

## DRILLING & MILLING MACHINE MFI V

### Convincing arguments: quality, efficiency and price

- Heavy, solid type made of high-grade Meehanite casting
- All axes with adjustable dovetail guide
- High true running accuracy due to taper roller bearings of less than 0.01 mm measured in the spindle sleeve
- Automatic spindle sleeve feed
- Central lubricating for spindle, screw nut and guideways
- Milling head can be slewn to the left and right by 90°
- Spindle head support slewable by ± 90°

Model	MF 1 V
Code no.	2310080
Motor	2.2 kW
Milling head dimension max.	Ø 63 mm
End mill dimension max.	Ø 20 mm
Spindle stroke	127 mm
Spindle seat	ISO 40 DIN 2080
Spindle speed	50 - 6300 min <sup>-1</sup>
Automatic spindle sleeve feed	0.04 / 0.08 / 0.16 mm/rev
Table length x table width	915 x 200 mm
T-slot size /distance	16 mm / 64 mm / number 3
Travel X/Y/Z axis	570/210/365 mm
Length x width x height	1350 x 1050 x 2015 mm
Total weight	850 kg



MILLING

## DRILLING & MILLING MACHINE MT2BV

### Convincing arguments: quality, efficiency and price

- Variable drive for stepsless vario speed
- Solid rectangular guideways for Z-axis
- All axes with adjustable dovetail guideway
- Adjustable drill depth stop with millimeter scale
- High true running accuracy due to taper roller bearings, better than 0.01 mm measured in the spindle sleeve
- Main switch with motor protection, emergency-stop push button
- Automatic spindle sleeve feed
- Right-/left handed rotation for tapping

Model	MT2BV
Code no.	2320080
Motor cooling pump	40 W
Drilling capacity in steel (S235JR)	Ø 18 mm
Milling head dimension max.	Ø 75 mm
End mill dimension max.	Ø 20 mm
Spindle taper	ISO 40 (DIN 2080)
Spindle speed	60 - 4200 rpm
Table length x Table width	1245 x 230 mm
Slot size /Distance	16 mm/63 mm/3
Load of cross table (max.)	350 kg
Travel X/Y/Z-axis automatic	730/320/390 mm
LengthxWidthxHeight	1660x1800x2040 mm
N.W./G.W.	1100 /1280kg

### Details



Control panel  
• Inclunable to both sides of the machine



X-axis power feed  
• with infinitely variable speed adjustment



variable speed  
• Mechanical step-less driver  
• Spindle speed 60 - 4200 rpm



## VERTICAL & HORIZONTAL DRILLING & MILLING MACHINE **MT 50/50V/50E**

### Convincing arguments: quality, efficiency and price

- Heavy, compact model made of high-grade vibration absorbing cast iron
- Spindle sleeve feed operating handle (drilling) or with fine feed handwheel to manual fine feed
- For operations in horizontal milling position with counter support and support for side milling cutters, adjustable slide bearing
- For operations in vertical milling position with drilling, Inclined drilling and at the most milling operations

#### Details



Horizontal milling position



Table power feeder



Housing cross table

Model	MT50	MT50V	MT50E
Code No.	2205000	2205100	2705000
Total connected value	4.5kW 400V~50Hz or 230V~50Hz	4.5kW 400V~50Hz or 230V~50Hz	0.85/1.5 kW 50Hz
Spindle stroke	120 mm	120 mm	120 mm
Drilling capacity in steel (S235JR)	Ø 50 mm	Ø 50 mm	Ø 30 mm
Continuous drilling cap. steel (S235JR)	Ø 40 mm	Ø 40 mm	Ø 25 mm
Throat	Ø 90 mm	Ø 90 mm	Ø 90 mm
Spindle speed(vertical)	115-1750 rpm	100-600/350-2000rpm	115-1750 rpm
Spindle speed(horizontal)	60 - 1355 rpm	60 - 1355 rpm	/
Table length x Width	1000x240mm <b>1200x240mm</b> <b>(For optional)</b>	1000x240mm <b>1200x240mm</b> <b>(For optional)</b>	1000x240mm
T-slot size	14 mm	14 mm	14 mm
X/Y/Z-axis Travel	390/200/340mm	390/200/340mm	600/230/350mm
Length x Width x Height	1400x1140x2200mm	1400x1140x2200mm	1380x1220x2100mm
Total weight	900 kg	900 kg	840 kg



