FIRST LONG CHANG MACHINERY CO., LTD.

VERTICAL MILLING MACHINE LC-185VS-B

Milling Head

Variable speed head with R8 spindle taper and 3hp spindle motor. This quiet and smooth running head uses dynamically balanced pulleys, precision bearings and selectively fitted quill and housing for smooth speed changing, free of noise and vibration.

Ram Structure

Gibbed and double-locked ram design ensures rigidity and limited clearance between ram and adapter.

Knee Locks

Double knee locks clamp the knee firmly and eliminates the lateral rocking motion.

Main Components

The major components are made from certified Meehanite GC casting with excellent vibration dampening properties and high resistance to wear. Column and base are cast as one piece.

Lubrication System

The simple and reliable one-shot lubrication is used to lubricate all slideways and leadscrews.

Machine shown with optional accessories

R8 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 was induction hardened and precision ground to ensure durability. The spindle inner taper runout remains within 0.002mm.

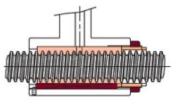
Quill and Housing



The best quality, endurance and low noise is ensured by using hardened and ground spindle back-gears running in a grease packed housing. A chrome coating and mirror ground finished quill to fit the individual housing offers extremely high accuracy and stability.

Leadscrew Unit





A unique double nut and backlash adjusting design with the contact face enlarged ensures long term accuracy and easy backlash adjustments.

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 6 T-bolts to lock the knuckle to the ram instead of 3 bolts.

FIRST

LC-185VS-B

| TRAVEL | | METRIC | IMPERIAL |
|--------------------------------|-----|-----------------------------|----------------------------|
| X-Axis (longitudinal) | | 890 mm | 35" |
| Y-Axis (cross) | | 425 mm | 16.75" |
| Z-Axis (knee) | | 390 mm | 15.3" |
| Guideway type X / Y / Z | | dovetail / square / box | |
| Bedway type X / Y / Z | | hardened & ground Turcite-B | |
| TABLE | | | |
| Work surface | | 1372 x 254 mm | 54 x 10" |
| Work surface to ground | A01 | 950 - 1340mm | 37.4 - 52.8" |
| T-slot number (width x pitch) | | 3 (15.87 x 63.5 mm) | 3 (0.62 x 2.5") |
| Max table load | | 400 kg | 882 lb |
| VERTICAL SPINDLE | | | |
| Taper | | R8 | R8 |
| Spindle drive motor | | 3hp | 3hp |
| Spindle speed (variable) | | 60 - 4500 rpm | 60 - 4500 rpm |
| Quill travel | | 127 mm | 5" |
| Quill diameter | | 85.7 mm | 3.37" |
| Quill feeds | | 0.04, 0.08, 0.16 mm/rev | 0.0015, 0.003, 0.006 "/rev |
| Head swivel R & L | B01 | 90° | |
| Head swivel F & B | B02 | 45° | |
| Overarm travel | B05 | 470 mm | 18.5" |
| Overarm swivel | | 360° | |
| Spindle nose to table | B03 | 135 - 525 mm | 5.31 - 20.7" |
| Spindle nose to column surface | B04 | 245 - 715 mm | 9.6 - 28.1" |
| GENERAL | | | |
| Electrical rating | | 600V 4.2Amp 3Ph 60Hz | |
| Depth | A02 | 1630-2020mm | 64.2-79.5" |
| Width | A03 | 1775-2670mm | 70-105" |
| Height | A04 | 2286mm | 90" |
| Weight | | 1250 kg | 2755 lb |

ACCESSORIES

STANDARD:

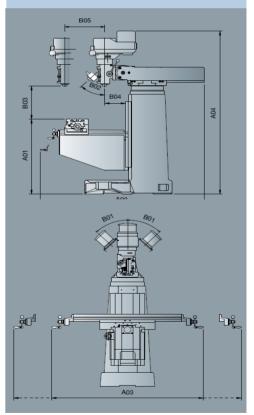
- Rubber chip covers F & R
- One shot lubrication system
- Z-Axis rapid feed

INCLUDED:

- 2-Axis digital readout installed
- R8 Collets 8pc set

OPTIONAL:

- 3rd-Axis digital readout installed
- Align X-Axis table feed installed
- Align air power drawbar installed
- Coolant system & splash tray
- LED Machine lamp 110V



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

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