KNECHT

Operating Instructions

KLA 220 – HV 153 II

Sharpening Machine for Circular Knives

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Operating Instructions

KLA 220 – HV 153 II Sharpening Machine for Circular Knives

Manufacturer

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Documents for machine operator

Operating Instructions

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1. Important notes

1.1 Preface to the operating instructions

These operating instructions are intended to make it easy to learn how to use the circular knife sharpening machine and to properly utilize its features.

These operating instructions contain important notes on how to operate the circular knife sharpening machine safely, properly, and efficiently. Observing these instructions helps to avoid hazards, reduce repair costs and downtimes, and to increase the reliability and service life of the sharpening machine.

The operating instructions must always be accessible at the place of use of the circular knife sharpening machine.

The operating instructions must be read and applied by every person tasked with working with the circular knife sharpening machine, e.g.:

- transport, installation, commissioning
- operation, including error rectification during operation, as well as
- servicing (maintenance, repair).

Recognized technical standards for safe and professional work must be observed in addition to these operating instructions and the binding accident prevention regulations applicable in the country of use and at the place of use.

1.2 Warnings and symbols in the operating instructions

The operating instructions use the following symbols/designations that must be followed:

CAUTION

The hazard triangle with the signal word "CAUTION" serves as a work safety notice for all work for which there is a risk of personal injury or death.

In these cases, work should be done with special attention and care.

ATTENTION

"ATTENTION" is written in places where special attention must be paid to prevent damage or destruction of the circular knife sharpening machine or its surroundings.

NOTE

"NOTICE" refers to user tips and especially useful informations.

1. Important notes

1.3 Warning and mandatory signs and their meaning

1.3.1 Warning and mandatory signs on the sharpening machine

The following warnings and mandatory signs have been affixed on the circular knife sharpening machine:

CAUTION! DANGEROUS ELECTRICAL VOLTAGE
(Warning sign on switch housing)

The circular knife sharpening machine carries life-threatening voltage when it is connected to the power supply.

Voltage-carrying device parts may only be opened by authorized personnel.

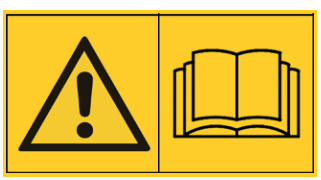
The circular knife sharpening machine must be separated from the mains supply before carrying out servicing, maintenance and repair work on it.

CAUTION! DANGER OF RETRACTION!
(Warning sign on the protection hood)

There is a risk that hands, hair and clothing may be pulled in while the circular knife sharpening machine is switched on.

CAUTION! DANGER OF CUTTING!
(Warning sign on the protection hood)

When working with circular knives, there is a danger of being cut by sharp knife edges.



ATTENTION! READ OPERATING INSTRUCTIONS!
(WARNING SIGN ON THE CONTROL PANEL)

Before commissioning and working with the circular knife sharpening machine, read and follow the operating instructions and safety instructions.

1. Important notes

CAUTION! RISK OF INJURY FROM ABRASIVE PARTICLES!
(Mandatory sign on the protection hood)

Grinding, deburring and dressing creates abrasive particles that can enter the eyes.

Wearing eye protection is mandatory when carrying out such work.

CAUTION! RISK OF INJURY FROM KNIFE!
(mandatory sign on the protection hood)

Working with the circular knife sharpening machine involves grinding knives that could cause serious cut injuries due to their sharpness.

Caution when transporting knives. Use the protective equipment provided by the knife manufacturer. Protective gloves and safety shoes must be worn.

1. Important notes

1.4 Rating plate and machine serial number

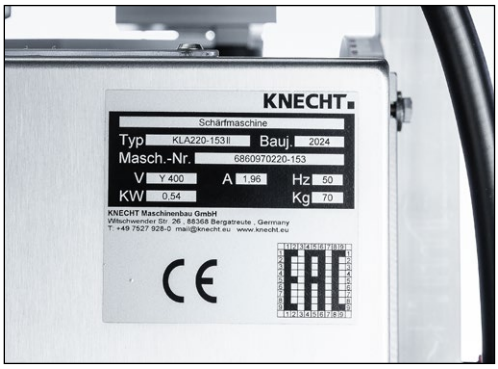


Figure 1-1 Rating plate

The rating plate (1-1) is located on the right side of the machine.

Figure 1-2 Machine serial number

The machine serial number (1-2) is located on the rating plate (1-1) and on the left underneath the water tray.

1.5 Figure and position numbers in the operating instructions

If the text makes a reference to a machine component depicted in a figure, the figure and position number will be given in brackets.

Example: (7-1/1) means picture number 7-1, position 1.

Figure 7-1 *Grinding angle display*

The grinding angle is set via the star knob (7-1/1) on the right side of the machine.

On the machine housing there is a scale (7-1/2) on which the grinding angle is read off.

Since the grinding angle changes with increasing wear of the grinding wheels, it must be readjusted daily and after each dressing process.

2. Safety

2.1 Basic safety instructions

2.1.1 Observe notes in the operating instructions

The basic prerequisite for the safe handling and uninterrupted operation of this circular knife sharpening machine is knowledge of the basic safety instructions and regulations.

- These operating instructions contain important notes on how to operate the circular knife sharpening machine safely.
- All persons carrying out work on the circular knife sharpening machine must follow these operating instructions, in particular the safety notices.
- In addition, the rules and regulations regarding accident prevention at the place of use are to be observed.

2.1.2 Obligation on the part of the operator

The operator is obliged to allow only those persons to work on the circular knife sharpening machine, who

- are familiar with the occupational safety and accident prevention regulations and have received instruction in handling the circular knife sharpening machine,
- have read and understood the operating instructions, in particular the section entitled "Safety" and the warning notes, and have provided signed confirmation of this.

The safety-awareness of the personnel at work will be monitored at regular intervals.

2.1.3 Obligation on the part of the personnel

All personnel working on the circular knife sharpening machine shall be obliged, before starting work, to

- observe basic occupational safety and accident prevention regulations,
- read the operating instructions, particularly the section entitled "Safety" and the warning notes, and provide signed confirmation that they have understood them.

2.1.4 Hazards involved in handling the circular knife sharpening machine

The circular knife sharpening machine has been built to the latest technological standards and the recognized rules of technical safety. In spite of this, its use poses inherent risks which could result in bodily harm or even death of the user or third persons, or damage to the circular knife sharpening machine or other property.

2. Safety

The circular knife sharpening machine may be used only:

- for its intended purpose
- in a safe and secure condition.

Malfunctions that may impair safety are to be eliminated immediately.

2.1.5 Malfunctions

If safety-relevant malfunctions occur with the circular knife sharpening machine, or if the processing behavior indicates that such malfunctions may have occurred, the circular knife sharpening machine must be stopped immediately and until such time as the malfunction has been found and eliminated.

Allow only authorized trained personnel to eliminate the malfunctions.

2.2 Intended use

The circular knife sharpening machine is exclusively suitable for sharpening circular knives with a diameter of 60–475 mm.

Any other use or use beyond this is not considered as intended. KNECHT Maschinenbau GmbH is not liable for any damage resulting from this. The risk is borne solely by the user.

Intended use also includes observing all instructions in the operating manual.

ATTENTION

Improper use of the circular knife sharpening machine exists, for example, if:

- **fixtures are not properly attached.**
- **knives other than those mentioned above are sharpened.**
- **knives are ground on the wrong circular knife holding fixture.**

2.3 Warranty and liability

Warranty and liability claims in case of personal injury or property damage are excluded if such damage is attributable to one or more of the following causes:

- improper use of the circular knife sharpening machine,
- improper transport, commissioning, operation, and maintenance of the circular knife sharpening machine,

- operating the circular knife sharpening machine with defective safety devices, or using improperly attached or malfunctioning safety and protective equipment,
- failure to observe the instructions with regard to transportation, commissioning, operation, maintenance and repair of the circular knife sharpening machine,
- unauthorized structural alterations to the circular knife sharpening machine,
- unauthorized modification, e.g. of the drive conditions (output and speed),
- failure to monitor machine parts that are subject to wear, and
- use of unapproved replacement and wear parts.

Use only original replacement and wear parts. If externally purchased parts are used, it is not guaranteed that they have been designed and manufactured to meet the requirements in terms of stress and safety.

2.4 Safety regulations

2.4.1 Organizational measures

Inspect all available safety devices regularly.

Observe prescribed intervals for recurring maintenance work or as specified in the operating instructions!

2.4.2 Protective equipment

Before every commissioning of the circular knife sharpening machine, ensure that all protective equipment is properly mounted and in functional condition.

Protective equipment may be removed only after the circular knife sharpening machine has stopped and has been secured against accidental restart.

When attaching spare parts, the protective equipment must be attached by the operator as stipulated.

2.4.3 Informal safety measures

The operating instructions must be permanently available at the place of use of the circular knife sharpening machine. In addition to the operating instructions, the generally applicable as well as locally relevant accident prevention regulations must also be made available and observed.

All safety alert symbols and hazard warnings on the circular knife sharpening machine must be complete and clearly legible.

2.4.4 Selection and qualification of personnel

Only trained and instructed personnel may work on the circular knife sharpening machine. Observe the legally permitted minimum age!

The responsibilities of personnel with respect to commissioning, operation, maintenance, and repair must be clearly specified.

Personnel still undergoing training or instruction may only work on the circular knife sharpening machine under the permanent supervision of an experienced person!

2.4.5 Machine control system

Only trained and instructed personnel are permitted to switch on and operate the machine.

2.4.6 Safety measures in normal operation

Do not operate the machine in any unsafe manner. Only operate the circular knife sharpening machine if all the safety devices are installed and fully functional.

At least once per shift (or per day), check the circular knife sharpening machine for externally visible damage and proper functioning of the safety devices.

Immediately report any changes present (including those of the operating behavior) to the responsible office or person. If necessary, immediately shut down the circular knife sharpening machine and secure it against restart.

Before you switch on the circular knife sharpening machine, ensure that no one can be injured by the start-up of the machine.

In the event of a malfunction, immediately stop the circular knife sharpening machine and secure it against restart. Rectify malfunctions immediately.

2.4.7 Hazards due to electrical power sources

Work on electrical systems or operating materials may only be performed by a qualified electrician, in accordance with electrical regulations.