MT50/MT50V

MT 50E

## VERTICAL & HORIZONTAL DRILLING & MILLING MACHINE **MT60**

### Standard Accessories included:

- Drill chuck Ø3-Ø16mm/B18
- Taper shank for drilling chuck ISO40/B18
- T-nuts M14x55
- Tilted wedge
- Adjustable sets ISO40-MT3 ; MT3/MT2

Model	MT60
Code No.	2206000
Max.drilling dia	Ø30 mm
Max.end drilling dia	Ø25 mm
Spindle taper	R8 or ISO30 or ISO40
Spindle speed range(50/60Hz)	90-2000/108-2400 (V) 40-1300/48-1560 (H)
Distance between Vertical spindle and surface of column	220-600 mm
Distance between Vertical spindle and surface of table	125-460 mm
Distance between Horizontal spindle and surface of table	35-370(H) mm
Vertical spindle travel	120(V)
Table size	1120X280 /1270X280mm
Table travel	600X260 /750X260mm
Motor	2.2KW
Overall size	1580x1450x2150mm
N.W/G.W	900/1300kg



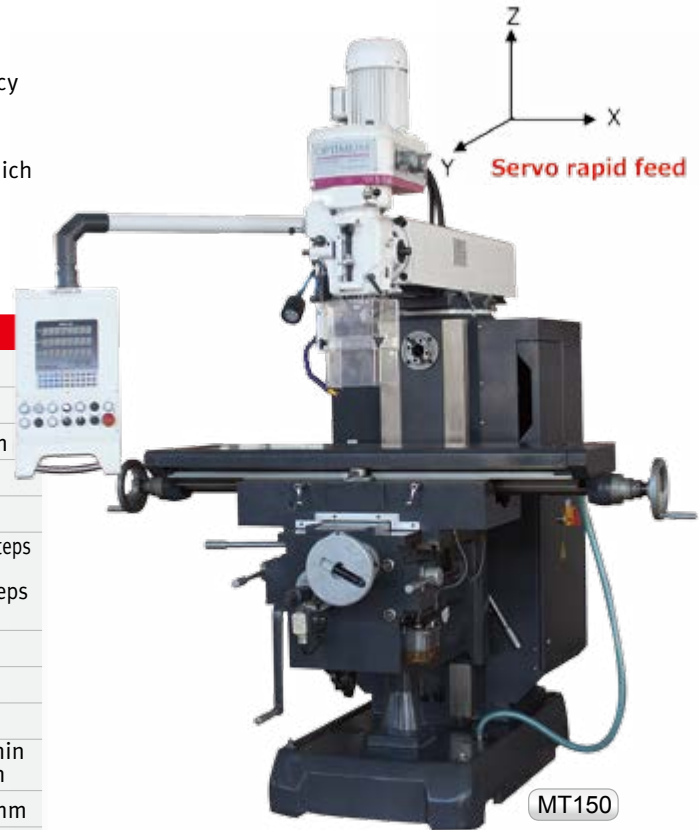
MT60

# VERTICAL & HORIZONTAL DRILLING & MILLING MACHINE **MT150**

**Convincing arguments: quality, efficiency and price**

- X/Y/Z three-axis servo drive and variable speed
- Main drive use gear transmission which has higher efficiency and bigger torque. Main drive has bigger speed range and more wide choice
- New-style control panel, concentrated operation station which is more directly and more easy for operation
- With both vertical and horizontal milling function
- With three-axis coordinate digital display system
- High-quality foundation casting and hardened guide-way

