

# GRINDING MACHINES









MADE IN GERMANY



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FROM THE EMERY FILE ...

## ... TO THE CNC-GRINDING MACHINE

It all started at KAINDL with the production of simple emery files 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.









## ... 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  ${\rm CO_2}$ -neutral.







## **DRILL GRINDING MACHINE BSG 20/2**

## Precise, simple, solid

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

- enshures highest cutting edge symmetry
- quick and easy handling
- ✓ sharpens twist drills from Ø 2 – 20 mm

## *ITEM NO.* **17651**

- Special drills: step drills, sheet metal- and wood drills
- ✓ compact construction







Ø 2 to 20 mm Clamping range: Corundum wheel: 125 x 20 x 20 x 75 mm Motor: 230 V, 50 - 60 Hz, 120 W with motor feed

(also avaliable 110 V, 50 Hz)

Weight net: 13,5 kg **Revolutions:** 2840 rpm<sup>-1</sup>

Clearance- and top angle: to be adjusted stepless Dim (L x W x H): 290 x 220 x 250 mm

#### **Basic version**

- Clamping prism Ø 2 to 20 mm
- Corundum wheel grit 80
- Optic with flexible goose neck
- Grinding wheel dresser with

diamond

- Adjustable motor



Cutters



Step drills



### **Corundum grinding wheel**

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



Flat drill



Center tip for wood



**Diamond grinding wheel** 

wide, complete with support 125 mm, covered on 3 sides, D76/3 for carbide drills

Item No. 14580

thin, complete with support 125 mm, covered on 3 sides,

D76/3 for carbide drills Item No. 14581

Item No. 16496 CBN-grinding wheel B76 (standard) Item No. 17073 **CBN-grinding wheel B126** 



sheet metal



Cast iron shape



**Grinding wheel support** 

Morse tapper sleeve for short MK1 drills

for short MK2 drills

suitable for all grinding wheels Item No. 15422



Cross facet ground



Left hand drill



Magnetic depth stop for cutter

Item No. 10528

Item No. 10542

Item No. 10543



edge correction



Support sleeve for short welding point bits

5 and 6 mm Item No. 10538 8 and 10 mm Item No. 10975





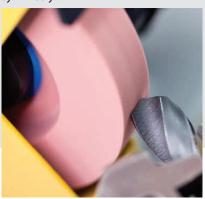


Introductory video:

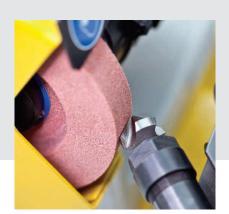
## **DRILL GRINDING MACHINE BSM 20**

# Quick, easy handling

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

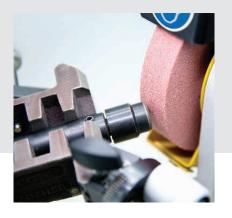


- ✓ simplest handling
- ✓ sharpens twist drills in the range of Ø 2 20 mm
- clearance- and top angle stepless adjustable



## *ITEM NO.* **17776**

- ✓ web thinning
- optional: countersink sharpening device SVR 20



Clamping range: Ø 2 to 20 mm CBN grinding wheel: 125 x 20 mm

Motor: 230 V, 50 - 60 Hz, 120 W with lateral

feed (also avaliable 110 V, 50 Hz)

Weight net: 22 kg Revolutions: 2840 rpm<sup>-1</sup>

Clearance- and top angle: to be adjusted stepless 370 x 310 x 260 mm Dim (L x W x H):

#### **Basic version**

- Camping prism Ø 2 to 20 mm
- Precision optical lens lighted
- CBN-grinding wheel B76



