



# OPTIMUM<sup>®</sup>

MASCHINEN - GERMANY



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**OPTIMUM<sup>®</sup>**  
MASCHINEN - GERMANY

## METAL WORKING MACHINERY

THE OPTIMUM IN TERMS OF QUALITY, PRICE-PERFORMANCE AND SERVICE







## CNC MILLING MACHINE M2LS/M3HS/M4HS/M4 CNC

Convincing arguments: quality, efficiency and price

- Ball screw in all three axis
- Automatical lubricating system
- Coolant system

SIEMENS 808D control



M2LS



M4



M3HS/M4HS

| Model                        | M2LS            | M3HS             | M4HS             | M4               |
|------------------------------|-----------------|------------------|------------------|------------------|
| Code No.                     | 1102100         | 1103100          | 1104100          | 1104000          |
| Total connection             | 2.5KW           | 5KW              | 6KW              | 5KW              |
| Spindle taper                | BT30            | ER32             | ER32             | SK40             |
| Spindle speed                | 90-3000rpm      | 150-8600rpm      | 150-8600rpm      | 150-3100rpm      |
| Table length×width           | 700x180mm       | 750×210mm        | 850×240mm        | 850x240mm        |
| T-slot(size/distance/number) | 12mm/63mm/3     | 12mm/63mm/3      | 18mm/80mm/3      | 18mm/80mm/3      |
| X axis                       | 480mm           | 430mm            | 500mm            | 500mm            |
| Y axis                       | 155mm           | 200mm            | 240mm            | 240mm            |
| Z axis                       | 275mm           | 450mm            | 500mm            | 500mm            |
| Packing size(LxWxH)          | 1816x996x2054mm | 2030×1290×2280mm | 2030×1350×2240mm | 2040x1320x2240mm |
| Net weight/Gross weight      | 360/420kg       | 760/830kg        | 800/870kg        | 800/870kg        |



## CNC MILLING MACHINE F 2/F 3 CNC

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

- Linear guiding in all three axis
- Ball screw in all three axis
- Each door equipped with a safety switch and air-line with safety valve
- Automatical lubricating system
- Coolant system
- Spindle servo motor and drive
- Pneumatical-cylinder and cutter
- Compact structure, easy for operation and less occupied area

**SIEMENS 808D control**



F 2

### Standard equipment



- Wide electrical-cabinet for easy maintenance



- Siemens 808D control system



F 3

| Model                        | F 2             | F 3              |
|------------------------------|-----------------|------------------|
| Code No.                     | 1102200         | 1103200          |
| Total connection             | 2.5KW           | 4KW              |
| Spindle taper                | BT30            | BT30             |
| Spindle speed                | 90-3000rpm      | 50-4000rpm       |
| Face milling dimension (Max) | Ø52mm           | Ø40mm            |
| End milling dimension (Max)  | Ø20mm           | Ø25mm            |
| Table length×width           | 700x180mm       | 620x180mm        |
| T-slot(size/distance/number) | 12mm/63mm/3     | 12mm/50mm/3      |
| X axis                       | 480mm           | 355mm            |
| Y axis                       | 155mm           | 190mm            |
| Z axis                       | 275mm           | 245mm            |
| Packing size(LxWxH)          | 1816x996x2100mm | 1720x1720x1950mm |
| Net weight/Gross weight      | 360/420kg       | 1100/1200kg      |



## CNC MACHINE CENTER F 4/F 80 CNC

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

- Linear guiding in all three axis
- Servo-drive in all three axis
- Door equipped with a safety switch
- Ball screw in all three axis
- Central lubricating
- Coolant system
- Compact structure, easy for operation

**SIEMENS 808D control**



F 4

F 80

### Optional accessories:



- The fourth axis imported from Taiwan (Rotary table)



- Tool-setting gauge



- Optical Probe System

| Model                        | F 4              | F 80             |
|------------------------------|------------------|------------------|
| Code No.                     | 1104200          | 1108000          |
| Total connection             | 6KW              | 7KW              |
| Spindle taper                | BT30             | BT30             |
| Spindle speed                | 50-10000rpm      | 50-10000rpm      |
| Face milling dimension (Max) | Ø65mm            | Ø65mm            |
| End milling dimension (Max)  | Ø30mm            | Ø30mm            |
| Capacity                     | 8 tools          | 10 tools         |
| Table length×width           | 690x210mm        | 800x260mm        |
| T-slot(size/distance/number) | 16mm/63mm/3      | 16mm/50mm/5      |
| X axis                       | 310mm            | 400mm            |
| Y axis                       | 200mm            | 230mm            |
| Z axis                       | 300mm            | 400mm            |
| Packing size(LxWxH)          | 2020x1840x2150mm | 2020x1780x2220mm |
| Net weight/Gross weight      | 1400/1520kg      | 1700/1900kg      |

### Standard equipment



- Wide electrical-cabinet for easy maintenance



- Magazine tool-changer



- Siemens 808D control system





## CNC MACHINE CENTER F 105/F 150 CNC



F 105

SIEMENS 808D control



• Turntable style tool magazine 16tools

• Disc style tool magazine (optional) 24 tools



F 150

### Optional accessories:



• Water out from spindle center  
• Press 20 Bars  
• Filtering precision is 25µm



• The fourth axis imported from Taiwan (Rotary table)



• Tool-setting gauge



• Optical Probe System



• Chip conveyor

| Model                        | F 105                                 | F 150                                |
|------------------------------|---------------------------------------|--------------------------------------|
| Code No.                     | 1110500                               | 1115000                              |
| Total connection             | 10KW                                  | 12KW                                 |
| Spindle taper                | BT40                                  | BT40                                 |
| Spindle speed                | 10-8000rpm                            | 10-10000rpm                          |
| Face milling dimension (Max) | Ø75mm                                 | Ø80mm                                |
| End milling dimension (Max)  | Ø35mm                                 | Ø38mm                                |
| Capacity                     | 12 tools                              | 16 tools                             |
| Tool diameter (Max)          | Ø 104mm(with adjacent tool)<br>Ø160mm | Ø 78mm(with adjacent tool)<br>Ø120mm |
| Table length×width           | 800x350mm                             | 960x450mm                            |
| T-slot(size/distance/number) | 16mm/50mm/5                           | 18mm/80mm/5                          |
| X axis                       | 550mm                                 | 650mm                                |
| Y axis                       | 330mm                                 | 500mm                                |
| Z axis                       | 460mm                                 | 500mm                                |
| Packing size(LxWxH)          | 2238x1981x2215mm                      | 2292x2268x2220mm                     |
| Net weight/Gross weight      | 2800/3200kg                           | 3500/4000kg                          |



## CNC MACHINE CENTER F 210/300/500/600/800 CNC

Convincing arguments: quality, efficiency and price

- Linear guiding in all three axis
- Ball screw in all three axis
- Automatical lubricating system
- Built-in working lamp/coolant system



F 210/300/500



F 600



F 800

| Model                        | F 210                               | F 300                               | F 500                               | F 600                                | F 800                                |
|------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|
| Code No.                     | 1121000                             | 1130000                             | 1150000                             | 1160000                              | 1180000                              |
| Total connection             | 18KW                                | 21KW                                | 24KW                                | 24KW                                 | 30KW                                 |
| Spindle taper                | BT40                                | BT40                                | BT40                                | BT50                                 | BT50                                 |
| Spindle speed                | 10-8000rpm                          | 10-8000rpm                          | 8000rpm                             | 6000/8000rpm                         | 6000/8000rpm                         |
| Face milling dimension (Max) | Ø85mm                               | Ø85mm                               | Ø90mm                               | Ø110mm                               | Ø120mm                               |
| End milling dimension (Max)  | Ø42mm                               | Ø42mm                               | Ø50mm                               | Ø55mm                                | Ø60mm                                |
| Capacity                     | 24 tools                            | 24 tools                            | 24 tools                            | 24 tools                             | 24 tools                             |
| Tool diameter (Max)          | Ø78mm(with adjacent tool)<br>Ø120mm | Ø78mm(with adjacent tool)<br>Ø120mm | Ø78mm(with adjacent tool)<br>Ø120mm | Ø112mm(with adjacent tool)<br>Ø200mm | Ø112mm(with adjacent tool)<br>Ø200mm |
| Table length×width           | 1050×500mm                          | 1000×500mm                          | 1360×650mm                          | 1400×700mm                           | 1700×800mm                           |
| T-slot(size/distance/number) | 18mm/90mm/5                         | 18mm/84mm/5                         | 18mm/110mm/5                        | 18mm/110mm/5                         | 22mm/160mm/5                         |
| X axis Travel                | 800mm                               | 900mm                               | 1100mm                              | 1200mm                               | 1500mm                               |
| Y axis Travel                | 500mm                               | 550mm                               | 650mm                               | 700mm                                | 800mm                                |
| Z axis Travel                | 550mm                               | 600mm                               | 650mm                               | 700mm                                | 800mm                                |
| Packing size(LxWxH)          | 2750×2250×2525mm                    | 3150×2600×2850mm                    | 3300×2680×3150mm                    | 4090×3290×3650mm                     | 3950×3650×3550mm                     |
| NW/GW                        | 5000/5500kg                         | 5200/6000kg                         | 7300/8300kg                         | 8500/9700kg                          | 12800/14000kg                        |





## CNC MACHINE CENTER F 120X CNC



F 120X

| Model                        | F 120X            |
|------------------------------|-------------------|
| Code No.                     | 1112000           |
| Total connection             | 15 KW             |
| Driving motor                | 4.8 KW            |
| Motor                        | 400 V/50 HZ/3 PH  |
| Spindle taper                | BT30              |
| Spindle speed                | 16000 rpm         |
| Table length×width           | 650x400 mm        |
| Distance spindle-table       | 130-410 mm        |
| T-slot(size/distance/number) | 14mm/125mm/3      |
| X axis                       | 520 mm            |
| Y axis                       | 400 mm            |
| Z axis                       | 280 mm            |
| Capacity                     | 16PCS             |
| Packing size(LxWxH)          | 2017x2030x2222 mm |
| Net weight/Gross weight      | 2400/2700 kg      |



## HORIZONTAL MACHINING CENTERS HF 500/630/800 CNC

### Convincing arguments: quality, efficiency and price

- A prevalent inverted "T" shaped layout is in the base frame, which is rigidity of the integral structure and is not creative of any overturning during the full stroke.
- The base frame manufacture by five-sided machined high-precisely machining centre, finish most work in one chucking.
- A grouped 60° angular contact ball bearing is adopted in the lead screw, which is doubly supported and pre-tensioned, so as to increase the machining precision.
- High-frequency hardened slide rails or heavy-load high precision roller guideways, which have an excellent property of shock absorption and bear heavy load cutting.
- Taiwan precision spindle, 6,000rpm and with air film protection device, so as to ensure to keep the spindle precision and service long life.
- CNC rotary table \ Indexing table \ Exchange table for optional.



HF 500/630/800

| Model                     | HF 500 CNC                          | HF 630 CNC                           | HF 800 CNC                           |
|---------------------------|-------------------------------------|--------------------------------------|--------------------------------------|
| Code No.                  | 1550000                             | 1563000                              | 1580000                              |
| Worktable dimensions(LxW) | 500x500mm                           | 630x630mm                            | 800x800mm                            |
| T-slot                    | 18mm/100mm/5                        | 22mm/125mm/5                         | 22mm/160mm/5                         |
| X axis travel             | 700mm                               | 950mm                                | 1300mm                               |
| Z axis travel             | 580mm                               | 830mm                                | 900mm                                |
| Y axis travel             | 580mm                               | 750mm                                | 900mm                                |
| Spindle taper             | BT40                                | BT50                                 | BT50                                 |
| Maximum spindle speed     | 8000rpm                             | 6000rpm                              | 6000rpm                              |
| Tool room capacity        | 30                                  | 40                                   | 40                                   |
| Maximum tool dimensions   | Ø77x320(With adjacent tool)Ø130x320 | Ø125x350(With adjacent tool)Ø250x350 | Ø125x350(With adjacent tool)Ø250x350 |
| N.W./G.W.                 | 12000kg                             | 14000kg                              | 18000kg                              |



## CNC LATHE MACHINE L28/L28S/L33HS CNC

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

- Bed guideways inductively hardened (HRC42-52)
- Coolant system
- Automatic lubricating system
- Ball screw in two axis
- Servo-drive
- electric turret
- Door equipped with a safety switch

**Standard accessories(L28):**

- 3-jaw chuck
- Dead center MT2
- Various wrench

**Optional accessories(L28):**

- Index turning tools
- Live center MT2

**Standard accessories(L33HS):**

- Wrench
- Reduction sleeve
- Alloy center
- 3-jaw chuck



L28/L28S



L33HS

| Model                    | L28             | L28S            | L33HS            |
|--------------------------|-----------------|-----------------|------------------|
| Code No.                 | 1302800         | 1303000         | 1303400          |
| Total connection         | 3.5KW           | 3.5KW           | 5KW              |
| Swing over bed           | Ø300mm          | Ø300mm          | Ø330mm           |
| Swing over cross slide   | Ø200mm          | Ø200mm          | Ø152mm           |
| Center width             | 600mm           | 600mm           | 630mm            |
| Center height            | 140mm           | 140mm           | 165mm            |
| Spindle bore             | Ø26mm           | Ø26mm           | Ø38mm            |
| Spindle speed range      | 30-4000rpm      | 30-4000rpm      | 30-4000rpm       |
| Numbers of tool position | 4               | 6               | 6/8              |
| Section of tool (Max)    | 12×12mm         | 16×16mm         | 16×16mm          |
| X axis Travel            | 180mm           | 180mm           | 165mm            |
| Z axis Travel            | 465mm           | 465mm           | 600mm            |
| Packing size(LxWxH)      | 1830x945x1840mm | 1830x945x1840mm | 2060x1390x1815mm |
| Net weight/Gross weight  | 800/900kg       | 800/900kg       | 1250/1400kg      |





## CNC LATHE MACHINE L28HS/L34HS CNC

Convincing arguments: quality, efficiency and price

- High-speed spindle unit
- Servo-spindle
- Servo-drive
- Servo turret
- Ball screw in two axis
- Automatical lubricating system
- Coolant system
- LED lamp



L28HS



L34HS

Standard accessories:

- Wrench
- Reduction sleeve
- Alloy center
- 3-jaw chuck

| Model                    | L28HS            | L34HS            |
|--------------------------|------------------|------------------|
| Code No.                 | 1302900          | 1303500          |
| Total connection         | 3.5KW            | 6.5KW            |
| Swing over bed           | Ø300mm           | Ø340mm           |
| Swing over cross slide   | Ø200mm           | Ø152mm           |
| Center width             | 600mm            | 630mm            |
| Center height            | 160mm            | 170mm            |
| Spindle bore             | Ø30mm            | Ø38mm            |
| Spindle speed range      | 40-4000rpm       | 30-3500rpm       |
| Numbers of tool position | 8                | 8                |
| Section of tool (Max)    | 12×12mm          | 16×16mm          |
| X axis Travel            | 145mm            | 185mm            |
| Z axis Travel            | 465mm            | 540mm            |
| Packing size(LxWxH)      | 1855x1659x1931mm | 2070x1650x2050mm |
| Net weight/Gross weight  | 900/1050kg       | 1300/1500kg      |



## CNC LATHE MACHINE L40/L50 CNC

### Convincing arguments: quality, efficiency and price

- Spindle high-speed, high-precision angular contact ball bearings into a set of support, high-speed lithium grease lubrication, lower temperature and maintenance-free
- Spindle motor with high overload and high-speed dedicated frequency spindle motor, the characteristics of output torque is good
- With full protective structure to prevent chips and coolant spill

### Optional accessories:

- Tool setting gauge
- Hydraulic chuck and hydraulic tail-stock



L40/L50

| Model                    | L40              | L50              |
|--------------------------|------------------|------------------|
| Code No.                 | 1304000          | 1305000          |
| Total connection         | 11KW             | 15KW             |
| Swing over bed           | Ø400mm           | Ø500mm           |
| Swing over cross slide   | Ø240mm           | Ø280mm           |
| Center width             | 850mm            | 1000mm           |
| Center height            | 200mm            | 250mm            |
| Spindle bore             | Ø66mm(Ø51mm)     | Ø100mm           |
| Spindle speed range      | 30-2500mm        | 30-1600rpm       |
| Numbers of tool position | 8                | 8                |
| Section of tool (Max)    | 20×20mm          | 25×25mm          |
| X axis Travel            | 240mm            | 330mm            |
| Z axis Travel            | 750mm            | 1000mm           |
| Packing size(LxWxH)      | 2760×1630×1953mm | 3520×1800×2030mm |
| Net weight/Gross weight  | 2400/2550kg      | 3500/3750kg      |



## CNC LATHE MACHINE L400 CNC

### Convincing arguments: quality, efficiency and price

- Stand and base use full casting, good rigidity
- Bed way 400mm width
- Chip convey in the middle of bed
- 3 support in spindle
- Box, linear way for optional
- Pneumatic spring collet, gang tool for optional
- Multi-numerical control system for optional

### Optional accessories:

- Inverter spindle motor 7.5KW
- Max spindle torque 95Nm
- Power capacity 13.5Kva
- X-axis slide guide and Z-axis rolling guide
- 6-step horizontal electric turret
- Row tool
- Hydraulic chuck with through hole
- Hydraulic chuck without through hole
- Pneumatic chuck



| Model                  | L400 CNC         |
|------------------------|------------------|
| Code No.               | 1340000          |
| Swing over bed         | Ø450mm           |
| Swing over cross slide | Ø220mm           |
| Length of workpiece    | 600mm            |
| Admits between         | 650mm            |
| Spindle bore           | Ø52mm            |
| Range of spindle speed | 200-2200r/min    |
| X-travel               | 250mm            |
| Z-travel               | 685mm            |
| Nos. of tool position  | 4                |
| Max.section of tool    | 20x20mm          |
| Main motor power       | 5.5KW            |
| Packing size(LxWxH)    | 2200x1320x2220mm |
| NW/GW                  | 1500/1600kg      |

### Standard equipment



- Electric-cabinet



- 6-step horizontal electric turret (Optional)