Model	MT150
Code No.	2315000
Working table size	1320×320 mm
Travel of working table (X/Y/Z)	800/290/400mm
T-SOLT size of working table	3/14/95 mm
Spinple seat(V/H)	7:24 ISO40
Spindle speeds 50Hz	Horizontal spindle: 12 steps 38—1310 r.p.m. Vertical spindle: 8 steps 115—1750 r.p.m.
Distance from center of H spindle to working table	40—440 mm
Distance from center of V spindle to working table	170--590 mm
Distance from working table to surfact of column	240--740 mm
Feed speed of working table	X/Y: 25 800 mm/min Z 8-267 mm/min
Dimension	1950×1950×2350 mm
N.W.	2100 kg



MT150

MILLING

# DRILLING & MILLING MACHINE **MT8**

**Details**



Horizontal milling position

**Optional accessories**

- Vice QG150/QG200
- 58pcs mill fixture M16
- mill chuck J7325-ISO40(8pcs)
- Milling chuck set J7325-ISO40(15pcs)

Model	MT8
Code no.	2280000
Total connected value	10 kW 400 V / 3 Ph ~50 Hz
Drilling capacity in steel (S235JR)	Ø 30 mm
Milling head dimension max.	Ø 125 mm
End mill dimension max.	Ø 25 mm
Spindle taper	ISO 40
Spindle speed	60 - 4660 rpm
Spindle taper	ISO 50
Spindle speed	58 - 1800 rpm
Table length x width	1320 x 360 mm
T-slot size / distance / number	18 mm/80 mm/3
X/Y/Z-axis Travel automatic	980/300/450 mm
Length x width x height	1900x1900x2250mm
Total weight	2200/2400 kg



MT8

# UNIVERSAL MILLING MACHINE **MT100/MT200**

**OPTIMUM**  
MASCHINEN · GERMANY

### Details



Horizontal milling position



Housing cross table

Model	MT 100	MT 200
Code No.	2210080	2220080
Total connection Motor	3.36 KW 400 V / 3 Ph	9.2 KW 400 V / 3 Ph
Spindle taper	ISO 40 (DIN 2080)	ISO 50
Spindle speed	45 - 1660 rpm	60 - 1750 rpm
Spindle speed	45 - 1660 rpm	58 - 1800 rpm
Table length x width	1120 x 260 mm	1650 x 360 mm
Table feed (9 steps)	24 - 402 mm/min	20 - 380 mm/min
T-slot size / Distance / Number	14 mm / 63 mm / 3	14 mm / 95 mm / 3
X/Y/Z-axis Travel automatic	600/270/380 mm	1290/280/400 mm
Length x Width x Height	2500x2300x1850 mm	3340x2200x1920 mm
Total weight	1300 kg	2220 kg



MT100

MT200

# UNIVERSAL MILLING MACHINE **MT220S**

Type	MT 220S
Code No.	2222080
working table size	1650x360 mm
travel of working table (X/Y/Z)	1300/320/420mm
T-SOLT size of working table	3/14/95 mm
spinple seat(V/H)	7:24 ISO50
spindle speeds 50Hz	V spindle: 12 step 58—1800 r.p.m. H spindle: 12 step 60—1750 r.p.m.
ram travle	500 mm
feed speed of working table	X/Y: 25 800 mm/min Z 8-267 mm/min rapid: X/Y 1200mm/min Z 400mm/min
main motro of V spindle	5.5KW , 1439r/min
dimension	2550x2161x2102 mm
N.W.	2850 kg



MT200S

# TURRET MILLING MACHINE TMM100/TMM100V

**Convincing arguments: quality, efficiency and price**

- . Heavy, solid model made of high-grade Meehanite casting
- . Solid rectangular slideways for Z-axis
- . All axes with adjustable dovetail slideways
- . High concentricity precision due to taper roller bearings, less than 0.01mm measured in the spindle sleeve
- . Automatic spindle sleeve feed
- . Main switch with motor protection, right/left handed rotation switch, emergency-stop button

