

02/2022

SANDING MACHINES



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DG 32 MD
DG 32 PRO

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Drill grinding machine

DG 13 M

The handy drill grinding machine DG 13 M is ideal for grinding of HSS and carbide twist drills. The adjustable centre point of 90° to 135° makes this model universal for double-edged twist drills.

- Economic, efficient grinding
- Adjustable center point of 90° to 135°
- Suitable for HSS and carbide twist drills (2 - 13 mm)
- Includes device for thinning of the drill bit
- Precisely guided collet guarantees best results
- ER 20 collets allow clamping of irregular sizes

Quick and easy
grinding of twist drills



Pre-setting



Grinding the point angle



Thinning



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Price**



Thousandfold
established

Technical data DG 13 M

Drill diameter	2 - 13 mm
Point angle	90° - 135°
Speed	4800 rpm
Motor power	0,12 kW
Voltage	230 V
Length	280 mm
Width	135 mm
Height	165 mm
Weight approx.	8 kg
Art. no.	05-1612

Standard accessories:

- Grinding wheel CBN
- Collets ER 20, 3 - 13 mm, 11 pcs.
(3,0 / 4,0 / 5,0 / 6,0 / 7,0 / 8,0 / 9,0 / 10,0 / 11,0 / 12,0 / 13,0 mm)
- Collet holder ER 20

Optional accessories:

Grinding wheel CBN for HSS-drill
Diamond grinding wheel SDC for carbide drill

Art. no. excl. VAT
05-1708
05-1709

Drill grinding machine

DG 13 MD

The handy drill grinding machine DG 13 MD is ideal for grinding of twist drills out of HSS, carbide, cobalt and so on. The advantage of this model – compared to DG 13 M – is the possibility of relief-grinding of the cutting face, which ensure a perfect drilling result.

- Including device for thinning, that means better centering of the drill bit on the workpiece and reduction of the required feeding force
- Additional station for relief-grinding of the cutting face (relief angle)
- Adjustable center point of 90° to 135°
- Suitable for HSS and carbide twist drills (2 - 13 mm)
- Rotor features precise ball bearings to guarantee smooth operation
- Quick and precise working results through the easy handling



Pre-setting



Grinding the point angle



Thinning



Relief-grinding of the relief angle



Stations for thinning of the chisel edge and relief-grinding of the relief angle



Technical data

DG 13 MD

Drill diameter	2 - 13 mm
Point angle	90° - 135°
Speed	4800 rpm
Motor power	0,12 kW
Voltage	230 V
Length	280 mm
Width	135 mm
Height	165 mm
Weight approx.	8,1 kg
Art. no.	05-1613

Standard accessories:

- Grinding wheel CBN
- Collets ER 20, 3 - 13 mm, 11 pcs.
(3,0 / 4,0 / 5,0 / 6,0 / 7,0 / 8,0 / 9,0 / 10,0 / 11,0 / 12,0 / 13,0 mm)
- Collet holder ER 20

Optional accessories:

- Grinding wheel CBN for HSS-drill
- Diamond grinding wheel SDC for carbide drill

Art. no.	excl. VAT
05-1710	
05-1711	

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Drill grinding machine

DG 20 M

The handy drill grinding machine DG 20 M is ideal for grinding of twist drills out of HSS, carbide, cobalt and so on. The adjustable centre point of 90° to 135° makes this model universal for double-edged twist drills.

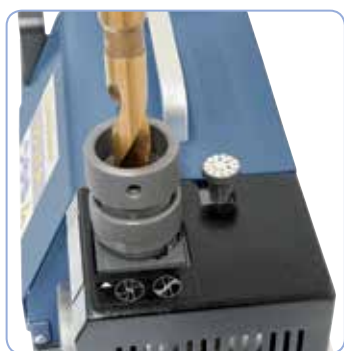
- Suitable for HSS and carbide twist drills (2 - 20 mm)
- ER 20 and ER 25 collets allow clamping of irregular sizes
- Precisely guided collet guarantees best results
- Includes device for thinning of the drill bit
- Adjustable point angle of 90° to 135°
- Economic, efficient grinding



Pre-setting



Grinding the point angle



Thinning



BEST PRICE!

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**Quick and easy
grinding of twist drills**



Technical data

DG 20 M

Drill diameter	2 - 20 mm
Point angle	90° - 135°
Speed	4800 rpm
Motor power	0,12 kW
Voltage	230 V
Length	285 mm
Width	130 mm
Height	170 mm
Weight approx.	8,6 kg
Art. no.	05-1614

Standard accessories:

- Grinding wheel CBN
- Collets ER 20, 3 - 12 mm, 11 pcs.
(3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 mm)
- Collets ER 25, 14 - 20 mm, 7 pcs.
(14 / 15 / 16 / 17 / 18 / 19 / 20 mm)
- Collet holder ER 20 resp. ER 25

Optional accessories:

Grinding wheel CBN for HSS-drill
Diamond grinding wheel SBC for carbide drill

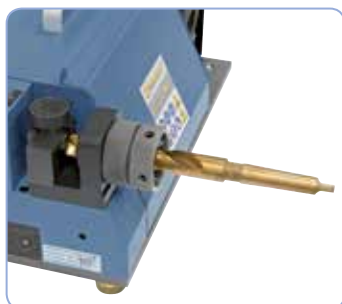
Art. no.	excl. VAT
05-1712	
05-1713	

Drill grinding machine

DG 32 MD

The DG 32 MD drill grinding machine is suitable for most common double edged twist drills out of HSS cobalt, carbide or similar - ranging from 8 – 32 mm. The advantage of this model is the possibility of relief-grinding of the cutting face, which ensure a perfect drilling result.

- Including device for thinning, that means better centering of the drill bit on the workpiece and reduction of the required feeding force
- Additional station for relief-grinding of the cutting face (relief angle)
- 25 pcs. ER 40 collets are part of the standard equipment, also suitable for clamping of intermediate sizes
- Allows for grinding of HSS-, carbide or TiN- coated twist drills ranging from 8 – 32 mm
- Rotor features precise ball bearings to guarantee smooth operation
- Heavy machine construction and rubber feet minimize vibrations
- Point angle can be adjusted to all conventional twist drills



Pre-setting



Grinding the point angle



Thinning



Relief-grinding of the relief angle



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Technical data

DG 32 MD

Drill diameter	8 – 32 mm
Point angle	90° - 140°
Speed	4800 rpm
Motor power	0,25 kW
Voltage	230 V
Length	425 mm
Width	220 mm
Height	235 mm
Weight approx.	30 kg
Art. no.	05-1615

Standard accessories:

- Grinding wheel CBN
- Collets ER 40, 8 – 32 mm, 25 pcs.
(8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16 / 17 / 18 / 19 /
20 / 21 / 22 / 23 / 24 / 25 / 26 / 27 / 28 / 29 / 30 /
31 / 32 mm)
- Collet holder ER 40

Stations for thinning of the chisel edge and relief-grinding of the relief angle

Optional accessories:

- Grinding wheel CBN for HSS-drill
- Diamond grinding wheel SBC for carbide drill

Art. no. excl. VAT
05-1714
05-1715

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Drill grinding machine

DG 32 PRO

- Including device for thinning, that means better centering of the drill bit on the workpiece and reduction of the required feeding force
- 30 pcs. ER collets are part of the standard equipment, also suitable for clamping of intermediate sizes
- Additional station for relief-grinding of the cutting face (relief angle)
- Adjustable point angle of 90° to 135°
- Rotor features precise ball bearings to guarantee smooth operation
- Quick and precise working results through the easy handling
- Heavy machine construction and rubber feet minimize vibrations



1. Grinding the point angle Ø 2 - 13 mm
2. Grinding the point angle Ø 8 - 32 mm



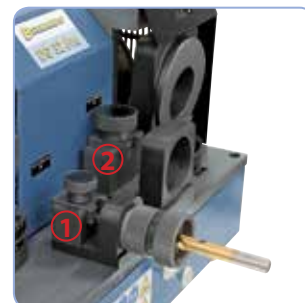
1. Thinning Ø 2 - 13 mm / 2. Thinning Ø 8 - 32 mm



1. Relief-grinding of the relief angle Ø 2 - 13 mm
2. Relief-grinding of the relief angle Ø 8 - 32 mm



Useable for
nearly all type
of twist drills



1. Pre-setting Ø 2 - 13 mm
2. Pre-setting Ø 8 - 32 mm



Stations for thinning of the
chisel edge and relief-grinding
of the relief angle

Quick and easy
grinding of twist drills

Technical data

DG 32 PRO

Drill diameter	2 - 32 mm
Point angle	90° - 135°
Speed	4800 rpm
Motor power	0,25 kW
Voltage	230 V
Length	350 mm
Width	210 mm
Height	305 mm
Weight approx.	32 kg
Art. no.	05-1616

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Top quality

Standard accessories:

- Diamantschleifscheibe SBC
- Collets ER 20, 3 - 12 mm, 10 pcs.
(3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 mm)
- Collets ER 40, 13 - 32 mm, 20 pcs.
(13 / 14 / 15 / 16 / 17 / 18 / 19 / 20 / 21 / 22 / 23 /
24 / 25 / 26 / 27 / 28 / 29 / 30 / 31 / 32 mm)
- Collet holder ER 20 resp. ER 25

Drill grinding machine

DG 32 PRO

The DG 32 Pro drill grinding machine is suitable for most common double edged twist drills out of HSS cobalt, carbide or similar - ranging from 2 - 32 mm. The advantage of this model is the possibility of relief-grinding of the cutting face, which ensure a perfect drilling result. Fast grinding process at low investment makes this model highly economical.



10 pcs. ER 20 collets (3 - 12 mm)
resp. 20 pcs. ER 40 collets
(13 - 32 mm) equipped at
standard accessories.

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Diamond grinding wheel SDC comes standard



Optional accessories:

Grinding wheel CBN (3 - 12 mm) for HSS-drill
Diamond grinding wheel SBC (3 - 12 mm) for carbide drill
Grinding wheel CBN (12,1 - 32 mm) for HSS-drill
Diamond grinding wheel SBC (12,1 - 32 mm) for carbide drill

Art. no.	excl. VAT
05-1710	
05-1711	
05-1714	
05-1715	

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End mill grinding machines

The end mill grinding machines EMG 14 and EMG 30 are ideal for grinding of HSS and carbide end mills. The adjustable centre point of 0° to 5° make these models universal for end mills with 2, 3 and 4 cutting edges.

EMG 14

EMG 30

- For grinding of end mills with 2, 3 and 4 cutting edges, from diam. 12 mm with 6 cutting edges
- For face grinding of HSS and carbide end mills
- Heavy machine construction and rubber feet minimize vibrations
- Quick and precise working results through the easy handling
- Rotor features precise ball bearings to guarantee smooth operation
- 2 models available, either from 4 – 14 mm or 12 – 30 mm



Pre-setting



Grinding the point angle



Grinding the cutting edge
1 and 3



Grinding of the relief angle
at 2-edged end mill



Grinding of the relief-angle
at 3- or 4-edged end mill



Standard accessories:

- Grinding wheel CBN
- Collets ER 20, 3 – 14 mm, 6 pcs. (EMG 14)
(4 / 6 / 8 / 10 / 12 / 14 mm)
- Collets ER 40, 12 – 30 mm, 10 pcs. (EMG 30)
(12 / 14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30 mm)
- Spannzangenhalter

Optional accessories:

	Art. no.	excl. VAT
Grinding wheel CBN for EMG 14	05-1718	
Diamond grinding wheel SBC for EMG 14	05-1719	
Grinding wheel CBN for EMG 30	05-1720	
Diamond grinding wheel SBC for EMG 30	05-1721	

Technical data

	EMG 14	EMG 30
End mill diameter	4 – 14 mm	12 – 30 mm
Point angle	0° - 5°	0° - 5°
Speed	4800 rpm	4800 rpm
Motor power	0,16 kW	0,25 kW
Voltage	230 V	230 V
Length	300 mm	350 mm
Width	190 mm	270 mm
Height	200 mm	300 mm
Weight approx.	13 kg	25 kg
Art. no.	05-1619	05-1622

End mill grinding machines

EMG 14 Pro EMG 30 Pro

- For face grinding of HSS and carbide end mills
- Additional station for grinding the outer spiral cutting edge
- For grinding of end mills with 2, 3 and 4 cutting edges, from diam. 12 mm with 6 cutting edges
- Heavy machine construction and rubber feet minimize vibrations
- Quick and precise working results through the easy handling
- Rotor features precise ball bearings to guarantee smooth operation



Pre-setting



Grinding the point angle



Grinding the cutting edge 1 and 3



Grinding of the relief angle at 2-edged end mill



Grinding of the relief-angle at 3- or 4-edged end mill



Grinding the outer spiral cutting edge



Standard accessories:

- Grinding wheel CBN
- Collets ER 20, 3 – 14 mm, 6 pcs. (EMG 14 Pro) (4 / 6 / 8 / 10 / 12 / 14 mm)
- Collets ER 40, 12 – 30 mm, 10 pcs. (EMG 30 Pro) (12 / 14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30 mm)
- Spannanzhalter

Optional accessories:

	Art. no.	excl. VAT
Grinding wheel CBN f. face side f. EMG 14 Pro	05-1718	
Diamond grinding wheel SDC f. face side f. EMG 14 Pro	05-1719	
Grinding wheel CBN f. side cutting face f. EMG 14 Pro	05-1722	
Diamond grinding wheel SDC f. side cutting face f. EMG 14 Pro	05-1723	
Grinding wheel CBN f. face side f. EMG 30 Pro	05-1724	
Diamond grinding wheel SDC f. face side f. EMG 30 Pro	05-1725	
Grinding wheel CBN f. side cutting face f. EMG 30 Pro	05-1726	
Diamond grinding wheel SDC f. side cutting face f. EMG 30 Pro	05-1727	

Technical data	EMG 14 Pro	EMG 30 Pro
End mill diameter	4 – 14 mm	12 - 30 mm
Point angle	0° - 5°	0° - 5°
Speed	4800 rpm	4800 rpm
Motor power	0,16 kW	0,25 kW
Voltage	230 V	230 V
Length	380 mm	550 mm
Width	190 mm	300 mm
Height	285 mm	360 mm
Weight approx.	20 kg	39 kg
Art. no.	05-1623	05-1624

Screw tab grinder

The screw tap grinders STG 20 and STG 42 are ideal for grinding of HSS and carbide screw taps. The adjustable centre point of 5° to 30° make these models universal for screw taps with 2, 3 and 4 chip flutes.

STG 20

STG 42

- Portable screw tap grinder for grinding of screw taps with 2, 3 and 4 chip flutes
- Rotor features precise ball bearings to guarantee smooth operation
- Suitable for grinding of HSS or carbide screw taps
- Quick and precise working results through the easy handling
- 2 models available, either from M5 – M20 or M16 – M42



Pre-setting



Grinding the broached length



Grinding the cutting edge



Grinding the front surface



Technical data	STG 20	STG 42
Grinding area	M5 – M20	M16 – M42
Point angle	5° - 30°	5° - 30°
Speed	4800 rpm	4800 rpm
Motor power	0,16 kW	0,25 kW
Voltage	230 V	230 V
Length	320 mm	400 mm
Width	235 mm	300 mm
Height	265 mm	310 mm
Weight approx.	14 kg	24 kg
Art. no.	05-1628	05-1629

Standard accessories:

- Grinding wheel CBN
- Collets ER 20, 5 – 14 mm, 6 pcs. (STG 20) (5 / 7 / 8 / 9 / 13 / 14 mm)
- Collets ER 40, 13 – 30 mm, 9 pcs. (STG 42) (13 / 14 / 16 / 18 / 20 / 23 / 25 / 28 / 30 mm)
- Collet holder

Optional accessories:

- Grinding wheel CBN for STG 20
- Diamond grinding wheel SBC for STG 20
- Grinding wheel CBN for STG 42
- Diamond grinding wheel SBC for STG 42

Art. no.	excl. VAT
05-1730	
05-1731	
05-1732	
05-1733	

Cutting machine

CM 14

The cutting machine CM 14 is the ideal machine for trimming of cylindrical tools from 4 – 14 mm (e.g. ejector pins), face grinding the front surface of drills and mills, grooving,.....

- Quick and precise working results through the easy handling
- Rotor features precise ball bearings to guarantee smooth operation
- Heavy machine construction and rubber feet minimize vibrations
- 11 pcs. ER 20 collets are part of the standard equipment, also suitable for clamping of intermediate sizes
- For cutting workpieces made of HSS or carbide



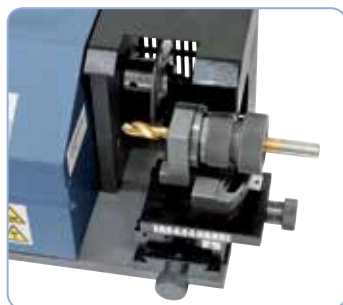
ER 20 collets from 4 – 14 mm comes standard



Pre-setting



Adjustable grinding angle from -30° to +30°



Example of use



Technical data

CM 14

Clamping range	4 – 14 mm
Angle adjustment	-30° to +30°
Drehzahl	4800 rpm
Motorleistung	0,16 kW
Spannung	230 V
Länge	320 mm
Breite	190 mm
Höhe	200 mm
Gewicht ca.	11 kg
Art. no.	05-1631

Standard accessories:

- Grinding wheel CBN
- Collets ER 20, 4 – 14 mm, 11 pcs.
(4/5/6/7/8/9/10/11/12/13/14 mm)
- Collet holder ER 20

Optional accessories:

- Grinding wheel CBN for HSS
- Diamond grinding wheel SBC for carbide

Art. no.	excl. VAT
05-1734	
05-1735	

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Universal cutter grinder

U3M

The U3M universal cutter grinder features various angles and adjustments, making it highly versatile. Furthermore, the large number of standard accessories makes this model excellent for price and performance.

- Grinding of dies, twist drills, electrodes, gravers, live centers etc.
- High user-friendliness
- Various angles and adjustments allow taper, cylindrical and central grinding of graving tools
- Solid construction ensures rigorous, long lasting precision
- Head features 24 locking positions for grinding of polygons on dies or electrodes
- Wide range of standard accessories, such as attachment for twist drills, end mills or turning chisels, diamond wheel, collets
- Ideal for grinding of graving tools (engraving cutter)
- Precisely, vibration-free driven grinding spindle guarantees optimal results

Suitable for grinding of eg.

- dies
- twist drills
- electrodes
- lathe tools
- centers



Standard accessories: Attachment for twist drill, end mill and turning tool, collets, corundum grinding wheel, diamond grinding wheel, drive belt

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Turning tool attachment



Attractive price



End mill attachment



Twist drill attachment

Technical data

U3M

Collet diameter min./max.	3 - 18 mm
Sanding diameter max.	25 mm
Taper grinding	0 - 180°
Rear angle	0 - 45°
Negative angle	0 - 25°
Speed	5000 rpm
Grinding wheel	100 x 50 x 20 mm
Locking position dividing head	24 (all 15°)
Motor power	0,37 kW
Voltage	230 V or 400 V
Length	450 mm
Width	500 mm
Height	400 mm
Weight approx.	45 kg
Art. no.	05-1639 (230 V) 05-1641 (400 V)

Optional accessories:

	Art. no.	excl. VAT
Corundum grinding wheel	05-1786	
Diamond grinding wheel	05-1787	
Disc flange	05-1788B	
Dressing diamond	05-1788C	
Collet 3 mm	05-1789	
Collet 14 mm	05-1795	
Collet 16 mm	05-1796	
Collet 18 mm	05-1796B	

Standard accessories:

- Diamond grinding wheel
- Corundum grinding wheel
- Dressing diamond
- Disc flange
- LED working light
- Collets 4, 6, 8, 10, 12 mm
- Twist drill attachment
- End mill attachment
- Turning tool attachment
- Extra belt

Pneumatic chamfering machines

PKFM 100 PKFM 150

- Powerful pneumatic-drive „Made in Japan“
- Comfortable work due to low weight and handy design
- Advantage of the pneumatic-drive: more insensitive and durable than an electric motor, therefore designed for continuous operation
- Suitable for processing of steel, stainless steel, plastics and non-ferrous materials
- For processing of differently shaped workpieces (PKFM 100)
- Application area is directly on workpiece, ideal for processing of large boards



Stepless setting of bevel width with adjustable scale ring



Easy handling due to handy design (PKFM 100)

**Best
Price**

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Examples of use



Technical data

PKFM 100

Bevel angle	45°
Width of bevel	3 mm
Bevel dimension adjustable	0,1 mm
Smallest inner radius	10,5 mm
Quantity of inserts	2 pcs.
Speed	13.000 rpm
Air pressure	6 - 8 bar
Machine dimension (W x D x H)	170 x 100 x 120 mm
Weight approx.	1,4 kg
Art. no.	05-1643

Technical data

PKFM 150

Max. bevel width at 45°	3 mm
Angle adjustment	45°
Guide rail	150 mm
Speed	13.000 rpm
Air pressure	6 - 8 bar
Machine dimension (L x W x H)	195 x 100 x 150 mm
Weight approx.	2,2 kg
Art. no.	05-1644

Standard accessories:

- Guide rail 150 mm (PKFM 150)
- Milling head
- Carbide inserts
- Tool

Optional accessories:

- Milling head (without inserts) f. PKFM 100
- Milling head (without inserts) f. PKFM 150
- Carbide inserts (10 pcs.) f. PKFM 100
- Carbide inserts (10 pcs.) f. PKFM 150

Art. no.	excl. VAT
05-1679	
05-1681	
05-1682	
05-1683	

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Chamfering machine

KFM 100 K

The chamfering machine KFM 100 K is the ideal model for chamfering and deburring various materials. The cost-effective model is suitable for chamfering of inner and outer edges, as well as for milling of contours and drilled holes from diam. 20 mm.

- Complete with mill head 45° and 2 TiN-coated inserts
- Light-weight, compact construction allows user-friendly handling
- Processing of differently shaped workpieces
- Stepless adjustment of the chamfering width from 0 - 4 mm
- Ergonomic two-hand control ensures high working comfort
- Suitable for processing of steel, stainless steel, plastics and non-ferrous materials
- Quick and easy removal of raw cutting edges
- Great for creating clean visible edges with excellent surface quality
- Perfect for removal of sharp edges and corners



45° milling head incl. 2 pcs. carbide inserts, comes standard



Ergonomic handle for high work comfort, alternatively mountable on the left or right side.

**Best
Price**



Examples of use

**For steel, aluminium,
non-ferrous material, etc.**



Technical data KFM 100 K

Bevel angle	45°
Width of bevel	4 mm
Bevel dimension adjustable	0,1 mm
Smallest inner radius	20 mm
Quantity of inserts	2 pcs.
Speed	10.000 rpm
Motor power	720 W
Voltage	230 V
Machine dimension (L x W x H)	300 x 190 x 140 mm
Weight approx.	3,5 kg
Art. no.	05-1646

Standard accessories:

- Milling head 45°
- Carbide inserts
- Side handle
- Tool

Optional accessories:

- Milling head (without inserts)
- Carbide inserts (10 pcs.)

Art. no.	excl. VAT
05-1674	
05-1659	

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Chamfering machine

KFM 140

The chamfering machine KFM 140 is suitable for chamfering, preparation of bevelled edges and economic preparation of welding seams of straight edges. This model is very popular for steel and machine construction as well as assembly works.

- Designed for chamfering of straight edges and preparation of welding seams
- Essential machine in steel and machine construction and mounting works
- Application area is directly on workpiece, ideal for processing of large boards
- Suitable for steel, stainless steel, aluminium and non-ferrous metals
- Ergonomic two-hand control ensures high working comfort
- Complete with mill head 45° and 2 TiN-coated inserts



45° milling head incl. 2 pcs. carbide inserts, comes standard



Robust guide rail, ideal guidance on the workpiece.



The handle is alternatively mountable on the left or right side of the machine



Example of use

**Best
Price**

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Technical data KFM 140

Max. bevel width at 45°	3 mm
Angle adjustment	45°
Guide rail	140 mm
Speed	10.000 rpm
Motor power	720 W
Voltage	230 V
Machine dimension (L x W x H)	310 x 120 x 150 mm
Weight approx.	3,8 kg
Art. no.	05-1647

Standard accessories:

- Guide rail 140 mm
- Milling head
- Carbide inserts
- Side handle
- Tool

**Ideal for economic
preparation of welding seams**

Optional accessories:

- Milling head (without inserts)
- Carbide inserts (10 pcs.)

Art. no.	excl. VAT
05-1674	
05-1659	

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Current second hand machines, remnants or sample machines are available at www.bernardo.at

Chamfering machine

KFM 175

The chamfering machine KFM 175 is suitable for chamfering, preparation of bevelled edges and economic preparation of welding seams of straight edges. The rollers integrated in the guide rail ensure a constant feed during work.

- Application area is directly on workpiece, ideal for processing of large boards
- Guide rails are hardened and feature integrated rolls for easy feed
- Essential machine in steel and machine construction and mounting works
- Powerful drive motor (1400 W) featuring high torque
- Ergonomic two-hand control ensures high working comfort
- Designed for chamfering straight edges and preparation of welding seams
- Suitable for steel, stainless steel, aluminium and non-ferrous metals



Complete with rolls to minimize friction resistance



Includes milling head with commercial HM-reversible plates.

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SEMI-PROFESSIONAL

For steel, aluminium,
non-ferrous material, etc.



Stepless setting of bevel width
with adjustable stop bar

**Best
Price**



Ergonomic handle for high work comfort,
alternatively mountable on the left or right side.