## CNC LATHE MACHINE L44 CNC

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

- Siemens 828Basic T numerical control system
- Siemens spindle and servo motor
- Safety PLC and door-switch
- With coolant system
- Automatical lubricating system
- Hydraulic chuck and hydraulic tail-stock
- Hydraulic turret
- X and Z-axis electric hand-wheel



| Model                          | L44 CNC              |
|--------------------------------|----------------------|
| Code No.                       | 1304400              |
| Total connection               | 18.5 kW 400 V ~50 Hz |
| Centre height                  | 223 mm               |
| Turning Ø over cross slide     | Ø240 mm              |
| Turning Ø over lathe bed       | Ø446 mm              |
| Turning Ø in the bed bridge    | Ø520 mm              |
| Spindle speed                  | 3'000 rpm            |
| Spindle hole                   | Ø 52 mm              |
| Number of tools                | 8                    |
| Seat height, seat width max.   | 20 x 20 mm           |
| X axis Travel                  | 250 mm               |
| Z axis Travel                  | 760 mm               |
| Length x Width x Height (open) | 2230x1580x1795 mm    |
| Total weight                   | 2'100 kg             |

### Standard equipment



- Heat exchanger
- To avoid faulty because of electric and numeral control components over-heat



- Hydraulic VDI30 turret



## CNC LATHE MACHINE L 560/L 660 CNC

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

- Range of gear wheel shift, variable frequency control and speed change is wide, torque in low-speed is big
- Whole stand, high rigidity, stable precision

**Optional accessories:**

- 8-step horizontal electric turret
- Hydraulic chuck with inside empty
- CNC rotaty turning tool
- GSK988T numeral control system
- Fanuc oi mate numeral control system
- CE standard



L560



L660

| Model                  | L560 CNC x 1000/1500 | L660 CNC x 1500/2000 |
|------------------------|----------------------|----------------------|
| Code No.               | 1356000/1356100      | 1366000/1366100      |
| Swing over bed         | ø560mm               | ø660mm               |
| Swing over cross slide | ø355mm               | ø440mm               |
| Admits between         | 1000mm/1450mm        | 1500mm               |
| Spindle bore           | ø80mm                | ø105mm               |
| Range of spindle speed | 32-2000 rpm          | 15-1500 rpm          |
| X-travel               | 250mm                | 370mm                |
| Z-travel               | 1340mm               | 1460mm               |
| Nos. of tool position  | 8                    | 6 or 8               |
| Max.section of tool    | 25x25mm              | 32x32mm              |
| Main motor power       | 7.5KW                | 7.5KW                |
| Packing size(LxWxH)    | 3400x1400x2240mm     | 3300x2300x2200mm     |
| NW/GW                  | 2350/2750kg          | 2100/3600kg          |

### Standard equipment



• Tail-stock



• Coolant tank





# CNC LATHE MACHINE S400E/S600 CNC

(Slant bedway)



S400E/S600

## Standard equipment



• Hydraulic tail-stock



• Hydraulic station



• Auto-lubrication pump  
• Folding-type



• Tool measuring sensor (Optional)



• Hydraulic turret  
• Electric turret (Optional)



• Chip conveyor and cart (Optional)

| Model                   | S400E CNC                  | S600 CNC                   |
|-------------------------|----------------------------|----------------------------|
| Code No.                | 1540000                    | 1560000                    |
| Swing over bed          | Ø450mm                     | Ø500mm                     |
| swing over cross slide  | Ø220mm                     | Ø250mm                     |
| X axis Travel           | 230mm                      | 250mm                      |
| Z axis Travel           | 530mm                      | 850mm                      |
| Spindle hole diameter   | Ø51mm ( optional Ø79mm)    | Ø51mm ( optional Ø79mm)    |
| Spindle speed           | 4500rpm<br>(Ø79mm 3000rpm) | 4500rpm<br>(Ø79mm 3000rpm) |
| Motor Power             | 7.5KW (optional 12/15KW)   | 12KW                       |
| Max. section of tool    | 25x25mm                    | 25x25mm                    |
| Pump motor              | 650W                       | 650W                       |
| Packing size            | 2816x2240x1998mm           | 3140x2430x2100mm           |
| Net weight/Gross weight | 3500/4100kg                | 4000/4500kg                |



Standard accessorie

- tool holder for round tool 25 mm
- tool holder for square tool 25 x 25 mm





## CNC LATHE MACHINE S400PS/S600PS CNC



### LS-120SP (S400PS with LS-120SP)

VDI Ø20,12 tools center Dia.Ø240 mm  
Turret center height 63 mm



### LS-160SP (S600PS with LS-160SP)

VDI Ø30,12 tools center Dia.Ø270 mm  
Turret center height 80 mm



| Model                   | S400PS CNC               | S600PS CNC              |
|-------------------------|--------------------------|-------------------------|
| Code No.                | 1540100                  | 1560100                 |
| Swing over bed          | Ø450mm                   | Ø500mm                  |
| swing over cross slide  | Ø220mm                   | Ø250mm                  |
| X axis Travel           | 230mm                    | 250mm                   |
| Z axis Travel           | 530mm                    | 850mm                   |
| Spindle hole diameter   | Ø51mm ( optional Ø79mm)  | Ø51mm ( optional Ø79mm) |
| Spindle speed           | 4500rpm (Ø79mm 3000rpm)  | 4500rpm(Ø79mm 3000rpm)  |
| Motor Power             | 7.5KW (optional 12/15KW) | 12KW                    |
| Max. section of tool    | 25x25mm                  | 25x25mm                 |
| Pump motor              | 650W                     | 650W                    |
| Packing size            | 2816x2240x1998mm         | 3140x2430x2100mm        |
| Net weight/Gross weight | 3600/4100kg              | 4100/4600kg             |



## CNC LATHE MACHINE SK 61128/61148/61168/61198/61208



SK 6112/61148/61168/61198/61208

### Standard accessories:

- FANUC Oi-TD/GSK/SIEMENS
- Coolant system
- Standard working lamp
- 4-step electric turret
- Heavy-type 4-jaw chuck (screw, wrench)
- Spindle taper Morse tape 6#
- Turret plate
- Steady rest
- Overlapping dual-sliding door semi-protective housing
- Automatic lubricating system
- Powerful fan
- Electric tail-stock
- Center sleeve

### Optional accessories:

- Hydraulic tail-stock and hydraulic chuck
- 6-step electric turret
- 8-step electric turret
- Follow-rest

| Model                        | SK61128                                                                  | SK61148 | SK61168 | SK61198 | SK61208 |
|------------------------------|--------------------------------------------------------------------------|---------|---------|---------|---------|
| Code No.                     | 1312200                                                                  | 1314200 | 1316200 | 1319200 | 1320200 |
| Max swing over bed           | Ø1280mm                                                                  | Ø1480mm | Ø1680mm | Ø1980mm | Ø2080mm |
| Max swing over cross slide   | Ø840mm                                                                   | Ø1040mm | Ø1240mm | Ø1540mm | Ø1640mm |
| Spindle hole                 | Ø130mm                                                                   | Ø130mm  | Ø130mm  | Ø130mm  | Ø130mm  |
| Bed width                    | 1100mm                                                                   | 1100mm  | 1100mm  | 1100mm  | 1100mm  |
| Diameter of tailstock sleeve | Ø260mm                                                                   |         |         |         |         |
| Spindle speeds(Number)       | 3.15-315r/min or 2.5-250(21)r/min or 2-200r/min 5-20 15-60 25-100 65-250 |         |         |         |         |
| Main motor power             | 30KW                                                                     |         |         |         |         |
| Net weight                   | (SK61168×4000mm)22000kg                                                  |         |         |         |         |
| Dimension                    | (SK61168×4000mm)7300×3000×2500mm                                         |         |         |         |         |





## 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) | Ø40/Ø32mm        | Ø45/Ø32mm        | Ø45/Ø32mm        |
| Milling capacity cutter head      | Ø63mm            | Ø80mm            | Ø80mm            |
| Milling capacity end mill cutter  | Ø32mm            | Ø32mm            | Ø32mm            |
| 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        |

## DRILLING & MILLING MACHINE **DH40CT/DH40CTV**

**OPTIMUM®**  
MASCHINEN - GERMANY

| Model                             | DH40CT                 | DH40CTV                |
|-----------------------------------|------------------------|------------------------|
| Code No.                          | 2214000                | 2514000                |
| Max.drilling capacity(Iron/Steel) | Ø40/Ø32mm              | Ø40/Ø32mm              |
| 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

**OPTIMUM®**  
MASCHINEN - GERMANY

### 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 or R8       | MT4 or R8       |
| 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

**OPTIMUM®**  
MASCHINEN - GERMANY

**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         |

**VARIO SELECT**



BF16 V



## DRILL & MILL MACHINE **BF20V/BF20LV** **VARIO SELECT**

**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<br>H:150-3000 rpm | L:90-1480 rpm<br>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

## DRILLING&MILLING HEAD **BF20AV**

| Model                                   | BF20 AV                        |
|-----------------------------------------|--------------------------------|
| Code no.                                | 2502055                        |
| Motor                                   | 850W 230 V /<br>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<br>H:150~3000rpm |
| Length x width x height max.            | 825x530x570mm                  |
| Net weight / Gross weight               | 67/84 kg                       |



BF20AV





## DRILL & MILL MACHINE BF30V/BF46V

**OPTIMUM<sup>®</sup>**  
MASCHINEN - GERMANY

Variable speed

**VARIO SELECT**

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

- Heavy solid casting
- High concentricity precision due to taper roller bearings
- Gearhead  $\pm 45^\circ$  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.)                | $\varnothing 35\text{mm}$                       | $\varnothing 45\text{mm}$                      |
| Milling capacity cutter head(max.)     | $\varnothing 75\text{mm}$                       | $\varnothing 80\text{mm}$                      |
| Milling capacity end mill cutter(max.) | $\varnothing 30\text{mm}$                       | $\varnothing 32\text{mm}$                      |
| Spindle holding fixture                | MT3/SK30                                        | MT4/SK40                                       |
| Gear stages                            | L:100-1100rpm<br>M:160-1700rpm<br>H:320-3100rpm | L:115-600rpm<br>M:270-1400rpm<br>H:590-3100rpm |
| Tabel(L×W)                             | 750×210mm                                       | 850×240mm                                      |
| 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)                    | 844×844×1342mm                                  | 904×904×1535mm                                 |
| 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  $\pm 60^\circ$  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.)                | $\varnothing 45\text{mm}$                      |
| Milling capacity cutter head(max.)     | $\varnothing 80\text{mm}$                      |
| Milling capacity end mill cutter(max.) | $\varnothing 32\text{mm}$                      |
| Spindle holding fixture                | SK40/MT4                                       |
| Gear stages speed                      | L:115-600rpm<br>M:270-1400rpm<br>H:590-3100rpm |
| Tabel(L×W)                             | 850×240mm                                      |
| 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)                    | 1210×950×1320mm                                |
| Net weight/Gross weight                | 480/525kg                                      |

### Details



•Lubricant pump



•Pneumatic tool changer



•Z-axis power feed



BF50 TC





## DRILLING &amp; MILLING MACHINE MH12V/MH20V/MH22V

OPTIMUM<sup>®</sup>  
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        | 480×440×850mm | 636×499×857mm | 770×700×917mm |
| Net weight/Brut weight         | 52/76kg       | 70/90kg       | 116/143kg     |



MH 20V

MH 22V

## DRILLING &amp; MILLING MACHINE MH25V/MH25SV

OPTIMUM<sup>®</sup>  
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:
- Infinately 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  |
| Length×width×height         | 914×844×1119mm | 914×844×1119mm |
| N.W./G.W.                   | 192/242kg      | 200/250kg      |



MH 25V

MH 25SV



## 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

OPTIMUM<sup>®</sup>  
MASCHINEN - GERMANY

### 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         | 864x844x1577mm              | 924x964x1809mm              |
| N.W./G.W.                   | 316/376kg / 306/366kg       | 525/595kg / 515/585kg       |







## 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<br>or 230V~50Hz            | 4.5kW 400V~50Hz<br>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<br>1200x240mm<br>(For optional) | 1000x240mm<br>1200x240mm<br>(For optional) | 1000x240mm       |
| T-slot size                             | 14 mm                                      | 14 mm                                      | 14 mm            |
| X/Y/Z-axis Travel                       | 600/200/340mm                              | 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)<br>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



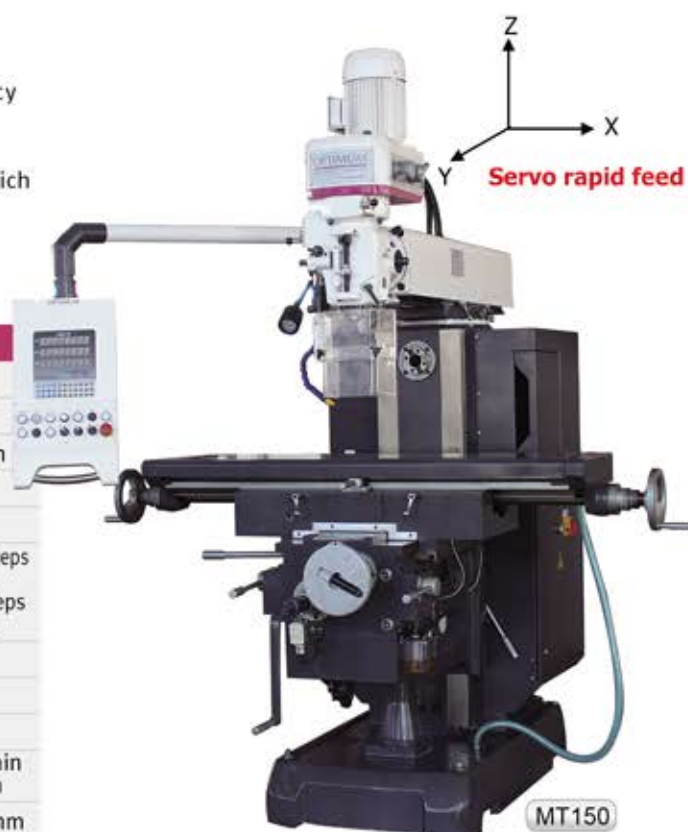


## VERTICAL & HORIZONTAL DRILLING & MILLING MACHINE MT150

### 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<br>38—1310 r.p.m.<br>Vertical spindle: 8 steps<br>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<br>Z 8-267 mm/min                                                           |
| Dimension                                          | 1950×1950×2350 mm                                                                              |
| N.W.                                               | 2100 kg                                                                                        |



MT150

## 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<sup>®</sup>  
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<br>58—1800 r.p.m.<br>H spindle: 12 step<br>60—1750 r.p.m. |
| ram travle                      | 500 mm                                                                       |
| feed speed of working table     | X/Y: 25 800 mm/min<br>Z 8-267 mm/min<br>rapid: X/Y 1200mm/min<br>Z 400mm/min |
| main motro of V spindle         | 5.5KW , 1439r/min                                                            |
| dimension                       | 2550x2161x2102 mm                                                            |
| N.W.                            | 2850 kg                                                                      |



MT200S





## 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<br>TMM800 SV                               |
|--------------------------|------------------------------------------------------|
| Code No.                 | 2370200<br>2380200                                   |
| Table size               | 1600×320mm<br>1600×360mm                             |
| Table travel (X/ Y/ Z)   | 1300/310(DRO:290)/450mm<br>30~750, 20~500            |
| Table feed. (X/Y/ Z)     | 15~375mm/min<br>7 : 24 ISO50 (H)<br>7 : 24 ISO40 (V) |
| Spindle taper            | 60 ~ 1800 rpm (H)<br>80 ~ 5000 rpm (V)               |
| Spindle speed range      | 3/18mm/70mm<br>3/18mm/80mm                           |
| T-slots(NO:/width/pitch) |                                                      |
| Main motor power         | 5.5 (H) 5.5 (V) KW                                   |
| Overall size             | 2500×2100×2350mm                                     |
| Net weight               | 2450/2500kg                                          |

## 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 travel 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
- SIEMENS 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                      |



MZ 2



MZ 4

## 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)<br>60~1750rpm(60Hz)<br>1320x360mm/<br>1600x360mm(optional) |
| Tabel(LxW)                             | 1120x260mm              | 1000/300/400mm                                                              |
| X/Y-axis travel automatic              | 600/300mm               | 14mm / 95mm / 5                                                             |
| T-slot size/distance/number            | 14mm / 63mm / 3         | 4KW                                                                         |
| Motor                                  | 2.2KW 380V-50Hz         | 2260x2070x2250mm                                                            |
| packing size(LxWxH)                    | 1600x1520x2220mm        | 2250/2450kg                                                                 |
| Net weight/Gross weight                | 1200/1320kg             |                                                                             |



UF100

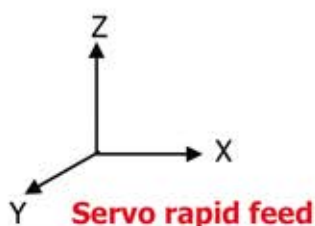


UF200





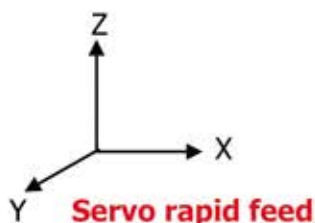
## UNIVERSAL MILLING MACHINE UF 150S



| 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          |



## 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<br>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                            |





## UNIVERSAL MILLING MACHINE **UF 500 servo**

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

- Table 3 axes with ball screws, high precision
- Table feeding with 3 separate servo motors, variable speeds, not interfere each other high reliability easy to operate
- Mechanical change speeds in head stock, powerful milling
- Table with an extra supporting column, big load, high accuracy
- It can mill any angle surface through front half-sphere by swiveling milling head

| Model                   | UF 500 servo     |
|-------------------------|------------------|
| Code No.                | 2250000          |
| Max load                | 1800 kg          |
| Spindle holding fixture | ISO50            |
| Spindle speed           | (27) 30-2050 rpm |
| Tabel(LxW)              | 2000x500 mm      |
| X/Y/Z travel            | 1400x700x500 mm  |
| T-slots NO./width/pitch | 5/18mm/80mm      |
| Motor                   | 7.5 kw           |
| Overall size(LxWxH)     | 2625x2860x2080mm |
| Net weight              | 5500 kg          |