Carbide drills



Cutters



Step drills



Flat drill



Center tip for wood



Center tip for sheet metal



Cast iron shape



Cross facet ground





edge correction



## **Corundum grinding wheel**

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

Grit 100 - 125 x 10 x 20 mm

## Diamond grinding wheel

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

thin, complete with support 125 mm, coated on 3 sides,

D76/3 for carbide wood drills

**CBN-grinding wheel B76 (standard)** 

**CBN-grinding wheel B126** 

## **Grinding wheel support**

for all extra grinding wheels

Morse tapper sleeves

for short MK 2- drills

## for short MK 1- drills

Support sleeve for short welding point drills 5 and 6 mm

8 and 10 mm

## Magnetic depth stop for cutters

Can for cross hole countersinks

Cam for two lip countersinks

## Countersink sharpening device SVR 20

incl. collet 10 mm

Item No. 10875

Item No. 14581

Item No. 16496

Item No. 17073

Item No. 15422

Item No. 10901

Item No. 10902

Item No. 10900

Item No. 10976

Item No. 10889

Item No. 10881









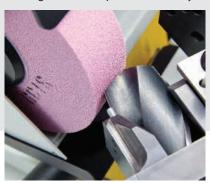
## **DRILL GRINDING MACHINE BSG 60**

## ITEM NO. 11323

# The professional machine – **Basic version**

The professional machine for supreme claims. For drills from Ø 3 – 60 mm. Precise, no servicing, 4 point linear quideways.

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. 20)





Ø 3 to 60 mm Clamping range: Corundum grinding wheel: 200 x 40 x 51 mm Motor: 230 V, 50 Hz, 0,37 kW

(also avaliable in 400 V, 110 V, 60 Hz)

Revolutions: 2800 rpm<sup>-1</sup> Weight net: 57 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 grit 60
- Precision optical lens lighted
- Grinding wheel dresser with rotating diamond



Carbide drills



Cutters



Step drills



Flat drill



Extra prism clamping range Ø 40 - 60 mm

Item No. 10602



Center tip for wood



Center tip for sheet metal





Cross facet ground



Left hand drill



edge correction





**Diamond grinding wheel** Ø 200 mm incl. support

Item No. 10627



Ø 200 mm incl. support

Item No. 17480



**Corundum grinding wheel** 

K46 K60 K100 K180

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



**Countersink sharpening device SVR 31** 

incl. collet 10 mm Item No. 10583





**Collet set** 

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





Item No. 10604



**Grinding wheel support** 

**Nut for extra collets** 

with cone







## DRILL GRINDING MACHINE BSG 60 full range equipment ITEM NO. 14369

## The professional maschine

in the all-around carefree package

- ✓ for twist drills to 40 mm
- ✓ countersinks up to MK3
- ✓ and end mills

## Full range equipment

- Clamping prism from 3 to 40 mm
- Corundum grinding wheel grit 60
- Cutter and countersink sharpening device SZVR
   Grinding wheel dresser with rotating diamond
   Collet set for SZVR

- DVD-manual
- Crank handle
  Adaptor for dust exhaust 32 mm
  Precision optical lens lighted

	Cam for cross hole countersinks	Item No. 10605
	Cam for two lip countersinks	Item No. 10606
	Spacer for 8 mm grinding wheels for 20 mm grinding wheels	Item No. 10694 Item No. 10690
The state of the s	Magnetic depth stop for cutters	Item No. 10621
	Cutting rost for cutters	Item No. 10622
	Stop dog for long drills	Item No. 10623
	Morse tapper sleeves for short MK-drills, MK 1 for short MK-drills, MK 2 for short MK-drills, MK 3	Item No. 14483 Item No. 14484 Item No. 14485





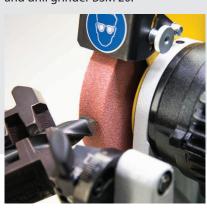
## DRILL- AND CORE DRILL GRINDING MACHINE BKS

*ITEM NO.* **15278** 

## All benefits united

The Kaindl BKS is the machine for quick and easy resharpening 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
- core drill fixation by collet chuck system
- precise adjustment by laser device





Clamping range drills: 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<sup>-1</sup>

Dim (L x W x H): 500 x 450 x 310 mm Motor: 230 V, 50 - 60 Hz, 120 W

### **Basic version**

- Two CBN-grinding wheels for chip chamber and tooth back
- Collet clamping system incl. 19 mm collet
- Laser adjustment device
- Precision optical lens lighted
- Corundum grinding wheel grit 80
- Index plates for 4/5/8/10 teeth core drills
- Grinding wheel dresser with rotating