Technical data

KFM 175

Max. bevel width at 45°	5 mm
Angle adjustment	45°
Guide rail	175 mm
Speed	10.000 rpm
Motor power	1400 W
Voltage	230 V
Machine dimension (L x W x H)	320 x 190 x 230 mm
Weight approx.	5,2 kg
Art. no.	05-1648

Standard accessories:

- Guide rail 175 mm
- Milling head
- Carbide inserts
- Side handle
- Tool

Optional accessories:

- Milling head (without inserts)
- Carbide inserts (10 pcs.)

Art. no.	excl. VAT
05-1677	
05-1672	

Chamfering machine

KFM 200 M

The KFM 200 M chamfering machine is suitable for deburring and chamfering of various materials as well as economic preparation of welding seams. Its main area of application is definitely the metal industry.

- Working direct at the workpiece, hence ideal for processing of oversize boards, steel joists and profiles with a 90° surface
- Designed for chamfering straight edges and preparation of welding seams
- Essential device in steel and machine construction as well as assembly works
- Ergonomic two-hand operation ensures high work comfort
- Quick and easy removal of cutting edges
- Cost-effective model for mid-range demands



Ideal for economic preparation of welding seams

Stepless adjustment of chamfering angle from 15° to 45°.



Setting of chamfering height and depth requires no tools.



For steel, aluminium, non-ferrous material, etc.

Includes milling head with commercial HM-reversible plates.



Technical data

KFM 200 M

Max. bevel width at 45°	10 mm
Angle adjustment	15° - 45°
Guide rail	200 mm
Speed	2800 rpm
Motor power	0,37 kW
Voltage	230 V or 400 V
Machine dimension (L x W x H)	370 x 250 x 230 mm
Weight approx.	11 kg
Art. no.	05-16320 (230 V) 05-1632 (400 V)

Standard accessories:

- Guide rail 200 mm
- Milling head
- Carbide inserts
- Tool

Optional accessories:

- Cutting knives (9 pcs.)
- Insert plate

Art. no.	excl. VAT
05-1736	
05-1737	

Chamfering machine

KFM 500 M

The KFM 500 M chamfering machine is perfect for deburring and chamfering various materials as well as for economic preparation of welding seams. This model is mainly used in the metal industry.

- Easy setting of milling depth and desired angle
- Highly suitable for deburring and chamfering (visible edges) of various materials e.g. steel, aluminium, non-ferrous metals, plastics etc.
- Ideal machine for economic preparation of welding seams
- Stepless adjustment of chamfering angle from 15° to 45°
- Low cost model for light to mid-range demands



Adjustable chamfering height from 0 – 3 mm.



Adjustable chamfering angle from 15 to 45°.



Oversize guide rail allows for secure workpiece support.

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Powerful motor (400 V) features high torque.



**Best
price**

Technical data

KFM 500 M

Max. bevel width at 45°	5 mm
Angle adjustment	15° - 45°
Guide rail	500 mm
Speed	2800 rpm
Motor power	0,55 kW
Voltage	400 V
Machine dimension (L x W x H)	500 x 370 x 265 mm
Weight approx.	33 kg
Art. no.	05-1633

Standard accessories:

- Guide rail 500 mm
- Milling head
- Carbide inserts
- Tool

Optional accessories:

- Cutting knives (9 pcs.)
- Insert plate

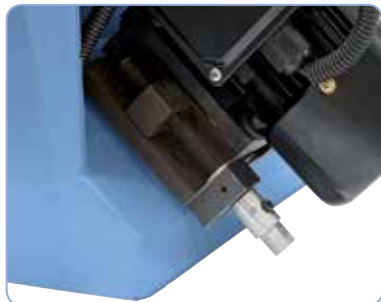
**For steel, aluminium,
non-ferrous material, etc.**

Art. no	excl. VAT
05-1736	
05-1737	

Grinding wheel chamfer KSM 500 S

The grinding wheel chamfer KSM 500 S is used for deburring and chamfering various materials, such as aluminium, copper, brass, plastics, etc., but also especially suitable for hard materials up to HRC63. This model is mainly used in the metal industry.

- Best suited for deburring and chamfering (45 °) of straight edges
- As standard with corundum grinding wheel, ideally suited for hardened materials up to HRC63, but also for aluminum, non-ferrous materials, plastics, etc.
- Sturdy and simple grinding wheel chamfer for machining small and medium workpieces from 2 mm thickness
- Low cost model for light to mid-range demands
- High own weight for vibration-free work



Stepless adjustment of bevel height with adjusting screw



Hardened and grounded guide rails



Oversize guide rail allows for secure workpiece support.

**Best
price**



Powerful drive motor is smooth running and performs well



**Inclusive corundum
grinding wheel**

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Technical data

KSM 500 S

Max. bevel width at 45°	5 mm
Angle adjustment	45°
Guide rail	500 mm
Speed	2800 rpm
Motor power	0,55 kW
Voltage	400 V
Machine dimension (L x W x H)	500 x 360 x 360 mm
Weight approx.	37 kg
Art. no.	05-1637

Standard accessories:

- Guide rail 500 mm
- Corundum grinding wheel
- Tool

Optional accessories:

Corundum grinding wheel

Art. no. excl. VAT
05-1747

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Should you have any questions, please feel free to contact our service center +43 / 732 / 664015

Chamfering machine

KFM 600 S

The chamfering machine KFM 600 S is used for deburring and chamfering various materials, such as aluminium, copper, brass, plastics, etc. This model is mainly used in the metal industry.

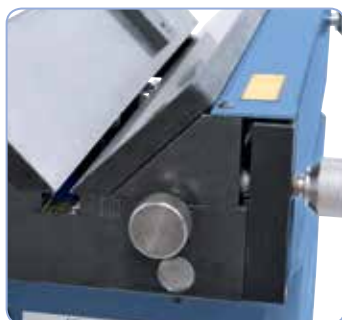
- Advantage of the sliding guide rail: the workpiece will not be moved and therefore can not scratch
- Highly suitable for deburring and chamfering (visible edges) of various materials e.g. steel, aluminium, non-ferrous metals, plastics etc.
- Great for creating clean visible edges with excellent surface quality
- High own weight for vibration-free work



Robust round column guiding for smooth movement of the guide rail



Grounded guide rail with workpiece fence.



Easy adjustment of the bevel width through adjustable stop bar.

For steel, aluminium,
non-ferrous material, etc.



Serially with moveable guide rail.



Technical data

KFM 600 S

Max. bevel width at 45°	4 mm
Angle adjustment	45°
Guide rail	500 mm
Speed	10.000 rpm
Motor power	0,75 kW
Voltage	400 V
Machine dimension (L x W x H)	560 x 300 x 450 mm
Weight approx.	44 kg
Art. no.	05-1649

Standard accessories:

- Moveable guide rail 500 mm
- Milling head
- Carbide inserts
- Tool

Optional accessories:

- Carbide inserts (10 pcs.)
- Milling head

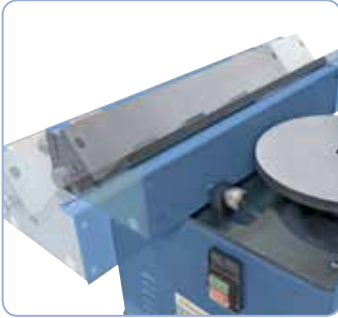
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Art. no	excl. VAT
05-1673	
05-1678	

Chamfering and contour milling machine

KFM 600 Duo

- Advantage of the sliding guide rail: the workpiece will not be moved and therefore can not scratch
- Suitable for processing of steel, stainless steel, plastics and non-ferrous materials
- Quick and easy removal of raw cutting edges
- Great for creating clean visible edges with excellent surface quality
- Perfect for removal of sharp edges and corners



Serially with moveable guide rail.



Fast adjustment of the bevel width at contour milling by turning the turntable



Easy adjustment of the bevel width through adjustable stop bar.



Grounded guide rail with workpiece fence.



Best price

Technical data

KFM 600 Duo

Max. bevel width at 45°	4 mm
Angle adjustment	45°
Guide rail	500 mm
Smallest inner radius	7 mm
Speed	10.000 rpm
Motor power	0,75 kW
Voltage	400 V
Machine dimension (L x W x H)	560 x 500 x 495 mm
Weight approx.	62 kg
Art. no.	05-1651

Standard accessories:

- Moveable guide rail 500 mm
- Mill head straight and contour
- Carbide inserts
- Tool

Optional accessories:

- Carbide inserts (10 pcs.) (contour)
- Carbide inserts (10 pcs.) (straight)
- Milling head (contour)
- Milling head (straight)

Art. no	excl. VAT
05-1659	
05-1673	
05-1674	
05-1678	

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Glazing machines

DP 120 DP 120 A

- Optimal tool for glazing, polishing, brushing, structuring, deburring, smoothening and removing rust
- Ideal for processing stainless steel, cast iron, non-ferrous metals, aluminium, plastics, wood etc.
- Aluminium cast iron gear housing allows for long life span
- 6 speed settings allow for ideal adjustment to the workpiece (DP 120)
- Ergonomical two-hand operation ensures high work comfort
- Powerful drive motor with soft start and overload protection
- Electronics are designed to ensure constant band speed
- Standard with powerful 21 V DC battery and charger (DP 120 A)



Handle threefold height adjustable



Convenient speed adjustment on handle (Picture shows DP 120).



Model DP 120 A incl. battery and charger

**Best
Price**

Universal in use

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Standard accessories:

- Handle with protective cover
- Sanding disc
- Battery (DP 120 A)
- Charger (DP 120 A)
- Tools

Technical data

DP 120 / DP 120 A

Max. sanding disc diameter	120 mm
Sanding width min./max.	100 mm
Shaft diameter	19 mm
No load speed (DP 120)	(6) 700 - 3000 rpm
No load speed (DP 120 A)	1400/1700/2100 rpm
Power (DP 120)	800 W
Voltage (DP 120)	230 V
Battery voltage (DP 120 A)	21 V DC
Battery capacity (DP 120 A)	4,0 Ah
Weight approx.	3,7 kg / 3,1 kg
DP 120	05-1323
DP 120 A	05-1331



Complete with inflatable rubber sanding drum, which adjusts to the surface of the workpiece.



Excellent finishes when glazing, polishing, structuring and matting



Optional with conditioning belt for touching up mounted stainless steel railings.



Optional accessories:

	Art. no.	excl. VAT
Battery for DP 120 A	05-1336	
Charger for DP 120 A	05-1337	
Rubber expansion roller	05-1339	
Sanding sleeve Ø 90 mm x 100 mm, Grit 60 (5 pcs.)	49-1105	
Sanding sleeve Ø 90 mm x 100 mm, Grit 100 (5 pcs.)	49-1107	
Sanding sleeve Ø 90 mm x 100 mm, Grit 180 (5 pcs.)	49-1109	
Surface condition belt Ø 90 mm x 100 mm (5 pcs.)	49-1110	
Multi disc grinding wheel 105 x 100 x 19 mm (2 pcs.)	49-1115	
Hook & loop sanding belt 40 x 600 mm, Grit 120 (10 pcs.)	49-1124	
Hook and loop surface conditioning belt 40 x 600 mm (2 pcs.)	49-1126	

Fillet weld grinders

KNS 150 KNS 150 A

- Ideal for machining of welding seams at hardly accessible places
- Handle can be turned 180° allowing minimum space requirements
- Designed for grinding and polishing of stainless steel constructions
- Useable for grinding and polishing wheels up to max. 150 mm diameter
- Electronics are designed to ensure constant speed
- Powerful drive motor with 6 speed steps (KNS 150)
- Standard with powerful 21 V DC battery and charger (KNS 150 A)



Example of use



Ergonomic handle for high work comfort, alternatively mountable on the left or right side.



Convenient speed adjustment on handle (Picture shows KNS 150).



Adjustable protective cover

**High-power
800 W drive motor**

KNS 150



**Best
Price**

Technical data

KNS 150 / KNS 150 A

Grinding disc	150 x 25,4 x 6 mm
No load speed (KNS 150)	(6) 1100 - 4500 rpm
No load speeds (KNS 150 A)	1800/2500/3100 rpm
Power (KNS 150)	800 W
Voltage (KNS 150)	230 V
Battery voltage (KNS 150 A)	21 V DC
Battery capacity (KNS 150 A)	4,0 Ah
Weight approx.	3,3 kg / 2,7 kg
KNS 150	05-1326
KNS 150 A	05-1334

Standard accessories:

- Grinding wheel diam. 150 mm
- Handle
- Protective cover
- 2 pcs. carbon brush (KNS 150)
- Battery (KNS 150 A)
- Charger (KNS 150 A)
- Tools

Optional accessories:

Battery for KNS 150 A
Charger for KNS 150 A

Art. no. excl. VAT
05-1336
05-1337

**Model KNS 150 A incl.
battery and charger**

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Wraparound tube sander/polisher

TBS 620 TBS 620 A

- The tiltable arm enables the grinding belt to adjust to the diameter of each pipe
- The oversize contact wheel allows grinding of welding seams on plane surfaces without making bumps or wrinkles
- Ergonomic two-hand control ensures high working comfort
- Sanding belt conducts heat, making this model ideal for grinding of stainless steel welding seams without discolouration
- Powerful drive motor with 6 speed steps (TB 620)
- Electronics are designed to ensure constant belt speed
- Effective removal of welding seams through power motor
- No tools required for belt change - making it simple and straightforward
- Standard with powerful 21 V DC battery and charger (TBS 620 A)

**Model TBS 620 A incl.
battery and charger**



Set screw for quick
belt change without tools.



Convenient speed adjustment
(6 steps) on handle (TBS 620).



Standard accessories:

- Handle
- Abrasive web
- 2 pcs. carbon brush (TBS 620)
- Battery (TBS 620 A)
- Charger (TBS 620 A)

Technical data	TBS 620 / TBS 620 A
Belt length	620 mm
Belt width	40 mm
Pipe diameter max.	120 mm
Belt speed (TBS 620)	3,1 - 11,6 m/sec.
No load speed (TBS 620)	(6) 500 - 2800 rpm
Belt speed (TBS 620 A)	4,7 / 5,7 / 7 m/sec.
No load speed (TBS 620 A)	1400 / 1700 / 2100 rpm
Power (TBS 620)	800 W
Voltage (TBS 620)	230 V
Battery voltage (TBS 620 A)	21 V DC
Battery capacity (TBS 620 A)	4,0 Ah
Weight approx.	4,1 kg / 3,5 kg
TBS 620	05-1324
TBS 620 A	05-1332

**Best
price**



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Examples of use

Optional accessories:

	Art. no.	excl. VAT
Battery for TB 620 A	05-1336	
Charger for TB 620 A	05-1337	
Sanding belt 40 x 620 mm - Grit 60 (10 pcs.)	49-1136	
Sanding belt 40 x 620 mm - Grit 100 (10 pcs.)	49-1138	
Sanding belt 40 x 620 mm - Grit 180 (10 pcs.)	49-1141	
Surface conditioning belt 40 x 620 mm, rough (5 pcs.)	49-1142	
Surface conditioning belt 40 x 620 mm, medium (5 pcs.)	49-1143	
Surface conditioning belt 40 x 620 mm, fine (5 pcs.)	49-1144	

Pipe grinding machines

The TBS 760 / TBS 760 A pipe grinding machine is a highly versatile, handy model for various grinding, polishing and satin finishing works. This model is mainly used in metal and railing work as well as locksmiths.

TBS 760 TBS 760 A

- Ideal for grinding and polishing of pipe constructions
- Suitable for follow up works (grinding, satin finishing and polishing) on mounted rails
- Handle can be turned 180°, allowing minimum space requirements for example handrails close to walls
- Powerful drive motor with 6 speed steps (TB 760)
- Special electronic device allows constant band speed
- Effective removal of welding seams through power motor
- Easy, straightforward grinding belt change, no tools required
- 2 steps allow 360° peripheral grinding
- Flexible arm allows ideal adjustment to pipes up to 270°
- Standard with powerful 21 V DC battery and charger (TBS 760 A)



Convenient speed adjustment (6 steps) on handle (TBS 760)

Model TBS 760 A incl. battery and charger



Example of use

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Standard accessories:

- Handle
- Sanding belt
- 2 pcs. carbon brush (TBS 760 A)
- Battery (TBS 760 A)
- Charger (TBS 760 A)

Technical data	TBS 760 / TBS 760 A
Belt length	760 mm
Belt width	40 mm
Pipe diameter max.	180 mm
Belt speed (TBS 760)	2,4 - 9,1 m/sec.
No load speed (TBS 760)	(6) 900 - 2800 rpm
Belt speed (TBS 760 A)	4,2 / 5 / 6,2 m/sec.
No load speeds (TBS 760 A)	1400 / 1700 / 2100 rpm
Power (TB 760)	800 W
Voltage (TB 760)	230 V
Battery voltage (TBS 760 A)	21 V DC
Battery capacity (TBS 760 A)	4,0 Ah
Weight approx.	3,9 kg / 3,3 kg
TBS 760	05-1325
TBS 760 A	05-1333



Universal in use

Optional accessories:

	Art. no.	excl. VAT
Battery for TB 760 A	05-1336	
Charger for TB 760 A	05-1337	
Sanding belt 40 x 760 mm, Grit 80 (10 pcs.)	49-1147	
Sanding belt 40 x 760 mm, Grit 120 (10 pcs.)	49-1148	
Sanding belt 40 x 760 mm, Grit 220 (10 pcs.)	49-1149	
Abrasive web 40 x 760 mm, rough (5 pcs.)	49-1155	
Abrasive web 40 x 760 mm, medium (5 pcs.)	49-1156	
Abrasive web 40 x 760 mm, fine (5 pcs.)	49-1157	

Wet and dry grinders

NTS 250 Top NTS 250 Vario

- Model NTS 250 Vario with stepless speed adjustment, ideal adjustment to each material
- The height adjustable universal support can also be used for various devices of different manufacturers
- Solid sheet steel model in stylish design featuring powerful drive motor to achieve top results
- The corundum grinding wheel runs in water tank (removeable), which cools the blade during the grinding process and protects the tools from overheating or annealing
- Multifunctional device for grinding of knives, axes, turning gouges, planer blades, scissors etc.
- Suitable for amateurs, craftsmen with high demands and commercial customers, requiring sharp blades in a short period of time
- Low speed of grinding wheel ensures high safety and reduces risk of flying sparks



Complete with leather wheel for burr removal after grinding.



Universal device UNI-100, suitable for various straight tools (standard).



Easy angle adjustments by using the angle gauge WL-60 (standard).



Shelf to store the accessories comes standard.



Modern design

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NTS 250 Top
PROFESSIONAL



Technical data	NTS 250 Top	NTS 250 Vario
Grinding wheel	250 x 50 x 32 mm	250 x 50 x 32 mm
Leather wheel	210 x 30 x 12 mm	210 x 30 x 12 mm
Speed	90 rpm	90 - 180 rpm
Input power	200 W	200 W
Voltage	230 V	230 V
Width	470 mm	470 mm
Depth	300 mm	300 mm
Height	440 mm	440 mm
Weight approx.	19 kg	18,5 kg
Art. no.	05-1082	05-1083

The NTS-series wet and dry grinding machines can easily and quickly achieve perfect grinding results. Using the appropriate attachments this machine can grind spoon carving gouges, finger-shaped turning tools, oval skew, chisels etc. To ensure a constant grinding performance, the model NTS 250 Vario is equipped with a stepless speed adjustment to compensate the abrasion of the grinding stone.

NTS 250 Top NTS 250 Vario



05-2050 Stone grader: Suitable for thorough preparation of grinding wheel (fine / rough).



05-2058 Diamond turning tool: for circular and accurate dressing of grinding wheel



05-2056 Tool rest: Ideal when working on small items



05-2054 Plane camper jig: Suitable for plane irons and chisels with a maximum width of 70 mm and maximum thickness of 6.5 mm



05-2052 Turning gouge jig: Max. tool diameter of 20 mm



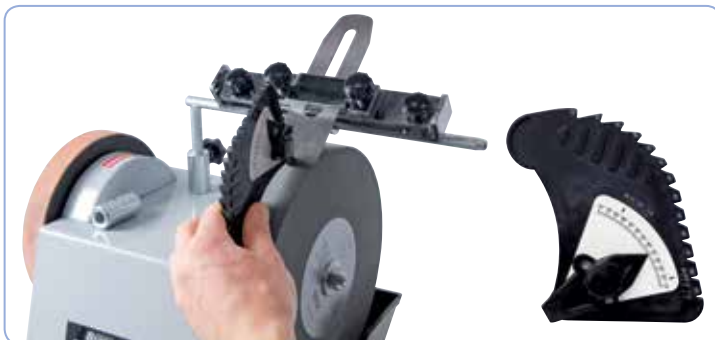
05-2055 Scissors jig: Ideal for scissors or secateurs



05-2057 Long knife jig: For knives from 100 mm in blade length, also suitable for draw knives



05-1809A Profiled leather wheel: For dressing and polishing of insides of turning gouges and crowbars



05-2051 Grinding angle set-up jig: Measure existing angles and use to adjust cutting angles from 15° to 75°, suitable for grinding wheels from 150 to 250 in diameter

Standard accessories:

- Leather wheel
- Adapter 32 / 12 mm
- Universal bracket
- Universal device UNI-100
- Angle gauge WL-60
- White corundum grinding wheel grit 220
- Water tank

**Best
price**

Optional accessories:

	Art. no.	excl. VAT
Corundum grinding wheel 250 x 50 x 32 mm, grit 220	05-1808	
Leather wheel 210 x 30 x 12 mm	05-1809	
Profiled leather wheel	05-1809A	
Stone grader	05-2050	
Grinding angle set-up jig	05-2051	
Turning gouge jig	05-2052	

Optional accessories:

	Art. no.	excl. VAT
Plane camper jig	05-2054	
Scissors jig	05-2055	
Tool rest	05-2056	
Long knife jig	05-2057	
Diamond turning tool	05-2058	

Bench grinders

DSA-Serie

The bench grinding machines of the DSA series are versatile and perfectly suitable for semi-professional users. The induction motor runs quietly and requires no maintenance. High quality grinding discs allow for optimal results when sharpening and deburring tools.

- Comes complete with a solid, adjustable workpiece support to achieve top results
- Universal use for various materials (metals, plastics, wood etc.)
- Rotor features ball bearings to ensure smooth operation and long life-span
- State-of-the-art machine design, aluminium die-cast construction
- Work lamp and wheel dressing tool as part of standard equipment
- Coolant tank integrated in machine housing
- Oversize protective glass on both sides protect from sparks
- High-performance motor ensures powerful torque
- Protective cover closed on sides for more efficient spark protection

ISO 9001



DSA 150



DSA 200



Picture shows optionally available console WH

Work lamp, wheel dressing tool and protective glass with magnifier come standard

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Optional accessories:

	Art. no.	excl. VAT
Grinding wheel Ø 150 x 25,4 mm, Grit 36	05-1810	
Grinding wheel Ø 150 x 25,4 mm, Grit 60	05-1811	
Grinding wheel Ø 200 x 25,4 mm, Grit 36	05-1812	
Grinding wheel Ø 200 x 25,4 mm, Grit 60	05-1813	
Grinding wheel Ø 250 x 25,4 mm, Grit 36	05-1814	
Grinding wheel Ø 250 x 25,4 mm, Grit 60	05-1815	
Console WH	56-1049	
Stand model C for DSA-series	56-1042	
Stand model F for DSA 150, DSA 200	56-1045	
Stand model K for DSA 250	56-10480	

Technical data	DSA 150	DSA 200	DSA 250
Grinding wheel Ø x W	150 x 25,4 mm	200 x 25,4 mm	250 x 25,4 mm
Grinding wheel bore	12,7 mm	15,88 mm	20 mm
Grinding wheel grit	Grit 36 / Grit 80	Grit 36 / Grit 80	Grit 36 / Grit 80
Speed	2850 rpm	2850 rpm	2850 rpm
Motor power output S ₁ 100%	0,37 kW	0,55 kW	0,75 kW
Motor power input S ₆ 40%	0,50 kW	0,75 kW	1,0 kW
Voltage	230 V	230 V or 400 V	230 V or 400 V
Width	345 mm	410 mm	450 mm
Depth	270 mm	340 mm	360 mm
Height	275 mm	330 mm	370 mm
Weight approx.	10 kg	18 kg	26 kg
Art. no.	05-1090	05-1092 (230 V) 05-1094 (400 V)	05-1096 (230 V) 05-1098 (400 V)

Standard accessories:

- Roughing wheel grit 36
- Finishing wheel grit 80
- Spark protection on both sides
- Workpiece support
- LED working light
- Integrated coolant tank
- Wheel dressing tool

Combined sanding machines KSA-Serie

The KSA-series of combined sanding machines is suitable for straightforward sanding operations of numerous materials, such as metals, non-ferrous metals, plastics, wood, plexiglass and many others. The wide range of applications make these models hard to miss in any DIY workshop.

