

LATHE 800 SERIES - LINEAR GUIDE / BOX WAY



(B)ML-800S/ML (Y)	
Y	Y axis
S	Small M Medium L Large
800	Max. Swing Over Bed
ML	Linear Guide Way
BML	Box Way



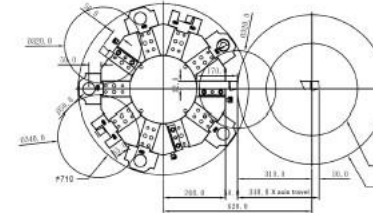
The BML-800 series is a highly customizable turning center machine with various options for spindle, gearbox, base, tailstock, turret, and multiple selectable feed speeds.

It can efficiently handle the most demanding machining requirements.

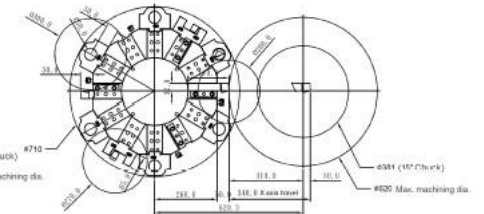
- The modular structure design of the base has high strength and rigidity. It is molded as a single unit, effectively absorbing the vibrations generated by the machinery and providing the stability and machining precision required for heavy cutting operations, without any distortion or deformation.
- The optimal modular design spindle features high speed and power, and can be paired with a high-torque output gearbox design, offering a variety of processing options to meet different machining needs.
- The robust tool turret design allows for quick and reliable tool changes, ensuring high efficiency and precision. It caters to the characteristics of various cutting processes, effectively enhancing machining capabilities.
- The high-strength design of the transmission structure ensures precise positioning and greatly enhances machining efficiency and stability.
- Ergonomically designed interface for ease of operation and convenient maintenance. Sheet metal design incorporates comprehensive safety considerations, with proper handling of chips and cutting fluids. Management and maintenance are facilitated, in compliance with safety and environmental regulations.

Tool Interference Diagram

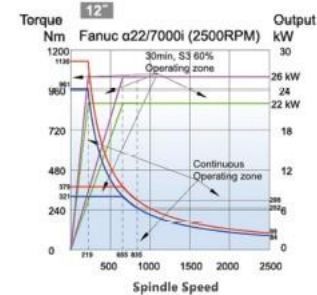
Hydraulic / Servo Turret (10T)



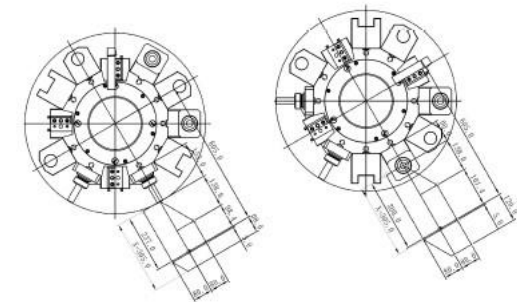
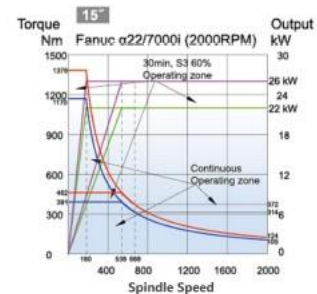
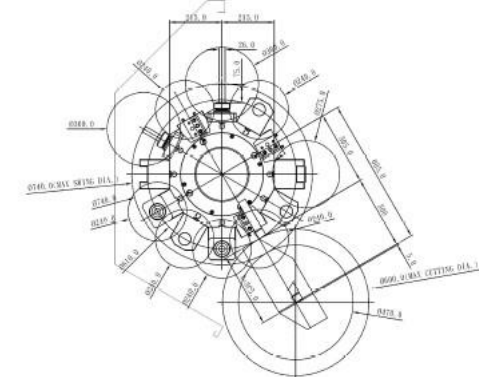
Power Turret (BMT75 - 12T)



Spindle Power and Torque Diagram



Power Turret + Y axis (BMT75 - 12T)

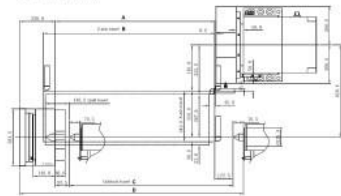


WORK ENVELOPE

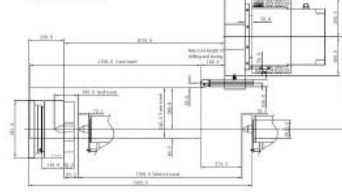
Hydraulic / Servo Turret

UNIT : mm

O.D. Tool Holder



I.D. Tool Holder

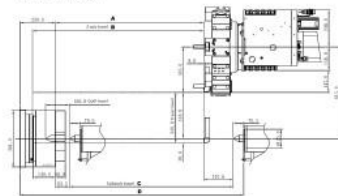


Model	Spindle	Dimension							
		A	B	C	D	E	F	G	H
(B)ML-800S	15"	1,071.0	1,150.0	1,100.0	1,503.0	1,079.0	1,150.0	1,100.0	1,503.0
(B)ML-800M	15"	2,071.0	2,150.0	2,100.0	2,503.0	2,079.0	2,150.0	2,100.0	2,503.0
(B)ML-800L	15"	3,071.0	3,150.0	3,100.0	3,503.0	3,079.0	3,150.0	3,100.0	3,503.0