## UNIVERSAL MILLING MACHINE **UF 1500**

**Standard Accessories :**

- Draw bar
- ISO50 Milling chuck
- ISO50 Milling arbor  $\varnothing 40$
- Horizontal milling arbor  $\varnothing 32$
- 7 : 24 Middle sleeve ISO50/MS4
- Tool box
- Oil gun
- Foundation bolts M12x500

| Model                       | UF1500           |
|-----------------------------|------------------|
| Code No.                    | 2215000          |
| Table size                  | 2100x500 mm      |
| Table travel(X, Y)          | 1500x670 mm      |
| T-slot size/distance/number | 20mm/100mm/4     |
| Taper of spindle            | 7:24 ISO50       |
| Spindle speed range         | 35-1345 rpm      |
| Spindle motor power         | 7.5 KW           |
| Overall dimension           | 3300x2380x2750mm |
| Weight                      | 7300 kg          |







## DRILL PRESS PRO LINE B 17/23/26/33 Pro

**OPTIMUM®**  
MASCHINEN - GERMANY



### Belt drive

- High running smoothness thanks to ground multi-toothed follower
- Best power transmission due to aluminium belt pulleys in connection with toothed GATES quality V-belt



| Model                               | B 17Pro          | B 23Pro              | B 26Pro          | B 33Pro          |
|-------------------------------------|------------------|----------------------|------------------|------------------|
| Code No.                            | 3111700          | 3112302/3112303      | 3112600          | 3113300          |
| Electrical connection               | 230V / 1Ph ~50Hz | 230V/1Ph or 400V/3Ph | 400V / 3Ph ~50Hz | 400V / 3Ph ~50Hz |
| Motor power                         | 500 W            | 750 W                | 750 W            | 1.1 kW           |
| Drilling capacity in steel (S235JR) | Ø 16 mm          | Ø 25 mm              | Ø 25 mm          | Ø 30 mm          |
| Spindle seat                        | MT 2             | MT 2                 | MT 3             | MT 4             |
| Spindle speeds                      | 500-2520 rpm     | 200-2440 rpm         | 200-2440 rpm     | 120-1810 rpm     |
| Work surface table (LxW)            | 235 x 220 mm     | 280 x 245 mm         | 330 x 290 mm     | 475 x 425 mm     |
| Work surface stand (LxW)            | 220 x 230 mm     | 240 x 250 mm         | 385 x 260 mm     | 410 x 270 mm     |
| Column diameter                     | Ø 60 mm          | Ø 73 mm              | Ø 80 mm          | Ø 92 mm          |
| Length x width x height             | 600x260x860 mm   | 654x330x1012 mm      | 700x350x1670 mm  | 860x480x1720 mm  |
| Total weight                        | 39 kg            | 66 kg                | 82 kg            | 135 kg           |

## DRILL PRESS E LINE E17/E23/E26/E33

### Convincing arguments: quality, efficiency and price

- Guaranteed true running accuracy of less than 0.02 drilling spindle sleeve
- Drilling spindle with precision ball bearings
- ROHM quick-action drill chuck supplied as standard mm measured in the
- High smoothness due to aluminium V-belt pulleys and grinded multitooth dog (from E 23)
- V-belt covering with safety switch
- Worktable can be inclined by  $\pm 45^\circ$  and slewed by  $360^\circ$
- Solid, largely dimensioned base plate with slots, heavily ribbed at the rear side (for E 33 T-slots)
- One-piece star grip made of diecast aluminium with soft grip handle
- Easy-to-operate safety switch (IP 54compliant) with low-voltage release and emergency-stop pushbutton
- 400 volt types additionally with right-/left-handed rotation

| Model                      | E 17              | E 23                           | E 26           | E 33            |
|----------------------------|-------------------|--------------------------------|----------------|-----------------|
| Code No.                   | 3101700           | 3102302(230V)<br>3102303(400V) | 3102600        | 3103300         |
| Motor                      | 500W<br>230V~50Hz | 750W 230V/<br>400V~50Hz(400V)  | 750W 400V~50Hz | 1.1KW 400V~50Hz |
| Drilling capacity in steel | Ø16mm             | Ø25mm                          | Ø25mm          | Ø30mm           |
| Spindle seat               | MT2               | MT2                            | MT3            | MT4             |
| Spindle speeds             | 500-2520rpm       | 200-2440rpm                    | 200-2440rpm    | 120-1810rpm     |
| Table size (LxW)           | 235x220mm         | 280x250mm                      | 330x290mm      | 475x425mm       |
| T-slot size                | 12mm              | 12mm                           | 14mm           | 14mm            |
| Column diameter            | 60mm              | 73mm                           | 80mm           | 92mm            |
| Packing size(LxWxH)        | 680x460x290mm     | 815x530x325mm                  | 1430x545x290mm | 1435x645x325mm  |
| N.W./G.W.                  | 36.5/40 kg        | 63.5/66 kg                     | 81/85 kg       | 132/140 kg      |





## DRILL PRESS H LINE B16H/B24H/B28H/B34H

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### Optional Accessories:

- Reduction bush MT<sub>3</sub>/MT<sub>2</sub>
- Threading tapping chuck M5-M12(B24H/B28H/B34H)
- Twist drill bit set 1-13mm/25PCS
- Morse taper drill bit set MT<sub>2</sub>/9PCS 14.5-30mm MT<sub>3</sub>/9PCS 14.5-30mm
- Drilling vice TQ100 ( B16H/B24H ) TQ140(B28H/B34H)
- Backwater filtration device ( B28H/B34H)



| Model                      | B16H            | B24H            | B28H            | B34H            |
|----------------------------|-----------------|-----------------|-----------------|-----------------|
| Code No.                   | 3201600         | 3202400         | 3202800         | 3203400         |
| Drilling capacity (max.)   | Ø16mm           | Ø24mm           | Ø28mm           | Ø34mm           |
| Spindle holding fixture    | MT <sub>2</sub> | MT <sub>2</sub> | MT <sub>3</sub> | MT <sub>4</sub> |
| Spindle speeds             | 450-3500rpm     | 350-4000rpm     | 260-4075rpm     | 145-4800rpm     |
| Table size(L×W)            | 230×245mm       | 280×300mm       | 340×360mm       | 426×400mm       |
| T-slot size                | 12mm            | 14mm            | 14mm            | 14mm            |
| Working surface stand(L×W) | 260×362mm       | 280×264mm       | 364×320mm       | 388×370mm       |
| Motor                      | 550W            | 850W            | 850W            | 2.2/1.5KW       |
| packing size(L×W×H)        | 600×360×1000mm  | 760×440×1170mm  | 770×500×1940mm  | 965×600×2140mm  |
| N.W./G.W.                  | 55/70kg         | 92/116kg        | 142/178kg       | 260/313kg       |

## DRILLING MACHINE B 16HV/24HV/28HV/34HV

OPTIMUM<sup>®</sup>  
MASCHINEN - GERMANY

Variable speed

VARIO SELECT



| Model                      | B16HV            | B24HV           | B28HV           | B34HV            |
|----------------------------|------------------|-----------------|-----------------|------------------|
| Code No.                   | 3401600          | 3402400         | 3402800         | 3403400          |
| Drilling capacity(max.)    | Ø16mm            | Ø24mm           | Ø28mm           | Ø34mm            |
| Spindle holding fixture    | MT <sub>2</sub>  | MT <sub>2</sub> | MT <sub>3</sub> | MT <sub>4</sub>  |
| Spindle speeds             | 90-6000rpm       | 100-5950rpm     | 35-5600rpm      | 40-5000rpm       |
| Table size(L×W)            | 230×245mm        | 300×280mm       | 358×340mm       | 426×400mm        |
| T-slot size                | 12mm             | 14mm            | 14mm            | 14mm             |
| Working surface stand(L×W) | 260×362mm        | 280×264mm       | 364×320mm       | 388×390mm        |
| Motor                      | 1.5KW /230V/50Hz | 1.5KW/230V/50Hz | 1.5KW/230V/50Hz | 2.2KW /230V/50Hz |
| packing size(L×W×H)        | 600×360×1000mm   | 755×440×1175mm  | 765×500×1940mm  | 970×600×2140mm   |
| N.W./G.W.                  | 67/82kg          | 96/122kg        | 166/202kg       | 275/328kg        |





## BENCH DRILLING MACHINE DX TYPE DX13V/DX15V/DX17V

### Convincing arguments: quality, efficiency and price

- Best power transmission due to aluminium belt pulleys
- Emergency-stop push button
- Language selection (all major languages)
- Digital reference point
- Digital parts counter
- Acoustic signal when reaching the drilling depth
- Reduced speed in the thread cutting mode
- Softkey panel with high-contrast display
- Control of the core functions using just four keys and central ordered rotary switch
- Siemens frequency converter

### Variable speed



Stand  
(for optional)



DX13V

DX15V



DX17V

| Model                              | DX13V          | DX15V          | DX17V          |
|------------------------------------|----------------|----------------|----------------|
| Code No.                           | 3301300        | 3301500        | 3301700        |
| Electrical connection              | 230V/1Ph/50Hz  | 230V/1Ph/50Hz  | 230V/1Ph/50Hz  |
| Motor power                        | 850W           | 850W           | 1.0 kW         |
| Spindle seat                       | B16            | MT2            | MT2            |
| Spindle speeds                     | 100-3000rpm    | 100-3000rpm    | 50-4000rpm     |
| Drilling table size length x width | /              | 290x290 mm     | 290x290 mm     |
| T-slot size / number / distance    | /              | 10mm/2/100mm   | 10mm/2/100mm   |
| Stand work surface L x W           | 290x280mm      | 290x280mm      | 290x280mm      |
| Column diameter                    | ø60 mm         | ø60mm          | ø60 mm         |
| Packing size                       | 540x420x1035mm | 540x420x1060mm | 540x420x1100mm |
| N.W./G.W.                          | 51/65.1 kg     | 66/83 kg       | 73/85 kg       |

## DRILLING MACHINE B30BS/B30VGM

### Variable speed



### Convincing arguments: quality, efficiency and price

- Smooth running and high performance electro motor
- Drilling spindle with precise ball bearings
- Large sleeve travel of 125 mm
- Height adjustment of the drilling table via toothed rack
- EMERGENCY-STOP-switch
- Digital depth gauge, accuracy of the display 0.01 mm, reversible mm/inch
- Height adjustable screening grid with interlock switch for best possible protection of the user

| Model                      | B30BS            | B30VGM                                        |
|----------------------------|------------------|-----------------------------------------------|
| Code No.                   | 3403000          | 3413000                                       |
| Drilling capacity (max.)   | ø30mm            | ø30mm                                         |
| Spindle holding fixture    | MT3              | MT3                                           |
| Spindle speeds             | 30-3800rpm       | L:80-700rpm<br>M:200-1700rpm<br>H:400-3000rpm |
| Table size(LxW)            | 426x400mm        | 426x400mm                                     |
| T-slot size                | 14mm             | 14mm                                          |
| Working surface stand(LxW) | 388x390mm        | 388x390mm                                     |
| Motor                      | 2.2KW /230V/50Hz | 2.5KW 230v/50Hz                               |
| Packing size(LxWxH)        | 855x600x2110mm   | 855x600x2110mm                                |
| N.W./G.W.                  | 295/344kg        | 302/366kg                                     |



B30BS

B30VGM



## DRILLING MACHINE B40E/B40PTE

OPTIMUM®  
MASCHINEN - GERMANY

### Convincing arguments: quality, efficiency and price

- Spindle sleeve fine infeed via handwheel, easy to use
- Largely dimensioned drilling table, solid and precisely machined with transversally running T-slots, heavily ribbed at the backside and double clamping
- Easy speed change via gear shifting lever at the front
- Spindle sleeve feed via star grip (B 40E)
- Coupler to change from manual rough feed to manual fine feed
- Machine head adjustable via toothed rack B 40 PTE:
- Automatic sleeve feed allows easy working

| Model                      | B40E                             | B40PTE    |
|----------------------------|----------------------------------|-----------|
| Code No.                   | 3304000                          | 3314000   |
| Drilling capacity in steel | Φ32mm                            |           |
| Spindle taper              | MT4                              |           |
| Spindle speeds             | 95-3200rpm                       |           |
| Working surface table LxW  | 426x400mm                        |           |
| T-slot size                | 14mm                             |           |
| Upright diameter           | Φ115mm                           |           |
| Driving power              | 1.1/1.5KW 400V~50Hz              |           |
| Packing size               | 755x620x2010mm<br>760x620x2000mm |           |
| N.W./G.W.                  | 288/336kg                        | 302/360kg |



B40E

B40PTE

## GEAR HEAD DRILLING MACHINE DH26GT/DH28GS/DH32GS

OPTIMUM®  
MASCHINEN - GERMANY

### Convincing arguments: quality, efficiency and price

- Smooth running and stability due to a largely dimensioned, thick-walled casting column
- High true running accuracy due to hardened and ground work spindle
- Smooth running due to aluminum pulleys with ground multi
- Height-adjustable spindle protection with microswitch to prevent chips and parts
- Spindle protection for best possible protection of the user
- Integrated Machine lamp

| Model                               | DH26GT                                                            | DH28GS         | DH32GS                                                            |
|-------------------------------------|-------------------------------------------------------------------|----------------|-------------------------------------------------------------------|
| Code No.                            | 3312680                                                           | 3322880        | 3323280                                                           |
| Total connexion ~50 Hz              | 1,1/1,5 kW                                                        | 1,1/1,5 kW     | 1,5/2.2KW                                                         |
| Drilling capacity in steel (S235JR) | Ø 26 mm                                                           | Ø 28 mm        | Ø 32 mm                                                           |
| Spindle taper                       | MT 3                                                              |                | MT4                                                               |
| Spindle speeds                      | 75 / 150 rpm<br>250 / 500 rpm<br>420 / 840 rpm<br>1450 / 2900 rpm |                | 75 / 110 rpm<br>240 / 360 rpm<br>420 / 620 rpm<br>1330 / 2000 rpm |
| Working surface table               | 380 x 380 mm                                                      | 376 x 394 mm   | 400 x 420 mm                                                      |
| T-slot size                         | 14 mm                                                             | 14 mm          | 14 mm                                                             |
| Working surface stand               | 322 x 320 mm                                                      | 322 x 356 mm   | 420 x 393 mm                                                      |
| Column diameter                     | Ø 92 mm                                                           | Ø 92 mm        | Ø 115 mm                                                          |
| Packing size(LxWxH)                 | 725x500x1600mm                                                    | 2070x480x845mm | 2240x550x990mm                                                    |
| N.W./G.W.                           | 158/184 kg                                                        | 175/230 kg     | 312/378 kg                                                        |



DH 26GT

DH 32GS





## GEAR HEAD DRILLING MACHINE DH 26GTV/28GSV/32GSV

**OPTIMUM<sup>®</sup>**  
MASCHINEN - GERMANY

Variable speed

**VARIO SELECT**

| Model                                         | DH 26GTV                                                 | DH 28GSV                                                | DH32GSV                                                  |
|-----------------------------------------------|----------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------|
| Code No.                                      | 3412600                                                  | 3422800                                                 | 3423280                                                  |
| Electrical connection                         | 230V 50HZ 1PH                                            | 400V 50HZ 3PH                                           | 400V 50HZ 3PH                                            |
| Motor power                                   | 1.5KW                                                    | 1.5KW                                                   | 2.2KW                                                    |
| Drilling capacity in steel (S235JR)           | Ø 26 mm                                                  | Ø 28 mm                                                 | Ø 32 mm                                                  |
| Continuous drilling capacity in steel(S235JR) | Ø 24 mm                                                  | Ø 25 mm                                                 | Ø 30 mm                                                  |
| Spindle stroke                                | 127mm                                                    | 127mm                                                   | 125mm                                                    |
| Spindle seat                                  | MT3                                                      | MT3                                                     | MT4                                                      |
| Throat                                        | 235mm                                                    | 260mm                                                   | 285mm                                                    |
| Spindle speed                                 | 45-165 rpm<br>150-550 rpm<br>250-925 rpm<br>870-3200 rpm | 45-165 rpm<br>150-550rpm<br>250-925 rpm<br>870-3200 rpm | 50-160 rpm<br>160-530 rpm<br>280-920 rpm<br>900-3000 rpm |
| Table work surface Lx W                       | 380x380mm                                                | 376x394mm                                               | 400x420mm                                                |
| T-slot size                                   | 14mm                                                     | 14mm                                                    | 14mm                                                     |
| Distance spindle - table                      | max. 450 mm                                              | max. 875 mm                                             | max. 822 mm                                              |
| Distance spindle - stand                      | max. 610 mm                                              | max. 1200 mm                                            | max. 1270 mm                                             |
| Column diameter                               | Ø 92 mm                                                  | Ø 92 mm                                                 | Ø 115 mm                                                 |
| Dimensions                                    | 725x500x1600mm                                           | 2070x480x890mm                                          | 2240x550x990mm                                           |
| N.W./G.W.                                     | 168/194 kg                                               | 184/242 kg                                              | 303/369 kg                                               |



## DRILLING MACHINE DH45G/DH55G

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

- Smooth running and stability due to a largely dimensioned, thick-walled casting column
- Automatic gearwheel lubrication via oil pump
- High true running accuracy due to hardened and ground work spindle
- High smooth running due to grinded gearwheels
- Lockable main switch and protective motor switch
- Spindle locking with integrated drill drift for a simple tool change
- With mechanic, 3-fold adjustable spindle sleeve feed

