



ACHTUNG VORSICHT
1. Elektroden entfernen
2. Beim Einstecken der Elektroden
mittels Rändelmutter die
Beschädigung des Antriebs
sicherstellen voll aus
schieben der Seitenver
berohre täglich mit Sp

GRINDING MACHINES

Kaindl®
SCHLEIFTECHNIK

MADE IN GERMANY

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06



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FROM THE EMERY FILE ...

... TO THE CNC-GRINDING MACHINE



It all started at KAINDL with the production of simple emery wheels in the private garage of Reinhold Reiling, who would later found the company. In the early days he only supplied the jewellery and watch industry based in Pforzheim.

After the company was founded in 1972 and his brother Karl Reiling joined, we invented the first usable grinding attachment for drills, the „uni-grinder“. Extremely successful marketing of this tool at trade fairs also presented an opportunity for further dialogue with users. We continually refined and improved our grinding tools by tackling problems systematically.

The first step had been taken to creating our first, simple tool grinding devices. These devices were rapidly honed and finally fitted with their own motor. KAINDL's first drill bit grinder, BSG 20, was complete.

40 years after we were founded, we now offer more than ten different grinding machines and a wealth of innovative tools.

Take a look for yourself on www.kaindl.de, Facebook or YouTube.



KAINDL TODAY...

... AND TOMORROW



We currently employ 49 staff at our Königsbach-Stein plant. Our tools and machines are available in over 30 countries. You can find Kaindl products at all leading technical trade fairs in Germany and abroad.

Visit our homepage for an up-to-date overview:
www.kaindl.de/de/messen-exhibitions



The production plants in Königsbach-Stein were last extended by 700m² in 2008. The buildings were fully modernised in 2012. Our focus here was on sustainability and energy efficiency.

As part of our extensive energy-saving measures, for example the complete lighting system in all our operational premises has been switched to state-of-the-art LED lights. Our efforts have resulted in an energy saving of 18,000 kWh per year. Since the installation of two photovoltaic plants, they have produced more energy than we use. Kaindl's production and administration are therefore both CO₂-neutral.



Precise, simple, solid

Our entry-level model for simply resharpening of twist drills from Ø 2 – 20 mm.

- ✓ grants highest cutting edge symmetry
- ✓ quick and easy handling
- ✓ sharpens twist drills from Ø 2 – 20 mm
- ✓ Special drills: step drills, sheet metal- and wood drills
- ✓ compact construction



Introductory video:

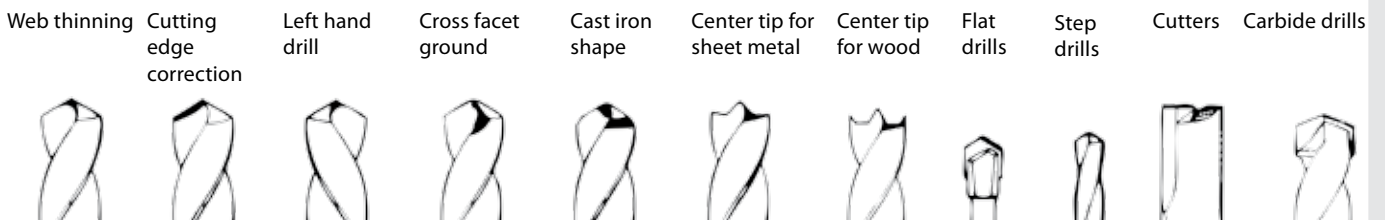


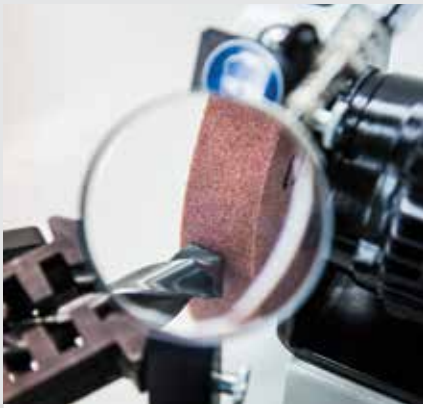
TECHNICAL DATA

Clamping range: Ø 2 to 20 mm
 Corundum wheel: 125 x 20 x 20 x 75 mm
 Motor: 230 V, 50 – 60 Hz, 120 W (also available 110 V, 50 Hz)
 Weight net: 17,4 kg
 Revolutions: 2840 rpm⁻¹
 Clearance- and top angle: to be adjusted stepless
 Dim (L x W x H): 290 x 220 x 250 mm
 Adjustable motor unit

BASIC VERSION

- Corundum wheel Ø 125 mm, grit 80
- Optic with flexible goose neck
- Grinding wheel dresser with diamond
- Granite base slap





Corundum grinding wheel

- Item No. 10535** Grit 60 125 x 20 x 20 mm (coarse)
- Item No. 10529** Grit 80 125 x 20 x 20 mm (standard)
- Item No. 10530** Grit 180 125 x 20 x 20 mm (fine)
- Item No. 10532** Grit 100 125 x 05 x 20 mm (HSS-wood drills)
- Item No. 10533** Grit 100 125 x 10 x 20 mm



Diamond grinding wheel

- Item No. 14580** wide, complete with support 125 mm, covered on 3 sides, D76/3 for carbide drills
- Item No. 14581** thin, complete with support 125 mm, covered on 3 sides, D76/3 for carbide drills
- Item No. 16490** CBN-grinding wheel B76 (standard)
- Item No. 17073** CBN-grinding wheel B126
- Item No. 17556** CBN-grinding wheel B46



Cleaning- and sharpening stone

- Item No. 15855** for diamond grinding wheels



- Item No. 18658** Grinding wheel fixture



Morse taper sleeve

- Item No. 10542** for short MK1 drills
- Item No. 10543** for short MK2 drills



- Item No. 10528** Magnetic depth stop for cutter



Support sleeve for short welding point bits

- Item No. 10900** 5 and 6 mm
- Item No. 10976** 8 and 10 mm

Quick, easy handling

Our model for success for the upper claim for twist drills from Ø 2 – 20 mm. Approved patented prism reversing systems ensures top level cutting edge symmetry!

- ✓ simplest handling
- ✓ sharpens twist drills in the range of Ø 2 – 20 mm
- ✓ clearance- and top angle stepless adjustable
- ✓ web thinning
- ✓ optional: countersink sharpening device SVR 20
- ✓ dimensionally stable CBN grinding wheel



Introductory video:

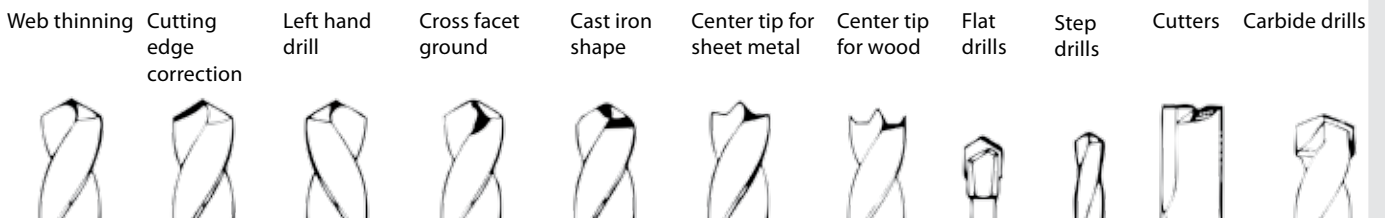


TECHNICAL DATA

Clamping range: Ø 2 to 20 mm
 CBN-grinding wheel: 125 x 20 x 20 x 75 mm
 Motor: 230 V, 50 - 60 Hz, 120 W (also available 110 V, 50 Hz)
 Weight net: 32 kg
 Revolutions: 2840 rpm⁻¹
 Clearance- and top angle: to be adjusted stepless
 Dim (L x W x H): 370 x 310 x 260 mm