diamond



#### Corundum grinding wheel

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



### Diamond grinding wheel

wide, complete with support 125 mm, covered on 3 sides Item No. 14580

thin, complete with support 125 mm, covered on 3 sides, D76/3 for HM-wood drills

**CBN-grinding wheel B76 (standard)** Item No. 16496 **CBN-Schleifscheibe B126** Item No. 17073



#### **Grinding wheel support**

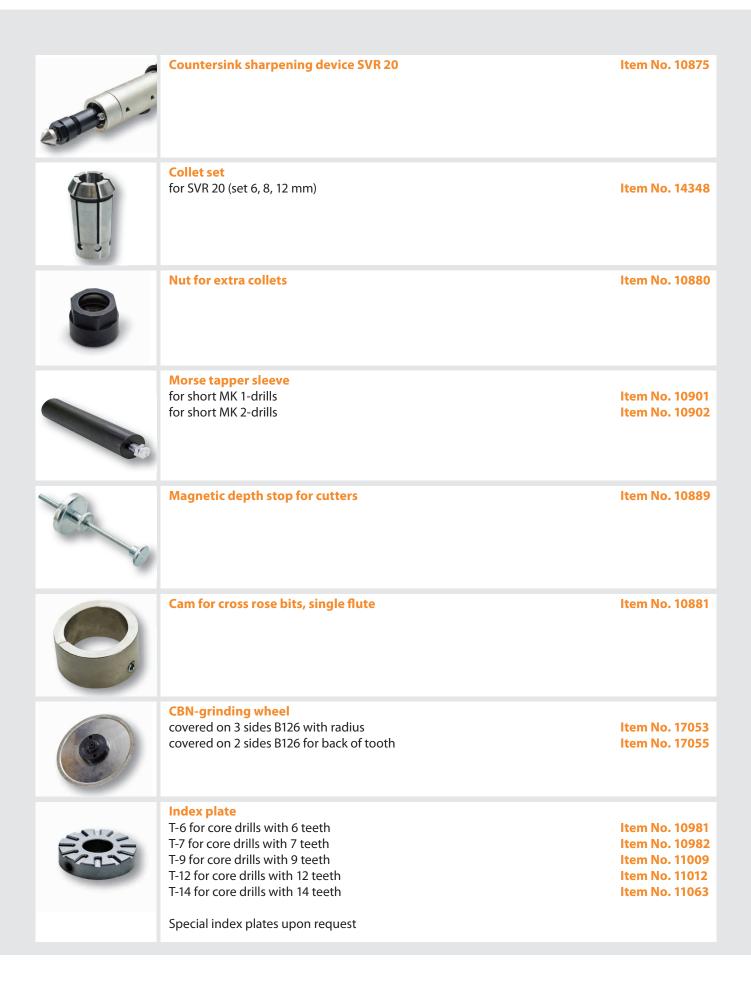
Item No. 15422 suitable for all grinding wheels



## **Collet set**

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











## COUNTERSINK SHARPENING DEVICE SVR 20

*ITEM NO.* **10875** 

# A good team with the BSM 20

Special accessory for BSM 20

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

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





Top angle:

90° to 120°

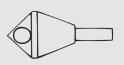
Countersinks with cylindrycal shaft:

Ø 6 mm to 20 mm

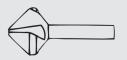
Cross rose bits (optional): Collets: Ø 2/5, 5/10, 10/15, 15/20 mm Ø 6 mm, 8 mm, 10 mm, 12 mm

### **Basic version**

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



cross rosebit 90°





Countersink 90° to 120°



Collet set for SVR 20 (Ø 6, 8, 12 mm)

Item No. 14348



**Nut for extra collets** 

Item No. 10880



for cross rose bits, single flute

Item No. 10881



**Cam** for two flute countersinks





## **CUTTER AND COUNTERSINK ATTACHMENT SZVR**

ITEM NO. 11280

## Precise re-sharpening

For re-sharpening of one-, two-, or 3 flute countersinks and resharpening 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 tapper



- ✓ for 3 flute countersinks from 6 – 20 mm or morse tapper up to MK3
- one to four flute cutters for re-sharpeing the face of cutters up to 20 mm
- ✓ precise laser adjustment

- ✓ tool support ER 32 and morse tapper support MK 3
- extendable for cross rose bits (optional)
- ✓ special forms: step drills, sheet metal- and wood drills
- ✓ solid construction





Top angle:

60° to 120°

Countersinks with

cylindrical shaft:

Collets:

Ø 6 mm to 31 mm Ø 2/5, 5/10, 10/15, 15/20 mm

Cross rose bits (optional):