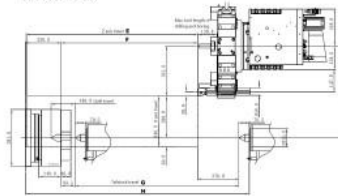
Live Tooling Turret (BMT75)

UNIT : mm

O.D. Tool Holder



I.D. Tool Holder



Model	Spindle	Dimension							
		A	B	C	D	E	F	G	H
(B)ML-800S	15"	995.9	1,150.0	1,100.0	1,503.0	1,150.0	917.5	1,100.0	1,503.0
(B)ML-800M	15"	1,995.9	2,150.0	2,100.0	2,503.0	2,150.0	1,917.5	2,100.0	2,503.0
(B)ML-800L	15"	2,995.9	3,150.0	3,100.0	3,503.0	3,150.0	2,917.5	3,100.0	3,503.0

Standard Accessories:

1. Fanuc OiF plus controller, 10.4" LCD
2. Spindle motor
3. Hydraulic 3-jaws chuck
4. Hydraulic turret
5. O.D. tool holders
6. I.D. tool holders
7. Boring bar holders: $\Phi 12, 16, 20, 25, 32, 40$ x O.D.50
8. Taper sleeves MT No. 3,4 x O.D.50
9. Tailstock quill MT5
10. Chain type chip conveyor + chip bucket
11. Coolant tank
12. Automatic tailstock
13. Leveling bolts and pads
14. Auto lubrication system
15. Foot pedal for chuck
16. Tool kit
17. Work lamp
18. End of program light
19. 2-step gear box (YIDA)
20. Manual steady rest (150-400mm)

MACHINE SPECIFICATIONS

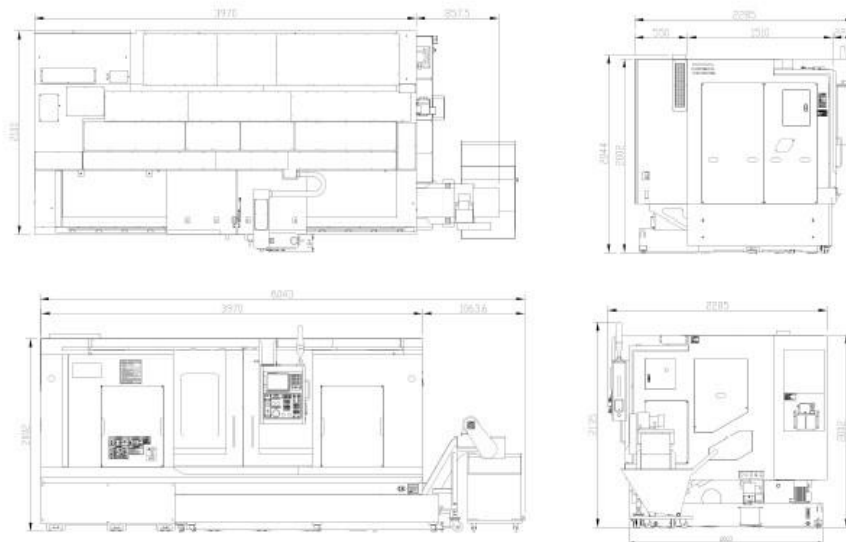
Item	Unit	(B)ML-800S	(B)ML-800S	(B)ML-800M	(B)ML-800M	(B)ML-800L	(B)ML-800L
		Standard	(Optional) C or Y axis	Standard	(Optional) C or Y axis	Standard	(Optional) C or Y axis
CAPACITY	Swing over bed	mm		Ø800		Ø800	
	Swing over saddle	mm		Ø600 (Y axis:Ø500)		Ø600 (Y axis:Ø500)	
	Distance between center	mm		1,342		3,342	
	Max. machining dia.	mm		Ø620 (Y axis:Ø600)		Ø620 (Y axis:Ø600)	
	Max. machining length	mm		1,000		3,000	
TRAVELS	Slant angle of bed	mm		30° (Y axis:60°)		30° (Y axis:60°)	
	X-axis	mm		340(310+30)		340(310+30)	
	Y-axis	mm		- ±80		- ±80	
	Z-axis	mm		1,150		3,150	
	C-axis	mm		- 360°(0.001°)		- 360°(0.001°)	
SPINDLE	Spindle speed	rpm					
	Spindle nose	STD: 2,000 (15"); OPT: 2,500 (12") / 1,200 (15") / 1,000 (18")					
	Spindle bore dia.	mm					
	Front bearing inner dia.	mm					
CHUCK	Chuck diameter	inch					
	Type	STD: Ø381 (15"); OPT: Ø304 (12") / Ø405 (15" Oversize) / Ø457 (18")					
TURRET	Stations	Hydraulic/Servo		Live tool		Live tool	
	Square tool shank	mm					
	Boring bar shank dia.	mm					
	Indexing time (0~180°)	Sec					
LIVE TOOL	Spindle speeds	rpm		rpm		rpm	
	Rapid traverse	m/min					
FEEDRATE	Type	Automatic					
	Quill diameter	mm					
	Quill bore taper	mm					
	Quill travel	mm					
TAILSTOCK	Tailstock travel	mm		mm		mm	
	Main-spindle	kw		kw		kw	
	Sub-spindle	kw					
	Live tool	kw		kw		kw	
MOTORS	X/Y/Z axis servo motor	kw					
	Hydraulic oil pump	kw					
	Chip conveyor	kw					
	Coolant pump	kw					
ACCURACY	Positioning	mm		mm		mm	
	Repeatability	mm		mm		mm	
POWER	Requirement	KVA		KVA		KVA	
	Machine size	cm		cm		cm	