BASIC VERSION

- Clamping prism Ø 2 to 20 mm
- Precision optical lens lighted
- CBN-grinding wheel Ø 125 mm B76
- Granite base slap





Corundum grinding wheel

- Item No. 10895** Grit 60 - 125 x 20 x 20 mm (coarse)
- Item No. 10890** Grit 80 - 125 x 20 x 20 mm (standard)
- Item No. 10891** Grit 180 - 125 x 20 x 20 mm (fine)
- Item No. 10893** Grit 100 - 125 x 05 x 20 mm (HSS-wood drills)
- Item No. 11103** Grit 100 - 125 x 10 x 20 mm



Diamond grinding wheel

- Item No. 14580** wide, complete with support 125 mm, coated on 3 sides, D76/3 for carbide drills
- Item No. 14581** thin, complete with support 125 mm, coated on 3 sides, D76/3 for carbide wood drills

- Item No. 16490** CBN-grinding wheel B76 (standard)
- Item No. 17073** CBN-grinding wheel B126
- Item No. 17556** CBN-grinding wheel B46



- Item No. 18658** Grinding wheel fixture



Morse taper sleeves

- Item No. 10901** for short MK 1- drills
- Item No. 10902** for short MK 2- drills



Cleaning- and sharpening stone

- Item No. 15855** for diamond grinding wheels



Support sleeve for short welding point drills

- Item No. 10900** 5 and 6 mm
- Item No. 10976** 8 and 10 mm



- Item No. 10889** Magnetic depth stop for cutters



- Item No. 10881** Can for cross hole countersinks



Countersink sharpening device SVR 20

- Item No. 10875** incl. collet 10 mm



Collet set

- Item No. 14348** for SVR 20 (Ø 6, 8, 12 mm)



Grinding wheel dresser with rotating diamond

- Item No. 10908** only for corundum grinding wheels

- Item No. 12385** Adaptor cable 230 V Schuko / 400 V CEE

- Item No. 10883** Retrofit sharpening center with diamond cup-wheel

The professional machine – Basic version

The professional machine for supreme claims. For drills from Ø 3 – 60 mm. Precise, no servicing, 4 point linear guideways. Spindle system with adjustable needle bearings. Prism quick action system.

- ✓ clamping range from Ø 3 – 40 mm
- ✓ range extension to 60 mm by extra prism
- ✓ clearance- and top angle to be adjusted stepless
- ✓ patented prism reversing system
- ✓ web thinning
- ✓ optional: countersink-and cutter grinding adaptor SZVR (see page. 16)



Introductory video:

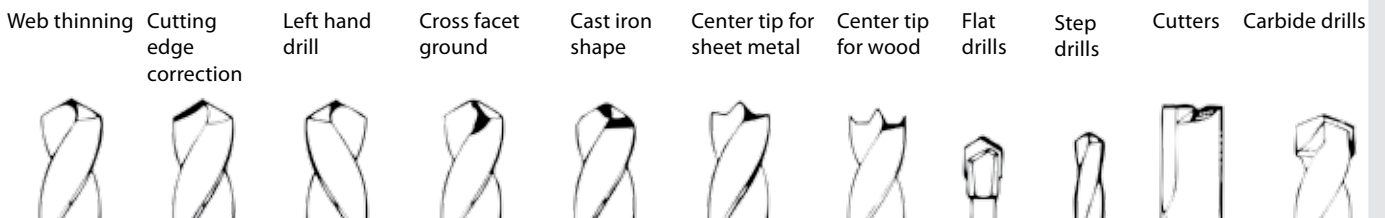


TECHNICAL DATA

Clamping range: Ø 3 to 60 mm
 Corundum grinding wheel: 200 x 40 x 51 mm
 Motor: 230 V, 50 Hz, 0,37 kW (also available in 400 V, 110 V, 60 Hz)
 Revolutions: 2800 rpm⁻¹
 Weight net: 59 kg
 Clearance- and top angle: to be adjusted stepless
 Dim (L x W x H): 570 x 330 x 520 mm

BASIC VERSION

- Prism from Ø 3 to 40 mm
- Corundum grinding wheel Ø 200 mm grit 60
- Precision optical lens lighted
- Grinding wheel dresser with rotating diamond
- Granite base slap





Extra prism

Item No. 10598 Clamping range Ø 20 - 40 mm
Item No. 10602 Clamping range Ø 40 - 60 mm



Diamond grinding wheel

Item No. 10627 Ø 200 mm incl. support

CBN-grinding wheel

Item No. 17480 Ø 200 mm incl. support



Cleaning- and sharpening stone

Item No. 15855 for diamond wheels



Corundum grinding wheel

	Grit 46	Grit 60	Grit 100	Grit 180
200x40x51	Item No. 10612	Item No. 10613	Item No. 10614	Item No. 10615
200x20x51		Item No. 10687	Item No. 10688	Item No. 10689
200x 8x51		Item No. 10691	Item No. 10692	Item No. 10693



Distance-ring

Item No. 10690 for 20 mm grinding wheels
Item No. 10694 for 8 mm grinding wheels



Item No. 10621 Magnetic depth stop for cutters



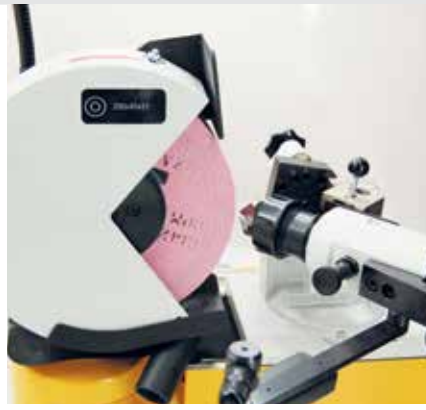
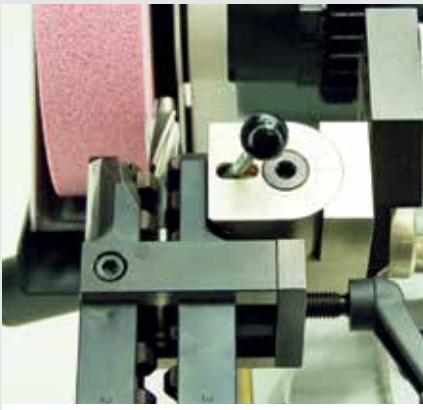
Item No. 10622 Cutting roset for cutters



Item No. 10623 Stop dog for long drills



Item No. 10685 Handle for motor feed



Item No. 10646 Adapter for dust exhaust Ø 32 mm



Morse taper sleeves

- Item No. 14483** for short MK-drills, MK 1
- Item No. 14484** for short MK-drills, MK 2
- Item No. 14485** for short MK-drills, MK 3



Countersink sharpening device SVR 31

Item No. 10583 incl. collet 10 mm



Collet set

Item No. 14348 for SVR 31 (Ø 6, 8, 12 mm)