Model	TMM100/TMM100V
Code No.	2310000 / 2310100
Drilling capacity(max.)	Ø15mm
Milling capacity cutter head(max.)	Ø75mm
Milling capacity end mill cutter(max.)	Ø20mm
Spindle taper	R8/ NT40
Spindle speed	65-4550 rpm /50-3500rpm(V)
Tabel(LxW)	200x910mm
X-axis travel automatic	560mm
Y-axis travel manual	240mm
Z-axis travel	350mm
T-slot size/distance/number	16mm / 64mm / 3
Motor	2.2KW/3Ph/50Hz
size(LxWxH)	1040x1300x1950mm
Net weight/Gross weight	785/895kg



TMM 100/100V

MILLING

# TURRET MILLING MACHINE TMM200(V)/TMM400(V)

**Convincing arguments: quality, efficiency and price**

- . Heavy, solid model made of high-grade Meehanite casting
- . Solid rectangular slideways for Z-axis
- . All axes with adjustable dovetail slideways
- . Right-/left handed rotation
- . High concentricity precision due to taper roller bearings, less than 0.01mm measured in the spindle sleeve
- . Automatic spindle sleeve feed
- . Main switch with motor protection, right/left handed rotation switch, emergency-stop button

Model	TMM200/TMM200V	TMM400/TMM400V
Code No.	2320000 / 2320100	2340000 / 2340100
Drilling capacity(max.)	Ø18mm	Ø24mm
Milling capacity cutter head	Ø75mm	Ø100mm
Milling capacity end mill cutter	Ø20mm	Ø20mm
Spindle taper	R8/NT40	R8/NT40
Spindle speed	65-4550 rpm / 50-3500rpm(V)	80-5440 rpm / 80-4200rpm(V)
Tabel(LxW)	230x1245mm	254x1270mm
X-axis travel automatic	730mm	700mm
Y-axis travel manual	315mm	380mm
Z-axis travel	405mm	385mm
T-slot size/distance/number	16mm/64mm/3	16mm/64mm/3
Motor	2.2KW/3Ph/50Hz/380V	2.2KW/3Ph/50Hz
Size(LxWxH)	1460x1600x2032mm	1600x1700x2100mm
Net weight/Gross weight	1000/1150kg	1310/1490kg



