

LC-20 Series

HEAVY DUTY
MILLING MACHINE

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03 9761 - 2929

VERTICAL MILLING MACHINE



► ACCESSORIES

| Machine Type | LC-20 VSG | LC-20 VGN | LC-20 VGA |
|---|-----------------------|-----------------------|-----------------------|
| Y axis ball screws (grade C5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Y power feed | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8 Speed gear box feed system for Y-Axis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1420 mm X 260 mm long table | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Scales | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Coolant system | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Coolant tray | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Automatic lubrication system | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Halogen light | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Air power drawbar (Vertical) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5"(127mm) rise r block | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tapping Unit | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

V: Standard ; O: Option ; X: Not Available

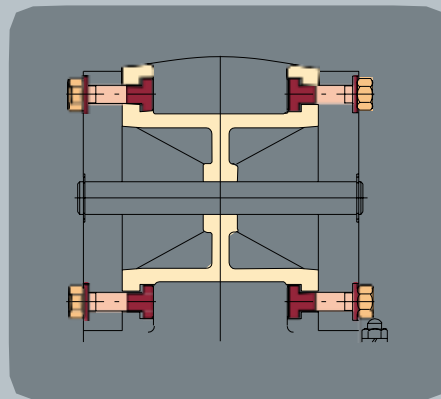
20VS HEAD



20VN HEAD



2G HEAD



**RIGID HEAD
TILTING SYSTEM**

The Ram adapter is designed with 8 T-bolts clamping system that allows the large vertical head to be tilted at all angles, front and back. This structure greatly increase the versatility of the machine to perform complicated work.

**GEAR DRIVEN
HORIZONTAL SPINDLE**

All gears that drive the horizontal spindle system are made of alloy steel, precision ground and hardened for heavy cutting and quiet operation. The automatic lub. system keeps the gears lubricated at all times. The 5HP motor drive with 6 speed changes offers high torque cutting in wide range of speeds.



► MILLING HEAD SPECIFICATION

| Milling Head | | 20 VS | 20 VN | 2G |
|-------------------------------|-------|-------------------------|-------------------------|--------------------|
| Spindle Taper | | NST 40 | | |
| Spindle Motor(3Ph) | | 3 HP | | 5 HP |
| Quill Diameter | | 90 mm | | 110 mm |
| Quill Travel | | 127 mm (5") | | 135 mm (5.3") |
| Vertical Feeds | | 0.04/0.08/0.16 mm | | 0.035/0.07/0.14 mm |
| Spindle Speed | 50 HZ | 50~3,750 rpm (Variable) | 60~3,000 rpm (16 Steps) | |
| | 60 HZ | 60~4,500 rpm (Variable) | 75~3,600 rpm (16 Steps) | |
| Inverter (Option) | | X | O | O |
| Bigger spindle motor (Option) | | 5 HP | | X |
| Single phase motor (Option) | | X | X | X |
| 2 speed motor (Option) | | X | O | O |

* Specifications may different according to option accessories and are subject to change without notice.

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SPINDLE

Ni-Cr alloy steel spindles are supported by three super precision preloaded angular contact ball bearings. The spindle drive can be operated as manual feed, micro feed and automatic feed. It is ideal for precision milling and drilling operations.



GEAR DRIVEN LONGITUDINAL FEED

The table is driven by steel gears box with 12 speeds change and rapid feed for positioning of work piece.