Defects, such as damaged cables, cable connections, etc. must be immediately rectified by an authorized specialist.

2.4.8 Particular hazard areas

In the area of the grinding wheels, there is a danger of pinching and being drawn in (e.g. clothing, fingers and hair). Suitable personal protective equipment must be worn.

2.4.9 Servicing (maintenance, repair) and fault rectification

Maintenance work is to be carried out on schedule by trained personnel. Inform operating personnel before beginning repair work. Designate a supervisor responsible for this.

For all service work, the circular knife sharpening machine is to be disconnected from the current supply and secured against accidental restart.

Remove power plug. Secure repair area as necessary.

After completing maintenance work and rectifying any faults, install all safety devices and verify that they are fully functional.

2.4.10 Structural alterations to the circular knife sharpening machine

Do not make any changes, additions or conversions to the circular knife sharpening machine without the approval of the manufacturer. This also applies to the installation and setup of safety devices.

Any conversion work requires the written permission from KNECHT Maschinenbau GmbH.

Immediately replace machine parts that are not in perfect condition.

Use only original replacement and wear parts. If externally purchased parts are used, it is not guaranteed that they have been designed and manufactured to meet the requirements in terms of stress and safety.

2.4.11 Cleaning the circular knife sharpening machine

Properly handle any cleaning agents and materials used and dispose of them in an environmentally-friendly manner.

Dispose of the wear parts and replacement parts in a safe and environmentally-friendly manner.

2.4.12 Lubricants/oils and greases

When using oils and greases, follow the safety regulations applicable to the product. Comply with the special regulations for the food areas.

2.4.13 Relocation of the circular knife sharpening machine

Disconnect the circular knife sharpening machine from any external power supply, even in the event of a minor change of location. Before restarting the circular knife sharpening machine, connect it properly to the power supply.

For loading work, use only lifting equipment and load-bearing devices with sufficient lifting capacity. Appoint a qualified instructor for the lifting operation.

2. Safety

No persons other than those designated for this work may be present in the loading and installation area.

When restarting the machine, proceed only in accordance with the operating instructions.

3. Description

3.1 Intended use

The KLA 220–HV 153 II Sharpening Machine for Circular Knives can be used to sharpen and deburr circular knives with a diameter from 60–475 mm.

3.2 Technical specifications

Table version

Height	approx. 790 mm
Width	approx. 835 mm
Depth	approx. 850 mm
Space requirement (WxD)	1000 x 1200 mm
Weight	approx. 76 kg

Version with machine table

Height	approx. 1640 mm
Width	approx. 910 mm
Depth	approx. 850 mm
Space requirement (WxD)	1000 x 1200 mm
Weight	approx. 170 kg

Power supply*	3x 400 V
Mains frequency*	50 Hz
Power output*	0.50 kW
Power consumption*	0.53 kW
Current consumption*	1.52 A
Back-up fuse	16 A
Idle noise level**	approx. 68 db (A)
Operating noise level (measured A-weighted emission sound pressure level at the workplace LpA)**	approx. 71 dB (A)

3. Description

Diameter wet-grinding wheels _____ 150 mm

Speed of grinding wheels _____ 170 rpm

*) This information may change depending on the electrical power supply.
**)Two-digit sound emission value according to EN ISO 4871 (measurement uncertainty KpA 3dB (A)).
Emission sound pressure level according to EN ISO 11201. A circular knife with a diameter of 200 mm was ground.

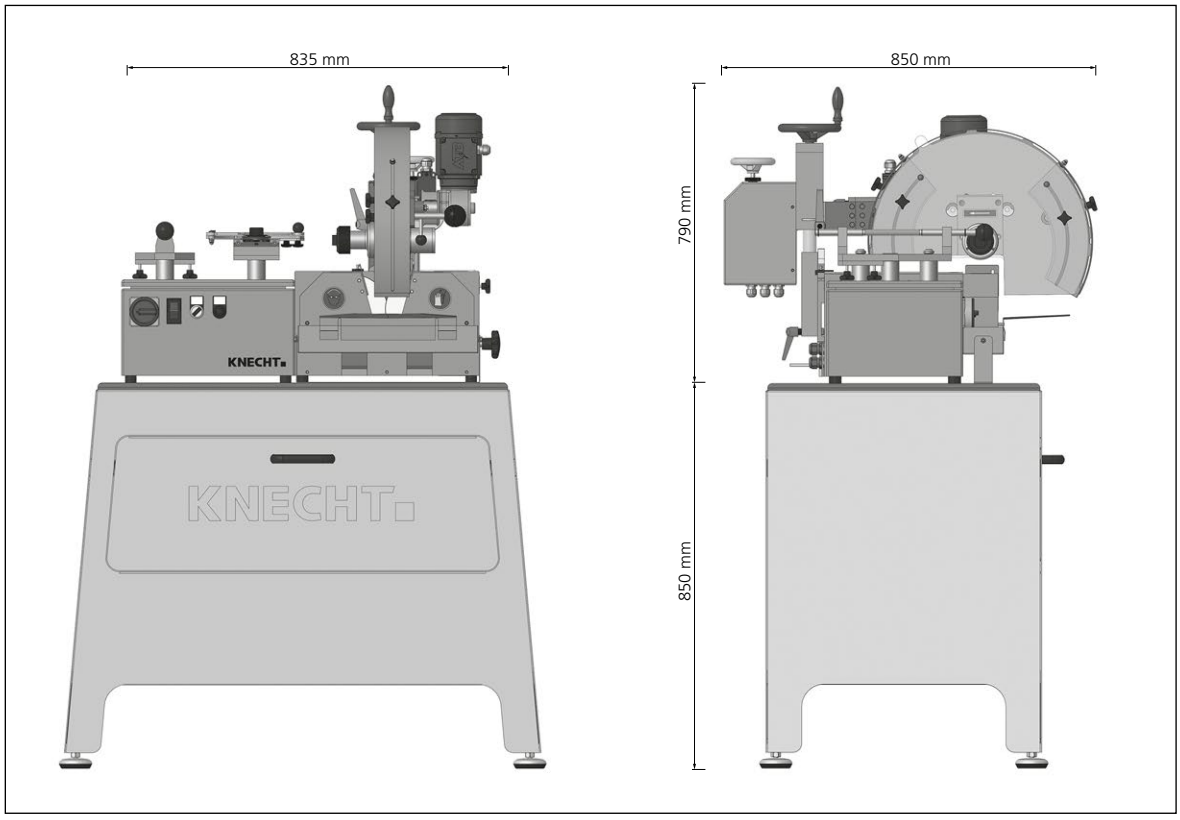


Figure 3-1 Dimensions in mm

3. Description

3.3 Functional description

The KLA 220–HV 153 II Sharpening Machine for Circular Knives can be used to sharpen and deburr circular knives with diameters from 60 to 475 mm.

Three circular knife holding fixtures are available:

- Circular knife holding fixture 1: 60–180 mm diameter
- Circular knife holding fixture 2: 180–250 mm diameter
- Circular knife holding fixture 3: 180–475 mm diameter

With the KLA 220–HV 153 II, one-sided and two-sided cutting edges can be produced.

The machine is equipped with four grinding wheels (two left and two right). The grinding and deburring angle can be set between 5°–40°.

3.3.1 Setup

The circular knife sharpening machine has two grinding units, each with two grinding wheels. The left unit processes the left side of the knife, the right unit the right side of the knife.

Both grinding units are each driven by a motor. Power is transmitted to the grinding wheels via a V-belt to a worm gear.

The grinding wheels of the left grinding unit can be operated in both directions. The grinding wheels of the right unit are infinitely variable in speed (optional). This allows one-sided cutting edges to be produced on the circular knife.