Item No. 10604 Nut for extra collets



Grinding wheel fixture

Item No. 10616 with cone



Item No. 14721 Machine stand

Item No. 12385 Adaptor cable 230 V Schuko / 400 V CEE



Cutter and countersink attachment SZVR

Item No. 11280 for 3 edged countersinks from Ø 6-31 mm or up to MK3, and 1-4 lip cutters for sharpening the face max Ø 20 mm, incl. 10 mm collet



A good team with the BSM 20

Special accessory for BSM 20

For re-sharpening of countersink and
cross rose bits with cylindrical shaft

- ✓ simplest handling
- ✓ for countersinks from
Ø 6 – 20 mm
- ✓ support for BSM 20
- ✓ complete with collet
Ø 10 mm

Introductory video:



TECHNICAL DATA

Top angle:	60° to 120°
Countersinks with cylindrical shaft:	Ø 6 mm to 20 mm
Cross rose bits (optional):	Ø 2/5, 5/10, 10/15, 15/20 mm
Collets:	Ø 6 mm, 8 mm, 10 mm, 12 mm

BASIC VERSION

- SVR incl. 10 mm collet
- Support for BSM 20
- Cam for 3 flute countersinks



Countersink
60° to 120°



cross rosebit 90°



Collet set
Item No. 14348 for SVR 20 (Ø 6, 8, 12 mm)



Item No. 10880 Nut for extra collets



Cam
Item No. 10881 for cross rose bits, single flute



Cam
Item No. 10606 for two flute countersinks



Cam
Item No. 12487 for 3 edged countersinks, inclination 0,8 mm
Item No. 12488 for 3 edged countersinks, inclination 1,2 mm

CUTTER- AND COUNTERSINK ATTACHMENT SZVR ITEM NO. 11280

Precise re-sharpening

For re-sharpening of one-, two-, or 3 flute countersinks and resharping the faces of one to four flute cutters. The fixation is made by a clamping head ER 32. Additionally the clamping head is equipped with a MK3 morse taper.

- ✓ for 3 flute countersinks from 6 – 20 mm or morse taper up to MK3
- ✓ one to four flute cutters for re-sharpening the face of cutters up to 20 mm
- ✓ precise laser adjustment
- ✓ tool support ER 32 and morse taper support MK 3
- ✓ extendable for cross rose bits (optional)
- ✓ special forms: step drills, sheet metal- and wood drills
- ✓ solid construction

Introductory video:



TECHNICAL DATA

Top angle:	60° to 120°
Countersinks with cylindrical shaft:	Ø 6 mm to 31 mm
Cross rose bits (optional):	Ø 2/5, 5/10, 10/15, 15/20 mm
Collets:	ER 32 to 20 mm
Countersinks with morse taper:	up to MK 3

BASIC VERSION

- SZVR incl. 10 mm collet
- Collet nut
- Laser adjustment
- Morse taper MK 3
- Cam for 3 ute countersink
- Index plate for one to four ute cutters



Countersink
60° to 120°



cross rosebit 90°



SZVR collet set

Item No. 11915 7 pieces
Ø 6 / 8 / 12 / 14 / 16 / 18 / 20 mm



Cam

Item No. 12610 for single edge cross-countersinks, inclination 0,4 mm
Item No. 13510 for single edge cross-countersinks, inclination 0,8 mm



Cam

Item No. 13511 for double edge spot facing cutters, inclination 0,5 mm
Item No. 13512 for double edge, spot facing cutters inclination 0,8 mm



Cam

Item No. 13513 for 3 edged countersinks, inclination 0,5 mm
Item No. 13514 for 3 edged countersinks, inclination 0,8 mm (standard)
Item No. 13967 for 3 edged countersinks, inclination 1,2 mm
Item No. 13968 for 3 edged countersinks, inclination 1,4 mm



Index plate

Item No. 13517 T4 + T3 for cutter (standard)
Item No. 13518 T5 for cutter
Item No. 13519 T6 for cutter

DRILL GRINDING MACHINE BSG 60

Full range equipment

ITEM NO. 14369

The professional machine in the all-around carefree package

- ✓ for twist drills Ø 3 to 60 mm
- ✓ countersinks up to MK3
- ✓ and end mills



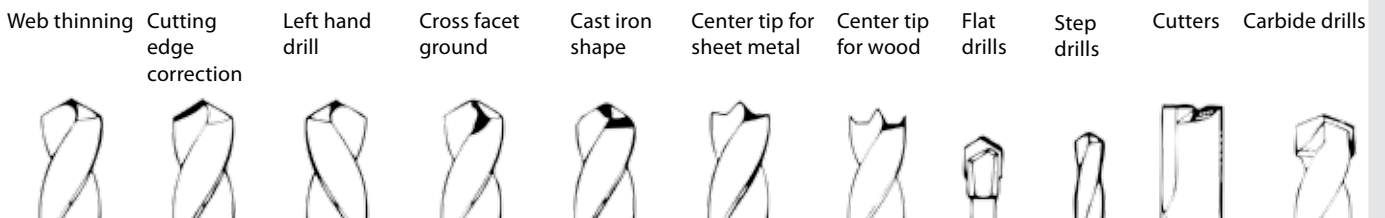
Introductory video:



SPARE PART LIST SEE PAGE 11+12

FULL RANGE EQUIPMENT:

- Clamping prism from 3 to 40 mm (with additional prism up to 60 mm)
- Corundum grinding wheel Ø 200 mm grit 60
- Cutter and countersink sharpening device SZVR
- Grinding wheel dresser with rotating diamond
- Collet set, 7 pieces for SZVR
- DVD-manual
- Crank handle
- Adaptor for dust exhaust Ø 32 mm
- Precision optical lens lighted
- Granite base slap





All benefits united

The Kaindl BKS is the machine for quick and easy resharpener of twist- and core drills.

The BKS combines the benefits of our core drill grinding machine KBS/2 and drill grinder BSM 20.

- ✓ sharpens core drills in the range of Ø 12 – 100 mm
- ✓ sharpens twist drills in the range of Ø 2 – 20 mm
- ✓ core drill fixation by collet chuck system
- ✓ precise adjustment by laser device

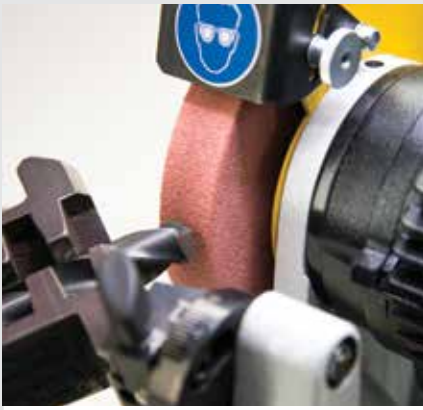


TECHNICAL DATA

Clamping range:	Ø 2 to 20 mm
Core drills:	Ø 12 to 100 mm
Corundum grinding wheel:	125 x 20 x 20 x 75 mm
CBN & diamond wheel:	125 mm
Weight net:	43 kg
Revolutions:	2840 rpm ⁻¹
Dim (L x W x H):	500 x 450 x 310 mm
Motor:	230 V, 50 - 60 Hz, 120 W

BASIC VERSION

- Collet clamping system incl. 19 mm collet
- Laser adjustment device
- Precision optical lens lighted
- Corundum grinding wheel grit K80
- Index plates for 4/5/8/10 teeth core drills
- Grinding wheel dresser with rotating diamond
- CBN-grinding wheel Ø 125 mm B126, covered on 3 sides
- CBN-grinding wheel Ø 125 mm B126, covered on 2 sides
- Granite base slap



