

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



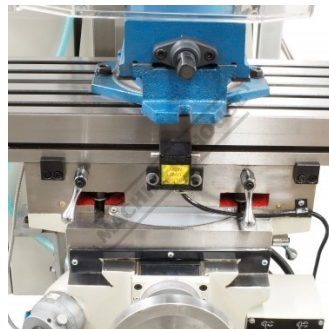
Adjustable Swivel and Sliding Ram



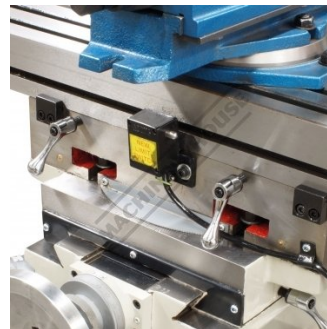
Horizontal Spindle Support



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

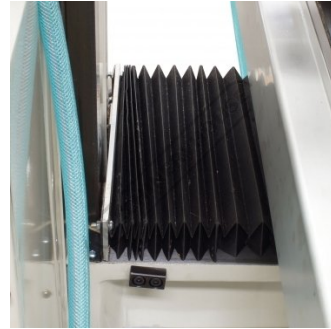


Knee Feed Handle

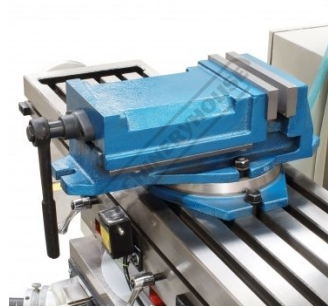
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Coolant Pump



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



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**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



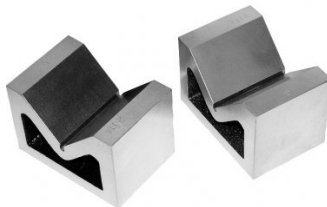
M242  
Angle Plate - Precision Ground



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



S074  
Cutting Tool Lubricant Paste - 500g

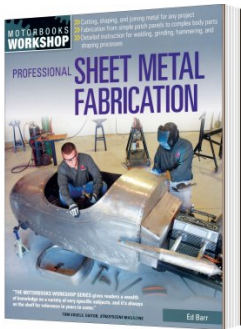


L345  
Handy Workshop Tips & Techniques - 1st Edition

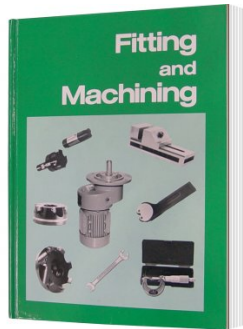


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L3455  
Professional Sheet Metal  
Fabrication Book



L341  
Fitting and Machining Technical  
Book



L300  
Magnetic Swarf Remover



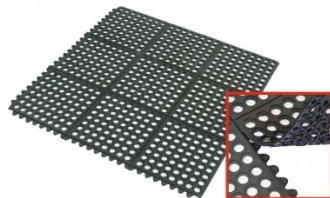
M9991  
Magnetic Floor Sweeper



M800  
Rubber Mat - Anti-Fatigue



M805  
Rubber Mat - Anti-Fatigue



O043  
Rust & Corrosion Preventive



O042  
General Purpose Lubricant &  
Corrosion Inhibitor



O044  
Rust & Corrosion Preventive