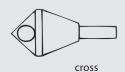
ER 32 to 20 mm

Countersinks with morse tapper:

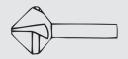
up to MK 3

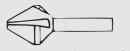
### **Basic version**

- SZVR incl. 10 mm collet
- Laser adjustment
- Morse tapper MK 3
- Cam for 3 flute countersink
- Index plate for one to four flute cutters



rosebit 90°





Countersink 60° bis 120°



**SZVR** collet set 7 pieces

Ø6/8/12/14/16/18/20 mm

Item No. 11915



single edge for SZVR

Item No. 13510



#### Cam

double edge

pitch 0,5 for spot facing cutter Item No. 13511

pitch 0,8 for spot facing cutter Item No. 13512



### **Index plate**

T4 + T3 for cutter (standard)

Item No. 13517

T5 for cutter

Item No. 13518

T6 for cutter Item No. 13519







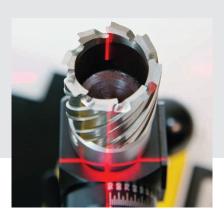
Introductory video:

## **CORE DRILL GRINDING MACHINE KBS/2**

## ITEM NO. 15394

## **Professional and precise**

Professional core drill grinding maschine – easy, fast and precise. With laser adjustment device for exact alignment of core drills. For core drills from Ø 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 Ø 12 – 100 mm with 4+8 / 5+10-teeth (special sizes upon request)



Core drills: Ø 12 to 100 mm CBN-grinding wheel: Ø 125 mm

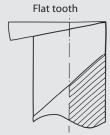
Motor: 230 V, 50 - 60 Hz, 120 W

Weight net: 37,5 kg Revolutions:  $2840 \text{ rpm}^{-1}$ 

Dim (L x W x H): 500 x 450 x 310 mm

### **Basic version**

- Two CBN grinding wheels for chip chamber and back of tooth
- Precision optical lens
- Laser adjustment device
- Core drills from Ø 12 100 mm
- Index plate f. 4 / 5 / 8 / 10 toothed core drills
- 19 mm weldon support







**CBN-grinding wheel** 

covered on three sides B126 with radius

covered on two sides B126 for tooth back

Item No. 17053

Item No. 17055



## **Index plate**

T-6 for core drills with 6 teeth T-7 for core drills with 7 teeth T-9 for core drills with 9 teeth T-12 for core drills with 12-teeth T-14 for core drills with 14 teeth

special index plates upon request

Item No. 10981

Item No. 10982 Item No. 11009 Item No. 11012

Item No. 11063



**Adaptor for core drills** 

19 mm to 32 mm

Item No. 11302



Adaptor for core drills

with threat

Item No. 11069



Adaptor for core drills

"quick-In"





## CIRCULAR KNIFE SHARPENING MACHINE MANUAL ITEM NO. 12694

## The perfect entry

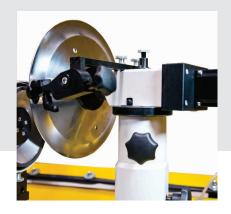
The perfect entry for professionally and easy sharpening of circular knives

- ✓ made for circular knives from Ø 100 – 350 mm
- adjustment of revolutions of the circular knife
- ✓ burr-free grinding

- ✓ feeding by lateral handwheel
- ✓ cabinet







Motor: 230 V, 50 / 60 Hz, 0,37 kW, 2850 rpm<sup>-1</sup>

Grinding range circular knives: from Ø 100 to Ø 350 mm Reducer ring: Ø 20 x 22 / 30 / 32 / 42 / 30

with 25er flat

Nominal circular knife boring: Ø 20 mm Weight net: 120 kg

Dim (L x W x H): 940 x 830 x 1230 mm

### **Basic version**

- Reducer rings
- CBN grinding wheel Ø 125 mm
- $-\,$  from Ø 100 mm to 350 mm
- Pump cooling
- Cabinet



**CBN** grinding wheel

**CBN B126** 

CBN B76

Item No. 11315

Item No. 11314



## **Diamond grinding wheel**

D126

D76

Item No. 11317

Item No. 11316



Permanent circular magnetic chuck incl. support

Item No. 15978



**Grinding wheel support** 

Item No. 11247



Silicon carbide dresser wheel

Item No. 15857



Diamond dresser wheel

D356

Item No. 15856



**Special support** 

Ø 40 mm for small circular knives (special sizes upon request)