Corundum grinding wheel

- Item No. 10895** Grit 60 - 125 x 20 x 20 mm (coarse)
- Item No. 10890** Grit 80 - 125 x 20 x 20 mm (standard)
- Item No. 10891** Grit 180 - 125 x 20 x 20 mm (fine)
- Item No. 10893** Grit 100 - 125 x 05 x 20 mm (HSS-wood drills)
- Item No. 11103** Grit 100 - 125 x 10 x 20 mm



Diamond grinding wheel

- Item No. 14580** wide, complete with support 125 mm, covered on 3 sides, D76/3 for HM-wood drills
- Item No. 14581** thin, complete with support 125 mm, covered on 3 sides, D76/3 for HM-wood drills

- Item No. 16490** CBN-grinding wheel B76 (standard)
- Item No. 17073** CBN-grinding wheel B126
- Item No. 17556** CBN-grinding wheel B46



CBN-grinding wheel

- Item No. 17053** covered on 3 sides B126 with radius
- Item No. 17055** covered on 2 sides B126 for back of tooth



Cleaning- and sharpening stone

- Item No. 15855** for diamond wheels



- Item No. 18658** Grinding wheel fixture



- Item No. 10889** Magnetic depth stop for cutters



Support sleeve for short welding point drills

- Item No. 10900** 5 and 6 mm
- Item No. 10976** 8 and 10 mm



- Item No. 10875** Countersink sharpening device SVR 20



Morse taper sleeves

- Item No. 10901** for short MK 1-drills
- Item No. 10902** for short MK 2-drills



Collet set
Item No. 14348 for SVR 20 (Set 6, 8, 12 mm)



Item No. 10880 Nut for extra collets



Item No. 10881 Cam for cross rose bits, single flute



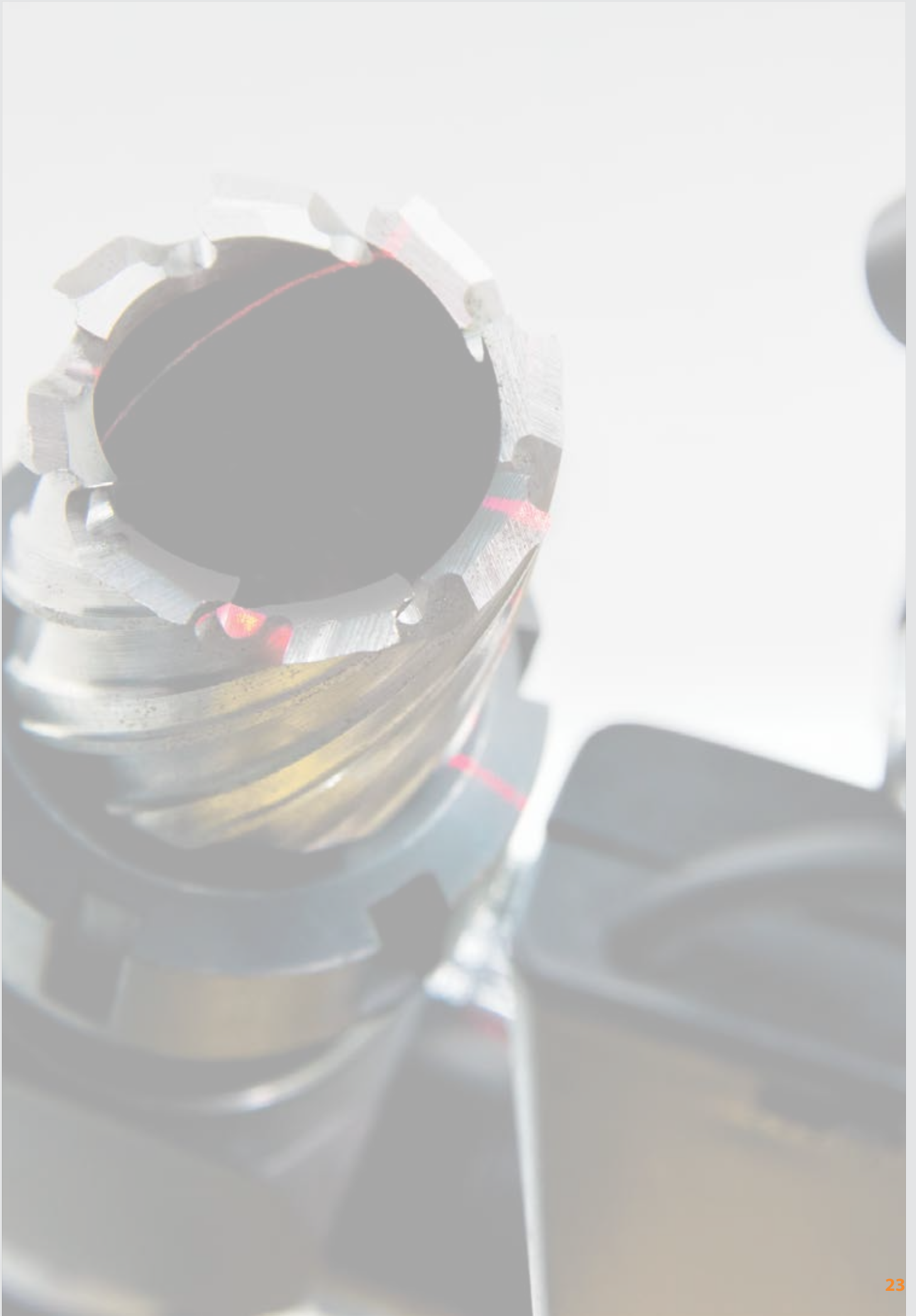
Collet set
Item No. 16398 7 pcs. for BKS (8/10/12/14/16/18/20 mm)



Index plate
Item No. 10981 T-6 for core drills with 6 teeth
Item No. 10982 T-7 for core drills with 7 teeth
Item No. 11009 T-9 for core drills with 9 teeth
Item No. 11012 T-12 for core drills with 12 teeth
Item No. 11063 T-14 for core drills with 14 teeth

Special index plates upon request

Item No. 12385 Adaptor cable 230 V Schuko / 400 V CEE



Professional and precise

Professional core drill grinding machine – easy, fast and precise. With laser adjustment device for exact alignment of core drills. For core drills from \varnothing 12 to 100 mm.

- ✓ core drill holding fixture by weldon support
- ✓ precise adjustment by laser device
- ✓ simplest handling
- ✓ stepless angle adjustment
- ✓ for core drills from \varnothing 12 – 100 mm with 4+8 / 5+10-teeth (special sizes upon request)

Introductory video:



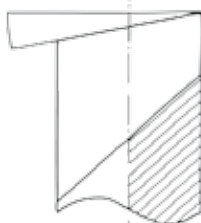
TECHNICAL DATA

Core drills:	\varnothing 12 to 100 mm
CBN-grinding wheel:	\varnothing 125 mm
Motor:	230 V, 50 - 60 Hz, 120 W
Weight net:	37,5 kg
Revolutions:	2840 rpm ⁻¹
Dim (L x W x H):	500 x 450 x 310 mm

