

DRILLING & MILLING MACHINE DM25/DM30

Convincing arguments: quality, efficiency and price

- Very easy to operate
- Head swivels 360
- Head worktable up & down vertically
- Strong iron casting column
- Wide and big table
- Micro feed precision
- Heavy-duty tapered roller bearing Spindle
- Positive spindle lock
- Adjustable gibs on table
- Belt drive, low noise

Optional equipment:

- Halogen lamp
- Coolant pump
- 58pcs clamping tool kit
- Q24-16Milling chuck set (4.5.6.8.10.12.16)
- End milling cutter set(HSS 20pcs)
- Milling vice QG100(100mm)
- Face milling cutter ø63mm/MT3
- Steel stand and chip tray
- X/Y 2-axis DRO
- H/V Precision rotarytable ERT-HV125

Model	DM25	DM30
Code No.	2102500	2103000
Max.drilling capacity(Iron/Steel)	ø25/ø20mm	ø30/ø25mm
Milling capacity cutter head	ø63mm	ø76mm
Milling capacity end mill cutter	ø20mm	ø20mm
Spindle taper	MT3	MT3 or R8
Sleeve travel	120mm	120mm
Spindle speed	100-2080rpm	100-2080rpm
Y-axis travel	168mm	210mm
X-axis travel	370mm	500mm
T-slot size/distance/number	14mm/475mm/3	14mm/630mm/3
Distance spindle-cross table	430mm	440mm
Motor	1.1KW	1.5KW
LxWxH	730×670×1020mm	950×760×1200mm
NW/GW	270/320kg	300/350kg



Stand & chip tray is for optional

DM25/DM30

DRILLING & MILLING MACHINE DMF 40

Convincing arguments: quality, efficiency and price

- Milling drilling, tapping, boring, reaming
- Head swivels 360°
- Head worktable up & down vertically
- Super high column
- High precision cross table
- Micro feed precision
- Heavy-duty tapered roller bearing Spindle
- Positive spindle lock
- Adjustable gibs on table
- Gear drive, lower noise

Model	DMF40
Code No.	2204000
Max.drilling capacity(Iron/Steel)	ø40/ø32mm
Milling capacity cutter head	ø80mm
Milling capacity end mill cutter	ø32mm
Spindle taper	MT3 MT4 or R8
Sleeve travel	120mm
Spindle speed	75-1600rpm
Tabel(LxW)	600x190mm(730x210 optional)
Y-axis travel	280mm
X-axis travel	500mm
T-slot size/distance/number	14mm/630mm/3
Distance spindle-cross table	630mm
Motor	1.5KW
LxWxH	830×760×1885mm
NW/GW	340/390kg



coolant optional

DMF40

DRILLING & MILLING MACHINE **DM40/DM45/DM45L**



Convincing arguments: quality, efficiency and price

- Milling drilling, tapping, boring, reaming
- Head swivels $\pm 90^\circ$ vertically
- Largely dimensioned table
- Spindle micro feed
- Heavy-duty tapered roller bearing spindle
- Spindle can be locked, headstock power down feed
- Adjustable gibs on table
- Adjustable stops on table
- Gear drive headstock
- Accurate position, good rigidity, big cutting power

Model	DM40	DM45	DM45L
Code No.	2104000	2104500	2104600
Max.drilling capacity(Iron/Steel)	$\varnothing 40/\varnothing 32$ mm	$\varnothing 45/\varnothing 32$ mm	$\varnothing 45/\varnothing 32$ mm
Milling capacity cutter head	$\varnothing 63$ mm	$\varnothing 80$ mm	$\varnothing 80$ mm
Milling capacity end mill cutter	$\varnothing 32$ mm	$\varnothing 32$ mm	$\varnothing 32$ mm
Spindle taper	MT3 or R8 or MT4	MT3 or MT4 or R8	MT3 or MT4 or R8
Spindle travel	120mm	120mm	120mm
Spindle speed	75-1600rpm	75-1600rpm	75-1600rpm
Table(LxW)	730x210mm	800x240mm	1000x240mm
Y-axis travel	230mm	190mm	190mm
X-axis travel	500mm	560mm	760mm
T-slot size/distance/number	14mm/575mm/3	14mm/630mm/3	14mm/840mm/3
Motor	1.5KW	1.5KW	1.5KW
LxWxH	820x760x1150mm	1015x1015x1425mm	1200x760x1150mm
NW/GW	270/300kg	312/378kg	375/400kg