3. Description

3.4 Description of the assemblies

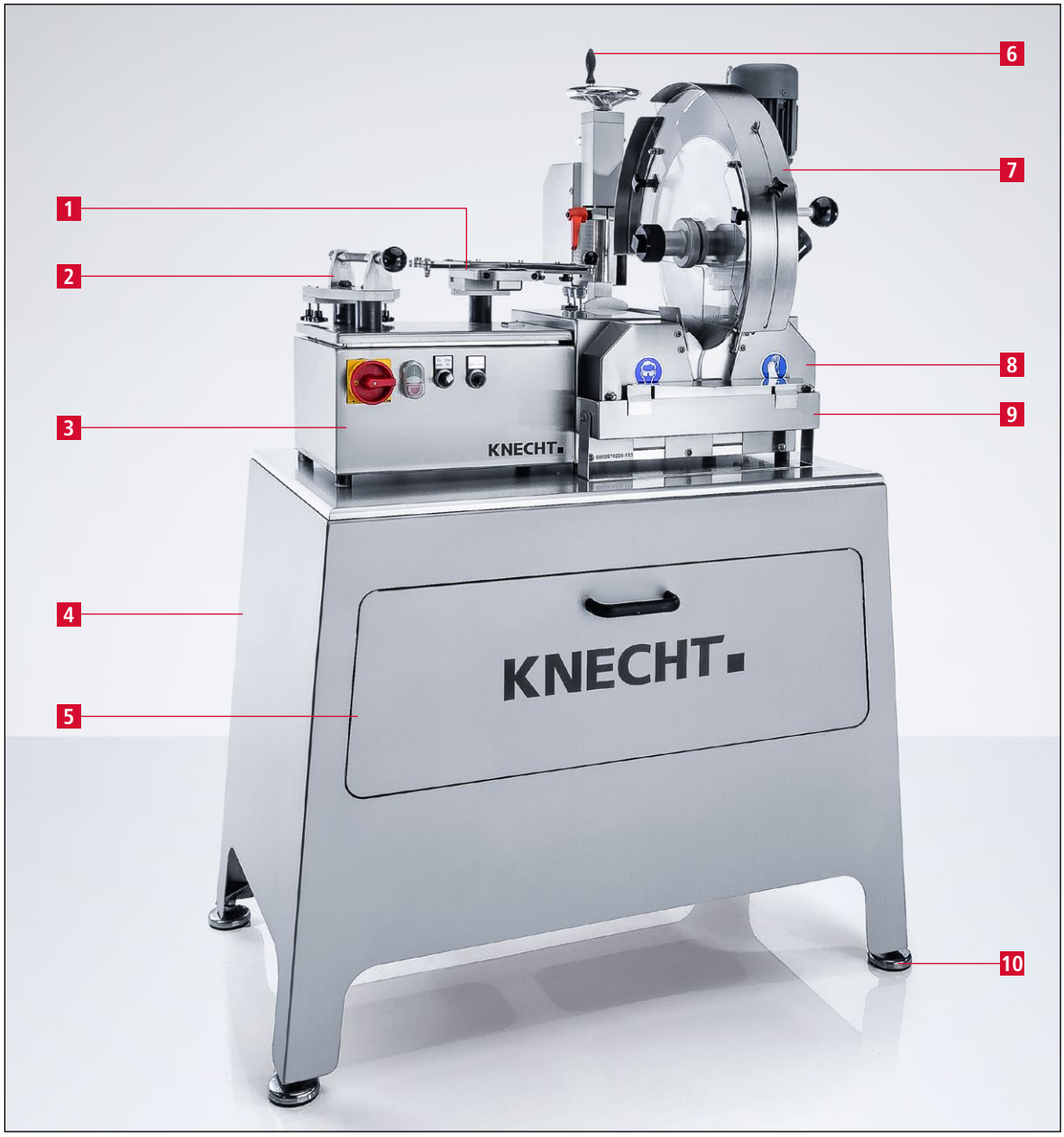


Figure 3-2 General view of circular knife sharpening machine

1 Circular knife holding fixture 1: d. 60–180 mm
2 HV 156 Dressing device
3 Control panel
4 Machine table (optional)
5 Drawer with storage space for knife holding fixtures and accessories
6 "Height adjustment" hand wheel circular knife grinding attachment
7 Circular knife holding fixture 3: d. 180–475 mm
8 Protection hood
9 Water tray
10 Machine feet

3. Description

3.4.1 Angle scale

Figure 3-3 Angle scale

1 Angle scale

3.4.2 Control panel

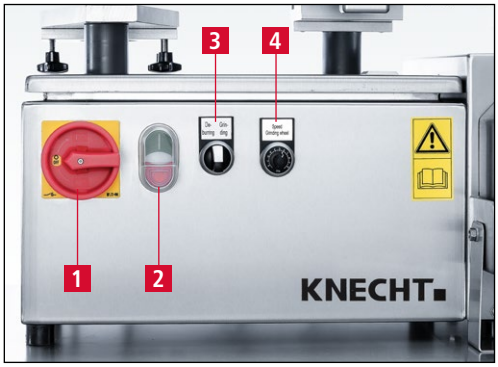


Figure 3-4 Control panel

1 Main switch
2 "Control ON / OFF" button
3 "Deburring/grinding" selection switch
4 Rotary knob for speed regulation right grinding wheels (optional)

3.4.3 Switching the sharpening machine on / off

Figure 3-5 Main switch

The main switch is located on the rear of the control panel.

Turning the main switch to position "1 ON" activates the sharpening machine ready for operation.

Turning the main switch to position "0 OFF" disconnects the sharpening machine from the power supply.

3.4.4 HV 156 Dressing device

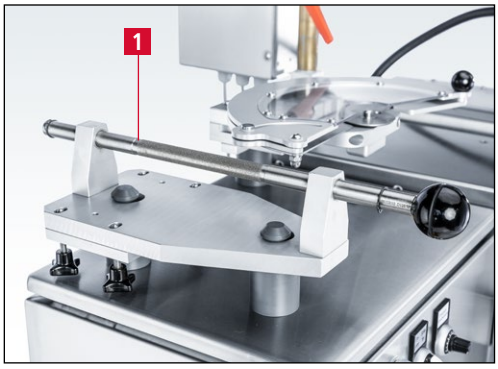


Figure 3-6 HV 156 Dressing device

1 Dressing diamond

4. Transport

When transporting, observe the local applicable safety and accident prevention regulations.

Only transport the circular knife sharpening machine with the machine feet facing downwards.

4.1 Transport aids

For transporting and for setting up of the circular knife sharpening machine, only use adequately dimensioned transport aids.

4.2 Transport damage

If damage is detected during acceptance of the delivery, immediately inform KNECHT Maschinenbau GmbH and the forwarding agent. If necessary, an independent expert must be called in immediately.

Remove packaging and fastening straps. Remove the shipping straps on the circular knife sharpening machine. Dispose of packaging in an environment-friendly manner.

4.3 Transport to another installation site

For transport to another installation site, ensure that the space requirements are fulfilled (see Chapter 3.2).

A permissible electrical connection must be provided at the new installation site.
The circular knife sharpening machine must stand firmly and securely.

Work on the electrical unit is only to be carried out by an authorized specialist. Observe the locally applicable safety and accident prevention regulations.

5. Installation

5.1 Selection of qualified personnel

We recommend having the installation work on the circular knife sharpening machine carried out by the trained KNECHT personnel.

We are not liable for any damage resulting from improper installation.

5.2 Installation site

When determining the installation site, bear in mind the space required for installation as well as maintenance and repair work on the circular knife sharpening machine (see Chapter 3.2).

5.3 Supply connections

The circular knife sharpening machine is provided ready to connect with the corresponding connection cable.

Check that the power supply is connected correctly.

If the connection to the voltage supply is incorrect, the grinding wheels can rotate in reverse of the prescribed direction. An incorrect direction of rotation can result in serious injuries.

Observe the prescribed rotating direction, see Chapter 6.

5.4 Settings

KNECHT Maschinenbau GmbH will configure the various components as well as the electrical system before delivery.

ATTENTION

Unauthorized alterations to the preset values are not permitted and can damage the circular knife sharpening machine.

5. Installation

5.5 Initial start-up of the circular knife sharpening machine

Place the circular knife sharpening machine at the installation site on a leveled table or a base. The ideal table height is approx. 85 cm. We recommend the optionally available machine table.

Have the power supply installed on site by a qualified electrician.

Completely install and inspect the protective equipment before commissioning.

Have all protective equipment checked for proper functioning by authorized trained personnel before commissioning the machine.

6. Commissioning

CAUTION

All work may only be carried out by authorized specialist personnel.

The applicable local safety and accident prevention regulations must be observed.

There is a risk that hands, hair and clothing may be pulled in while the circular knife sharpening machine is switched on.

Serious injuries are possible. Wear personal protective equipment.

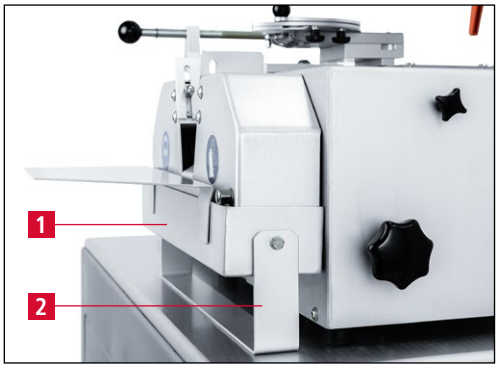


Figure 6-1 Mounting the water tray

Fill the water tray (6-1/1) with water to approx. 1 cm below the rim.

Push up the water tray from below in the direction of the grinding wheels until the stop is reached.

Fold the support bracket (6-1/2) down until it is vertical. To do this, lift the machine slightly at the front if necessary. The water tray is now secured against slipping down.

ATTENTION

The grinding wheels may not stand in water for a long time when the machine is switched off, otherwise they will become out of round.

Connect the machine plug to the socket provided on site (3x 400 V, 16 A) and set the main switch (6-2/1) to the position "1 ON".

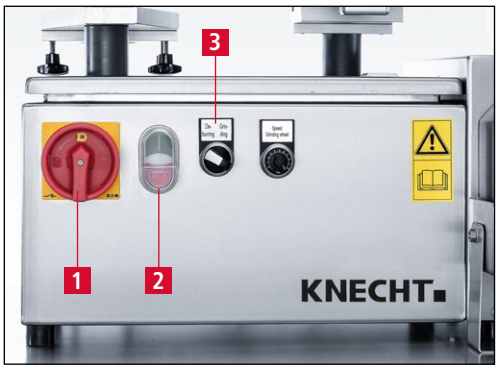


Figure 6-2 Switching on the circular knife sharpening machine

Press the "Control On / Off" button (6-2/2).

Turn the selection switch (6-2/3) on the control panel to position "Deburring".

The grinding wheels rotate.

6. Commissioning

Figure 6-3 Checking rotating direction

Check the direction of rotation of the grinding wheels.

The direction arrow (6-3/1) indicates the rotating direction of the right grinding wheels.

If the rotating direction of the grinding wheels is incorrect, have the phase reversed by a qualified electrician.

After ensuring the prescribed direction of rotation, turn off the circular knife sharpening machine.

7. Operation

7.1 General grinding fundamentals

To sharpen the cutting edge which has become blunt, metal must be removed from the knife.

To do so, grind the circular knife up to the cutting edge until a small burr appears. This is done in the switch position “Grinding”.

In the switch position “Deburring”, the burr is gently removed under moderate pressure. To do this, reduce the grinding pressure on the circular knife so that the grinding wheels are still just engaged. Deburr the circular knife in this position for approx. one minute.

Since a cutting edge is defined not only by its sharpness but also by its service life, the cutting edge angle is another important performance indicator. In theory, the smaller the cutting edge angle, the higher the service life. In practice, however, if the cutting edge angle is too small, the cutting edge breaks loose and is no longer sharp.

The cutting edge angle is therefore between 25° and 35°. For cutting edge angles below 15°, the cutting edge is so unstable that it snaps with the smallest resistance. For a cutting edge angle of more than 40°, the cutting edge is extremely stable but it loses sharpness very fast.

In essence: The profile and cutting edge angle stipulated by the manufacturer must be maintained.

7. Operation

CAUTION

When the circular knife sharpening machine is switched on, there is a danger of hands, hair and clothing being drawn in.

Serious injuries are possible!

7.2 Grinding circular knives d. 180–475 mm

7.2.1 Setting the grinding angle

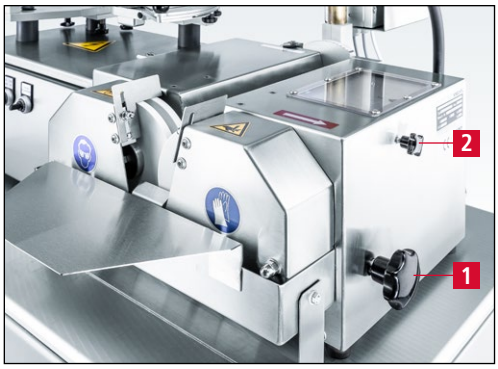


Figure 7-1 Grinding angle display

The grinding angle is set via the star knob (7-1/1) on the right side of the machine.