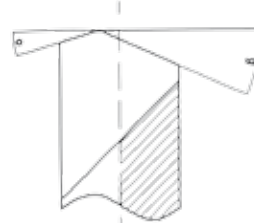
BASIC VERSION

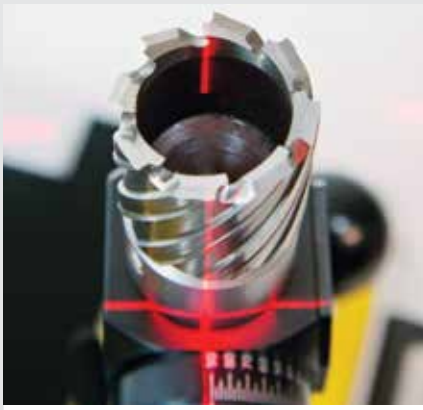
- LED-Precision optical lens
- Laser adjustment device
- Index plate f. 4 / 5 / 8 / 10 - toothed core drills
- ER32 collect clamping system + 19 mm collet
- CBN-grinding wheel \varnothing 125 mm B126, covered on 3 sides
- CBN-grinding wheel \varnothing 125 mm B126, covered on 2 sides
- Granite base slap

Flat tooth



Trapezoidal tooth

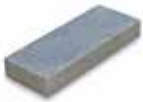




CBN-grinding wheel

Item No. 17053 covered on three sides B126 with radius

Item No. 17052 covered on two sides B126 for tooth back



Cleaning- and sharpening stone

Item No. 15855 for diamond grinding wheel



Index plate

Item No. 10981 T-6 for core drills with 6 teeth

Item No. 10982 T-7 for core drills with 7 teeth

Item No. 11009 T-9 for core drills with 9 teeth

Item No. 11012 T-12 for core drills with 12 teeth

Item No. 11063 T-14 for core drills with 14 teeth

special index plates upon request



Adaptor for core drills

Item No. 11302 19 mm to 32 mm



Adaptor for core drills

Item No. 11069 with M 18-thread to Weldon 19mm



Adaptor for core drills

Item No. 13613 "Quick-In"

Item No. 12385 Adaptor cable 230 V Schuko / 400 V CEE

The perfect entry

The perfect entry for professionally and easy sharpening of circular knives.

- ✓ made for circular knives from \varnothing 100 – 350 mm (smaller diameters upon request)
- ✓ adjustment of revolutions of the circular knife
- ✓ burr-free grinding
- ✓ feeding by lateral handwheel
- ✓ cabinet



Upon request:

- Circular knives smaller than \varnothing 100 mm
- Meat mincer knives
- Industrial knives
- Special knives for printing houses, paper- and foil industry

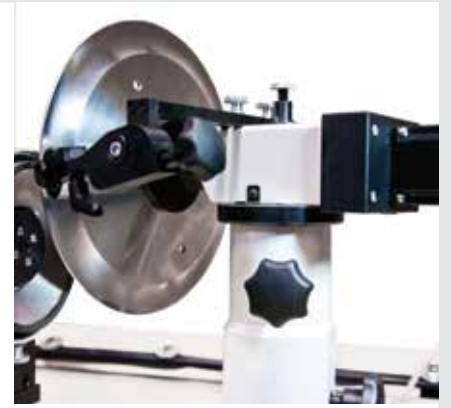


TECHNICAL DATA

Motor:	230 V, 50 / 60 Hz, 0,37 kW, 2850 rpm ⁻¹
Grinding range circular knives:	from \varnothing 100 to \varnothing 350 mm
Reducer ring:	\varnothing 20 x 22 / 30 / 32 / 42 / 30 with 25er flat
Nominal circular knife boring:	\varnothing 20 mm
Weight net:	120 kg
Dim (L x W x H):	940 x 830 x 1230 mm

BASIC VERSION

- Spacer rings for boring diameter 20 mm x 22/30/32/42/30 mm with 25 mm surface area
- CBN grinding wheel \varnothing 125 mm B126
- 1 pair cut protection gloves
- Pump cooling
- Cabinet



CBN grinding wheel

Item No. 11315 CBN B126

Item No. 11314 CBN B76

Diamond grinding wheel

Item No. 11317 D126

Item No. 11316 D76



Item No. 15978 Permanent circular magnetic chuck incl. support



Item No. 11247 Grinding wheel fixture



Item No. 15739 Column short for lower blades
with scale, star knob screw, locking bolt

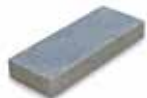


Item No. 15857 Silicon carbide dresser wheel



Diamond dresser wheel

Item No. 15856 D356



Cleaning- and sharpening stone

Item No. 15855 for diamond grinding wheels



Special support

Item No. 13987 Ø 40 mm for small circular knives
(special sizes upon request)

Cut protection gloves, 5 pair

Item No. 18234 Cutgrip Gr. 9 (M)

Item No. 18235 Cutgrip Gr. 10 (L)

Item No. 18236 Cutgrip Gr. 11 (XL)

Item No. 18237 Cutgrip Gr. 12 (XXL)

Intuitive control

The circular knife sharpening machine RMS-NC for circular knives from Ø 100 to 400 mm. Intuitive control by touchscreen and electronic jogwheel.

- ✓ made for circular knives from Ø 100 – 400 mm (smaller diameters upon request)
- ✓ programmable zero point offset
- ✓ input of feeding and pause steps
- ✓ stepless adjustment of revolutions of the circular knife
- ✓ burr-free sharpening
- ✓ sparking time mode



Upon request:

- Circular knives smaller than Ø 100 mm
- Meat minzer knives
- Industrial knives
- Special knives for printing houses, paper- and foil industry



Introductory video:



TECHNICAL DATA

Grinding motor:	230 V, 50 / 60 Hz, 1,05 kW with frequency converter, 2850 rpm ⁻¹
Grinding range circular knives:	from Ø 100 to 400 mm
Reducer ring:	Ø 20 x 22 / 30 / 32 / 42 / 30 with 25er flat
Weight net:	188 kg
Dim (L x W x H):	700 x 900 x 1540 mm

BASIC VERSION

- Touchscreen-control
- CBN grinding wheel Ø 125 mm B126
- Spacer rings for boring diameter 20 mm x 22/30/32/42/30 mm with 25 mm surface area
- 1 pair cut protection gloves
- Digital jogwheel
- Pump cooling



CBN grinding wheel

Item No. 11315 CBN B126

Item No. 11314 CBN B76

Diamond grinding wheel

Item No. 11317 D126

Item No. 11316 D76



Item No. 15978 Permanent circular magnetic chuck incl. support



Item No. 11247 Grinding wheel fixture



Item No. 15739 Column short for lower blades
with scale, star knob screw, locking bolt

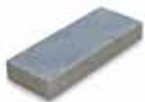


Item No. 15857 Silicon carbide dresser wheel



Diamond dresser wheel

Item No. 15856 D356



Cleaning- and sharpening stone

Item No. 15855 for diamond grinding wheels



Special support

Item No. 13987 Ø 40 mm for small circular knives
(special sizes upon request)

Cut protection gloves, 5 pair

Item No. 18234 Cutgrip Gr. 9 (M)

Item No. 18235 Cutgrip Gr. 10 (L)

Item No. 18236 Cutgrip Gr. 11 (XL)

Item No. 18237 Cutgrip Gr. 12 (XXL)

Transport casters 1 set

Item No. 15916 (4 pcs)

Programmed precision

This machine is equipped with a high performance industrial PC with touch-screen and digital jogwheel. This PC controls two linear and a rotary axis simultaneously. The geometry of grinding is exibly programmable by G-code.

