SURFACE GRINDERS



OPTIgrind® GT 22

NEW

CRAFTSMEN

Manual surface grinder by OPTIMUM for finishing metal surfaces.
Precision and hight grinding quality **with digital position display DPA 31**

Facts that impress in terms of quality, performance and price

- Permanent magnet for holding the workpiece
- Premium spindle with precision taper roller bearings
- Hardened and ground bed guides
- Turcite-B coated counter guides for excellent wear-resistance and low friction
- Integrated grinding wheel dressing device
- Machine base made of stable, torsion resistant cast material for maximum rigidity and stability
- Backlash-free V-flat guide on the Z axis and flat guides on the X and Y axes
- Trapezoidal threaded spindle on the Y axis
- Manual centralised lubrication system
- All flat guides are finely honed and thus guarantee a high precision of all manual movements
- LED lamp
- Safety electrics in 24 V DC
- Grinding accuracy: 0.005 mm
- Corundum grinding wheel 46 grain for all popular metals included in standard scope of delivery
- Two-channel safety electrics
- EMC filter class
- Substantial energy savings thanks to IE3 motor
- Coolant unit with external coolant tank

Digital position display DPA 31- 2

NEW

Display:
› User-friendly membrane keyboard, splash water protected, dazzle free and easy to clean

New measuring strips:
› The electronic measuring components of the linear encoders are protected and sealed in the housing
› Provides accurate and reliable measurement results even if the measuring system is operated in oil or coolant
› Tolerant towards vibration and magnetic interference

Permanent magnet



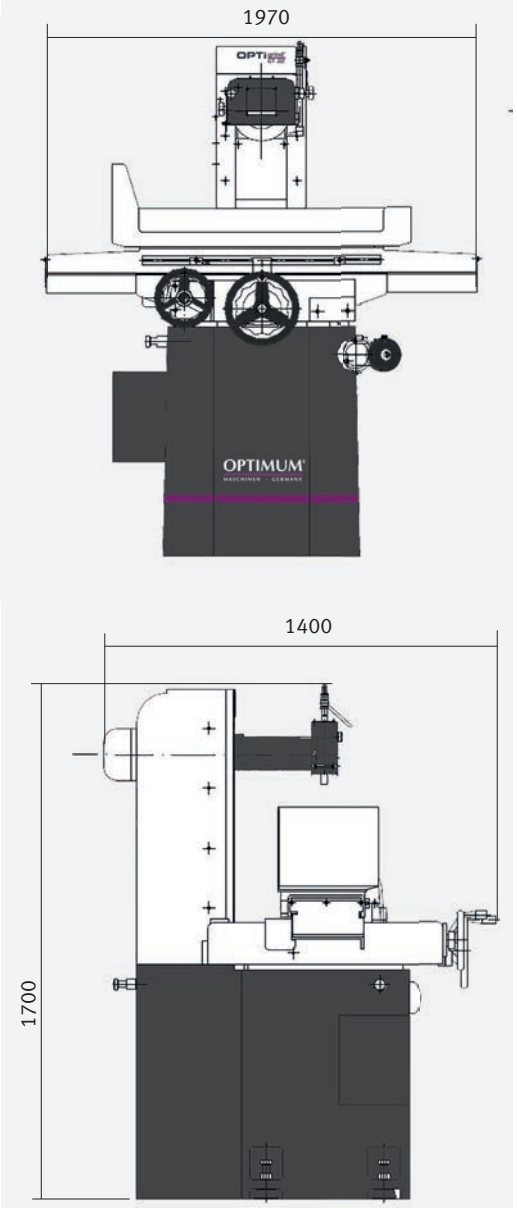
› Fast and safe workpiece clamping



Technical data and dimension

Model	GT 22
Article no.	3111020
Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Grinding wheel drive motor	1.5 kW
Coolant pump motor	125 W
Surface grinding table	
Surface grinding table length x width	200 x 450 mm
Magnetic clamping plate	200 x 500 mm
T-slot size/number of slots	14 mm / 1
Load bearing capacity of grinding table including permanent magnet	128 kg
Workpiece size length x width x height	450 x 200 x 350 mm
Spacing spindle centre - grinding table	max. 450 mm
Grinding wheel	
Size of grinding wheel	Ø 200 x 20 mm, shaft Ø 31.75 mm
Clearance grinding wheel - grinding table	405 mm
Circumferential speed of grinding wheel	33 m/s
Grinding spindle true running accuracy	0.005 mm
Manual travel	
X axis	500 mm
Z axis	240 mm
Rotational speeds	
Constant spindle speed	2 850 rpm
Dimensions and weight	
Length x width x height	1 970 x 1 300 x 1 700 mm
Net weight	900 kg

Dimensions



Scope of delivery
• Corundum grinding wheel 46 grain
• Digital position display
• Balancing stand
• Degaussing unit
• Grinding wheel and clamping chuck
• Dresser for grinding wheel (with diamond tip)
• Wheel balancing mandrel
• Wheel dresser
• Base plate for dresser
• Levelling feet
• Operating tool in toolbox

See for accessories page 274

OPTIgrind® GT 25

NEW

CRAFTSMEN

Solid **surface grinding machine by OPTIMUM with compact footprint. Impresses with easy handling, precision and** great grinding quality.

Facts that impress in terms of quality, performance and price

- Electro-magnetic clamping plate for holding the workpiece with automatic degaussing function
- Premium spindle with precision taper roller bearings
- Hardened and ground bed guides
- Turcite-B coated counter guides for excellent wear-resistance and low friction
- Grinding spindle with premium precision bearings
- Integrated grinding wheel dressing device
- Digital position display
- Machine base made of stable, torsion resistant cast material for maximum rigidity and stability
- Backlash-free V-flat guide on the Z axis and flat guides on the X and Y axes
- Trapezoidal threaded spindle on the Y axis
- Precision ball screws
- Guideways and transport spindle with centralised lubrication system
- All flat guides are finely honed and thus guarantee highest precision of all manual movements
- Safety electrics in 24 V DC
- Generously dimensioned, decoupled hand wheels on all three axes
- Hydraulic lines according to DIN EN 853
- Grinding accuracy: 0.005 mm
- Corundum grinding wheel 46 grain for all popular metals included in standard scope of delivery
- Pivoting control panel substantially facilitates work
- Separate hydraulics unit with heat exchanger avoids vibrations and thermal load
- Two-channel safety electronics
- Grinding table splash guard
- EMC filter class
- Coolant unit with external coolant tank, capacity 100 litres
- Substantial energy savings thanks to IE3 motor



Digital position display DPA 31- 2

NEW



Display:

› User-friendly membrane keyboard, splash water protected, dazzle free and easy to clean

New measuring strips:

› The electronic measuring components of the linear encoders are protected and sealed in the housing

› Provides accurate and reliable measurement results even if the measuring system is operated in oil or coolant

› Tolerant towards vibration and magnetic interference

Central lubrication



› Prevents wear, repair costs and unnecessary downtime to a major extent

Electromagnetic clamping plate



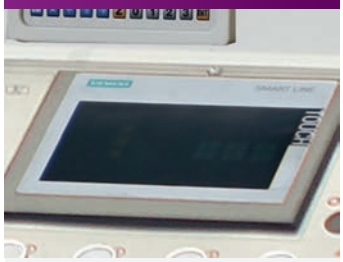
› Fast and safe workpiece clamping

Hydraulic power unit



› External hydraulic power unit with heat exchanger for constant oil temperature

Touch Screen



› for entering work data and displaying information



› Hand wheel for moving the Y axis

› Swivelling control panel

Technical data and dimension

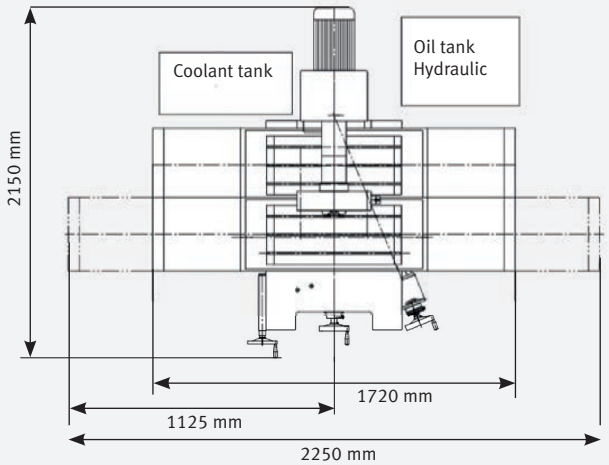
Model	GT 25
Article no.	3111025
Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Total connected load	3.7 kW
Grinding wheel drive motor	2.2 kW
Hydraulic motor	0.75 kW
Coolant pump motor	70 W
Surface grinding table	
Surface grinding table length x width	254 x 508 mm
Electro-magnetic clamping plate	250 x 500 mm
T-slot size/number of slots	14 mm / 1
Grinding table load bearing capacity including electromagnetic clamping plate	180 kg
Workpiece size length x width x height	508 x 254 x 350 mm
Spacing spindle centre - grinding table	max. 450 mm
Oscillating speeds of table	5 - 25 m/min
Grinding wheel	
Size of grinding wheel	Ø 200 x 20 mm, shaft Ø 31.75 mm
Clearance grinding wheel - grinding table	405 mm
Circumferential speed of grinding wheel	33 m/s
Grinding spindle true running accuracy	0.005 mm
Oscillating travel/travel travel	
Oscillating travel X-axis	560 mm
Traverse path Z axis	275 mm
Y axis	
Continuous transverse feed	0.1 - 8 mm
Rapid traverse on Y axis	990 mm/min
Scale division on handwheel	0.02 mm
Z axis	
Step widths of rapid traverse feed	0.005 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05
Rapid traverse adjustment on the Z axis	480 mm/min
Scale division on handwheel	0.005 mm
Rotational speeds	
Constant spindle speed	2 850 rpm
Dimensions and weight	
Length x width x height	2 250 x 2 150 x 1 675 mm
Net weight	1 900 kg

Scope of delivery

- Corundum grinding wheel 46 grain
- Digital position display
- Balancing stand
- Degaussing unit
- Grinding wheel and clamping chuck
- Dresser for grinding wheel (with diamond tip)
- Wheel balancing mandrel
- Wheel dresser
- Base plate for dresser
- Levelling feet
- Operating tool in toolbox

See for accessories page 274

Footprint



OPTIgrind® GT 30

NEW

CRAFTSMEN

Solid surface grinding machine by OPTIMUM equipped with digitally controlled automatic vertical feed and digital position display DPA 31

Facts that impress in terms of quality, performance and price

- Electro-magnetic clamping plate for holding the workpiece with automatic degaussing function
- Premium spindle with precision taper roller bearings
- Hardened and ground bed guides
- Turcite-B coated counter guides for excellent wear-resistance and low friction
- Grinding spindle with premium precision bearings
- The grinding wheel can be sharpened with a dressing unit directly on the machine
- Digital position display
- Machine base made of stable, torsion resistant cast material for maximum rigidity and stability
- Guideways for longitudinal, transverse and vertical movements are play-free and designed to self-centre as V and flat rails
- Precision ball screws
- Guideways and transport spindle with centralised lubrication system
- All flat guides are finely honed and thus guarantee highest precision of all manual movements
- Safety electrics in 24 V DC
- Generously dimensioned, decoupled hand wheels on all three axes
- Time-controlled centralised lubrication system
- Hydraulic lines according to DIN EN 853
- Grinding accuracy: 0.005 mm
- Corundum grinding wheel 46 grain for all popular metals included in standard scope of delivery
- Pivoting control panel substantially facilitates work
- Two-channel safety electronics
- Grinding table with splash protection enclosure
- Coolant unit with external coolant tank, capacity 100 litres
- Digitally controlled automatic vertical feed with servo motor
- Motorised vertical height adjustment via spindle
- Hydraulic and continuously adjustable longitudinal feed
- EMC filter class
- Substantial energy savings thanks to IE3 motor