On the machine housing there is a scale (7-1/2) on which the grinding angle is read off.

Since the grinding angle changes with increasing wear of the grinding wheels, it must be readjusted daily and after each dressing process.

7.2.2 Adjusting the grinding wheels

Figure 7-2 Locking the display arrow

For grinding wheel adjustment, turn the grinding wheels apart with the star knob (7-2/1) until the display arrow is at "0".

Then tighten the star handle (7-2/2).

The display arrow is now locked.

7. Operation

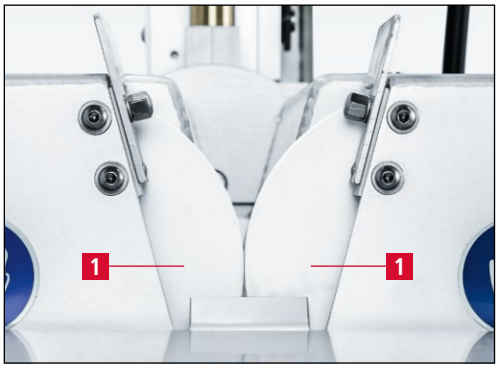


Figure 7-3 Adjusting the grinding wheels

Use the star knob (7-2/1) to adjust the grinding wheels (7-3/1) until they appear to be just touching (see Figure 7-3).

To do this, look at the grinding wheels from the front.

Figure 7-4 Setting the grinding angle

The grinding wheels are now adjusted to "zero".

Finally, release the lock of the display arrow (7-4/2).

Use the star knob (7-4/1) to set the grinding wheels to the desired grinding angle.

7.2.3 Angle scale

Figure 7-5 Angle scale

The angle scale consists of two columns:

Left column:
For double-sided grinding, symbolized with ▼

This scale applies to all knives that are ground on both sides.

Right column:
For single-sided grinding, symbolized with ◥

This scale applies to knives that are ground on one side. For this purpose, discs are mounted on one grinding wheel side which do not remove any material from the knife.

7. Operation

7.2.4 Mounting the circular knife holding fixture No. 3 d. 180–475 mm

CAUTION

Never mount or dismount the circular knife holding fixture with the machine switched on.

Never change the circular knife holding fixture with the circular knife clamped.

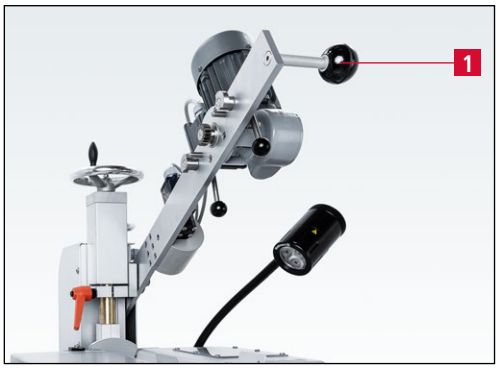


Figure 7-6 Mounting arm in rest position

Swivel the mounting arm (7-6/1) upwards into the rest position.

To do this push the mounting arm (7-6/1) slowly upwards until the locking mechanism engage.

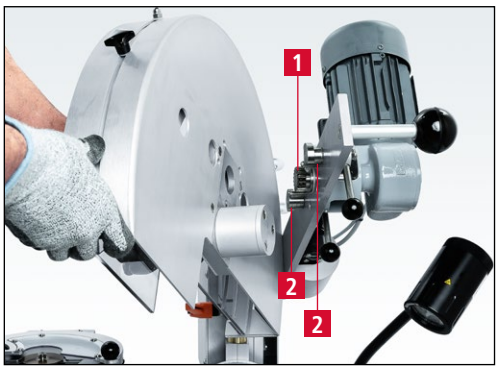


Figure 7-7 Mounting the circular knife holding fixture

Place the circular knife holding fixture No. 3 on the locating gear (7-7/1) and the locating bolts (7-7/2).

If necessary, turn the clamping nut until the gearwheels engage.

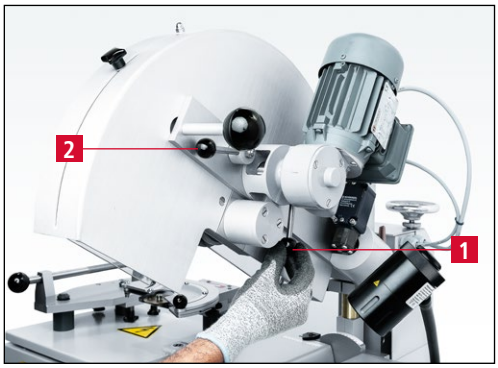


Figure 7-8 Tightening the circular knife holding fixture

Turn the right tensioning lever (7-8/1) counter-clockwise to tighten and the left tensioning lever (7-8/2) clockwise to tighten.

NOTE

The circular knife holding fixture must seat flat on the mounting arm and securely clamped.

7.2.5 Swiveling the circular knife grinding attachment into the clamping position

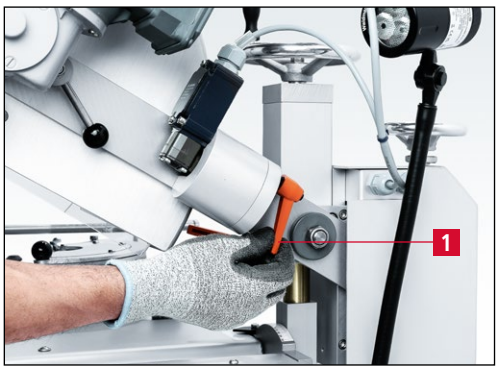


Figure 7-9 Loosening the "Mounting arm" clamping lever

To swivel the circular knife grinding attachment into the clamping position, loosen the "Mounting arm" clamping lever (7-9/1).

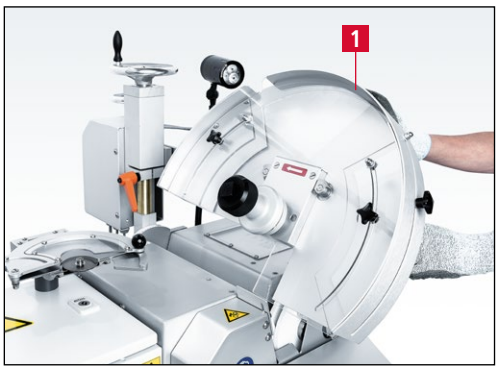


Figure 7-10 Swiveling the circular knife grinding attachment clockwise

Swivel the circular knife grinding attachment (7-10/1) clockwise as far as it will go into the horizontal position.

Tighten the "Mounting arm" clamping lever (7-9/1).

Slowly push the circular knife grinding attachment up until the locking mechanism opens.

Now carefully lower the circular knife grinding attachment until it stops.

Figure 7-11 Circular knife grinding attachment in the clamping position

The circular knife grinding attachment is now in the clamping position.

7.2.6 Clamping the knife

CAUTION

Be careful when clamping the knife! Sharp knife edge!

Serious cutting injuries are possible.

Wear protective gloves.

NOTE

Circular knives must be clean and free of grease before grinding.

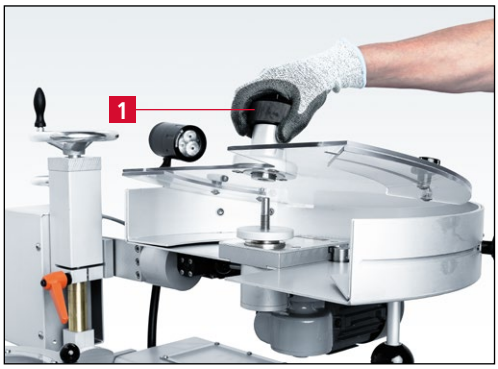


Figure 7-12 Removing clamping nut with the safety screen

Open the clamping nut (7-12/1) counterclockwise and remove it together with the safety screen.

Figure 7-13 Removing clamping flange

Remove the clamping flange (7-13/1).

7. Operation

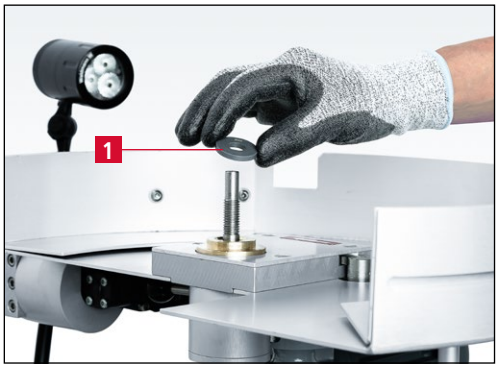


Figure 7-14 Placing centering disk on locating bolt

Place the centering disk matching the circular knife (7-14/1) onto the locating bolt.

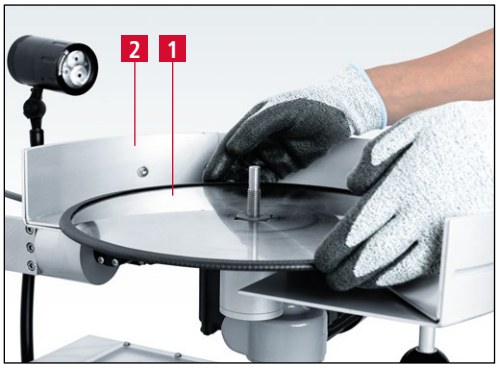


Figure 7-15 Placing circular knife on the circular knife holding fixture

Place circular knife with knife protector (7-15/1) on the circular knife holding fixture (7-15/2).

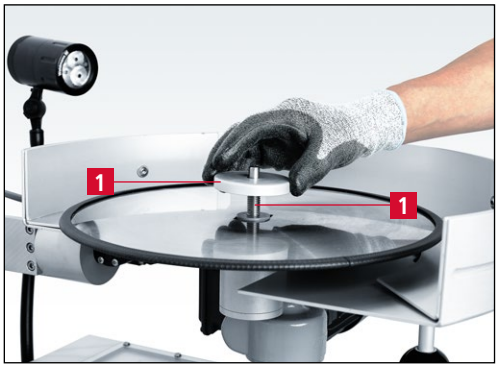


Figure 7-16 Placing the clamping flange on the locating bolt

Place the clamping flange (7-16/1) on the locating bolt (7-16/2).