- ✓ sharpens profiled knives with a radius from 50 to 175 mm
- ✓ for circular knives from Ø 100 to 350 mm
- ✓ built on solid IPC-basis, freely programmable with G-Code
- ✓ based on Linux software
- ✓ integrated electronic jogwheel



TECHNICAL DATA

Grinding motor:	230 V, 50 / 60 Hz, 1,05 kW with frequency converter, 2850 rpm ⁻¹
Grinding range circular knife:	from Ø 100 to 350 mm
Grinding range profiled knife:	from 50 to 175 mm Radius
Reducer rings:	Ø 20 x 22 / 30 / 32 / 42 / 30 with 25er flat
Nominal boring of support:	Ø 20 mm
Weight net:	225 kg
Weight control unit:	37 kg
Dim (L x W x H):	900 x 700 x 1540 mm

BASIC VERSION

- Touchscreen-control
- CBN grinding wheel Ø 125 mm B126
- Pump cooling
- USB-stick
- Electronic jogwheel
- Spacer rings for boring diameter 20 mm x 22/30/32/42/30 mm with 25 mm surface area
- freely programmable with G-code
- Grinding wheel dresser
- 1 pair cut protection gloves



- CBN grinding wheel**
Item No. 11315 CBN B126
Item No. 11314 CBN B76
Diamond grinding wheel
Item No. 11317 D126
Item No. 11316 D76



- Item No. 15978** Permanent circular magnetic chuck incl. support



- Item No. 11247** Grinding wheel fixture



- Item No. 18152** Column short for lower blades
with scale, star knob screw, locking bolt



- Item No. 15857** Silicon carbide dresser wheel



- Diamond dresser wheel**
Item No. 15856 D356



- Cleaning- and sharpening stone**
Item No. 15855 for diamond grinding wheels



- Special support**
Item No. 13987 Ø 40 mm for small circular knives
(special sizes upon request)

- Cut protection gloves, 5 pair**
Item No. 18234 Cutgrip Gr. 9 (M)
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Item No. 18236 Cutgrip Gr. 11 (XL)
Item No. 18237 Cutgrip Gr. 12 (XXL)

- Transport casters 1 set**
Item No. 15916 (4 pcs)

Filter device for cooling liquid see page 42

Perfect sharpening

The manual saw blade sharpening machine with linear feed. Perfect sharpening combined with simplest handling. For saw blades from \varnothing 100 to 600 mm.

- ✓ table version
- ✓ from \varnothing 100 mm to 600 mm
- ✓ precise re-sharpening of face of tooth and tooth back

suited for:

- ✓ alternating teeth
- ✓ flat teeth
- ✓ step teeth
- ✓ trapezoid teeth

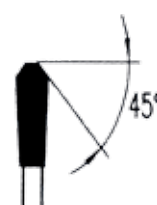
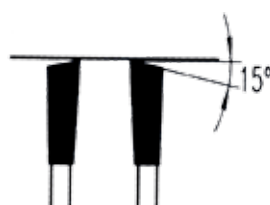
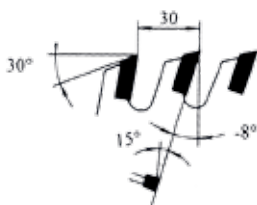


TECHNICAL DATA

Motor:	230 V, 50 / 60 Hz, 0,18 kW, 2850 rpm ⁻¹
Grinding area	
Diameter of saw blades:	\varnothing 100 mm to \varnothing 600 mm
Reducer rings for saw blades:	\varnothing 25 / 30 / 32 / 35 / 40 / 50 / 70 / 75 mm
nominal saw blade boring:	\varnothing 20mm
Weight net:	50 kg
Dim (L x W x H):	600 x 500 x 400 mm

BASIC VERSION

- Diamond grinding wheel \varnothing 150 mm D64
- Table machine
- Spacer rings SSG for saw blades diameter 25 / 30 / 32 / 35 / 40 / 50 / 70 / 75 mm





Diamond grinding wheel

Item No. 10774 150 x 5 x 1,5 x 20 mm, D64 standard

Item No. 10973 150 x 16 x 5 x 3 x 20 mm, D76 thin



Corundum grinding wheel

Item No. 10775 150 x 13 x 20 mm, Grit 46, coarse

Item No. 10776 150 x 13 x 20 mm, Grit 100, fine



Item No. 10796 Grinding wheel fixture



Diamond wheel dresser

Item No. 10804 for corundum wheel



Cleaning- and sharpening stone

Item No. 15855 for diamond grinding wheels



Laser adjustment device

Item No. 15859 for exact adjustment of saw blade

Item No. 12385 Adaptor cable 230 V Schuko / 400 V CEE

Item No. 10773 Retrofit kit for automatik DC

SEMI AUTOMATIC SAW BLADE SHARPENING MACHINE**SSG 600-A-DC****ITEM NO. 11105****Digital assistance**

This saw blade sharpening machine has a digital control with self explaining display. Perfect grinding combined with simplest handling.

- ✓ electropneumatic control
- ✓ alternating tooth transport
- ✓ automatic breakpoint
- ✓ from 100 mm to 600 mm
- ✓ Maschine diagnostic
- ✓ input of no. of teeth

suited for:

- ✓ alternating teeth
- ✓ flat teeth
- ✓ step teeth
- ✓ trapezoid teeth

TECHNICAL DATA

Motor:	230 V, 50 / 60 Hz, 0,18 kW, 2850 rpm ⁻¹
Control electric:	230 V, 50 / 60 Hz
Control pneumatic:	5 bar
Grinding area	
Diameter of saw blades:	Ø 100 mm to Ø 600 mm
Reducer rings:	Ø 25 / 30 / 32 / 35 / 40 / 50 / 70 / 75 mm
Nominal saw blade boring:	Ø 20 mm
Weight net:	115 kg
Dim (L x W x H):	940 x 830 x 1230 mm

BASIC VERSION

- digital control
- Diamond grinding wheel Ø 150 mm D64
- Cabinet
- Spacer rings SSG for saw blades diameter 25 / 30 / 32 / 35 / 40 / 50 / 70 / 75 mm



Diamond grinding wheel

Item No. 10774 150 x 5 x 1,5 x 20 mm, D64 standard

Item No. 10973 150 x 16 x 5 x 3 x 20 mm, D76 thin



Corundum grinding wheel

Item No. 10775 150 x 13 x 20 mm, Grit 46, coarse

Item No. 10776 150 x 13 x 20 mm, Grit 100, fine



Item No. 10796 Grinding wheel fixture



Diamond wheel dresser

Item No. 10804 for corundum wheel



Cleaning- and sharpening stone

Item No. 15855 for diamond grinding wheels



Laser adjustment device

Item No. 15859 for exact adjustment of saw blade

Item No. 12385 Adaptor cable 230 V Schuko / 400 V CEE

Item No. 14482 Universal Pump cooling SSG 600-A-DC

Precise results

Sharpens TIG electrodes precise and simple in longitudinal shape. Provides repeatable welding results on automatic systems, respectively robot welding.