Digital position display DPA 31- 2

NEW



Display:

› User-friendly membrane keyboard, splash water protected, dazzle free and easy to clean

New measuring strips:

› The electronic measuring components of the linear encoders are protected and sealed in the housing

› Provides accurate and reliable measurement results even if the measuring system is operated in oil or coolant

› Tolerant towards vibration and magnetic interference

Dressing unit



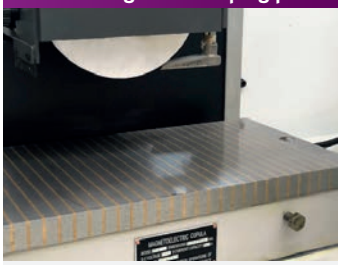
› Manual parallel dressing unit

Hydraulic power unit



› External hydraulic power unit with heat exchanger for constant oil temperature

Electromagnetic clamping plate



› Fast and safe workpiece clamping

Touch Screen



› For entering work data and displaying information

› Hand wheel for moving the Y axis

› Swivelling control panel



Technical data and dimension

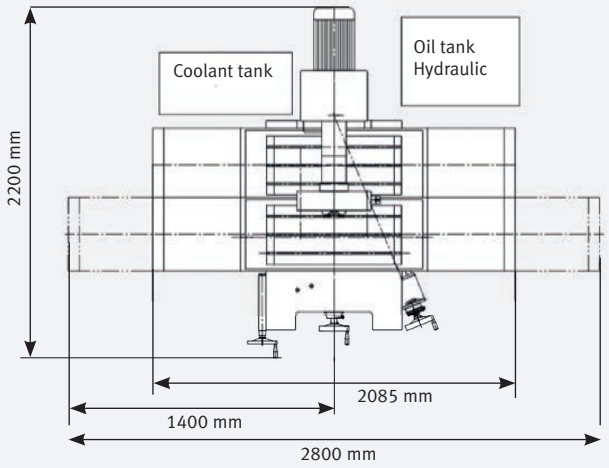
Model	GT 30
Article no.	3111030
Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Total connected load	7.5 kW
Grinding wheel drive motor	4 kW
Hydraulic motor	2.2 kW
Coolant pump motor	90 W
Surface grinding table	
Surface grinding table length x width	305 x 635 mm
Electro-magnetic clamping plate	300 x 600 mm
T-slot size/number of slots	14 mm / 1
Grinding table load bearing capacity including electromagnetic clamping plate	270 kg
Workpiece size length x width x height	635 x 305 x 405 mm
Spacing spindle centre - grinding table	max. 580 mm
Oscillating speeds of table	5 - 25 m/min
Grinding wheel	
Size of grinding wheel	350 x 40 x shaft Ø 127 mm
Clearance grinding wheel - grinding table	405 mm
Circumferential speed of grinding wheel	27 m/s
Grinding spindle true running accuracy	0.005 mm
Oscillating travel/travel travel	
Oscillating travel X-axis	765 mm
Traverse path Z axis	340 mm
Y axis	
Continuous transverse feed	0.1 - 8 mm
Rapid traverse on Y axis	990 mm/min
Scale division on handwheel	0.02 mm
Z axis	
Step widths of rapid traverse feed	0.005 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05
Rapid traverse adjustment on the Z axis	480 mm/min
Scale division on handwheel	0.005 mm
Rotational speeds	
Constant spindle speed	1 450 rpm
Dimensions and weight	
Length x width x height	2 800 x 2 205 x 1 900 mm
Net weight	3 000 kg

Scope of delivery

- Corundum grinding wheel 46 grain
- Digital position display
- Balancing stand
- Degaussing unit
- Grinding wheel and clamping chuck
- Dresser for grinding wheel (with diamond tip)
- Wheel balancing mandrel
- Wheel dresser
- Base plate for dresser
- Levelling feet
- Operating tool in toolbox

See for accessories page 274

Footprint



OPTIgrind® GT 40

NEW

CRAFTSMEN

Solid **surface grinding machine by OPTIMUM equipped with digitally controlled automatic vertical feed and digital position display DPA 31**

Facts that impress in terms of quality, performance and price

- Electro-magnetic clamping plate for holding the workpiece with automatic degaussing function
- Premium spindle with precision taper roller bearings
- Hardened and ground bed guides
- Turcite-B coated counter guides for excellent wear-resistance and low friction
- Grinding spindle with premium precision bearings
- The grinding wheel can be sharpened with a dressing unit directly on the machine
- Digital position display
- Machine base made of stable, torsion resistant cast material for maximum rigidity and stability
- Guideways for longitudinal, transverse and vertical movements are play-free and designed to self-centre as V and flat rails
- Precision ball screws
- Guideways and transport spindle with centralised lubrication system
- All flat guides are finely honed and thus guarantee highest precision of all manual movements
- Safety electrics in 24 V DC
- Generously dimensioned, decoupled hand wheels on all three axes
- Time-controlled centralised lubrication system
- Hydraulic lines according to DIN EN 853
- Grinding accuracy: 0.005 mm
- Corundum grinding wheel 46 grain for all popular metals included in standard scope of delivery
- Pivoting control panel substantially facilitates work
- Two-channel safety electronics
- Grinding table with splash protection enclosure
- Coolant unit with external coolant tank, capacity 100 litres
- Digitally controlled, automatic vertical feed with servo motor
- Motorised vertical height adjustment via spindle
- Hydraulic and continuously adjustable longitudinal feed
- EMC filter class
- Substantial energy savings thanks to IE3 motor



Digital position display DPA 31- 2

NEW



Display:

› User-friendly membrane keyboard, splash water protected, dazzle free and easy to clean

New measuring strips:

The electronic measuring components of the linear encoders are protected and sealed in the housing

› Provides accurate and reliable measurement results even if the measuring system is operated in oil or coolant

› Tolerant towards vibration and magnetic interference

Dressing unit



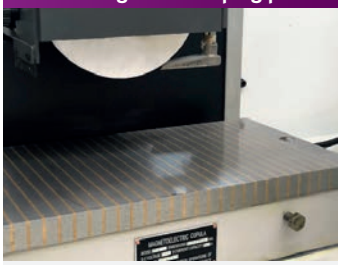
› Manual parallel dressing unit

Hydraulic power unit



› Prevents wear, repair costs and unnecessary downtime to a major extent

Electromagnetic clamping plate



› Fast and safe workpiece clamping

Touch Screen





› For entering work data and displaying information

› Hand wheel for moving the Y axis

› Swivelling control panel

Technical data and dimension

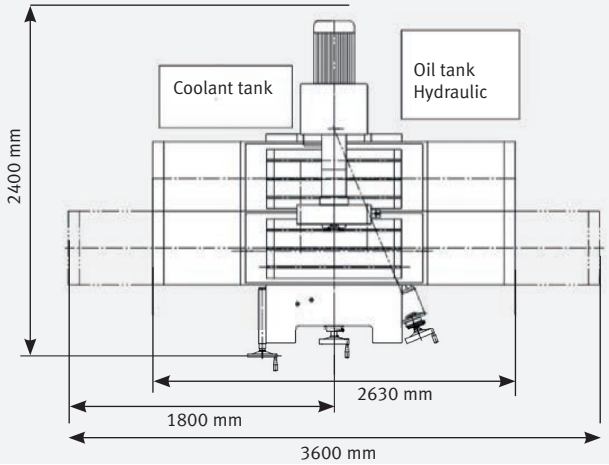
Model	GT 40
Article no.	3111040
Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Total connected load	7.5 kW
Grinding wheel drive motor	4 kW
Hydraulic motor	2.2 kW
Coolant pump motor	90 W
Surface grinding table	
Surface grinding table length x width	406 x 813 mm
Electro-magnetic clamping plate	400 x 800 mm
T-slot size/number of slots	14 mm / 3
Grinding table load bearing capacity including electromagnetic clamping plate	500 kg
Workpiece size length x width x height	813 x 406 x 405 mm
Spacing spindle centre - grinding table	max. 580 mm
Oscillating speeds of table	5 - 25 m/min
Grinding wheel	
Size of grinding wheel	350 x 40 x shaft Ø 127 mm
Clearance grinding wheel - grinding table	405 mm
Circumferential speed of grinding wheel	27 m/s
Grinding spindle true running accuracy	0.005 mm
Oscillating travel/travel travel	
Oscillating travel X-axis	830 mm
Traverse path Z axis	420 mm
Y axis	
Continuous transverse feed	0.1 - 8 mm
Rapid traverse on Y axis	990 mm/min
Scale division on handwheel	0.02 mm
Z axis	
Step sizes of the rapid traverse infeed	0.005 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05
Rapid traverse adjustment on the Z axis	480 mm/min
Scale division on handwheel	0.005 mm
Rotational speeds	
Constant spindle speed	1 450 rpm
Dimensions and weight	
Length x width x height	3 600 x 2 400 x 1 900 mm
Net weight	3 600 kg

Scope of delivery

- Digital position display
- Coolant system
- External hydraulic unit with oil cooler
- Balancing station and balancing mandrel
- Corundum grinding wheel 46 grain
- Diamond dressing tip
- Table enclosure as splash guard when used
- Levelling feet, set screws and lock nuts
- Operating tool
- LED lamp
- Electromagnetic clamping plate
- Degaussing function

See for accessories page 274

Footprint



NEW

Magnetic separator with paper belt filter MPS 1

- Magnetic separator filters out metal contaminants
- Paper belt filter for versatile and safe filtering of fluids such as grinding fluids, cooling lubricants, etc. during operation.