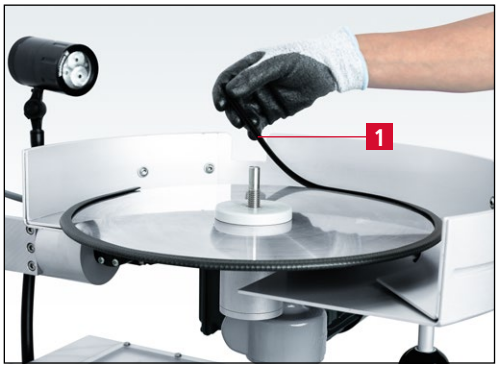


Figure 7-17 Removing the knife protector

Remove the knife protector (7-17/1).

Figure 7-18 Placing the safety screen

Put on the safety screen and tighten it clockwise with the clamping nut (7-18/1).

The circular knife is now clamped.

7.2.7 Bringing the circular knife grinding attachment into the grinding position

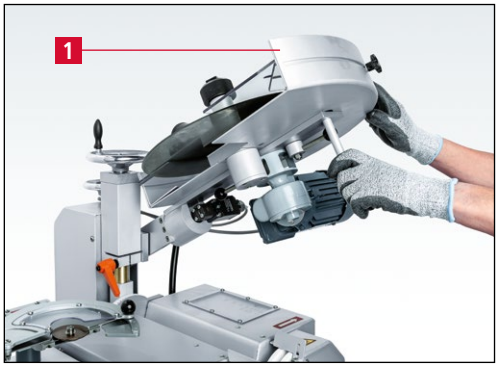


Figure 7-19 Pushing the circular knife grinding attachment upwards

Push the circular knife grinding attachment (7-19/1) slowly upwards until the locking mechanism engage.

The grinding attachment is now secured in the rest position.

7. Operation

Figure 7-20 Loosening the "Mounting arm" clamping lever

Loosen the "Mounting arm" clamping lever (7-20/1).

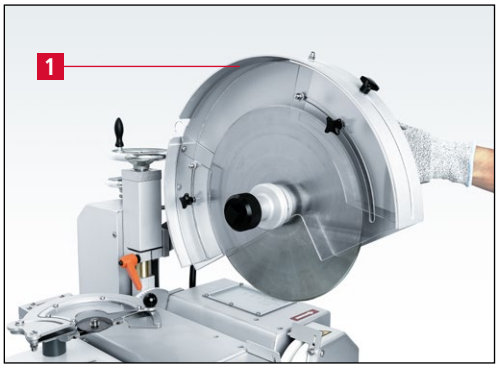


Figure 7-21 Swiveling the circular knife grinding attachment into the grinding position

Swivel the circular knife grinding attachment (7-21/1) counterclockwise into the grinding position.

Tighten the "Mounting arm" clamping lever (7-20/1).

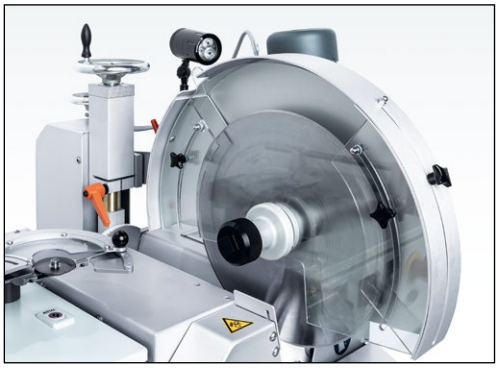


Figure 7-22 Bringing the circular knife grinding attachment into the grinding position

Slowly push the circular knife grinding attachment up until the locking mechanism opens.

Now carefully lower the circular knife grinding attachment as far as it will go.

The circular knife must not touch the grinding wheels. The distance to the grinding wheels should be approximately 10 mm.

If necessary, correct the height position of the circular knife grinding attachment (see Figure 7-24 and Figure 7-25).

7. Operation

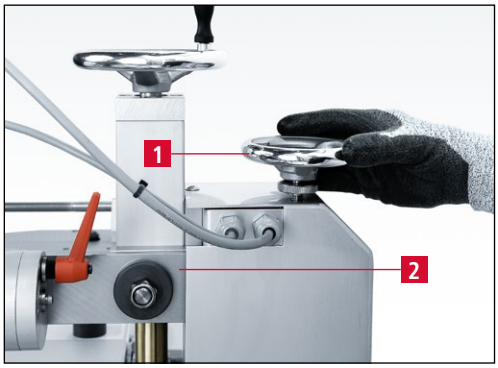


Figure 7-23 Aligning the mounting arm horizontally

Turn the "fine adjustment" hand wheel (7-23/1) until the mounting arm (7-23/2) is horizontally aligned.

Figure 7-24 Loosening the "Height adjustment" clamping lever

Loosen the "Height adjustment" clamping lever (7-24/1).

Figure 7-25 Moving the circular knife to the grinding wheels

Turn the "Height adjustment" hand wheel (7-25/1) clockwise until the circular knife touches the grinding wheels at their point of intersection.

Tighten the "Height adjustment" clamping lever (7-24/1).

7. Operation

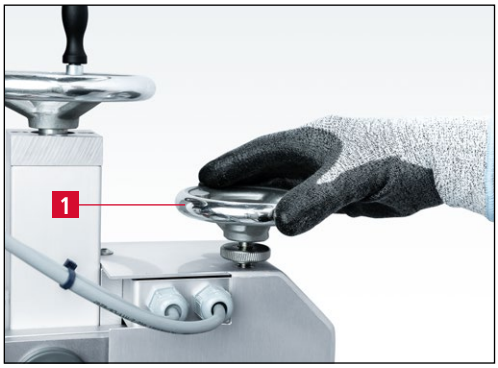


Figure 7-26 Turning the "Fine adjustment" hand wheel clockwise

Turn the "Fine adjustment" hand wheel (7-26/1) clockwise ...

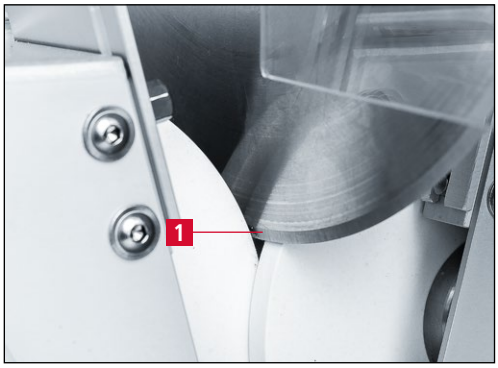


Figure 7-27 Knife moving away from the grinding wheels

... until the circular knife (7-27/1) no longer touches the grinding wheels.

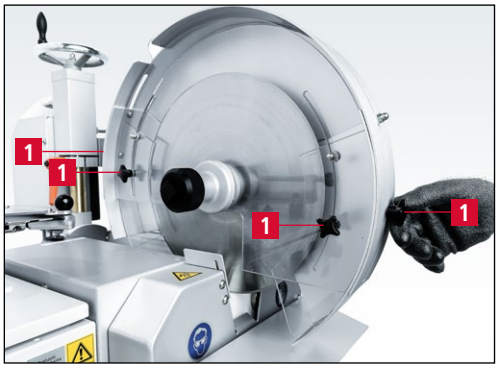


Figure 7-28 Setting the guard slides

Set all four guard slides (7-28/1) of the circular knife holding fixture so that the distance between the guard slide and the machine is max. 20 mm.

To move, loosen the star handles (7-28/1).

CAUTION

There is a risk of injury by the rotating knife. The guard slides must be set correctly.

Serious cutting injuries are possible.

7.2.8 Grinding circular knives with double-sided cutting edge

CAUTION

There is a risk that hands, hair and clothing may be pulled in while the circular knife sharpening machine is switched on.

Grinding and deburring creates abrasive particles that can enter the eyes. Wear safety glasses.

NOTE

Circular knives must be clean and free of grease before grinding.

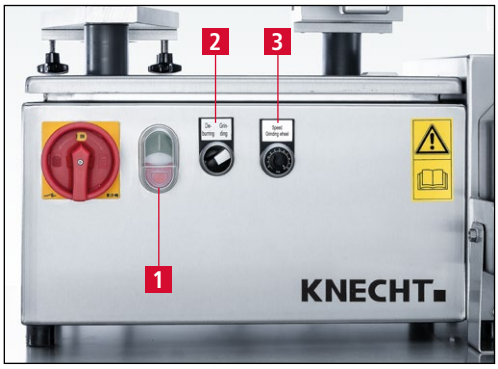


Figure 7-29 Switching on the circular knife sharpening machine

Press the "Control On / Off" button (7-29/1).

Turn the selection switch (7-29/2) on the control panel to position "Grinding".

The grinding wheels rotate.

ATTENTION

For double-sided cutting edges, the speed controller (7-29/3) must be turned clockwise as far as it will go.

The right grinding wheels now work at maximum speed.

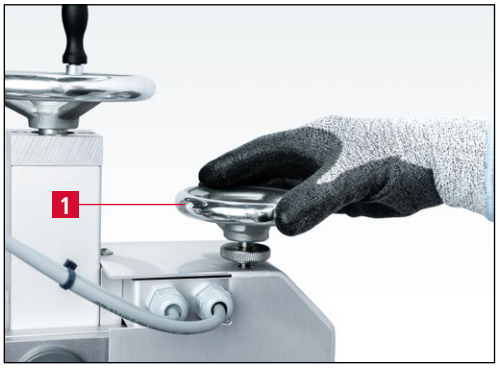


Figure 7-30 Turning the "Fine adjustment" hand wheel counterclockwise

Turn the hand wheel for fine adjustment (7-30/1) counterclockwise.

The circular knife grinding attachment now lowers towards the grinding wheels.

Turn the hand wheel until the knife touches the grinding wheels.