- Combines regular sanding operations and belt sanding
- Universal in use for various materials (metals, plastics, wood etc.)
- Coolant tank integrated in machine housing
- Solid aluminium die-cast housing for a long life-span
- Convenient sanding belt change – no tools required
- Low noise, maintenance free induction motor
- Ideal for deburring, surface and contour grinding
- Balanced rotor with high-quality ball bearings ensures smooth run
- Top-quality construction guarantees prolonged machine life



Complete with roughing wheel, adjustable workpiece support, safety cover fully enclosed at sides and eye protection

KSA 150



Optional accessories:

	Art. no.	excl. VAT
Fabric sanding belt 685 x 50 mm - Grit 60 (10 pcs.)	11-2116A	
Fabric sanding belt 685 x 50 mm - Grit 80 (10 pcs.)	11-2116	
Fabric sanding belt 685 x 50 mm - Grit 100 (10 pcs.)	11-2117	
Fabric sanding belt 685 x 50 mm - Grit 120 (10 pcs.)	11-2117A	
Fabric sanding belt 685 x 50 mm - Grit 150 (10 pcs.)	11-2118	
Fabric sanding belt 685 x 50 mm - Grit 180 (10 pcs.)	11-2119	
Fabric sanding belt-set 685 x 50 mm - Grit 60 / 80 / 100 / 120 / 150 / 180 (each 2 pcs.)	11-2119A	
Grinding wheel Ø 150 x 20 mm, Grit 36	05-1800	
Grinding wheel Ø 150 x 20 mm, Grit 80	05-1801	
Grinding wheel Ø 200 x 20 mm, Grit 36	05-1827	
Grinding wheel Ø 200 x 20 mm, Grit 80	05-1828	
Belt cleaner	11-2175	
Stand model C for KSA-Serie	56-1042	
Stand model F for KSA-Serie	56-1045	



Technical data

	KSA 150	KSA 200
Grinding wheel Ø x W	150 x 20 mm	200 x 20 mm
Grinding wheel bore	12,7 mm	15,88 mm
Grinding wheel grit	Grit 36	Grit 36
Sanding belt	685 x 50 mm	685 x 50 mm
Sanding belt speed	15,4 m/sec.	15,4 m/sec.
Grinding area	125 x 50 mm	125 x 50 mm
Speed	2850 rpm	2850 rpm
Motor power output S ₁ 100%	0,25 kW	0,37 kW
Motor power input S ₆ 40%	0,35 kW	0,50 kW
Voltage	230 V	230 V
Width	370 mm	420 mm
Depth	280 mm	300 mm
Height	350 mm	390 mm
Weight approx.	11 kg	16 kg
Art. no.	05-1030	05-1035

Standard accessories:

- Roughing wheel grit 36
- Sanding belt grit 80
- Spark protection
- Workpiece support
- LED working light
- Integrated coolant tank
- Wheel dressing tool



Combined sanding machine KMS 200 S

The KMS 200 S is an incredibly economical universal grinding machine purchased at a relatively low cost. The powerful motor and the robust construction make this model ideal for professional workshops.

- Complete with solid, adjustable workpiece support for optimal results
- Wide range of applications for various materials, such as metals, plastics, wood etc.
- Perfectly designed die-casting machine body
- Sanding unit can be used in horizontal as well as vertical position
- Quick clamping lever allows for convenient change of sanding belt
- Rotor features ball bearings to guarantee smooth running and a long life span
- Ideal for chamfering, surface and contour grinding
- Combines belt sanding and ordinary sanding operations
- High quality manufacturing ensures long life span



Sanding unit - ideal for deburring or surface sanding operations



Standard accessories:

- Roughing wheel grit 36
- Sanding belt grit 80
- Sanding unit SA 1
- Graphite coating
- Workpiece support
- Spark protection

Optional accessories:

	Art. no.	excl. VAT
Grinding wheel Ø 200 x 32 mm, Ø 32 mm, Grit 36	05-1818A	
Grinding wheel Ø 200 x 32 mm, Ø 32 mm, Grit 80	05-1819A	
Fabric sanding belt 762 x 75 mm - Grit 60 - (10 Stk.)	49-0970	
Fabric sanding belt 762 x 75 mm - Grit 80 - (10 pcs.)	49-0971	
Fabric sanding belt 762 x 75 mm - Grit 100 - (10 pcs.)	49-0972	
Fabric sanding belt 762 x 75 mm - Grit 120 - (10 pcs.)	49-0973	
Fabric sanding belt 762 x 75 mm - Grit 150 - (10 pcs.)	49-0974	
Fabric sanding belt 762 x 75 mm - Grit 180 - (10 pcs.)	49-0975	
Fabric sanding belt-set 762 x 75 mm - grit 60 / 80 / 100 / 120 / 150 / 180 (each 2 pcs.)	49-0976	
Belt cleaner	11-2175	
Stand model H	56-1048	

Technical data

KMS 200 S

Grinding wheel Ø x W	200 x 32 mm
Grinding wheel bore	32 mm
Grinding wheel grit	Grit 36
Sanding belt	762 x 75 mm
Speed of grinding wheel	2850 rpm
Speed of sanding belt	16,4 m/sec.
Tilting range of sanding unit	32 mm
Grinding area	90°
Dust extraction outlet	180 x 75 mm
Motor power output S ₁ 100%	0,9 kW
Motor power input S ₆ 40%	1,25 kW
Voltage	230 V or 400 V
Width	540 mm
Depth	310 mm
Height	370 mm
Weight approx.	27 kg
Art. no.	05-1164 (230 V) 05-1168B (400 V)

Universal in use



Regulating screws ensure convenient adjustment of parallel belt run.



Combined sanding machine

KMS 250

The KMS 250 is an incredibly economical universal grinding machine purchased at a relatively low cost. The powerful motor and the robust construction make this model ideal for professional workshops.

- Universal use for various materials (metals, plastics, wood etc.)
- Tilttable support table for a large variety of applications
- Balanced rotor features high quality ball bearings to ensure a smooth run
- Powerful motor guarantees high torque
- Motor comes equipped with copper wiring for long life span
- Sanding unit can be used in horizontal as well as vertical position
- Sanding unit complete with dust port (diameter 38 mm)
- On-/off switch according IP 54 standards and undervoltage release

Ideal model for sanding, deburring and sharpening

Top Price



Grinding unit - ideal for deburring or surface sanding operations



Complete with roughing wheel, adjustable workpiece support, fully closed protective cover and eye protection



Optional accessories:

	Art. no.	excl. VAT
Grinding wheel Ø 250 x 32 mm, Ø 32 mm, Grit 36	05-1820	
Grinding wheel Ø 250 x 32 mm, Ø 32 mm, Grit 80	05-1821	
Fabric sanding belt 1016 x 75 mm - Grit 60 (10 pcs.)	49-0980	
Fabric sanding belt 1016 x 75 mm - Grit 80 (10 pcs.)	49-0981	
Fabric sanding belt 1016 x 75 mm - Grit 100 (10 pcs.)	49-0982	
Fabric sanding belt 1016 x 75 mm - Grit 120 (10 pcs.)	49-0983	
Fabric sanding belt 1016 x 75 mm - Grit 150 (10 pcs.)	49-0984	
Fabric sanding belt 1016 x 75 mm - Grit 180 (10 pcs.)	49-0985	
Fabric sanding belt-set 1016 x 75 mm - Grit 60/80/100/120/150/180 (each 2 pcs.)	49-0986	
Belt cleaner	11-2175	
Stand model H	56-1048	
Stand model K	56-10480	

Technical data

KMS 250

Grinding wheel Ø x W	250 x 32 mm
Grinding wheel bore	32 mm
Grinding wheel grit	Grit 36
Sanding belt	1016 x 75 mm
Speed of grinding wheel	2850 rpm
Speed of sanding belt	16,4 m/sec.
Dust extraction outlet	38 mm
Tilting range sanding unit	90°
Grinding area	300 x 75 mm
Motor power output S1 100%	1,5 kW
Motor power input S6 40%	2,0 kW
Voltage	400 V
Width	580 mm
Depth	310 mm
Height	570 mm
Weight approx.	34 kg
Art. no.	05-1170

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Standard accessories:

- Roughing wheel grit 36
- Sanding belt grit 80
- Sanding unit SA 2
- Graphite coating
- Workpiece support
- Spark protection

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Current offers will be sent to you as a Bernardo Newsletter

Bench grinders

DS-Serie

These universal bench grinding machines are designed for professional use. The induction motor features top quality ball bearings to eliminate noise and maintenance. Quality grinding wheels ensure optimal results when sharpening and deburring tools.

- On/off switch in accordance with IP54 standards and undervoltage release
- Universal use for various materials, such as metals, plastics, wood and many others
- Balanced rotor with quality ball bearings ensure smooth running
- Motor features copper wiring for long life span (DS 250 S)
- Oversize protective glass provide optimal spark protection
- Solid, adjustable die-cast workpiece support
- High performance drive motor ensures powerful torque
- Optionally available sanding attachment (DS 200 S/ 250 S) increase range of applications significantly



Sanding attachment – available for DS 200 S and DS 250 S



Console WH optional available.

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Standard accessories:

- Roughing wheel grit 36
- Finishing wheel grit 80
- Spark protection on both sides
- Workpiece support

Optional accessories:

	Art. no.	excl. VAT
Grinding wheel Ø 150 x 25 mm, Ø 32 mm, Grit 36	05-18020	
Grinding wheel Ø 150 x 25 mm, Ø 32 mm, Grit 80	05-18021	
Grinding wheel Ø 175 x 25 mm, Ø 32 mm, Grit 36	05-1816	
Grinding wheel Ø 175 x 25 mm, Ø 32 mm, Grit 80	05-1817	
Grinding wheel Ø 200 x 32 mm, Ø 32 mm, Grit 36	05-1818A	
Grinding wheel Ø 200 x 32 mm, Ø 32 mm, Grit 80	05-1819A	
Grinding wheel Ø 250 x 32 mm, Ø 32 mm, Grit 36	05-1820	
Grinding wheel Ø 250 x 32 mm, Ø 32 mm, Grit 80	05-1821	
Sanding attachment SA 1 for DS 200 S (Sanding belt 762 x 75 mm)	05-1130	
Sanding attachment SA 2 for DS 250 S (Sanding belt 1016 x 75 mm)	05-1131	
Fabric sanding belts for sanding attachments SA 1 and SA 2 are on page 84		
Console WH	56-1049	
Stand model H	56-1048	
Stand model K for DS 250 S	56-10480	

Technical data	DS 150 S	DS 175 S	DS 200 S	DS 250 S
Grinding wheel Ø x W	150 x 25 mm	175 x 25 mm	200 x 32 mm	250 x 32 mm
Grinding wheel bore	32 mm	32 mm	32 mm	32 mm
Grinding wheel grit	Grit 36 / Grit 80	Grit 36 / Grit 80	Grit 36 / Grit 80	Grit 36 / Grit 80
Speed	2850 rpm	2850 rpm	2850 rpm	2850 rpm
Motor power output S1 100%	0,50 kW	0,50 kW	0,90 kW	1,5 kW
Motor power input S6 40%	0,70 kW	0,70 kW	1,25 kW	2,0 kW
Voltage	230 V	230 V	230 V or 400 V	400 V
Width	430 mm	450 mm	510 mm	510 mm
Depth	195 mm	230 mm	270 mm	320 mm
Height	230 mm	250 mm	310 mm	360 mm
Weight approx.	16 kg	18 kg	25 kg	30 kg
Art. no.	05-1119	05-1121	05-1125 (230 V) 05-1126 (400 V)	05-1127

Industrial bench grinder

DS 300 S

- Rotor features ball bearings to ensure smooth running and long life span
- High performance drive motor ensures powerful torque
- Protective cover closed on sides for more efficient spark protection
- Complete with dust port (Ø 35 mm) to allow for connection to dust collector
- Solid design and top of the range accessories make this model qualify for industrial use
- Optionally available dust collector allows efficient elimination of dust
- Comes complete with solid, adjustable workpiece support to achieve top results

Rigid, height adjustable workpiece support, and big dimensioned protective glass



On and off switch features undervoltage release and emergency-stop button



Solid machine body with dust extraction outlet, large dimensioned spark protection and working light



Standard accessories:

- Roughing wheel grit 36
- Finishing wheel grit 80
- Folding protective glasses
- Adjustable workpiece support
- LED working light

Optional accessories:

Grinding wheel Ø 300 x 50 mm, grit 36
Grinding wheel Ø 300 x 50 mm, grit 80
Stand model G
Stand model D with aspiration MSA 500

Art. no. excl. VAT

05-1822A
05-1823A
56-1044
56-1046

Picture shows optionally available stand - model D - with extraction unit MSA 500

Top quality

Technical data

DS 300 S

Grinding wheel Ø x W	300 x 50 mm
Grinding wheel bore	75 mm
Grinding wheel grit	Grit 36 / Grit 80
Speed	1450 rpm
Dust extraction outlet	2x 35 mm
Motor power output S ₁ 100%	2,2 kW
Motor power input S ₆ 40%	3,0 kW
Voltage	400 V
Width	700 mm
Depth	500 mm
Height	460 mm
Weight approx.	84 kg
Art. no.	05-1154

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Combined sanders

These combined sanding machine are suitable for processing a variety of materials, such as metals, non-ferrous metals, plastics, wood, plexiglass etc. The wide range of applications makes these models hard to miss in any workshop.

SPM 150 KSE 200

- Work lamp and wheel dressing tool as part of the standard accessories (SPM 150)
- Model KSE 200 features dust outlet (60 mm in diameter) at steel brush wheel
- Rotor with ball bearings ensures smooth run and long life span
- Quick and easy deburring of complicated profiles
- Powerful and low noise drive motor
- Suitable for polishing of metals, plastics and non-ferrous materials

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SPM 150



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KSE 200



Standard accessories SPM 150:

- Polishing wheel hard
- Grinding wheel grit 36
- Steel brush wheel
- Working light
- Wheel dressing tool
- Spark protection on both sides
- Integrated coolant tank

Technical data	SPM 150	KSE 200
Grinding wheel Ø x W	150 x 20 mm	200 x 32 mm
Bore	12,7 mm	32 mm
Grinding wheel grit	Grit 36	Grit 36
Polishing wheel	150 x 12,5 mm	-
Steel brush wheel	150 x 12,5 mm	200 x 20 mm
Speed	2850 rpm	2850 rpm
Motor power output S ₁ 100%	0,37 kW	0,90 kW
Motor power input S ₆ 40%	0,50 kW	1,25 kW
Voltage	230 V	230 V or 400 V
Width	450 mm	570 mm
Depth	280 mm	270 mm
Height	370 mm	300 mm
Weight approx.	10 kg	26 kg
Art. no.	05-1045	05-1172 (230 V) 05-1173 (400 V)

Standard accessories KSE 200:

- Grinding wheel grit 36
- Steel brush wheel
- Spark protection
- Workpiece support

Optional accessories:

Grinding wheel Ø 150 x 20 mm, Ø 12,7 mm, Grit 36
 Grinding wheel Ø 150 x 20 mm, Ø 12,7 mm, Grit 80
 Polishing wheel Ø 150 x 20 mm, Ø 12,7 mm for SPM 150
 Steel brush wheel Ø 150 x 20 mm, Ø 12,7 mm for SPM 150
 Stand model F for SPM 150
 Grinding wheel Ø 200 x 25 mm, Ø 32 mm, Grit 36
 Grinding wheel Ø 200 x 25 mm, Ø 32 mm, Grit 80
 Steel brush wheel Ø 200 x 25 mm, Ø 32 mm for KSE 200
 Stand model H for KSE 200

Art. no.	excl. VAT
05-1800	
05-1801	
05-1838	
05-1836	
56-1045	
05-1818A	
05-1819A	
05-1799	
56-1048	

Polishing machines

The PS-series of polishing machines are perfectly suitable for treating surfaces of different materials. Achieve different polishing finishes, from matt to gloss, by using suitable polishing wheels and pastes.

PS 200 S
PS 250 S

Sanding machines

- On/ off switch in accordance with IP 54 standards and undervoltage release
- Ideal device to achieve matt, polished, high gloss finishes on various materials by using optionally available polishing wheels and pastes
- Solid construction and top of the range equipment designed for professional use
- Motor comes complete with copper wiring for long life span
- Equipped with rubber feet to eliminate vibrations
- Balanced rotor with high quality ball bearings ensures a smooth run
- Aluminium die-cast machine housing in state-of-the-art design
- Suitable for polishing of metals, plastics and non-ferrous metals

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PROFESSIONAL



PS 200 S



Sisal-cord green Ø 200 mm
Sisal-cord green Ø 250 mm



Sisal-Nettle polishing wheel Ø 200 mm
Sisal-Nettle polishing wheel Ø 250 mm



Nettle-polishing wheel
PS 1001 stepped Ø 200 mm
Nettle-polishing wheel
PS 1001 stepped Ø 250 mm



Molleton-polishing wheel PS 1004
loose Ø 200 mm
Molleton-polishing wheel PS 1004
loose Ø 250 mm



Technical data	PS 200 S	PS 250 S
Polishing wheel Ø x W	200 x 20 mm	250 x 25 mm
Bore	16 mm	20 mm
Speed	2850 rpm	2850 rpm
Motor power output S1 100%	0,9 kW	1,5 kW
Motor power input S6 40%	1,25 kW	2,0 kW
Voltage	230 V or 400 V	400 V
Width	580 mm	600 mm
Depth	250 mm	290 mm
Height	270 mm	300 mm
Weight approx.	19 kg	23 kg
Art.no.	05-1051 (230 V) 05-1052 (400 V)	05-1053

Standard accessories:

- Polishing wheel soft
- Polishing wheel hard

**Polishing wheels and
pastes see from page 87**

Optional accessories:

Polishing wheel see page 87
Polish paste and polish sets see page 88 | 89
Console WH
Stand model H for PS-series
Stand model K for PS 250 S

Art. no. excl. VAT

56-1049
56-1048
56-10480

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Polishing machine

PS 350

The PS 350 polishing machine is the ideal device to treat different types of materials. Various polishing results from matt to gloss can be achieved by using suitable polishing wheels and pastes.

- High quality die-cast machine housing in state-of-the-art design
- Including acute shaft end on both sides for mounting different polishing wheels
- Rotor features ball bearings to ensure smooth running and long life span
- Ideal for chamfering and sanding surfaces and contours
- Solid design and top of the range accessories make this model qualify for industrial use
- Ideal device to achieve matt, polished, high gloss finishes on various materials by using optionally available polishing wheels and pastes

**Best
Price**

Polishing wheels and
pastes see from page 87



With acute shaft end for mounting
polishing wheels with a bore of
16 to 30 mm



On/off switch features undervoltage
release and emergency stop-button



Sisal-cord green for stainless
steel, further polishing
wheels see page 87

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Standard accessories:

- 2 pcs. polishing wheel stepped

Technical data	PS 350
Polishing wheel Ø x W	350 x 45 mm
Bore	16 mm
Speed	1450 rpm
Motor power output S ₁ 100%	2,2 kW
Motor power input S ₆ 40%	3,0 kW
Voltage	400 V
Width	1000 mm
Depth	350 mm
Height	400 mm
Weight approx.	54 kg
Art.no.	05-1061

Optional accessories:

	Art. no.	excl. VAT
Polishing wheel soft, Ø 350 x 40 mm, Ø 16 mm	05-1844	
Polishing wheel stepped, Ø 350 x 40 mm, Ø 16 mm	05-1845	
Sisal-Nettle-Polishing wheel Ø 350 x 30 mm, Ø 16 mm	05-1890	
Sisal-cord green Ø 350 x 25 mm, Ø 16 mm	05-1891	
Nettle-Polishing wheel PS 1001 loose Ø 350 x 25 mm, Ø 16 mm	05-1892	
Nettle-Polishing wheel PS 1001 stepped Ø 350 x 25 mm, Ø 16 mm	05-1893	
Molleton-Polishing wheel PS 1004 loose Ø 350 x 25 mm, Ø 16 mm	05-1894	
Molleton-Polishing wheel PS 1004 stepped Ø 350 x 25 mm, Ø 16 mm	05-1895	
Stand model G	56-1044	
Polish paste and polish sets see page 88 89		

Polishing machine

MPS 350

The MPS 350 polishing and belt sanding machine is the ideal device for grinding and polishing of various materials, such as metals, non-ferrous metals, plastics, wood, plexiglass and many more. The wide choice of applications makes this model overly popular for businesses and industrial use.

- Includes frequency converter for stepless speed settings to allow ideal adjustment to each workpiece
- Quick and convenient deburring of complex profiles
- Powerful motor ensures high torque
- Straightforward sanding belt change – no tools required
- Machine base complete with lockable tool storage
- Individually tiltable sanding arm with dust extraction outlet
- Suitable for sanding, polishing and brushing of metals, plastics and non-ferrous metals for instance copper, bronze, aluminium and brass



Wide range of standard accessories allows for a large variety of applications

Universal in use

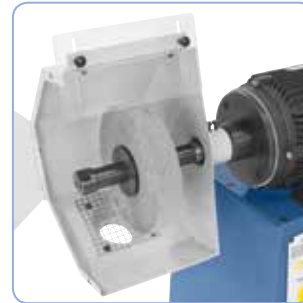
Optional accessories:

	Art. no.	excl. VAT
Dust collector MSA 750	56-1085	
Connector 100 mm inside	12-1038	
Reducer 100 mm inside to 80 mm inside	12-1039	
Branch connection with slider 100 – 100 / 100 mm	12-1040	
Alu-tube diam. 100 mm, extendable to 5 m	12-1087	
Fleece sanding disc Ø 250 x 50 mm, Ø 35 mm	05-1847	
Polishing wheel soft, Ø 300 x 30 mm, Ø 35 mm	05-1848	
Polishing wheel stepped, Ø 300 x 30 mm, Ø 35 mm	05-1849	
Fabric sanding belt 2000 x 50 mm - Grit 40 (10 pcs.)	49-1051	
Fabric sanding belt 2000 x 50 mm - Grit 60 (10 pcs.)	49-1052	
Fabric sanding belt 2000 x 50 mm - Grit 80 (10 pcs.)	49-1053	
Fabric sanding belt 2000 x 50 mm - Grit 100 (10 pcs.)	49-1054	
Fabric sanding belt 2000 x 50 mm - Grit 120 (10 pcs.)	49-1055	
Fabric sanding belt 2000 x 50 mm - Grit 150 (10 pcs.)	49-1055A	
Fabric sanding belt 2000 x 50 mm - Grit 180 (10 pcs.)	49-1055B	
Fabric sanding belt-set 2000 x 50 mm - Grit 40/60/80/100/120/150/180 (each 2 pcs.)	49-1056	
Polish paste and polish sets see page 88 89		

Technical data

MPS 350

Polishing wheel Ø x B	250 x 50 mm
Bore	35 mm
Sanding belt	2000 x 50 mm
Speed, stepless	400 - 2800 rpm
Dust extraction outlet	2 x 80 mm
Motor power output S1 100%	2,2 kW
Motor power input S6 40%	3,0 kW
Voltage	400 V
Width	1160 mm
Depth	700 mm
Height	1850 mm
Weight approx.	150 kg
Art.no.	05-1062



Adjustable protective cover features safety device and dust outlet



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Standard accessories:

- Fleece sanding disc 250 x 50 mm
- Sanding belt 2000 x 50 mm / Grit 100
- Polishing mandrel, right
- Clamping arbor, right
- Keyless drill chuck 1 – 10 mm, right
- Clamping mandrel, right
- Grinding wheel 125 mm / Grit 400
- Collet for velcro sanding disc 125 mm
- Stand

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Disc sanding machines

The TS 250 and TS 300 disc grinding machines are designed for grinding of metals, non-ferrous metals and wood. Model TS 300 comes complete with a velcro fastener for practical disc change.

TS 250 TS 300

- Tiltable table (0° to +45°) for different machining tasks
- Universal useable for metal, non-ferrous metals and wood
- Stable machine body with rubber lining
- Balanced sanding disc ensures vibration-free run
- Grinding table is positioned below the middle, to utilize the entire sanding disc
- Powerful motor guarantees best results, even at longer operation
- Complete with integrated brake to stop the sanding disc (TS 300)



The serially equipped velcro fastener makes disc change quick and easy.



TS 250



Serially equipped with integrated dust extraction outlet underneath the 45° tiltable table.

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HOBBY

Standard accessories:

- Lockable angle fence
- Sanding disc Grit 80 (TS 250)
- Sanding disc Grit 100 (TS 300)
- Disc brake (TS 300)
- Velcro fastener (TS 300)
- Mitre fence
- Motor protective switch

Optional accessories:

	Art. no.	excl. VAT
Velcro fastener diam. 250 mm	11-2131A	
Sanding disc diam. 250 mm - Grit 60 (10 pcs.), velcro fastener	11-2202	
Sanding disc diam. 250 mm - Grit 80 (10 pcs.), velcro fastener	11-2095	
Sanding disc diam. 250 mm - Grit 100 (10 pcs.), velcro fastener	11-2096	
Sanding disc diam. 250 mm - Grit 120 (10 pcs.), velcro fastener	11-2097	
Sanding disc diam. 250 mm - Grit 150 (10 pcs.), velcro fastener	11-2203	
Velcro fastener diam. 300 mm	11-2131	
Sanding disc diam. 300 mm - Grit 60 (10 pcs.), velcro fastener	11-2206	
Sanding disc diam. 300 mm - Grit 80 (10 pcs.), velcro fastener	11-2101	
Sanding disc diam. 300 mm - Grit 100 (10 pcs.), velcro fastener	11-2102	
Sanding disc diam. 300 mm - Grit 120 (10 pcs.), velcro fastener	11-2103	
Sanding disc diam. 300 mm - Grit 150 (10 pcs.), velcro fastener	11-2207	
Sanding disc - set velcro fastener diam. 300 mm - Grit 60 / 80 / 100 / 120 / 150 (each 2 pcs.)	11-2218	
Belt cleaner	11-2175	
Stand model B 1	56-1041	



TS 300

**Best
price**

Technical data

	TS 250	TS 300
Sanding disc	250 mm	300 mm
Table size	290 x 140 mm	435 x 150 mm
Table tiltable	0° to 45°	0° to 45°
Speed	1400 rpm	1450 rpm
Dust extraction outlet	35 mm	50 mm
Motor power output S ₁ 100%	0,55 kW	0,90 kW
Motor power input S ₆ 40%	0,75 kW	1,25 kW
Voltage	230 V	230 V
Width	370 mm	450 mm
Depth	360 mm	450 mm
Height*	300 mm	400 mm
Weight approx.	15 kg	29 kg
Art. no.	05-1185	05-1186

* without stand

Disc sanding machine

TS 300 TOP

The TS 300 TOP disc sanding machine is a great device to achieve perfectly smooth wooden surfaces but is evenly suitable for non-ferrous metals and plastic materials. Complete with a hook and loop fastener to allow for a quick and convenient change of sanding discs without tools.