MILLING

DRILLING & MILLING MACHINE **DH40CT/DH40CTV**

OPTIMUM[®]
MASCHINEN - GERMANY

Model	DH40CT	DH40CTV
Code No.	2214000	2514000
Max.drilling capacity(Iron/Steel)	$\varnothing 40/\varnothing 32$ mm	$\varnothing 40/\varnothing 32$ mm
Face mill capacity	76mm	76mm
End mill capacity	25mm	25mm
Working table size	730mm×210mm	730mm×210mm
Working table cross travel	490mm ×180mm	490mm ×180mm
Dimension of base	670mm×470mm	670mm×470mm
distance spindle to column	278mm	278mm
T-slot size	3-14×63mm	3-14×63mm
Spindle taper(option)	MT3 or MT4 R8 or ISO30	MT3 or MT4 R8 or ISO30
Max distance spindle to table	600mm	600mm
Max distance nose to base	1180mm	1180mm
Spindle travel	120mm	120mm
Packing dimension	950×760×1885mm	1000×760×1970mm
NW/GW Weight	360/390Kg	360/390Kg



DRILLING & MILLING MACHINE MB4P/MB4PV



Standard Accessories:

- 3-axis magnetic
- X-axis power feed
- Draw bar
- Drill chuck 1-13mm/B16
- Morse taper MT4/B16
- LED lamp
- Coolant pump

Optional equipment:

- 58pcs clamping tool kit M12x1.75
- Milling chuck set (8pcs/set) size 4-16mm
- End milling cutter set(HSS 20pcs)
- Milling vice QG125
- Face milling cutter ø63mm/MT3(or MT4)
- H/V Precision rotary table ERT-HV150
- X-axis power feeder

Model	MB4P	MB4PV
Code No.	2204580	2504580
Drilling capacity(max.)	Φ45	Φ45
Milling capacity cutter head(max.)	Φ80	Φ80
Milling capacity end mill cutter(max.)	Φ32	Φ32
Spindle holding fixture	MT4 orR8	MT4 orR8
Spindle speed	95-3200RPM	60-2760RPM
Tabel(L×W)	800x240mm	800x240mm
X-axis travel	560mm	560mm
Y-axis travel	230mm	230mm
Z-axis travel	350mm	350mm
T-slot size/distance/number	14mm/ 80 mm /3	14mm/ 80 mm /3
Motor	1.5KW/1.1KW	1.5KW/230V/50HZ
packing size(L×W×H)	950x1240x2160mm	1240x930x2050mm
Net weight/Gross weight	515/590kg	480/530kg



MB4P/MB4PV

DRILL & MILL MACHINE BF16 V



Variable speed

Convincing arguments: quality, efficiency and price

- Two-step gear multiplication
- With dynamic infinitely variable drive from 100 to 3,000 rpm
- Drill-mill head is inclinable to any direction by 90° and thus allows milling and drilling operations at any angle position
- User-friendly safety switch for IP 54 with low-voltage release
- Tool holding fixture MT2
- High concentricity precision due to taper roller bearings less than 0.015 mm measured in the spindle sleeve
- Stable and precise dovetail control adjustable via V-ledges on all 3 axes
- Clean cut surface of milled work by individually clampable cheeks
- Height-adjustable screening grid
- All travels are readable from scales

