

Product Brochure For M161D

Workshop Turret Milling Machine - Horizontal - Vertical - HM-52

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

Includes Digital Readout System, Vice & Collet Chuck System



ORDER CODE:	M161D
MODEL:	HM-52
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):	9 (220 - 2400)
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

A well-built entry level turret milling vertical and horizontal, 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, 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

Features

- 3 Axis digital readout system
- Swivel table left & right with graduated scale

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- 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 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 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

- 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



3 Axis Digital Readout System



Head Front View



Head Right View



Head Left View



Safety Cutter Guard



Tilting Head Scale

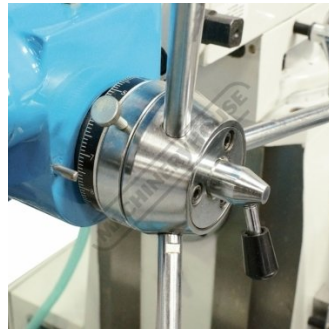


Adjustable Swivel and Sliding Ram

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Quill Feed Handle and Fine Feed Dial



Quill Handle



Quill Fine Adjuster Handle



Control Panel



Quill Lock Handle

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



Horizontal Spindle

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

Horizontal Spindle Speed Chart



Horizontal Spindle Switch



Machine Vice



Swivel Table and Feed Limit Switches



Y Axis Dial



X Axis Power Feed with Rapid



X Axis Dial



Knee Feed Handle

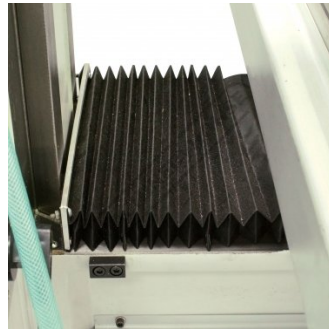


Knee Feed Dial

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Worklight and Coolant Hose



Concentina Slide Way Cover



Coolant System



Horizontal Spindle Support



Includes Horizontal Arbors



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

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



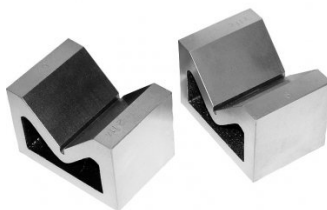
M242
Angle Plate - Precision Ground



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



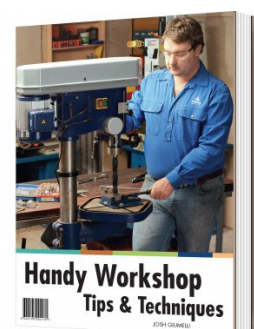
S077
Drilling, Tapping & Cutting Tool Lubricant Spray - 400g



S074
Cutting Tool Lubricant Paste - 500g

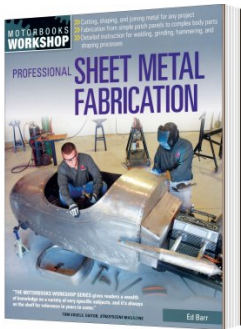


L345
Handy Workshop Tips & Techniques - 1st Edition

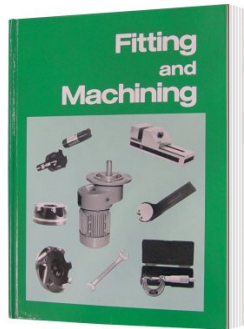


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L3455
Professional Sheet Metal
Fabrication Book



L341
Fitting and Machining Technical
Book



L300
Magnetic Swarf Remover



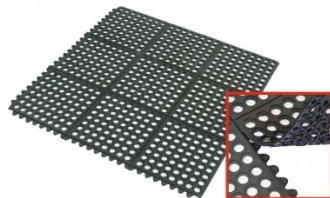
M9991
Magnetic Floor Sweeper



M800
Rubber Mat - Anti-Fatigue



M805
Rubber Mat - Anti-Fatigue



O043
Rust & Corrosion Preventive



O042
General Purpose Lubricant &
Corrosion Inhibitor



O044
Rust & Corrosion Preventive