**NEW**

| Model                             | DH45G           | DH55G       |
|-----------------------------------|-----------------|-------------|
| Code No.                          | 3324500         | 3325500     |
| Electrical connection             | 400 V           | 400 V       |
| Motor power                       | 2.2 KW          | 3 KW        |
| Spindle seat                      | MT4             | MT4         |
| Spindle speeds                    | 90-1520 rpm     | 40-2000 rpm |
| Work surface table length x width | 530x530mm       | 650x650mm   |
| T-slot size / distance / number   | 16/125/3        | 18/160/3    |
| Work surface stand length x width | 755x480mm       | 910x600mm   |
| Column diameter                   | Ø150mm          | Ø200mm      |
| Length x Width x Height           | 850x480x2195mm  | /           |
| Packing size                      | 1110x770x2440mm | /           |
| N.W./G.W.                         | 560/625kg       | 590kg       |





## DRILLING MACHINE DRILLING 45/45E

### Convincing arguments: quality, efficiency and price

- Heavy, solid cast iron construction
- Smooth running and stability due to a largely dimensioned, thick-walled casting column
- Automatic gearwheel lubrication via oil pump
- High true running accuracy due to hardened and ground work spindle
- High smooth running due to grinded gearwheels
- Threading mechanism
- Lockable main switch and protective motor switch
- Spindle locking with integrated drill drift for a simple tool change
- Drilling 45 with mechanic, 2-fold adjustable spindle sleeve feed
- Drilling 45E with electromagnetic spindle sleeve feed

| Model                      | Drilling 45/Drilling 45E |
|----------------------------|--------------------------|
| Code No.                   | 3304500/3334500          |
| Drilling capacity (max.)   | Ø45mm                    |
| Threading in steel (max.)  | M20                      |
| Spindle taper              | MT4                      |
| Spindle speeds             | 50-1450 rpm              |
| Table size(L×W)            | 560x560mm                |
| T-slot size                | 18mm                     |
| Working surface stand(L×W) | 730x405mm                |
| Motor                      | 0.85/1.5KW               |
| Packing size(L×W×H)        | 2270x690x1100mm          |
| Net weight/Gross weight    | 480/615kg                |

### Optional accessories:

- Quick-action drill chuck MT4/1-16 mm
- Reducing bushes MT 4 - MT 3
- Twist drill kit coated with titanium Ø 1-13 mm
- Clamping tool kit SPW 12
- Tapping chuck M5-M12
- Machine vices:MSO 125/150,BMS 150/200,BSI 140/200



Drilling 45/45E

## DRILLING MACHINE DRILLING 50

### Convincing arguments: quality, efficiency and price

- Heavy, solid cast iron construction
- Smooth running and stability due to a largely dimensioned, thick-walled casting column
- Automatic gearwheel lubrication via oil pump
- High true running accuracy due to hardened and ground work spindle
- High smooth running due to grinded gearwheels
- Threading mechanism
- Lockable main switch and protective motor switch
- Spindle locking with integrated drill drift for a simple tool change
- Drilling 50 with electromagnetic spindle sleeve feed

| Model                                | Drilling 50                      |
|--------------------------------------|----------------------------------|
| Code No.                             | 3305000                          |
| Total connected value                | 3.0 / 2.4 kW 400 V / 3 Ph ~50 Hz |
| Drilling capacity in steel (S235JR)  | Ø 50 mm                          |
| Thread cutting in steel              | M 42                             |
| Spindle taper                        | MT 4                             |
| Spindle speeds                       | 54 - 2'090 rpm                   |
| Work surface table length x width    | 600 x 600 mm                     |
| T-slot size                          | 18 mm                            |
| Working surface stand length x width | 600 x 520 mm                     |
| Column diameter                      | Φ200 mm                          |
| Packing size                         | 1134 x 600 x 2460 mm             |
| Total weight                         | 950 kg                           |

### Optional accessories:

- Quick-action drill chuck MT4/1-16 mm
- Reducing bushes MT 4 - MT 3
- Drilling chuck taper MT 4 - B16
- Twist drill kit HSS incl. Morse taper MT3
- Clamping tool kit SPW 16
- Tapping chuck M5-M12



Drilling 25





## RADIAL DRILLING MACHINE DR4/DR5/DR6

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

- Wide range of applications drilling, reaming, threading
- Working range by horizontally adjustable machine head
- Durable, rigid construction of the arm
- Height adjustment of the arm is powerful spindle motor drive
- Oil bath gearbox of the arm
- Spindle with precision tapered roller bearings with automatic spindle brake
- Arm guideways hardened and precision ground
- Motorized adjustment of spindle head
- Thick-walled steel column for and stability
- Gear parts are supplied by central lubrication with grease
- Hardened and ground guideways
- Spindle sleeve feed with an adjustable overload clutch



DR 4

DR 5



DR 6

| Model                               | DR 4             | DR5              | DR 6              |
|-------------------------------------|------------------|------------------|-------------------|
| Code no.                            | 3703280          | 3704080          | 3705080           |
| Power main motor                    | 1,5 kW           | 3 kW             | 4 kW              |
| Drilling capacity in steel (S235JR) | Φ40 mm           | Φ40 mm           | Φ50 mm            |
| Tapping capacity                    | M30              | M30              | M36               |
| Spindle seat                        | MK 4             | MK 4             | MK 5              |
| Spindle speeds                      | 75 - 1220 rpm    | 32 - 2500 rpm    | 25 - 2000 rpm     |
| Working surface table (LxW)         | 1370 x 700 mm    | 940 x 600 mm     | 1700 x 980 mm     |
| Travel drilling head (horizontal)   | 700 mm           | 1.000 mm         | 1.250 mm          |
| Travel of arm (vertical)            | 510 mm           | 550 mm           | 600 mm            |
| Column diameter                     | Φ200 mm          | Φ280 mm          | Φ350 mm           |
| Packing size                        | 1750x770x2100 mm | 1940x750x2010 mm | 2600x1120x2600 mm |
| Total weight                        | 1200 kg          | 2500 kg          | 3500 kg           |

## دستگاه درل مگنت

## ELECTR-MAGNETIC BASE DRILL MBD 19/25/38

Optional equipment



MBD 19



MBD 25



MBD 38

| Model                 | MBD19         | MBD25         | MBD38         |
|-----------------------|---------------|---------------|---------------|
| Code No.              | 3601900       | 3602500       | 3603800       |
| Max.drilling capacity | Ø19mm         | Ø23mm         | Ø32mm         |
| Rated speed           | 350r/min      | 330r/min      | 150r/min      |
| Rated voltage         | 220V          | 220V          | 380V          |
| Rated frequency       | 50Hz          | 50Hz          | 50Hz          |
| Rated output power    | 850W          | 1100W         | 1600W         |
| Electromagnetism      | 11000N        | 13000N        | 16000N        |
| Packing size          | 410x200x510mm | 410x200x510mm | 530x280x680mm |
| Net weight            | 30kg          | 30kg          | 50kg          |



## LATHE MACHINE TU 1503V/TU 1804V

### Convincing arguments: quality, efficiency and price

- Ribbed prism bed made of grey cast iron, inductively hardened and ground
- Hardened and ground bed guideways
- Guaranteed true running accuracy of the spindle nose better than 0.015 mm
- True running accuracy - Lathe chuck max 0.05 mm
- With leading spindle for threading or automatic longitudinal turning
- With longitudinal slide, cross slide and top slide
- Automatic longitudinal/leading spindle drive
- Right-/left-handed rotation switchable on the control panel
- Handwheels with adjustable precision scaling of 0.04/0.01 mm
- Double tool holder
- All guideways adjustable via V-ledges free of play
- Emergency stop push button

| Model                   | TU 1503V                      | TU 1804V                      |
|-------------------------|-------------------------------|-------------------------------|
| Code No.                | 342 0260                      | 3420280                       |
| Electrical connection   | 230V / 1Ph~50Hz               | 230V / 1Ph~50Hz               |
| Centre height           | 75 mm                         | 90 mm                         |
| Centre width            | 250 mm                        | 400 mm                        |
| Turning diameter (max.) | 150 mm                        | 180 mm                        |
| Speeds                  | 120 - 3'000 min <sup>-1</sup> | 120 - 3'000 min <sup>-1</sup> |
| Spindle taper           | MT 1                          | MT 1                          |
| Spindle drilling        | Ø 11 mm                       | Ø 11 mm                       |
| Travel top slide        | 40 mm                         | 40 mm                         |
| Travel cross slide      | 55 mm                         | 55 mm                         |
| Dimensions L x W x H    | 720x415x345mm                 | 810x430x380mm                 |
| N.W./G.W.               | 23/26 kg                      | 26.5/30 kg                    |

### Convincing arguments...



- Wide range of threading due to change gear kit
- Simple and rapid speed change via V-belt



TU 1503V/TU 1804V

## LATHE MACHINE TU2004V

### Convincing arguments: quality, efficiency and price

- Heavily ribbed prism bed made of steel casting, inductively hardened and precision ground
- Hardened and ground bed guideways
- Hardened spindle nose (DIN 6350)
- Guaranteed true running accuracy of the spindle nose of better than 0.009 mm
- With longitudinal slide, cross slide and top slide
- Right-/left-handed rotation switchable on the control panel
- Emergency-stop push button and low-voltage release
- Thrust bearing
- Leading spindle run on two porous bearings
- Large threading range due to set of change gears
- Change gear train

| Model                      | TU 2004 V                    |
|----------------------------|------------------------------|
| Code No.                   | 342 0310                     |
| Electrical connection      | 230 V / 1 Ph ~50 Hz          |
| Centre height              | 100 mm                       |
| Centre width               | 300 mm                       |
| Turning diameter (max.)    | 200 mm                       |
| Turning Ø over cross slide | 110 mm                       |
| Spindle speeds             | 150 - 2500 min <sup>-1</sup> |
| Spindle taper              | MT 3                         |
| Spindle drilling           | Ø 21 mm                      |
| Travel top slide           | 55 mm                        |
| Travel cross slide         | 75 mm                        |
| Dimensions L x H x W       | 830 x 425 x 360 mm           |
| Net weight                 | 61 kg                        |



TU 2004V





## LATHE MACHINE TU 2304/TU 2304V

### Convincing arguments: quality, efficiency and price

- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- True running accuracy - Lathe chuck better than 0.05 mm
- With leading spindle for threading or automatic longitudinal turning
- Right-/left-handed rotation switchable on the control panel
- Rolled trapezoid spindles
- Emergency-stop push button and low-voltage release

### TU 2304 V

- Speed change easily adjustable via potentiometer
- Digital speed display

| Model                    | TU 2304/TU 2304V              |
|--------------------------|-------------------------------|
| Code No.                 | 342 0320/342 0325             |
| Electrical connection    | 230 V / 1 Ph ~50 Hz           |
| Centre height            | 115 mm                        |
| Centre width             | 450 mm                        |
| Turning Ø over lathe bed | 230 mm                        |
| Spindle speed            | 125 - 2'000 min <sup>-1</sup> |
| Spindle taper            | MT 3                          |
| Travel top slide         | 75 mm                         |
| Travel cross slide       | 120 mm                        |
| Dimensions LxHxW         | 965 x 585 x 510 mm            |
| Net weight               | 114 kg                        |



TU 2304/TU 2304V

## LATHE MACHINE TU 2404(V)/TU 2406(V)

### Convincing arguments: quality, efficiency and price

- Hardened and ground guideways
- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- True running accuracy - Lathe chuck better than 0.05 mm
- With leading spindle for threading or automatic longitudinal turning
- Right-/left-handed rotation switchable on the control panel
- Emergency-stop push button and low-voltage release
- Comprehensive accessory

### TU 2404 V/ TU 2406 V

- Speed change easily adjustable via potentiometer
- Digital speed display

| Model                    | TU 2404/TU 2404V | TU 2406/TU 2406V |
|--------------------------|------------------|------------------|
| Code No (230 V)          | 3420330/3420335  | 342 0355         |
| Code No (400 V)          | 342 0333         | 3420353          |
| Electrical connection    | 230 V or 400 V   | 230 V or 400 V   |
| Centre height            | 125 mm           |                  |
| Centre width             | 450 mm           | 550 mm           |
| Turning Ø over lathe bed | 250 mm           |                  |
| Spindle speed            | 125 - 2000 rpm   | 125 - 2000 rpm   |
| Spindle taper            | MT 3             |                  |
| Travel top slide         | 75 mm            |                  |
| Travel cross slide       | 120 mm           |                  |
| Dimensions LxHxW         | 1020x520x560 mm  | 1310x520x560 mm  |



TU 2404(V)/TU 2406(V)



## LATHE MACHINE TU 2506(V)/TU 2807(V)

### Convincing arguments: quality, efficiency and price

- Heavily ribbed prism bed made of grey cast iron, inductively hardened and precision ground
- Hardened and ground bed guideways
- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- True running accuracy of the lathe chuck better than 0.04 mm
- With leading spindle for threading or automatic longitudinal turning
- Right-/left-handed rotation switchable on the control panel
- Leading spindle run on two porous bearings
- Handwheels on the slide with adjustable precision scaling of 0.04/0.01 mm
- With change gear kit for threading
- Emergency-stop push button and low-voltage release

### TU 2506 V / TU 2807 V

- Smooth and high-performance DC drive with excellent control characteristics
- High-precision tool chuck for higher speeds
- Speed change easily adjustable via potentiometer
- Digital speed display

| Model                    | TU 2506/TU 2506V             | TU 2807/TU 2807V             |
|--------------------------|------------------------------|------------------------------|
| Code No (230 V)          | 3425001/3425006              | 3427001/3427006              |
| Code No (400 V)          | 342 5003                     | 342 7003                     |
| Electrical connection    | 230V/1Ph ~50Hz               | 400V/3Ph ~50Hz               |
| Centre height            | 125 mm                       | 140 mm                       |
| Centre width             | 550 mm                       | 700 mm                       |
| Turning Ø over lathe bed | 250 mm                       | 266 mm                       |
| Spindle speed            | 125 - 2000 min <sup>-1</sup> | 150 - 2000 min <sup>-1</sup> |
| Spindle taper            | MT 4                         |                              |
| Travel top slide         | 70 mm                        | 60 mm                        |
| Travel cross slide       | 110 mm                       | 160 mm                       |
| Dimensions LxHxW         | 1250x585x475 mm              | 1370x640x535 mm              |
| Dimensions LxHxW Vario   | 1250x650x420 mm              | 1370x660x440 mm              |
| Net weight               | 125 kg                       | 180 kg                       |



TU 2506(V)/TU 2807(V)

## LATHE MACHINE D 320x630/630DPA/920/920DPA

### Convincing arguments: quality, efficiency and price

- Camlock spindle seat DIN ISO 702-2 Nr. 4
- Guaranteed true running accuracy of the spindle nose of better than 0.015 mm
- Electrical system with Siemens components
- Emergency-stop push button, protective motor switch, lockable main switch
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Machine substructure including tool compartment

### DPA machines:

- Digital position display DPA 2000 and glass scales
- High working accuracy
- Clearly-arranged keyboard
- Glare-free display

| Model                       | D 320 x 630                 | D 320 x 920     |
|-----------------------------|-----------------------------|-----------------|
| Code No.                    | 340 0633                    | 340 0923        |
| DPA - model                 | D 320 x 630 DPA             | D 320 x 920 DPA |
| Code No.                    | 340 0633DPA                 | 340 0923DPA     |
| Electrical connection       | 400 V / 3 Ph ~50 Hz         |                 |
| Centre height               | 160 mm                      |                 |
| Centre width                | 630 mm                      | 920 mm          |
| Turning Ø over lathe bed    | 320 mm                      |                 |
| Turning Ø over cross slide  | 190 mm                      |                 |
| Turning Ø in the bed bridge | 430 mm                      |                 |
| Spindle speed               | 65 - 1800 min <sup>-1</sup> |                 |
| Spindle taper               | MT 5                        |                 |
| Travel top slide            | 85 mm                       |                 |
| Travel cross slide          | 162 mm                      |                 |
| Length                      | 1485 mm                     | 1685 mm         |
| Dimensions HxW              | 750 x 1350 (DPA 1550) mm    |                 |
| Weight                      | 400 kg                      | 410 kg          |



D 320





## LATHE MACHINE TU 3209V

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

- Hardened and ground bed guideways
- Camlock spindle seat DIN ISO 702-2 Nr. 4
- Guaranteed true running accuracy of the spindle nose of better than 0.015 mm
- Emergency-stop push button, protective motor switch, lockable main switch
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Chip protection at the top slide
- **Digital position display DPA 2000 S** and glass scales
- Speed display
- Considerable reduction of the manufacturing times
- High working accuracy
- Error rate is reduced
- Glare-free display

| Model                       | TU 3209V                    |
|-----------------------------|-----------------------------|
| Code No.                    | 340 3110                    |
| Electrical connection       | 230 V / 1 Ph ~50 Hz         |
| Centre height               | 160 mm                      |
| Centre width                | 920 mm                      |
| Turning Ø over lathe bed    | 320 mm                      |
| Turning Ø over cross slide  | 190 mm                      |
| Turning Ø in the bed bridge | 430 mm                      |
| Spindle speed               | 12 - 2250 min <sup>-1</sup> |
| Spindle taper               | MT 5                        |
| Travel top slide            | 85 mm                       |
| Travel cross slide          | 162 mm                      |
| Dimensions LxHxW            | 1685 x 750 x 1550 mm        |
| Weight                      | 410 kg                      |



TU 3209V

## LATHE MACHINE D 330x1000/330 x 1000DPA

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

- Hardened and ground bed guideways
- Camlock DIN ISO 702-2 Nr. 4
- Guaranteed true running accuracy of the spindle nose of better than 0.015 mm
- Hardened and ground toothed wheels and shafts, running in an oil bath on precision bearings
- Emergency-stop push button, protective motor switch, lockable main switch
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Electrical system with Siemens components
- **DPA machine:**
- **Digital position display DPA 2000** and glass scales
- High working accuracy
- Clearly-arranged keyboard
- Glare-free display

| Model                       | D 330x1000/D 330x1000 DPA   |
|-----------------------------|-----------------------------|
| Code No.                    | 340 1000/340 1000DPA        |
| Electrical connection       | 400 V / 3 Ph ~50 Hz         |
| Centre height               | 165 mm                      |
| Centre width                | 1000 mm                     |
| Turning Ø over lathe bed    | 330 mm                      |
| Turning Ø over cross slide  | 198 mm                      |
| Turning Ø in the bed bridge | 476 mm                      |
| Spindle speed               | 70 - 2000 min <sup>-1</sup> |
| Spindle taper               | MT 5                        |
| Travel top slide            | 95 mm                       |
| Travel cross slide          | 170 mm                      |
| Dimensions LxHxW            | 1930x755x1300(DPA 1550) mm  |
| Net weight                  | 550 kg                      |



