

HEAVY DUTY MILLING MACHINE

LC-20 Series



EXCLUSIVE VARI-DISC DESIGN

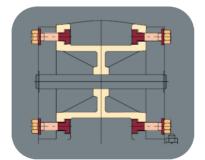
To ensure smooth operation and eliminate noise and vibration in the vertical head under high speed, the inside shaft of vari-disc is treated with HD polymer using a patented process. (CNC Patent NO.7225810)





SPINDLE UNIT

Spindle is made from one piece of Ni-Cr alloy steel and supported by three precision angular contact and one ball bearing to ensure rigidity. The inner taper surface is induction hardened and precision ground to ensure durability. The spindle inner taper runout remains within 0.002mm.



RIGID HEAD TILTING SYSTEM

The patented head knuckle design greatly increases the stability and rigidity. The vertical head can be tilted from side to side and front to back increasing the versatility of the machine to perform complicated work. There are 8 T-bolts to lock the knuckle to the ram.



GEAR DRIVEN LONGITUDINAL FEED

The table is driven by steel gears with 12 speed changes and rapid feed for positioning of the work piece.



GEAR DRIVEN HORIZONTAL SPINDLE

All the gears that drive the horizontal spindle system are made of alloy steel, precision ground and hardened for heavy cutting and smooth quiet operation. The automatic lubrication system keeps the gears continuously lubricated. The 5hp drive motor with 6 speed changes offers high torque cutting in a wide range of speeds. (LC-20VHS Model)

FIRST		LC-20VSG	LC-20VHS
TRAVEL			
X-Axis (longitudinal)		800mm (31.5"), OPT 920mm (36.2")	
Y-Axis (cross)		430mm (16.9")	
Z-Axis (knee)		460mm (18")	435mm (17.12")
Guideway type X / Y / Z		dovetail /	box / box
Bedway type X / Y / Z		hardened & ground Turcite-B	
TABLE			
Work surface		1300x260mm (51x10"), OPT 1420x260mm (56x10")	
Work surface to ground	A01	910-1370mm (35.8-53.9")	925-1360mm (36.4-53.5")
T-slot number (width x pitch)		3 (15.87 x 63.5mm) / 3 (0.62 x 2.5")	
Max table load		500 kg (1102 lb)	
VERTICAL SPINDLE			
Taper		ISA40	
Spindle drive motor		5hp	
Spindle speed (variable)		60-4500 rpm	
Quill travel		127mm (5")	
Quill diameter		90mm (3.54")	
Quill feeds		0.04, 0.08, 0.16mm/rev (0.0015, 0.003, 0.006"/rev)	
Head swivel R & L	B01	90°	
Head swivel F & B	B02	45°	
Overarm travel	B05	470mm (18.50")	
Overarm swivel		360°	
Spindle nose to table	B03	80-540mm (3.1-21.3")	115-550mm (4.5-21.7")
Spindle nose to column surface	B04	355-825mm (14-32.5")	
HORIZONTAL SPINDLE			
Taper		-	ISA40
Horizontal spindle drive motor		-	5hp
Spindle speed (6 steps)		-	55-1180rpm
Spindle center to table surface		-	-25 - 410mm (-1 - 16.1")
Spindle center to overarm surface		-	146mm (5.7")
Spindle face to column surface		-	28mm (1.1")
FEED SYSTEM			
Longitudinal feed (12 steps)		22-690mm/min (0.8-27.2"/min)	
Longitudinal rapid feed		2100mm/min (82.7"/min)	
Vertical rapid feed		800mm/min (31.5"/min)	
Longitudinal feed motor		1/0.5hp 4/8P	
Vertical feed motor		1.5hp 6P	
GENERAL			
Electrical rating		600V 9.6Amp 3Ph 60Hz	
Depth	A02	2110-2580mm (83.1-106.6")	
Width	A03	1875-2695mm (74-106")	
Height	A04	2310mm (92")	
Weight		1800 kg (3970 lb)	2010 kg (4430 lb)

Overall machine dimensions are for reference purposes only and subject to change without notice.

ACCESSORIES

STANDARD:

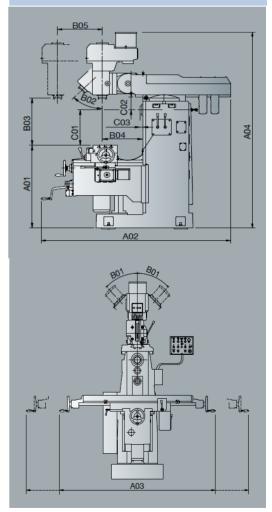
- Rubber chip covers F & R
- One shot lubrication system
- Coolant system
- Splash / Chip tray

INCLUDED:

• 2-Axis digital readout installed

OPTIONAL:

- 3rd-Axis digital readout installed
- Align air power drawbar installed
- LED Machine lamp 110V
- 56x10" Work surface (X-Axis 36.2")



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