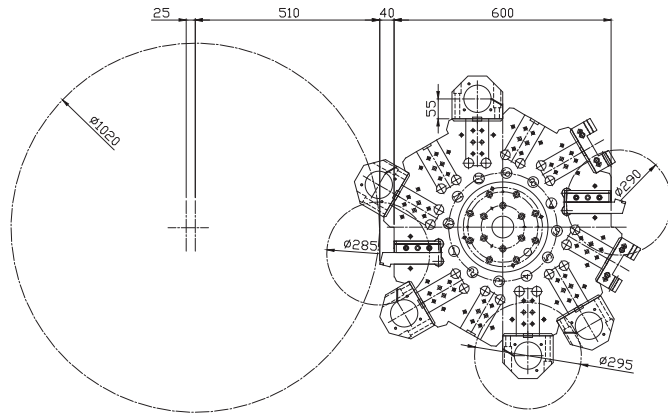


### HIGH PRESSURE COOLANT DEVICE (opt.)

- 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.

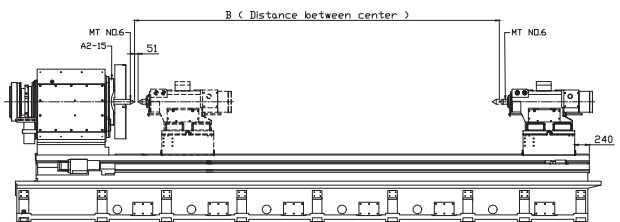
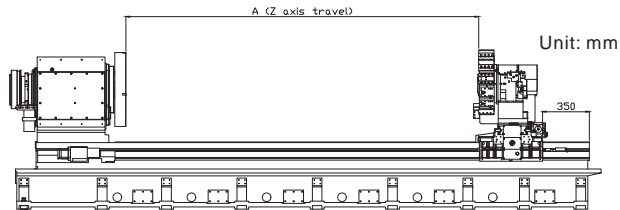


## INTERFERENCE DIAGRAM



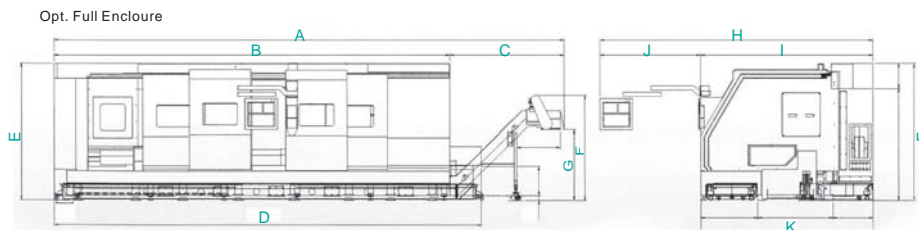
## WORKING RANGE

	A	B
MFB-4030	3,060	3,080
MFB-4040	4,080	4,100
MFB-4050	5,100	5,120
MFB-4060	6,120	6,140



## MACHINE DIMENSIONS

Unit: mm



	A	B	C	D	E	F	G	H	I	J	K
MFB-4030	8,300	6,200	2,100	6,800	2,550	1,954	1,317	5,022	3,169	1,853	3,165
MFB-4040	9,300	7,200	2,100	7,800	2,550	1,954	1,317	5,022	3,169	1,853	3,165
MFB-4050	10,300	8,200	2,100	8,800	2,550	1,954	1,317	5,022	3,169	1,853	3,165
MFB-4060	11,300	9,200	2,100	9,800	2,550	1,954	1,317	5,022	3,169	1,853	3,165

## MFB-40 series SPECIFICATION

MODEL	UNIT	MFB-4030	MFB-4040	MFB-4050	MFB-4060
<b>CAPACITY</b>					
Max. swing dia	mm (inch)	ψ1,300 (51")			
Max. swing over carriage	mm (inch)	ψ830 (32")			
Max. load between center	kgs	9,000			
Max. turning length	mm (inch)	3,060(120")	4,080(160")	5,100(200")	6,040(237")
Distance between centers	mm (inch)	3,080(121")	4,100(161")	5,120(201")	6,060(238")
<b>BED</b>					
Width	mm (inch)	1,445(56")			
<b>HEADSTOCK</b>					
Spindle bore	mm (inch)	230 mm Std. / 280 mm Opt./ 310 mm Opt./ 355 mm Opt. (A2-15 9" Std / A2-20 10.8" Opt. / A2-20 12" Opt / A2-20 14" Opt.)			
Spindle speed (without chuck)	rpm(30min)	Max. 800(depends on chuck size)	Max. 600(depends on chuck size)	Depends on chuck size	Depends on chuck size
Headstock speed steps	-	9"-4 steps Std. / 10.8"-3 steps Opt. / 12"-3 steps Opt. / 14"-3 steps Opt.			
Chuck	-	Opt.Different size will effect max speed			
<b>TURRET</b>					
Turret type	-	Hydraulic turret			
Stations	-	12			
O.D.tooling	mm (inch)	32x32 (1.25"x1.25")			
I.D.tooling	mm (inch)	50 Std. / 40 Opt. / 63 Opt. / 12"-3 steps Opt. / 14"-3 steps Opt.			
<b>TRAVEL</b>					
X1 axis travel	mm (inch)	510+25(20"+1")			
Z1 axis travel	mm (inch)	3,020(118")	4,040(159")	5,060(199")	6,080(239")
Cutting feed rate	mm/rev	0.001-500			
Rapid rate	m(inch)/min	X axis : 10 (393.7") / Z axis : 10 (393.7")			
Ball screw diameter	mm (inch)	X axis : 50 (1.97") / Z axis:80 (3.15")			
<b>TAILSTOCK</b>					
Quill type	-	Rotary Quill			
Quill dia.	mm (inch)	ψ230 (9.05")(Suitable for Boring Attachment)			
Quill travel	mm (inch)	200 (7.87")			
Taper of quill	-	MT#6			
<b>MOTOR</b>					
Spindle motor	kW (HP)	ø40/ 37 / 45 kW (STD.)			
X1 axis motor	kW (HP)	ø22/ 4.0kW			
Z1 axis motor	kW (HP)	ø30/ 7.0kW			
Controller	-	FANUC 0iTF + 10.4" color screen			
<b>MACHINE DIMENTION</b>					
Floor space (L x W)	mm (inch)	8,200 x 3,165mm (322" x 124")	9,300 x 3,165mm (366" x 124")	10,350 x 3,160mm (407" x 124")	11,350 x 3,160mm (407" x 124")
Machine max. height	mm (inch)	2,580 (101")			
Machine net. Weight	kg	24,600	27,600	30,600	33,600

Specifications subject to change without notice for improvements and modifications

## STANDARD ACCESSORIES

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

## OPTIONAL ACCESSORIES

- Transformer
- Sub carriage and boring attachment
- Power turret
- Air conditioner for electronic cabinet
- Steady rest
- High pressure coolant device
- Chuck
- Coolant through spindle 75/ 125 Bar
- Max. swing dia.:1,400 mm( 100mm Riser)
- Max. swing dia.:1,500 mm( 200mm Riser)
- Cs/Cf Axis




MULTI RAIL (FLAT-BED)  
HEAVY DUTY CNC LATHE

MFB-40 series

# MFB-40 series

MULTI RAIL (FLAT-BED) HEAVY DUTY CNC LATHE



The MFB-40 series is designed to provide the most robust, heavy duty machining capability in its class. And it is specifically optimized for machining large cylinders and shafts used in transportation, energy, and other industries.