Magnetic separator with paper belt filter MPS 1	
Article no.	3112000
Filtration (water-based emulsion)	30 ~ 40 µm
Coolant pump flow rate	25 litres per minute
Tank volume	120 litres
Overall dimensions L x W x H	1 290 x 460 x 580 mm
Diameter of (non-woven) filter cloth	Ø 200 mm
Width of filter cloth	400 mm
Coolant pump drive power	120 W
Filter cloth feed motor drive power	90 W
Weight	110 kg

Spare filter paper	
Article no.	3112001
Width of paper filter	400 mm
Length of paper filter	100 metres



Grinding dust extraction	Article no.
for grinding work without coolant	
Air volume is 240 m³/hour	
Motor power 370 W 400 V /~50Hz	
Vent size Ø 70mm/ Connector size Ø 60mm	
Dimension: 570 x 330 x 580mm	
GT 22 / GT 25	3112015
GT 30 / GT 40	3112016



Grinding wheel adapter	Article no.
For fast grinding wheel change	
GT 22 / GT 25	3112010
GT 30 / GT 40	3112011



Corundum grinding wheel	Article no.
Dimensions: 200 x 20 x 31.75 mm	
46 grain	3112040
60 grain	3112042
80 grain	3112044



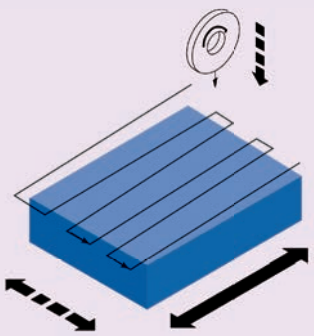
Corundum grinding wheel	Article no.
Dimensions: 350 x 40 x 127 mm	
46 grain	3112050
60 grain	3112052
80 grain	3112054



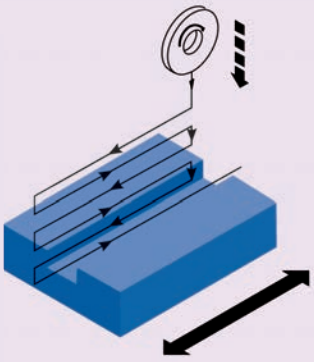
Diamond dresser	3112025
for the grinding wheel	
3/8 x 2“ x 1.00 carat	



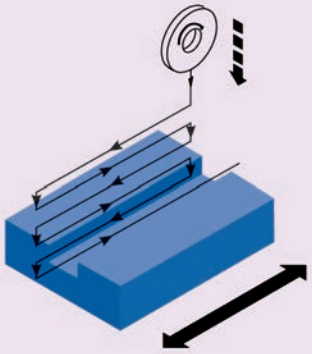
The GT 25, GT 30 and GT 40 series models are equipped with automatic feed control. Various grinding cycles are available as shown in the diagram.
Workpieces can be individually processed by entering the number of feeds with a minimum possible feed of 0.001 mm and by selecting the type of grinding.
The maximum possible feed per sequence step during automatic feed control is 0.01 mm.
A further possibility is to enter the number of grinding passes without grinding wheel feed in order to enable "firing" on the workpiece



Surface grinding with feed at start point



Slot grinding with feed at start point



Slot grinding with feed at start and end point

DRILLING/GRINDING MACHINES



DIY

quantum® MASCHINEN - GERMANY

The handy drill bit grinding device by quantum.

For easy sharpening of twist drill bits from Ø 3 mm to Ø 13 mm

Facts that impress in terms of quality, performance and price

- Easy to operate for inexpensive grinding of twist drill bits with two cutting edges
- Drill bit grinding without prior experience - clean, fast and precise
- Easy to transport
- Easy replacement of the grinding wheel
- Positively-driven sharpening action, thus easy to operate
- Automatic grinding of the tip geometry thanks to cam
- Robust plastic housing with anti-slip base
- Diamond grinding stone with long service life for the perfect grind

DRILL BIT GRINDERS



Fig.: GQ-D13

Three steps to a ground drill bit



Adjust the drill bit
› Twist drills are aligned in projection length and at the correct angle



Sharpening the drill bit
› Through slight rotation from stop to stop



Tipping the drill bit
› Again through slight rotation from stop to stop

Model	GQ-D13
Article no.	3140020
Power	
Electrical connection	230 V/1 Ph ~50 Hz
Motor power	80 W
Technical data	
Continuously variable speed	4 200 rpm
Grinding wheel	Ø 78 mm
Grinding capacity of drill bits	Ø 3 mm to Ø 13 mm
Dimensions and weight	
Length x width x height	220 x 200 x 160 mm
Net weight	2.5 kg

Scope of delivery
› Diamond grinding wheel
› Collet chuck holder

Accessories	Article no.
Replacement grinding wheel	3140021
Crystalline cubic boron nitride Grain size: 170 - 200 Area of application: High-speed steel (HSS)	



CRAFTSMEN

The handy drill grinders. Ideal for grinding twist drills

Facts that impress in terms of quality, performance and price

- Easy to operate for inexpensive grinding of twist drill bits with two cutting edges
- Drill bit grinding without prior experience - clean, fast and precise
- Easy to transport
- Grinding stone with long service life for the perfect grind on HSS (high-speed steel) drill bits
- Diamond grinding stone available as option for HM drill bits from accessories programme.
- Fully equipped with ER collets in the machine interior

DRILL BIT GRINDERS



Fig.: GH10T

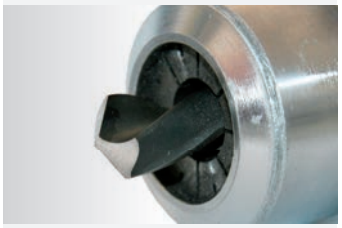


Fig.: GH15T

Drill bit ...



› ... with blunt cutting edges



› ..fast and easy regrinding

Comprehensive scope of delivery
with complete
collet assortment



GH 10T
› 11 units collets ER 20 sizes
Ø 2 - Ø 13 mm



GH 15T
› 6 units collets ER 20 sizes
Ø 3 - Ø 8 mm
› 22 units collets ER 40 sizes
Ø 8 - Ø 30 mm

Model	GH 10T	GH 15T
Article no.	3100110	3100115
Power		
Electrical connection	230 V/1 Ph ~50 Hz	230 V/1 Ph ~50 Hz
Motor power	180 W	450 W
Technical data		
Grinding wheel	Steel disc, coated with cubic crystalline boron nitride	
Collet chuck holder	ER20 DIN 6499	ER20 and ER 40 DIN 6499
Continuously variable speed	5 300 rpm	5 000 rpm
Tip sharpening angle	90° - 135°	90° - 145°
Drill bit grinding range	Ø 3 mm to Ø 13 mm	Ø 3 mm to Ø 30 mm
Dimensions and weight		
Length x width x height	310 x 180 x 190 mm	450 x 240 x 270 mm
Net weight	9.5 kg	33 kg

Accessories	Article no.
for GH10T	
Replacement grinding wheel Crystalline cubic boron nitride Grain size: 170 - 200 Area of application: High-speed steel (HSS)	3100126
Replacement grinding wheel Diamond Grain size: 150 Area of application: Carbide	3100131
for GH15T	
Replacement grinding wheel Crystalline cubic boron nitride Grain size: 170 - 200 Area of application: High-speed steel (HSS)	3100127
Replacement grinding wheel Diamond Grain size: 150 Area of application: Carbide	3100132

OPTIgrind® GH 20T

CRAFTSMEN

Versatile graver and tool grinding machine for various tool geometries

Facts that impress in terms of quality, performance and price

- Many pivoting and adjustment options usable for creating gravers (cylindrical, centric, tapered)
- For grinding stamps, twist drills, electrodes, lathe tools, centres etc.
- High level of precision thanks to rugged machine body and vibration-free driven precision grinding spindle
- Easy handling and operation
- Indexing head with 24 latching positions
- Adjustable dressing device

GRAVER GRINDING MACHINE



Model	GH20T
Article no.	3100125
Power	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	370 W
Grinding wheel speed, diamond	5 000 rpm
Max. grinding speed	35 m/s
Motor speed	2 750 rpm
Tool holder travel	140 mm
Tool holder fine adjustment	18 mm
Longitudinal fine adjustment	6 mm
Adjustable angle	
vertical/rear side	0° - 40°
horizontal/conical grinding	0° - 180°
Negative angles	0° - 52°
Latching setting angle of rotation	22* x 15°
	180°
Collet chuck holder	
Clamping range	Ø 1- 12 mm
Clamping jaw type	385E (5C), DIN 6341
Dimensions and weight	
Length x width x height	350 x 450 x 340 mm
Net weight	45 kg

* Two latching positions occupied for sharpening drill bits

Replacement grinding wheel	Grain size	Area of application	Article no.
Corundum	K 80	Fast-working steel (HSS)	3100128
Diamond	K 150	Carbide	3100129

YouTube

Follow this for the video presentation of our drill bit grinding machine GH 20T
Subscribe to our YouTube channel, to avoid missing any of the new videos:
www.youtube.com/user/OptimumMaschinen



Fig.: Corundum



Fig.: Diamond

Comprehensive scope of delivery



› Collets 385E (5C) DIN 6341 Ø 37.5 mm; L=89 mm; 20°
› Sizes Ø 4/6/8/10/12 mm



› Corundum cup grinding wheel Ø 100 x 51 x Ø 20 mm
› Diamond cup grinding wheel Ø 100 x 51 x Ø 20 mm
(already mounted when delivered)



› Device for sharpening lathe tools



› Device for sharpening end mills



› Device for sharpening twist drill bits



› Operating tool

BELT SANDERS



OPTIgrind® GB 100S

NEW

CRAFTSMEN

Belt grinding machine offers the user a maximum of application possibilities on a minimal footprint

Facts that impress in terms of quality, performance and price

- Heavy, durable industrial design with maintenance-free motor
- Long service life and quiet action thanks to balanced rotor with quality ball bearings
- Sturdy and stable machine body
- Tray for safety glasses

BELT GRINDER





Dimensions

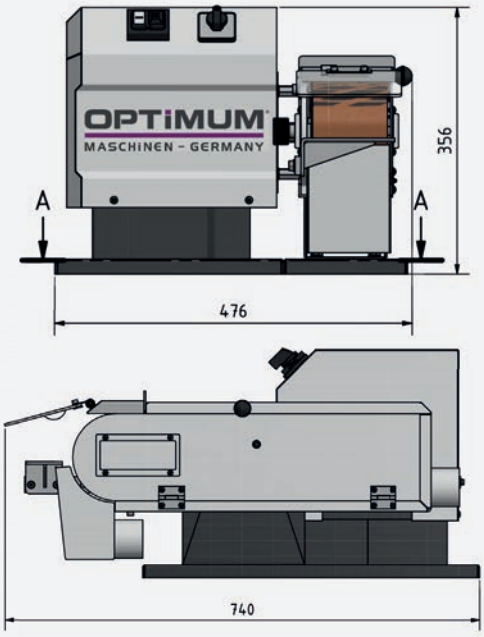




Fig. shows sample application

Model	GB 100S
Article no.	3101660
Power	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	1.3 / 1.8 kW
Grinding belt	
Grinding belt width - length	100 x 1 190 mm
Extraction port	Ø 60 mm
Usable contact surface for grinding at top on grinding belt	345 x 100 mm
Circumferential speed of grinding belt	19.4 m/s at 2 850 rpm
Speed	1 450 / 2 850 rpm
Dimensions and weight	
Length x width x height	740 x 476 x 356 mm
Net weight	47 kg

Machine base	Article no.
GU 2	3107115
› Cyclone extraction unit with two motors	
› Noise-insulated	
Extraction pipes (2 pcs.)	3107116
› 300 - 1 000 mm variable length	

For information see page 307

Scope of delivery
› Grinding belt

Grinding belt	PQ	Article no.
Grain size 40	5 units	3357637
Grain size 60	5 units	3357638
Grain size 80	5 units	3357639
Grain size 120	5 units	3357640

BELT GRINDER

Belt grinders in heavy and rugged industrial design for roughing, finishing and profile grinding of various materials in continuous operations

Facts that impress in terms of quality, performance and price

- Time-saving deburring of edges and weld polishing
- Sturdy and vibration-free design
- Powerful motor
- 22° - 50° inclinable grinding table
- Continuously adjustable top stop supports fast and convenient initial grinding of workpieces
- Large surface grinding surface
- Additional safety device
- Front extraction duct for attaching an extraction unit
- Spark guard
- Workpiece support allows grinding at the required angle
- One grinding belt included in standard scope of delivery