Upon request:

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



Introductory video:

## CIRCULAR KNIFE SHARPENING MACHINE RMS NC ITEM NO. 12695

## 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
- ✓ zero point offset
- input of feeding and pause steps
- stepless adjustment of revolutions of the circular knife.
- ✓ burr-free sharpening
- sparking time mode







Grinding motor: 230 V, 50 / 60 Hz, 0,37 kW, 2850 rpm<sup>-1</sup>

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: 180 kg

Dim (L x W x H): 700 x 900 x 1540 mm

#### **Basic version**

- Touchscreen-control
- CBN grinding wheel) Ø 125 mm
- Set of reducer rings
- Digital jogwheelPump cooling



**CBN** grinding wheel

**CBN B126** 

CBN B76 Item No. 11314



**Diamond grinding wheel** 

D126 Item No. 11317

D76 Item No. 11316



**Permanent circular magnetic** chuck incl. support

Item No. 15978

Item No. 11315



**Grinding wheel support** 

Item No. 11247



Silicon carbide dresser wheel

Item No. 15857



Diamond dresser wheel D356

Item No. 15856



**Special support** 

Ø 40 mm for small circular knives (special sizes upon request)

Item No. 13987



Item No. 15916 (4 pcs)





## CIRCULAR KNIFE SHARPENING MACHINE RMS CNC ITEM NO. 15858

## **Programmed precision**

This machine is equipped with a high performance industrial PC with toughscreen and digital jogwheel. This PC controls two linear and a rotary axis simultaneously.

The geometry of grinding is flexibly 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 the solid Linux
  Ubuntu software
- ✓ electronic jogwheel







Grinding motor: 230 V, 50 / 60 Hz, 0,37 kW, 2850 rpm<sup>-1</sup>

Grinding range circular knife: from Ø 100 to 350 mm Grinding range profiled knife: from 50 to 175 mm Radius

Reducer rings:  $\emptyset 20 \times 22 / 30 / 32 / 42 / 30$  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
- Pump cooling
- USB-stick
- Electronic jogwheel
- freely programmable with G-code
- Grinding wheel dresser



**CBN** grinding wheel

CBN B126 Item No. 11315

CBN B76 Item No. 11314



**Diamond grinding wheel** 

D126 Item No. 11317

D76 Item No. 11316



Permanent circular magnetic chuck incl. support

Item No. 15978



**Grinding wheel support** 

Item No. 11247



Silicon carbide dresser wheel

Item No. 15857



Diamond dresser wheel D356

Item No. 15856



**Special support** 

Ø 40 mm for small circular knives (special sizes upon request)

Item No. 13987



(4 pcs) Item No. 15916

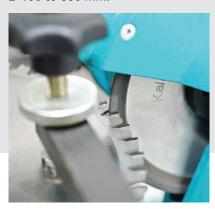




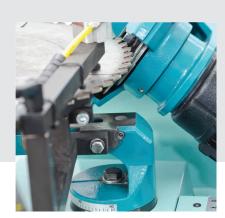
## MANUAL SAW BLADE SHARPENING MACHINE ITEM NO. 11324 SSG 600-M-LF

## **Perfect sharpening**

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



- ✓ table version
- ✓ from Ø 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



Motor: 230 V, 50 / 60 Hz, 0,18 kW, 2850 rpm<sup>-1</sup>

Diameter of saw blades: Ø 100 mm to Ø 600 mm

Reducer rings for saw blades: Ø 25 / 30 / 32 / 35 / 40 / 50 / 70 / 75 mm

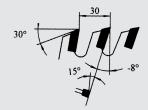
nominal saw blade boring: Ø 20mm Weight net.: 50 kg

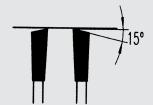
Dim (L x W x H):