7. Operation

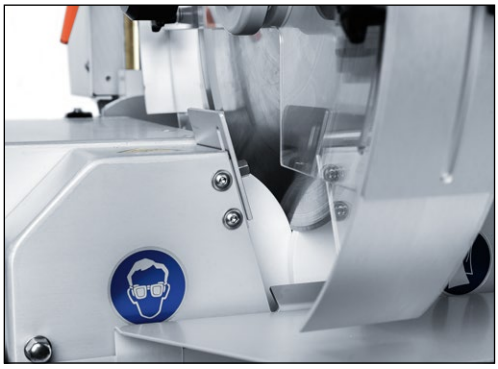


Figure 7-31 Circular knife in operation

Depending on how far the hand wheel is turned, the grinding pressure increases or decreases and thus the grinding abrasion on the circular knife.

Grind the knife until a fine burr has formed on the cutting edge.

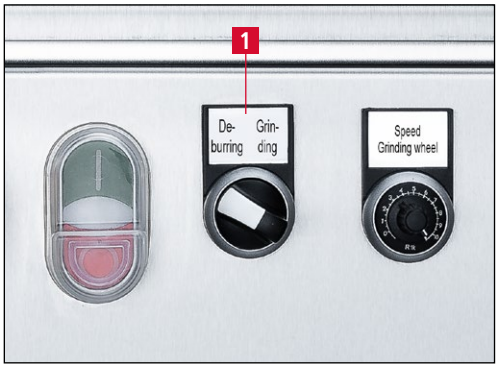


Figure 7-32 "Deburring" switch position

To deburr the circular knife, set the selection switch (7-32/1) to position "Deburring" and deburr the knife for approx. one minute.

Turn the hand wheel for fine adjustment (7-30/1) approx. 5 – 10 mm clockwise and reduce the grinding pressure.

After finishing the grinding and deburring process switch off the circular knife sharpening machine.

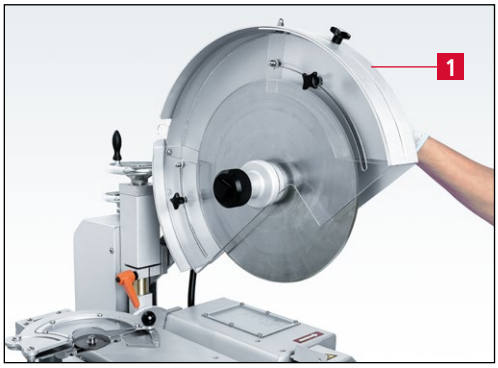


Figure 7-33 Bringing the grinding attachment into rest position

Push the circular knife grinding attachment (7-33/1) slowly upwards into the rest position until the locking mechanism engage.

Figure 7-34 Checking the knife sharpness

Check the sharpness of the knife with a sheet of paper.

7.2.9 Unclamping the circular knife

Be careful when unclamping the knife! Sharp knife edge!

Serious cutting injuries are possible.

Wear protective gloves.

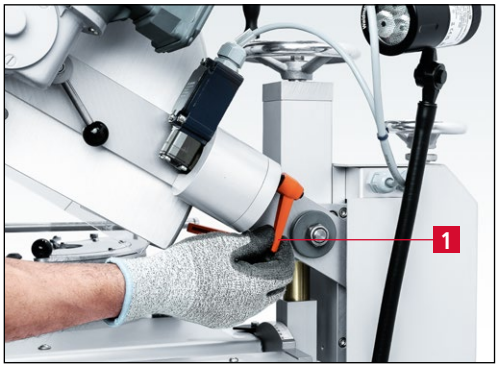


Figure 7-35 Loosening the "Mounting arm" clamping lever

Loosen the "Mounting arm" clamping lever (7-35/1).

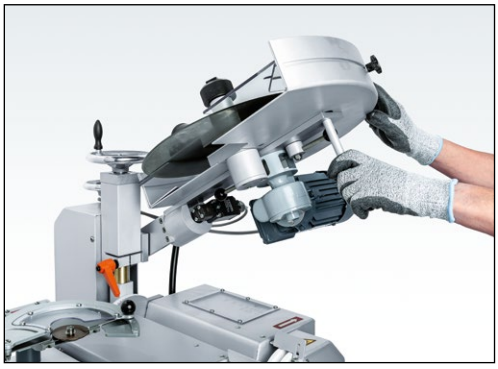


Figure 7-36 Bringing the circular knife grinding attachment into the clamping position

Swivel the circular knife grinding attachment clockwise as far as it will go into the horizontal position (Figure 7-36).

Tighten the "Mounting arm" clamping lever (7-35/1).

Slowly push the circular knife grinding attachment up until the locking mechanism opens.

Now carefully lower the circular knife grinding attachment into the clamping position.

Figure 7-37 Unclamping the circular knife

Open the clamping nut (7-37/1) counterclockwise and remove it together with the safety screen.

Attach the knife protector to the circular knife (see Figure 7-17).

Unclamp the knife.

7.2.10 Water tray

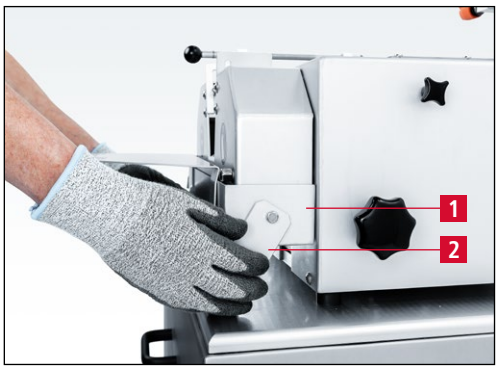


Figure 7-38 Folding the water tray away

After completing the sharpening work, the water tray (7-38/1) must be folded down so that the grinding wheels are no longer in the water (see Chapter 8.1 Cleaning).

To do this, fold the support bracket (7-38/2) in the direction of the operator.

The water tray can now be moved down.

ATTENTION

The grinding wheels may not stand in water for a long time when the machine is switched off, otherwise they will become out of round.

7.2.11 One-sided cutting edge – Option 1 Version with infinitely variable speed control of the grinding wheels

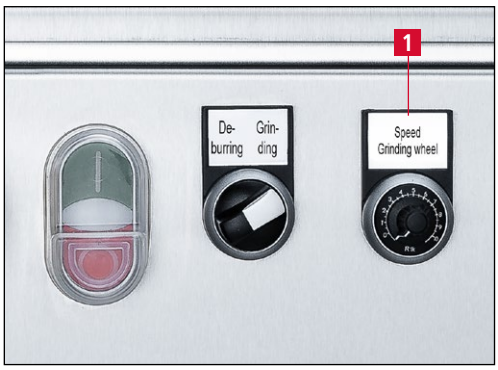


Figure 7-39 Speed control of the right grinding wheels

To produce a one-sided cutting edge, turn the speed controller (7-39/1) counterclockwise as far as it will go.

The right grinding wheels now work at minimum speed.

As a result, almost no grinding abrasion takes place.

7.2.12 One-sided cutting edge – Option 2 Version without infinitely variable speed control of the grinding wheels

Figure 7-40 Use of the hardened steel wheel

Replace the grinding wheels on the right side with the hardened steel wheel.

As a result, almost no grinding abrasion takes place.

7.2.13 One-sided cutting edge – Option 3 Only for special applications and after consultation with KNECHT Service

Figure 7-41 Inclining the grinding attachment

Incline the grinding attachment to the desired angle.

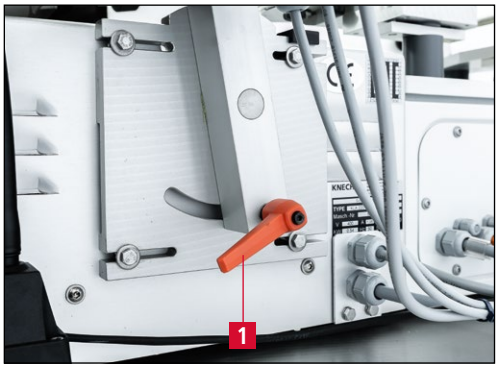


Figure 7-42 Loosening the clamping lever

To do this, loosen the clamping lever (7-42/1) on the rear of the machine …

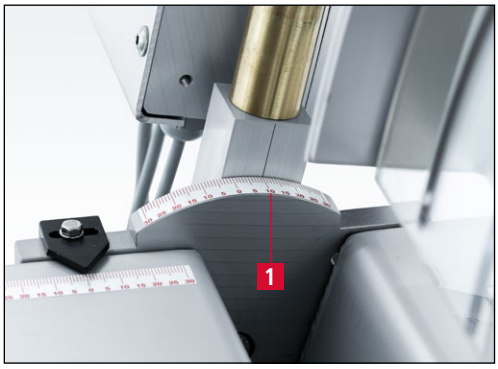


Figure 7-43 Scale for inclined position of grinding attachment

… and incline the grinding attachment by the desired angle.

The angle can be read on the scale (7-43/1).

Tighten the clamping lever (7-42/1).

NOTE

The amount by which the circular knife grinding attachment is inclined to the right must be added to the grinding angle on the left (bevel side) of the circular knife.

7. Operation

7.3 Grinding circular knives d. 60–180 mm (d. 180–250 mm)

CAUTION

When the circular knife sharpening machine is switched on, there is a danger of hands, hair and clothing being drawn in.

Serious injuries are possible!

7.3.1 Setting the grinding angle

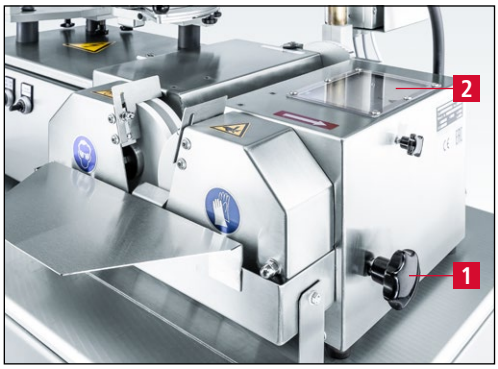


Figure 7-44 Grinding angle display

The grinding angle is set via the star knob (7-44/1) on the right side of the machine.

On the machine housing there is a scale (7-44/2) on which the grinding angle is read off.

Since the grinding angle changes with increasing wear of the grinding wheels, it must be readjusted daily and after each dressing process.

7.3.2 Adjusting the grinding wheels

Figure 7-45 Locking the display arrow

For grinding wheel adjustment, turn the grinding wheels apart with the star knob (7-45/1) until the display arrow is at "0".

Then tighten the star handle (7-45/2).

The display arrow is now locked.

7. Operation

Figure 7-46 Adjusting the grinding wheels

Use the star knob (7-45/1) to adjust the grinding wheels (7-46/1) until they appear to be just touching (see Figure 7-46).

