# FRST LONG CHANG MACHINERY CO., LTD.

## AC SERVO MILLING MACHINES LC-205 Series

### Features

The machine now comes standard with X & Y axis ball screws for smooth table transmission and long life for the screw and nuts.

The Delta control allows AC step less position with a position repeatable accuracy of 0.0002" with bolt pattern or non-pattern drilling cycle, milling cycle and "S" milling cycle allows auto use of machine with high accuracy.

Machine is standard with 3-Axis position display and X & Y axis feed meter.

Machine is equipped with X & Y axis motor locks, eliminating the need to manually clamp the table.

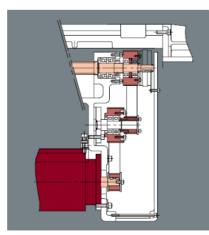
Equipped with an ISA40 spindle taper, the 5Hp AC inverter drive spindle head with 110mm (4.3") quill diameter allows heavy duty cutting with no vibrations for smooth finishes.

The control panel with a digital read control touch panel for the X, Y and Z-axis. Included for safety, all control switches wired to low voltage.



SPINDLE UNIT

Spindle is made from one piece of Ni-Cr alloy steel and supported by two 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.

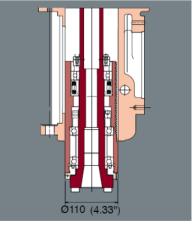


X, Y AXES TRANSMISSION SYSTEM

Driven by a powerful AC Servo motor. A backlash-free timing belt provides a large feedrate range and smooth axes motion. Easy to use automatic machining cycles. Machine can run automatically.



Model LC-205VHD illustrated



QUILL AND HOUSING

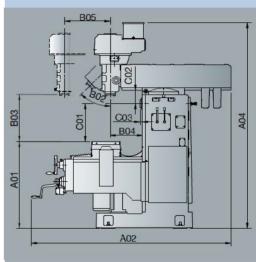
The 110mm (4.3") diameter large quill is chromed and mirror finished, then individually fitted to each quill housing. This close matching process offers extremely high spindle accuracy and machining stability.

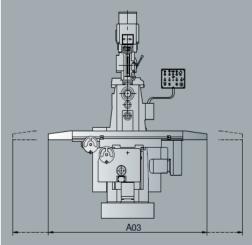
FIRST		LC-205VSD	LC-205VHD
TRAVEL			
X-Axis		835mm (32.8")	
Y-Axis		420mm (16.53")	
Z-Axis		460mm (18.11")	435mm (17.12")
Guideway type X / Y / Z		dovetail / box / box	
Bedway type X / Y / Z		hardened & gr	ound Turcite-B
TABLE			
Work surface		1300 x 300mm	n (51.1 x 11.8")
Work surface to ground	A01	935-1395mm (36.8-54.9")	935-1370mm (36.8-53.9"
T-slot number (width x pitch)		3 (15.87 x 63.5mm	n) / 3 (0.625 x 2.5")
Max table load		550 kg (1213 lb)	
VERTICAL SPINDLE			
Taper		ISA40	
Spindle drive motor		5hp	
Spindle speed (variable)		25- <b>3600rpm</b>	
Quill travel		135mm (5.31")	
Quill diameter		110mm (4.33")	
Quill feeds		0.035, 0.07, 0.14mm/rev (0.0014, 0.0028, 0.0055"/rev	
Head swivel R & L	B01	90°	
Overarm travel	B05	470mm (18.5")	
Overarm swivel		360°	
Spindle nose to table	B03	40-500mm (1.5-19.6")	75-510mm (2.9-20")
Spindle nose to column face	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 rapid feed		2100mm/min (82.7"/min)	
Vertical rapid feed		800mm/min (31.5"/min)	
Longitudinal feed motor		AC Servo / 1kW	
Cross feed motor		AC Servo / 1kW	
Vertical feed motor		1 1/2hp 6P	
GENERAL			
Electrical rating		230V 30Amp 3Ph 60Hz	
Depth	A02	1900-2300mm (74.8-90.55")	
Width	A03	2160-3000mm (85-118")	
Height	A04	2450mm (96.45")	
Weight		1800 kg (3970 lb)	2010 kg (4430 lb)

#### ACCESSORIES

#### STANDARD:

- X & Y-Axis ball screws
- Rubber chip covers F & R
- Automatic lubrication system
- Coolant system
- Splash tray & rear guarding
- Horizontal milling arbor & support (205VHD) INCLUDED:
- X, Y & Z-Axis digital read control touch panel
- Align air power drawbar
- LED Machine lamp
- 14KVA Transformer 600V-220V





Edition/A05 10092407 2023 03 21



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