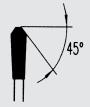
600 x 500 x 400 mm

### **Basic version**

- Diamond grinding wheel Ø 150 mm
- Table machine
- Reducer rings









**Diamond grinding wheel** 

150 x 5 x 1,5 x 20 mm, D64 standard

150 x 16 x 5 x 3 x 20 mm, D76 thin

Item No. 10774

Item No. 10973



## **Corundum grinding wheel**

150 x 13 x 20 mm, K46, coarse

150 x 13 x 20 mm, K100, fine

Item No. 10775

Item No. 10776



#### **Grinding wheel support**

Item No. 10796



### **Diamond wheel dresser**

for corundum wheel

Item No. 10804



## Laser adjustment device

for exact adjustment of saw blade

Item No. 15859

**Retrofit kit for automatik DC** 







ITEM NO. 11105

# SEMI AUTOMATIC SAW BLADE SHARPENING MACHINE SSG 600-A-DC

## **Digital assistance**

This saw blade sharpening machine has a digital control with self explaning

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







Motor: 230 V, 50 / 60 Hz, 0,18 kW, 2850 rpm<sup>-1</sup>

Control electric: 230 V, 50 / 60 Hz

Control pneumatic: 5 bar

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
- cabinet

Diamond grinding wheel	
150 x 5 x 1,5 x 20 mm, D64 standard	Item No. 10774
150 x 16 x 5 x 3 x 20 mm, D76 thin	Item No. 10973
Corundum grinding wheel	
150 x 13 x 20 mm, K46, coarse	Item No. 10775
150 x 13 x 20 mm, K100, fine	Item No. 10776
Grinding wheel support	Item No. 10796
Diamond wheel dresser for corundum wheel	Item No. 10804
Laser adjustment device for exact adjustment of saw blade	Item No. 15859
Universal Pump cooling SSG 600-A-DC	Item No. 14482





## **ELECTRODE SHARPENING MACHINE WIG4**

*ITEM NO.* **10728** 

## **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



- for Ø 1,0 / 1,6 / 2,0 / 2,4 / 3,2 and 4,0 mm
- ✓ angle setting from 15° bis 180°





Diamond grinding wheel: Ø 125 mm

Grinding motor: 230 V, 50 Hz, 0,05 kW, 2840 rpm<sup>-1</sup>

Motor for electrode drive: 230 V, 50 Hz, 375 rpm<sup>-1</sup>

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**

- Complete with dianmond grinding wheel
- Adaptor or dust exhaust
- Ø 1,0 / 1,6 / 2,0 / 2,4 / 3,2 / 4,0 mm
   Special sizes upon request



Diamond grinding wheel

D107 incl. support (standard)

D76 incl. support (medium)

D46 incl. support (fine)

Item No. 10745

Item No. 10744

Item No. 10743



**Cleaning stone** 

for diamond grinding wheel

Item No. 15855



Set of bushes

for short electrodes (6 pcs) Ø 1,0 / 1,6 / 2,0 / 2,4 / 3,2 / 4,0 mm

further special diameters upon request

Item No. 10729



**Guiding bloc for electrodes** 

Item No. 16592



Vakuum for dust exhaust

filter class M (BG approval)

spare dust bags (5 pcs)

Item No. 10768





## UNIVERSAL TOOL GRINDING MACHINE FSM-CNC

**ITEM NO. 16636** 

## **Controllable versatility**

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 Ø 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 the solid Linux Ubuntu software
- ✓ electronic jogwheel



Grinding motor: 230 V, 50 / 60 Hz, 0,37 kW, 2850 rpm<sup>-1</sup>

Grinding range cutter: max. Ø 150 mm

Support of rotary axis: SK 40 CNC-axis: 4;XYZA 300 kg Weight net:: Weight control unit: 37 kg

Dim (L x W x H): 1200 x 900 x 1780 mm

### **Basic version**

- Touchscreen-control
- CBN grinding wheel Ø 125 mm
- Grinding wheel dresser
- electronic jogwheelPump cooling
- ready made CNC-programms for cutter grinding on spiral, face as well as chip space









Introductory video:

## LOOKING THROUGH GRINDING MACHINE SM 180

ITEM NO. 10944

## 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 3 sides
- high-quality diamond coating ensures long durability
- ✓ for sure every material can be worked on
- ✓ simplest handling
- ✓ low heat generation







Diamond grinding wheel: Ø 180 mm

Motor: 230 V, 50 to 60 Hz, 0,15 kW

Revolutions: 1420 rpm<sup>-1</sup>
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







