

### Optimum MH 20V/22V/22VD Milling/Drilling



A well engineered range of compact manual milling machines for bench-mounting (or floor-standing models with the optional base cabinets). These are all sturdy machines, capable of heavy cuts to a high precision. The MV20V is a compact machine with an MT2 spindle and electronic speed control as standard. The MH22V has a significantly larger machining envelope and a BT20 spindle for increased rigidity. The MH22VD adds a full digital readout on all three axes. These machines are an ideal choice for most schools.

The education versions of these machines, supplied by TechSoft, include all necessary guards, stops and interlocks to make them suitable for educational use.

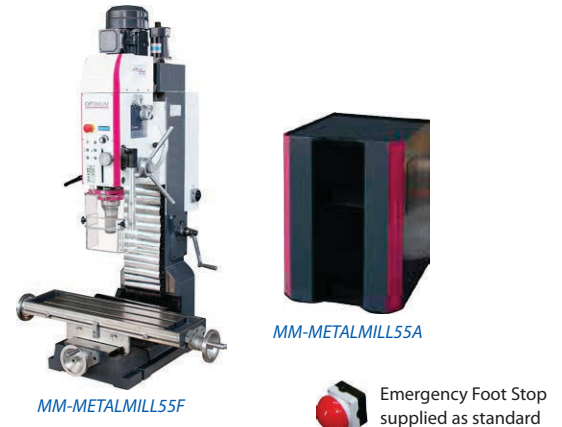
Specification	MH20V	MH22V/VD
Axis Travel:	210 x 175 x 210mm	480 x 175 x 370mm
Table Size:	500 x 180mm	700 x 180mm
Spindle Speeds:	100 - 3000rpm	90 - 3000rpm
Spindle Taper:	2MT	BT20
Motor:	0.75kW	0.95kW
Weight:	94kg	120kg
Dimensions:	650(W) x 750(D) x 820(H)mm	850(W) x 750(D) x 950(H)mm
Power Requirements:	240V 0.75kW Lockable rotary isolator	240V 0.95kW Lockable rotary isolator
Warranty:	UK Mainland: 1 Year On-Site Elsewhere: 1 Year Return and Collect	

#### Standard Accessories:

Digital Quill Readout, Interlocked Cutter Guard, Work Table Illumination

Prices £*		*See Pricing Information on page 2
<b>MM-METALMILL50F</b>	Optimum MH20V Vario Bench Milling/Drilling Machine (1 phase) + Emergency Footstop	
<b>MM-METALMILL51F</b>	Optimum MH22V Variable Speed Bench Milling/Drilling Machine (1 phase) + Emergency Footstop	
<b>MM-METALMILL52F</b>	Optimum MH22VD Variable Speed Bench Milling/Drilling Machine with Dro (1 phase) + Emergency Footstop	
<b>MM-METALMILL50A</b>	Stand for MM-METALMILL50/51/52 c/w Swarf Tray	
<b>Recommended Tooling Pack:</b> This Tooling Pack provides a useful selection of tools and accessories to "get you going".		
<b>MT-MM-PK71</b>	Tooling Pack for MM-METALMILL50 (MH20) (Includes swivel base 100mm milling vice, collet set ER-25 2MT with 15 collets, set of 10 end mills and 10 slot drills, keyed drill chuck and arbor)	
<b>MT-MM-PK78</b>	Tooling Pack for MM-METALMILL51/2 (MH22V/MH22VD) (Includes Swivel Base 100mm milling vice; collet set ER-16 BT20 with 12 collets, 6 slot drills, 7 end mills, 2 pull studs, Keyed Drill Chuck and Arbor)	

### Optimum MH35V/50V Milling/Drilling Machine



These are powerful, rigid machines capable of taking heavy cuts to a high precision. Both machines have an exceptional speed range of 50 - 3,260rpm using a gearbox and a variable speed motor, ideal for operations such as tapping. The MH35V has a rigid BT30 taper and a 1.5kW motor. The MH50V has a larger machining envelope combined with a BT40 taper and a 2.2kW motor. Other features include a digital spindle speed readout and a pivoting head. These machines are ideal for schools wishing to have a versatile machine with the capability to do demanding, heavy duty, yet precision work.

The education versions of these machines, supplied by TechSoft, include all necessary guards, stops and interlocks to make them suitable for educational use.