- Wide application range for various materials, such as wood, metals or plastics
- Powerful motor guarantees best results, even when operated continuously
- Complete with integrated brake to bring the sanding disc to a standstill
- Table tilts from -3° to $+45^{\circ}$ and features rests at 0° / 22.5° / 45°
- Balanced sanding disc eliminates vibrations
- Polished grey cast-iron table tilts to both sides
- Includes dust port to allow connection to dust collector

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Manual brake brings sanding disc to a standstill within seconds



Polished grey cast-iron table with tilting range from -3° to $+45^{\circ}$



Complete with mitre fence for precise grinding of angles



On/Off switch in accordance with IP 54 standards and undervoltage release



Standard accessories:

- Lockable angle fence
- Sanding disc
- Hook and loop fastener
- Disc brake
- Mitre fence
- Locking device at 0° / 22.5° / 45°
- Motor protective switch

Technical data	TS 300 TOP
Sanding disc	300 mm
Table size	435 x 165 mm
Table tiltable	-3° to $+45^{\circ}$
Speed	1420 rpm
Dust extraction outlet	60 / 75 mm
Motor power output S ₁ 100%	0,75 kW
Motor power input S ₆ 40%	1,0 kW
Voltage	230 V
Width	520 mm
Depth	490 mm
Height*	380 mm
Weight approx.	36 kg
Art. no.	05-1190

*without stand

Optional accessories:

	Art. no.	excl. VAT
Hook and loop fastener diam. 300 mm	11-2131	
Sanding disc diam. 300 mm - Grit 60 (10 pcs.), hook and loop fastener	11-2206	
Sanding disc diam. 300 mm - Grit 80 (10 pcs.), hook and loop fastener	11-2101	
Sanding disc diam. 300 mm - Grit 100 (10 pcs.), hook and loop fastener	11-2102	
Sanding disc diam. 300 mm - Grit 120 (10 pcs.), hook and loop fastener	11-2103	
Sanding disc diam. 300 mm - Grit 150 (10 pcs.), hook and loop fastener	11-2207	
Sanding disc - set hook and loop fastener diam. 300 mm - Grit 60 / 80 / 100 / 120 / 150 (each 2 pcs.)	11-2218	
Belt cleaner	11-2175	
Stand model B 1	56-1041	

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For additional information please visit www.bernardo.at

Disc sanding machine

TS 300 Pro

The TS 300 Pro disc grinding machine features a heavy duty, solid construction, allowing a precise and vibration-free operation. This model is predominantly used among professionals.

- Complete with integrated brake to stop the sanding disc
- Grey, cast-iron table features T-slots for the circular sanding unit and the mitre fence
- Powerful motor guarantees best results, even at longer operation
- Robust tilting device with adjustable end stops
- Includes mitre fence for accurate angle grinding
- Balanced sanding disc ensures vibration-free run
- Dust extraction below work table allows for clean working conditions
- Useable for different materials (wood, metal, plastics, etc.)



Circular grinding unit is part of standard equipment.



Tiltable grey cast-iron table features T-slots.



Standard accessories:

- Lockable angle fence
- Sanding disc
- Velcro fastener
- Disc brake
- Mitre fence
- Circular sanding unit
- Exhaust fan
- Stand
- Motor protective switch

Optional accessories:

	Art. no.	excl. VAT
Sanding disc 300 mm, velcro fastener Grit 60 (10 pcs.)	11-2206	
Sanding disc 300 mm, velcro fastener Grit 80 (10 pcs.)	11-2101	
Sanding disc 300 mm, velcro fastener Grit 100 (10 pcs.)	11-2102	
Sanding disc 300 mm, velcro fastener Grit 120 (10 pcs.)	11-2103	
Sanding disc 300 mm, velcro fastener Grit 150 (10 pcs.)	11-2207	
Sanding disc -set 300 mm, velcro fastener Grit 60 / 80 / 100 / 120 / 150 (each 2 pcs.)	11-2218	
Velcro fastener	11-2131	
Belt cleaner	11-2175	

Technical data

TS 300 Pro

Sanding disc	300 mm
Table size	420 x 250 mm
Table tiltable	-15° to +45°
Working height	950 mm
Speed	1450 rpm
Dust extraction outlet	100 mm
Motor power output S ₁ 100%	0,75 kW
Motor power input S ₆ 40%	1,0 kW
Voltage	230 V
Width	460 mm
Depth	600 mm
Height	1150 mm
Weight approx.	46 kg
Art. no.	05-1188

Inclusive stand



Complete with exhaust fan inside machine housing.



Universal tool grinding machine

UWS 320

Sanding machines

- For grinding of various tools, e.g. drills, milling cutters, turning tools etc.
- Stand serially equipped with tool rest
- Large number of standard accessories
- Solid construction for vibration-free run
- Ergonomically arranged control elements



Standard accessories

Standard accessories:

- Stand
- 2 tailstocks
- Spring stop
- Adjustable table end stops
- 2 centers 60°
- 2 half-centers 60°
- 1 cup wheel 125 x 45 x 32 mm
- 1 diamond cup wheel 125 x 32 mm
- 1 grinding wheel 125 x 25 x 32 mm
- 1 dish wheel
- Drive unit with 3-jaw chuck diam. 80 mm
- Twist drill grinding attachment
- Lathe tool grinding attachment
- Clamping mandrel for milling cutter 16, 22, 32 mm
- Diamond dressing stone
- Tools

Technical data	UWS 320
Workpiece diameter max.	175 mm
Distance between centers	320 mm
Table size	535 x 130 mm
Table longitudinal travel	320 mm
Table cross travel	170 mm
Grinding head vertically tiltable	-40° to +40°
Grinding head horizontally tiltable	-50° to +50°
Speed grinding spindle	2800 rpm
Motor power	0,18 kW
Voltage	400 V
Weight approx.	266 kg
Art. no.	05-1365

Big range of standard accessories

Universal in use



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Belt and disc sanding machine

BDS 75 BDS 75-2

- Graphite coating on face grinder increases sliding capacity of sanding belt
- High belt speed ensures excellent grinding performance
- Wide range of applications such as contour, surface and cylindrical grinding
- Quick adjustment from vertical to horizontal grinding
- Solid and torsion-free machine housing guarantees smooth run
- Efficient deburring of edges, buffing of welding seams
- Sanding disc with Velcro fastener, ideal for multiple change of grit
- Model BDS 75-2 comes with 2 speed settings and adjustable workpiece support
- Sanding belt is easy to change, manual adjustment of belt tension



Regulating screws ensure convenient adjustment of parallel belt run.



Tiltable sanding disc table comes complete with adjustable fence stop.



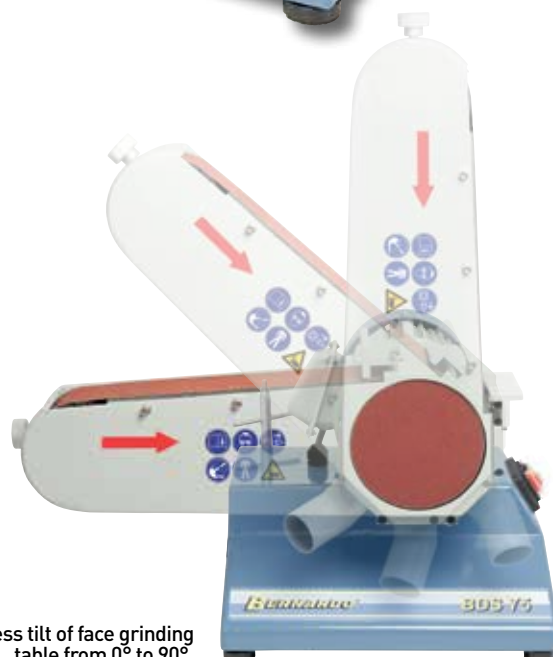
Large face sanding area with workpiece fence.



Standard accessories:

- Sanding belt grit 80
- Sanding disc grit 80
- Spark protection (BDS 75-2)
- Sanding and supporting table
- Graphite coating
- Dust extraction outlet
- 2-speed switch

Technical data	BDS 75	BDS 75-2
Sanding belt	75 x 1180 mm	75 x 1180 mm
Belt speed	11 m/sec.	11 / 22 m/sec.
Belt sanding table	280 x 80 mm	280 x 80 mm
Belt sanding table tiltable	0° to 90°	0° to 90°
Sanding disc diam.	150 mm	150 mm
Sanding disc table	150 x 130 mm	150 x 130 mm
Sanding disc table tiltable	0° to 45°	0° to 45°
Dust extraction outlet	50 mm	50 mm
Motor power output S ₁ 100%	1,1 kW	1,5 / 1,8 kW
Motor power input S ₆ 40%	1,5 kW	2,1 / 2,5 kW
Voltage	400 V	400 V
Machine dimension (W x D x H)	470 x 720 x 520 mm	580 x 680 x 765 mm
Weight approx.	65 kg	69 kg
Art. no.	05-1197	05-1198



Stepless tilt of face grinding table from 0° to 90°.

The belt and disc sanding machines BDS 75 and BDS 75-2 are universal in use eg, deburring, surface and contour grinding. These models are perfect for grinding of shapes and materials of all kind among professionals in workshops as well as advanced amateurs.

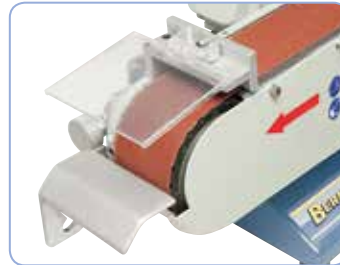
BDS 75 BDS 75-2



Powerful motor and protective switch in accordance with IP 54 standards.



Complete with integrated dust port below grinding table which tilts up to 45°.



Model BDS 75-2 comes complete with adjustable workpiece support and spark protection.

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3 in 1

Edge grinding
Surface grinding
Round grinding

**Best
Price**

Model BDS 75-2

Belt speed
11 / 22 m/sec.



Picture shows removable cover for large face grinding operations.

Complete with 2-step switch for 2 speed settings, ideal for grinding of stainless steel and aluminium.
(BDS 75-2)



Optional accessories:

	Art. no.	excl. VAT
Fabric sanding belt 1180 x 75 mm - grit 40 (10 pcs.)	49-0964	
Fabric sanding belt 1180 x 75 mm - grit 60 (10 pcs.)	49-0965	
Fabric sanding belt 1180 x 75 mm - grit 80 (10 pcs.)	49-0966	
Fabric sanding belt 1180 x 75 mm - grit 100 (10 pcs.)	49-0967	
Fabric sanding belt 1180 x 75 mm - grit 120 (10 pcs.)	49-0968	
Fabric sanding belt set 1180 x 75 mm - Grit 40 / 60 / 80 / 100 / 120 (each 2 pcs.)	49-0969	
Belt cleaner	11-2175	

Optional accessories:

	Art. no.	excl. VAT
Sanding disc diam. 150 mm - grit 60 (10 pcs.), velcro fastener	11-2121A	
Sanding disc diam. 150 mm - grit 80 (10 pcs.), velcro fastener	11-2122A	
Sanding disc diam. 150 mm - grit 100 (10 pcs.), velcro fastener	11-2120A	
Sanding disc diam. 150 mm - grit 120 (10 pcs.), velcro fastener	11-2123A	
Sanding disc diam. 150 mm - grit 150 (10 pcs.), velcro fastener	11-2124A	
Sanding disc set diam. 150 mm - G60 / 80 / 100 / 120 / 150 (each 2 pcs.), velcro fastener	11-2124B	
Velcro fastener diam. 150 mm	11-2132	

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Current second hand machines, remnants or sample machines are available at www.bernardo.at

Belt sanding machines

BS 100 x 1220 S BS 100 x 1220 S-2

- Balanced discs ensure vibration-free run
- BS 100 x 1220 S-2 comes complete with 2 speed settings, optimal for grinding of stainless steel
- Time-efficient chamfering of edges, fettling of welded seams
- Motor protective switch according to IP 54 including undervoltage release
- Powerful drive and belt speed
- User-friendly belt change, quick and easy
- Large grinding surface, adjustable fence for universal use
- Fine adjustment for parallel belt run as standard
- Solid and vibration-free construction
- Machine base included

**Best
price**



High protection against flying sparks through big dimensioned protective glass

Standard accessories:

- Sanding belt grit 80
- Workpiece fence
- Dust extraction outlet
- Motor protective switch
- User manual
- Foldable protective glass
- Machine base
- Sanding and support table
- Separate emergency stop switch



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Modell BS 100 x 1220 S-2

Belt speed 9,5 / 19 m/sec.
Voltage 400 V
Art. no. 05-1238

Technical data

BS 100 x 1220 S BS 100 x 1220 S-2

Belt dimensions	100 x 1220 mm	100 x 1220 mm
Belt speed	19 m/sec.	9,5 / 19 m/sec.
Contact disc Ø x W	125 / 100 mm	125 / 100 mm
Belt sanding table	285 x 105 mm	285 x 105 mm
Dust extraction outlet	2 x 75 mm	2 x 75 mm
Motor power output S ₁ 100%	1,5 kW	1,0 / 1,5 kW
Motor power input S ₆ 40%	2,2 kW	1,35 / 2,2 kW
Voltage	230 V or 400 V	400 V
Length	690 mm	690 mm
Width	400 mm	400 mm
Height	940 mm	940 mm
Weight approx.	41 kg	41 kg
Art. no.	05-1236 (400 V) 05-1237 (230 V)	05-1238

Optional accessories::

	Art. no.	excl. VAT
Dust collector MSA 300 (for wall mounting)	56-1087	
Connector 100 mm inside	12-1038	
Reducer 100 mm inside to 80 mm inside	12-1039	
Branch connection with slider 100 - 100 / 100 mm	12-1040	
Alu-tube diam. 100 mm, extendable to 5 m	12-1087	
Fabric sanding belt 1220 x 100 mm - Grit 40 (10 pcs.)	49-1011A	
Fabric sanding belt 1220 x 100 mm - Grit 60 (10 pcs.)	49-1011	
Fabric sanding belt 1220 x 100 mm - Grit 80 (10 pcs.)	49-1012	
Fabric sanding belt 1220 x 100 mm - Grit 100 (10 pcs.)	49-1013	
Fabric sanding belt 1220 x 100 mm - Grit 120 (10 pcs.)	49-1013A	
Fabric sanding belts-Set 1220 x 100 mm - Grit 40 / 60 / 80 / 100 / 120 (each 2 pcs.)	49-1014	
Belt cleaner	11-2175	

Belt sanding machines

MS 75 x 2000 S MS 150 x 2000 S

- High belt speed allows for top grinding performance
- Quick adjustment for horizontal and inclined position
- Continuous face grinding surface ensures ideal grinding of long workpieces
- Spring loaded clamping device guarantees consistent belt tension
- Universally applicable for grinding of edges, surface and cylindrical grinding
- Complete with quick clamping system for fast belt change
- Set screw allows easy adjustment of parallel belt run
- Graphite coating on planing surface increases sliding capacity of grinding belt



Complete with dust extraction outlet at infeed roller



Large contact disc and automatic belt tension



Workpiece rest and chip tray come standard



Tiltable protective cover allows for extra large grinding surface

Standard accessories:

- Sanding belt grit 80
- Folding protective glass
- Sanding and support table
- Workpiece fence
- Dust extraction outlet
- Stand
- Separate emergency stop switch

Technical data	MS 75 x 2000 S	MS 150 x 2000 S
Belt dimensions	75 x 2000 mm	150 x 2000 mm
Belt speed	29 m/sec.	29 m/sec.
Contact disc Ø x W	200 / 80 mm	200 / 155 mm
Belt sanding table	460 x 75 mm	460 x 150 mm
Dust extraction outlet	100 mm	100 mm
Motor power output S ₁ 100%	3,0 kW	4,0 kW
Motor power input S _e 40 %	4,0 kW	5,5 kW
Voltage	230 V or 400 V	400 V
Length	1080 mm	1080 mm
Width	440 mm	520 mm
Height	1000 mm	1000 mm
Weight approx.	66 kg	84 kg
Art. no	05-12459 (230 V)	05-1248
	05-1246 (400 V)	

Optional accessories:

	Art. no.	excl. VAT
Dust collector MSA 750	56-1085	
Alu-tube diam. 100 mm, extendable to 5 m	12-1087	
Fabric sanding belt 2000 x 75 mm – Grit 40 (10 pcs.)	49-1020	
Fabric sanding belt 2000 x 75 mm – Grit 60 (10 pcs.)	49-1021	
Fabric sanding belt 2000 x 75 mm – Grit 80 (10 pcs.)	49-1022	
Fabric sanding belt 2000 x 75 mm – Grit 100 (10 pcs.)	49-1023	
Fabric sanding belt 2000 x 75 mm – Grit 120 (10 pcs.)	49-1024	
Fabric sanding belts-Set 2000 x 75 mm – Grit 40 / 60 / 80 / 100 / 120 (each 2 pcs.)	49-1024A	
Fabric sanding belt 2000 x 150 mm – Grit 40 (10 pcs.)	49-1025	
Fabric sanding belt 2000 x 150 mm – Grit 60 (10 pcs.)	49-1026	
Fabric sanding belt 2000 x 150 mm – Grit 80 (10 pcs.)	49-1027	
Fabric sanding belt 2000 x 150 mm – Grit 100 (10 pcs.)	49-1028	
Fabric sanding belt 2000 x 150 mm – Grit 120 (10 pcs.)	49-1029	
Fabric sanding belts-Set 2000 x 150 mm – Grit 40 / 60 / 80 / 100 / 120 (each 2 pcs.)	49-1030	

Optimal price-performance ratio

Belt sanding machines

The MS-models are very economical and cost effective belt sanding machines. The powerful motor and the robust construction makes these models ideal for professional workshops and in small series production.

- Both models comes complete with 2 speed settings, optimal for grinding of stainless steel
- Universal use for grinding of edges, surfaces and round grinding
- Graphite coating on grinding surface increases sliding capacity of sanding belt
- Spring loaded device ensures consistent belt tension
- User-friendly belt change, fast and straightforward
- High belt speed guarantees brilliant sanding performance
- Quick adjustment for horizontal and inclined position
- Universal use for trade and industry
- Large face grinding surface with protective cover
- Includes fine adjustment for parallel belt run



Comes complete with dust extraction outlet (diameter 100 mm).



Contact disc 70° - 74° Shore A, ideal for roughing.

**Optimal
price-performance ratio**

Powder coated

Separate emergency stop switch and big dimensioned protective glass for increased safety



Top quality



Includes quick clamping system for fast belt change.

Technical data

	MS 75 x 2000 S-2	MS 150 x 2000 S-2
Belt dimensions	75 x 2000 mm	150 x 2000 mm
Belt speed	14,5 / 29 m/sec.	14,5 / 29 m/sec.
Contact disc Ø x W	200 / 80 mm	200 / 155 mm
Belt sanding table	460 x 75 mm	460 x 150 mm
Dust extraction outlet	100 mm	100 mm
Motor power output S ₁ 100%	1,5 / 2,2 kW	2,1 / 2,8 kW
Motor power input S ₆ 40 %	2,2 / 3,0 kW	2,8 / 3,6 kW
Voltage	400 V	400 V
Length	1080 mm	1080 mm
Width	440 mm	520 mm
Height	1000 mm	1000 mm
Weight approx.	67 kg	85 kg
Art. no.	05-1247	05-1249

Standard accessories:

- Sanding belt grit 80
- Folding protective glass
- Sanding and supporting table
- Workpiece fence
- Dust extraction outlet
- Motor protective switch
- Rubber coated grinding roller
- Graphite coating
- Stand
- Separate emergency stop switch

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MS 75 x 2000 S-2 MS 150 x 2000 S-2



Oversize contact and drive wheel

Tiltable protective cover
increases grinding surface.



Belt speed

14,5 / 29 m/sec.



Complete with 2 belt speeds



Dust hood can
easily be removed.

Continuous face grinding surface allows
ideal grinding of long workpieces.

Optional accessories MS 75 x 2000 S-2:

	Art. no.	excl. VAT
Dust collector MSA 750	56-1085	
Alu-tube diam. 100 mm, extendable to 5 m	12-1087	
Fabric sanding belt 2000 x 75 mm - Grit 40 (10 pcs.)	49-1020	
Fabric sanding belt 2000 x 75 mm - Grit 60 (10 pcs.)	49-1021	
Fabric sanding belt 2000 x 75 mm - Grit 80 (10 pcs.)	49-1022	
Fabric sanding belt 2000 x 75 mm - Grit 100 (10 pcs.)	49-1023	
Fabric sanding belt 2000 x 75 mm - Grit 120 (10 pcs.)	49-1024	
Fabric sanding belts-Set 2000 x 75 mm - Grit 40 / 60 / 80 / 100 / 120 (each 2 pcs.)	49-1024A	
Surface conditioning belt 2000 x 75 mm, rough	49-1017	
Surface conditioning belt 2000 x 75 mm, medium	49-1018	
Surface conditioning belt 2000 x 75 mm, fine	49-1019	

Optional accessories MS 150 x 2000 S-2:

	Art. no.	excl. VAT
Dust collector MSA 750	56-1085	
Alu-tube diam. 100 mm, extendable to 5 m	12-1087	
Fabric sanding belt 2000 x 150 mm - Grit 40 (10 pcs.)	49-1025	
Fabric sanding belt 2000 x 150 mm - Grit 60 (10 pcs.)	49-1026	
Fabric sanding belt 2000 x 150 mm - Grit 80 (10 pcs.)	49-1027	
Fabric sanding belt 2000 x 150 mm - Grit 100 (10 pcs.)	49-1028	
Fabric sanding belt 2000 x 150 mm - Grit 120 (10 pcs.)	49-1029	
Fabric sanding belts-Set 2000 x 150 mm - Grit 40 / 60 / 80 / 100 / 120 (each 2 pcs.)	49-1030	
Surface conditioning belt 2000 x 150 mm, rough	49-1031	
Surface conditioning belt 2000 x 150 mm, medium	49-1032	
Surface conditioning belt 2000 x 150 mm, fine	49-1033	

Combined belt and pipe sanding machine

KBR 100 x 2000 DUO

- Spring balanced clamping device allows for continuous belt tension
- Comes complete with round grinding device for grinding diameters from 20 – 76 mm
- Quick and easy grinding angle adjustment
- Graphite coating on face grinding area increases sliding capacity of sanding belt
- Large face grinding area with protective cover
- Low speed setting (15 m/sec) allows for optimal grinding of stainless steel and aluminium
- User-friendly belt change, straightforward and quick
- Fast and easy change of grinding rolls – no tools required
- Various grinding angles from 30° to 90° are easily achieved
- Short processing times compared to milling



The 400 x 100 mm face grinding support increases the application range significantly



Grinding device swivels from 30° to 90°



Backside with workpiece support and large dimensioned protective glass



1. Switch for pipe / belt grinding
2. Switch for speed setting

Suitable for grinding of pipes and profiles

2 speed settings (serially)

3 in 1

Belt sanding
Pipe sanding
Face grinding

Adjustable grinding angle from 30° to 90°



Technical data

KBR 100 x 2000 Duo

Belt dimension	100 x 2000 mm
Belt speed	15 / 30 m/sec.
Grinding diameter	20 - 76 mm
Carriage adjustment	30° - 90°
Belt sanding table	400 x 100 mm
Contact disc Ø x W	195 x 100 mm
Dust extraction outlet	2 x 75 mm
Speed	1420 / 2660 rpm
Motor power	2,5 / 3,3 kW (400 V)
Machine dimension (W x D x H)	750 x 1400 x 1200 mm
Weight approx.	148 kg
Art. no.	05-1312

Standard accessories:

- Sanding belt grit 36
- Rubber coated grinding roller
- 1 pc. grinding wheel for 1 1/4" pipe (42/44 mm pipe)
- 2 pcs. foldable protective covers
- Sanding and supporting table
- 2 x dust extraction outlet diam. 75 mm
- 2 pcs. chip tray
- Graphite coating
- Motor protective switch



Easily detachable chip tray

The KBR 100 x 2000 DUO is a multifunctional grinding machine for grinding of pipes and end of profiles at the front, grinding of edges, face and round grinding on reverse side as well as face grinding on the machine surface.