TMM200V

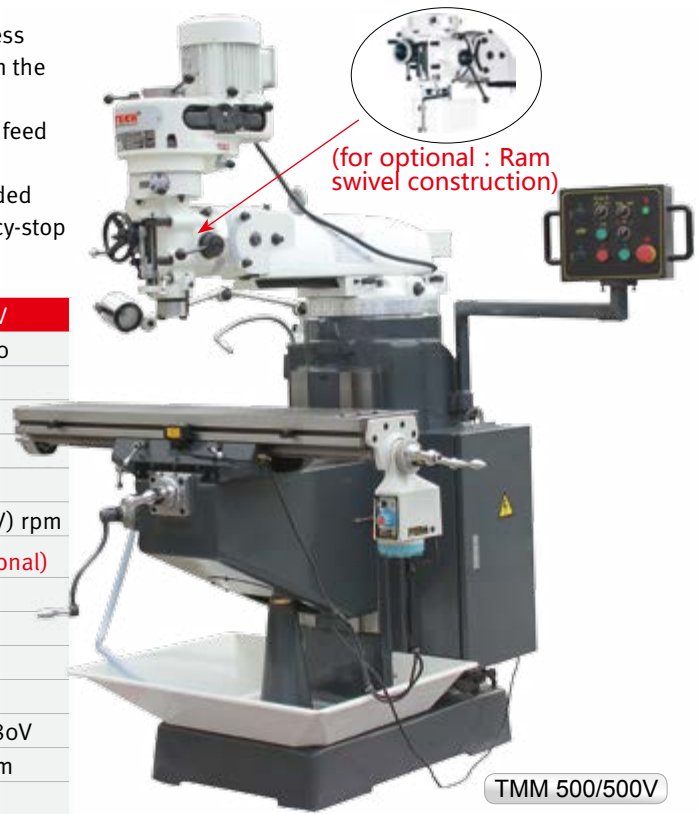
TMM400V

# TURRET MILLING MACHINE TMM500/TMM500V

### Convincing arguments: quality, efficiency and price

- Heavy, solid model made of high-grade Meehanite casting
- Solid rectangular slideways for Z-axis
- All axes with adjustable dovetail slideways
- Right-/left handed rotation
- High concentricity precision due to taper roller bearings, less than 0.01mm measured in the spindle sleeve
- Automatic spindle sleeve feed
- Main switch with motor protection, right/left handed rotation switch, emergency-stop button

Model	TMM500/TMM500V
Code No.	2350000 / 2350100
Drilling capacity(max.)	Ø24mm
Milling capacity cutter head(max.)	Ø100mm
Milling capacity end mill cutter(max.)	Ø20mm
Spindle taper	NT40
Spindle speed	70-3600 rpm/50-3000(V) rpm 250x1270mm
Tabel(LxW)	/305x1370mm(for optional)
X-axis travel automatic	700mm
Y-axis travel manual	400mm
Z-axis travel	420mm
T-slot size/distance/number	16mm / 64mm / 3
Motor	3.75KW/3Ph/50Hz/380V
Size(LxWxH)	1660x1950x2100mm
Net weight/Gross weight	1650/1850kg



TMM 500/500V

# TURRET MILLING MACHINE(VERTICAL & HORIZONTAL) TMM 700(V)/800(V)

### Convincing arguments: quality, efficiency and price

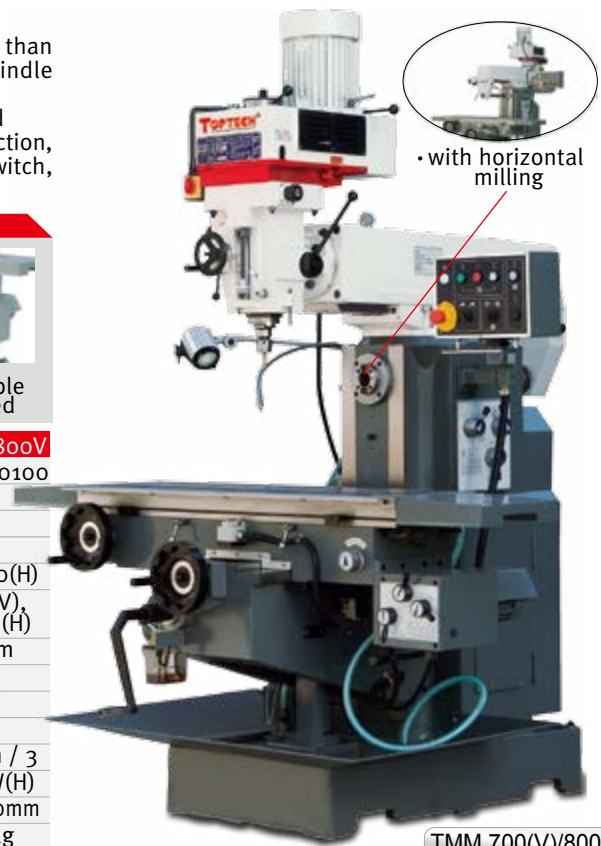
- Heavy, solid model made of high-grade Meehanite casting
- Solid rectangular slideways for Z-axis
- All axes with adjustable dovetail slideways
- High concentricity precision due to taper roller bearings, less than 0.01mm measured in the spindle sleeve
- Automatic spindle sleeve feed
- Main switch with motor protection, right/left handed rotation switch, emergency-stop button

### Details



- Electrical cabinet with Simens parts
- Electrical control panel
- Z axis power feed
- X/Y axis table power feed