EXCLUSIVE VARI-DISC DESIGN

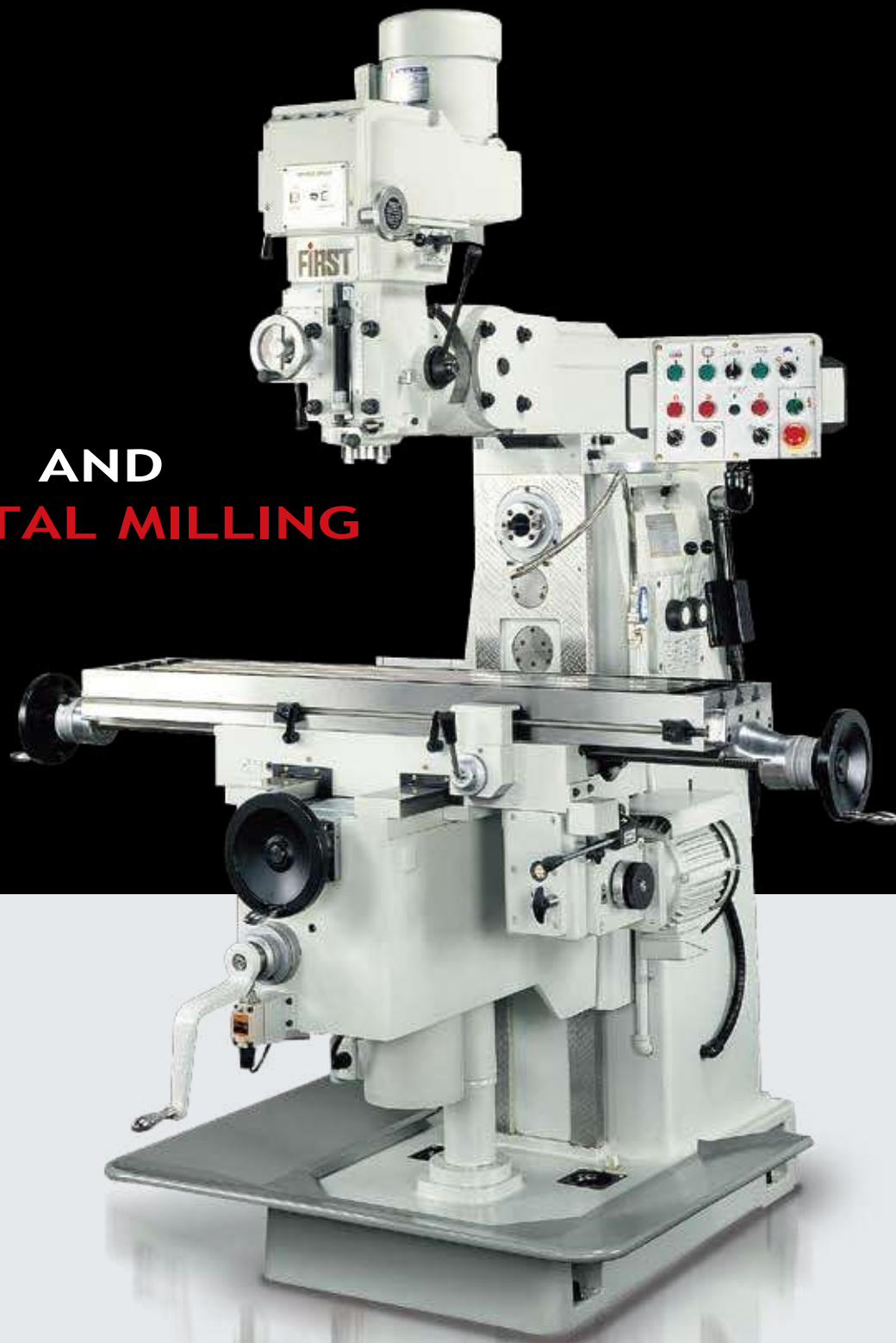
To ensure smooth operation under high speed and to eliminate noise and vibration in the vertical head, the vari-disc is treated with HD polymer at the inside diameter using a patented process. (CNS Patent NO.7225810)



WORLD CLASS MANUFACTURING FACILITY

The ISO9001 certified company got many international design patents. Manufacturing is done in-house using Machining centers, CNC lathes and CNC grinders. Most parts are inter-changeable. Fully computerized factory link all our teams together. We offer the Great machines and Great service.

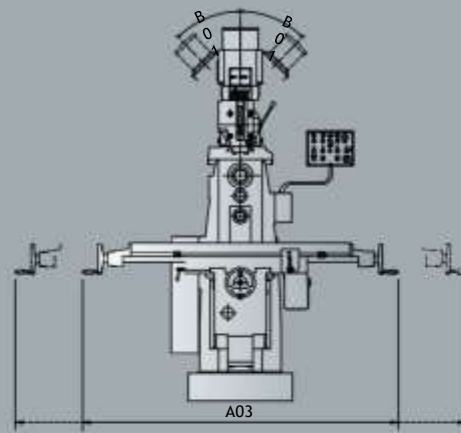
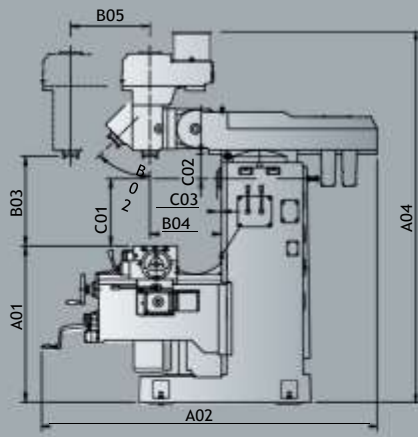
VERTICAL AND HORIZONTAL MILLING MACHINE