Specification	MH35V	MH50V
Axis Travel:	450 x 200 x 460mm	520 x 260 x 465mm
Table Size:	750 x 210mm	850 x 240mm
Spindle Speeds:	220 - 3100rpm	50 - 3260rpm
Spindle Taper:	BT30	BT40
Motor:	1.5kW	2.2kW
Weight:	316kg	525kg
Dimensions:	1030(W) x 850(D) x 1340(H)mm	1020(W) x 1210(D) x 1620(H)mm
Power Requirements:	415V 1.5kW Lockable rotary isolator	
Warranty:	UK Mainland: 1 Year On-Site Elsewhere: 1 Year Return and Collect	

#### Standard Accessories:

Digital Quill Readout, Interlocked Cutter Guard

Prices £*		*See Pricing Information on page 2
<b>MM-METALMILL54F</b>	Optimum MH35V Vario Bench Milling/Drilling Machine (3 phase) + Emergency Footstop	
<b>MM-METALMILL54A</b>	Stand for MM-METALMILL54	
<b>MM-METALMILL55F</b>	Optimum MH50V Vario Bench Milling/Drilling Machine (3 phase) + Emergency Footstop	
<b>MM-METALMILL55A</b>	Stand for MM-METALMILL55	
<b>Recommended Tooling Pack:</b> This Tooling Pack provides a useful selection of tools and accessories to "get you going".		
<b>MT-MM-PK74</b>	Tooling Pack for MM-METALMILL54 (MH35V) (Includes swivel base 100mm milling vice, collet set ER-32 BT30 with 18 collets, set of 10 end mills and 10 slot drills, keyed drill chuck and arbor)	
<b>MT-MM-PK75</b>	Tooling Pack for MM-METALMILL55 (MH50V) (Includes swivel base 100mm milling vice, collet set ER-32 BT40 with 18 collets, set of 10 end mills and 10 slot drills, keyed drill chuck and arbor)	

### ETM-2VS/3VS Turret Mill



Emergency Foot Stop  
supplied as standard

This industry standard style of full size turret mill comes complete with all the bells and whistles. A huge table size, 3 axis digital readout, power feed to ALL three axes, 3hp variable speed head, power feed to the quill, built-in coolant, etc. With all this capability, there is no compromise on quality as the machine is precision manufactured using meehanite castings and has hardened bed ways for much longer service life. This outstanding vertical milling machine will undoubtedly provide everything that a school or college could reasonably ask for at a very competitive price.

The education versions of these machines, supplied by TechSoft, include all necessary guards, stops and interlocks to make them suitable for educational use.

Specification	ETM-2VS	ETM-3VS
Axis Travel:	840 x 305 x 350mm	950 x 400 x 400mm
Table Size:	1246 x 230mm	1370 x 254mm
Spindle Speeds:	60-4,200rpm (variable)	70-4200rpm (variable)
Spindle Taper:	R8	
Digital Readout:	3 Axis	
Coolant System:	Inbuilt	
Motor:	2.2kW (3hp)	
Weight:	1,060kg	1,400kg
Dimensions:	1400(W) x 1470(D) x 2030(H) mm	1800(W) x 2010(D) x 2170(H)mm
Power Requirements:	415V 2.2kW, Lockable rotary isolator	
Warranty:	UK Mainland: 1 Year On-Site Elsewhere: 1 Year Return and Collect	

#### Standard Accessories:

3 Axis Digital Readout, In-built Coolant System, X, Y Axis Power Feed, Z Axis Power Feed (ETM-2VS), Electric Rise and Fall on Z Axis (ETM-3VS), Interlocked Cutter Guard, One Shot Central Lubrication System, Machine Light

Prices £*		*See Pricing Information on page 2
<b>MM-METALMILL12F</b>	ETM-2VS Variable Speed Turret Mill (3 phase) + Emergency Footstop	
<b>MM-METALMILL25F</b>	ETM-3VS Variable Speed Turret Mill (3 phase) + Emergency Footstop	
<b>Recommended Tooling Pack</b>		
This Tooling Pack provides a useful selection of tools and accessories to "get you going".		
<b>MT-MM-PK77</b>	Tooling Pack for MM-METALMILL12/25 (ETM-2VS/3VS). (Includes swivel base 150mm machine vice, collet set ER-32 R8 with 6 collets, set of 10 end mills and 10 slot drills, keyed drill chuck and arbor)	