Surface grinding surface



› Open throughout and to rear
› Also perfectly suited for machining longer workpieces

Operation



› Emergency stop button
› Setting the angle of inclination



Fig.: GBS 75



Fig.: GBS150

Machine base with cyclone suction system see page 307

Model	GBS 75	GBS 150
Article no.	3321155	3321160
Power		
Electrical connection	400 V/3 Ph ~50 Hz	400 V/3 Ph ~50 Hz
Motor power	1.5/2.2 kW	1.5/2.2 kW
Rotational speeds		
Speed	1 450 / 2 850 rpm	1 450 / 2 850 rpm
Grinding belt		
Grinding belt dimensions	75 x 2 000 mm	150 x 2 000 mm
Surface grinding surface	98 x 60 mm	173 x 60 mm
Dimensions and weight		
Extraction duct nominal width outside	Ø 60 mm	Ø 60 mm
Dimensions L x W x H	430 x 1 000 x 937 mm	500 x 1 070 x 937 mm
Height: Pivot bearing below	1 035 mm	1 065 mm
Height: Pivot bearing above	1 090 mm	1 065 mm
Net weight	72 kg	87.5 kg

Scope of delivery

› Grinding belt 60 grain
› Allen key

GBS 75 grinding belts*	Article no.	PQ
Grain size 40	3357642	5 pcs.
Grain size 60	3357644	5 pcs.
Grain size 80	3357646	5 pcs.
Grain size 120	3357648	5 pcs.
Grain size 180	3357649	5 pcs.
Grain size 240	3357650	5 pcs.

Grinding belts GBS 150	Article no.	PQ
Grain size 40	3357672	5 pcs.
Grain size 60	3357674	5 pcs.
Grain size 80	3357676	5 pcs.
Grain size 120	3357678	5 pcs.
Grain size 180	3357679	5 pcs.
Grain size 240	3357680	5 pcs.

PLATE GRINDING MACHINES



NEW

CRAFTSMEN

OPTIMUM® MASCHINEN - GERMANY

Disc sanding machine for processing surfaces, edges and curves

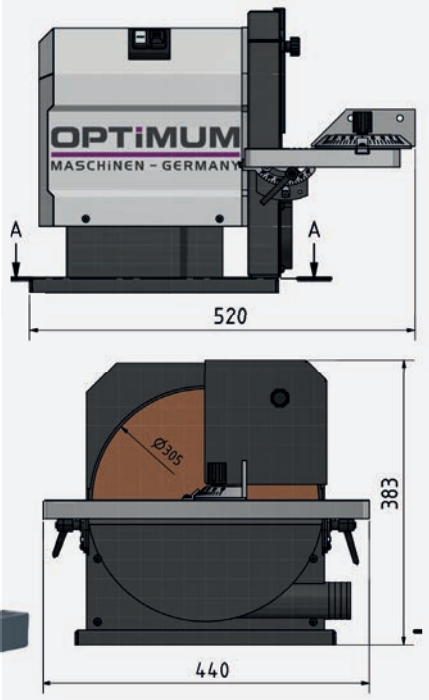
Facts that impress in terms of quality, performance and price

- Heavy, durable industrial design with maintenance-free motor
- Long service life and quiet action thanks to balanced rotor with quality ball bearings
- Versatile areas of application:
- For roughing, fine and moulding grinding work
- Sturdy and stable machine body
- Balanced aluminium grinding wheel for smooth action
- Powerful motor
- Delivered with grinding sheet
- Tray for safety glasses

DISK GRINDER



Dimensions





Hook and loop fastener pad



› Good grinding wheel adhesion, easy replacement

Mitre stop



› Mitre stop 180° swivelable
› ± 45° inclinable grinding table

Model	GB 305D
Article no.	3101675
Power	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	1.1 kW
Grinding wheel	
Dimensions	Ø 305 mm
Extraction port	Ø 50 mm
Table support	440 x 210 mm
Adjustment of angle stop	180°
Grinding attachment swivel range	0 - 45°
Speed	1 450 rpm
Dimensions and weight	
Length x width x height	560 x 440 x 380 mm
Net weight	26.5 kg

Base units	
GU 1 - 400 V with extraction unit	3107109
Extraction pipes (2 pcs.)	3107111
› 300 - 1 000 mm variable length	
GU 4	3107119

For information see page 307

Accessories

Grinding sheets	Article no.	PQ
› Hook and loop fastener		
Grain size 40	**3357854**	**5 pcs.**
Grain size 60	**3357856**	**5 pcs.**
Grain size 80	**3357858**	**5 pcs.**
Grain size 100	**3357860**	**5 pcs.**
Grain size 120	**3357862**	**5 pcs.**
Grain size 150	**3357865**	**5 pcs.**
Grain size 180	**3357866**	**5 pcs.**
Grain size 240	**3357867**	**5 pcs.**

Extraction hose	3107111	35.00
2 flexible extraction pipes		

DIY

Disc grinder for machining metal surfaces

Facts that impress in terms of quality, performance and price

- Versatile areas of application:
- For roughing, fine and moulding grinding work
- Sturdy and stable machine body
- Balanced aluminium grinding wheel for smooth action
- Powerful motor
- Delivered with grinding sheet bonded onto grinding wheel

DISK GRINDER



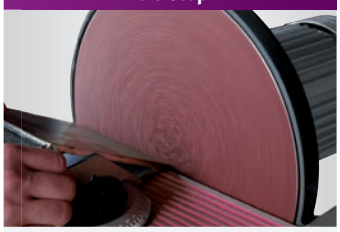
Fig.: TS 305

Extraction port



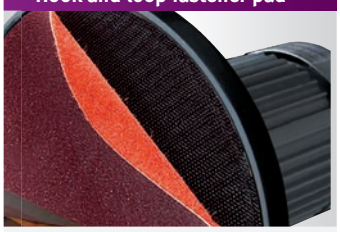
› Factory standard extraction duct with two diameters for attaching an extraction unit
› Outside nominal width ± Ø 30/ Ø 38 mm

Mitre stop



› Factory standard mitre stop pivots up to ± 60°
› ± 45° inclinable grinding table

Hook and loop fastener pad



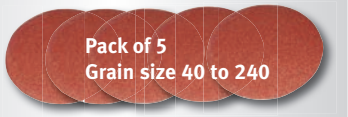
› Optional accessories (Article No. 3357801). Good grinding wheel adhesion, easy replacement

Model	TS 305
Article no.	3310305
Power	
Electrical connection	230 V/1 Ph ~50 Hz
Motor power	900 W
General Information	
Grinding wheel	Ø 305 mm
Speed	1 420 rpm
Table support	155 x 440 mm
Adjustment of angle stop	± 60°
Tiltable grinding table	± 45°
Dimensions and weight	
Length x width x height	440 x 445 x 365 mm
Net weight	30 kg

Scope of delivery
› Adjustable angle stop
› Grinding sheet

Accessories	Article no.
Hook and loop fastener pad	3357801

Grinding sheets	Article no.	PQ
› Hook and loop fastener		
Grain size 40	3357854	5 pcs.
Grain size 60	3357856	5 pcs.
Grain size 80	3357858	5 pcs.
Grain size 100	3357860	5 pcs.
Grain size 120	3357862	5 pcs.
Grain size 150	3357865	5 pcs.
Grain size 180	3357866	5 pcs.
Grain size 240	3357867	5 pcs.



DOUBLE GRINDERS



CRAFTSMEN

Double grinders by OPTIMUM.
A quality product for trades and industry

Facts that impress in terms of quality, performance and price

- Heavy, durable industrial design with maintenance-free motor
- Housing made of strand cast aluminium
- Long service life and quiet action thanks to balanced rotor with quality ball bearings
- Spark guard on each grinding wheel reduces flying sparks and is made of break-proof material
- Sturdy adjustable workpiece support
- Vibration-damping rubber feet
- Coarse and fine grinding wheel (K36/K80) included in standard scope of delivery

BENCH GRINDERS

OPTION:
Vario drive with SIEMENS Inverter Sinamics V20
see from page 300



Fig.: GU 30



Fig.: GU 15 - GU 25

Scope of delivery
› 1 grinding wheel each normal corundum 36/80 grain

For machine bases, see from page 306
For grinding wheels, see from page 310

Model	GU 15	GU 18	GU 20	GU 25	NEW GU 30
Article no. (230V)	3101505	3101510	3101515	-	-
Article no. (400V)	-	-	3101520	3101525	3101530
Technical data					
Electrical connection	230 V/1 Ph ~50 Hz	230 V/1 Ph ~50 Hz	230 V / 400 V ~50 Hz	400 V/3 Ph ~50 Hz	400 V/3 Ph ~50 Hz
Motor power	450 W	450 W	600 W	1.5 kW	2.2 kW
Grinding wheel dimensions	Ø 150 x 20 mm	Ø 175 x 25 mm	Ø 200 x 30 mm	Ø 250 x 40mm	Ø 300 x 50 mm
Shaft diameter	Ø 16 mm	Ø 32 mm	Ø 32 mm	Ø 32 mm	Ø 75 mm
Grinding speed	22 m/s	26 m/s	30 m/s	37 m/s	22 m/s
Rotational speeds	2 850 rpm	2 850 rpm	2 850 rpm	2 850 rpm	1 450 rpm
Extraction duct nominal width	Ø 34 mm	Ø 34 mm	Ø 34 mm	Ø 34 mm	Ø 35 / Ø 50 mm
Dimensions L x W x H	389 x 205 x 265 mm	389 x 235 x280 mm	495 x 260 x330 mm	471 x 320 x 365 mm	678 x 422 x 525 mm
Net weight	11 kg	14 kg	19 kg	33 kg	65 kg

INDUSTRY

PREMIUM Double grinders.