## TOOL SHARPENING CENTER SZ INCL. DRILL GRINDING MACHINE BSM 20

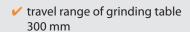
ITEM NO. 11333

## 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
- steppless adjustable grinding table with permanent magnet



✓ sharpens twist drills from Ø 2 - 20 mm





Drill grinding machine

Clamping range: Ø 2 to 20 mm

Motor: 230 V, 50 / 60 Hz, 0,12 kW,

Revolutions: 2840 rpm<sup>-1</sup>

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

Sharpenin q 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
- Precision optical lens lighted
- Grinding wheel dresser with rotating

diamond dresser



#### **Corundum grinding wheel**

Grit 60 - 125 x 20 x 20 mm (coarse) Grit 80 - 125 x 20 x 20 mm (standard) Grit 180 - 125 x 20 x 20 mm (fine) Grit 100 - 125 x 05 x 20 mm (HSS-wood drills)

Grit 100 - 125 x 10 x 20 mm

Item No. 10895 Item No. 10890

Item No. 10891 Item No. 10893

Item No. 11103



## **Corundum cup-wheel**

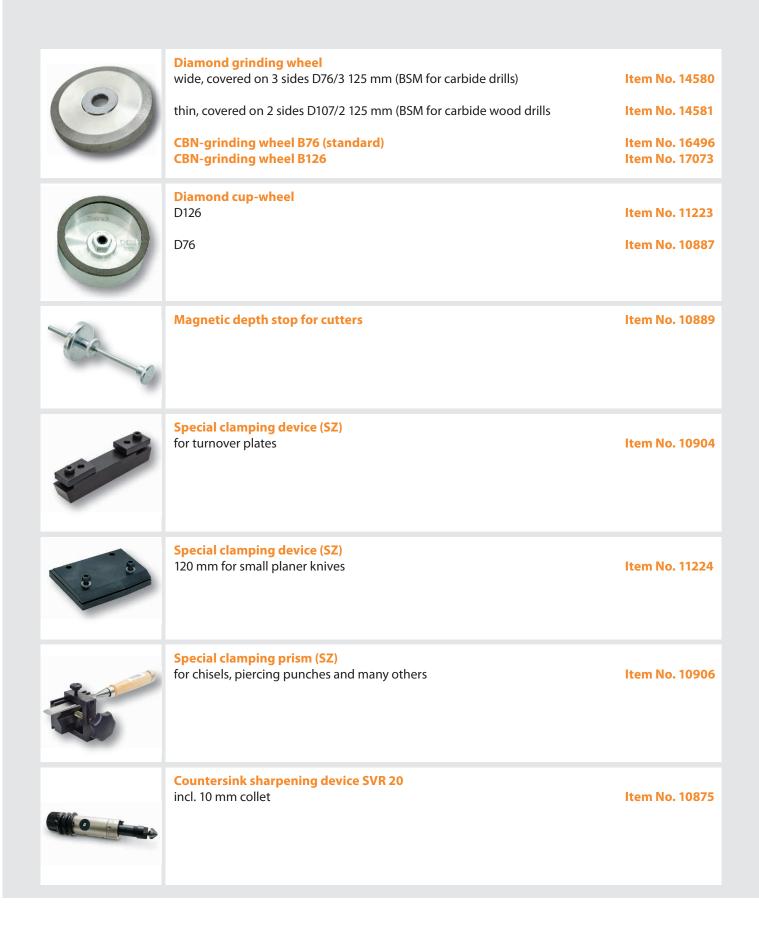
Grit 60 - 125 x 40 x 20 mm (SZ standard) Grit 80 - 125 x 40 x 20 mm Grit 100 - 125 x 40 x 20 mm Item No. 10896 Item No. 10897 Item No. 10898



### **Grinding wheel support**

suitable for all grinding wheels







**Collet set** for SVR 20 (Ø 6, 8, 12 mm)

Item No. 14348



**Collet nut for extra collets** 

Item No. 10880



**Special strong triangular permanent magnet** for carbide

Item No. 11113



Adaptor for profiled finger cutters with height adjustment incl. collet 10 mm, ER32-support and cross line laser adjustment device

Item No. 16868



**Vakuum for dust exhaust** filter class M (BG approval)

spare dust bags (5 pcs)

Item No. 10768



## FURTHER INFORMATION OF THE KAINLD WORLD



DIY catalogue







Internet presence

YouTube video-channel

facebook

## www.kaindl.de

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