Model	BF16 V
Code No.	2501600
Drilling capacity(max.)	Ø16mm
Milling capacity cutter head(max.)	Ø50mm
Milling capacity end mill cutter(max.)	Ø16mm
Spindle holding fixture	MT2/M10
Z-axis travel	210mm
T-slot size/distance/number	10mm / 35mm / 3
Motor	500W
packing size(L×W×H)	483x444x857mm
Net weight/Gross weight	62/78kg



BF16 V

DRILL & MILL MACHINE **BF20V/BF20LV**

OPTIMUM
MASCHINEN - GERMANY

Variable speed

Convincing arguments: quality, efficiency and price

- Spindle sleeve feed via star grip (drilling)
- Fine crossfeed of spindle sleeve when milling
- Feed spindles can be adjusted without clearance due to adjustable spindle nuts
- Stable and precise dovetail control adjustable with V-ledges
- Expansion bellow as guide protection
- All travels speed are readable on scales
- The drill head can be inclined by $\pm 90^\circ$, thus permitting milling and drilling operations at any angular position
- Accurate infeed by positioning graduated collar on any handwheels

Model	BF20 V	BF20L V
Code No.	2502000	2502100
Drilling capacity(max.)	Ø20mm	Ø20mm
Milling capacity cutter head(max.)	Ø63mm	Ø63mm
Milling capacity end mill cutter(max.)	Ø20mm	Ø20mm
Spindle holding fixture	MT2/M10	MT2/M10
Gear stages	L:90-1480 rpm H:150-3000 rpm	L:90-1480 rpm H:150-3000 rpm
Tabel(L×W)	500×180mm	700×180mm
X/Y/Z-axis travel	280/175/280mm	480/175/280mm
T-slot size/distance/number	12mm/63mm/3	12mm/63mm/3
Motor	850W	850W
packing size(L×W×H)	606x554x917mm	770x714x917mm
Net weight/Gross weight	103/130kg	112/139kg



BF20V/BF20LV

MILLING

DRILLING&MILLING HEAD **BF20AV**

Model	BF20 AV
Code no.	2502055
Motor	850W 230 V / 1 Ph ~50 Hz
Drilling capacity in steel (S235JR)	Ø20 mm
Continuous drilling cap. steel (S235JR)	Ø18 mm
Sleeve diameter	Ø60 mm
Spindle seat	MT2 / M10
Swivel range	$\pm 90^\circ$
Spindle speeds	L:90~1480 rpm H:150~3000rpm
Length x width x height max.	825x530x570mm
Net weight / Gross weight	67/84 kg



BF20AV

DRILL & MILL MACHINE BF30V/BF46V

OPTIMUM
MASCHINEN · GERMANY

Variable speed



Convincing arguments: quality, efficiency and price

- Heavy solid casting
- High concentricity precision due to taper roller bearings
- Gearhead ± 45° rotatable
- Solid dovetail slideway, hand-scraped, provides for highest stability and optimum precision
- Optional, solid, heavy substructure provides for stability and vibration-free working
- Drill depth stop
- Threading mode
- Automatic mode
- CNC prepared

Model	BF30 V	BF46 V
Code No.	2503000	2504600
Drilling capacity(max.)	Ø35mm	Ø45mm
Milling capacity cutter head(max.)	Ø75mm	Ø80mm
Milling capacity end mill cutter(max.)	Ø30mm	Ø32mm
Spindle holding fixture	MT3/SK30	MT4/SK40
Gear stages	L:100-1100rpm M:160-1700rpm H:320-3100rpm	L:115-600rpm M:270-1400rpm H:590-3100rpm
Tabel(L×W)	750x210mm	850x240mm
X/Y/Zaxis travel	450/200/470mm	500/260/540mm
T-slot size/distance/number	12mm / 63mm / 3	18mm / 80mm / 3
Motor	2.2KW DC brushless motor	2.2KW DC brushless motor
packing size(L×W×H)	844x844x1342mm	904x904x1535mm
Net weight/Gross weight	266/318kg	426/492kg