D 330



## LATHE MACHINE D 360x1000/360x1000DPA

### Convincing arguments: quality, efficiency and price

- Hardened and ground bed guideways
- Camlock spindle seat DIN ISO 702-2 Nr. 4
- Coolant tank with filling level display and oil separator; easy and complete draining and cleaning according to DIN
- Guaranteed true running accuracy of the spindle nose of better than 0.015 mm
- Hardened and ground toothed wheels and shafts, running in an oil bath on precision bearings
- Emergency-stop push button, protective motor switch, lockable main switch
- Right-handed / left-handed rotation on the bed slide

| Model                       | D 360 x 1000/D 360 x 1000 DPA |
|-----------------------------|-------------------------------|
| Code No.                    | 3401150/3401150DPA            |
| Electrical connection       | 400 V / 3 Ph ~50 Hz           |
| Centre height               | 180 mm                        |
| Centre width                | 1 000 mm                      |
| Turning Ø over lathe bed    | 356 mm                        |
| Turning Ø over cross slide  | 220 mm                        |
| Turning Ø in the bed bridge | 516 mm                        |
| Spindle speed               | 45 - 1800 min <sup>-1</sup>   |
| Spindle taper               | MT 5                          |
| Travel top slide            | 95 mm                         |
| Travel cross slide          | 180 mm                        |
| Dimensions LxHxW            | 1920x800x1250 (DPA 1.490) mm  |
| Net weight                  | 850 kg                        |

- switchable via stem
- Electrical system with Siemens components
- Adjustable scale of the threading gauge

### DPA machine:

- Digital position display DPA 2000 and glass scales
- High working accuracy
- Clearly-arranged keyboard
- Glare-free display



D 360

## LATHE MACHINE TU 3610V

### Convincing arguments: quality, efficiency and price

- Hardened and ground bed guideways
- Camlock spindle seat DIN ISO 702-2 Nr. 4
- EMC filter also for the use in mixed-use areas
- Coolant equipment with separate coolant tank separately with filling level display and oil separator; easy and complete draining and cleaning according to DIN
- Guaranteed true running accuracy of the spindle nose of better than 0.015 mm
- Hardened and ground toothed wheels and shafts, running in an oil bath on precision bearings

| Model                       | TU 3610 V                                                   |
|-----------------------------|-------------------------------------------------------------|
| Code No.                    | 3403130                                                     |
| Electrical connection       | 400 V / 3 Ph ~50 Hz                                         |
| Centre height               | 180 mm                                                      |
| Centre width                | 1000 mm                                                     |
| Turning Ø over lathe bed    | 356 mm                                                      |
| Turning Ø over cross slide  | 220 mm                                                      |
| Turning Ø in the bed bridge | 516 mm                                                      |
| Spindle speed               | 30 - 550 min <sup>-1</sup> / 160 - 3000 min <sup>-1</sup> * |
| Spindle taper               | MT 5                                                        |
| Travel top slide            | 95 mm                                                       |
| Travel cross slide          | 180 mm                                                      |
| Dimensions LxHxW            | 1920x800x1250 (DPA 1.490) mm                                |
| Net weight                  | 850 kg                                                      |

- Emergency-stop push button, protective motor switch, lockable main switch
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Quick action tool holder and tool holder for square tools
- Electrical system with Siemens components
- Digital position display DPA 2000 S and glass scales
- High working accuracy
- Glare-free display



TU 3610V





## LATHE MACHINE D 420x1000/420x1500

### Convincing arguments: quality, efficiency and price

- Hardened and ground bed guideways
- Camlock spindle seat DIN ISO 702-2 No. 6
- Coolant equipment with separate coolant tank separately with filling level display and oil separator; easy and complete draining and cleaning according to DIN
- Guaranteed true running accuracy of the spindle nose of better than 0.015 mm
- Main spindle running in an oil bath hardened and ground mounted on 2 adjustable precision taper roller bearings
- All metric thread pitch in the range from 0.2 to 14 mm/r and all inch threads in the range from 72 - 2 threads per inch

| Model                       | D 420x1000/1000 DPA         | D 420x1500/1500 DPA |
|-----------------------------|-----------------------------|---------------------|
| Code No.                    | 3401160/3401160DPA          | 3401165/3401165DPA  |
| Electrical connection       | 400 V / 3 Ph ~50 Hz         |                     |
| Centre height               | 210 mm                      |                     |
| Centre width                | 1000 mm                     | 1500 mm             |
| Turning Ø over lathe bed    | 420 mm                      |                     |
| Turning Ø over cross slide  | 250 mm                      |                     |
| Turning Ø in the bed bridge | 590 mm                      |                     |
| Spindle speed               | 45 - 1800 min <sup>-1</sup> |                     |
| Spindle taper               | MT 6                        |                     |
| Travel top slide            | 140 mm                      |                     |
| Travel cross slide          | 230 mm                      |                     |
| Length                      | 2025 mm                     | 2525 mm             |
| Dimensions HxW              | 915x1375 (DPA 1615) mm      |                     |
| Net weight                  | 1550 kg                     | 1800 kg             |

- without replacing the change gears by means of gear levers adjustable on the control panel
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Central lubrication at the bed slide
- Electrical system with Siemens components

### DPA machine:

- **Digital position display DPA 2000** and glass scales
- High working accuracy
- Clearly-arranged keyboard
- Glare-free display



D 420

## LATHE MACHINE TU 4210V

### Convincing arguments: quality, efficiency and price

- Hardened and ground bed guideways
- Camlock spindle seat DIN ISO 702-2 No. 6
- EMC filter also for the use in mixed-use areas
- Coolant equipment with separate coolant tank separately with filling level display and oil separator; easy and complete draining and cleaning according to DIN
- Guaranteed true running accuracy of the spindle nose of better than 0.015 mm
- All metric thread pitch in the range from 0.2 to 14 mm/rev and all inch threads in the range from 72 - 2 threads per

| Model                       | TU 4210 V                                                |
|-----------------------------|----------------------------------------------------------|
| Code No.                    | 340 3150                                                 |
| Electrical connection       | 400 V / 3 Ph ~50 Hz                                      |
| Centre height               | 210 mm                                                   |
| Centre width                | 1000 mm                                                  |
| Turning Ø over lathe bed    | 420 mm                                                   |
| Turning Ø over cross slide  | 250 mm                                                   |
| Turning Ø in the bed bridge | 590 mm                                                   |
| Spindle speed               | 30 - 550 min <sup>-1</sup> / 160 - 3000min <sup>-1</sup> |
| Spindle taper               | MT 6                                                     |
| Travel top slide            | 140 mm                                                   |
| Travel cross slide          | 230 mm                                                   |
| Dimensions LxHxW            | 2025x915x1615 mm                                         |
| Net weight                  | 1550 kg                                                  |

- inch without replacing the change gears by means of gear levers adjustable on the control panel
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Electrical system with Siemens components
- **Digital position display DPA 2000 S** and glass scales
- High working accuracy
- Glare-free display



TU 4210V



## LATHE MACHINE TX4412/TX5216/TX6222

NEW

| Model                       | TX4412                                                           | TX5216                                                        | TX6222                                                        |
|-----------------------------|------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Code No.                    | 4244300                                                          | 4254400                                                       | 4262500                                                       |
| Electrical connection       | 3x400V~50Hz                                                      | 3x400V~50Hz                                                   | 3x400V~50Hz                                                   |
| Centre height               | 220mm                                                            | 260mm                                                         | 310mm                                                         |
| Centre width                | 1150mm                                                           | 1600mm                                                        | 2225mm                                                        |
| Turning Ø over lathe bed    | Ø400mm                                                           | Ø520mm                                                        | Ø620mm                                                        |
| Turning Ø in the bed bridge | Ø600mm                                                           | Ø780mm                                                        | Ø880mm                                                        |
| Turning Ø over cross slide  | Ø210mm                                                           | Ø325mm                                                        | Ø425mm                                                        |
| Main spindle taper          | MT4                                                              | MT7(Ø80)                                                      | 1:20(Ø105)                                                    |
| Spindle speeds              | 40/72/92/185/<br>340/425/625/<br>950/1150/1400/<br>1750/2200 rpm | 30/44/62/80/<br>110/170/230/<br>350/500/750/<br>1100/1500 rpm | 30/44/62/80/<br>110/170/230/<br>350/500/750/<br>1100/1500 rpm |
| Travel cross slide          | 300mm                                                            | 350mm                                                         | 365mm                                                         |
| Travel top slide            | 130mm                                                            | 170mm                                                         | 165mm                                                         |
| Packing size(LxWxH)         | /                                                                | 3016x1256x2220mm                                              | 3600x1060x1845mm                                              |
| Total weight                | /                                                                | 1795kg                                                        | 2020kg                                                        |

### Optional accessories:

- Three jaw chuck CI3P Ø 315 mm, D1 - 8" cast
- Four jaw chuck CI3P Ø 315 mm, D1 - 8" cast
- Steady rest Ø 10 - 185 mm bronze bushes
- Follow rest Ø 15 - 125 mm roll



TX4412/TX5216/TX6222

## LATHE MACHINE TM4010

NEW

| Model                             | TM 4010          |
|-----------------------------------|------------------|
| Code No.                          | 4640300          |
| Electrical connection             | 400V             |
| Motor power                       | 2.2kw            |
| Spindle taper                     | MK4              |
| Spindle seat                      | D5               |
| Spindle drilling, rod passage     | 53mm             |
| Centre height                     | 200mm            |
| Centre width                      | 1000mm           |
| Turning Ø over lathe bed          | 400mm            |
| Turning Ø over cross slide        | 250mm            |
| Spindle speed                     | 70-2000rpm       |
| Travel top slide                  | 98mm             |
| Travel cross slide                | 185mm            |
| Longitudinal feed in the range of | 0.014-0.38mm     |
| Transverse feed in the range of   | 0.052-1.392mm    |
| Pitch - Metric in the range of    | 0.4-7mm          |
| Pitch - Inch in the range of      | 56-4             |
| Tool holder seat height (max.)    | 30mm             |
| Tailstock seat                    | 50mm             |
| Tailstock - sleeve travel         | 0-110mm          |
| Packing size(LxWxH)               | 1950x8520x1530mm |
| N.W./ G.W.                        | 500/598Kg        |



TM4010





## LATHE MACHINE TURNER 360/TURNER 380H

**Optional Accessories:**

- Tapet turning attachment
- Live center MT3
- Leadscrew cover
- Quick change tool post
- Turning tool kit 16mm/7pcs
- 3-axis Digital readout
- 4-way tool holder

| Model                    | Turner 360      | Turner 380H                   |
|--------------------------|-----------------|-------------------------------|
| Code No.                 | 4236300         | 4238303                       |
| Swing over bed           | Ø355mm          | Ø400mm                        |
| Swing over cross slide   | Ø220mm          | Ø260mm                        |
| Swing in gap diameter    | Ø505mm          | Ø550mm                        |
| Admits between           | 1000mm          | 1000mm                        |
| Center height            | 175mm           | 200mm                         |
| Spindle bore             | Ø40mm           | Ø51mm                         |
| Taper of spindle bore    | MT5             | MT6                           |
| Range of spindle speed   | 45-1800rpm      | 45-1800rpm                    |
| Top slide travel         | 92mm.           | 92mm                          |
| Cross slide travel       | 176mm           | 178mm                         |
| Threads metric pitches   | 0.45-7.5mm      | M(37)0.4-7mm IN(22)0.45-7.5mm |
| Threads imperial pitches | 4-56T.P.I.      | M(28)4-56TPI IN(40)4-112TPI   |
| Main motor power         | 1.5 / 2.4KW     | 1.5/2.4KW                     |
| Packing size(LxWxH)      | 1950x760x1450mm | 1950x760x1480mm               |
| NW/GW                    | 750/830kg       | 780/850Kg                     |



TURNER 360



TURNER 380H

## LATHE MACHINE TURNER 400x1000

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

- Electro-magnetic foot brake reduces downtime
- Hardened and polished toothed gears also in feed drive
- Practical, solid machine featuring a lead screw and feed rod
- Grey cast-iron machine bed, inductively hardened and precisely polished
- State-of-the-art spindle bedding with high-quality, angular ball bearings
- Machine base in heavy cast iron construction
- Tailstock can be adjusted +/- 5 mm for taper turning
- Ideal for technical colleges, repair shops and training purposes
- Easy, smooth and precisely adjustable speed and feed settings
- Removable bridge for processing of work pieces with a large diameter

| Model                    | Turner 400x1000 |
|--------------------------|-----------------|
| Code No.                 | 4240300         |
| Distance between centers | 1000mm          |
| Center height            | 200mm           |
| Swing over bed           | Ø400mm          |
| Swing over gap           | Ø506mm          |
| Swing over cross slide   | Ø240mm          |
| Spindle bore             | Ø52mm           |
| Speed range              | (12)45-2000rpm  |
| Metric thread            | (36)0.8-14mm    |
| Inch thread              | (30)2-28TPI     |
| Motor power              | 2.4kw/2.0kw     |
| Packing size             | 1930x760x1540mm |
| N.W./G.W.                | 820/860kg       |



TURNER 400





# LATHE MACHINE

## TURNER 410x1000/1500 TURNER 460x1000/1500 TURNER 510x1500/2000/3000 TURNER 560x1500/2000/3000

### Convincing arguments: quality, efficiency and price

- Induction harden bedway
- Enough strong power motor
- Euro-safety magnetic switch or lock key switch

| Model                        | Turner 410/Turner 460         | Turner 510/Turner 560          |
|------------------------------|-------------------------------|--------------------------------|
| Code No.                     | 4241300/4246400               | 4251400/4256400                |
| Swing over bed               | Ø410mm/Ø460mm                 | Ø510mm/Ø560mm                  |
| Swing over cross slide       | Ø220mm/Ø270mm                 | Ø305mm/Ø355mm                  |
| Turning Ø without bed bridge | Ø640mm/Ø690mm                 | Ø735mm/Ø785mm                  |
| Admits between               | 1000mm/1500mm                 | 1500mm/1500mm                  |
| Center height                | 205mm/230mm                   | 255mm/280mm                    |
| Spindle bore                 | Ø58mm/<br>Ø80mm(For optional) | Ø80mm/<br>Ø105mm(For optional) |
| Spindle taper                | MT6                           | MT7                            |
| Range of spindle speed       | 25-2000rpm                    | 25-1600rpm                     |
| Top slide travel             | 128mm                         | 130mm                          |
| Cross slide travel           | 285mm                         | 316mm                          |
| Threads metric pitches       | 0.1-14mm                      | 0.2-14mm                       |
| Threads imperial pitches     | 2-112TPI                      | 2-112TPI                       |
| Main motor power             | 4 / 5.5KW                     | 7.5KW                          |
| Packing size(LxWxH)          | 2850x1120x1700mm              | 2960x1130x1820mm               |
| N.W./G.W.                    | 1670/1980kg<br>2020/2385kg    | 2335/2700kg<br>2370/2740kg     |

### Details



· Good function  
& Easy operate apron



· Big range &  
power feed box



TURNER 410/460/510/560

# LATHE MACHINE

## TURNER 530x1500/2000 TURNER 600x1500/2000 TURNER 680x1500/2000

### Convincing arguments: quality, efficiency and price

- Whole piece casting iron foot stand
- 400mm width of bedway, high rigidity, stable precision
- 11KW(15HP)main motor for optional

| Standard Accessories: |                                         |
|-----------------------|-----------------------------------------|
| · Three jaw chuck     | · Steady Rest                           |
| · Coolant system      | · Follow Rest                           |
| · Sleeve and center   | · Face Plate                            |
| · Footbrake system    | · Work light                            |
| · Toolbox&tools 1 set | · 4-jaw Independent<br>Chuck&Back Plate |

| Model                                  | Turner 530x1500/2000 | Turner 600x1500/2000 | Turner 680x1500/2000  |
|----------------------------------------|----------------------|----------------------|-----------------------|
| Code No.                               | 4253400/4253500      | 4260400/4260500      | 4268400/4268500       |
| Swing over bed                         | Φ530mm               | Φ600mm               | Φ680mm                |
| Swing over cross slide                 | Φ329mm               | Φ399mm               | Φ479mm                |
| Height of center                       | 265mm                | 300mm                | 380mm                 |
| Distance between centers               | 1500/2000mm          | 1500/2000mm          | 1500/2000mm           |
| Spindle bore                           | Φ82                  | Φ82                  | Φ82                   |
| Spindle morse taper in nose, in sleeve | ME90/MT5             | ME90/MT5             | ME90/MT5              |
| Spindle speeds range                   | 20-1600rpm           | 20-1600rpm           | 20-1600rpm            |
| Total travel of cross slide            | 320mm                | 358mm                | 438mm                 |
| Total travel of top slide              | 200mm                | 200mm                | 200mm                 |
| Threads imperial pitches               | 4-112TPI             | 4-112TPI             | 4-112TPI              |
| Threads metric pitches                 | 0.25-7mm             | 0.25-7mm             | 0.25-7mm              |
| Spindle drive motor                    | 7.5KW                | 7.5KW                | 7.5KW                 |
| Net weight                             | 2750/3010kg          | 2820/3080kg          | 2900/3160kg           |
| Gross weight                           | 3090/3400kg          | 3180/3490kg          | 3260/3570kg           |
| Packing size                           | 3335x1110x1900mm     | 3335x1110x1900mm     | 3270/3770x1150x1900mm |



TURNER 530/600/680

### Optional Accessories:

- Drill Chuck
- Rolling Centres
- Quick Change Tool Post
- Digital readout(2Axis)
- Digital readout(3Axis)
- Chuck cover
- Leadscrew guard
- Taper Turning Attachment