Model	TMM700/ TMM700V	TMM800/TMM800V
Code No.	2370000 / 2370100	2380000 / 2380100
Drilling capacity(max.)	Ø30	Ø30
Milling capacity cutter head	Ø80	Ø125
Milling capacity end mill cutter	Ø25	Ø25
Spindle taper	ISO40(V&H)	ISO40(V),ISO50(H)
Spindle speed	70-3620rpm(V), 60-1350rpm(H)	70-3620rpm(V), 60-1800rpm(H)
Tabel(LxW)	1270x320mm	1320x360mm
X-axis travel automatic	780mm	980mm
Y-axis travel manual	300mm	300mm
Z-axis travel	380mm	450mm
T-slot size/distance/number	14mm / 70mm / 5	18mm / 80mm / 3
Motor	3.7KW(V)/2.2KW(H)	5.5KW(V)/4KW(H)
Packing size(LxWxH)	1620x1620x2250mm	1930x1850x2250mm
Net weight/Gross weight	1770/1972kg	2250/2400kg



TMM 700(V)/800(V)

# MILLING MACHINE TMM700/TMM800 SV(Servo)



TMM 700(SV)/800(SV)

**Optional Accessories:**

- 15 pcs of milling chuck set ISO50
- 58 pcs of combination plate
- Dividing head F1125A
- Digital readout for X/Y/Z axis
- Adjusting size-block (4 pcs on each unit)
- 100mm cutter
- Automatic lubricant pump

Model	TMM700 SV TMM800 SV
Code No.	2370200 2380200
Table size	1600×320mm 1600x360mm
Table travel (X/ Y/ Z)	1300/310(DRO:290)/450mm
Table feed. (X/Y/ Z)	30~750、20~500、 15~375mm/min
Spindle taper	7 : 24 ISO50 (H) 7 : 24 ISO40 (V)
Spindle speed range	60 ~ 1800 rpm (H) 80 ~ 5000 rpm (V)
T-slots(NO:/width/pitch)	3/18mm/70mm 3/18mm/80mm
Main motor power	5.5 (H) 5.5 (V) KW
Overall size	2500×2100×2350mm
Net weight	2450/2500kg

MILLING

# UNIVERSAL MILLING MACHINE MX2/MX3/MX4



MX 2

MX 3

**Convincing arguments: quality, efficiency and price**

- Robust machine construction
- Heavy, solid design of high quality cast Meehanite
- All guides and hardened by V-ledge
- Central lubrication
- Main switch and motor protection switch, right-left rotation, emergency stop switch
- Large diameter handwheel with scale
- Standard coolant equipment
- Slewing digital position display DPA 2000 precise tavel measurement of an integrated control unit
- Attached glass scales - 5 microns accuracy
- Dovetail with adjustable dovetail guides in all 3 Axis
- Standard features include automatic mode table feed in the X-Y, and Z-axis

Model	MX 2	MX 3	MX 4
Code No.	2402080	2403080	2404080
Total connection Motor	2.2kW 400V/3Ph	2.2kW 400V/3Ph	3kW 400V/3Ph
Motor pump	140 W	90 W	90 W
Spindle taper	ISO 40	ISO 40	ISO 40
Spindle speed	40 - 1600 rpm	40 - 2000 rpm	40 - 2000 rpm
Dimensions horizontal table L x W	750 x 320 mm	750 x 320 mm	800 x 400 mm
T-slot size / Distance / Number	14mm/63mm/5	14mm/63mm/5	14mm/63mm/6
X/Y/Z-axis Travel automatic	405/200/390 mm	400/300/390 mm	500/400/400 mm
Length(DPA arm right /left side)	1840 / 1340 mm	1880 / 1650 mm	2190/ 1700 mm
Width x Height	1640x2120 mm	1300x2200 mm	1500x2200 mm
NW/GW	1200/1400 kg	1300/1650 kg	1400/1800 kg

# UNIVERSAL MILLING MACHINE **MZ2/MZ4**

**Optional Accessories:**

- Precision Ball screw on Z axis
- LED work lamp
- Auto Oil lubrication system(only for MZ4)
- CE certificate approved by TUV
- Newall DRO 3 axis-import from Optimum
- Installation Charge for Newall DRO 3 axis
- SIEMEMS Switches (CE)
- Special Accessories from China-Optimum

