

## Product Brochure For M162D

# Workshop Turret Milling Machine Inverter Variable Speed & Geared Head - Horizontal & Vertical - HM-53GV

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

Includes Digital Readout System, Vice & Collet Chuck System



|                                              |                        |
|----------------------------------------------|------------------------|
| ORDER CODE:                                  | M162D                  |
| MODEL:                                       | HM-53GV                |
| Digital Readout:                             | 3-Axis Digital Readout |
| Type:                                        | Vertical & Horizontal  |
| Table Size (mm):                             | 1000 x 240             |
| Column Type:                                 | ~                      |
| Spindle Taper - Vertical:                    | NT30                   |
| Spindle Taper - Horizontal:                  | NT30                   |
| 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):                             | 500                    |
| Spindle to Table (mm):                       | 375                    |
| Spindle to Base:                             | ~                      |
| Spindle Travel / Diameter (mm):              | 125 / 90               |
| Throat Depth (max.) (mm):                    | 640                    |
| 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):          | Variable (90 - 2000)   |
| Spindle Speeds Horizontal (No./ rpm):        | 9 (60 - 1350)          |
| Spindle Speeds - Universal Head:             | ~                      |
| Motor Power - Vertical Spindle (kW / hp):    | 1.5 / 2                |
| Motor Power - Horizontal Spindle (kW / hp):  | 1.5 / 2                |
| Motor Power - Universal Head:                | ~                      |
| Voltage / Amperage (V / amp):                | 240 / 10               |
| Nett Weight (kg):                            | 1050                   |

## Description

This HM-53GV geared head vertical and horizontal turret milling machine now includes a inverter variable speed drive on the vertical spindle, 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 hi-low geared head selector lever mounted on right side of milling head allows for quick change off speed range.

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, 1" & 1-1/4" horizontal arbors, 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.

### Extra Features:

Swivel table  
 1" & 1-1/4" horizontal arbors

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### Features

- Electronic inverter variable spindle speeds
  - 3 Axis digital readout system
  - Swivel table left & right with graduated scale
  - Mill head tilts to  $\pm 90^\circ$  left to right
  - 500mm horizontally sliding and rotating ram
  - NT30 Horizontal and vertical spindles that are hardened and ground
  - Precision-ground dovetail slide-ways and table
  - Precision milling table incorporating machined T slots
  - Rear concertina slide-way cover
  - Forward and reverse button 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 dial graduations on hand wheel @ 0.05mm
  - All slides utilise dovetail construction for maximum rigidity
  - Includes 1" & 1-1/4" arbors for the horizontal spindle
- \* 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

- Electronic inverter variable spindle speeds
- 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



Mill Head Front View



Mill Head Right View



3 Axis Digital Readout



Vertical Spindle Speed Chart



Variable Spindle Speeds With DRO



Safety Chuck Guard



Quill Fine Adjustment Handle

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Quill Handle



Vertical Spindle High Low Lever



Horizontal Spindle



Horizontal Spindle Control Panel

| HORIZONTAL SPINDLE SPEED (R.P.M) |    |      |
|----------------------------------|----|------|
| 1                                | AG | 60   |
| 2                                | BG | 140  |
| 3                                | CG | 175  |
| 4                                | AF | 200  |
| 5                                | AE | 240  |
| 6                                | BF | 460  |
| 7                                | CE | 690  |
| 8                                | BD | 1090 |
| 9                                | CD | 1350 |

Horizontal Spindle Speed Chart



Tilting Head Scale



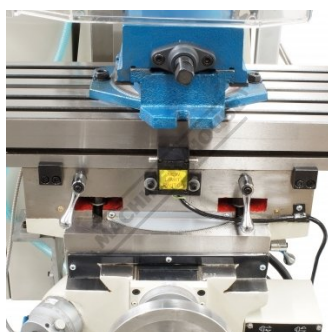
Adjustable Swivel and Sliding Ram



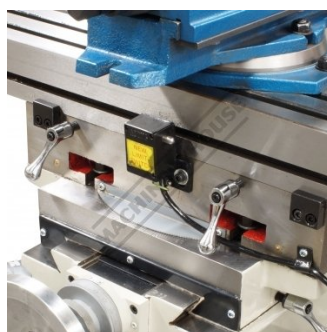
Horizontal Spindle Support



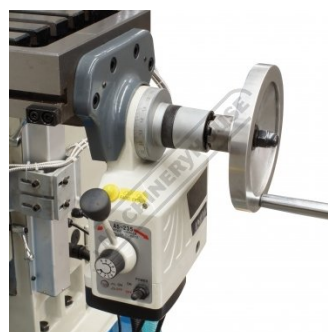
Halogen Work Light and Coolant Hose



Swivel Table



Feed Limit Switches



X Axis Power Feed with Rapid



X Axis Dial



Y Axis Dial



Z Axis Dial



Knee Feed Handle

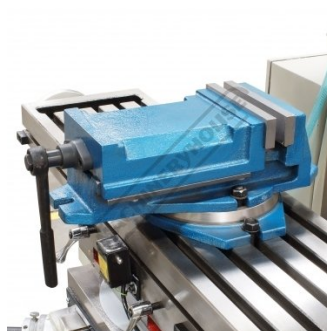
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Coolant Pump



Concertina Slide Way Cover



Shown with Vice Fitted



Included Accessories



Included Horizontal Arbors and Drawbars

## 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



## Product Brochure For M162D

### 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



### 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



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M250

Parallel Set - 8 Piece



M252

Parallel Set - 18 Piece



M243

Angle Plate - Precision Ground



M242

Angle Plate - Precision Ground



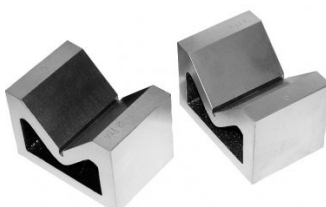
V010

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

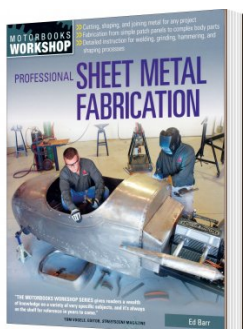
Cutting Tool Lubricant Paste - 500g



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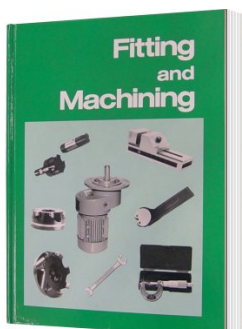
**L3455**

Professional Sheet Metal  
Fabrication Book



**L341**

Fitting and Machining Technical  
Book



**L300**

Magnetic Swarf Remover



**M9991**

Magnetic Floor Sweeper



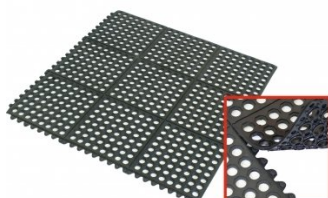
**M800**

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

