

Product Brochure For M160D

## Workshop Turret Milling Machine - HM-50

Table Travel: (X) - 600mm (Y) - 200mm (Z) - 340mm

Includes Digital Readout System, Vice & Collet Chuck System



|  |                        |
|--|------------------------|
| ORDER CODE:                                  | M160D                  |
| MODEL:                                       | HM-50                  |
| Digital Readout:                             | 3-Axis Digital Readout |
| Type:  | Vertical               |
| Table Size (mm):                             | 1000 x 240             |
| Column Type:                                 | ~                      |
| Spindle Taper - Vertical:                    | NT30                   |
| Spindle Taper - Horizontal:                  | ~                      |
| Longitudinal Travel (X-Axis) (mm):           | 600*                   |
| Cross Travel (Y-Axis) (mm):                  | 200*                   |
| Vertical Travel (Z-Axis) (mm):               | 340                    |
| Type of Slides:                              | Dovetail               |
| Ram Travel (mm):                             | 340                    |
| Spindle to Table (mm):                       | 430                    |
| Spindle to Base:                             | ~                      |
| Spindle Travel / Diameter (mm):              | 125 / 90               |
| Throat Depth (max.) (mm):                    | 600                    |
| Tilting Head (Left ~ Right):                 | ±90°                   |
| Tilting Head (Forward ~ Back):               | Fixed                  |
| Drilling Capacity (mm):                      | 30                     |
| End Milling Capacity (mm):                   | 25                     |
| Face Milling Capacity (mm):                  | 80                     |
| Power Feed - Quill (mm/rev):                 | Manual                 |
| Power Feed - Longitudinal (X-Axis) (mm/min): | 20 - 2000              |
| Power Feed - Cross (Y-Axis) (mm/min):        | Optional *             |
| Power Feed - Vertical (Z-Axis) (mm/min):     | Optional *             |
| Table T-Slot Size (inch / mm):               | 14                     |
| Work Table Load Capacity (kg):               | 175                    |
| Spindle Speeds Vertical (No./ rpm):          | 9 (220 - 2400)         |
| 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):                            | 850                    |

### Description

A well-built entry level turret milling / drilling machine with a powerful continuous-load 1.5kW / 2hp motor, intended for trade use. The work table is precision made with adjustable dovetail guides and is recognised for its 600mm X axis by 200mm Y axis travel. There is a three armed handle on the side for drilling also incorporating a fine feed control hand wheel on the front for milling. The screwed belt guard covers on each side of the head offer secure safety whilst providing easy access to the belts and pulleys for speed changing.

Other features include 3 axis digital readout system, taper roller bearing support for the spindle, easy-to-read drilling depth stop, low voltage work light, 150mm machine vice, 8 piece metric collet chuck set, coolant system, X axis power feed unit, drill chuck, 2 & 3 morse taper adaptors. The combination of generous sized vertical support and rugged cast iron construction throughout reduces vibration and guarantees accurate and chatter-free operation.

### Features

- 3 Axis digital readout system
- Mill head tilts to ±90° left to right
- 340mm horizontally sliding and rotating ram
- NT30 vertical spindle is hardened and ground
- Precision-ground dovetail slide-ways and table
- Precision milling table incorporating machined T-slots

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- Rear concertina slide-way cover
  - Forward and reverse on/off switch
  - Fine hand wheel operated quill feed
  - Swarf & splash tray
  - Spindle lock for quill
  - Metric dial graduations @ 0.02mm for X , Y & Z-Axis
  - Vertical quill hand-wheel dial graduations @ 0.05mm
  - All slides utilise dovetail construction for maximum rigidity
- \* Note: X & Y travels maybe reduced due to digital readout scales and safety stops
  - \* Note: Optional Y & Z power feeds require additional parts & fitting (not included)

### Includes

- 3 Axis digital readout system
- X-Axis power feed
- Safety cutter guard
- Swarf tray
- Coolant system
- Halogen lamp
- 150mm machine vice
- Drill chuck & arbor
- 2 & 3MT adaptors
- 8-piece metric collet chuck set (4-16mm)