## LATHE MACHINE TURNER 660x2000/660x3000 TURNER 800x2000/800x3000



TURNER 660/800

| Model                    | Turner 660x2000/660x3000              | Turner 800x2000/800x3000              |
|--------------------------|---------------------------------------|---------------------------------------|
| Code No.                 | 4266500/4266700                       | 4280500/4280700                       |
| Swing over bed           | Ø660mm                                | Ø800mm                                |
| Swing over cross slide   | Ø440mm                                | Ø570mm                                |
| Swing in gap diameter    | Ø900mm                                | Ø1035mm                               |
| Admits between           | 2000mm/3000mm                         | 2000mm/3000mm                         |
| Center height            | 330mm                                 | 400mm                                 |
| Spindle bore             | Φ105mm                                | Φ105mm                                |
| Taper of spindle bore    | 1:20/MT5                              | 1:20/MT5                              |
| Range of spindle speed   | 25-1600rpm                            | 25-1600rpm                            |
| Top slide travel         | 230mm                                 | 230mm                                 |
| Cross slide travel       | 368mm                                 | 420mm                                 |
| Threads metric pitches   | 0.45-120mm(54kinds)                   | 0.45-120mm(54kinds)                   |
| Threads imperial pitches | 7/16-80T.P.I.(54kinds)                | 7/16-80T.P.I.(54kinds)                |
| Main motor power         | 7.5KW                                 | 7.5KW                                 |
| Packing size(L×W×H)      | 3740x1140x1840mm/<br>4740x1140x1840mm | 3740x1140x1910mm/<br>4740x1140x1910mm |
| N.W./G.W.                | 3345/3835kg 3710/4310kg               | 3455/4005kg 3820/4495kg               |

### Details



• Tailstock



• Spindle box & feed box



• Steady rest



• Good function box

## LATHE MACHINE TURNER 800H/1000H/1200H



TURNER 800H/1000H/1200H

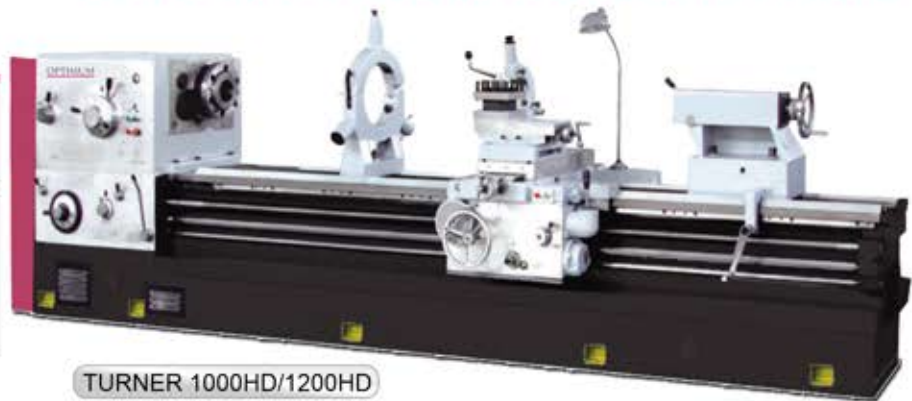
| Model                       | Turner 800H                                                     | Turner 1000H                | Turner 1200H        |
|-----------------------------|-----------------------------------------------------------------|-----------------------------|---------------------|
| Code No.                    | 4602000                                                         | 4613000                     | 4603000             |
| Max.swing over bed          | Φ800mm                                                          | Φ1000mm                     | Φ1200mm             |
| Max.swing over cross slide  | Φ485mm                                                          | Φ685mm                      | Φ800mm              |
| Center distance             | 1000 / 1500 / 2000 / 3000 / 4000 / 5000 / 6000 / 8000 / 10000mm |                             |                     |
| Max.swing over gap          | Φ1000mm                                                         | Φ1200mm                     | Φ1400mm             |
| Spindle hole                |                                                                 | Φ105mm/Φ130mm(For optional) |                     |
| Spindle taper               | 1:20                                                            | 1:20                        | 1:20                |
| Spindle speeds(Number)      | 14-750RPM(18 STEPS)                                             | 14-750RPM(18 STEPS)         | 14-750RPM(18 STEPS) |
| Metric threads range(kinds) | 1-240mm(54 kinds)                                               | 1-240mm(54 kinds)           | 1-240mm(54 kinds)   |
| Inch threads rangs(Kinds)   | 28-1 TPI(36 kinds)                                              | 28-1 TPI(36 kinds)          | 28-1 TPI(36 kinds)  |
| Cross slide travel          | 420mm                                                           | 520mm                       | 520mm               |
| Top slide travel            | 200mm                                                           | 200mm                       | 200mm               |
| Spindle power               | 11KW                                                            | 11KW                        | 11KW                |
| N.W.                        | 4800kg                                                          | 5300kg                      | 5800kg              |
| WEIGHT FLOOR SPACE(L×W×H)   | 3452x1326x1390mm                                                | 3452x1326x1390mm            | 3452x1326x1390mm    |



## LATHE MACHINE TURNER 1000HD/TURNER 1200HD

### Special accessories:

- Face plate ø800mm/ø1000mm
- Larger size steady rest ø200-ø450
- Compound slide auto feed
- Taper turning attachment
- Three-jaw chuck ø400mm
- Four-jaw chuck ø630mm



TURNER 1000HD/1200HD

| Model                      | Turner 1000HD                     | Turner 1200HD                     |
|----------------------------|-----------------------------------|-----------------------------------|
| Code No.                   | 4813000                           | 4803000                           |
| Max.swing over bed         | Φ1000mm                           | Φ1200mm                           |
| Max.swing over gap         | Φ1200mm                           | Φ1400mm                           |
| Max.swing over cross slide | Φ680mm                            | Φ680mm                            |
| Center distance            | 1m 1.5m 2m 3m 4m 5m 6m 8m 10m 12m | 1m 1.5m 2m 3m 4m 5m 6m 8m 10m 12m |
| Spindle hole               | Φ105mm or Φ130mm ( For optional ) |                                   |
| Spindle taper              | 1:20                              | 1:20                              |
| Spindle speeds             | 5.5-730 rpm                       | 5.5-730 rpm                       |
| Metric threads mm          | 1-240mm (52)                      | 1-240mm (52)                      |
| Inch threads TPI           | 1-14 (26)TPI                      | 1-14 (26)TPI                      |
| Cross slide travel         | 520mm                             | 520mm                             |
| Top slide travel           | 200mm                             | 200mm                             |
| Main motor                 | 11KW                              | 11KW                              |

## LATHE MACHINE TURNER 1400HM/TURNER 1600HM

### Special accessories:

- Steady rest ø380-ø800
- Electric tailstock
- Live center



TURNER 1400HM/1600HM

| Model                      | Turner 1400HM                  | Turner 1600HM                  |
|----------------------------|--------------------------------|--------------------------------|
| Code No.                   | 4705100                        | 4707100                        |
| Max.weight of workpiece    | 8T                             | 8T                             |
| Max.swing over bed         | Φ1400mm                        | Φ1600mm                        |
| Max.swing over cross slide | Φ1000mm                        | Φ1200mm                        |
| Center distance            | 1.5m 2m 3m 4m 5m 6m 8m 10m 12m | 1.5m 2m 3m 4m 5m 6m 8m 10m 12m |
| Spindle hole               | Φ130mm                         | Φ130mm                         |
| Spindle taper              | 140#                           | 140#                           |
| Spindle speeds             | 3.15-315r/min or 2.5-250r/mm.  | 3.15-315r/min or 2.5-250r/mm.  |
| Cross slide travel         | 650mm                          | 650mm                          |
| Top slide travel           | 280mm                          | 280mm                          |
| Main motor                 | 22KW                           | 22KW                           |





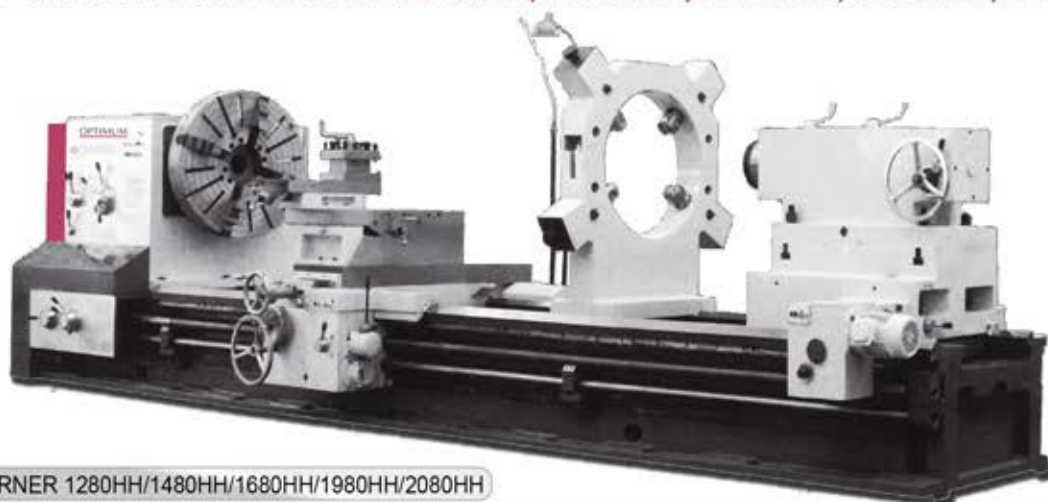
## LATHE MACHINE TURNER 1600HI/TURNER 1800HI



TURNER 1600HI/1800HI

| Model                         | Turner 1600HI | Turner 1800HI |
|-------------------------------|---------------|---------------|
| Code No.                      | 4807301       | 4814301       |
| Swing diameter over bed       | Φ1600mm       | Φ1800mm       |
| Swing diameter over tool rest | Φ1250mm       | Φ1450mm       |
| Diameter of spindle hole      | Φ160mm        | Φ160mm        |
| Range of spindle speeds       | 4-192rpm      | 4-192rpm      |
| Power of main motor           | 22KW          | 22KW          |
| Speed of main motor           | 970rpm        | 970rpm        |

## LATHE MACHINE TURNER 1280HH/1480HH/1680HH/1980HH/2080HH

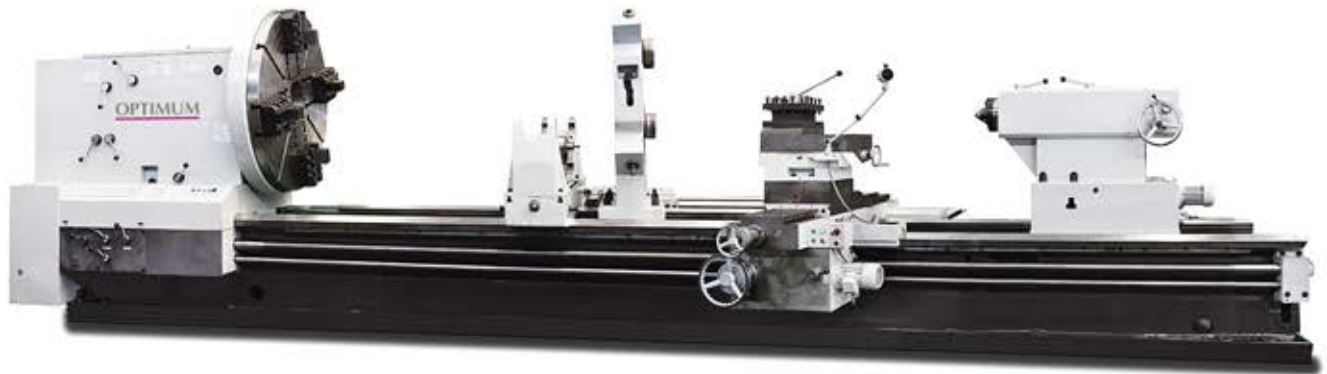


TURNER 1280HH/1480HH/1680HH/1980HH/2080HH

| Model                      | Turner 1280HH                    | Turner 1480HH | Turner 1680HH | Turner 1980HH | Turner 2080HH |
|----------------------------|----------------------------------|---------------|---------------|---------------|---------------|
| Code No.                   | 4604200                          | 4606200       | 4608200       | 4609200       | 4615200       |
| Max swing over bed         | Φ1280mm                          | Φ1480mm       | Φ1680mm       | Φ1980mm       | Φ2080mm       |
| Max swing over cross slide | Φ840mm                           | Φ1040mm       | Φ1240mm       | Φ1500mm       | Φ1600mm       |
| Max swing over gap         | Φ1580mm                          | Φ1780mm       | Φ1980mm       | Φ2280mm       | Φ2380mm       |
| Spindle bore               | Φ130mm                           | Φ130mm        | Φ130mm        | Φ130mm        | Φ130mm        |
| Spindle speeds             | 3-315rpm or 2-200rpm or 2-250rpm |               |               |               |               |
| Cross slide travel         | 860mm                            | 860mm         | 860mm         | 860mm         | 860mm         |
| Top slide travel           | 280mm                            | 280mm         | 280mm         | 280mm         | 280mm         |
| Main drive motor           | 30KW                             | 30KW          | 30KW          | 30KW          | 30KW          |



## LATHE MACHINE TURNER 1600HH/1800HH/2000HH



TURNER 1600HH/1800HH/2000HH

| Model                         | Turner 1600HH | Turner 1800HH | Turner 2000HH |
|-------------------------------|---------------|---------------|---------------|
| Code No.                      | 4607501       | 4614501       | 4610501       |
| Swing diameter over bed       | Φ1600mm       | Φ1800mm       | Φ2000mm       |
| Swing diameter over tool rest | Φ1250mm       | Φ1450mm       | Φ1650mm       |
| Diameter of spindle hole      | Φ100mm        | Φ100mm        | Φ100mm        |
| Range of spindle speeds       | 3-136rpm      | 3-136rpm      | 3-136rpm      |
| Power of main motor           | 30KW          | 30KW          | 30KW          |
| Height of machine             | 2300mm        | 2500mm        | 2700mm        |

## METAL BAND SAW S 92G/S 122G

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

- Triple ball bearing guiding of the saw band
- Three speed stages for a broad choice of materials
- Automatic limit switching when finishing the sawing process
- Sawing arc slewable from 0° to 45° thus allowing angular saw cuts
- Scale good read for angle adjustment
- Infeed adjustable by means of a spring
- Saw band tension at the front adjustable via handwheel
- Protective switch for the belt cover
- Safety switch with undervoltage release and emergency stop
- Transport lock
- S 122 G with serial quick action vice
- S 122 G including practical underframe

### Optional Accessories:

- Bandsaw stand
- Coolant system
- Machine lamp
- Saw blade 1300x13x0.65mm  
10-14TPI(S92G)  
1640x13x0.65mm  
10-14TPI(S122G)



S 92G



S 122G

| Model               | S 92G                 | S 122G              |
|---------------------|-----------------------|---------------------|
| Code No.            | 5109280               | 5112280             |
| Motor power ~50 Hz  | 400 W 230 V / 1 Ph    | 550 W 230 V / 1 Ph  |
| Saw band speed      | 20/29/50 m/min        | 21/31/54 m/min      |
| Saw band dimensions | 1300 x 12.5 x 0.63 mm | 1640 x 13 x 0.63 mm |
| Net weight          | 34 kg                 | 69 kg               |
| Packing size        | 760x330x470mm         | 1080x520x470mm      |





## METAL BAND SAW SP 13V

### Convincing arguments: quality, efficiency and price

- Ball bearing mounted 2 point saw band guiding providing outstanding
- Sawing arc slewable from 0° to 60° thus allowing angular saw cuts
- With high-grade bimetallic saw band supplied as standard
- Adjustable material stop for series productions
- Base plate equipped with anti-skid feet
- Low vibration and low wear due to special gearbox with two large toothed wheels made of hardened steel
- DC drive motor with low speed and carbon brushes for an up to 10 times higher durability

| Model                 | SP 13V              |
|-----------------------|---------------------|
| Code No.              | 5101300             |
| Electrical connection | 230 V / 1 Ph ~50 Hz |
| Motor power           | 800 W               |
| Saw band speed        | 30 - 80 m/min       |
| Saw band dimension    | 1440 x 13 x 0.65 mm |
| Cutting angle         | 0° - 60°            |
| Net weight            | 19.5 kg             |



SP 13V

## METAL BAND SAW S 100G

### Convincing arguments: quality, efficiency and price

- Quick-action vice for rapid workpiece clamping
- Micro switch for automatic limit stop
- Automatic lowering of the saw bow by means of 3-stage adjustable saw bow lowering pressure
- With high-grade bimetallic saw band supplied as standard
- Saw bow can be fixed during transportation
- Large, ergonomic handle and little weight allowing easy transportation to the construction site
- Space-saving due to mitre adjustment by means of the saw arc
- Adjustable material stop for series productions



S 100G

### Details



#### Automatic limit stop

- Switching off the saw band drive at the bottom limit of travel



#### Saw band guiding

- Ball bearing; for outstanding belt run and thus optimum cut



#### Safety switch

- Easy-to-operate
- according to IP 54 with under-voltage release, emergency-stop push button

| Model               | S 100G              |
|---------------------|---------------------|
| Code No.            | 5110080             |
| Motor power ~50 Hz  | 370 W 230 V / 1 Ph  |
| Saw band speed      | 45 m/min            |
| Saw band dimensions | 1470 x 13 x 0.65 mm |
| NW./GW.             | 23/28 kg            |
| Packing size        | 720 x 380 x 460 mm  |



## METAL BAND SAW S 150G V

### Convincing arguments: quality, efficiency and price

- Quick holding of the workpiece by a quick-action vice
- With high-grade bimetallic saw band supplied as standard
- Base plate and saw bow made of grey cast iron
- Mitre adjustment to 60° by slewing the whole saw bow
- Scale good read for angle adjustment
- Stable saw bow, for silence and vibration-free running
- Ball-bearing saw band guidance

### Details



#### Control panel

- Emergency-stop push button
- Switch for coolant pump
- Potentiometer
- EMC filter