- ✓ with automatic drive and feeding
- ✓ functional handle
- ✓ centric tip to central axis in longitudinal direction
- ✓ stable arc
- ✓ for \varnothing 1,0 / 1,6 / 2,0 / 2,4 / 3,2 and 4,0 mm
- ✓ angle setting from 15° to 180°



ALSO AVAILABLE AS WORKSTATION SOLUTION:

Tungsten grinder WIG 4
+ Machine cabinet
+ Vacuum cleaner for dust exhaust

TECHNICAL DATA

Diamond grinding wheel:	\varnothing 125 mm
Grinding motor:	230 V, 50 Hz, 0,08 kW, 2840 rpm ⁻¹
Motor for electrode drive:	230 V, 50 Hz, 375 rpm ⁻¹
Weight net:	6,8 kg
Angle setting:	15° / 30° / 60° / 90° / 120° / 150° / 180°
Diameter of electrodes:	1,0 / 1,6 / 2,0 / 2,4 / 3,2 / 4,0 mm
Dim (L x W x H):	260 x 300 x 230 mm

BASIC VERSION

- Diamond grinding wheel \varnothing 125 mm D107
- Adaptor or dust exhaust
- Adjustment slide standard for electrodes \varnothing 1,0 / 1,6 / 2,0 / 2,4 / 3,2 / 4,0 mm
Special sizes upon request



Diamond grinding wheel

- Item No. 10745** D107 incl. support (standard)
- Item No. 10744** D76 incl. support (medium)
- Item No. 10743** D46 incl. support (fine)



Cleaning- and sharpening stone

- Item No. 15855** for diamond grinding wheels



Set of bushes

- for short electrodes (6 pcs)
- Item No. 10729** Ø 1,0 / 1,6 / 2,0 / 2,4 / 3,2 / 4,0 mm
- further special diameters upon request



- Item No. 16592** Guiding bloc for electrodes



Cabinet with integrated dust exhaust

- Item No. 19644** consisting of: cabinet, safety dust exhaust class M, 5 pcs dust bags, ready to fit for WIG4

- Item No. 15701** Spare dust bags (5 pcs)

- Item No. 10739** Extra charge for both 110 V motors

Compact and powerful

Our small solution for cutting cylindrical workpieces, reducing the diameter of end mills by grinding, or grinding in of grooves, as well as surface grinding of front faces.

- ✓ 3 jaw chuck Ø 3-30 mm, push through: Ø 16 mm
- ✓ Spindle lock for 3 jaw chuck
- ✓ Reservoir tank for grinding dust with possibility for connection of vacuum cleaner



ALSO AVAILABLE AS WORKSTATION SOLUTION:

Cutter-grinding machine TSM 16
+ Machine cabinet
+ Vacuum cleaner for dust exhaust

TECHNICAL DATA

Clamping range:	Ø 3 - 30 mm
Motors:	
Grinding spindle:	250 Watt, 5.000 rpm ⁻¹
Tool spindle :	250 Watt, 150 rpm ⁻¹
Cutting wheel:	Ø 100 x 12,75 x 1,4 mm
Grinding wheel:	Ø 110 x 12,75 x 5 mm
Weight net:	28,5 kg
Dim (L x W x H):	380 x 230 x 220 mm

BASIC VERSION

- Diamond cutting wheel Ø 100 mm for carbide
- CBN cutting wheel Ø 100 mm for HSS
- Diamond grinding wheel Ø 110 mm for carbide



Cutting disc

Item No. 19291 Diamond cutting disc for carbide Ø 100 x 12,75 x 1,4 mm

Item No. 19292 CBN cutting disc for HSS Ø 100 x 12,75 x 1,4 mm



Grinding wheel

Item No. 19294 Diamond grinding wheel for carbide Ø 110 x 12,75 x 5 mm

Item No. 19295 CBN grinding wheel for HSS Ø 100 x 12,75 x 5 mm



Corundum cutting disc

Item No. 19296 Corundum cutting disc for HSS (5 pcs) Ø 100 x 12,75 x 1 mm



Cabinet with integrated dust exhaust

Item No. 19645 consisting of: cabinet,
safety dust exhaust class M,
5 pcs dust bags,
ready to fit for TSM16

Item No. 15701 Spare dust bags (5 pcs)

Controllable versatility on 4 CNC axis

This machine is equipped with a high performance industrial PC with touchscreen and digital jogwheel. This PC controls two linear and a rotary axis simultaneously. The geometry of grinding is flexibly programmable by G-code.

- ✓ SK 40 support for ER collets
- ✓ for cutters up to \varnothing 150 mm, cutter grinding of spiral and face as well as chip space
- ✓ built on solid IPC-basis, freely programmable by G-code
- ✓ based on Linux software
- ✓ integrated electronic jogwheel



TECHNICAL DATA

Grinding motor:	230 V, 50 / 60 Hz, 0,70 kW, 2850 rpm ⁻¹
Grinding range cutter:	max. \varnothing 150 mm
Support of rotary axis:	SK 40
CNC-axis:	4 ; X Y Z A
Weight net:	300 kg
Weight control unit:	37 kg
Dim (L x W x H):	1200 x 930 x 1780 mm

BASIC VERSION

- Touchscreen-control
- Cup wheel optional as CBN or diamond \varnothing 125 mm B76 or D76
- Grinding wheel dresser
- Jogwheel integrated in the control unit
- Pump cooling
- ready made CNC-programms
- 5Mpix camera system with holder and software package for Windows and Mac
- Support SK40+ \varnothing 10 mm ER collet



Item No. 18305 High frequency spindle and internal grinding device

6000-24000 RPM, 0,8 kW,
incl. frequency transformer with wiring set,
ER11collets 3+6 mm



Item No. 18051 FSM-CNC saw blade sharpening option

Ø 100 - 450 mm
Content: horizontal round axis, 2 clamping flanges, spacer rings,
diamond grinding wheel D 76, support ER32, magnetic clamping,
USB stick with several programs

Item No. 18782 FSM-program suite

(48 programs) for HSS hacksaw blades with tooth shape T3-T18 DIN1838
incl. 2 CBN grinding wheels D=75+125 mm incl. grinding wheel support

provided that: FSM-CNC option saw blades item No. 18051 is present.



Item No. 18440 Option: 3D-edge finder for FSM-CNC



Item No. 17304 CBN cup grinding wheel

CBN Ø 125 mm, B126

Item No. 17303 CBN Ø 125 mm, B76

Diamond cup grinding wheel

Item No. 17306 Ø 125 mm, D126

Item No. 17305 Ø 125 mm, D76

CBN cup grinding wheel

Item No. 18293 CBN Ø 100 mm, B126

Item No. 18292 CBN Ø 100 mm, B76

Diamond cup grinding wheel

Item No. 18295 Ø 100 mm, D126

Item No. 18294 Ø 100 mm, D76



CBN circumference grinding wheel

Item No. 18297 CBN Ø 125 mm, B126

Item No. 18296 CBN Ø 125 mm, B76

Diamond circumference grinding wheel

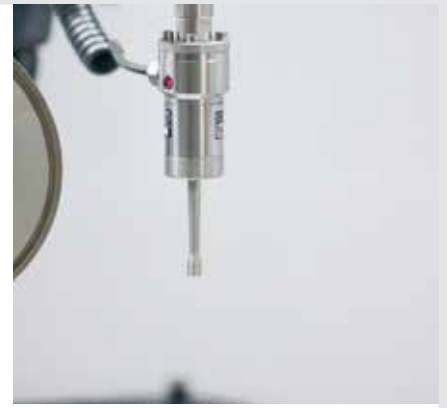
Item No. 18299 Ø 125 mm, D126

Item No. 18298 Ø 125 mm, D76

Item No. 18304 PCD-dressing device



Item No. 18658 Grinding wheel fixture



Item No. 19119 Special-Grinding wheel fixture „Twin“



Item No. 16050 Precision grinding head ER32
with indexing, 19 mm chuck and laser adjustment



Item No. 15857 Silicon carbide dresser wheel



Item No. 15856 Diamond dresser wheel
D 356



Item No. 15855 Cleaning- and sharpening stone
for diamond grinding wheels



Item No. 17675 Chuck set ER32
18 pcs. 3,0 - 20,0 mm, premium quality, 5 μ class, in wooden box



Item No. 19745 Filter device
for cooling liquid

- Item No. 18234** Cutgrip Gr. 9 (M)
Item No. 18235 Cutgrip Gr. 10 (L)
Item No. 18236 Cutgrip Gr. 11 (XL)
Item No. 18237 Cutgrip Gr. 12 (XXL)

Item No. 15916 Transport casters 1 set
(4 pcs.)

