



HAFCO-METALMASTER HM-46B

Mill Drill - Geared & Tilting Head

Table Travel: (X) - 485mm (Y) - 175mm (Z) - 430mm



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



Tilting Head Left



Tilting Head Right



Front View



Left View



Left Side View



Shown On Optional Stand



Ground Work Table with T Slots



Quill Feed



Fine Quill Feed Handwheel



Head Controls



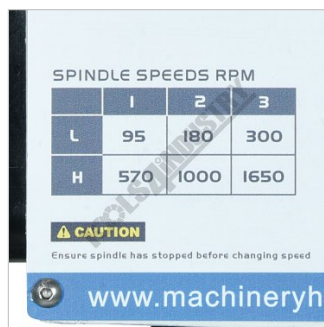
Forward Reverse ON OFF-Emergency Switches



Quill Depth Stop Scale & Spindle Lock



Spindle Speed Selectors



Spindle Speed Chart



Tilting Head Scale



Digital Tilting Head Gauge

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Table Cross Feed Handle



Table Longitudinal Handle



Includes Drill Chuck & Arbor



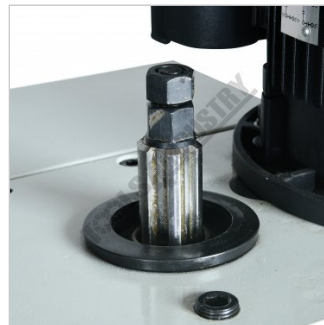
Includes Face Mill Cutter



Interlocked Spindle Safety Guard



Rack & Pinion Wind Up Head



Drawbar



Motor-Drawbar



Included Accessories

Description

The HM-46B milling machines is similar in overall size to the popular HM-32 but with the additional benefit of a 6-speeds 95-1650rpm, 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 on different angles. In addition the milling head is also mounted to a vertical dovetail slide system that allows the head to maintain on the exact same centre position when raising or lowering.

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.

Also available is an optional power feed attachment which fits to the left hand end of the table and provides a smooth,

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variable speed longitudinal drive.

Features

- 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

- Digital tilting head gauge
- Drill chuck & arbor
- Face cutter & arbor
- Interlocked spindle safety guard
- 3-2MT sleeve
- M12 drawbar
- 1/2" x 12tpi whitworth drawbar

Specifications

ORDER CODE	M138
MODEL	HM-46B
Digital Readout	~
Type	Vertical
Table Size (mm)	730 x 210
Column Type	Dovetail
Spindle Taper - Vertical	3MT
Spindle Taper - Horizontal	~
Longitudinal Travel (X-Axis) (mm)	485
Cross Travel (Y-Axis) (mm)	175
Vertical Travel (Z-Axis) (mm)	430
Type of Slides	Dovetail
Ram Travel (mm)	~
Spindle to Table (mm)	485
Spindle to Base	~
Spindle Travel / Diameter (mm)	120 / 75
Throat Depth (max.) (mm)	265
Tilting Head (Left ~ Right)	$\pm 90^\circ$
Tilting Head (Forward ~ Back)	Fixed

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Drilling Capacity (mm)	31.5
End Milling Capacity (mm)	28
Face Milling Capacity (mm)	80
Power Feed - Quill (mm/rev)	~
Power Feed - Longitudinal (X-Axis) (mm/min)	Optional
Power Feed - Cross (Y-Axis) (mm/min)	~
Power Feed - Vertical (Z-Axis) (mm/min)	~
Table T-Slot Size (inch / mm)	14
Work Table Load Capacity (kg)	55
Spindle Speeds Vertical (No./ rpm)	6 (95 - 1650)
Spindle Speeds Horizontal (No./ rpm)	~
Spindle Speeds - Universal Head	~
Motor Power - Vertical Spindle (kW / hp)	1.5 / 2
Motor Power - Horizontal Spindle (kW / hp)	~
Motor Power - Universal Head	~
Voltage / Amperage (V / amp)	240 / 10
Nett Weight (kg)	380