KBR 100 x 2000 DUO



Universal vice allows clamping of pipes and profiles



Scale allows for easy readout of desired grinding angle



Height adjustment of grinding roll for excentric grinding



Hinged cover allows for convenient change of sanding belt



Comes complete with convenient holder for the grinding rolls

Optional accessories:

	Art. no.	excl. VAT
Dust collector MSA 750	56-1085	
Reducer 100 mm inside to 80 mm inside	12-1039	
Branch connection with slider 100 - 100 / 80 mm	12-10400	
Alu-tube diam. 80 mm, extendable to 5 m	12-1086	
Fabric sanding belt 2000 x 100 mm - grit 40 (10 pcs.)	49-1039	
Fabric sanding belt 2000 x 100 mm - grit 60 (10 pcs.)	49-1040	
Fabric sanding belt 2000 x 100 mm - grit 80 (10 pcs.)	49-1041	
Fabric sanding belt 2000 x 100 mm - grit 100 (10 pcs.)	49-1042	
Fabric sanding belt 2000 x 100 mm - grit 120 (10 pcs.)	49-1043	
Fabric sanding belt set 2000 x 100 mm - grit 40 / 60 / 80 / 100 / 120 (each 2 pcs.)	49-1044	
Surface conditioning belt 2000 x 100 mm, rough	49-1036	
Surface conditioning belt 2000 x 100 mm, medium	49-1037	
Surface conditioning belt 2000 x 100 mm, fine	49-1038	

Optional accessories:

	Art. no.	excl. VAT
Grinding wheel for 1/2" pipe*	05-1313	
Grinding wheel for 22 mm pipe*	05-1313	
Grinding wheel for 3/4" pipe*	05-13130	
Grinding wheel for 28 mm pipe*	05-13130	
Grinding wheel for 1" pipe*	05-13131	
Grinding wheel for 34 mm pipe*	05-13131	
Grinding wheel for 1 1/4" pipe*	05-13132	
Grinding wheel for 44 mm pipe*	05-13132	
Grinding wheel for 1 1/2" pipe	05-13133	
Grinding wheel for 50 mm pipe*	05-13133	
Grinding wheel for 2" pipe*	05-13134	
Grinding wheel for 62 mm pipe*	05-13134	
Grinding wheel for 2 1/2" pipe*	05-13135	
Grinding wheel for 78 mm pipe*	05-13135	

Dust collector for metal chips MSA 300

The dust collector MSA 300 is particularly suitable for extraction of metal dust and chips at bench grinding machines, metal belt sanders etc. With the serially bracket this model can be mounted on the wall or directly on the machine base. The optional available branch connection with slider allows the connection on 2 machines at the same time.

- Care for ideal production conditions and clean air at the workplace
- High-quality powder coating creates scratch-resistant and shock-proof surface
- Optimal fan design guarantees top efficiency and smooth run
- Ideal for metal working factories, mechanical workshops,...
- Statically and dynamically balanced steel fan wheel
- Easy mounting through serially bracket
- Simultaneous operation of several machines possible



Optional available: Branch connection with slider to connect 2 machines at the same time



Woven fine-filter bag keep dust enclosed.

Top
Price



Standard accessories:

- Filter bag
- On-Off-switch
- Adapter round / square
- Bracket

Technical data	MSA 300
Capacity	870 m ³ /h
Dust extraction outlet	100 mm
Outlet diameter	112 mm
Motor power	0,75 kW
Voltage	230 V
Dimension without dust bag	430 x 400 x 420 mm
Dimension with dust bag	430 x 400 x 780 mm
Weight approx.	15,6 kg
Art. no.	56-1087

Optional accessories:

	Art. no.	excl. VAT
Filter bag	12-0992	
Adapter A100/70 - A65/45 - A40/40 - A35/35	12-1034	
Connector 100 mm inside	12-1038	
Reducer 100 mm inside to 80 mm inside	12-1039	
Branch connection with slider 100 - 100 / 100 mm	12-1040	
Alu-tube diam. 80 mm, extendable to 5 m	12-1086	
Alu-tube diam. 100 mm, extendable to 5 m	12-1087	
Hose clamp for tube 100 mm	12-1109	
Grounding set ES 1	12-1140	
Automatic start-up ALV 2 / M 230 - 230 V	12-1152	
Automatic start-up ALV 10 / 1 M	12-1150	

Pictures with different sanding machines, stands and connection parts, not equipped in standard accessories.

Stand model D with extraction for metal chips

MSA 500

- State-of-the-art design – allows for optimal working conditions and clean air at work
- Complete with large chip tray, easy to empty
- Equipped with practical water tank to allow for cooling of processed workpiece
- Optimal fan design guarantees top efficiency and smooth run
- For use at metal sanding machines such as belt sanding machines, bench grinder,...
- Statically and dynamically balanced steel fan wheel
- Requires minimum space but features top performance



On/Off switch in accordance with IP 54 features undervoltage release. Powerful drive motor, particularly smooth-running

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Technical data

Modell D

Capacity	1275 m³/h
Dust extraction outlet inside	2 x 35 mm
Dust extraction outlet outside	2 x 50 mm
Motor power	0,37 kW
Voltage	400 V
Supporting area	400 x 285 mm
Height	810 mm
Weight approx.	50 kg
Art. no.	56-1046

Standard accessories:

- Filter bag
- Dust and chip tray
- 2x Alu tube diam. 100 mm
- 2x Reduction 100 / 35 mm
- Y-Adapter 125 mm / 2 x 100 mm
- Water tank

Optional accessories:

Filter bag

Art. no. excl. VAT
12-0989

Pictures with different sanding machines, not equipped in standard accessories.

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Dust collector for metal chips MSA 750

The dust collector MSA 750 is particularly suitable for extraction of metal dust and chips at bench grinding machines, metal belt sanders etc. This model is predominately used by mechanical workshops and metal working factories.

- Extractable chip drawer at the front of machine
- Optimal fan design guarantees top efficiency and smooth run
- Serially equipped with 2 dust extractor outlets Ø 100 mm
- Statically and dynamically balanced steel fan wheel
- High-quality powder coating creates scratch-resistant and shock-proof surface
- Requires minimum space but features top performance
- Simultaneous operation of several machines possible



Easy emptying of sanding dust at the front of machine.

Powder coated

Easy handling

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Best price



Standard accessories:

- Filter bag
- Chip drawer
- Carry handles

Technical data

MSA 750

Capacity	1100 m³/h
Inlet diameter Ø	2 x 100 mm
Motor power	0,75 kW
Voltage	400 V
Dimension without dust bag	570 x 490 x 1180 mm
Dimension with dust bag	940 x 490 x 1180 mm
Weight approx.	36 kg
Art. no.	56-1085

Optional accessories:

Filter bag	12-0992
Connector 100 mm inside	12-1038
Reducer 100 mm inside to 80 mm inside	12-1039
Branch connection with slider 100 - 100 / 100 mm	12-1040
Alu-tube diam. 80 mm, extendable to 5 m	12-1086
Alu-tube diam. 100 mm, extendable to 5 m	12-1087
Hose clamp for tube 100 mm	12-1109
Grounding set ES 1	12-1140
Automatic start-up ALV 10 / 1 M	12-1150

Art. no. excl. VAT

Pictures with different sanding machines, not equipped in standard accessories.

Dust collector for metal chips with fine dust filter

MSA 1500

- State-of-the-art design – allows for optimal working conditions and clean air at work
- Complete with large chip tray, easy to empty
- Optimal filtration of extracted air, circulated back into work space
- For use at metal sanding machines such as belt sanding machines, bench grinder,...
- Serially with carriage for increased mobility
- High-quality powder coating creates scratch-resistant and shock-proof surface
- Statically and dynamically balanced steel fan wheels
- Optimal fan design guarantees top efficiency and smooth run
- Simultaneous operation of several machines possible
- Small space requirements due to compact design

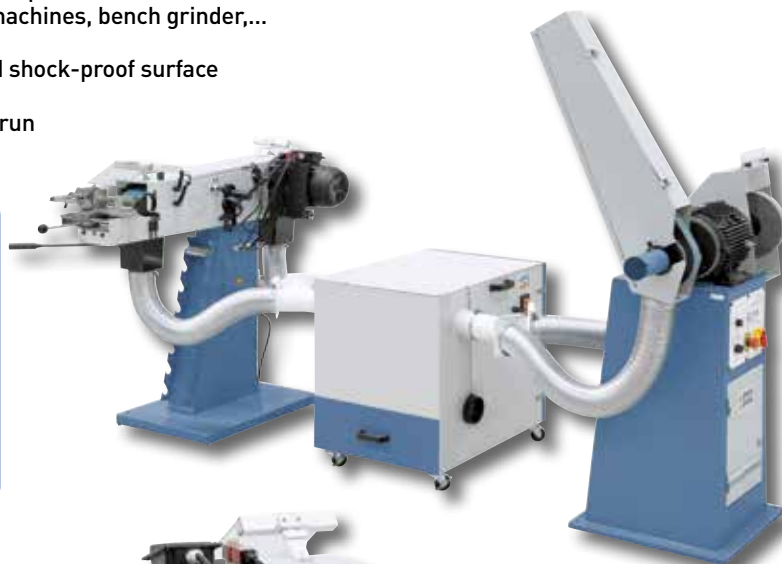
Powder coated



Built-in fine dust filter with big surface



Extractable collecting tray



Standard accessories:

- Filter bag
- Fine dust filter (2 pcs.)
- Carriage
- Chip drawer
- Sliding handles



Easy handling

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Technical data

MSA 1500

Capacity	1500 m ³ /h
Inlet diameter Ø	2 x 100 mm
Motor power	1,5 kW
Voltage	400 V
Dimension	860 x 680 x 770 mm
Weight approx.	72 kg
Art. no.	56-1086

Optional accessories:

Fine dust filter (2 pcs.)	12-0991
Filter bag	12-0990
Connector 100 mm inside	12-1038
Reducer 100 mm inside to 80 mm inside	12-1039
Branch connection with slider 100 - 100 / 100 mm	12-1040
Alu-tube diam. 80 mm, extendable to 5 m	12-1086
Alu-tube diam. 100 mm, extendable to 5 m	12-1087
Hose clamp for tube 100 mm	12-1109
Grounding set ES 1	12-1140
Automatic start-up ALV 10 / 1 M	12-1150

Art. no. excl. VAT

Pictures with different sanding machines, not equipped in standard accessories.

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For additional information please visit www.bernardo.at

Downdraft tables

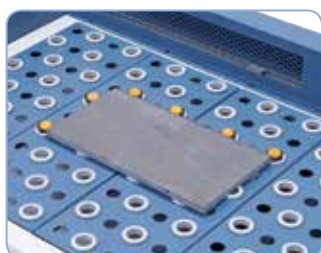
AT 1000 HM / AT 1500 HM

- State-of-the-art design – allows for optimal working conditions and clean air at work
- Optimal filtration of extracted air, circulated back into work space
- Optimal fan design guarantees top efficiency and smooth run
- Suitable for sanding of any type of workpieces
- Extractable chip drawer at the front of machine
- Complete with hinged side panels for longer workpieces
- Installed fan, additional dust collector not necessary
- Rubber table protection guarantees scratch-free work
- Statically and dynamically balanced steel fan wheels

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Rubber coating on table protects the workpiece from scratches.



Standard with stops for positioning the workpiece.



Grounding set ES 1 (optional extra)

Attention! The dust collector must be grounded at all time to reduce the risk of fire and explosion.

powder coated



Technical data	AT 1000 HM	AT 1500 HM
Table size	1000 x 550 mm	1550 x 550 mm
Table height	825 mm	825 mm
Max. load capacity	200 kg	225 kg
Capacity max.	2500 m³/h	2x 2500 m³/h
Motor power	1,0 kW (1,5 HP)	2x 0,75 kW (2x 1,0 HP)
Voltage	230 V / 50 Hz	230 V / 50 Hz
Machine dimension (W x D x H)	1070 x 630 x 930 mm	1660 x 620 x 900 mm
Weight approx.	66 kg	105 kg
Art. no.	12-2196	12-2197

Standard accessories AT 1000 HM:

- On-Off switch
- 2x filter (wood / metal)
- Rubber table protection
- Chip drawer
- 6x workpiece fence

The downdraft tables of the AT-series guarantee a clean work environment in single and small series production. A fan at the table allows for decent extraction of the sanding dust.

AT 2000 HM



Through the lateral opening, the filtered air is added to the working space again.



Integrated filter (wood / metal) with large surface.



Easy emptying of sanding dust at the front of machine.



Extraction of the sanding dust also to the rear - advantage at large plates.



powder coated



Standard accessories AT 1500 HM / AT 2000 HM:

- On-Off switch
- 4x filter (wood / metal)
- Rubber table protection
- Chip drawer
- 6x workpiece fence

Technical data	AT 2000 HM
Table size	2110 x 550 mm
Table height	825 mm
Max. load capacity	250 kg
Capacity max.	2x 3000 m³/h
Motor power	2x 1,0 kW (2x 1,5 HP)
Voltage	230 V / 50 Hz
Machine dimension (W x D x H)	2170 x 620 x 920 mm
Weight approx.	132 kg
Art. no.	12-2198

Optional accessories:

Replacement filter (wood / metal)
Replacement filter (wood)
Grounding set ES 1

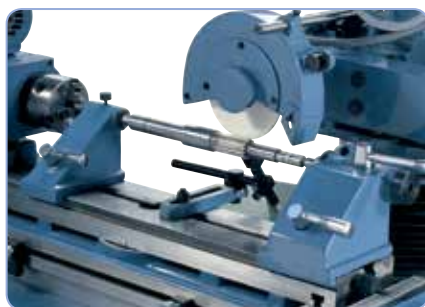
Art. no.	excl. VAT
12-1146	
12-1144	
12-1140	

Universal grinding machine with dust extractor

USM 500

- Round, flat and tool grinding combined in one machine
- Heavy cast-iron construction allows vibration-free machining
- Special spindle bearing for precise sanding results
- Used in tool and die making, production as well as in training workshops
- Various application areas increase productivity
- Coolant device, central lubrication and dust extractor as standard
- Easy gear shifting allows quick speed change
- Hydraulic or manual longitudinal adjustment of table (in x-axis)
- Headstock adjustable in height and tiltable (-100° to +100°)

BERNARDO
PROFESSIONAL



Longitudinal grinding



Technical data

USM 500

Max. workpiece diameter	200 mm
Distance between centers	500 mm
Surface grinding	200 x 50 mm
Outside grinding	Ø 5 - 50 x 400 mm
Inside grinding	Ø 10 - 50 x 75 mm
Max. workpiece weight	10 kg

Headstock

Tilting range	-90° to +90°
Speed	110 / 200 / 300 rpm
Spindle taper	MT 2
Chuck diameter	100 mm

Grinding headstock

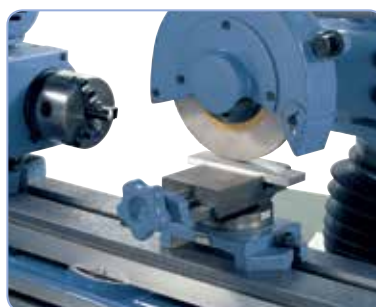
Tilting range	-100° to +100°
Travel	
Cross	230 mm
Vertical	210 mm
Scale division vertical	0,01 mm
Vertical adjustment per handwheel rotation	2 mm/rev.
Scale division cross	0,02 mm
Cross adjustment per handwheel rotation	2 / 4 mm/rev.
Sanding disc	200 x 20 x 75 mm
Speed	2500 rpm
Speed inside grinding spindle	13500 rpm
Grindstone	Ø 26 x 20 x 6 mm
	Ø 10 x 10 x 3 mm

Working table

Max. travel	480 mm
Hydraulic longitudinal feed	0,01 - 6 m/min
Table tilting range	-45° to +45°
Taper of tailstock sleeve	MT 2
Travel of tailstock sleeve	15 mm

Total motor power	2,5 kW
Motor power of sanding disc	1,1 kW
Machine dimension (L x W x H)*	1500 x 1150 x 1400 mm
Weight approx.	1300 kg
Art. no.	05-1375

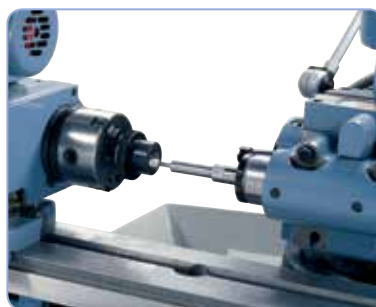
* without dust collector and coolant device



Surface grinding



External cylindrical grinding



Inside round grinding

Surface grinding
Internal cylindrical grinding
External cylindrical grinding
Tool grinding
Conical grinding

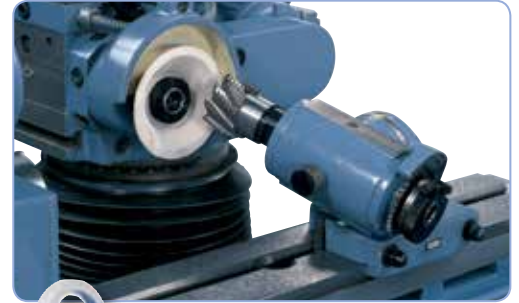
The USM 500 universal grinding machine features a variety of applications for professional users, requiring minimum space. High user-friendliness and a wide range of standard accessories guarantees a maximum of performance.

USM 500



Sawblade grinding

Fully equipped universal grinding machine



Tool grinding



Standard accessories:

- Coolant device
- Dust extractor
- Safety guard
- Dividing head
- 4 grinding discs
- 3-jaw chuck 100 mm
- Left and right tailstock
- Live centre
- Half live centre
- Balancing stand
- Spindle extension
- Vice for surface grinding
- 5 tappets
- Dresser
- Central lubrication
- Inside grinding device incl. 2 grinding stones

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Current second hand machines, remnants or sample machines are available at www.bernardo.at

Cylindrical grinding machine

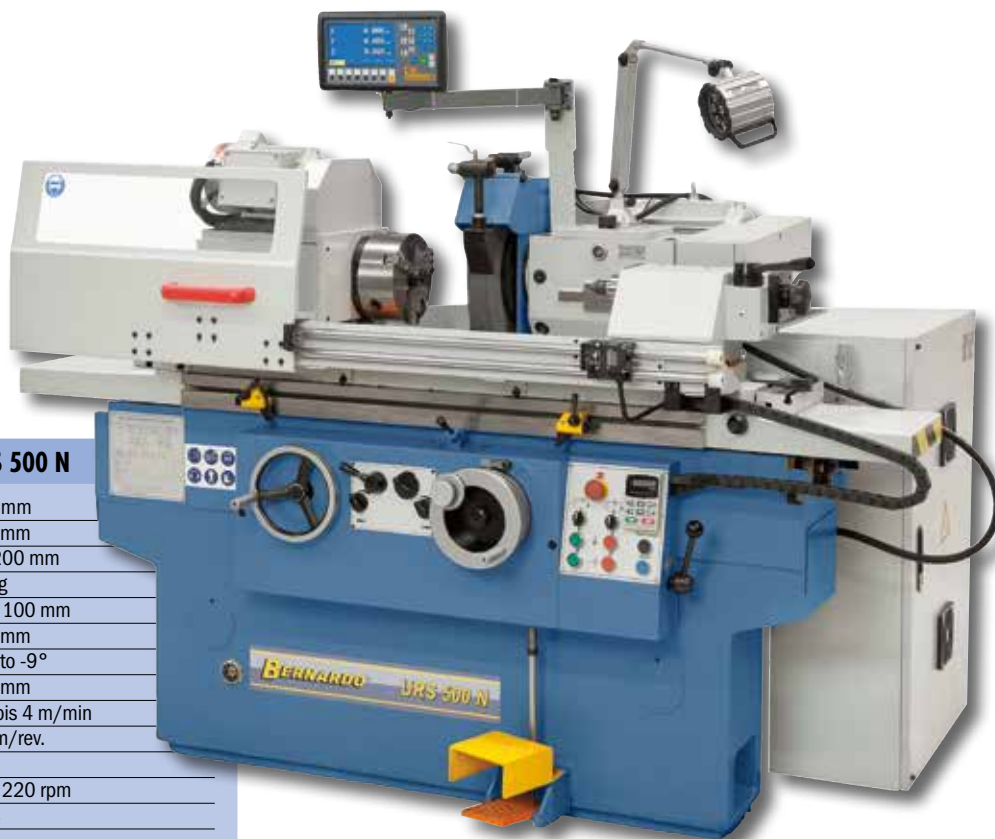
URS 500 N

- Table can be tilted for conical grinding operations and scale allows adjustment to desired position
- Spindle stock can be swivelled 180° for inside grinding operations
- Main spindle is mounted hydro-dynamically – oil film prevents contact between spindle and bearing
- Longitudinal table guide and grinding spindle stock cross guide feature V- and flat guiding each
- Strong reinforcements and generously designed walls make the machine base resistant to temperature fluctuations and deformations
- Oil film between spindle and bearing reduces the vibrations to a minimum to achieve top results and high accuracy
- Stepless feed adjustment with selective programmable stop at end of each table movement
- Precisely adjusted spindle head and solid grinding spindle stock to achieve top processing results at various grinding operations
- Precisely polished and manually finished guideways in x- and y-axis
- Hydraulic or manual resetting of grinding spindle stock
- Longitudinal movement of table is either manually by handwheel or automatically by hydraulic feed
- Grinding spindle features bearings on both sides and adjustable sliding flat grids

**Variable
spindle speed**



Complete with 2-axis digital readout to guarantee work convenience and increase accuracy.



Technical data

URS 500 N

Distance between centers	500 mm
Center height	135 mm
Outside grinding diameter	8 - 200 mm
Max. workpiece weight	60 kg
Inside grinding diameter	13 - 100 mm
Inside grinding depth max.	125 mm
Table tilting range max.	+3° to -9°
Table longitudinal travel max.	600 mm
Table feed	0,1 bis 4 m/min
Man. table travel / hand turn	6 mm/rev.

Headstock

Spindle speed, stepless	25 - 220 rpm
Spindle taper	MT 4
Tilting range spindle	90°

Grinding headstock

Sanding disc	400 x 50 x 203 mm
Spindle speed	1670 rpm
Speed inside grinding spindle	20000 rpm
Tilt range grinding headstock	+/- 30°
Travel of grinding head	200 mm
Scale division	0,005 mm

Tailstock

Taper of tailstock sleeve	MT 4
Travel of tailstock sleeve	35 mm

Motor power

Sanding spindle	4,0 kW
Working spindle	0,75 kW
Machine dimension (W x D x H)	2150 x 1450 x 1700 mm
Weight approx.	2170 kg
Art. no.	05-1370

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Grinding wheel
- Grinding wheel flange
- 3-jaw chuck 200 mm
- Frequency inverter
- Open rest
- Closed rest
- Inside grinding device
- LED machine light
- Balancing stand
- Balancing arbor
- 2 dead centers
- Coolant device
- Splash guard
- Grinding wheel dresser
- Workpiece carrier
- Tools



For conical grinding between the centers the table can be tilted from +3° bis -9°.

The URS 500 N universal cylindrical grinding machine is suitable for outside grinding operations up to 200 mm in diameter. The machine comes complete with an inside grinding device to increase the application range significantly. Most commonly this model is used in machine construction, tool and mould shaping and in the production of small series.

URS 500 N



Complete with inside grinding device.



For conical grinding operations the robust spindle head can be tilted up to 90°.



Essential control elements are clearly arranged on the front of the machine.

BERNARDO
PROFESSIONAL

Big range of
standard accessories

Inclusive 2-axis-
digital readout with
LCD-display



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Current offers will be sent to you as a Bernardo Newsletter

Cylindrical grinding machine

URS 800 N

- Hydro-dynamically mounted main spindle, oil film prevents contact between spindle and bearing
- For conical grinding operations table can be tilted - scale allows precise adjustment to desired position
- Guideways in x- and y-axis are precisely polished and manually finished
- Longitudinal table guide and grinding spindle stock cross guide each feature V- and flat guiding
- Achieve smooth results at various grinding operations due to the precisely adjusted spindle head and solid grinding spindle stock
- Strong reinforcements and generously designed walls make the machine base resistant to temperature fluctuations and deformations
- Oil film between spindle and bearing keeps the vibrations to a minimum to achieve top results and high accuracy
- Longitudinal movement of table is either manual (by hand wheel) or automatic (by hydraulic feed)
- Stepless feed adjustment with selective programmable stop at end of each table movement
- Hydraulic or manual repositioning of grinding spindle
- Grinding spindle features bearings on both sides and adjustable sliding flat grids
- Swivelling spindle stock (up to 180°) for inside grinding operations

Including digital readout



Comes complete with digital 2-axis digital readout.



Technical data

URS 800 N

Distance between centers	800 mm
Center height	135 mm
Outside grinding diameter	8 - 200 mm
Max. workpiece weight	60 kg
Inside grinding diameter	13 - 100 mm
Inside grinding depth max.	125 mm
Table tilting range max.	+3° to -7°
Table longitudinal travel max.	850 mm
Table feed	0,1 bis 4 m/min
Man. table travel / hand turn	6 mm/rev.

Headstock

Spindle speed, stepless	25 - 380 rpm
Spindle taper	MT 4
Tilting range spindle	90°

Grinding headstock

Sanding disc	400 x 50 x 203 mm
Spindle speed	1670 rpm
Speed inside grinding spindle	20000 rpm
Tilt range grinding headstock	+/- 30°
Travel of grinding head	200 mm
Scale division	0,005 mm

Tailstock

Taper of tailstock sleeve	MT 4
Travel of tailstock sleeve	35 mm

Motor power

Sanding spindle	4,0 kW
Working spindle	0,75 kW
Machine dimension (W x D x H)	2900 x 1450 x 1700 mm
Weight approx.	2570 kg
Art. no.	05-1371

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Grinding wheel
- Grinding wheel flange
- 3-jaw chuck 200 mm
- Frequency inverter
- Open rest
- Closed rest
- Inside grinding device
- LED machine light
- Balancing stand
- Balancing arbor
- 2 dead centers
- Coolant device
- Splash guard
- Grinding wheel dresser
- Workpiece carrier
- Tools



For conical grinding between the centers the table can be tilted from +3° bis -7°.

The URS 800 N universal cylindrical grinding machine features an excellent range of standard accessories which includes an inside grinding device and a 2-axis digital readout. Designed predominantly for model and tool making, this model is popular for the production of small series.

URS 800 N



Spindle head tilts from 0° - 90° for conical grinding operations.



Clearly arranged and ergonomically positioned electronic control element.



Hydraulic tailstock features top accuracy and rigidity, foot pedal allows for movement.

BERNARDO
PROFESSIONAL

Big range of
standard accessories

Variable
spindle speed



Serially with 2-axis-
digital readout with
LCD-display

Handwheel with scale (0.0025 mm)
allows for manual cross movement
of grinding spindle.