GZ - DD Models with machine base and integrated extraction system

PREMIUM line

Facts that impress in terms of quality, performance and price

- **10-year Optimum guarantee***
- Heavy industrial grinding machine absorbs the vibrations, which are low anyway, thanks to its high deadweight
- Also suitable for strong thrust force on the grinding wheels
- Maintenance-free, durable, induction motor with smooth action
- Cast iron housing
- Spark guard
- Sturdy, adjustable workpiece support
- Grinding wheels not included in standard scope of delivery

GZ-D models:
- without machine base (machine base available as option)

GZ-DD models:
- Integrated extraction system with aluminium fan and self-cleaning impellers
- Dust bag made of self-extinguishing woven material
- Sturdy base with water tray

OPTION:
Vario drive with
SIEMENS Inverter
Sinamics V20
see from page 304

BENCH GRINDERS







Fig.: GZ 25DD with optional grinding wheels

DO NOT FORGET:
Grinding wheels not included.
These can be found from page 310 on

Accessories	Article no.
Electronic brake	3091099
› Controlled braking	
› Including factory assembly	



For machine bases, see from page 306
For grinding wheels, see from page 310

Model	GZ 20D	GZ 25D	GZ 30D
Article no.	3091010	3091015	3091020
Model	**GZ 20DD**	**GZ 25DD**	**GZ 30DD**
Article no.	3091040	3091045	3091050

Technical data			
Electrical connection	400 V/3 Ph ~50 Hz	400 V/3 Ph ~50 Hz	400 V/3 Ph ~50 Hz
Motor power	750 W	1.1 kW	1.8 kW
Grinding wheel dimensions	Ø 200 x 25 mm	Ø 250 x 30 mm	Ø 300 x 35 mm
Shaft diameter	Ø 20 mm	Ø 25 mm	Ø 30 mm
Rotational speeds	2 800 rpm	1 400 rpm	1 400 rpm
Dimensions L x W x H GZ models	550 x 290 x 360 mm	670 x 340 x 410 mm	810 x 420 x 560 mm
Dimensions L x W x H GZ-DD models	800 x 710 x 1 120 mm	800 x 710 x 1 300 mm	810 x 1 200 x 1 320 mm
Net weight GZ/GZ-DD models	25 kg / 63.7 kg	44.8 kg / 91 kg	64.5 kg / 124 kg

* Information on scope, duration, content and guarantor at www.optimum-machines.com or to be requested at Optimum Maschinen Germany GmbH

OPTIgrind® GZ 40D

NEW

INDUSTRY

PREMIUM line

PREMIUM Industrial - double grinder, extremely robust and stable

Facts that impress in terms of quality, performance and price

- **10-year Optimum guarantee***
- Suitable for intensive use in industry
- Heavy industrial grinding machine absorbs the vibrations, which are low anyway, thanks to its high deadweight
- Also suitable for strong thrust force on the grinding wheels
- Maintenance-free, durable, induction motor with smooth action
- Cast iron housing
- Spark guard
- Stable, displaceable workpiece support
- Grinding wheels not included in standard scope of delivery

OPTION:
Vario drive with SIEMENS Inverter Sinamics V20
see from page 303



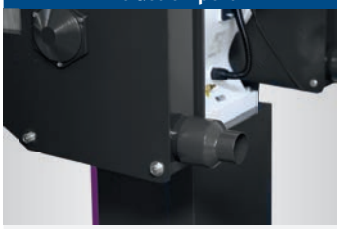
Fig.: Showing optional grinding wheels and GU4-H machine base

Material support



› Displaceable
› Sturdy

Extraction port



› Nominal width 90 mm

Control unit



› With EMERGENCY-STOP push button



Model	GZ40D
Article no.	3091025
Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	4.4 kW
Grinding wheels	
Dimensions	Ø 400 x 50 mm
Shaft diameter	Ø 40 mm
Rotational speeds	1 400 rpm
Extraction duct nominal width	90 mm
Dimensions and weight	
Length x width x height	980 x 600 x 660 mm
Net weight	168 kg

For grinding wheels, see from page 310

Machine base	Article no.
GU 5-H with cyclone extraction unit	3107114
GU 4-H	3107119

For information see page 308

* Information on scope, duration, content and guarantor at www.optimum-machines.com or to be requested at Optimum Maschinen Germany GmbH

BENCH GRINDERS

COMBINED AND UNIVERSAL GRINDERS

UNIVERSAL
COMBINED GRINDERS
BRUSH DEBURRER



NEW

CRAFTSMEN

Functional universal grinding machines with grinding attachment

Facts that impress in terms of quality, performance and price

- Rugged and sturdy universal grinding machines with grinding belt and grinding wheel for a variety of materials
- Heavy, durable industrial design with maintenance-free motor
- Large, heavy fastening flanges ensure excellent disc true running accuracy
- Grinding attachment with graphite support; prevents friction and heat
- Stop allows for fast and convenient initial grinding of the workpieces
- Belt run adjustment without tools - adjustable using a single star knob
- Universal corundum grinding wheel and grinding belt included in standard scope of delivery

Grinding belt



› Grinding attachment can be adjusted via the flange in a swivel range of 0° to 90°

Grinding wheel



› Sturdy workpiece support surface
› Adjustable spark protection

UNIVERSAL GRINDERS

OPTION:
Vario drive with
SIEMENS Inverter
Sinamics V20
see from page 302



Fig.: GU 30S



Fig.: GU 20S

Model	GU 20S	GU 25S	GU 30S
Article no. (230V)	3101570	-	-
Article no. (400V)	3101575	3101580	3101585
Technical data			
Electrical connection	230 V or 400V	400 V/3 Ph ~50 Hz	400 V/3 Ph ~50 Hz
Motor power	600 W	1.5 KW	2.2 kW
Grinding wheel size	Ø 200 x 30 mm	Ø 250 x 40 mm	Ø 300 x 50 mm
Shaft diameter	Ø 32 mm	Ø 32 mm	Ø 25 mm
Grinding belt L x W	75 x 762 mm	75 x 1 016 mm	100 x 1 190 mm
Extraction port	Ø 32 mm	Ø 32 mm	Ø 35 / Ø 50 mm
Grinding speed, belt sander	16 m/s	16 m/s	10 m/s
Grinding speed, grinding wheel	30 m/s	37 m/s	27 m/s
Dimensions L x W x H	501 x 261 x 459 mm	514 x 319 x 596 mm	767 x 420 x 527 mm
Net weight	20.7 kg	31.5 kg	64.5 kg

Scope of delivery
› Grinding wheel normal corundum fine 80 grain
› Grinding belt normal corundum fine 80 grain

For machine bases, see from page 306
For polishing discs, see from page 310

NEW

CRAFTSMEN

OPTIMUM® MASCHINEN - GERMANY

Effective brush deburrer for trades and small series

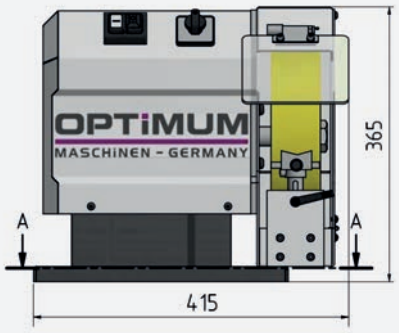
Facts that impress in terms of quality, performance and price

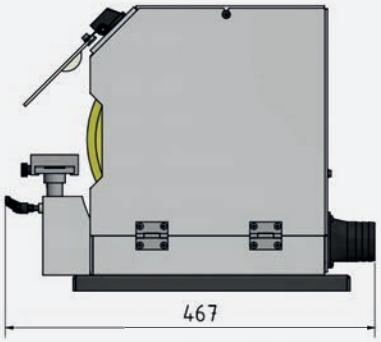
- Heavy, durable industrial design with maintenance-free motor
- Long service life and quiet action thanks to balanced rotor with quality ball bearings
- For deburring pipes, sections and flat workpieces made of metal
- Tray for safety glasses
- Sturdy and stable machine body
- Safe and clean working with the optional GU 1 machine base with cyclone dust extraction

BRUSH DEBURRER



Dimensions







Material support



› Height-adjustable
› Holder also for round material

Extraction duct



› The extraction connection outer diameter is 50 mm

Scope of delivery

› Round brush, wire thickness 0.35 mm

Model	GB 250B
Article no.	3101670
Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	1.3 / 1.8 kW
Round brush	
Round brush dimensions	Ø 250 x 40 mm
Shaft diameter	Ø 25 mm
Extraction port	Ø 50 mm
Circumferential speed of round brush	37.3 m/s at 2 850 rpm
Speed	1 450 / 2 850 rpm
Dimensions and weight	
Length x width x height	415 x 467 x 356 mm
Net weight	36 kg

Machine base	Article no.
GU 1 - 400 V with extraction unit	3107109
GU 4	3107119

For information, see page 307

Extraction hose	3107111
2 flexible extraction pipes	

NEW

Round brush steel wire	Article no.
for stainless steel Ø 250 x 32-37 mm with adapter 25 mm	Made in Germany
Wire thickness 0.30 mm	3098070

Round brush steel wire	Article no.
Ø 250 x 42-47 mm with 25mm adapter	
Wire thickness 0.20 mm	3107451
Wire thickness 0.30 mm	3107452

CRAFTSMEN

Combined grinding machines by Optimum for workshops

Facts that impress in terms of quality, performance and price

- Durable design with maintenance-free motor
- Housing made of strand cast aluminium
- Large, heavy fastening flanges ensure excellent disc true running accuracy
- Grinding attachment with graphite support - prevents friction and heat
- Stop allows for fast and convenient initial grinding of the workpieces
- Swivelling brush protection housing
- Extraction duct for attaching an extraction unit
- One grinding wheel and one multi-purpose brush included in scope of delivery

Material support



› Mobile and sturdy

Multi-purpose brush



› in swivelling brush housing
› High tensile steel wire
› with extraction duct

COMBINED GRINDERS



Scope of delivery

› Grinding wheel - normal corundum coarse 36 grain
› Multi-purpose wire brush, wire thickness 0.3 mm

For machine bases, see from page 306
For polishing discs, see from page 310

Model	GU 15B	GU 18B	GU 20B	GU 25B
Article no. (230V)	3101600	3101605	3101610	-
Article no. (400V)	-	-	3101615	3101620
Technical data				
Electrical connection	230 V/1 Ph ~50 Hz	230 V/1 Ph ~50 Hz	230 V / 400 V	400 V/3 Ph ~50 Hz
Motor power	450 W	450 W	600 W	1.5 kW
Grinding disk dimensions	Ø 150 x 20 mm	Ø 175 x 25 mm	Ø 200 x 30 mm	Ø 250 x 40 mm
Multi-purpose wire brush	Ø 150 x 20 mm	Ø 175 x 25 mm	Ø 200 x 25 mm	Ø 250 x 30 mm
Shaft diameter	Ø 16 mm	Ø 32 mm	Ø 32 mm	Ø 32 mm
Rotational speeds	2 850 rpm	2 850 rpm	2 850 rpm	2 850 rpm
Extraction duct	Ø 34- 35 mm	Ø 34- 35 mm	Ø 34- 35 mm	Ø 34- 35 mm
Dimensions L x W x H	428 x 305 x 230 mm	428 x 305 x 244 mm	517 x 345 x 282 mm	526 x 380 x 319 mm
Net weight	10.7 kg	12.3 kg	18.5 kg	32.5 kg

PREMIUM Combined grinding machines for workshops, steel construction companies.