To do this, look at the grinding wheels from the front.

Figure 7-47 Setting the grinding angle

The grinding wheels are now adjusted to "zero".

Finally, release the lock of the display arrow (7-47/2).

Use the star knob (7-47/1) to set the grinding wheels to the desired grinding angle.

7.3.3 Angle scale

Figure 7-48 Angle scale

The angle scale consists of two columns:

Left column:
For double-sided grinding, symbolized with ▼

This scale applies to all knives that are ground on both sides.

Right column:
For single-sided grinding, symbolized with ◥

This scale applies to knives that are ground on one side. For this purpose, discs are mounted on one grinding wheel side which do not remove any material from the knife.

7.3.4 Mounting the circular knife holding fixture No. 1 d. 60–180 mm (No. 2 d. 180–250 mm)

CAUTION

Never mount or dismount the circular knife holding fixture with the machine switched on.

Never change the circular knife holding fixture with the circular knife clamped.

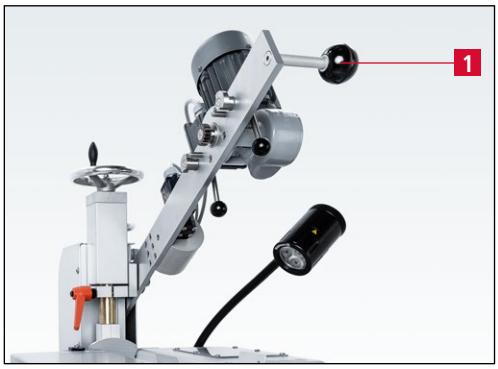


Figure 7-49 Mounting arm in rest position

Swivel the mounting arm (7-49/1) upwards into the rest position.

To do this push the mounting arm slowly upwards until the locking mechanism engage.

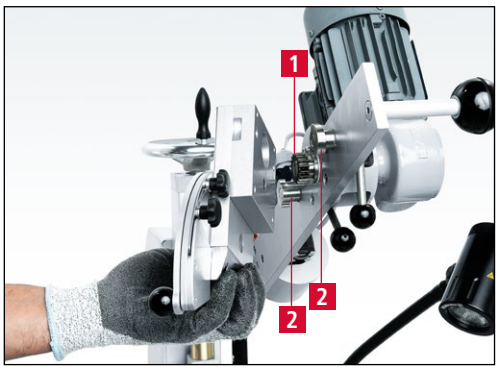


Figure 7-50 Mounting the circular knife holding fixture

Place the circular knife holding fixture No. 1 (or No. 2) on the locating gear (7-50/1) and the locating bolts (7-50/2).

If necessary, turn the holding flange of the circular knife holding fixture until the gearwheels engage.

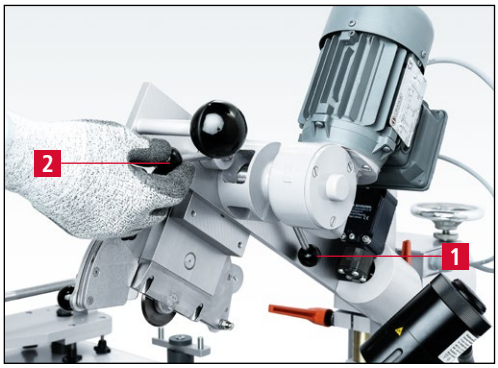


Figure 7-51 Tightening the circular knife holding fixture

Turn the right tensioning lever (7-51/1) counter-clockwise to tighten and the left tensioning lever (7-51/2) clockwise to tighten.

NOTE

The circular knife holding fixture must seat flat on the mounting arm and securely clamped.

7.3.5 Swiveling the circular knife grinding attachment into the clamping position

Figure 7-52 Loosening the "Mounting arm" clamping lever

To swivel the circular knife grinding attachment into the clamping position, loosen the "Mounting arm" clamping lever (7-52/1).

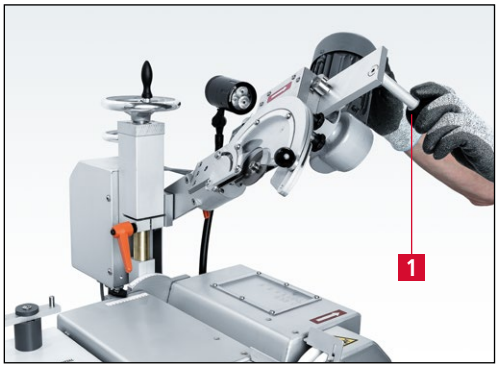


Figure 7-53 Swiveling the circular knife grinding attachment clockwise

Swivel the circular knife grinding attachment (7-53/1) clockwise as far as it will go into the horizontal position.

Tighten the "Mounting arm" clamping lever (7-52/1).

Slowly push the circular knife grinding attachment up until the locking mechanism opens.

Now carefully lower the circular knife grinding attachment until it stops.

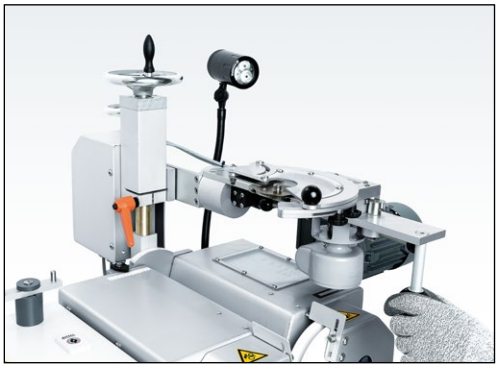


Figure 7-54 Circular knife grinding attachment in the clamping position

The circular knife grinding attachment is now in the clamping position.

7.3.6 Clamping the knife

CAUTION

Be careful when clamping the knife! Sharp knife edge!

Serious cutting injuries are possible.

Wear protective gloves.

NOTE

Circular knives must be clean and free of grease before grinding.

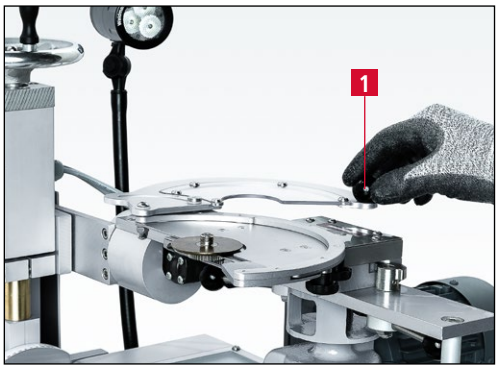


Figure 7-55 Opening the safety screen

Open the safety screen (7-55/1).

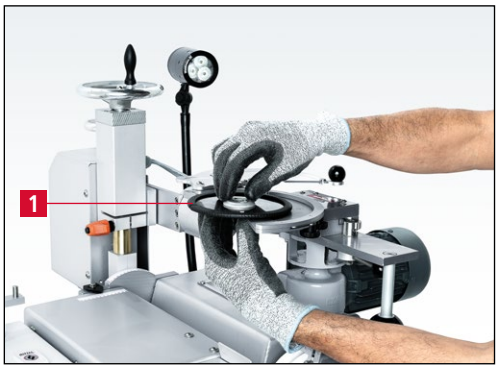


Figure 7-56 Placing the circular knife

Place the knife (7-56/1) with the knife protector and matching centering piece on the holding gear wheel.

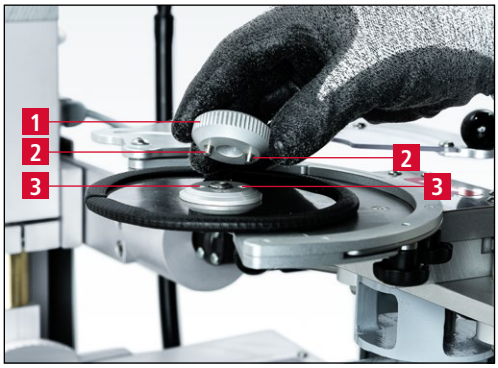


Figure 7-57 Tightening the knife

Insert the knurled key (7-57/1) with the two pins (7-57/2) into the locating hole (7-57/3) and tighten the knife counterclockwise.

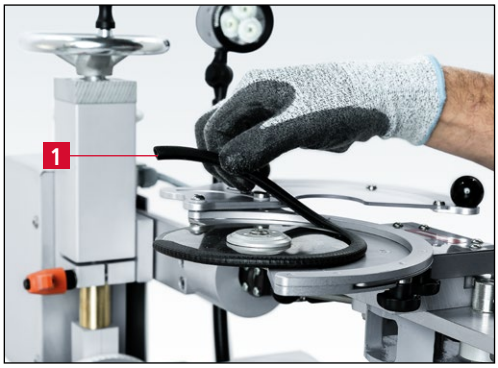


Figure 7-58 Removing the knife protector

Remove the knife protector (7-58/1).

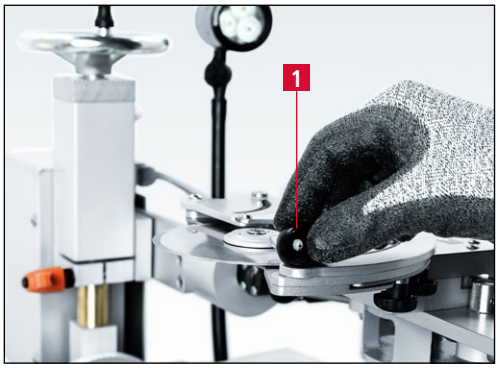


Figure 7-59 Closing the safety screen

Close the safety screen (7-59/1).

7. Operation

7.3.7 Bringing the circular knife grinding attachment into the grinding position

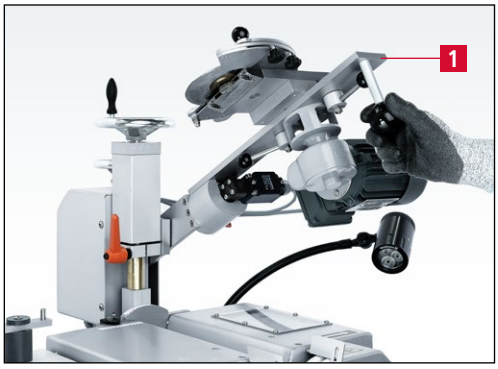


Figure 7-60 Pushing the circular knife grinding attachment upwards

Push the circular knife grinding attachment (7-60/1) slowly upwards until the locking mechanism engage.