► ACCESSORIES

| Machine Type | LC-20 VHS | LC-20 VHN | LC-20 VHA |
|---|-----------|-----------|-----------|
| Y axis ball screws (grade C5) | O | O | O |
| Y power feed | O | O | O |
| 8 Speed gear box feed system for Y-Axis | O | O | O |
| 1420 mm X 260 mm long table | O | O | O |
| Scales | O | O | O |
| Coolant system | V | V | V |
| Coolant tray | V | V | V |
| Automatic lubrication system | O | O | O |
| Halogen light | O | O | O |
| Air power drawbar (Vertical) | O | O | O |
| 5"(127mm) riser block | O | O | O |
| Tapping Unit | O | O | O |

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| Machine Type | LC-20 VSG | LC-20 VGN | LC-20 VGA | LC-20 VHS | LC-20 VHN | LC-20 VHA |
|--|--|-----------|-----------------------|---------------------------|------------------------|-----------------------|
| Travel | | | | | | |
| Longitudinal travel | 800 mm (32.5") / Opt: 920mm (36.2") | | | | | |
| Cross travel | 415 mm (16.3") | | | | | |
| Vertical travel | 460 mm (18") | | | 435 mm (17.1") | | |
| Table | | | | | | |
| Working Surface | 1,300 mm X 260 mm (51" X 10") / Opt: 1,420mm (56") | | | | | |
| Working surface to ground A01 | 910~1,370 mm (35.8~53.9") | | | 925~1,360 mm (36.4~53.5") | | |
| Max. Loading | 200 Kg | | | | | |
| T-slot (no. x width x pitch) | 3 X 15.875mm X 63.5mm (3 X 0.625" X 2.5") | | | | | |
| Machine Size | | | | | | |
| Length A02 | 2,110~2,580 mm (83.1~101.6") | | | | | |
| Width A03 | 1,900 mm (74.8") | | | | | |
| Height A04 | 2,270 (89.4") | | | | | |
| Weight | 1,800 kgs (3,960 lbs) | | | 2,010 kgs (4,422 lbs) | | |
| Coolant pump | O | | | 1/8 HP | | |
| Vertical Spindle | | | | | | |
| Milling head | 20 VS | 20 VN | 2 G | 20 VS | 20 VN | 2 G |
| Quill Swivel (R&L/90°) B01 | V | V | V | V | V | V |
| Quill Swivel (F&B/45°) B02 | V | V | V | V | V | V |
| Spindle nose to table | 80~540mm (3.1"~21.3") | | | 115~550mm (4.5"~21.7") | | |
| Spindle nose to column surface B04 | 355~825 mm (14"~32.5") | | 255~725mm (10"~28.5") | 355~825 mm (14"~32.5") | | 255~725mm (10"~28.5") |
| Overarm travel B05 | 470 mm (18.5") | | | | | |
| Overarm Swivel | 360° | | | | | |
| Feed System | | | | | | |
| Longitudinal | 22~690mm (0.8"~27.2")/ min | | | | | |
| Longitudinal rapid feeds | 2100mm (82.7")/ min | | | | | |
| Vertical | 800mm (31.5")/ min | | | | | |
| Longitudinal motor | 1 / 0.5 HP 4 / 8 P | | | | | |
| Vertical motor | 1.5 HP 6P | | | | | |
| Horizontal Spindle | | | | | | |
| Spindle Speed | 50 HZ | X | | | 45~980 rpm (6 Steps) | |
| | 60 HZ | X | | | 55~1,180 rpm (6 Steps) | |
| Spindle motor | X | | | 5 HP 4P | | |
| Spindle taper | X | | | NST 40 | | |
| Spindle centerline to table C01 | X | | | -25~410 mm (-1~16.1") | | |
| Spindle centerline to overarm C02 | X | | | 146 mm (5.7") | | |
| Spindle centerline to column surface C03 | X | | | 28 mm (1.1") | | |

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Edition / A02



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