GZ - CD Models with machine base and integrated extraction system

Facts that impress in terms of quality, performance and price

- **10-year Optimum guarantee***
- Heavy industrial combined grinding machine absorbs the vibrations, which are low anyway, thanks to its high deadweight
- Also suitable for strong thrust force on the grinding wheel and brush
- Maintenance-free, durable, induction motor with smooth action
- Cast iron housing
- Sturdy, adjustable workpiece support
- Grinding wheel and brush not included in standard scope of delivery

COMBINED GRINDERS





Fig.: Base of CD machines with integrated extraction system

OPTION:
Vario drive with SIEMENS Inverter Sinamics V20
see from page 302

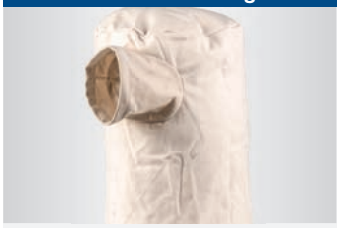
PREMIUM line

Extraction system



GZ - CD models
› Made in Italy
› Perfectly aligned to avoid noise and vibrations
› self-cleaning wings

Dust collection bag



GZ - CD models
› For a clean workplace
› More safety - collects glowing chips in a sack

Multi-purpose brush



› with swivelling brush housing
› High tensile steel wire

Model	GZ 20C	GZ 25C
Article no.	3091070	3091075
Model	**GZ 20CD**	**GZ 25CD**
Article no.	3091080	3091085

Technical data		
Electrical connection	400 V/3 Ph ~50 Hz	400 V/3 Ph ~50 Hz
Motor power	750 W	1.1 kW
Grinding wheel dimensions	Ø 200 x 25 mm	Ø 250 x 30 mm
Round brush dimensions	Ø 200 x 25 mm	Ø 250 x 25 mm
Shaft diameter	Ø 20 mm	Ø 25 mm
Rotational speeds	2 800 rpm	1 400 rpm
Dimensions L x W x H GZ-C	650 x 300 x 360 mm	850 x 340 x 410 mm
Dimensions L x W x H GZ-CD	900 x 710 x 1 300 mm	850 x 1 200 x 1 300 mm
Net weight GZ-C / GZ-CD	26.5 kg / 65 kg	47.9 kg / 87 kg

DO NOT FORGET:
Polishing discs and multi-purpose brushes not included. These can be found on page 310

Accessories	Article no.
Electronic brake	3091099
› Controlled braking	
› Including factory assembly	



Machine base	Article no.
GZ 20D	3091120
GZ 25D	3091122

For information, see page 306

* Information on scope, duration, content and guarantor at www.optimum-machines.com or to be requested at Optimum Maschinen Germany GmbH

OPTIgrind® GZ 40C

NEW

INDUSTRY

PREMIUM line

PREMIUM combination grinder - a powerful industrial grinder with multi-purpose brush and grinding wheel

Facts that impress in terms of quality, performance and price

- **10-year Optimum guarantee***
- Suitable for intensive use in industry
- Heavy-duty combined grinding machine absorbs the vibrations thanks to its high deadweight
- Also suitable for strong thrust force on the grinding wheel and brush
- Maintenance-free, durable, induction motor with smooth action
- Cast iron housing
- Swivelling brush protection housing with extraction ducts
- Sturdy, adjustable workpiece support
- Grinding wheel and brush not included in standard scope of delivery

COMBINED GRINDERS



Fig.: Showing optional grinding wheel, brush, and GU4-H machine base

OPTION:
Vario drive with SIEMENS Inverter Sinamics V20
see from page 302

Material support



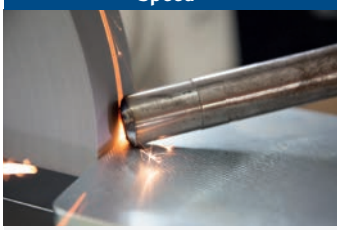
› Mobile and sturdy

Multi-purpose brush



› with swivelling brush housing
› Optionally available multi-purpose brush made of high tensile steel wire

Speed



› constant speed, also under load

Model	GZ 40C
Article no.	3091079

Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	4.4 kW
Grinding wheel dimensions	Ø 400 x 50 mm
Grinding wheel Shaft diameter	Ø 40 mm
Round brush dimensions	Ø 350 x 35 mm
Round brush Shaft diameter	Ø 25 mm
Rotational speeds	1 400 rpm
Extraction duct nominal width	Ø 90 mm
Dimensions length x width x height	1 200 x 660 x 580 mm
Net weight	144 kg

DO NOT FORGET:
Polishing discs and multi-purpose brushes not included.
These can be found on page 310

Machine base	Article no.
GU 5-H with extraction unit (cyclone)	3107124
GU 4-H	3107123

For information, see page 307

* Information on scope, duration, content and guarantor at www.optimum-machines.com or to be requested at Optimum Maschinen Germany GmbH

GRINDING/POLISHING MACHINE



CRAFTSMEN

Polishing machine for fine surface finishing on metallic workpieces

Facts that impress in terms of quality, performance and price

- Heavy, durable industrial design with maintenance-free motor
- Housing made of strand cast aluminium
- Long service life and quiet action thanks to balanced rotor with quality ball bearings
- Two wide polishing discs included in standard scope of delivery
- Vibration-damping rubber feet (without extraction hood - can be ordered as an option)

GRINDING/POLISHING MACHINE



Fig.: GU 20P



Fig.: Vario conversion
Machine base with view window (not available)

OPTION:
Vario drive with SIEMENS Inverter Sinamics V20
see from page 300

Machine base	Article no.
GU 3 without extraction unit	3107118
GU 1 (230 V)	3107110
GU 1 (400 V)	3107109
› Cyclone extraction unit with two motors	
Extraction pipes (2 pcs.)	3107111

For more information see page 306

NEW

Extraction hood set	Article no.
For GU 20P	3107060
For GU 25P	3107061
› 2-part (left and right)	
› For use of an extraction unit	



Model	GU 20P	GU 25P
Article no. (230V)	3101540	-
Article no. (400V)	3101545	3101550

Technical data		
Electrical connection	230 V or 400 V	400 V/3 Ph ~50 Hz
Motor power	600 W	1.5 kW
Speed	2 850 rpm	2 850 rpm
Polishing disc size	Ø 200 x 20 mm	Ø 250 x 25 mm
Shaft diameter	Ø 16 mm	Ø 20 mm
Polishing speed	30 m/s	37 m/s
Dimensions L x W x H	545 x 200 x 262 mm	555 x 250 x 296 mm
Net weight	10.6 kg	17.4 kg

Scope of delivery
› 2 buffing discs

For polishing discs, see from page 310

NEW

CRAFTSMEN

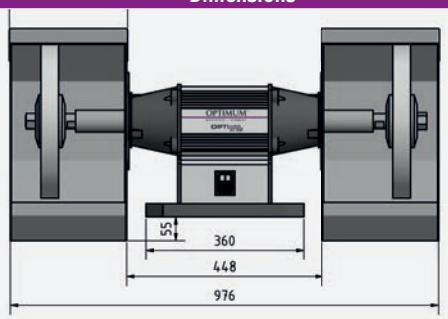
OPTIMUM® MASCHINEN - GERMANY

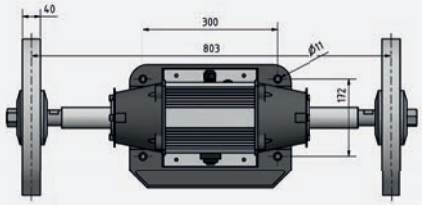
Polishing machine for fine surface finishing on metallic workpieces

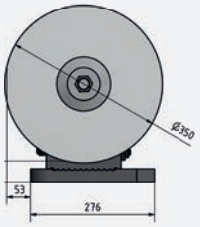
Facts that impress in terms of quality, performance and price

- Heavy, durable industrial design with maintenance-free motor
- Housing made of strand cast aluminium
- Long service life and quiet action thanks to balanced rotor with quality ball bearings
- Emergency stop button
- Two wide polishing discs included in standard scope of delivery
- Vibration-damping rubber feet, base plate
- Extraction hood for use of an extraction unit

Dimensions







OPTION:
Vario drive with
SIEMENS Inverter
Sinamics V20
see from page 300



GRINDING/POLISHING MACHINE

Model	GU 35P
Article no.	3101560

Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	2.2 kW
Speed	1 450 rpm
Polishing disc size	Ø 350 x 30 mm
Shaft diameter	Ø 25 mm
Polishing speed	37 m/s
Dimensions L x W x H	1 017 x 420 x 527 mm
Net weight	64.1 kg

Scope of delivery

› 2 buffing discs

For machine bases, see from page 306
For polishing discs, see from page 310

INDUSTRY

PREMIUM line

PREMIUM Polishing machine - a powerful industrial machine

Facts that impress in terms of quality, performance and price

- **10-year Optimum guarantee***
- Suitable for intensive use in industry
- Heavy-duty buffing grinder absorbs the vibrations (which are low anyway) thanks to its high deadweight
- Maintenance-free, durable, induction motor with smooth action
- Cast iron housing
- Polishing discs not included in standard scope of supply

GRINDING/POLISHING MACHINE



Fig: With optional polishing discs and GU4-H machine base

OPTION:
Vario drive with SIEMENS Inverter Sinamics V20
see from page 302

Safety enclosure



› swivelling
› Extraction support for attaching an extraction unit

Control unit



› With EMERGENCY-STOP push button

Housing



› Made of cast iron
› Very high damping capacity

Model	GZ 40P
Article no.	3091130

Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	4.4 kW
Grinding wheel dimensions	350 x 30 mm
Shaft diameter	Ø 25 mm
Rotational speeds	1 400 rpm
Extraction duct nominal width	Ø 90 mm
Dimensions L x W x H	1 390 x 530 x 580 mm
Net weight	110 kg

DO NOT FORGET:
Polishing discs not included. These can be found on page 310

Machine base	Article no.
GU 5-H with extraction unit (cyclone)	3107114
GU 4-H	3107123

For information see page 307

 * Information on scope, duration, content and guarantor at www.optimum-machines.com or to be requested at Optimum Maschinen Germany GmbH

VARIO DRIVES



Machine	20			25			30		35	40
Bench grinders	GU 20	GZ 20D	GZ 20DD	GU 25	GZ 25D	GZ 25DD	GU 30	GZ 30D		GZ 40D
Universal grinders	GU 20S			GU 25S			GU 30S			
Combined grinders	GU 20B	GZ 20C	GZ 20CD	GU 25B	GZ 25C	GZ 25CD		GZ 30C		GZ 40C
Polishing machines	GU 20P			GU 25P					GU 35P	GZ 40P
Vario drive										
GU 1 with cyclone extraction unit				●						
GU 3				●						
GU 4							●		●	
GU 4-H										●
GU 5 with cyclone extraction unit							●		●	
GU 5-H with cyclone extraction unit										●
GZ		●	●		●	●		●		

Vario Vario drive with GU 1 machine base with cyclone extraction unit
enables continuously adjustable grinding machine speed control

Vario drive with SIEMENS Sinamics V20 inverter
- Wider voltage range, advanced cooling and painted electronic components increase the robustness of the inverter
- Stable operation even with difficult grid conditions



Vario machine base with machine base GU 1 with cyclone extraction unit
› Without grinder- must be ordered separately along with your order.
› Sturdy machine base
› Cyclone extraction unit integrated in machine base, consequently less space required
› Noise-insulated

Automatic start-up

No need to additionally switch the extraction unit on or off because the extraction unit switches on or off automatically after a delay of 2- 3 seconds when the unit is switched on or off. The residual dust is extracted after switching off the machine in line with the Hazardous Materials Ordinance



Vario conversion with machine base GU 1	
Motor power up to 1.5 kW	
Article no.	3491530
Controlable circumferential speeds 37 m/s to 6 m/s	

Machines required	
› Double grinder GU 25	3101525
› Combined grinding machine GU 25B	3101620
› Polishing machine GU 25P	3101550
› Universal grinding machine GU 25S	3101580

For more **information** on machine bases see page 307

The Vario conversion comply with DIN EN 55011 standard: class C2 note: The extraction unit needs a neutral conductor, 400-V version

Vario drive with GU 3 machine base
enables continuously adjustable grinding machine speed control

Vario drive with SIEMENS Sinamics V20 inverter
- Wider voltage range, advanced cooling and painted electronic components increase the robustness of the inverter
- Stable operation even with difficult grid conditions