• Stand & chip tray is for optional

BF30V/BF46V

DRILLING & MILLING MACHINE BF50 TC

Convincing arguments: quality, efficiency and price

- High concentricity precision due to taper roller bearings, higher than 0.015 mm measured in the spindle sleeve
- Gearhead ± 60° slewable
- Solid dovetail slideway of the gearhead provides for highest stability and optimum precision
- Optional, solid, heavy steel substructure provides for stability
- CNC prepared
- Central lubricating for spindle, screw nut and slideways
- For tool changer, Z-axis power feed

Model	BF50 TC
Code No.	2505000
Drilling capacity(max.)	Ø45mm
Milling capacity cutter head(max.)	Ø80mm
Milling capacity end mill cutter(max.)	Ø32mm
Spindle holding fixture	SK40/MT4
Gear stages speed	L:115-600rpm M:270-1400rpm H:590-3100rpm
Tabel(L×W)	850x240mm
X/Y/Z-axis travel	500/260/540mm
T-slot size/distance/number	18mm / 80mm / 3
Motor	2.2KW DC brushless motor
Packing size(L×W×H)	1210x950x1320mm
Net weight/Gross weight	480/525kg

Details



•Lubricant pump



•Pneumatic tool changer



•Z-axis power feed



BF50 TC

DRILLING & MILLING MACHINE MH12V/MH20V/MH22V

OPTIMUM
MASCHINEN · GERMANY

Variable speed

VARIO SELECT

Model	MH 12V	MH 20V	MH 22V
Code No.	2501200	2501800	2502200
Motor power	450W	750W	950W
Milling head dimension max.	Ø50mm	Ø63mm	Ø63mm
End mill dimension max.	Ø16mm	Ø20mm	Ø20mm
Spindle stroke	60mm	50mm	50mm
Spindle sleeve diameter	Ø52mm	Ø60mm	Ø60mm
Spindle speed	80-2500 rpm	100-3000 rpm	90-3000 rpm
Spindle seat	MT2	MT2	BT20
Table length x table width	390x100mm	400x120mm	676x180mm
T-slot size /distance	10mm/30mm	10mm/35mm	12mm/63mm
Distance spindle - cross table	260mm	280mm	370mm
Travel X /Y/Zaxis	240/100/200mm	220/160/210mm	480/175/370mm
Length x width x height	480x440x850mm	636x499x857mm	770x700x917mm
Net weight/Brut weight	52/76kg	70/90kg	116/143kg