THE DEVELOPMENT OF BESPOKE SOLUTIONS

The majority of contemporary tools require specific adaptations to the machine, tool fittings and software. To this end, we develop and produce special chucking tools, translate complex cutting geometries into programme codes and even develop bespoke form grinding wheels. As such, in addition to the “naked” machine hardware, we also provide bespoke turn-key solutions designed to meet your special requirements - all from a single source.

We have already implemented numerous customer-specific projects.

Here are a few examples:

Video



ROBOTIC ROUGHING BLADE



DICER



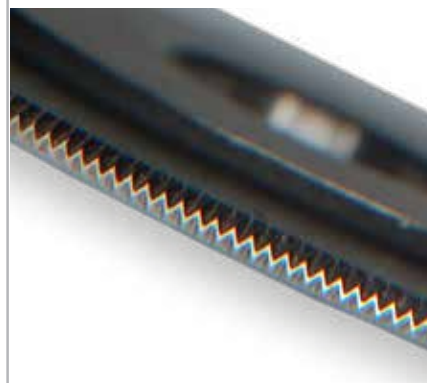
FACE-MILLING CUTTER FOR WOOD PROCESSING



PIN DRILL



ZIGZAG BLADE



INDUSTRIAL POULTRY BLADE



ULTRASONIC PLOTTER BLADE



V-BLADE



LATHE BLADE



Even for hardest materials

This machine gives you free sight and control of your workpiece. Equipped with a diamond wheel coated on both sides.

- ✓ boring holes in the looking through grinding wheel cool the workpiece permanently
- ✓ thin grinding wheel
- ✓ looking-through diamond grinding wheel coated on both sides
- ✓ high-quality diamond coating grants long durability
- ✓ for sure every material can be worked on
- ✓ simplest handling
- ✓ low heat generation

Introductory video:

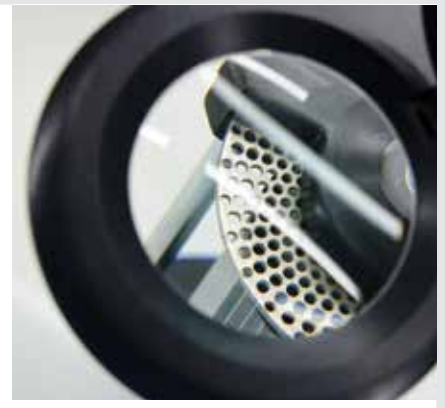


TECHNICAL DATA

Diamond grinding wheel:	Ø 180 mm
Motor:	230 V, 50 bis 60 Hz, 0,15 kW
Revolutions:	1420 rpm ⁻¹
Weight net:	7,3 kg
Abrasive layer:	diamond
Adaptor for dust exhaust:	Ø 35 mm
Dim (L x W x H):	250 x 250 x 310 mm

BASIC VERSION

- Diamond layer coated on both sides of grinding wheel Ø 180 mm
- Adaptor for dust exhaust
- Low revolution motor



Item No. 18070 LED lighted precision optical lens



Item No. 18658 Grinding wheel fixture



Item No. 17358 Workpiece support with angle adjustment



Diamond grinding wheel
Item No. 10947 coarse (standard)
Item No. 10948 medium
Item No. 10949 fine

Universally usable

Compact drill- and universal sharpening machine with adjustable permanent magnetic clamping table. The sharpening table is equipped with a precision recirculating ball bearing guide.

- ✓ universally usable
- ✓ precise clamping and grinding of the workpiece
- ✓ stepless adjustable grinding table with permanent magnet
- ✓ travel range of grinding table 300 mm
- ✓ sharpens twist drills from $\varnothing 2 - 20$ mm

Introductory video:



TECHNICAL DATA

Drill grinding machine

Clamping range::	$\varnothing 2$ to 20 mm
Motor:	230 V, 50 / 60 Hz, 0,12 kW,
Revolutions:	2840 rpm ⁻¹
Clearance- and top angle:	stepless adjustable
Grinding wheel:	125 x 20 x 20 x 75 mm
Dim (L x W x H):	500 x 420 x 310 mm

Sharpening table

Travel range:	300 mm
Table size:	170 x 100 mm
Swivelling:	stepless positive: 90°, negativ: 10°
Grinding wheel:	125 x 40 x 20 mm
Weight:	40 kg

BASIC VERSION

- Two corundum grinding wheels
- Diamond cup-wheel
- Grinding table with permanent magnet
- incl. drill grinding machine BSM 20
- LED lighted precision optical lens
- Grinding wheel dresser with rotating diamond
- Granite base slap



Corundum grinding wheel

- Item No. 10895** Grit 60 - 125 x 20 x 20 mm (coarse)
- Item No. 10890** Grit 80 - 125 x 20 x 20 mm (standard)
- Item No. 10891** Grit 180 - 125 x 20 x 20 mm (fine)
- Item No. 10893** Grit 100 - 125 x 05 x 20 mm (HSS-wood drills)
- Item No. 11103** Grit 100 - 125 x 10 x 20 mm



Diamond grinding wheel

- Item No. 14580** wide, covered on 3 sides D76/3 125 mm (BSM for carbide drills)
- Item No. 14581** thin, covered on 2 sides D107/2 125 mm (BSM for carbide wood drills)
- Item No. 16490** CBN-grinding wheel B76 (standard)
- Item No. 17073** CBN-grinding wheel B126



Corundum cup-wheel

- Item No. 10896** Grit 60 - 125 x 40 x 20 mm
- Item No. 10897** Grit 80 - 125 x 40 x 20 mm (SZ standard)
- Item No. 10898** Grit 100 - 125 x 40 x 20 mm



Diamond cup-wheel

- Item No. 11223** D126
- Item No. 10887** D76

CBN cup-wheel

- Item No. 19364** B126
- Item No. 19365** B76
- Item No. 19366** B76



Cleaning- and sharpening stone

- Item No. 15855** for diamond grinding wheels



- Item No. 18658** Grinding wheel fixture



Item No. 10889 Magnetic depth stop for cutters



Item No. 10904 Special clamping device (SZ)
for turnover plates



Item No. 11224 Special clamping device (SZ)
120 mm for small planer knives



Item No. 10906 Special clamping prism (SZ)
for chisels, piercing punches and many others



Item No. 10875 Countersink sharpening device SVR 20
incl. 10 mm collet



Item No. 16868 Adaptor for profiled finger cutters
with height adjustment incl. collet 10 mm, ER32-support
and cross line laser adjustment device



Collet set
Item No. 14348 for SVR 20 (Ø 6, 8, 12 mm)



Item No. 10880 Collet nut for extra collets



Special strong triangular permanent magnet
Item No. 11113 for carbide



Vacuum for dust exhaust
Item No. 10768 filter class M (BG approval)
Item No. 15701 spare dust bags (5 pcs)



Spark guard device
Item No. 19646 for safety dust exhaust

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