Vario conversion with machine base GU 3
Without grinder- must be ordered separately along with your order
Coolant tray
Small footprint



Fig.: Base with sample view window

Vario conversion with machine base GU 3	
Motor power up to 1.5 kW	
Article no.	3491531
Controlable circumferential speeds 37 m/s to 6 m/s	

Machines required	
Double grinder GU 25	3101525
Combined grinding machine GU 25B	3101620
Polishing machine GU 25P	3101550
Universal grinding machine GU 25S	3101580

For more **information** on machine bases see page 307

Vario drive optionally with machine machine base GU 4 or GU 5
enables continuously adjustable grinding machine speed control

Vario drive with SIEMENS Sinamics V20 inverter
› Wider voltage range, advanced cooling and painted electronic components increase the robustness of the inverter
› Stable operation even with difficult grid conditions



GU 4



Machine base & Machine = Vario

GU 5



Machines required	
› Double grinder GU 30	3101530
› Combined grinding machine GU 30S	3101585
› Polishing machine GU 35P	3101560

Vario conversion with machine base GU 4 without extraction unit	
Motor power up to 2.2 kW	
Article no.	3491550

› Without grinder- must be ordered separately along with your order.
› Controlable circumferential speeds 34 m/s to 6 m/s
› Coolant tray
› Small footprint

For more **information** on machine bases see page 308

Vario conversion with machine base GU 5 with cyclone extraction unit	
Motor power up to 2.2 kW	
Article no.	3491552

› Without grinder- must be ordered separately along with your order.
› Controlable circumferential speeds 34 m/s to 6 m/s
› Sturdy machine base
› Cyclone extraction unit integrated in machine base, consequently less space required
› Noise-insulated

Automatic start-up
No need to additionally switch the extraction unit on or off because the extraction unit switches on or off automatically after a delay of 2- 3 seconds when the unit is switched on or off. The residual dust is extracted after switching off the machine in line with the Hazardous Materials Ordinance

Vario drive optionally with machine base GU 4-H or GU 5-H
enables continuously adjustable grinding machine speed control

Vario drive with SIEMENS Sinamics V20 inverter
- Wider voltage range, advanced cooling and painted electronic components increase the robustness of the inverter
- Stable operation even with difficult grid conditions





GU 4-H

Machine base & Machine = Vario



GU 5-H

Machines required	
› Double grinder GZ40D	3091025
› Combined grinding machine GZ 40C	3091079
› Polishing machine GZ 40P	3091130

Vario conversion with GU 4-H machine base without extraction unit	
Motor power up to 4.4 kW	
Article no.	3491571

- › Without grinder- must be ordered separately along with your order
- › Controlable circumferential speeds 34 m/s to 6 m/s
- › Coolant tray
- › Small footprint

Vario conversion with GU 5-H machine base with cyclone extraction unit	
Motor power up to 4.4 kW	
Article no.	3491573

- › Without grinder- must be ordered separately along with your order.
- › Controlable circumferential speeds 34 m/s to 6 m/s
- › Sturdy machine base
- › Cyclone extraction unit integrated in machine base, consequently less space required
- › Noise-insulated

Reminder: The bases must be filled with concrete by the customer.

Automatic start-up
No need to additionally switch the extraction unit on or off because the extraction unit switches on or off automatically after a delay of 2- 3 seconds when the unit is switched on or off. The residual dust is extracted after switching off the machine in line with the Hazardous Materials Ordinance

For more **information** on machine bases see page 308

Vario drive with machine base GZ with or without extraction unit
enables continuously adjustable grinding machine speed control

Vario drive with SIEMENS Sinamics V20 inverter
- Wider voltage range, advanced cooling and painted electronic components increase the robustness of the inverter
- Stable operation even with difficult grid conditions





Fig.: GZ 25D

Vario conversion with GZ machine base without extraction unit	
Motor power up to 0.75 kW	
Article no.	3491513

- Without grinder- must be ordered separately along with your order.
- including base(without extraction unit)
- Controlable circumferential speeds 30 m/s to 5 m/s

Machines required	
Double grinder GZ 20D	3091010
Universal grinder GZ 20C	3091070

Vario conversion with GZ machine base without extraction unit	
Motor power up to 1.1 kW	
Article no.	3491530

- Without grinder- must be ordered separately along with your order.
- including base(without extraction unit)
- Controlable circumferential speeds 19 m/s to 3 m/s

Machines required	
Double grinder GZ 25D	3091015
Universal grinder GZ 25C	3091075



Fig.: GZ 25DD

Vario conversion GZ with cyclone extraction unit	
Motor power up to 0.75 kW	
Article no.	3491514

- Machine base (scope of delivery) is converted to Vario
- Controlable circumferential speeds 30 m/s to 5 m/s

Machines required with machine base	
Double grinder GZ 20DD	3091040
Universal grinder GZ 20CD	3091080

Vario conversion GZ with cyclone extraction unit	
Motor power up to 1.1 kW	
Article no.	3491534

- Machine base (scope of delivery) is converted to Vario
- Controlable circumferential speeds 19 m/s to 3 m/s

Machines required with machine base	
Double grinder GZ 25DD	3091045
Universal grinder GZ 25CD	3091085

For more **information** on machine bases see page 306

MACHINE BASES







Machine													
Belt sanders	GB 100S	GBS 75	GBS 150										
Brush deburrer				GB 250B									
Plate grinding machine				GB 305D									
Bench grinders					GU 15	GU 18	GU 20	GZ 20D	GU 25	GZ 25D	GU 30	GZ 30D	GZ 40D
Universal grinders							GU 20S		GU 25S		GU 30S		
Combined grinders					GU 15B	GU 18B	GU 20B	GZ 20C	GU 25B	GZ 25C		GZ 25C	GZ 40C
Polishing machines							GU 20P		GU 25P		GU 35P		GZ 40P
Matching machine base													
Wall holder					●	●	●		●				
GZ								●		●		●	
GU 1 with extraction unit				●	●	●	●		●				
GU 2 with extraction unit	●	●	●										
GU 3					●	●	●		●				
GU 4				●							●		
GU 4-H													●
GU 5 with extraction unit											●		
GU 5-H with extraction unit													●

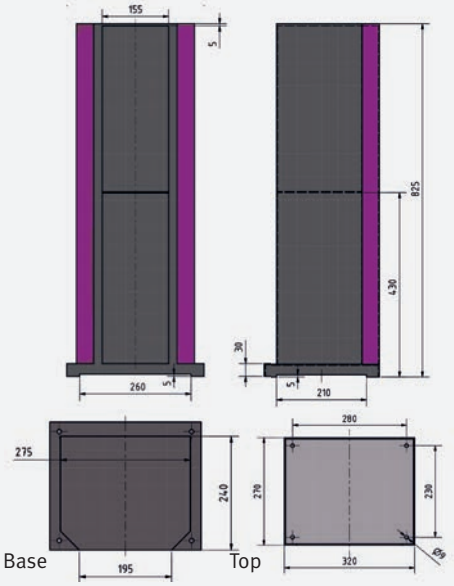
GU 3 - Machine base with cyclone extraction unit for grinding machines

Facts that impress in terms of quality, performance and price

- ▶ Coolant tray
- ▶ Small footprint
- ▶ Specially suited for our machines
- › Bench grinders GU 15 - GU 25
- › Universal grinding machines GU 20S and 25S
- › Combined grinder GU 15B - GU 25B
- › Polishing machines GU 20P and GU 25P



Dimensions and holes



Model	GU 3
Article no.	3107118
Dimensions L x W x H	320 x 270 x 825 mm
Net weight	14.5 kg

Machine base for GZ grinding machines

Facts that impress in terms of quality, performance and price

- ▶ Sturdy
- ▶ Small footprint
- ▶ Specially suited for our machines
- › Bench grinders GZ 20 - GZ 30
- › Combined sanders GZ 20C - GZ 25C



Model - suitable for	GZ 20	GZ 25	GZ 30
Article no.	3091120	3091122	3091124
Dimensions L x W x H	400 x 370 x 760 mm	437 x 437 x 675 mm	460 x 430 x 760 mm
Net weight	33 kg	40 kg	52 kg

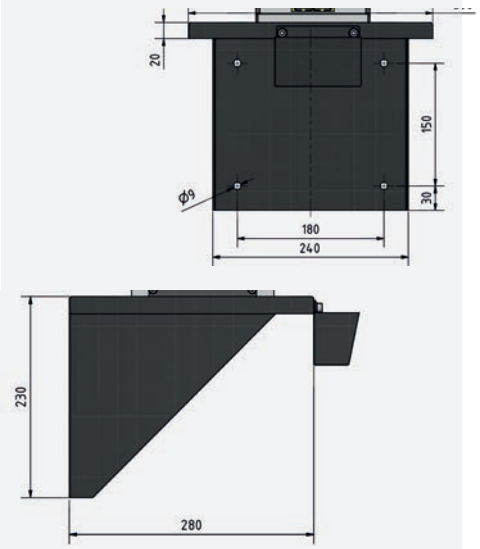
Wall holder

Facts that impress in terms of quality, performance and price

- ▶ Coolant tray
- ▶ L x W x H: 332 x 300 x 230 mm
- ▶ Specially suited for our machines
- › Bench grinders GU 15 - GU 25
- › Universal grinding machines GU 20S and 25S
- › Combined grinder GU 15B - GU 25B
- › Polishing machines GU 20P and GU 25P



Dimensions



Model	Wall holder
Article no.	3107050

GU 1 - Machine base with cyclone extraction unit for grinding machines

Facts that impress in terms of quality, performance and price

- Sturdy machine base
- Cyclone extraction unit integrated in machine base, consequently less space required
- For GU and GU-S machines
- Noise-insulated
- Without drilled holes - must be drilled individually
- Y adapter for two-pipe extraction unit connection each with Ø 50 mm



Lamp holder
- prepared for machine lamp LED 3- 500



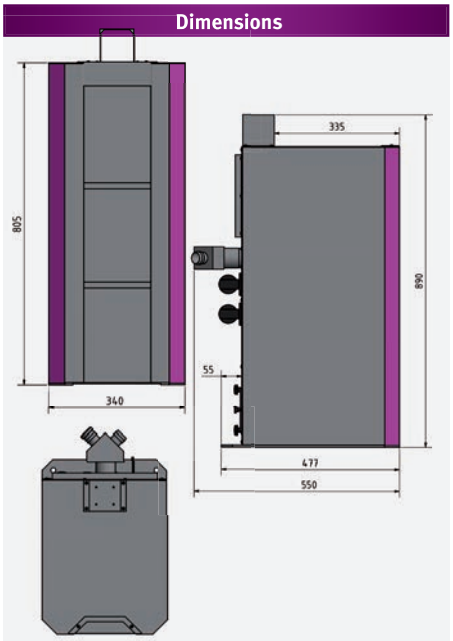


Fig. shows sample application

Model	GU 1	
Article no.	3107110	3107109
Electrical connection	230 V/1 Ph	400 V/3 Ph
Motor power	1.3 kW	
Speed	29 000 rpm	
Air throughput	2.3 m³ per minute	
Dimensions L x W x H	477 (550) x 340 x 805 (890) mm	
Net weight	42 kg	