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Should you have any questions, please feel free to contact our service center +43 / 732 / 664015

Cylindrical grinding machines

URS 1000 N

URS 1500 N

- When conical grinding, the table can be swivelled to either side and exactly positioned by using the scale
- Oil film between bearing and spindle keeps vibrations at a minimum level, hence achieving outstanding results and top accuracy
- Precisely balanced spindle head and solid grinding head guarantees extraordinary results at any type of operation
- Strong reinforcements and solidly designed walls of the machine base makes it resistant to temperature fluctuations and deformations
- Spindle is mounted from both sides and features adjustable sliding bearings consisting of three segments
- Hydrodynamic bearing of spindle, therefore no contact between spindle and bearing
- Longitudinal table feed can be set to automatic mode - hydraulically driven or manual mode - by handwheel
- Stepless feed adjustments with selective programmable hold time at the end of each table movement
- Longitudinal table guide and cross guide of grinding headstock each feature a V-guide and flat guide
- Hydraulic or manual repositioning of grinding spindle stock
- Guideways in x- and y-axis are precisely constructed and hand-polished

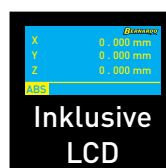


Tiltable spindle head from +30° to -30°, featuring stepless speed adjustment.



Comes complete with removable internal grinding device.

Big range of
standard accessories



Inklusive
LCD

Technical data	URS 1000 N	URS 1500 N
Distance between centers	1000 mm	1500 mm
Center height	180 mm	180 mm
Outside grinding diameter	8 - 320 mm	8 - 320 mm
Max. workpiece weight	150 kg	150 kg
Inside grinding diameter with rest	35 - 100 mm	35 - 100 mm
Inside grinding diameter without rest	30 - 100 mm	30 - 100 mm
Inside grinding depth max.	125 mm	125 mm
Table tilting range max.	+3° to -7°	+3 to -6°
Table longitudinal travel max.	1000 mm	1500 mm
Table feed	0,1 - 4 m/min	0,1 - 4 m/min
Man. table travel / hand turn	6 mm	6 mm
Headstock		
Spindle speed, stepless	25 - 220 rpm	25 - 220 rpm
Spindle taper	MT 4	MT 4
Tilting range spindle	+90°	+90°
Grinding headstock		
Sanding disc	400 x 50 x 203 mm	400 x 50 x 203 mm
Spindle speed	1670 rpm	1670 rpm
Speed inside grinding spindle	10000 rpm	10000 rpm
Tilting range grinding headstock	+/- 30°	+/- 30°
Travel of grinding head	180 mm	180 mm
Scale division	0,0025 mm	0,0025 mm
Rapid feed, hydraulic	50 mm/min	50 mm/min
Tailstock		
Taper of tailstock sleeve	MT 4	MT 4
Travel of tailstock sleeve	30 mm	30 mm
Motor power		
Sanding spindle	5,5 kW	5,5 kW
Working spindle	1,5 kW	1,5 kW
Inside grinding spindle	1,1 kW	1,1 kW
Machine dimension (W x D x H)	3700 x 1900 x 1500 mm	4700 x 1900 x 1500 mm
Weight approx.	3700 kg	4300 kg
Art. no.	05-1382XL	05-1383XL



Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Grinding wheel
- Grinding wheel flange
- 3-jaw chuck diam. 200 mm
- 2 pcs. open rest
- Closed rest
- Inside grinding device
- LED machine light
- Balancing stand
- Balancing arbor
- Frequency inverter
- 2 dead centers
- Measuring plate
- Coolant device
- Splash guard front and back
- Grinding wheel dresser
- Workpiece carrier
- Tools

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The URS 1000 N and URS 1500 N universal cylindrical grinding machines are suitable for external cylindrical grinding of workpieces up to 320 mm diameter. Part of the standard equipment is the internal grinding device, increasing the range of applications significantly. A popular model for machine construction, mould and tool making and production of small series.

URS 1000 N URS 1500 N



Hydraulic tailstock with high accuracy and stability, moveable by foot pedal.



One open rest and two closed rests for supporting long workpieces come standard.



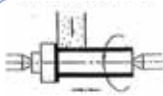
User-friendly arrangement of all electronic control elements.



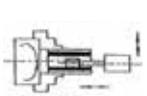
Approved quality

Inclusive 2-axis-digital readout with LCD-display

Application area



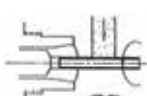
Cylindrical grinding of offset shafts



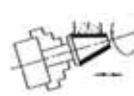
Internal grinding



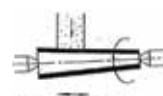
Cylindrical shaft grinding



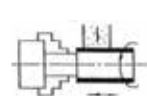
Grinding with collet device



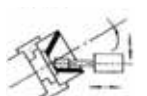
Conical grinding with chuck



Conical grinding with centres



Cylindrical grinding with chuck



Conical internal grinding

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For technical requests you can contact us at service@pwa.at

Cylindrical grinding machines

URS 2000 N

URS 3000 N

- When conical grinding, the table can be swivelled to either side and exactly positioned by using the scale
- Oil film between bearing and spindle keeps vibrations at a minimum level, hence achieving outstanding results and top accuracy
- Precisely balanced spindle head and solid grinding head guarantees extraordinary results at any type of operation
- Strong reinforcements and solidly designed walls of the machine base makes it resistant to temperature fluctuations and deformations
- Spindle is mounted from both sides and features adjustable sliding bearings consisting of three segments
- Hydrodynamic bearing of spindle, therefore no contact between spindle and bearing
- Longitudinal table feed can be set to automatic mode - hydraulically driven or manual mode - by handwheel
- Stepless feed adjustments with selective programmable hold time at the end of each table movement
- Longitudinal table guide and cross guide of grinding headstock each feature a V-guide and flat guide
- Hydraulic or manual repositioning of grinding spindle stock
- Guideways in x- and y-axis are precisely constructed and hand-polished

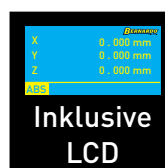


Tiltable spindle head from +30° to -30°, featuring stepless speed adjustment.



Comes complete with removable internal grinding device.

Big range of standard accessories



Inklusive LCD

Technical data	URS 2000 N	URS 3000 N
Distance between centers	2000 mm	3000 mm
Center height	180 mm	180 mm
Outside grinding diameter	8 - 320 mm	8 - 320 mm
Max. workpiece weight	150 kg	150 kg
Inside grinding diameter with rest	35 - 100 mm	35 - 100 mm
Inside grinding diameter without rest	30 - 100 mm	30 - 100 mm
Inside grinding depth max.	125 mm	125 mm
Table tilting range max.	+5° to -2°	+3 to -2°
Table longitudinal travel max.	2100 mm	3100 mm
Table feed	0,1 - 3 m/min	0,1 - 3 m/min
Man. table travel / hand turn	6 mm	6 mm
Headstock		
Spindle speed, stepless	25 - 220 rpm	25 - 220 rpm
Spindle taper	MT 4	MT 4
Tilting range spindle	+90°	+90°
Grinding headstock		
Sanding disc	500 x 50 x 203 mm	500 x 50 x 203 mm
Spindle speed	1330 rpm	1330 rpm
Speed inside grinding spindle	10000 rpm	10000 rpm
Tilting range grinding headstock	+/- 30°	+/- 30°
Travel of grinding head	200 mm	200 mm
Scale division	0,0025 mm	0,0025 mm
Rapid feed, hydraulic	50 mm/min	50 mm/min
Tailstock		
Taper of tailstock sleeve	MT 4	MT 4
Travel of tailstock sleeve	30 mm	30 mm
Motor power		
Sanding spindle	7,5 kW	7,5 kW
Working spindle	1,5 kW	1,5 kW
Inside grinding spindle	1,1 kW	1,1 kW
Machine dimension (W x D x H)	5400 x 2000 x 2000 mm	7400 x 2000 x 2000 mm
Weight approx.	6200 kg	8000 kg
Art. no.	05-1384XL	05-1385XL



Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Grinding wheel
- Grinding wheel flange
- 3-jaw chuck diam. 200 mm
- 2 pcs. open rest
- Closed rest
- Inside grinding device
- LED machine light
- Balancing stand
- Balancing arbor
- Frequency inverter
- 2 dead centers
- Measuring plate
- Coolant device
- Splash guard front and back
- Grinding wheel dresser
- Workpiece carrier
- Tools

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The URS 2000 N and URS 3000 N universal cylindrical grinding machines are suitable for external cylindrical grinding of workpieces up to 320 mm diameter. Part of the standard equipment is the internal grinding device, increasing the range of applications significantly. A popular model for machine construction, mould and tool making and production of small series.

URS 2000 N URS 3000 N



Hydraulic tailstock with high accuracy and stability, moveable by foot pedal.



One open rest and two closed rests for supporting long workpieces come standard.



User-friendly arrangement of all electronic control elements.

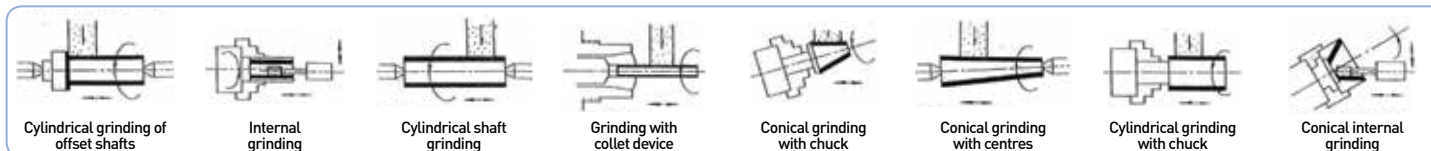


Approved quality

Inclusive 2-axis-digital readout with LCD-display

Picture URS 1500 N

Application area



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Surface grinding machine with digital readout

FSM 2040

- High quality bearings of spindle ensure vibration-free run
- Hardened, polished linear guiding for table longitudinal movement
- Double V-guide of cross table movement
- Main parts, such as stand, base and apron made of high quality grey cast iron
- Completely equipped with 2-axis digital readout and permanently magnetic clamping plate
- Central lubrication of all guide rails
- Essential for grinding of small parts and fast grinding



The pre-tensioned special bearings of the spindle assure a vibration-free run and highest accuracy.



High-quality electronic parts guarantees a consistent run.



2-axis digital readout with LCD-display comes standard



2-axis digital readout for y- and z-axis

Technical data

FSM 2040

Table dimensions	500 x 210 mm
T-slot quantity / width	1 / 14 mm
Permanent magnet clamping plate	200 x 400 mm
Max. travel, longitudinal	530 mm
Max. travel, cross	220 mm
Max. distance spindle / table	420 mm
Grinding wheel	200 x 20 x 31,75 mm
Table speed, electric	3 - 20 m/min
Cross adjustment	
Table speed, electric	0,1 - 2 m/min
Adjustment per handwheel rotation	2,5 mm
Scale division on handwheel	0,02 mm
Vertical adjustment	
Adjustment per handwheel rotation	1,25 mm
Scale division on handwheel	0,01 mm
Motor power of sanding spindle	1,5 kW
Spindle speed	2800 rpm
Length	1250 mm
Depth	1400 mm
Height	1730 mm
Weight approx.	750 kg
Art. no.	05-1404

Optional accessories:

	Art. no.	excl. VAT
Flange	05-1415	
Dust suction with coolant system and magnetic separator	05-1418	
Precision tool maker vise QKG 125	28-6003	
Precision tool maker vise QGG 100	28-6007	
Precision angle vise QKJ 100	28-6012	
Precision angle vise QGJ 73	28-6016	
Precision universal vise, 2-dimensional, 70 mm	28-6035	
Universal coolant fluid MN 1103, 5 l canister	54-1206	

The FSM 2040 is a solidly constructed surface grinding machine with compact dimensions. The high user-friendliness makes this model ideal for training workshops, education as well as tool and die making.

FSM 2040



Polished flat guide allows precise feed of grinding head.

Electric table adjustment
in x- and y-axis

BERNARDO
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**Best
price**

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Grinding wheel
- Flange
- LED working light
- Permanent magnet clamping plate
- Balancing stand
- Balancing arbor
- Protective cover
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Tools

Central lubrication for
all guide rails and spindles.

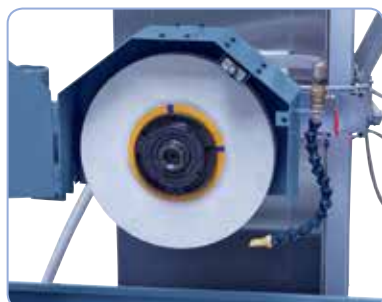


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For additional information please visit www.bernardo.at

Hydraulic surface grinding machines with digital readout

- Plastic-coated counter guide in x- and y-axis assure a low slip-stick-effect
- V-flat longitudinal table guide, double-V cross table guide
- Spindle features axial and radial, clearance-free, pre-tensioned bearings
- Separate hydraulic unit with heat exchanger to omit vibrations and thermal load
- Solidly constructed and well supported structure assures high stability
- State of the art hydraulic system guarantees soft table traverse even at high work load
- Completely equipped with 2-axis digital readout and permanently magnetic clamping plate
- Central lubrication of all guide rails



The pre-tensioned special bearings of the spindle assure a vibration-free run and highest accuracy.



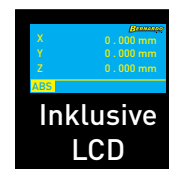
Separate hydraulic unit to eliminates vibrations and thermal strain.



Technical data	FSM 2550	FSM 3060
Table dimensions	250 x 520 mm	300 x 700 mm
T-slot quantity / width	1 / 14 mm	1 / 14 mm
Permanent magnet clamping plate	250 x 500 mm	300 x 600 mm
Max. travel, longitudinal	560 mm	640 mm
Max. travel, cross	260 mm	320 mm
Max. distance spindle / table	450 mm	520 mm
Max. workpiece weight*	150 kg	200 kg
Grinding wheel	200 x 20 x 31,75 mm	300 x 30 x 75 mm
Table speed, hydraulic	3 - 20 m/min	3 - 20 m/min
Cross adjustment		
Adjustment per handwheel rotation	4 mm/rev.	4 mm/rev.
Scale division on handwheel	0,02 mm	0,02 mm
Vertical adjustment		
Adjustment per handwheel rotation	2 mm/rev.	2 mm/rev.
Scale division on handwheel	0,01 mm	0,01 mm
Motor power of sanding spindle	1,5 kW	4,0 kW
Spindle speed	2850 rpm	1440 rpm
Motor power of hydraulic pump	1,5 kW	1,5 kW
Length	1700 mm	2000 mm
Depth	1400 mm	1650 mm
Height	1750 mm	1850 mm
Weight approx.	1010 kg	1330 kg
Art. no.	05-1405	05-1407
Price excl. VAT		

* with magnet clamping plate

Hydraulic longitudinal travel of table



Inklusive LCD

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Grinding wheel
- Flange
- LED machine light
- Permanent magnet clamping plate
- Balancing stand
- Balancing arbor
- Protective covers
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Tools

The surface grinding machine FSM 2550 / FSM 3060 assured with its robust construction. All main parts, like stand, base and apron are made of high-quality grey cast iron. The wide range of accessories make this model very cost-effective for tool and die making.

FSM 2550 FSM 3060

Sanding machines



Clearly arranged control elements at the tiltable control panel

2-axis digital readout for y- and z-axis



Optional accessories:

Flange for FSM 2550	05-1415
Flange for FSM 3060	05-1416
Dust suction with coolant system and magnetic separator	05-1418
Precision tool maker vise QKG 125	28-6003
Precision tool maker vise QGG 50	28-6005

Art. no.	excl. VAT
05-1415	
05-1416	
05-1418	
28-6003	
28-6005	

Optional accessories:

Precision tool maker vise QGG 100	28-6007
Precision angle vise QKJ 100	28-6012
Precision angle vise QGJ 73	28-6016
Precision universal vise, 2-dimensional, 70 mm	28-6035
Universal coolant fluid MN 1103, 5 l canister	54-1206

Art. no.	excl. VAT
28-6007	
28-6012	
28-6016	
28-6035	
54-1206	

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Hydraulic surface grinding machines with digital readout

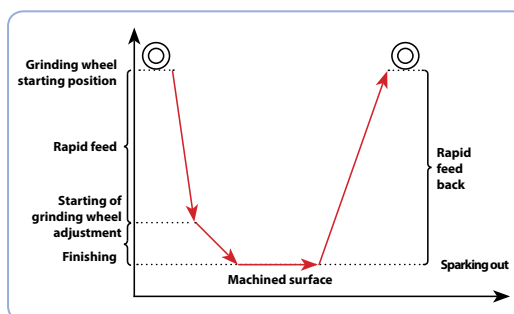
- Plastic-coated counter guide in x- and y-axis assure a low slip-stick-effect
- V-flat longitudinal table guide, double-V cross table guide
- Spindle features axial and radial, clearance-free, pre-tensioned bearings
- Solidly constructed and well supported structure assures high stability
- Digitally controlled, automatic vertical feed with servo motor
- State of the art hydraulic system guarantees soft table traverse even at high work load
- Infeed via rapid feed to height of workpiece, adjustable to finishing and sparking, automatic lift at program end
- Adjustable longitudinal and cross table movement via end stops



Control with touch operation and electronic handwheel.



The pre-tensioned special bearings of the spindle assure a vibration-free run and highest accuracy.



Hydraulic longitudinal travel of table

Technical data	FSM 2550 AHD	FSM 3060 AHD
Table dimensions	250 x 520 mm	300 x 700 mm
T-slot quantity / width	1 / 14 mm	1 / 14 mm
Electric magnet clamping plate	250 x 500 mm	300 x 600 mm
Max. travel, longitudinal	560 mm	640 mm
Max. travel, cross	260 mm	320 mm
Max. distance spindle / table	450 mm	520 mm
Max. workpiece weight*	150 kg	200 kg
Grinding wheel	200 x 20 x 31,75 mm	300 x 30 x 75 mm
Table speed, hydraulic	2 - 18 m/min	2 - 18 m/min
Cross adjustment		
Automatic adjustment, cross	0,5 - 10 mm/Stroke	0,5 - 10 mm/Stroke
Rapid feed, cross	990 mm/min	990 mm/min
Adjustment per handwheel rotation	4 mm/rev.	4 mm/rev.
Scale division on handwheel	0,02 mm	0,02 mm
Vertical adjustment		
Automatic adjustment, vertical	0,01 / 0,1 mm	0,01 / 0,1 mm
Rapid feed, vertical	360 mm/min	360 mm/min
Adjustment per handwheel rotation	2 mm/rev.	2 mm/rev.
Scale division on handwheel	0,01 mm	0,01 mm
Motor power of sanding spindle	1,5 kW	4,0 kW
Spindle speed	2850 rpm	1440 rpm
Motor power of hydraulic pump	1,5 kW	1,5 kW
Motor power of vertical feed	0,75 kW	0,75 kW
Length	1700 mm	2000 mm
Depth	1400 mm	1650 mm
Height	1750 mm	1850 mm
Weight approx.	1100 kg	1400 kg
Art. no.	05-1406	05-1408
Price excl. VAT		

* with magnet clamping plate



Separate hydraulic unit to eliminate vibrations and thermal strain

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Control with touch operation
- Electronic handwheel
- Grinding wheel
- Flange
- LED machine light
- Electric magnet clamping plate
- Balancing stand
- Balancing arbor
- Protective covers
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Tools

The FSM-AHD-series are solidly-built surface grinding machines featuring automatic vertical feed. The extensive range of standard equipment ensures optimal performance eg. computer automated vertical feed, magnetic clamping plate with demagnetization device, control via touchscreen and a electronic handwheel.

FSM 2550 AHD FSM 3060 AHD



Automatic central lubrication for all guide rails and spindles.



The solid guiding of the grinding head ensures precise infeed.



Optional accessories:

Flange for FSM 2550
Flange for FSM 3060
Dust suction with coolant system and magnetic separator
Precision tool maker vise QKG 125
Precision tool maker vise QGG 50

Art. no.	excl. VAT
05-1415	
05-1416	
05-1418	
28-6003	
28-6005	

Optional accessories:

Precision tool maker vise QGG 100
Precision angle vise QKJ 100
Precision angle vise QGJ 73
Precision universal vise, 2-dimensional, 70 mm
Universal coolant fluid MN 1103, 5 l canister

Art. no.	excl. VAT
28-6007	
28-6012	
28-6016	
28-6035	
54-1206	

Surface grinding machine with digital readout

BSG 2040 MC

- High quality bearings of spindle ensure vibration-free run
- Hardened, polished linear guiding for table longitudinal movement
- Double V-guide of cross table movement
- Main parts, such as stand, base and apron made of high quality grey cast iron
- Maintenance-free, permanently lubricated spindle
- Completely equipped with 2-axis digital readout and permanently magnetic clamping plate
- Central lubrication of all guide rails
- Essential for grinding of small parts and fast grinding

X 0.000 mm
Y 0.000 mm
Z 0.000 mm

Inklusive
LCD



The pre-tensioned special bearings of the spindle assure a vibration-free run and highest accuracy.



High-quality electronic parts guarantees a consistent run.



Technical data

BSG 2040 MC

Table dimensions	445 x 205 mm
T-slot quantity / width	1 / 13 mm
Permanent magnet clamping plate	200 x 400 mm
Max. travel, longitudinal	560 mm
Max. travel, cross	225 mm
Max. distance spindle / table	440 mm
Grinding wheel	200 x 13 x 31,75 mm
Cross adjustment	
Manual adjustment	5 mm/rev.
Scale division on handwheel	0,02 mm
Vertical adjustment	
Manual adjustment	1 mm/rev.
Scale division on handwheel	0,005 mm
Spindle speed	2850 rpm
Coolant device	55 l
Motor power	1,5 kW
Machine dimension (W x D x H)	1460 x 1200 x 1740 mm
Weight approx.	850 kg
Art. no.	05-1444

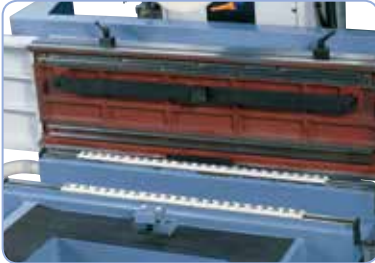
Optional accessories:

Flange	05-1462
Dust suction with coolant system and magnetic separator	05-1465
Precision tool maker vise QGG 50	28-6005
Precision angle vise QKJ 73	28-6016
Universal coolant fluid MN 1103, 5 l canister	54-1206

Art. no. excl. VAT

The BSG 2040 MC is a solidly constructed surface grinding machine with compact dimensions. The high user-friendliness make this model ideal for training workshops, education as well as tool and die making.

BSG 2040 MC



The machine features a table with a maintenance-free linear ball bearing and a toothed-belt drive.



Polished flat guide allows precise feed of grinding head.



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**Best
price**

**2-axis digital readout
for y- and z-axis**

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Grinding wheel
- Flange
- Machine feet
- Coolant device
- Dressing diamond
- Balancing stand
- Balancing arbor
- Tools
- Central lubrication
- LED working light
- Protective cover
- Longitudinal and cross fence
- Splash guard

**Manual table
adjustment**

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Hydraulic surface grinding machines with digital readout

- Including Siemens PLC-control for programming simple sanding cycles via touchscreen
- State of the art hydraulic system guarantees soft table traverse even at high work load
- Separate hydraulic unit with heat exchanger to omit vibrations and thermal load
- Solidly constructed and well supported structure assures high stability
- Plastic-coated counter guide in x- and y-axis assure a low slip-stick-effect
- Infeed via rapid feed to height of workpiece, adjustable to finishing and sparking, automatic lift at program end
- Spindle features axial and radial, clearance-free, pre-tensioned bearings
- Digitally controlled, automatic vertical feed with servo motor
- Adjustable longitudinal and cross table movement via end stops
- V-flat longitudinal table guide, double-V cross table guide



Including cable guiding by energy chain



The spindle features pre-tensioned bearings to ensure high accuracy and a smooth run.

Hydraulic longitudinal travel of table



Separate hydraulic unit to eliminates vibrations and thermal strain

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Technical data

BSG 2040 PLC

Table dimensions	200 x 500 mm
T-slot quantity / width	1 / 14 mm
Electric magnet clamping plate	200 x 460 mm
Max. travel, longitudinal	560 mm
Max. travel, cross	240 mm
Max. distance spindle / table	450 mm
Max. workpiece weight*	180 kg
Grinding wheel	200 x 20 x 31,75 mm
Table speed, hydraulic	7 - 25 m/min
Cross adjustment	
Automatic adjustment, cross	0,5 - 8 mm / Stroke
Rapid feed, cross	990 mm/min
Adjustment per handwheel rotation	4 mm/rev.
Scale division on handwheel	0,02 mm

* with magnet clamping plate

Technical data

BSG 2040 PLC

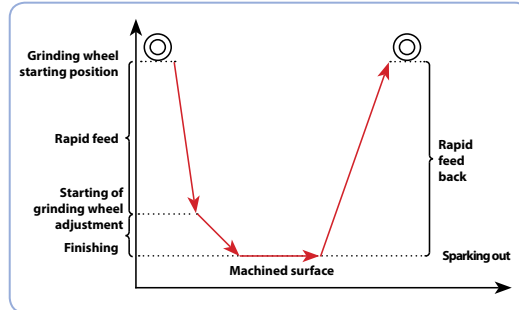
Vertical adjustment	
Automatic adjustment, vertical	0,005 / 0,01 / 0,02 / 0,03 / 0,04 / 0,05 mm
Rapid feed, vertical	480 mm/min
Adjustment per handwheel rotation	2 mm/rev.
Scale division on handwheel	0,005 mm
Motor power of sanding spindle	2,2 kW
Spindle speed	2850 rpm
Motor power of hydraulic pump	0,75 kW
Motor power of vertical feed	0,5 kW
Length	2160 mm
Depth	1650 mm
Height	1840 mm
Weight approx.	1640 kg
Art. no.	05-1445B

The hydraulic surface grinding machine BSG 2040 PLC features an extensive range of standard equipment eg. computer automated vertical feed, parallel dresser with micrometre setting, magnetic clamping plate with demagnetization device and 2-axis digital readout.