Model	MZ 2	MZ 4
Code No.	3346220	3346240
Electrical connection	400 V / 3 Ph ~50 Hz	400 V/3 Ph ~50 Hz
Total consumption	4 kW	5,4 kW
Drilling capacity steel (S235JR)	Ø 20 mm	Ø 20 mm
Spindle speeds	50 - 1.890 min <sup>-1</sup>	30 - 2.250 min <sup>-1</sup>
Spindle taper	ISO 40 DIN 2080	ISO 40 DIN 2080
Table length x width horizontal table	750 x 320 mm	900 x 500 mm
T-slot size / distance / number	14 mm / 63 mm / 5	14 mm / 63 mm / 7
Length x width x height	1239x1168x1900 mm	1610x1825x1885 mm
Total weight	1180 kg	1450 kg



# UNIVERSAL MILLING MACHINE **UF100/UF200**

**Convincing arguments: quality, efficiency and price**

- Heavy, solid model made of high-grade Meehanite casting
- Dovetail slideways
- All slideways hardened
- Central lubricating
- Main switch with protective motor switch, right-/left-handed rotation switch, emergency-stop button
- Largely dimensioned handwheels with scale
- Machine lamp supplied as standard
- Coolant equipment supplied as standard

**Details**



. Z axis power feed(optional)



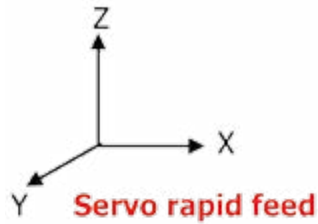
. Motor with gear table feed X-and Y-axis



Model	UF 100	UF 200
Code No.	2210000	2220000
Drilling capacity(max.)	Ø50mm	Ø40mm
Milling capacity cutter head(max.)	Ø125mm	Ø200mm
Milling capacity end mill cutter(max.)	Ø25mm	Ø30mm
Spindle taper	ISO40(DIN2080,DIN69871)	ISO50
Spindle speed	45-1660rpm	58~1800rpm(50Hz) 60~1750rpm(60Hz)
Tabel(LxW)	1120x260mm	1320x360mm/ 1600x360mm(optional)
X/Y-axis travel automatic	600/300mm	1000/300/400mm
T-slot size/distance/number	14mm / 63mm / 3	14mm / 95mm / 5
Motor	2.2KW 380V-50Hz	4KW
packing size(LxWxH)	1600x1520x2220mm	2260x2070x2250mm
Net weight/Gross weight	1200/1320kg	2250/2450kg



## UNIVERSAL MILLING MACHINE **UF 150S**



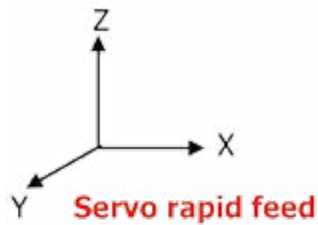
Model	UF 150S
Code No.	2215100
Max load of table	300 kg
Max rotary angle of table	±45°
Spindle holding fixture	7:24 ISO40
Spindle speed	45-1660 rpm
Tabel(LxW)	1270×300 mm
X/Y/Z travel	720/300/400 mm
T-slots NO./width/pitch	3/14mm/80mm
Motor	3KW
Packing size(L×W×H)	1730×1760×1700mm
Net weight	1550 kg



Rotary table is optional accessories

MILLING

## UNIVERSAL MILLING MACHINE **UF 200S**



Model	UF 200S
Code No.	2220100
Max load of table	500 kg
Max rotary angle of table	±45°
Spindle holding fixture	7:24 ISO50
Spindle speed	60-1750 (V) rpm 60-1800 (H) rpm
Tabel(LxW)	1600×360 mm
X/Y/Z travel	1200/800/600 mm
T-slots NO./width/pitch	3/18mm/80mm
Motor	4KW / 5.5KW
Packing size(L×W×H)	2450×2100×2150mm
Net weight	2750 kg