#### Vario drive

- continuously adjustable saw band speeds



#### Coolant pump

- Standard equipment

| Model               | S 150G V             |
|---------------------|----------------------|
| Code No.            | 5115180              |
| Motor power ~50 Hz  | 1.1 kW 230 V / 1 Ph  |
| Motor coolant pump  | 50 W                 |
| Saw band speed      | 20 - 65 m/min        |
| Saw band dimensions | 1735 x 12.7 x 0.9 mm |
| NW./GW.             | 100/112kg            |
| Packing size        | 1130x570x750mm       |



S 150G V

## METAL BAND SAW S 131GH

### Convincing arguments: quality, efficiency and price

- Silent operation
- Ball-bearing 3-point saw band guidance
- Three switchable saw band speeds 22/31/55 m/min.
- Quick holding of the workpiece by a quick-action vice
- With high-grade bimetallic saw band supplied as standard
- Base plate and saw bow made of grey cast iron
- Material limit stop
- Emergency-Stop push button, motor protection switch (CE conformity of the electrical equipment)
- Scale good read for angle adjustment

| Model               | S 131 GH            |
|---------------------|---------------------|
| Code No.            | 5113180             |
| Motor power ~50 Hz  | 1.1KW 230 V / 1 Ph  |
| Saw band speed      | 22 / 31 / 55 m/min  |
| Saw band dimensions | 1638 x 13 x 0.65 mm |
| NW./GW.             | 78/80kg             |
| Packing size        | 1040 x 460 x 560 mm |



#### Saw bow

- made of grey cast iron
- Slewable on both sides from -45° to +60°



#### Hydraulic cylinder

- Infinitely variable lowering speed by means of a hydraulic cylinder and a throttle valve



#### Machine substructure

- Mobile
- Standard equipment

S 131GH





## METAL BAND SAW SG 5018/5018GW

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

- User-friendly safety switch for IP 54 with low-voltage release
- With high-grade bimetallic saw band supplied as standard
- Material limit stop
- Lowering of the saw bow by means of the hydraulic support cylinder with infinitely variable throttle valve
- Automatic switch-off of the saw after termination of cutting



SG 5018

### Details



• Swivel working table

### Machine substructure

- Robust
- Large wheels and handy transport strap allow trouble-free position change

SG 5018GW

- Saw band guiding**
- Ball bearing 3-point saw band guiding, durable and easy to adjust
  - Chip brush



| Model                  | SG5018/SG5018GW  |
|------------------------|------------------|
| Code No.               | 5151800/5151900  |
| Motor                  | 1.1KW, 380V      |
| Blade speed            | 34,41,59,98m/min |
| Blade size - Length    | 2360mm           |
| Blade size - Teeth     | 4-6TPI           |
| Blade size - Thickness | 0.9mm            |
| Blade size - Width     | 19mm             |
| NW/GW                  | 158/185kg        |
| Packing size           | 1250x440x1080mm  |

## METAL BAND SAW S 181G

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

- User-friendly safety switch for IP 54 with low-voltage release
- With high-grade bimetallic saw band supplied as standard
- Material limit stop
- Lowering of the saw bow by means of the hydraulic support cylinder with infinitely variable throttle valve
- Automatic switch-off of the saw after termination of cutting



S 181G

### Saw band guiding

- Ball bearing 5-point saw band guiding
- Outstanding band run and thus optimum cut
- Chip brush



### Details



- Three saw band speeds**
- Switchable by means of the gearbox



- Quick-action vice**
- Clamping jaws adjustable from 0° to 45° for mitre cuts



- Coolant equipment**
- Integrated in the base
  - Tank capacity 11 litres

| Model               | S 181G             |
|---------------------|--------------------|
| Code No.            | 5118180            |
| Motor power ~50 Hz  | 750 W 400 V / 3 Ph |
| Saw band speed      | 39/66/82 m/min     |
| Saw band dimensions | 2362 x 19 x 0.9 mm |
| NW./GW.             | 130/150kg          |
| Packing size        | 1300x460x1120mm    |



## METAL BAND SAW S 275N/S 275NV

### Convincing arguments: quality, efficiency and price

- High cutting accuracy due to vibration-free running
- Two switchable speeds
- Lowering of the saw bow by means of the hydraulic cylinder with infinitely variable throttle valve
- Micro switch for automatic limit stop
- Scale good read for angle adjustment
- With high-grade bimetallic saw band supplied as standard
- Adjustable material stop for series productions
- Fully equipped machine, the user can immediately start to work productively S 275NV
- Infinitely variable saw belt speeds 20 - 90 m/min.
- It is easily possible to change the speed during operation

| Model                 | S 275N              | S 275NV          |
|-----------------------|---------------------|------------------|
| Code No.              | 5127500             | 5627500          |
| Electrical connection | 400V / 3Ph ~50Hz    | 230V / 1Ph ~50Hz |
| Motor power           | 1.1 kW              | 1.5 kW           |
| Saw band speed        | 45 / 90 m/min       | 20 - 90 m/min    |
| Saw band demension    | 2.480 x 27 x 0.9 mm |                  |
| Cutting angle         | from 0° to 60°      |                  |
| N.W./G.W.             | 185/200 kg          |                  |



S 275N/S 275NV

## METAL BAND SAW S 210G

### Convincing arguments: quality, efficiency and price

- High cutting accuracy due to vibration-free running
- Two switchable saw band speeds
- With high-grade bimetallic saw band supplied as standard
- Material limit stop
- Automatic switch-off of the saw after termination of cutting
- Precise, infinitely variable lowering by means of hydraulic cylinder including throttle valve

#### Optional accessories:

- Material stand MSR4×1m  
MSR7×2m
- Saw blade  
M42 HSS (5-8 TPI)  
M42 HSS (6-10 TPI)  
M42 HSS (10-14 TPI)

| Model              | S210G          |
|--------------------|----------------|
| Code No.           | 5221000        |
| Saw belt speed     | 40/80m/min     |
| Saw belt dimension | 2080x20x0.9mm  |
| Motor power        | 750W 400V-50Hz |
| NW./GW.            | 185/200kg      |
| Packing size       | 1300x580x880mm |



S 210G





## METAL BAND SAW S 285DG

### Convincing arguments: quality, efficiency and price

- Heavy casting type
- Limit stops exactly adjustable within an accuracy of a degree
- Automatic switch-off of the saw after termination of cutting
- Precise and durable saw band guiding, re-adjustable
- Two switchable saw band speeds 45/90 m/min.
- Mitre adjustment from -45° up to 60° by slewing the whole saw bow
- With high-grade bimetallic saw band supplied as standard
- Material limit stop with scaling
- Precise, infinitely variable lowering by means of hydraulic cylinder
- CE conformity of the electrical equipment

### Details



Manometer



Lowering speed



Coolant pump

| Model               | S 285 DG            |
|---------------------|---------------------|
| Code No.            | 5228580             |
| Motor power ~50 Hz  | 1.1 kW 400 V / 3 Ph |
| Saw band speed      | 45 / 90 m/min       |
| Saw band dimensions | 2480 x 27 x 0.9 mm  |
| NW./GW.             | 295/315kg           |
| Packing size        | 1460x730x1060mm     |



S 285DG

## METAL BAND SAW S 300DG/S 300DG V

### Convincing arguments: quality, efficiency and price

- Heavy casting type
- Limit stops exactly adjustable within an accuracy of a degree
- Automatic switch-off of the saw after termination of cutting
- Precise and durable saw band guiding, re-adjustable
- Two switchable saw band speeds 45/90 m/min.
- Mitre adjustment from -45° up to 60° by slewing the whole saw bow
- With high-grade bimetallic saw band supplied as standard
- Material limit stop with scaling
- Precise, infinitely variable lowering by means of hydraulic cylinder
- CE conformity of the electrical equipment

### Details



Manometer



Lowering speed



Coolant pump

| Model               | S 300DG/ S 300DG V  |
|---------------------|---------------------|
| Code No.            | 5230080/5230180     |
| Motor power ~50 Hz  | 1.5 kW 400 V / 3 Ph |
| Saw band speed      | 35 / 70 m/min       |
| Saw band dimensions | 2750 x 27 x 0.9 mm  |
| NW./GW.             | 335/371kg           |
| Packing size        | 1720x730x1130mm     |



S 300DG/300DGV



## METAL BAND SAW S 310DG V

### Convincing arguments: quality, efficiency and price

- Heavy casting type
- High cutting accuracy due to vibration-free running
- Silent operation
- High motor power also at low speeds
- Automatic switch-off of the saw after termination of cutting
- Precise and durable saw band guiding, adjustable
- With high-grade bimetallic saw band supplied as standard
- Limit stops exactly adjustable within an accuracy of a degree
- Chip brush
- Precise, infinitely variable lowering by means of hydraulic cylinder
- Rapid and safe clamping of the workpiece by means of quick-action vice with additional lever, shiftable to produce large materials

| Model               | S 310DG V            |
|---------------------|----------------------|
| Code No.            | 5231180              |
| Motor power ~50 Hz  | 1.5 kW 400 V / 3 Ph  |
| Saw band speed      | 20 - 90 m/min        |
| Saw band dimensions | 2750 x 27 x 0.9 mm   |
| NW./GW.             | 380/416kg            |
| Packing size        | 1720 x 730 x 1130 mm |



S 310DG V

## METAL BAND SAW S 350DG

### Convincing arguments: quality, efficiency and price

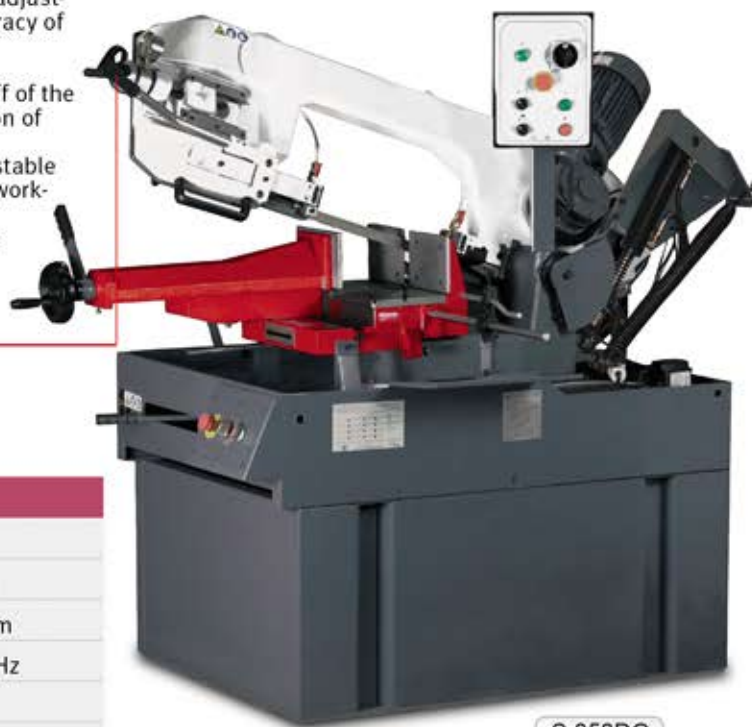
- Heavy industrial type
- High cutting accuracy
- Silent operation
- Two switchable saw band speeds 36/72 m/min.
- Mitre adjustment to 60° by slewing the whole saw bow
- Combinable and individual adjustable hard metal and ball-bearing guidance of the saw band
- With high-grade bimetallic saw band supplied as standard
- Limit stops exactly adjustable within an accuracy of a degree
- Chip brush
- Automatic switch-off of the saw after termination of cutting
- Roller support adjustable for long and heavy workpieces
- Solid machine base



#### Manometer

- Simple and correct control of the saw band tension

| Model              | S350DG               |
|--------------------|----------------------|
| Code No.           | 5235000              |
| Saw belt speed     | 36/72m/min           |
| Saw belt dimension | 2925x27x0.9mm        |
| Motor power        | 2.2KW 400V-50Hz      |
| NW./GW.            | 550/600kg            |
| Packing size       | 1930 x 970 x 1120 mm |



S 350DG





## SEMI-AUTOMATIC DOUBLE MITRE METAL BAND SAW SD 350AV

### Convincing arguments: quality, efficiency and price

- Manual or semi-automatic operation
- Heavy industrial type
- High cutting accuracy
- Silent operation
- Mitre adjustment to 60° by slewing the whole saw bow
- Combinable and individual adjustable hard metal and ball-bearing guidance of the saw band
- With high-grade bimetallic saw band supplied as standard
- Limit stops exactly adjustable within an accuracy of a degree
- Chip brush
- Automatic switch-off of the saw after termination of cutting
- Roller support adjustable for long and heavy workpieces



### Robust quick-action vice

- Shiftable for large cross sections
- Saw cuts in the range from -45° up to +60° are infinitely variable
- Angle adjustments are readable via scale

| Model               | SD 350AV             |
|---------------------|----------------------|
| Code No.            | 5235280              |
| Motor power ~50 Hz  | 2.2 kW 400 V / 3 Ph  |
| Saw band speed      | 0 - 80 m/min         |
| Saw band dimensions | 2925 x 27 x 0.9 mm   |
| NW./GW.             | 600/650 kg           |
| Packing size        | 1930 x 970 x 1120 mm |



### Lowering speed

- Simple adjustment via feed gear control valve on the control panel
- Emergency-stop push button



SD 350AV

## MANUAL CIRCULAR METAL SAW CS275/CS315/CS350

### Convincing arguments: quality, efficiency and price

- Slewing range of ± 45°
- Easy readable angle scale allows precise working
- Adjustment of the mitre in a matter of seconds
- Protected vice spindle
- Solid machine base with holes on both sides for the installation of the material stand MSR
- Machine base sizes:
  - CS 275 - 460 x 515 x 775 mm and
  - CS 315 - 546 x 620 x 801 mm
- The saw is delivered without circular saw blade (saw blade pitch freely selectable)



### Vice

- Centric clamping
- 4-time guided
- Individually adjustable jaws
- Cut is always performed in an optimum position to the workpiece
- 4-lever clamping system
- Protected vice spindle

| Model                    | CS275                | CS315                   | CS350                  |
|--------------------------|----------------------|-------------------------|------------------------|
| Code No.                 | 5427500              | 5431500                 | 5435000                |
| Speed of sawing blade    | 96 / 48 rpm          | 38 / 19 rpm             | 38 / 19 rpm            |
| Diameter of sawing blade | Ø275mm               | Ø315mm                  | Ø350mm                 |
| Motor power              | 2/1.4KW<br>400V/50Hz | 1.5/0.75KW<br>400V/50Hz | 1.5/1.1KW<br>415V/50Hz |
| Packing size             | 940x560x1550mm       | 1000x630x1570mm         | 630x1000x1510mm        |
| Net weight               | 156kg                | 200kg                   | 226kg                  |



### Coolant pump

- Detachable coolant tank
- Integrated powerful pump



CS275/CS315/CS350



## AUTOMATIC CIRCULAR METAL SAW CS315SA/CS350SA

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

- Strong 2-Speed motor
- Pneumatic clamp, quickly and reliably
- Automatic cutting vario speed
- High-grade, fracture proof and movable protective device with rapid opening mechanism provides
- optimum protection when cutting
- Central orientation vice, quadruple guiding, with individually adjustable jaws
- Removable coolant tank with integrated powerful pump

### Details

1. Material stand MSR<sub>4</sub>

2. Saw blade 4mm/6mm/8mm

M42 HSS(5-8 TPI)

M42 HSS(6-10 TPI)

M42 HSS(10-14 TPI)



1. MSR 4



2. Saw blade

| Model              | CS315SA                             | CS350SA                             |
|--------------------|-------------------------------------|-------------------------------------|
| Code No.           | 5531500                             | 5535000                             |
| Motor power        | 1.5KW/1.1KW (4/8 Pole)<br>400V/50Hz | 1.5KW/1.1KW (4/8 Pole)<br>400V/50Hz |
| Saw blade speed    | 38/19 r/min                         | 38/19 r/min                         |
| Blade max.diameter | Ø315mm                              | Ø350mm                              |
| Packing size       | 1050x630x1530mm                     | 1050x630x1550mm                     |
| NW/GW              | 270/320kg                           | 290/345kg                           |



CS315SA/CS350SA

## دستگاه اره نواری اتومات

## DOUBLE COLUMN HORIZONTAL BAND SAW GB 4225/4240/4250/4265/4280/42100

### Details



Hydraulic  
up & down



Motor pulley



Saw blade  
holder  
adjustment



GB4225-GB42100

| Model                        | GB4040/60A      | GB4225          | GB4230/40A      | GB4240          | GB4250          | GB4265          |
|------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Code No.                     | 5326000         | 5322500         | 5323000         | 5324000         | 5325000         | 5326500         |
| Cutting off limit(mm)        | • 400 ■ 320×600 | • 250 ■ 250×250 | • 300 ■ 300×400 | • 400 ■ 400×400 | • 500 ■ 500×500 | • 650 ■ 650×650 |
| Sile of band saw(mm)         | 4570×34×1.1     | 3660×27×0.9     | 3820×27×0.9     | 4570×34×1.1     | 5700×41×1.3mm   | 6800×54×1.6mm   |
| Linespeed of band saw(m/min) | 25 - 45 - 65    | 25 - 50 - 80    | 25 - 50 - 80    | 25 - 45 - 65    | 25 - 45 - 65    | 25 - 45 - 65    |
| Total motor power(kw)        | 4.9             | 2.5             | 3.3             | 4.6             | 7.4             | 8.2             |
| Size of outward(L×W×H)mm     | 2530×1450×1250  | 2100×1300×1100  | 2100×1400×1100  | 2540×1650×1250  | 2850×2100×1350  | 3200×2300×1450  |
| Machine weight(kg)           | 1780            | 1000            | 1150            | 1860            | 4200            | 5200            |

| Model                        | GB4280          | GB42100            | GB42100/130        | GZ4225          | GZ4230/40       | GZ4240          | GZ4250          |
|------------------------------|-----------------|--------------------|--------------------|-----------------|-----------------|-----------------|-----------------|
| Code No.                     | 5328000         | 5321000            | 5321300            | 5312500         | 5313000         | 5314000         | 5315000         |
| Cutting off limit(mm)        | • 800 ■ 800×800 | • 1000 ■ 1000×1000 | • 1000 ■ 1000×1300 | • 250 ■ 250×250 | • 300 ■ 300×400 | • 400 ■ 400×400 | • 500 ■ 500×500 |
| Sile of band saw(mm)         | 7740×45×1.6mm   | 10270×67×1.6mm     | 11280×67×1.61mm    | 3660×27×0.9     | 3820×27×0.9     | 4570×34×1.1     | 5900×41×1.3     |
| Linespeed of band saw(m/min) | Vario           | Vario              | Vario              | 25 50 80        | 25 50 80        | 25 45 65        | 25 45 65        |
| Total motor power(kw)        | 10.5            | 16                 | 16.5               | 3.3             | 4.0             | 5.7             | 7.5             |
| Size of outward(L×W×H)mm     | 3900×2550×1800  | 5500×3200×2020     | 5800×3200×2020     | 2100×1800×1100  | 2100×1900×1100  | 2530×1650×1550  | 3400×2000×1900  |
| Machine weight(kg)           | 6500            | 15000              | 16500              | 1500            | 1650            | 2500            | 4800            |





