

Product Brochure For M123

Mill Drill - Geared & Tilting Head - HM-46

Table Travel: (X) - 475mm (Y) - 195mm (Z) - 450mm

Dovetail Vertical Column



ORDER CODE:	M123
MODEL:	HM-46
Digital Readout:	Optional
Type:	Vertical
Table Size (mm):	730 x 210
Column Type:	Dovetail
Spindle Taper - Vertical:	3MT
Spindle Taper - Horizontal:	~
Longitudinal Travel (X-Axis) (mm):	475
Cross Travel (Y-Axis) (mm):	195
Vertical Travel (Z-Axis) (mm):	450
Type of Slides:	Dovetail
Ram Travel (mm):	~
Spindle to Table (mm):	510
Spindle to Base:	~
Spindle Travel / Diameter (mm):	120 / 75
Throat Depth (max.) (mm):	265
Tilting Head (Left ~ Right):	±90°
Tilting Head (Forward ~ Back):	Fixed
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 - 1600)
Spindle Speeds Horizontal (No./ rpm):	~
Spindle Speeds - Universal Head:	~
Motor Power - Vertical Spindle (kW / hp):	1.1 / 1.5
Motor Power - Horizontal Spindle (kW / hp):	~
Motor Power - Universal Head:	~
Voltage / Amperage (V / amp):	240 / 10
Nett Weight (kg):	293

Description

The HM-46 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 standard forward and reverse on/off switch.

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

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

- Gear driven head 6 speeds
- Dovetail vertical Z-axis
- Mill head tilts to ±90° from vertical with digital display

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- 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 switch
- 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

- Drill chuck
- 3MT arbor
- 3MT-2MT drill sleeve
- Face cutter & arbor
- Safety cutter guard
- Digital tilting head gauge

Specific Features



Fine Feed Handwheel Operating Quill Feed



Forward and Reverse On Off Switch



Quill Depth Scale



Spindle Speed Selectors

SPINDLE SPEEDS (r/min)			
	I-L	I-M	I-H
50Hz	95	170	280
60Hz	120	210	340
	II-L	II-M	II-H
50Hz	540	960	1600
60Hz	670	1180	1970

Speed Chart



Spindle lock for quill



Face Mill Cutter



Rack & Pinion Wind Up Head



Large 730mm x 210mm ground work table with T Slots



Head Controls



Dovetailed Vertical Z Axis



Tilting head

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Digital Tilting Head Gauge



Drawbar



Table Cross Feed Handle



Table Longitudinal Handle



Includes These Accessories



Tilt Head Front View



Head Shown in Vertical Position



Left View



Shown mounted to Optional Stand

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Recommended Accessories

D695
 3-Axis Optimum Digital Readout
 Counter - 1µm



D694
 1500mm Optimum Magnetic
 Digital Readout Scale



M230
 Power Feed Unit



M240
 Transformer



C0965
 Clamp Kit 58 piece - Workshop
 Series



K150
 Mill-Drill Accessory Package
 Deal - Imperial Cutters



K151
 Mill-Drill Accessory Package
 Deal - Metric Cutters



C922B
 Collet & Chuck Set - 8 Piece



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C926
 Collet & Chuck Set - 20 Piece



M3301
 Metric HSS Slot Drill & End Mill Set - 10 Piece



M3321
 Imperial HSS Slot Drill & End Mill Set - 10 Piece



M3280
 13mm HSS End Mill Long Series



M182
 Precision Boring Head Kit



M192
 Boring Head Shank



M180
 Boring Bar Set - 9 piece



M250
 Parallel Set - 8 Piece



M530
 Universal Milling Kit - 4 Piece



M562
 Face Mill Arbor



M515
 Face Mill 45° - Super High-Rake



L065
 KYOCERA Carbide Inserts - Milling



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M528
 Face Mill 90° - Positive Rake



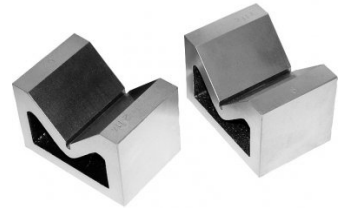
M529
 Face Mill 90° - Positive Rake



L066
 KYOCERA Carbide Inserts - Milling



V004
 Cast Iron Vee Block



V105
 Vertex K-Type Milling Vice



R006
 Vertex Rotary Table



P235
 Coolant Pump & Tank



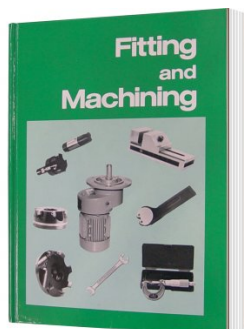
S090A
 Soluble Metal Cutting Fluid - 1 Litre



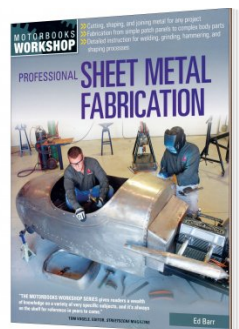
S090
 Soluble Metal Cutting Fluid - 5 Litre



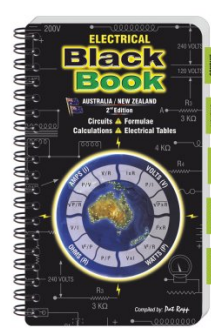
L341
 Fitting and Machining Technical Book



L3455
 Professional Sheet Metal Fabrication Book



L342
 Electrical Black Book



Product Brochure For M123

L300
 Magnetic Swarf Remover



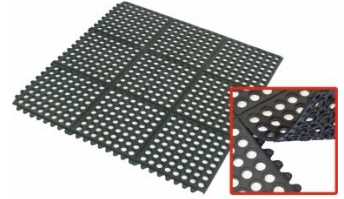
M9991
 Magnetic Floor Sweeper



M800
 Rubber Mat - Anti-Fatigue



M805
 Rubber Mat - Anti-Fatigue



O000
 SpillFix Universal Organic Absorbent



O043
 Rust & Corrosion Preventive



O042
 General Purpose Lubricant & Corrosion Inhibitor



O040
 Rust & Corrosion Preventive



O044
 Rust & Corrosion Preventive