Note: The extraction unit needs a neutral conductor, 400-V version

Dimensions



Extraction hose	3107111
› 2 flexible extraction pipes	
› for GU and GU-S grinders	
› Connection with Ø 50 mm and Ø 35 mm	



Automatic start-up GU 1 and GU 2
No need to additionally switch the extraction unit on or off because the extraction unit switches on or off automatically after a delay of 2- 3 seconds when the unit is switched on or off. The residual dust is extracted after switching off the machine in line with the Hazardous Materials Ordinance

GU 2 - Machine machine base with cyclone extraction unit

Facts that impress in terms of quality, performance and price

- Cyclone extraction unit with two motors
- Includes Y adapter for two-tube extraction unit connection, 60 x 300 - 1000 mm flexible
- Small footprint
- Noise-insulated
- External 230 V permanent power supply
- Specially suited for our belt grinding machines GBS 75 /GBS 150 or external machines

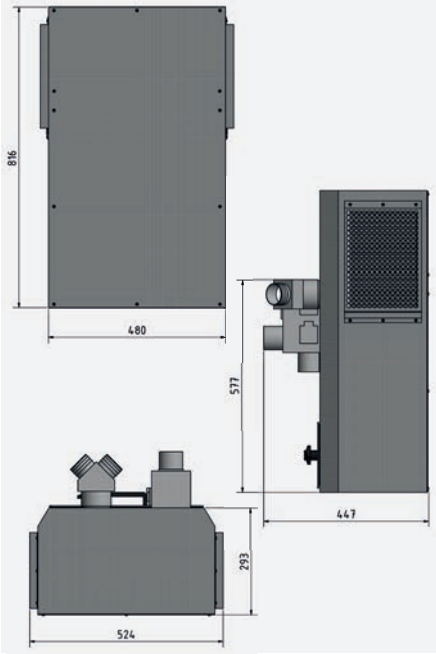


Chip drawer

Model	GU 2
Article no.	3107115
Electrical connection	400 V/3 Ph 50Hz
Total connected load	4 kW
Motor output per blower	1.3 kW
Number of blowers	2
Speed	29 000 rpm
Air throughput	4.6 m³ per minute
Chip filter container volume	15 litres
Dimensions L x W x H	525 x 440 x 815 mm
Net weight	60 kg

The bases GU 1 and GU 2 comply with the DIN EN 55011 standard:: class C2 Note: The extraction unit needs a neutral conductor

Dimensions



Extraction hose	3107116
2 units flexible extraction tube Ø 60 mm	
300 - 1 000 mm length	

GU 4 / GU 4-H - machine base for grinding machines GU 4-H for heavy loads

Facts that impress in terms of quality, performance and price

- ▶ Coolant tray
- ▶ Small footprint
- ▶ The GU 4-H machine base must be filled with concrete at the customer's site.
- ▶ GU 4 - Particularly suitable for the machines
  - › Double grinder GU 30
  - › Universal grinding machine GU 30S
  - › Polishing grinder GU 35P
- ▶ GU 4-H - Particularly suitable for the machines
  - › Double grinder GZ 40D
  - › Combined grinder GZ 40C
  - › Polishing grinder GZ 40P



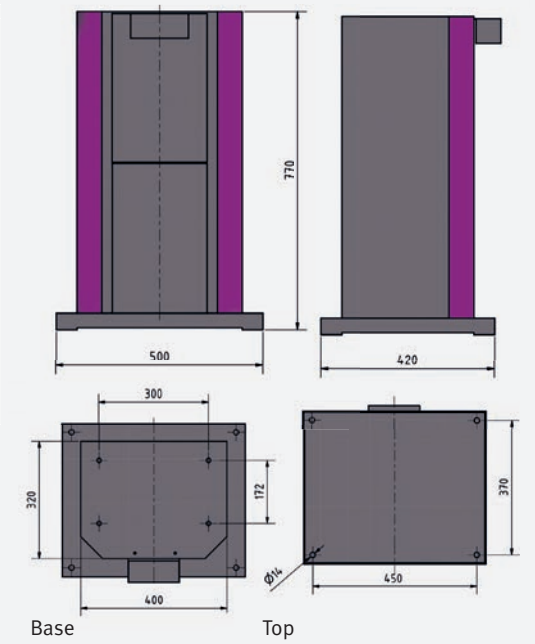
Fig. GU 4-H

Fig. GU 4

*Reminder: The GU 4-H machine base must be filled with concrete at the customer's site.

Model	GU 4	GU 4-H*
Article no.	3107119	3107123
Dimensions	500 x 420 x 770 mm	500 x 420 x 770 mm
Net weight	30 kg	empty 33 kg / filled 139 kg

Dimensions and holes



Mounting plate	3107125

› When mounting the GB 100S belt grinder on the substructure, the following is mandatory

GU 5 / GU 5-H - Universal machine base with cyclone extraction unit for grinding machines. GU 5-H for heavy loads

- ▶ Sturdy machine base
- ▶ Cyclone extraction unit integrated in machine base, consequently less space required
- ▶ Noise-insulated
- ▶ Without drilled holes - must be drilled individually
- ▶ Y adapter for two-tube extraction unit connection
- ▶ The GU 5-H machine base must be filled with concrete at the customer's site.

- ▶ GU 5 - Particularly suitable for the machines
  - › Double grinder GU 30
  - › Universal grinding machine GU 30S
  - › Polishing grinder GU 35P
- ▶ GU 5-H - Particularly suitable for the machines
  - › Double grinder GZ 40D
  - › Combined grinder GZ 40C
  - › Polishing grinder GZ 40P



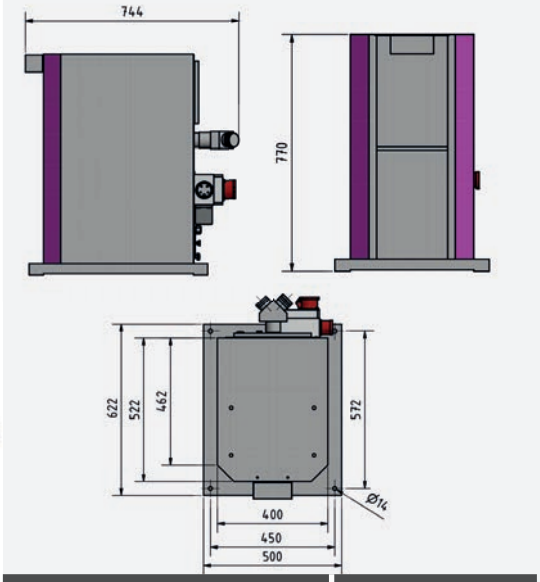
Fig. GU 5-H

Fig. GU 5

*Reminder: The GU 5-H machine base must be filled with concrete at the customer's site.

Model	GU 5	GU 5-H
Article no.	3107114	3107124
Total connected load	4 kW 400 V/3 Ph	
Speed	29 000 rpm	
Air throughput	2.3 m³ per minute	
Dust tank volume	0.06 m²	
Dimensions L x W x H	744 x 500 x 770 mm	
Net weight	50 kg	empty 53 kg / filled 165 kg

Dimensions and holes



Extraction hose	3107116

2 units flexible extraction tube Ø 60 mm

300 - 1000 mm length

Mounting plate	3107125

› When mounting the GB 100S belt grinder on the substructure, the following is mandatory

Automatic start-up

When the external device is switched on, the extraction unit automatically starts up after a delay of 2- 3 seconds. There is no need to switch the extraction system on and off: The residual dust is extracted after switching off the machine in line with the Hazardous Materials Ordinance

OPTIMUM®
MASCHINEN - GERMANY

ACCESSORIES FOR GRINDING MACHINES



Grinding wheel	Article no.
for GU 15 - GU 30	
› Normal corundum grinding wheel › Rough grain 36	
Ø 150 x 20 shaft diameter **Ø 16 mm**	3107150
Ø 175 x 25 shaft diameter **Ø 32 mm**	3107180
Ø 200 x 30 shaft diameter **Ø 32 mm**	3107210
Ø 250 x 40 shaft diameter **Ø 32 mm**	3107250
Ø 300 x 50 shaft diameter **Ø 75 mm**	3107270
› Fine grain 80	
Ø 150 x 20 shaft diameter **Ø 16 mm**	3107155
Ø 175 x 25 shaft diameter **Ø 32 mm**	3107185
Ø 200 x 30 shaft diameter **Ø 32 mm**	3107215
Ø 250 x 40 shaft diameter **Ø 32 mm**	3107255
Ø 300 x 50 shaft diameter **Ø 75 mm**	3107275
for GZ 20 - GZ 40	
› Normal corundum grinding wheel › Hardness M - grey, Made in Italy	
Grinding wheel GZ 20	
K 36	3098121
K 60	3098123
K 80	3098125
Grinding wheel GZ 25	
K 36	3098131
K 60	3098133
K 80	3098135
Grinding wheel GZ 30	
K 36	3098141
K 60	3098143
K 80	3098145
Grinding wheel GZ 40	
› Max. speed 1 650 rpm	
› Dimensions: 400 x 50 mm hole Ø 40 mm	
K 36	3098150
K 60	3098152
K 80	3098154

Polishing disc	Article no.
hard - for GU 20P - GU 35P	
Ø 200 x 20 shaft diameter **Ø 16 mm**	3107321
Ø 250 x 25 shaft diameter **Ø 20 mm**	3107331
Ø 350 x 40 shaft diameter **Ø 25 mm**	3107341



soft - for GU 20P - GU 35P	
Ø 200 x 20 shaft diameter **Ø 16 mm**	3107320
Ø 250 x 25 shaft diameter **Ø 20 mm**	3107330
Ø 350 x 30 shaft diameter **Ø 25 mm**	3107340



Multi-purpose wire brush	Article no.
for GU 15B / GU 18B / GU 20B / GU 25B	
› 0.3 mm thickness	
Ø 150 x 20 shaft diameter **Ø 16 mm**	3107425
Ø 175 x 20 shaft diameter **Ø 32 mm**	3107430
Ø 200 x 20 shaft diameter **Ø 32 mm**	3107435
Ø 250 x 30 shaft diameter **Ø 32 mm**	3107440
› High tensile steel wire › Made in EU	

GZ 20C/GZ 20CD	
Wire thickness **0.35 mm**	3098081
Wire thickness **0.5 mm**	3098082
GZ 25C/GZ 25CD	
Wire thickness **0.3 mm**	3098086
Wire thickness **0.5 mm**	3098087
GZ 40C	
Wire thickness **0.2 mm**	3098092
Wire thickness **0.35 mm**	3098093



Grinding belt	PQ	Article no.
For GU 20S		
Grain size 40	5 units	3357612
Grain size 60	5 units	3357614
Grain size 80	5 units	3357616
Grain size 120	5 units	3357618
Grain size 180	5 units	3357619
Grain size 240	5 units	3357620
For GU 25S		
Grain size 40	5 units	3357682
Grain size 60	5 units	3357684
Grain size 80	5 units	3357686
Grain size 120	5 units	3357688
Grain size 180	5 units	3357689
Grain size 240	5 units	3357690
For GU 30S		
Grain size 40	5 units	3357637
Grain size 60	5 units	3357638
Grain size 80	5 units	3357639
Grain size 120	5 units	3357640

Grinding wheel dresser	3101821
› Diamond	
› Dimensions 45 x 13 mm	