## Universally deployable wet/dry grinding machine **NTS 251**

### Convincing arguments: quality, efficiency and price

- Ideal for DIY enthusiast and crafts professionals
- For wet and dry sanding and grinding
- Many holding devices for various tools available
- Third-party holding devices can be used on the height-adjustable clamp
- Specially developed, water-resistant grinding disk with a long service life
- Due to the low speed of just 90 rpm in combination with water, no heat is generated during grinding; this avoids affecting the tool hardness
- Lockable on/off switch with emergency stop
- Incl. leather honing disk, universal holder, and angle setting gauge
- Easy to transport

| Model                     | NTS 251            |
|---------------------------|--------------------|
| Code No.                  | 5902251            |
| Grinding stone dimensions | Max. Ø 250 x 50 mm |
| Honing disk dimensions    | Max. Ø 220 x 30 mm |
| Speed                     | 90 rpm             |
| Motor output              | 200 W              |
| Electrical connection     | 230 V/50 Hz        |
| Weight                    | 16 kg              |
| Dimensions (L x W x H)    | 340 x 280 x 460 mm |



## DRILL BIT MACHINE **GQ-D 13**



### Adjustment of twist drill

- Twist drill is aligned in the overhang and in the appropriate angle



### Reground twist drill

- by slight rotation from stop to stop



### Reducing the chisel edge

- also by slight rotation from stop to stop



GQ-D 13

| Model                     | GQ-D 13                |
|---------------------------|------------------------|
| Code No.                  | 6601300                |
| Motor                     | 80 W 230 V 1 Ph ~50 Hz |
| Speed infinitely variable | 4200 rpm               |
| Grinding wheel            | Ø 78 mm                |
| Grinding capacity drill   | Ø 3 mm - Ø 13 mm       |
| Length                    | 220 mm                 |
| Width                     | 200 mm                 |
| Height                    | 160 mm                 |
| Net weight                | 2.5 kg                 |



## DRILL BIT MACHINE DG 20

| Model                      | DG20             |
|----------------------------|------------------|
| Code No.                   | 6602000          |
| Continuous speed           | 1400-7600rpm     |
| Grinding speed             | 16m/s            |
| Grinding diameter capacity | 3-20mm           |
| Bit grinding angle         | 90°-150°         |
| Cup wheel outside-Ø        | Ø40mm            |
| Cup wheel inside-Ø         | Ø26mm            |
| Cup wheel thread-Ø         | M10              |
| Cup wheel embedding        | 22mm             |
| Dimension (L x W x H)      | 225x490x240mm    |
| Net weight                 | 23kg             |
| Motor power                | 600W 230V / 50Hz |
| Packing size               | 510x280x270mm    |



DG 20

## دستگاه خم کن

## MANUAL BENDING MACHINE FP 30/RB 30



FP 30



RB 30

| Model               | FP30          | RB30          |
|---------------------|---------------|---------------|
| Code No.            | 7200300       | 7300300       |
| Max.plate thickness | 2mm           | 2mm           |
| Max.plate length    | 300mm         | 300mm         |
| Max.diameter        | /             | Ø5mm          |
| NW/GW               | 10.5/11kg     | 11/12kg       |
| Dimension           | 340x50x635mm  | 495x215x95mm  |
| Packing size        | 445x270x290mm | 465x275x140mm |





## CNC HYDRAULIC PLATE PRESS BRAKE W 67K

### Convincing arguments: quality, efficiency and price

- Steel –welded construction ,vibration to eliminate stress, with high strength and good rigidity .
- Hydraulic top-drive, steadiness and rdliability.
- Mechanical stop, steel torsion bar to maintain synchronization, high precision.
- Motorized –adjusting device of backgauge and rams stroke ,fine adjusting by handwheel ,numerical display.
- Deflection compensation unit installed on the top die.
- Manual crowned bottom die holder is adopted for the machine above 250ton length 4000mm.
- New material holding device (X,Z axis moving easily)



### Optional accessories:

- PRG920 CNC system
- DA41 CNC system
- DA51 CNC system
- Light curtain for operating safety

| Model No.     | Item No. | Nominal force | Length of working tabel | Distance between frames | Throat depth | Ram travel | Max open height | Ram travel adjustment | Main motor(KW) | Packing size (mm) | N.W/G.W(Kg)  |
|---------------|----------|---------------|-------------------------|-------------------------|--------------|------------|-----------------|-----------------------|----------------|-------------------|--------------|
| W67K-30/1320  | 1620100  | 300KN         | 1320mm                  | 1140mm                  | 200mm        | 80mm       | 320mm           | 60mm                  | 3              | 1940×1510×1905    | 2000/2200    |
| W67K- 40/1320 | 1620200  | 400KN         | 1320mm                  | 1120mm                  | 200mm        | 100mm      | 340mm           | 80mm                  | 4              | 1950×1600×2070    | 2200/2450    |
| W67K- 40/2000 | 1620300  | 400KN         | 2000mm                  | 1800mm                  | 200mm        | 100mm      | 340mm           | 80mm                  | 4              | 2550×1500×2200    | 3500/3750    |
| W67K- 40/2500 | 1620400  | 400KN         | 2500mm                  | 2300mm                  | 200mm        | 100mm      | 340mm           | 80mm                  | 4              | 3100×1500×2200    | 3850/4150    |
| W67K- 63/2500 | 1620500  | 630KN         | 2500mm                  | 2260mm                  | 250mm        | 100mm      | 355mm           | 80mm                  | 5.5            | 3100×1600×2280    | 4800/5100    |
| W67K- 63/3200 | 1620600  | 630KN         | 3200mm                  | 2960mm                  | 250mm        | 100mm      | 355mm           | 80mm                  | 5.5            | 3800×1725×2355    | 5600/5950    |
| W67K- 80/2500 | 1620700  | 800KN         | 2500mm                  | 2240mm                  | 250mm        | 100mm      | 355mm           | 80mm                  | 7.5            | 3100×1725×2280    | 6600/6950    |
| W67K- 80/3200 | 1620800  | 800KN         | 3200mm                  | 2940mm                  | 250mm        | 100mm      | 355mm           | 80mm                  | 7.5            | 3900×1700×2300    | 6500/6900    |
| W67K- 80/4000 | 1620900  | 800KN         | 4000mm                  | 3740mm                  | 250mm        | 100mm      | 355mm           | 80mm                  | 7.5            | 4700×1600×2300    | 7800/8100    |
| W67K-100/2500 | 1621000  | 1000KN        | 2500mm                  | 2210mm                  | 320mm        | 120mm      | 415mm           | 100mm                 | 7.5            | 3200×1850×2560    | 7300/7700    |
| W67K-100/3200 | 1621100  | 1000KN        | 3200mm                  | 2910mm                  | 320mm        | 120mm      | 415mm           | 100mm                 | 7.5            | 3900×1850×2700    | 8100/8500    |
| W67K-100/4000 | 1621200  | 1000KN        | 4000mm                  | 3710mm                  | 320mm        | 120mm      | 415mm           | 100mm                 | 7.5            | 4750×1850×2800    | 9200/9600    |
| W67K-125/3200 | 1621300  | 1250KN        | 3200mm                  | 2910mm                  | 320mm        | 120mm      | 415mm           | 100mm                 | 7.5            | 3900×1850×2700    | 8150/8500    |
| W67K-125/4000 | 1621400  | 1250KN        | 4000mm                  | 3710mm                  | 320mm        | 120mm      | 415mm           | 100mm                 | 7.5            | 4700×1900×2560    | 10800/11200  |
| W67K-160/3200 | 1621500  | 1600KN        | 3200mm                  | 2830mm                  | 320mm        | 200mm      | 455mm           | 160mm                 | 11             | 3900×1800×2580    | 11800/12200  |
| W67K-160/4000 | 1621600  | 1600KN        | 4000mm                  | 3630mm                  | 320mm        | 200mm      | 455mm           | 160mm                 | 11             | 4700×2200×2580    | 13500/14000  |
| W67K-200/3200 | 1621700  | 2000KN        | 3200mm                  | 2800mm                  | 320mm        | 200mm      | 455mm           | 160mm                 | 15             | 3900×2200×3000    | 14500/14900  |
| W67K-200/4000 | 1621800  | 2000KN        | 4000mm                  | 3600mm                  | 320mm        | 200mm      | 455mm           | 160mm                 | 15             | 4800×2280×3000    | 15400/158000 |
| W67K-250/3200 | 1621900  | 2500KN        | 3200mm                  | 2850mm                  | 400mm        | 250mm      | 560mm           | 200mm                 | 18.5           | 3900×2280×3000    | 16000/16500  |
| W67K250/4000  | 1622000  | 2500KN        | 4000mm                  | 3650mm                  | 400mm        | 250mm      | 560mm           | 200mm                 | 18.5           | 4800×2300×3600    | 23000/23500  |
| W67K-300/3200 | 1622100  | 3000KN        | 3200mm                  | 2720mm                  | 400mm        | 250mm      | 560mm           | 200mm                 | 22             | 4000×2300×3500    | 21000/21500  |
| W67K-300/4000 | 1622200  | 3000KN        | 4000mm                  | 3520mm                  | 400mm        | 250mm      | 560mm           | 200mm                 | 22             | 4600×2300×3200    | 23000/23600  |
| W67K-400/3200 | 1622300  | 4000KN        | 3200mm                  | 2800mm                  | 400mm        | 320mm      | 630mm           | 270mm                 | 30             | 3800×2680×3440    | 30000/30600  |
| W67K-400/4000 | 1622400  | 4000KN        | 4000mm                  | 3600mm                  | 400mm        | 320mm      | 630mm           | 270mm                 | 30             | 4600×2680×3520    | 32000/32600  |





## HYDRAULIC SWING BEAM SHEAR QC 12Y



QC 12Y

| Model   | Code No. | Shearing Thickness | Shearing width | Shearing angle | Number of stroke | Backgauge rang | Motor power | Packing size     |
|---------|----------|--------------------|----------------|----------------|------------------|----------------|-------------|------------------|
| 4X2000  | 7131010  | 4mm                | 2000mm         | 1°30'          | 22min-1          | 20~480mm       | 4KW         | 2650X1500X1600mm |
| 4X3200  | 7131030  | 4mm                | 3200mm         | 1°30'          | 20min-1          | 20~600mm       | 5.5KW       | 3900X1750X1800mm |
| 4X5000  | 7131050  | 4mm                | 5000mm         | 1°30'          | 14min-1          | 20~600mm       | 7.5KW       | 5655X1850X1850mm |
| 6X2000  | 7131060  | 6mm                | 2000mm         | 1°30'          | 20min-1          | 20~600mm       | 7.5KW       | 2580X1530X1600mm |
| 6X5000  | 7131100  | 6mm                | 5000mm         | 1°30'          | 8min-1           | 20~600mm       | 11KW        | 5690X2000X2100mm |
| 8X2500  | 7131120  | 8mm                | 2500mm         | 1°30'          | 14min-1          | 20~600mm       | 11KW        | 3300X1750X1850mm |
| 8X6000  | 7131150  | 8mm                | 6000mm         | 1°30'          | 6min-1           | 20~900mm       | 22KW        | 6900X2280X2400mm |
| 10X2500 | 7131160  | 10mm               | 2500mm         | 1°30'          | 12min-1          | 20~900mm       | 18.5KW      | 3300X1950X2100mm |
| 12X2500 | 7131180  | 12mm               | 2500mm         | 1°30'          | 8min-1           | 20~800mm       | 18.5KW      | 3250X2280X2280mm |
| 16X2500 | 7131220  | 16mm               | 2500mm         | 2°             | 12min-1          | 20~900mm       | 22KW        | 3300X2280X2280mm |
| 20X2500 | 7131250  | 20mm               | 2500mm         | 2°30'          | 10min-1          | 20~900mm       | 30KW        | 3600X2800X3000mm |
| 20X3200 | 7131260  | 20mm               | 3200mm         | 2°30'          | 8min-1           | 20~900mm       | 37KW        | 4400X2700X2600mm |
| 25X2500 | 7131270  | 25mm               | 2500mm         | 3°12'          | 8min-1           | 20~900mm       | 45KW        | 3600X2900X3000mm |

## CNC HYDRAULIC SWING BEAM SHEAR QC 12K



QC 12K

| Model No.     | Code No. | Shearing thickness | Shearing width | Strength of sheets | Shearing angle | Max. Length of Back Gauge | Stroke number | Distance between vertical columns | Main motor power | Packing size L x W x H (mm) | N.W/G.W (Kg) |
|---------------|----------|--------------------|----------------|--------------------|----------------|---------------------------|---------------|-----------------------------------|------------------|-----------------------------|--------------|
| QC12K-4x2500  | 1610100  | 4mm                | 2500mm         | 450N/mm2           | 1°30'          | 480mm                     | 20min-1       | 2750mm                            | 4KW              | 3200x1500x1600              | 3800/4000    |
| QC12K-4x3200  | 1610200  | 4mm                | 3200mm         | 450N/mm2           | 1°30'          | 600                       | 20            | 3450                              | 5.5              | 3900x1750x1800              | 5800/6100    |
| QC12K-6x2500  | 1610400  | 6mm                | 3200mm         | 450N/mm2           | 1°30'          | 600                       | 18            | 2720                              | 7.5              | 3200x1750x1750              | 5200/5400    |
| QC12K-8x2500  | 1610700  | 8mm                | 2500mm         | 450N/mm2           | 1°30'          | 600                       | 14            | 2720                              | 11               | 3300x1750x1850              | 6200/6400    |
| QC12K-10x2500 | 1611000  | 10mm               | 2500mm         | 450N/mm2           | 1°30'          | 600                       | 14            | 2750                              | 15               | 3300x1950x2100              | 8500/8750    |
| QC12K-12x2500 | 1611300  | 12mm               | 2500mm         | 450N/mm2           | 1°30'          | 900                       | 12            | 2765                              | 18.5             | 3250x2280x2280              | 9600/9950    |
| QC12K-16x2500 | 1611600  | 16mm               | 2500mm         | 450N/mm2           | 2°             | 900                       | 12            | 2765                              | 22               | 3300x2280x2280              | 11600/11900  |
| QC12K-20x2500 | 1611900  | 20mm               | 2500mm         | 450N/mm2           | 2°30'          | 900                       | 10            | 2865                              | 37               | 3600x2800x3000              | 16000/16400  |





## HYDRAULIC SHOP PRESSES HSPD

| Model     | Code No. | Capacity<br>(TON) | Ram Stroke<br>(mm) | Product size(mm) |     |      |      |     |
|-----------|----------|-------------------|--------------------|------------------|-----|------|------|-----|
|           |          |                   |                    | A                | B   | C    | D    | F   |
| HSPD o821 | 7432100  | 15                | 160                | 700              | 540 | 877  | 941  | 160 |
| HSPD o823 | 7432300  | 20                | 190                | 730              | 540 | 1513 | 1619 | 176 |
| HSPD o824 | 7432400  | 30                | 150                | 795              | 700 | 1772 | 1800 | 200 |
| HSPD o825 | 7432500  | 50                | 200                | 1030             | 800 | 1830 | 1850 | 245 |

| Model     | Working<br>range(mm) | Bed<br>width(mm) | Side<br>stroke(mm) | N.W. | G.W. | Packing size  | 20FT CNTR |
|-----------|----------------------|------------------|--------------------|------|------|---------------|-----------|
|           | F1-F2                | E                | M                  | (KG) | (KG) | (CM)          | (pcs)     |
| HSPD o821 | 149-449              | 500              | 160                | 75.5 | 100  | 101x66.5x27   | 128       |
| HSPD o823 | 35-912               | 510              | 176                | 112  | 139  | 174x72.5x27   | 64        |
| HSPD o824 | 151-1031             | 535              | 200                | 167  | 203  | 192x78x27     | 56        |
| HSPD o825 | 69-1048              | 730              | 245                | 298  | 341  | 97.5x31.5x211 | 36        |



HSPD 0821



HSPD 0825

## MANUAL WORKSHOP PRESSES HWP M-Series

| Model      | Code No. | Nominal<br>pressure | Hydraulic<br>pressure | Adjustment<br>distance of<br>worktable | Mass  |
|------------|----------|---------------------|-----------------------|----------------------------------------|-------|
| HWP M10/15 | 7400100  | 100kN               | 30MPa                 | 150x3 mmxn                             | 80kg  |
| HWP M20/15 | 7400200  | 200kN               | 38MPa                 | 180x4 mmxn                             | 165kg |
| HWP M30/18 | 7400300  | 300kN               | 36MPa                 | 200x4 mmxn                             | 275kg |
| HWP M50/19 | 7400500  | 500kN               | 40MPa                 | 250x3 mmxn                             | 420kg |

| Model      | A    | B   | C    | D   | E   | F   | G   |
|------------|------|-----|------|-----|-----|-----|-----|
| HWP M10/15 | 630  | 500 | 1205 | 430 | 620 | 150 | 180 |
| HWP M20/15 | 940  | 650 | 1800 | 500 | 944 | 150 | 230 |
| HWP M30/18 | 1000 | 700 | 1850 | 600 | 971 | 180 | 280 |
| HWP M50/19 | 1157 | 800 | 2100 | 700 | 990 | 190 | 320 |

