

## Product Brochure For M121

### Mill Drill - Belt Drive - HM-32

Table Travel: (X) - 540mm (Y) - 190mm (Z) - 410mm



ORDER CODE:	M121
MODEL:	HM-32
Digital Readout:	Optional
Type:	Vertical
Table Size (mm):	820 x 240
Column Type:	Ø115mm
Spindle Taper - Vertical:	3MT
Spindle Taper - Horizontal:	~
Longitudinal Travel (X-Axis) (mm):	540
Cross Travel (Y-Axis) (mm):	190
Vertical Travel (Z-Axis) (mm):	410
Type of Slides:	Dovetail
Ram Travel (mm):	~
Spindle to Table (mm):	455
Spindle to Base:	~
Spindle Travel / Diameter (mm):	130 / 75
Throat Depth (max.) (mm):	202
Tilting Head (Left ~ Right):	Fixed
Tilting Head (Forward ~ Back):	Fixed
Drilling Capacity (mm):	31.5
End Milling Capacity (mm):	22
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):	12 (100 - 2150)
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):	295

### Description

This is a rugged and well made machine with good capacities and plenty of power, a good choice for a serious home engineer.

The belt driven head provides a useful range of 12 speeds, 100-2150rpm and is quiet in operation, the head can be re-positioned on the column with the aid of a handle driven rack and pinion drive.

The table has T slots to allow the work to be directly mounting to table, or in a milling vice, with two large diameter control hand wheels with metric calibrations for the longitudinal axis.

The fine down feed control can be locked firmly in position when milling and the mill also features an easy-to-read depth stop.

Optional power feed provides smooth variable speed drive to longitudinal travel

### Features

- Quiet B section belt drive system
- Milling head rotates 360° on column
- Extra large 820 x 240mm ground work table with T-slots
- Adjustable leadscrew nuts eliminating backlash on both axis
- Fine feed hand wheel operating quill feed

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- Forward and reverse on/off switch with emergency stop
- 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 locks on both axis
- Metric dial graduations @ 0.05mm for X & Y axis
- Optional power feed fits straight on the table

### Includes

- Drill chuck
- 3MT arbor
- 3MT-2MT drill sleeve
- Face cutter & arbor
- 3" tilting vice
- Safety cutter guard
- 1/2" x 12tpi whitworth drawbar

### Specific Features



Right View



Front View



Left View



Rear View



Side View Head Fully Raised



Side View Head Fully Lowered



Top of Belt Guard



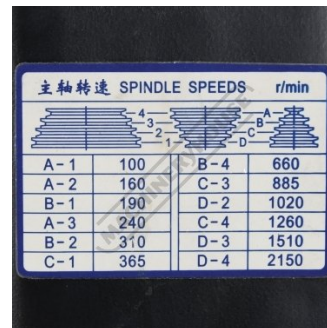
Pulley Guard Opens at Any Head Height



B Section Belt Drive System



Safety Micro Switch on Belt Guard



主轴转速 SPINDLE SPEEDS r/min			
A-1	100	B-4	660
A-2	160	C-3	885
B-1	190	D-2	1020
A-3	240	C-4	1260
B-2	310	D-3	1510
C-1	365	D-4	2150

Spindle Speed Chart



Drawbar Access

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Locking Nuts for Head and Motor Tension Lock



Quill Handle



Fine Feed Quill Handwheel and Quill Lock Lever



Quill Spring Return



75mm Quill Diameter



Quill Depth Scale



Safety Chuck Guard



Forward and Reverse Switch and Emergency Stop Button



On Off Switch



Rack and Pinion Wind Up Head



Rear Slide Cover



Worktable



Adjustable Table Length Stops



Table Locks on Both Axis



Table Cross Feed Handle



Table Longitudinal Handle

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Fold In Handles



Included Accessories



Shown with Optional Stand M135A

**Recommended Accessories**

D695

3-Axis Optimum Digital Readout Counter - 1µm

D694

1500mm Optimum Magnetic Digital Readout Scale

D5210

220mm Sino 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



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**C922B**  
Collet & Chuck Set - 8 Piece



**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



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**L065**  
KYOCERA Carbide Inserts -  
Milling



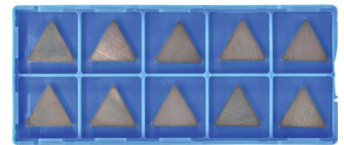
**M528**  
Face Mill 90° - Positive Rake



**M529**  
Face Mill 90° - Positive Rake



**L066**  
KYOCERA Carbide Inserts -  
Milling



**D1171**  
Metric Industrial HSS Reduced  
Shank Drill Set



**D1181**  
Imperial Industrial HSS Reduced  
Shank Drill Set



**D117**  
Metric HSS Reduced Shank Drill  
Set



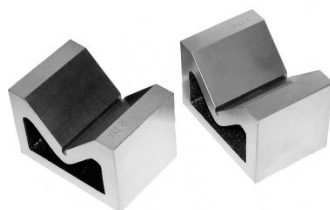
**D119**  
Metric 2MT HSS Drill Set



**D122**  
Metric Precision 2MT Morse  
Taper Drill Set - 10 Piece



**V004**  
Cast Iron Vee Block



**V105**  
Vertex K-Type Milling Vice



**R006**  
Vertex Rotary Table



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**P235**  
Coolant Pump & Tank



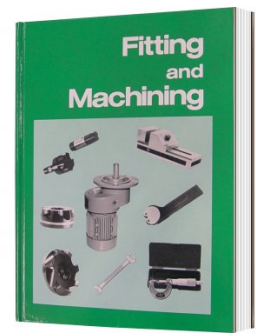
**S090A**  
Soluble Metal Cutting Fluid - 1 Litre



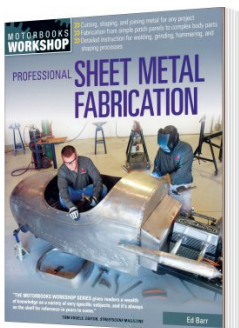
**S090**  
Soluble Metal Cutting Fluid - 5 Litre



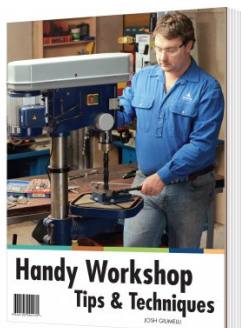
**L341**  
Fitting and Machining Technical Book



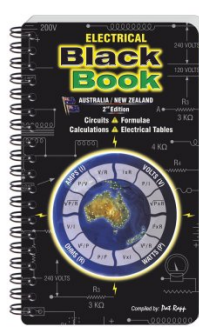
**L3455**  
Professional Sheet Metal Fabrication Book



**L345**  
Handy Workshop Tips & Techniques - 1st Edition



**L342**  
Electrical Black Book



**L300**  
Magnetic Swarf Remover



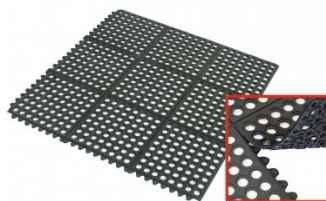
**M9991**  
Magnetic Floor Sweeper



**M800**  
Rubber Mat - Anti-Fatigue



**M805**  
Rubber Mat - Anti-Fatigue



**O043**  
Rust & Corrosion Preventive



Product Brochure For M121

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O042

General Purpose Lubricant &  
Corrosion Inhibitor



O044

Rust & Corrosion Preventive

