

Product Brochure For M163S

Workshop Turret Milling Machine Geared Head Horizontal - Vertical - HM-52G

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



ORDER CODE:	M163S
MODEL:	HM-52G
Digital Readout:	Optional
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):	~
End Milling Capacity (mm):	~
Face Milling Capacity (mm):	~
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):	8 (115 - 1750)
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):	415
Nett Weight (kg):	1050

Description

A well-built entry level geared head, 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. Two levers mounted on right side of milling head enables quick change off the geared spindle speeds.

Other features include taper roller bearing support for the spindle, easy-to-read drilling depth stop, low voltage work light, 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.

Extra Features:
 New design pendant control
 Swivel table
 2 Arbors for the horizontal spindle

Features

- Pendant control on swivelling arm
- Swivel table & two arbors for the horizontal spindle
- Mill head tilts to ±90° left to right

Product Brochure For M163S

- 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

- * 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

- X-Axis power-feed
- Safety cutter guard
- Swarf tray
- Coolant system
- Halogen lamp
- Drill chuck & arbor
- 2 & 3MT adaptors
- 8-piece metric collet chuck set (4-16mm)
- 2 Arbors for the horizontal spindle

Specific Features



Control Panel



Right View



Horizontal Setup

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 Speed Spindle Chart



Horizontal Spindle



Horizontal Spindle Support



Horizontal Milling Setup

SPINDLE SPEED (R.P.M) 50HZ		
	LOW SPEED	HIGH SPEED
BC	115	230
AC	290	580
BD	360	720
AD	875	1750

Speed Chart

Product Brochure For M163S

Recommended Accessories

M229
Power Feed Unit



L300
Magnetic Swarf Remover



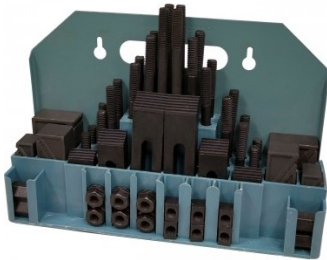
M9991
Magnetic Floor Sweeper



V106
Vertex K-Type Milling Vice



C0965
Clamp Kit 58 piece - Workshop Series



M540
Face Mill Arbor



M530
Universal Milling Kit - 4 Piece



M3301
Metric HSS Slot Drill & End Mill Set - 10 Piece

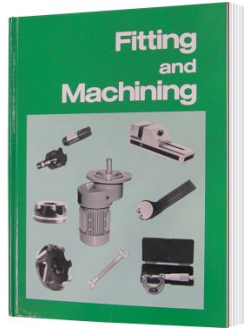


Product Brochure For M163S

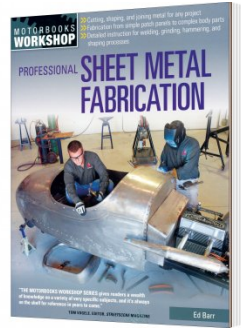
M3321
 Imperial HSS Slot Drill & End Mill Set - 10 Piece



L341
 Fitting and Machining Technical Book



L3455
 Professional Sheet Metal Fabrication Book



R004
 Vertex Super Indexing Head



R006
 Vertex Rotary Table



M242
 Angle Plate - Precision Ground



M243
 Angle Plate - Precision Ground



M182
 Precision Boring Head Kit



M183
 Precision Boring Head Kit



M184
 Precision Boring Head



M193
 Boring Head Shank



M197
 Boring Head Shank



Product Brochure For M163S

M250
 Parallel Set - 8 Piece



M252
 Parallel Set - 18 Piece



M180
 Boring Bar Set - 9 piece



M181
 Boring Bar Set - 12 piece



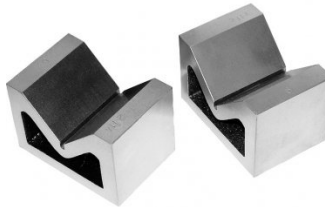
V010
 Alloy Steel Vee Block



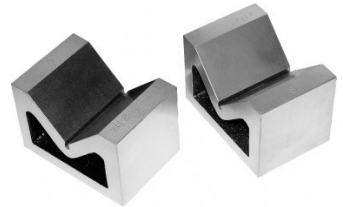
V003
 Cast Iron Vee Block



V004
 Cast Iron Vee Block



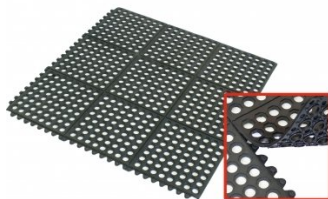
V006
 Cast Iron Vee Block



M800
 Rubber Mat - Anti-Fatigue



M805
 Rubber Mat - Anti-Fatigue



S090A
 Soluble Metal Cutting Fluid - 1 Litre



S090
 Soluble Metal Cutting Fluid - 5 Litre



Product Brochure For M163S

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



O000

SpillFix Universal Organic Absorbent



O043

Rust & Corrosion Preventive



O042

General Purpose Lubricant & Corrosion Inhibitor



O040

Rust & Corrosion Preventive



O044

Rust & Corrosion Preventive

