

## HAFCO METALMASTER HM-46B

Mill Drill - Geared & Tilting Head

(X) 485mm (Y) 175mm (Z) 430mm



**HAFCO METALMASTER HM-46B Mill Drill - Geared & Tilting Head**



Front View



Left View



Right Side View



Left Side View



Tilting Head - Left



Tilting Head - Right



Shown with Optional Stand



3-Axis Digital Readout Counter  
 Fitted with 2-Axis X & Y Scales  
 Only



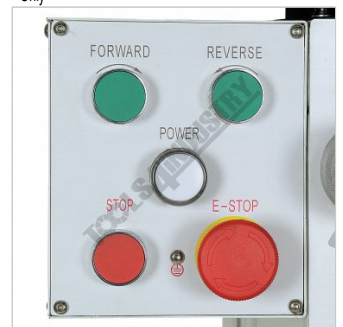
Quill Feed Lever



Fine Quill Feed Handwheel



Head Controls



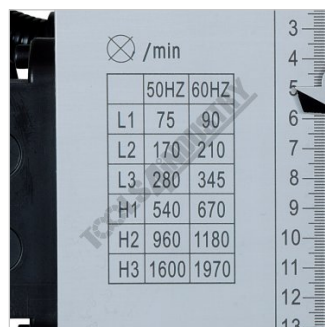
Forward-Reverse, ON-OFF  
 & Emergency Switches



Quill Depth Stop Scale &  
 Spindle Lock



Spindle Speed Selectors



Spindle Speed Chart



Includes Face Mill Cutter

**HAFCO METALMASTER HM-46B Mill Drill - Geared & Tilting Head**



Includes Drill Chuck & Arbor



Rack & Pinion Wind Up Head



Ground Work Table with T Slots



Tilting Head Scale



Digital Tilting Head Gauge



Table Longitudinal Dial



Table Cross Feed Dial



Swivel Safety Guard



Drawbar & Motor



Included Accessories

**Description**

The HM-46B milling machines is similar in overall size to the popular RF-31 or HM-32 but with the additional benefit of a 6-speed 95-1600rpm, gear driven head which can be tilted up to 90° either side of the vertical. This feature allows the head to be positioned in a variety of positions, allowing a whole range of milling, slotting, grooving, drilling and boring operations to be carried out.

The usual handle-driven down feed is available for precision drilling and there is a fine manual down-feed control for precise vertical milling.

The motor is controlled by a separate forward and reverse on/off button switches.

There is a heavy duty steel stand available as an extra, strongly recommended bearing in mind the weight of the machine.



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Also available is a optional power feed attachment which fits to the left hand end of the table and provides a smooth, variable speed longitudinal drive.

### Features

- 3-Axis digital readout counter fitted with 2-Axis X & Y scales only
- Gear driven head 6 speeds
- Dovetail vertical Z-axis
- Mill head tilts to  $\pm 90^\circ$  from vertical with digital display
- Large 730 x 210mm ground work table with T-slots
- Adjustable leadscrew nuts eliminating backlash on both axis
- Fine feed hand wheel operating quill feed
- Forward and reverse on/off button switches
- Digital tilting head gauge
- 3MT spindle with 75mm diameter quill
- Adjustable table and drill length stops
- Rack and pinion wind-up head
- Rear slide-way cover and slide clamps on all axis
- Spindle lock for quill
- Table lock on both axis
- Metric dial graduations @ 0.05mm for X & Y axis

### Includes

- 3-Axis digital readout counter fitted with 2-Axis X & Y scales only
- Digital tilting head gauge
- Drill chuck & arbor
- Face cutter & arbor
- Safety cutter guard
- M12 draw bar
- 1/2" x 12tpi whitworth draw bar

### Specifications

<b>ORDER CODE</b>	M138D
<b>MODEL</b>	HM-46B
<b>Digital Readout</b>	3-Axis Counter, X, Y Scales
<b>Type</b>	Vertical
<b>Table Size (mm)</b>	730 x 210
<b>Column Type</b>	Dovetail
<b>Spindle Taper - Vertical</b>	3MT
<b>Spindle Taper - Horizontal</b>	~
<b>Longitudinal Travel (X-Axis) (mm)</b>	485
<b>Cross Travel (Y-Axis) (mm)</b>	175
<b>Vertical Travel (Z-Axis) (mm)</b>	430
<b>Type of Slides</b>	Dovetail
<b>Ram Travel (mm)</b>	~
<b>Spindle to Table (mm)</b>	485
<b>Spindle Travel / Diameter (mm)</b>	120 / 75



## HAFCO METALMASTER HM-46B Mill Drill - Geared & Tilting Head

<b>Throat Depth (max.) (mm)</b>	265
<b>Tilting Head (Left ~ Right)</b>	±90°
<b>Tilting Head (Forward ~ Back)</b>	Fixed
<b>Drilling Capacity (mm)</b>	31.5
<b>End Milling Capacity (mm)</b>	28
<b>Face Milling Capacity (mm)</b>	80
<b>Power Feed - Quill (mm/rev)</b>	~
<b>Power Feed - Longitudinal (X-Axis) (mm/min)</b>	Optional
<b>Power Feed - Cross (Y-Axis) (mm/min)</b>	~
<b>Power Feed - Vertical (Z-Axis) (mm/min)</b>	~
<b>Table T-Slot Size (inch / mm)</b>	14
<b>Work Table Load Capacity (kg)</b>	55
<b>Spindle Speeds Vertical (No./ rpm)</b>	6 (95 - 1600)
<b>Spindle Speeds Horizontal (No./ rpm)</b>	~
<b>Motor Power - Vertical (kW / hp)</b>	1.5 / 2
<b>Motor Power - Horizontal (kW / hp)</b>	~
<b>Voltage / Amperage (V / amp)</b>	240 / 10
<b>Shipping Dimensions (L x W x H) (cm)</b>	102 x 102 x 143
<b>Nett Weight (kg)</b>	380