

## HAFCO-METALMASTER BM-90VE



### Industrial Turret Milling Machine

Table Travel: (X) - 1120mm (Y) - 520mm (Z) - 360mm



## HAFCO-METALMASTER Industrial Turret Milling Machine BM-90VE



Auto Lubrication System



3 Axis Digital Read Out



Align Air Operated Drawbar System



Control Panel



Safety Micro Switch On Z Axis Lever



Knee Elevating Motor for Z Axis



Side View

### Description

The BM-90VE Industrial turret milling machine is manufactured in Taiwan to a strict precision engineering ultra-high tolerance & superior excellence to cope with many jobs from small to big that is set out by the professional machinist, and importantly to deliver many years of valuable & reliable service.

This magnificent milling machine has a generous range in all X, Y & Z travels, X-axis 1120mm, Y-axis 520mm & Z-axis 360mm. The large 1470 x 370mm hardened & ground table is controlled by servo driven feed motors coupled to hardened ballscrew system in X & Y-Axis providing smooth & accurate positioning. The 5hp spindle motor speed is regulated via a Japanese quality Yaskawa inverter control unit and designed to achieve maximum torque in all speed ranges. In addition, the large spindle measure 110mm in diameter and helps provide greater rigidity when side loading with large diameter cutters.

This milling machine package is also complete with a few of the most desirable features for example, NT40 spindle taper, Z-axis powered elevating motor, pneumatic operated draw bar to easily & quickly change tool holders with a push of a button and automatic operated oil pump to keep slides in perfect working order.

The BM-90VE machine also includes features like, 3-axis digital readout system fitted, turcite B coated X & Y slide-ways that reduces friction to provide smooth table movement even when loaded up with a heavy job, square constructed slideways on X & Z-Axis, Steel slideway cover on Y-Axis for maximum protection & an electric fan installed on the milling head to reduce excessive heat & maintain accuracy.

Another reliable feature in this range of precision milling machines is the manufacturing process of the main body & supports, it is made up from the highest quality Meehanite® cast iron. The key to the undisputed success of Meehanite® metals is the rigid application of its patented manufacturing process to provide ultimate strength & durability performance.

**HAFCO-METALMASTER Industrial Turret Milling Machine BM-90VE****Features**

- 3 Axis digital readout fitted
- 5HP 415V motor, inverter control variable speed system(BM-90VE)
- Hardened ballscrew X & Y-Axis providing smooth and accurate operation
- Japanese quality Yaskawa spindle speed control
- NT40 Spindle taper with a 110mm chrome & ground quill
- Servo controlled feed motors on X & Y-Axis ensures response, accuracy and consistent feed
- Hardened & ground work table & slide-ways
- Square construction slides for X & Z-Axis to maximise rigidity
- Turcite B coated X & Y-Axis slide-ways reduces friction for smooth operation
- Pneumatic operation drawbar system for quick and effortless tool change
- Powered elevating motor for Z-Axis
- Large 1470mm x 370mm work table
- Electric fan incorporated in milling head to reduce heat
- Meehanite casting for high strength & minimal deformation
- Quality electrics & overload protection in an easy access enclosure
- Horizontal travelling ram mounted on a solid base allowing repositioning of spindle
- High / neutral and low gear selection lever to maximise torque
- Micro switch on the manual knee handle for additional operator safety
- Metric dial graduations @ 0.02mm for X , Y & Z-Axis
- Automatic quill feed 0.04, 0.08, 0.13mm/rev
- Automatic cut off depth stop on quill
- Automatic oil lubrication pump and reservoir
- Table trays each end of work table
- Clutch hand wheels X & Y-Axis
- Steel slideway cover Y-Axis
- Mill head tilts to  $\pm 90^\circ$  left and right
- Manual quick action quill lever
- Tool box and manual

**Includes**

- 3 Axis digital readout fitted
- Hardened ballscrew X & Y-Axis
- Automatic oil lubrication pump and reservoir
- Pneumatic drawbar system M16 thread
- Coolant system
- Steel slideway cover
- Z axis powered elevating motor
- X & Y-Axis servo controlled power-feed
- Halogen light
- Safety cutter guard
- Swarf tray
- Drawbar M16 thread

## HAFCO-METALMASTER Industrial Turret Milling Machine BM-90VE

### Specifications

<b>ORDER CODE</b>	M632D
<b>MODEL</b>	BM-90VE
<b>Digital Readout</b>	3-Axis Digital Readout
<b>Type</b>	Vertical
<b>Table Size (mm)</b>	1470 x 370
<b>Column Type</b>	~
<b>Spindle Taper - Vertical</b>	NT40
<b>Spindle Taper - Horizontal</b>	~
<b>Longitudinal Travel (X-Axis) (mm)</b>	1120
<b>Cross Travel (Y-Axis) (mm)</b>	520
<b>Vertical Travel (Z-Axis) (mm)</b>	360
<b>Type of Slides</b>	Dovetail (X), Square (Y & Z)
<b>Ram Travel (mm)</b>	500
<b>Spindle to Table (mm)</b>	500
<b>Spindle to Base</b>	~
<b>Spindle Travel / Diameter (mm)</b>	140 / 110
<b>Throat Depth (max.) (mm)</b>	685
<b>Tilting Head (Left ~ Right)</b>	±90°
<b>Tilting Head (Forward ~ Back)</b>	Fixed
<b>Drilling Capacity (mm)</b>	~
<b>End Milling Capacity (mm)</b>	~
<b>Face Milling Capacity (mm)</b>	~
<b>Power Feed - Quill (mm/rev)</b>	0.035 / 0.07 / 0.14
<b>Power Feed - Longitudinal (X-Axis) (mm/min)</b>	30 - 3000
<b>Power Feed - Cross (Y-Axis) (mm/min)</b>	30 - 3000
<b>Power Feed - Vertical (Z-Axis) (mm/min)</b>	Rapid
<b>Table T-Slot Size (inch / mm)</b>	18
<b>Work Table Load Capacity (kg)</b>	600
<b>Spindle Speeds Vertical (No./ rpm)</b>	Inverter (60 - 3600)
<b>Spindle Speeds Horizontal (No./ rpm)</b>	~
<b>Spindle Speeds - Universal Head</b>	~
<b>Motor Power - Vertical Spindle (kW / hp)</b>	3.75 / 5
<b>Motor Power - Horizontal Spindle (kW / hp)</b>	~
<b>Motor Power - Universal Head</b>	~
<b>Voltage / Amperage (V / amp)</b>	415
<b>Nett Weight (kg)</b>	2600