MILLING

DRILLING & MILLING MACHINE MH25V/MH25SV

OPTIMUM
MASCHINEN · GERMANY

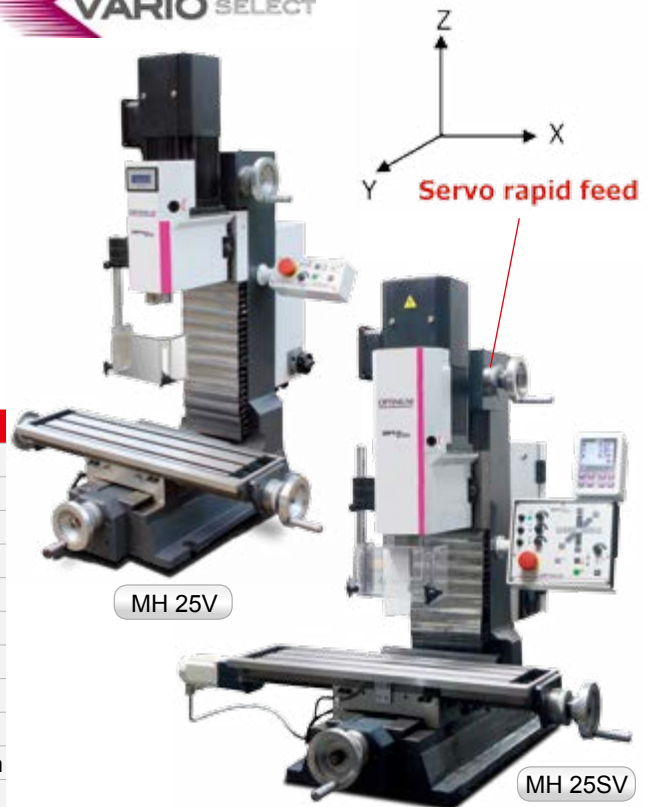
Variable speed

VARIO SELECT

Convincing arguments: quality, efficiency and price

- Counterweight eases the adjustment of the Z axis
- Easy tool change by using a rocker arm
- Feed spindles adjustable by readjustable spindle nuts
- All guideways are ground and sight scrapped (oil pockets for greasing)
- Angular contact bearings in the axis, can be adjusted free of play
- Drilling-milling head slewable by $\pm 45^\circ$
- Right-hand/left-hand rotation
- Height-adjustable screening grid with micro switch
- Stable dovetail guiding precision ground and scraped with re-adjustable V-ledges
- MH 25SV:
 - Infininitely variable feed in all axis
 - Rapid feed X-/Y-axis for rapid positioning
 - Digital speed display DRO 5

Model	MH25V	MH25SV
Code no.	2502500	2502600
Motor power	1.5KW	1.5KW
Face milling dimension max.	Ø 50 mm	Ø 50 mm
End milling dimension max.	Ø 25 mm	Ø 25 mm
Spindle speed	200-4000 rpm	200-4000 rpm
Table length	620mm	620mm
Table width	180mm	180mm
T-slot size	12mm	12mm
X/Y/Z axis	400/210/270mm	400/210/270mm
Lengthxwidthxheight	914x844x1119mm	914x844x1119mm
N.W./G.W.	192/242kg	200/250kg



DRILLING & MILLING MACHINE MH 28V

Convincing arguments: quality, efficiency and price

- Solid dovetail guideway of the gearhead provides for highest stability and optimum precision
- EMC filter
- The machines are equipped with 2-rowed angular ball bearings in the axes allowing to adjust them free of play
- It is possible to switch the machine on and off using the optional CNC controller via an integrated relay control
- Bellow as guide protection
- Drilling milling head tiltable by $\pm 90^\circ$ for milling and drilling works at different angles
- Height-adjustable protective screen with micro switch providing maximum



Model	MH 28 V
Code no.	2502800
Motor	1.1 kW 230V / 1 Ph ~50Hz
Drilling capacity in steel (S235JR)	Ø 28 mm
Continuous drilling cap. steel (S235JR)	Ø25 mm
Throat	Ø70 mm
Spindle speeds	100 - 2500 rpm
Table length	730 mm
Table width	210 mm
T-slot size	14 mm
Length x width x height max.	940x730x1140mm
NW./GW.	205/240 kg



DRILLING & MILLING MACHINE MH 35G/35V/50G/50V



Convincing arguments: quality, efficiency and price

- Heavy, solid cast iron construction
- Variable speed 120~3600 rpm
- Right-hand/left-hand rotation
- Gear head slewable by $\pm 60^\circ$
- Adjustable V-ledges
- Drill depth stop

Model	MH35G / MH35V	MH50G / MH50V
Code no.	2703500/2503500	2705000/2705100
Motor power	1.1/1.5KW / 1.5KW	1.5/2.2KW / 2.2KW
Face milling dimension max.	Ø 80 mm	Ø 63 mm
End milling dimension max.	Ø 28 mm	Ø 32 mm
Spindle stroke	90mm	115mm
Spindle speed	330-3000 rpm / 120-3600 rpm	330-3000 rpm / 120-3600 rpm
Table length×width	750×240mm	850×240mm
T-slot size	12mm	18mm
X/Y/Z axis	450/200/460 mm	500/260/540 mm
Length×width×height	864×844×1577mm	924×964×1809mm
N.W./G.W.	316/376kg / 306/366kg	525/595kg / 515/585kg

