FBL-510MC LIVE TOOLING, HEAVY-DUTY CNC LATHE



Handles Rough- and Fine-Turning Needs With Ease



Chevalier's FBL-510MC is an incredibly versatile machine that helps manufacturers with a wide range of needs.

The slant bed lathes are stable, highly accurate machines that can handle rough- and fine-turning operations for large workpieces. Its structure, capacity, power and accessories underscore the machine's ability to expertly and ruggedly handle various operations in an efficient, productive manner.

"The FANUC 0i-TD control with FANUC digital servo drive and motor are standard features with the FBL-510MC," says Chevalier National Sales Manager Herbert Hou. "They represent a substantial cost savings for our customers."

Specifications on the FBL-510MC:

Structure: Heat-treated to Rockwell 55-degree and stress relieved. Features a 45-degree slantbed design, comprised of single-piece Meehanite cast iron with wide-span, ribbed box structure. Four oversized box ways, 5.1" wide and 3.1" thick, provide strong stability and support.

Capacity: Spindle bore diameter ranges in size up to 12.5", which suits most oil industry applications. Maximum swing diameter is 44"; maximum turning diameter is 34.6". The series features an optional dual-chuck capability of 12.5" spindle bore diameter for longer parts.

Power: Powerful 60 HP spindle motor features a four-stage gear headstock and generates 3,049 ft.-lbs. torque, satisfying most cutting conditions of large-diameter work pieces or tough material applications.



Turret: Massive, 7.7" thick disk and hydraulic clamping of its curvic-coupling design ensure cutting stability during rough-turning environments. Live tooling max. speed is 3,000rpm/ power is 15 HP.

Accessories: Programmable tailstock has a built-in MT-6 rotary quill that provides better parts weight support than a normal live-center type of quill. Standard link-type chip conveyor is also a standard accessory. Optional programmable quill IN/OUT and base position. Live quill with MT 6 rotate center is a standard feature.

MODEL		FBL-510	FBL-520	FBL-530	FBL-540	FBL-510MC	FBL-520MC	FBL530MC	FBL-540MC
Control	FANUC 0i-TD α40/α30B/α30								
Turning Range									
Swing Over Bed	inch	Ø44" Ø40"			Ø44"	Ø40			
Swing Over Cross Slide	inch	Ø32.1"	032.1" Ø31.4"			Ø32.1"	Ø31.4"		
Max. Turning Diameter	inch		Ø37"				Ø34.6"		
Max. Turning Length	inch	41.3"	78.5"	118"	157"	41.3"	78.5"	118"	157"
Distance Between Center	inch	41.3"	78.5"	118"	157"	41.3"	78.5"	118"	157"
Headstock									
Spindle Nose		A2-15/A2-20 (Ø10.2"/Ø12.6") Optional							
Chuck Diameter	inch	18"~32"							
Spindle Bore	inch	Ø7.7" (A), Ø12.5" (C) Optional							
Gear Box		4-Speed (A), 3-Speed (C)							
Max. Spindle Speed	rpm	1000rpm (A), 500rpm (C)							
C-Axis Indexing Accuracy		– 0.001°							
Spindle Motor	kW(HP)	37/45 (50/60HP) / (α40/6000)							
Turret									
Turret Tool Station	tools	12				12 BMT85			
Shank Height of Square Tool	inch	1.25" x 1.25"							
Shank Dia. of Boring Bar	inch	Ø2.4" (Standard) / Ø3.0" (Optional)							
Speed	rpm	- 3,000							
Power	kW(HP)	-				11 (15HP)			
Travel									
X-Axis Travel	inch				20.7"				
Z-Axis Travel	inch	41.3"	78.5"	118"	157"	41.3"	78.5"	118"	157"
Feed Motor X-/Y-Axis	kW(HP)	9 (12HP) / (FANUC α40)							
Rapid Feed Rate X-/Z-Axis	ipm	X:394" / Z:472"							
Tailstock									
Tailstock Travel	in - l-	44.01	70 5	4401		44.01	70 51	110	4 = 7 "
(Without Steady Rest)	inch	41.3"	78.5"	118"	157"	41.3"	78.5"	118"	157"
Quill Travel	inch	3.9"							
Quill Diameter	inch	Ø7.8"							
Quill Taper	rotary	MT#6 rotary quill							
Slideway Slant	degree	45°							
Coolant Pump	kW(HP)	1.2 (1.6HP)							
Machine Weight	lbs.	33,069	41,888	50,706	59,525	33,069	41,888	50,706	59,525





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