BSG 2040 PLC



Manual parallel dressing device features micrometric adjustment as standard.



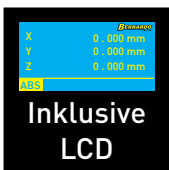
Automatic central lubrication for all guide rails and spindles.



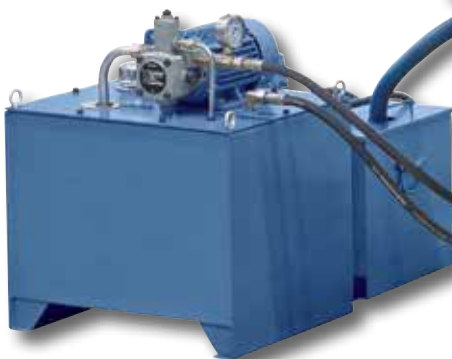
2-axis digital readout with LCD-display comes standard

Electronic vertical adjustment

Inclusvie Siemens SPC (PLC) - control



Inklusive LCD



Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Siemens SMART-panel IE V3 with touch screen
- Electronic handwheel
- Grinding wheel
- Flange
- LED machine light
- Magnetic clamping plate
- Balancing stand
- Balancing arbor
- Parallel dresser
- Protective covers
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Tools



Optional accessories:

- Flange
- Dust suction with coolant system and magnetic separator
- Dust suction with coolant system and paper filter
- Dust suction with coolant system, magnetic separator and paper filter
- Precision tool maker vise QGG 50
- Universal coolant fluid MN 1103, 5 l canister

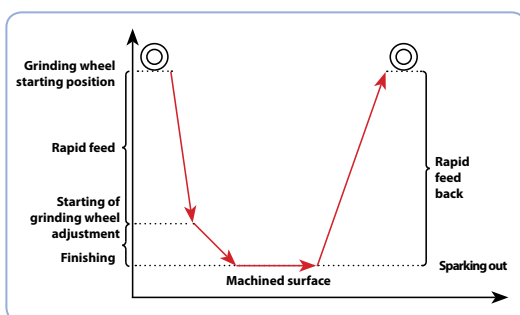
Art. no.	excl. VAT
05-1462	
05-1465	
05-1467	
05-1469	
28-6005	
54-1206	

Hydraulic surface grinding machines with digital readout

- Plastic-coated counter guide in x- and y-axis assure a low slip-stick-effect
- V-flat longitudinal table guide, double-V cross table guide
- Spindle features axial and radial, clearance-free, pre-tensioned bearings
- Separate hydraulic unit with heat exchanger to omit vibrations and thermal load (BSG 3060 PLC)
- Special hydraulic system guarantees gentle table adjustment even at full load
- Solidly constructed and well supported structure assures high stability
- Digitally controlled, automatic vertical feed with servo motor
- Infeed via rapid feed to height of workpiece, adjustable to finishing and sparking, automatic lift at program end
- Adjustable longitudinal and cross table movement via end stops



Including cable guiding by energy chain



Manual parallel dresser comes standard



Clearly arranged control elements at the tiltable control panel

2-axis digital readout for y- and z-axis

Hydraulic longitudinal travel of table

Technical data	BSG 2550 PLC	BSG 3060 PLC
Table dimensions	250 x 510 mm	305 x 635 mm
T-slot quantity / width	1 / 14 mm	3 / 14 mm
Electric magnet clamping plate	250 x 500 mm	300 x 600 mm
Max. travel, longitudinal	560 mm	765 mm
Max. travel, cross	275 mm	340 mm
Max. distance spindle / table	450 mm	580 mm
Max. workpiece weight*	180 kg	270 kg
Grinding wheel	200 x 20 x 31,75 mm	350 x 40 x 127 mm
Table speed, hydraulic	5 - 25 m/min	5 - 25 m/min
Cross adjustment		
Automatic adjustment, cross	0,5 - 8 mm/Stroke	0,5 - 8 mm/Stroke
Rapid feed, cross	990 mm/min	990 mm/min
Adjustment per handwheel rotation	4 mm/rev.	5 mm/rev.
Scale division on handwheel	0,02 mm	0,02 mm
Vertical adjustment		
Automatic adjustment, vertical	0,005 / 0,01 / 0,02 / 0,03 / 0,04 / 0,05 mm	0,005 / 0,01 / 0,02 / 0,03 / 0,04 / 0,05 mm
Rapid feed, vertical	480 mm/min	480 mm/min
Adjustment per handwheel rotation	2 mm/rev.	2 mm/rev.
Scale division on handwheel	0,005 mm	0,005 mm
Motor power of sanding spindle	2,2 kW	4,0 kW
Spindle speed	2850 rpm	1450 rpm
Motor power of hydraulic pump	0,75 kW	2,2 kW
Motor power of vertical feed	0,5 kW	0,5 kW
Length	1900 mm	2350 mm
Depth	2050 mm	2220 mm
Height	1840 mm	1910 mm
Weight approx.	1750 kg	2375 kg
Art. no.	05-1446B	05-1447B
Price excl. VAT		

* with magnet clamping plate



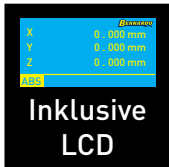
The spindle features pre-tensioned bearings to ensure high accuracy and a smooth run.

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Siemens SMART-panel IE V3 with touch screen
- Electronic handwheel
- Grinding wheel
- Flange
- LED machine light
- Magnetic clamping plate
- Balancing stand
- Balancing arbor
- Parallel dresser
- Protective covers
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Tools

The BSG-series are solidly-built surface grinding machines, featuring automatic vertical feed. All main parts, like stand, base and apron are made of high-quality grey cast iron. The wide range of accessories make these models very cost-effective for tool and die making.

BSG 2550 PLC BSG 3060 PLC



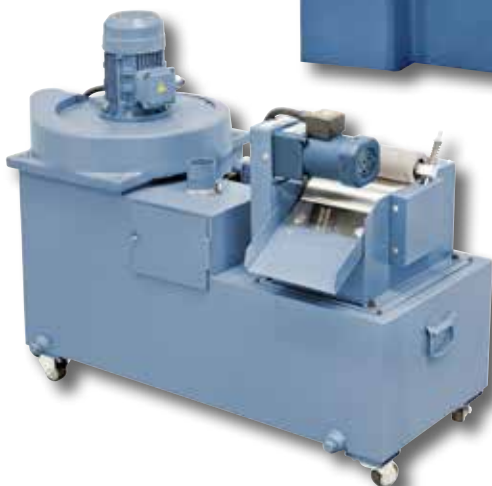
Electronic vertical adjustment

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Automatic central lubrication for all guide rails and spindles.



Inclusvie Siemens SPC (PLC) - control



Coolant device with extractor and magnetic separator are optionally available.

Optional accessories:

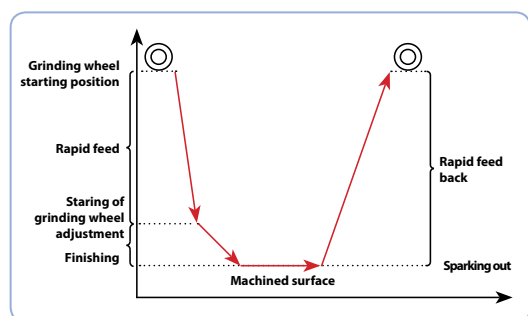
Flange for BSG 2550 TDC	Art. no.	excl. VAT
Flange for für BSG 3060 TDC	05-1462	
Dust suction with coolant system and magnetic separator	05-1463	
Dust suction with coolant system and paper filter	05-1465	
Dust suction with coolant system, magnetic separator and paper filter	05-1467	
Precision tool maker vise QGG 73	05-1469	
Precision angle vise QKJ 100	28-6006	
Universal coolant fluid MN 1103, 5 l canister	28-6012	
	54-1206	

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Hydraulic surface grinding machines with digital readout

- Separate hydraulic unit with heat exchanger eliminates vibrations and thermal strain
- Hardened and polished table guides cross and longitudinal. Durcite- B coated counter guides ensure high rigidity and low friction
- Longitudinal table guide V-flat, cross table guide double V
- Computer automated feed via rapid feed to workpiece height, adjustable roughing and surface finishing stroke, automatic return into start position at end of program
- Axial and radial bearings in grinding spindle are clamped clearance free
- Annealed machine base guarantees high accuracy
- Strong reinforcements and thick walls ensure rigidity
- Digital automatic vertical feed features servo motor
- End stops allow adjustable longitudinal and cross travel
- State of the art hydraulic system guarantees soft table traverse even at high work load



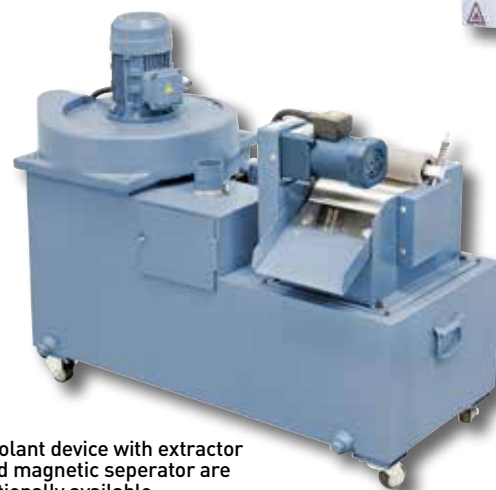
Siemens SMART-Panel IE V3 with touch-screen and electronic handwheel

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Electronic vertical adjustment

Technical data	BSG 4080 PLC	BSG 40100 PLC
Table dimensions	405 x 815 mm	405 x 1020 mm
T-slot quantity / width	3 / 14 mm	3 / 14 mm
Electric magnet clamping plate	400 x 800 mm	400 x 1000 mm
Max. travel, longitudinal	900 mm	1130 mm
Max. travel, cross	450 mm	450 mm
Max. distance spindle / table	580 mm	580 mm
Max. workpiece weight	500 kg	600 kg
Grinding wheel	350 x 40 x 127 mm	350 x 40 x 127 mm
Table speed, hydraulic	5 - 25 m/min	5 - 25 m/min
Cross adjustment		
Automatic adjustment, cross	0,5 - 8 mm/Stroke	0,5 - 8 mm/Stroke
Rapid feed, cross	990 mm/min	990 mm/min
Adjustment per handwheel rotation	5 mm/rev.	5 mm/rev.
Scale division on handwheel	0,02 mm	0,02 mm
Vertical adjustment		
Automatic adjustment, vertical	0,005 / 0,01 / 0,02 / 0,03 / 0,04 / 0,05 mm	0,005 / 0,01 / 0,02 / 0,03 / 0,04 / 0,05 mm
Rapid feed, vertical	480 mm/min	480 mm/min
Adjustment per handwheel rotation	2 mm/rev.	2 mm/rev.
Scale division on handwheel	0,005 mm	0,005 mm
Motor power of sanding spindle	4,0 kW	4,0 kW
Spindle speed	1450 rpm	1450 rpm
Motor power of hydraulic pump	2,2 kW	2,2 kW
Motor power of vertical feed	0,5 kW	0,5 kW
Length	2650 mm	3100 mm
Depth	2200 mm	2200 mm
Height	1900 mm	1900 mm
Weight approx.	3400 kg	3700 kg
Art. no.	05-1448B	05-1449B
Price excl. VAT		

* with magnet clamping plate



Coolant device with extractor and magnetic separator are optionally available.

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Siemens SMART-panel IE V3 with touch screen
- Electronic handwheel
- Grinding wheel
- Flange
- LED machine light
- Magnetic clamping plate
- Balancing stand
- Balancing arbor
- Parallel dresser
- Protective covers
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Tools

The BSG 4080 PLC and BSG 40100 PLC are suitable models for processing of workpieces up to 500 or 600 kg and a grinding surface up to 900 x 450 or 1130 x 450 mm. The extensive range of standard equipment ensures optimal performance e.g. Computer automated vertical feed, parallel dresser with micrometre setting, magnetic clamping plate with demagnetization device and 2-axis digital readout.

BSG 4080 PLC BSG 40100 PLC

Accuracy
according DIN 8632

Hydraulic longitudinal
travel of table

2-axis digital readout
with LCD-display

Inclusvie Siemens
SPC (PLC) - control



Manual parallel dressing device
features micrometric
adjustment as standard.



Central lubrication
for all guide ways and
spindles.

Optional accessories:

Flange for BSG 4080 TDC / BSG 40100 TDC
Dust suction with coolant system and magnetic separator
Dust suction with coolant system and paper filter
Dust suction with coolant system, magnetic separator and paper filter
Precision tool maker vise QGG 73
Precision angle vise QKJ 100
Universal coolant fluid MN 1103, 5 l canister

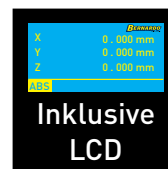
Art. no.	excl. VAT
05-1463	
05-1465	
05-1467	
05-1469	
28-6006	
28-6012	
54-1206	

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Hydraulic surface grinding machines with digital readout

- Hardened and polished table guides cross and longitudinal. Durcite- B coated counter guides ensure high rigidity and low friction
- Longitudinal and cross movement takes place via V-flat guiding
- Computer automated feed via rapid feed to workpiece height, adjustable roughing and surface finishing stroke, automatic return into start position at end of program
- Axial and radial bearings in grinding spindle are clamped clearance free
- Annealed machine base guarantees high accuracy
- Strong reinforcements and thick walls ensure rigidity
- End stops allow adjustable longitudinal and cross travel
- State of the art hydraulic system guarantees soft table traverse even at high work load
- Including Siemens PLC-control for programming simple sanding cycles via touchscreen



Inklusive
LCD



Including Siemens SMART-Panel IE V3 with touchscreen and electronic handwheel

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Inklusive Siemens
SPC (PLC) - control

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Siemens SMART-panel IE V3 with touch screen
- Electronic handwheel
- Grinding wheel
- Flange
- LED working light
- Magnetic clamping plate
- Balancing stand
- Balancing arbor
- Protective covers
- Parallel dresser
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Hydraulik oil cooler
- Tools

Technical data	BSG 50100 PLC	BSG 50160 PLC
Table dimensions	500 x 1100 mm	500 x 1600 mm
T-slot quantity / width	3 / 18 mm	3 / 18 mm
Electric magnet clamping plate	500 x 1000 mm	500 x 800 mm (2 pcs.)
Max. travel, longitudinal	1150 mm	1700 mm
Max. travel, cross	560 mm	560 mm
Max. distance spindle / table	600 mm	600 mm
Max. workpiece weight	700 kg	900 kg
Grinding wheel	350 x 50 x 127 mm	350 x 50 x 127 mm
Table speed, hydraulic	5 - 25 m/min	5 - 25 m/min
Cross adjustment		
Automatic adjustment, cross	0,5 - 30 mm/stroke	0,5 - 30 mm/stroke
Rapid feed, cross	0 - 600 mm/min	50 - 600 m/min
Vertical adjustment		
Automatic adjustment, vertical	0,005 / 0,01 / 0,015 / 0,02 / 0,03 / 0,04 mm	0,005 / 0,01 / 0,015 / 0,02 / 0,03 / 0,04 mm
Rapid feed, vertical	0 - 300 mm/min	50 - 500 mm/min
Motor power of sanding spindle	7,5 kW	7,5 kW
Spindle speed	1440 rpm	1450 rpm
Motor power of hydraulic pump	3,0 kW	3,0 kW
Total connected load	13,2 kW	13,2 kW
Length	3880 mm	5640 mm
Depth	2150 mm	2250 mm
Height	2420 mm	2500 mm
Weight approx.	5500 kg	6000 kg
Art. no.	05-1450XL	05-1452XL
Price excl. VAT		

* with magnet clamping plate



Individual hydraulic unit with oil cooling eliminates vibrations and thermal strain on the machine frame.

These models are suitable models for processing of workpieces up to 700 or 900 kg and a grinding surface up to 1150 x 560 or 1700 x 560 mm. The extensive range of standard equipment ensures optimal performance e.g. Computer automated vertical feed, parallel dresser with micrometre setting, magnetic clamping plate with demagnetization device and 2-axis digital readout.

BSG 50100 PLC BSG 50160 PLC

Manual parallel dressing device features micrometric adjustment as standard.

Serially with 2-axis-digital readout with LCD-display



2-axis digital readout for y- and z-axis

Optional accessories:

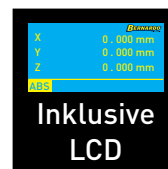
	Art. no.	excl. VAT
Flange	05-1464	
Dust suction with coolant system and magnetic separator	05-1466	
Dust suction with coolant system and paper filter	05-1468	
Dust suction with coolant system, magnetic separator and paper filter	05-1470	
Universal coolant fluid MN 1103, 5 l canister	54-1206	



Coolant device with extractor, magnetic separator and paper filter are optionally available.

Hydraulic surface grinding machines with digital readout

- Hardened and polished table guides cross and longitudinal. Durcite- B coated counter guides ensure high rigidity and low friction
- Longitudinal and cross movement takes place via V-flat guiding
- Computer automated feed via rapid feed to workpiece height, adjustable roughing and surface finishing stroke, automatic return into start position at end of program
- Axial and radial bearings in grinding spindle are clamped clearance free
- Annealed machine base guarantees high accuracy
- Strong reinforcements and thick walls ensure rigidity
- End stops allow adjustable longitudinal and cross travel
- State of the art hydraulic system guarantees soft table traverse even at high work load
- Including Siemens PLC-control for programming simple sanding cycles via touchscreen



Inklusive
LCD



Including Siemens SMART-Panel IE V3 with touchscreen and electronic handwheel



Coolant device with extractor, magnetic separator and paper filter are optionally available.



Technical data	BSG 60120 PLC	BSG 60160 PLC	BSG 60220 PLC
Table dimensions	600 x 1200 mm	600 x 1600 mm	600 x 2200 mm
T-slot quantity / width	3 / 18 mm	3 / 18 mm	3 / 18 mm
Electric magnet clamping plate	600 x 1200 mm	600 x 800 mm (2 pcs.)	600 x 1000 mm (2 pcs.)
Max. travel, longitudinal	1520 mm	1750 mm	2350 mm
Max. travel, cross	660 mm	660 mm	660 mm
Max. distance spindle / table	600 mm	600 mm	600 mm
Max. workpiece weight	970 kg	1300 kg	1700 kg
Grinding wheel	350 x 50 x 127 mm	350 x 50 x 127 mm	350 x 50 x 127 mm
Table speed, hydraulic	5 - 25 m/min	5 - 25 m/min	5 - 25 m/min
Cross adjustment			
Automatic adjustment, cross	0,5 - 30 mm/stroke	0,5 - 20 mm/stroke	0,5 - 20 mm/stroke
Rapid feed, cross	50 - 600 m/min	50 - 600 m/min	50 - 600 m/min
Vertical adjustment			
Automatic adjustment, vertical	0,005 / 0,01 / 0,015 / 0,02 / 0,03 / 0,04 mm	0,005 / 0,01 / 0,015 / 0,02 / 0,03 / 0,04 mm	0,005 / 0,01 / 0,015 / 0,02 / 0,03 / 0,04 mm
Rapid feed, vertical	0 - 300 mm/min	50 - 500 mm/min	50 - 500 mm/min
Motor power of sanding spindle	7,5 kW	7,5 kW	7,5 kW
Spindle speed	1440 rpm	1450 rpm	1450 rpm
Motor power of hydraulic pump	5,5 kW	5,5 kW	5,5 kW
Total connected load	18 kW	18 kW	18 kW
Length	4800 mm	5500 mm	6600 mm
Depth	2750 mm	2750 mm	2750 mm
Height	2420 mm	2700 mm	2700 mm
Weight approx.	6500 kg	7000 kg	8000 kg
Art. no.	05-1451XL	05-1453XL	05-1454XL
Price excl. VAT			

* with magnet clamping plate

Standard accessories:

- 2-axis digital readout ES-12 H with LCD-display
- Siemens SMART-panel IE V3 with touch screen
- Electronic handwheel
- Grinding wheel
- Flange
- LED working light
- Magnetic clamping plate
- Balancing stand
- Balancing arbor
- Protective covers
- Parallel dresser
- Demagnetization device
- Coolant device
- Dressing diamond
- Machine feet
- Central lubrication
- Hydraulik oil cooler
- Tools

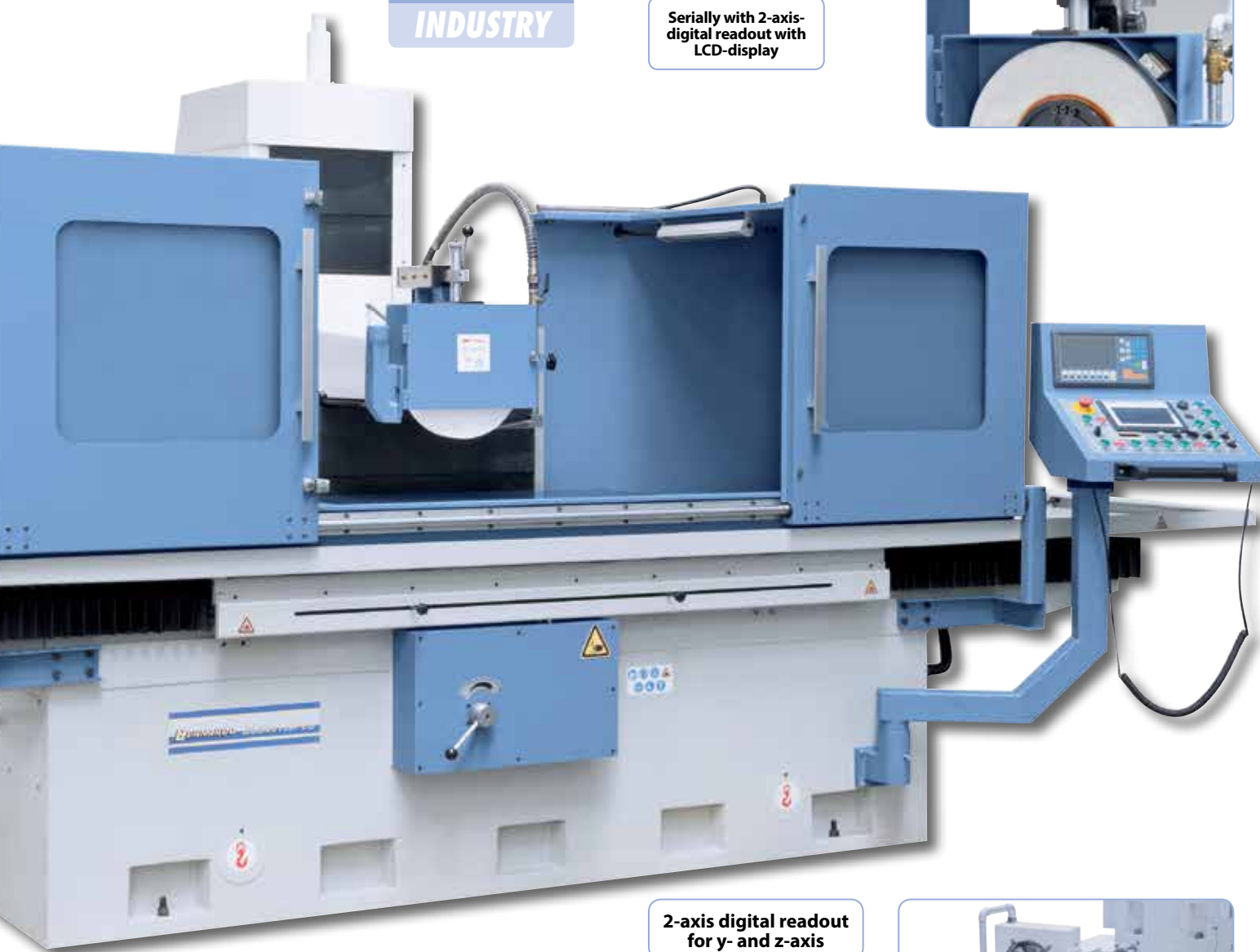
BSG 60120 PLC / BSG 60160 PLC BSG 60220 PLC

Inclusie Siemens
SPC (PLC) - control

Manual parallel dressing device features
micrometric adjustment as standard.

BERNARDO
INDUSTRY

Serially with 2-axis-
digital readout with
LCD-display



2-axis digital readout
for y- and z-axis

BSG 80160 PLC
Grinding surface 1800 x 910 mm
see www.bernardo.at

Optional accessories:

Flange	05-1464
Dust suction with coolant system and magnetic separator	05-1466
Dust suction with coolant system and paper filter	05-1468
Dust suction with coolant system, magnetic separator and paper filter	05-1470
Universal coolant fluid MN 1103, 5 l canister	54-1206

Art. no. excl. VAT

05-1464

05-1466

05-1468

05-1470

54-1206



Individual hydraulic unit with oil cooling
eliminates vibrations and thermal strain
on the machine frame.

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Accessories sanding and polishing machines

Fabric sanding belts (brown)



Universal in use, this sanding belt consists of electro corundum for grinding and deburring of steel plates, aluminium, cast parts, non-ferrous metals, plywood, soft and hard woods.

Long service life and performance guarantee high efficiency.