### Specific Features



Left View



Head Left View



Head Right View



3-Axis Digital Readout System



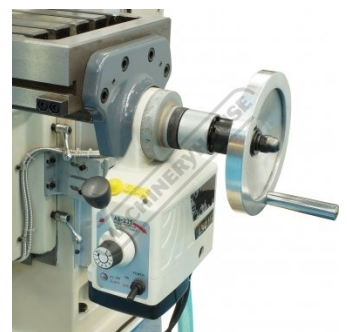
Quill Feed Handle and Fine Feed Dial



Quill Fine Feed Handle

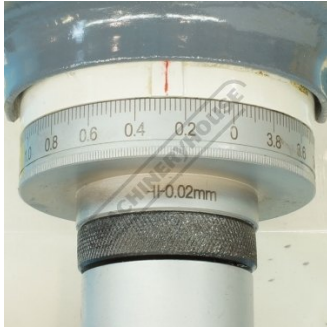


Quill Handle Lock

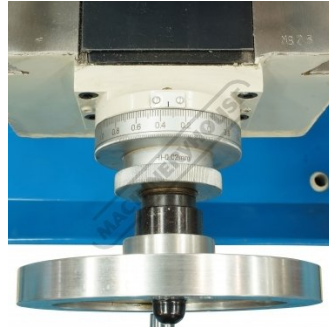


X-Axis Power Feed with Rapid

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X-Axis Dial



Y-Axis Dial



Knee Feed Handle



Knee Feed Dial

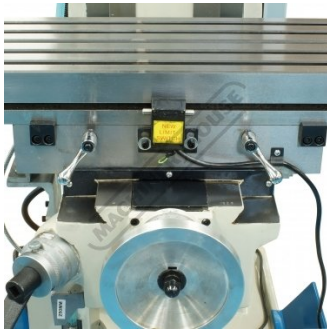


Table Feed Limit Switches

| SPINDLE SPEED (R.P.M) |     |       |      |
|-----------------------|-----|-------|------|
| SPINDLE               |     | MOTOR |      |
| DE                    | 220 | DG    | 760  |
| CE                    | 320 | AF    | 1300 |
| DF                    | 400 | BG    | 1600 |
| BE                    | 500 | AG    | 2400 |
| CF                    | 700 |       |      |

Spindle Speed Chart



Control Panel



Halogen Work Light and Coolant Hose



Coolant System



Concertina Slide Way Cover



Tilting Head Scale



Adjustable Swivel and Sliding Ram



Machine Vice



Accessories Included, 150mm Vice, Metric Collet Chuck Set, Drill Chuck and Arbor, Morse Taper Adaptors

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**Recommended Accessories**

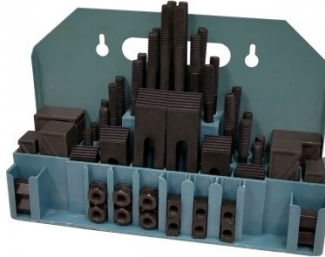
**M229**  
Power Feed Unit



**V106**  
Vertex K-Type Milling Vice



**C0965**  
Clamp Kit 58 piece - Workshop Series



**C9245**  
Collet & Chuck Set - 8 Piece



**C928**  
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



**M530**  
Universal Milling Kit - 4 Piece



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**M540**  
 Face Mill Arbor



**R004**  
 Vertex Super Indexing Head



**R006**  
 Vertex Rotary Table



**M184**  
 Precision Boring Head



**M197**  
 Boring Head Shank



**M182**  
 Precision Boring Head Kit



**M183**  
 Precision Boring Head Kit



**M193**  
 Boring Head Shank



**M250**  
 Parallel Set - 8 Piece



**M252**  
 Parallel Set - 18 Piece



**M243**  
 Angle Plate - Precision Ground



**M242**  
 Angle Plate - Precision Ground

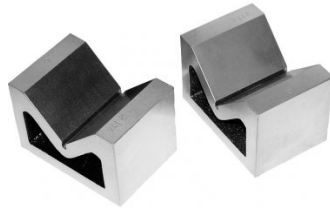


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V010  
 Alloy Steel Vee Block



V006  
 Cast Iron Vee Block



S090A  
 Soluble Metal Cutting Fluid - 1  
 Litre



S090  
 Soluble Metal Cutting Fluid - 5  
 Litre



S076  
 Cutting Tool Lubricant Fluid -  
 500ml



S077  
 Drilling, Tapping & Cutting Tool  
 Lubricant Spray - 400g



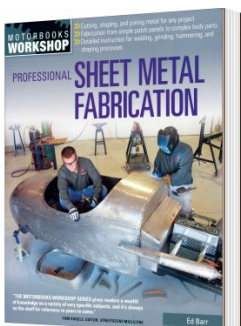
S075  
 Cutting Tool Lubricant Paste -  
 200g



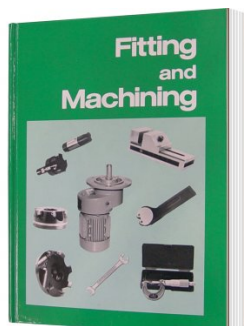
S074  
 Cutting Tool Lubricant Paste -  
 500g



L3455  
 Professional Sheet Metal  
 Fabrication Book



L341  
 Fitting and Machining Technical  
 Book



L300  
 Magnetic Swarf Remover



M9991  
 Magnetic Floor Sweeper

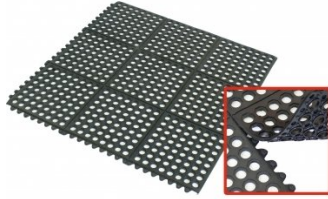


Product Brochure For M160D

**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