* Note: Specification are subject to change without notice.

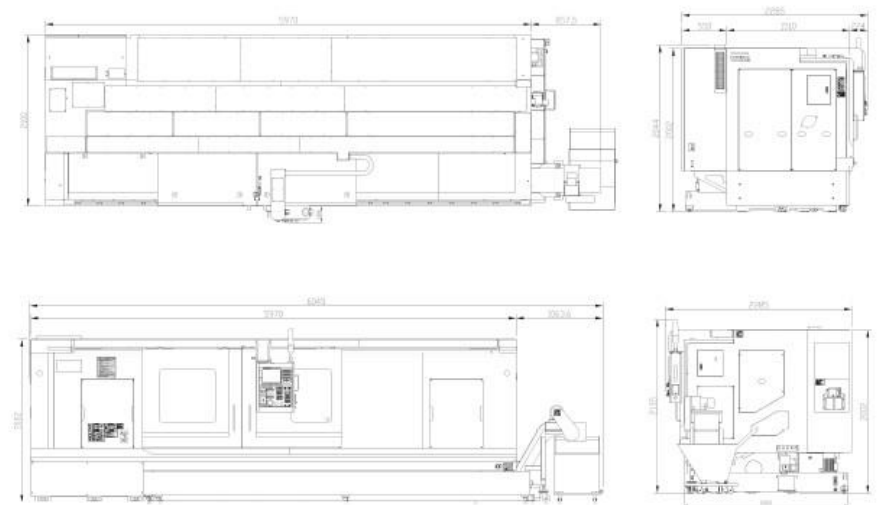
Optional Accessories:

1. Mitsubishi / Siemens controllers
2. Servo turret
3. Live tooling turret
4. Oil-Mist collector
5. Automatic door
6. Tool setter
7. CE
8. Transformer
9. Stabilizer
10. Air conditioner for electrical cabinet
11. Hydraulic stead rest
12. Oil skimmer
13. Coolant gun
14. Scraper type chip conveyor
15. 10 or 20 bar high pressure coolant through tool
16. Linear scales

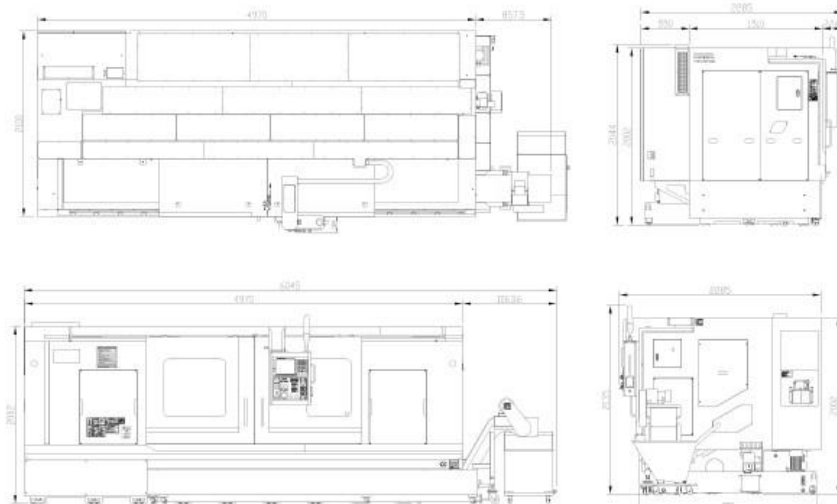
(B)ML-800S



(B)ML-800L



(B)ML-800M



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Turret

 - Hydraulic turret (Standard)
 - Servo turret (Optional)
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Live tool + C axis (Optional)

 - VDI40 turret- axial type (Standard for live tool + C axis)
 - BMT75 turret - radial type (Optional)
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Live tool + Y axis (Optional)

 - VDI 40 turret - radial type (Standard for Y axis)
 - BMT75 turret - radial type (Optional)
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Spindle

 - A2-11, 15" chuck, bar capacity $\Phi 120$ (Standard)
 - A2-8, 12" chuck, bar capacity $\Phi 91$ (Optional)
 - A2-11, 15" chuck, bar capacity $\Phi 142$ (Optional)
 - A2-15, 18" chuck, bar capacity $\Phi 165\text{mm}$ (Optional)
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Gear box (Optional)

 - 2-step gear box (YIDA)
 - 4-step gear box (YIDA)