Art.no.	Description	excl. VAT
11-2116A	685 x 50 mm - Grit 60 (10 pcs.)	
11-2116	685 x 50 mm - Grit 80 (10 pcs.)	
11-2117	685 x 50 mm - Grit 100 (10 pcs.)	
11-2117A	685 x 50 mm - Grit 120 (10 pcs.)	
11-2118	685 x 50 mm - Grit 150 (10 pcs.)	
11-2119	685 x 50 mm - Grit 180 (10 pcs.)	
11-2119A	Set 685x50 mm - G 60/80/100/120/150/180 (each 2 pcs.)	
49-0970	762 x 75 mm - Grit 60 (10 pcs.)	
49-0971	762 x 75 mm - Grit 80 (10 pcs.)	
49-0972	762 x 75 mm - Grit 100 (10 pcs.)	
49-0973	762 x 75 mm - Grit 120 (10 pcs.)	
49-0974	762 x 75 mm - Grit 150 (10 pcs.)	
49-0975	762 x 75 mm - Grit 180 (10 pcs.)	
49-0976	Set 762x75 mm - G 60/80/100/120/150/180 (each 2 pcs.)	
49-0980	1016 x 75 mm - Grit 60 (10 pcs.)	
49-0981	1016 x 75 mm - Grit 80 (10 pcs.)	
49-0982	1016 x 75 mm - Grit 100 (10 pcs.)	
49-0983	1016 x 75 mm - Grit 120 (10 pcs.)	
49-0984	1016 x 75 mm - Grit 150 (10 pcs.)	
49-0985	1016 x 75 mm - Grit 180 (10 pcs.)	
49-0986	Set 1016x75 mm-G60/80/100/120/150/180 (each 2 pcs.)	
49-0964	1180 x 75 mm - Grit 40 (10 pcs.)	
49-0965	1180 x 75 mm - Grit 60 (10 pcs.)	
49-0966	1180 x 75 mm - Grit 80 (10 pcs.)	
49-0967	1180 x 75 mm - Grit 100 (10 pcs.)	
49-0968	1180 x 75 mm - Grit 120 (10 pcs.)	
49-0969	Set 1180x75 mm-G40/60/80/100/120 (each 2 pcs.)	
49-1011A	1220 x 100 mm - Grit 40 (10 pcs.)	
49-1011	1220 x 100 mm - Grit 60 (10 pcs.)	
49-1012	1220 x 100 mm - Grit 80 (10 pcs.)	
49-1013	1220 x 100 mm - Grit 100 (10 pcs.)	
49-1013A	1220 x 100 mm - Grit 120 (10 pcs.)	
49-1014	Set 1220 x 100 mm - G40/60/80/100/120 (each 2 pcs.)	

Art.no.	Description	excl. VAT
49-1057	1500 x 75 mm - Grit 40 (10 pcs.)	
49-1058	1500 x 75 mm - Grit 60 (10 pcs.)	
49-1059	1500 x 75 mm - Grit 80 (10 pcs.)	
49-1060	1500 x 75 mm - Grit 100 (10 pcs.)	
49-1061	1500 x 75 mm - Grit 120 (10 pcs.)	
49-1062	1500 x 75 mm - Grit 40/60/80/100/120 (each 2 pcs.)	
49-1051	2000 x 50 mm - Grit 40 (10 pcs.)	
49-1052	2000 x 50 mm - Grit 60 (10 pcs.)	
49-1053	2000 x 50 mm - Grit 80 (10 pcs.)	
49-1054	2000 x 50 mm - Grit 100 (10 pcs.)	
49-1055	2000 x 50 mm - Grit 120 (10 pcs.)	
49-1055A	2000 x 50 mm - Grit 150 (10 pcs.)	
49-1055B	2000 x 50 mm - Grit 180 (10 pcs.)	
49-1056	Set 2000x50 mm-G40/60/80/100/120/150/180 (each 2 pcs.)	
49-1020	2000 x 75 mm - Grit 40 (10 pcs.)	
49-1021	2000 x 75 mm - Grit 60 (10 pcs.)	
49-1022	2000 x 75 mm - Grit 80 (10 pcs.)	
49-1023	2000 x 75 mm - Grit 100 (10 pcs.)	
49-1024	2000 x 75 mm - Grit 120 (10 pcs.)	
49-1024A	Set 2000 x 75 mm - G40/60/80/100/120 (each 2 pcs.)	
49-1025	2000 x 150 mm - Grit 40 (10 pcs.)	
49-1026	2000 x 150 mm - Grit 60 (10 pcs.)	
49-1027	2000 x 150 mm - Grit 80 (10 pcs.)	
49-1028	2000 x 150 mm - Grit 100 (10 pcs.)	
49-1029	2000 x 150 mm - Grit 120 (10 pcs.)	
49-1030	Set 2000 x 150 mm - G 40/60/80/100/120 (each 2 pcs.)	

Accessories sanding and polishing machines

Fabric sanding belts (blue)



Suitable particularly for grinding of hard materials such as stainless steel and high alloy steel.

Unique features of this belt are its short processing times, high performance and the incredibly long service life.

The additional coating reduces heat generation during the grinding process.



Art.no.	Description	excl. VAT
49-1039	2000 x 100 mm - Grit 40 (10 pcs.)	
49-1040	2000 x 100 mm - Grit 60 (10 pcs.)	
49-1041	2000 x 100 mm - Grit 80 (10 pcs.)	

Art.no.	Description	excl. VAT
49-1042	2000 x 100 mm - Grit 100 (10 pcs.)	
49-1043	2000 x 100 mm - Grit 120 (10 pcs.)	
49-1044	Set 2000 x 100 mm - G40/60 /80/100/120 (each 2 pcs.)	

Surface conditioning belts



Surface conditioning belts are very flexible and universal in use.

Suitable for polishing, sanding and preparation of oxidized and lacquer painted surfaces of various materials as well as refining of metal, wooden, painted or plastic surfaces.



49-1017	Surface conditioning belt 2000 x 75 mm, rough
49-1018	Surface conditioning belt 2000 x 75 mm, medium
49-1019	Surface conditioning belt 2000 x 75 mm, fine
49-1031	Surface conditioning belt 2000 x 150 mm, rough
49-1032	Surface conditioning belt 2000 x 150 mm, medium
49-1033	Surface conditioning belt 2000 x 150 mm, fine
49-1036	Surface conditioning belt 2000 x 100 mm, rough
49-1037	Surface conditioning belt 2000 x 100 mm, medium

49-1038	Surface conditioning belt 2000 x 100 mm, fine
49-1142	Surface conditioning belt 40 x 620 mm, rough (5 pcs.)
49-1143	Surface conditioning belt 40 x 620 mm, medium (5 pcs.)
49-1144	Surface conditioning belt 40 x 620 mm, fine (5 pcs.)
49-1155	Surface conditioning belt 40 x 760 mm, rough (5 pcs.)
49-1156	Surface conditioning belt 40 x 760 mm, medium (5 pcs.)
49-1157	Surface conditioning belt 40 x 760 mm, fine (5 pcs.)

Belt cleaner



Cleaning sanding belts makes increases service life significantly (up to 400%).

Used sanding belts can be cleaned which increases the quality and the evenness of the sanding result and ensures high efficiency.



11-2175 Belt cleaner

Velcro fastener



Velcro fastener on the rear is self-adhesive and stuck onto the disc of the grinding machine, allowing quick changeovers between various grits of abrasives.

Velcro disc is suitable for most commercial sanding machines.



11-2132	Velcro fastener diam. 150 mm
11-2131A	Velcro fastener diam. 250 mm
11-2131	Velcro fastener diam. 300 mm

Accessories sanding and polishing machines

Sanding discs



Universal in use for sanding and deburring of steel, aluminium, non-ferrous metals, wood and plastics.

Discs vary in diameters of 150 mm, 250 mm and 300 mm and come complete with practical velcro fastener to allow for extra fast disc change without requiring glue.

Art. no.	Description	excl. VAT
11-2121A	diam. 150 mm - Grit 60 (10 pcs.), velcro fastener	
11-2122A	diam. 150 mm - Grit 80 (10 pcs.), velcro fastener	
11-2120A	diam. 150 mm - Grit 100 (10 pcs.), velcro fastener	
11-2123A	diam. 150 mm - Grit 120 (10 pcs.), velcro fastener	
11-2124A	diam. 150 mm - Grit 150 (10 pcs.), velcro fastener	
11-2124B	Set diam. 150 mm - Grit 60 / 80 / 100 / 120 / 150 (each 2 pcs.), velcro fastener	
11-2200A	diam. 230 mm - Grit 60 (10 pcs.), self-adhesive	
11-2091A	diam. 230 mm - Grit 80 (10 pcs.), self-adhesive	
11-2092A	diam. 230 mm - Grit 100 (10 pcs.), self-adhesive	
11-2093A	diam. 230 mm - Grit 120 (10 pcs.), self-adhesive	
11-2201A	diam. 230 mm - Grit 150 (10 pcs.), self-adhesive	
11-2214	Set diam. 230 mm - Grit 60 / 80 / 100 / 120 / 150 (each 2 pcs.), self-adhesive	
11-2202	diam. 250 mm - Grit 60 (10 pcs.), velcro fastener	
11-2095	diam. 250 mm - Grit 80 (10 pcs.), velcro fastener	
11-2096	diam. 250 mm - Grit 100 (10 pcs.), velcro fastener	
11-2097	diam. 250 mm - Grit 120 (10 pcs.), velcro fastener	
11-2203	diam. 250 mm - Grit 150 (10 pcs.), velcro fastener	
11-2216	Set diam. 250 mm - Grit 60 / 80 / 100 / 120 / 150 (each 2 pcs.), velcro fastener	
11-2206	diam. 300 mm - Grit 60 (10 pcs.), velcro fastener	
11-2101	diam. 300 mm - Grit 80 (10 pcs.), velcro fastener	
11-2102	diam. 300 mm - Grit 100 (10 pcs.), velcro fastener	
11-2103	diam. 300 mm - Grit 120 (10 pcs.), velcro fastener	
11-2207	diam. 300 mm - Grit 150 (10 pcs.), velcro fastener	
11-2218	Set diam. 300 mm - Grit 60 / 80 / 100 / 120 / 150 (each 2 pcs.), velcro fastener	
11-2104	diam. 600 mm - Grit 60 (5 pcs.)	
11-2105	diam. 600 mm - Grit 80 (5 pcs.)	
11-2106	diam. 600 mm - Grit 100 (5 pcs.)	
11-2107	diam. 600 mm - Grit 120 (5 pcs.)	

Grinding wheels



Grit 80

Special corundum grinding wheels are perfect for grinding of HSS steel such as twist drills, chisels, scissors, knives and many more.



Grit 36

Standard corundum grinding wheels are suitable for simple tool grinding operations, for instance knives, flat irons, axes and more made from iron, steel, construction steel, cast steel, and brass.

Art. no.	Description	excl. VAT
05-18020	Sanding disc rough Ø 150 x 25 mm, Ø 32 mm, Grit36	
05-18021	Sanding disc fine Ø 150 x 25 mm, Ø 32 mm, Grit80	
05-1800	Sanding disc rough Ø 150 x 20 mm, Ø 12,70 mm, Grit36	
05-1801	Sanding disc fine Ø 150 x 20 mm, Ø 12,70 mm, Grit80	
05-1810	Sanding disc rough Ø 150 x 25,4 mm, Ø 12,70 mm, Grit36	
05-1811	Sanding disc fine Ø 150 x 25,4 mm, Ø 12,70 mm, Grit80	
05-1816	Sanding disc rough Ø 175 x 25 mm, Ø 32 mm, Grit36	
05-1817	Sanding disc fine Ø 175 x 25 mm, Ø 32 mm, Grit80	
05-1812	Sanding disc rough Ø 200 x 25,4 mm, Ø 15,88 mm, Grit36	
05-1813	Sanding disc fine Ø 200 x 25,4 mm, Ø 15,88 mm, Grit80	
05-1818A	Sanding disc rough Ø 200 x 32 mm, Ø 32 mm, Grit36	
05-1819A	Sanding disc fine Ø 200 x 32 mm, Ø 32 mm, Grit80	
05-1827	Sanding disc rough Ø 200 x 20 mm, Ø 15,88 mm, Grit36	
05-1828	Sanding disc fine Ø 200 x 20 mm, Ø 15,88 mm, Grit80	
05-1808	Sanding disc fine Ø 250 x 12 mm, Ø 50 mm, Grit220	
05-1814	Sanding disc rough Ø 250 x 25,4 mm, Ø 20 mm, Grit36	
05-1815	Sanding disc fine Ø 250 x 25,4 mm, Ø 20 mm, Grit80	
05-1820	Sanding disc rough Ø 250 x 32 mm, Ø 32 mm, Grit36	
05-1821	Sanding disc fine Ø 250 x 32 mm, Ø 32 mm, Grit80	
05-1822A	Sanding disc rough Ø 300 x 50 mm, Ø 75 mm, Grit36	
05-1823A	Sanding disc fine Ø 300 x 50 mm, Ø 75 mm, Grit80	

Steel brush wheels



Steel brush wheels are ideal for treating surfaces such as removing paint, corrosion, dirt etc. Furthermore for roughing, polishing and deburring of workpieces.

The high-quality wire ensure a long life span.

05-1836	Steel brush wheel Ø 150 x 20 mm, Ø 12,7 mm
05-1799	Steel brush wheel Ø 200 x 25 mm, Ø 32 mm

Accessories sanding and polishing machines

Polishing wheels



Most suitable polishing wheel for stainless steel, steel, aluminium, brass, plastics and wood. Thickness of wheel can be determined by the type of application, simply by omitting single layers.

Art. no.	Description	excl. VAT
05-1838	Polishing wheel stepped Ø 150 x 20 mm, Ø 12,7 mm	
05-1840	Polishing wheel soft, 200 x 20 mm, Ø 16 mm	
05-1841	Polishing wheel stepped, 200 x 20 mm, Ø 16 mm	
05-1842	Polishing wheel soft, 250 x 25 mm, Ø 20 mm	
05-1843	Polishing wheel stepped, 250 x 25 mm, Ø 20 mm	
05-1844	Polishing wheel soft, 350 x 40 mm, Ø 16 mm	
05-1845	Polishing wheel stepped, 350 x 40 mm, Ø 16 mm	
05-1848	Polishing wheel soft, Ø 300 x 30 mm, Ø 35 mm	
05-1849	Polishing wheel stepped, Ø 300 x 30 mm, Ø 35 mm	

PRE-POLISHING	POLISHING	VARNISHING
for e.g. remove scratches:	for main polish:	for high gloss:
Sisal-cord green for stainless steel, Sisal-nettle for aluminium, brass, non-ferrous metal	Nettle stepped for all metals, nettle loose (the thickness of the wheel can even be determine)	Molleton stepped, Molleton loose (the thickness of the wheel can even be determine)



Hard polishing wheel is ideal for pre-polishing and for processing of rough surfaces and scratched workpieces.

05-1850	Sisal-Nettle-polishing wheel Ø 200 x 20 mm, Ø 16 mm
05-1870	Sisal-Nettle-polishing wheel Ø 250 x 25 mm, Ø 20 mm
05-1890	Sisal-Nettle-polishing wheel Ø 350 x 25 mm, Ø 16 mm



Excellent for pre-polishing of stainless steel, deep immersion is ideal for angles, corners, corrugated panels and parts of different shapes.

05-1851	Sisal-cord green Ø 200 x 20 mm, Ø 16 mm
05-1871	Sisal-cord green Ø 250 x 25 mm, Ø 20 mm
05-1891	Sisal-cord green Ø 350 x 25 mm, Ø 16 mm



Suitable for polishing of stainless steel, steel, aluminium and brass. Top quality German production ensures long service life.

05-1853	Nettle-polishing wheel stepped Ø 200 x 20 mm, Ø 16 mm
05-1873	Nettle-polishing wheel stepped Ø 250 x 25 mm, Ø 20 mm
05-1893	Nettle-polishing wheel stepped Ø 350 x 25 mm, Ø 16 mm



Softer polishing wheels are suitable for achieving high-gloss finish, wheels are not sewn together so the thickness can be varied depending on the type of use. High-quality manufacturing guarantees long service-life.

05-1854	Molleton-polishing wheel loose Ø 200 x 20 mm, Ø 16 mm
05-1874	Molleton-polishing wheel loose Ø 250 x 25 mm, Ø 20 mm
05-1894	Molleton-polishing wheel loose Ø 350 x 25 mm, Ø 16 mm



Soft buffing wheel for stationary machines for high-gloss polishes stainless steel, steel, aluminium, non-ferrous metals, plastics and wood.

05-1855	Molleton-polishing wheel stepped Ø 200 x 20 mm, Ø 16 mm
05-1875	Molleton-polishing wheel stepped Ø 250 x 25 mm, Ø 20 mm
05-1895	Molleton-polishing wheel stepped Ø 350 x 25 mm, Ø 16 mm

Accessories sanding and polishing machines

Polish paste

Pre-polishing paste ABRA

ABRA is a grinding and brushing paste for matting and glazing of several metals. Often these pastes contain electro corundum, a particularly resistant grain which can be obtained by melting bauxite in an electric arc at 2000° C.



Colour: black
Grit: 10
(10 = strong, 1 = mild)
Fat content: dry
Weight: approx. 1000 g

Description:
Strong matting paste with coarse grain for aggressive pre-polishing of steel and stainless steel. Paste is perfectly suitable for matting and pre-polishing of aluminium.

Art.no.	Description	excl. VAT
05-1916	Polish Abra 153 (black) f. aluminium	

Polishing paste REKORD

REKORD is used for polishing of non-ferrous metals and contains tripolite, a naturally occurring, soft, siliceous sedimentary rock, suitable as a relatively mild polishing grain for processing of brass and zamac with its delicate coating.



Colour: brown
Grit: 5
(10 = strong, 1 = mild)
Fat content: average
Weight: approx. 800 g

Description:
Classic polishing paste with slightly coarser grain, average fat content, quick to achieve perfect surfaces on non-ferrous metals. (for instance aluminium, copper, brass, magnesium, zinc etc.)
Perfect paste for polishing aluminium alloy wheels.

Art.no.	Description	excl. VAT
05-1917	Polish Rekord 845 (brown) f. aluminium	

Pre-/ Polishing Paste KIESOLIN

The polishing paste KIESOLIN is suitable for various metals and plastics. Re-polishing is usually unnecessary. Offers big choice of applications ranging from mild to very abrasive. Generally, clay (aluminium oxide) is used for this group of articles, which is obtained from bauxite by the Bayer method. The hardness is determined by the temperature which depends on the post annealing process.



Colour: green
Grit: 6
(10 = strong, 1 = mild)
Fat content: high
Weight: approx. 1100 g

Description:
High-gloss grain, extremely good suction to sisal discs, perfectly suitable for pre-polishing of stainless steel and steel

05-1910	Polish Kiesolin 410 (green) f. stainless steel	
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Colour: light brown
Grit: 2 - 3
(10 = strong, 1 = mild)
Fat content: high
Weight: approx. 850 g

Description:
Fine polishing paste, especially for wood and plastics.

05-1926	Polish Kiesolin 327 (light brown) f. wood	
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Colour: red
Grit: 4
(10 = strong, 1 = mild)
Fat content: middle
Weight: approx. 1000 g

Description:
Classic universal paste with medium grain, suitable for all types of metals.

05-1911	Polish Kiesolin 358 (red) f. stainless steel	
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Accessories sanding and polishing machines

Polish paste

High-gloss/ Varnishing paste LUMO

LUMO is a great paste for finishing off the workpiece with a special polishing grain to achieve the most shiny, glossy surfaces.



Colour: blue
Grit: 2
(10 = strong, 1 = mild)
Fat content: low
Weight: approx. 700 g

Description:
The "Classic" is suitable for stainless steel, aluminium, copper, brass and wood. Special ingredients make this paste fat soluble to achieve high gloss on pre-polished pieces.



Colour: light brown
Grit: 1
(10 = strong, 1 = mild)
Fat content: low
Weight: approx. 900 g

Description:
Fine varnishing paste especially for plastics, hard wood and non-ferrous materials.

Art.no.	Description	excl. VAT
05-1923	Polish Lumo 939 (light brown) f. plastic material	

Art.no.	Description	excl. VAT
05-1912	Polish Lumo 934 (blue), universal	

Polishing sets

Polishing set for aluminium

Set consists of:

Polish ABRA 153 (black)
Polish REKORD 845 (brown)
Polish LUMO 934 (blue)
Sisal-Nettle-polishing wheel
Nettle-polishing wheel stepped
Molleton-polishing wheel stepped



05-2000 Polishing set for aluminium Ø 200 x 20 mm, Ø 16 mm, 6-pcs.

05-2001 Polishing set for aluminium Ø 250 x 25 mm, Ø 20 mm, 6-pcs.

05-2002 Polishing set for aluminium Ø 350 x 25 mm, Ø 16 mm, 6-pcs.

Polishing set for plastic

Set consists of:

Polish REKORD 845 (brown)
Polish Lumo 939 (light brown)
Nettle-polishing wheel loose
Molleton-polishing wheel loose



05-2020 Polishing set for plastic Ø 200 x 20 mm, Ø 16 mm, 4-pcs.

05-2021 Polishing set for plastic Ø 250 x 25 mm, Ø 20 mm, 4-pcs.

05-2022 Polishing set for plastic Ø 350 x 25 mm, Ø 16 mm, 4-pcs.

Polishing set for stainless steel

Set consists of:

Polish Kiesolin 410 (green)
Polish Kiesolin 358 (red)
Polish Lumo 934 (blue)
Sisal-cord green
Nettle-polishing wheel stepped
Molleton-polishing wheel stepped



05-2010 Polishing set f. stainless steel Ø 200 x 20 mm, Ø 16 mm, 6-pcs.

05-2011 Polishing set f. stainless steel Ø 250 x 25 mm, Ø 20 mm, 6-pcs.

05-2012 Polishing set f. stainless steel Ø 350 x 25 mm, Ø 16 mm, 6-pcs.

Polishing set for wood

Set consists of:

Polish Kiesolin 327 (light brown)
Polish Lumo 934 (blue)
Nettle-polishing wheel loose
Molleton-polishing wheel loose



05-2030 Polishing set for wood Ø 200 x 20 mm, Ø 16 mm, 4-pcs.

05-2031 Polishing set for wood Ø 250 x 25 mm, Ø 20 mm, 4-pcs.

05-2032 Polishing set for wood Ø 350 x 25 mm, Ø 16 mm, 4-pcs.

Console Stands

Modelle F / C / B 1

WH



Picture with optional available machine

Technical data	Model WH	Model F
Supporting area	330 x 300 mm	315 x 250 mm
Height	230 mm	700 - 900
Weight approx.	5 kg	10 kg
Art. no.	56-1049	56-1045
Price excl. VAT		



Description:

- Comes complete with practical water tank to cool processed workpieces
- Console WH – suitable for models up to 250 mm
- Height adjustable from 700 – 900 mm (model F)
- Machine base F in light-weight construction, suitable for machines up to 175 mm



Technical data	Model C	Model B 1
Supporting area	280 x 170 mm	400 x 285 mm
Height	840 mm	810 mm
Weight approx.	12 kg	19 kg
Art. no.	56-1042	56-1041
Price excl. VAT		



Description:

- Stand C features a shelving unit for grinding wheels and a tool compartment as part of the standard accessories
- Model B comes with a large support area, universal in used for bench grinders, combo and disc sanding machines



Technical data

	Model H	Model K	Model G
Supporting area	355 x 210 mm	350 x 330 mm	380 x 240 mm
Height	830 mm	800 mm	790 mm
Weight approx.	14 kg	15 kg	25 kg
Art. no.	56-1048	56-10480	56-1044
Price excl. VAT			

Description:

- Model H in compact construction with coolant fluid tray, recommended for model 200 mm and 250 mm
- Stand G in solid steel plate construction, suitable for models 300 mm and 350 mm
- Complete with coolant fluid tray and lockable tool compartment (model G)



Technical data

	Model D
Capacity	1275 m³/h
Dust extraction outlet inside	2 x 35 mm
Dust extraction outlet outside	2 x 50 mm
Motor power	0,37 kW
Voltage	400 V
Supporting area	400 x 285 mm
Height	810 mm
Weight approx.	50 kg
Art. no.	56-1046
Price excl. VAT	

Description:

- State-of-the-art design – allows for optimal working conditions and clean air at work
- Complete with large chip tray, easy to empty
- Equipped with practical water tank to allow for cooling of processed workpiece

Which stand is suitable for which machine?

	WH	F	C	B1	H	K	G	D
DSA 150	1	1	1	3	3	5	5	5
DSA 200	1	3	1	3	3	3	5	5
DSA 250	1	5	3	1	1	1	3	5
KSA 150	3	1	1	3	3	5	5	5
KSA 200	5	3	1	3	3	3	5	5
KMS 150	3	1	3	3	1	5	5	3
KMS 200 S	5	5	5	1	1	3	3	3
KMS 250	5	5	5	1	3	1	3	5
DS 150 S	1	1	3	3	1	5	5	5
DS 175 S	1	1	3	3	1	5	5	5
DS 200 S	1	5	5	3	1	3	3	5
DS 250 S	1	5	5	1	1	1	3	5
DS 300 S	5	5	5	3	5	3	1	1
KSE 200	1	5	5	3	1	3	3	5
SPM 150	1	1	1	3	3	5	5	5
PS 200 S	1	5	5	1	1	3	3	5
PS 250 S	1	5	5	1	1	1	3	5
PS 350	5	5	5	3	5	3	1	5
TS 250	5	5	5	1	5	5	5	5
TS 300	5	5	5	1	5	5	5	5

1 ... recommended
3 ... limited recommended
5 ... not recommended

Your dealer



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