The grinding attachment is now secured in the rest position.

Figure 7-61 Loosening the "Mounting arm" clamping lever

Loosen the "Mounting arm" clamping lever (7-61/1).

Figure 7-62 Swiveling the circular knife grinding attachment into the grinding position

Swivel the circular knife grinding attachment (7-62/1) counterclockwise into the grinding position.

Tighten the "Mounting arm" clamping lever (7-61/1).

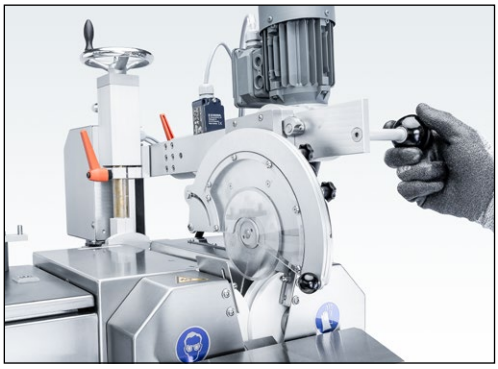


Figure 7-63 Bringing the circular knife grinding attachment into the grinding position

Slowly push the circular knife grinding attachment up until the locking mechanism opens.

Now carefully lower the circular knife grinding attachment as far as it will go.

The circular knife must not touch the grinding wheels. The distance to the grinding wheels should be approximately 10 mm.

If necessary, correct the height position of the circular knife grinding attachment (see Figure 7-65 and Figure 7-66).

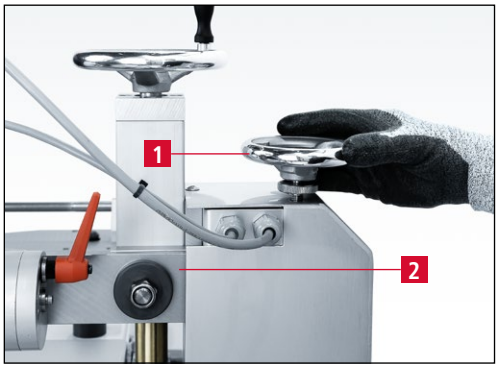


Figure 7-64 Aligning the mounting arm horizontally

Turn the "fine adjustment" hand wheel (7-64/1) until the mounting arm (7-64/2) is horizontally aligned.

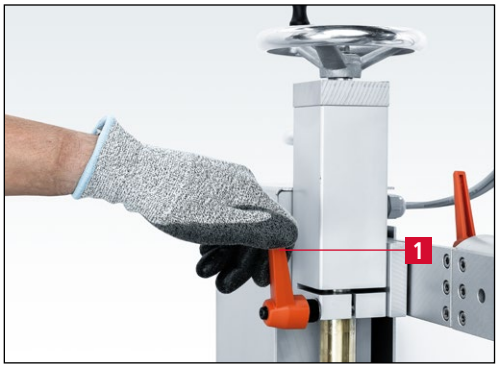


Figure 7-65 Loosening the "Height adjustment" clamping lever

Loosen the "Height adjustment" clamping lever (7-65/1).

Figure 7-66 Moving the circular knife to the grinding wheels

Turn the "Height adjustment" hand wheel (7-66/1) clockwise until the circular knife touches the grinding wheels at their point of intersection.

Tighten the "Height adjustment" clamping lever (7-66/1).

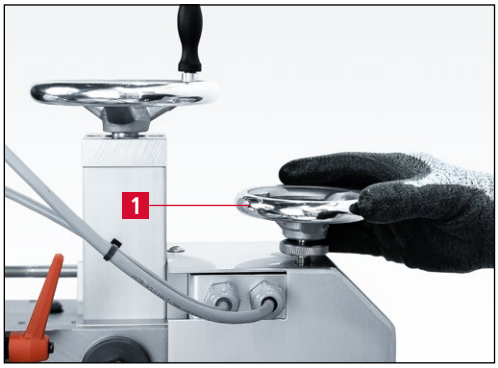


Figure 7-67 Turning the "Fine adjustment" hand wheel clockwise

Turn the "Fine adjustment" hand wheel (7-67/1) clockwise ...

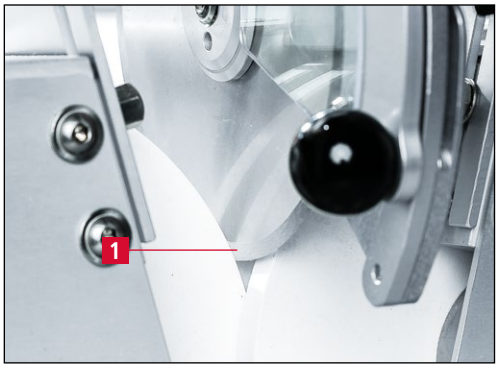


Figure 7-68 Knife moving away from the grinding wheels

... until the circular knife (7-68/1) no longer touches the grinding wheels.

7. Operation

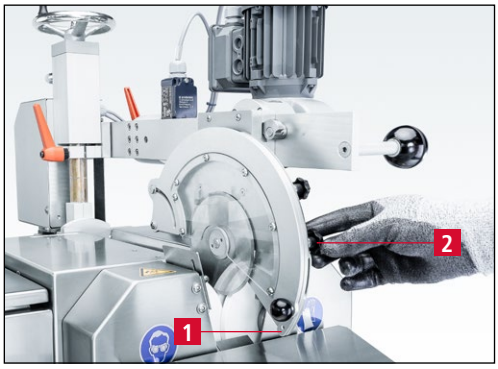


Figure 7-69 Setting the guard slide

Set the guard slide (7-69/1) of the circular knife holding fixture so that it does not bump against the machine during grinding.

To move, loosen the star handles (7-69/2).

There is a risk of injury by the rotating knife. The guard slides must be set correctly.

Serious cutting injuries are possible.

7.3.8 Grinding circular knives with double-sided cutting edge

There is a risk that hands, hair and clothing may be pulled in while the circular knife sharpening machine is switched on.

Grinding and deburring creates abrasive particles that can enter the eyes. Wear safety glasses.

NOTE

Circular knives must be clean and free of grease before grinding.

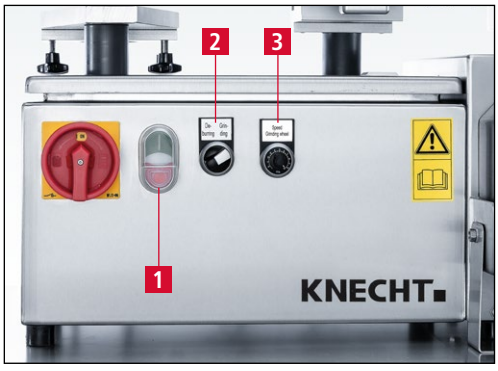


Figure 7-70 Switching on the circular knife sharpening machine

Press the "Control On / Off" button (7-70/1).

Turn the selection switch (7-70/2) on the control panel to position "Grinding".

The grinding wheels rotate.

7. Operation

ATTENTION

For double-sided cutting edges, the speed controller (7-70/3) must be turned clockwise as far as it will go.

The right grinding wheels now work at maximum speed.

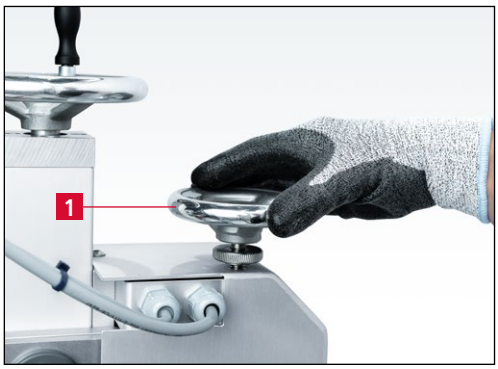


Figure 7-71 Turning the "Fine adjustment" hand wheel counterclockwise

Turn the hand wheel for fine adjustment (7-71/1) counterclockwise.

The circular knife grinding attachment now lowers towards the grinding wheels.

Turn the hand wheel until the knife touches the grinding wheels.

Figure 7-72 Circular knife in operation

Depending on how far the hand wheel is turned, the grinding pressure increases or decreases and thus the grinding abrasion on the circular knife.

Grind the knife until a fine burr has formed on the cutting edge.

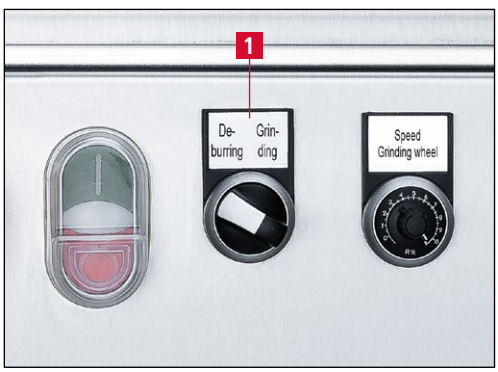


Figure 7-73 "Deburring" switch position

To deburr the circular knife, set the selection switch (7-73/1) to position "Deburring" and deburr the knife for approx. one minute.

Turn the hand wheel for fine adjustment (7-71/1) approx. 5 – 10 mm clockwise and reduce the grinding pressure.

After finishing the grinding and deburring process switch off the circular knife sharpening machine.

Figure 7-74 Bringing the grinding attachment into rest position

Push the circular knife grinding attachment (7-74/1) slowly upwards into the rest position until the locking mechanism engage.

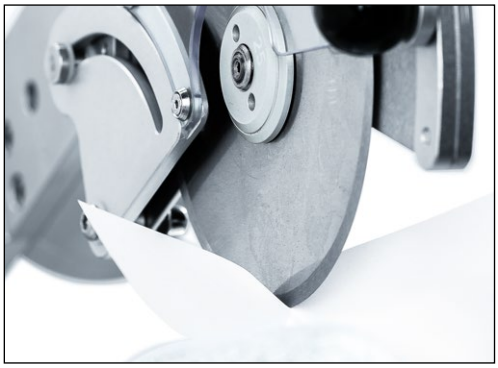


Figure 7-75 Checking the knife sharpness

Check the sharpness of the knife with a sheet of paper.

7.3.9 Unclamping the circular knife

CAUTION

Be careful when unclamping the knife! Sharp knife edge!

Serious cutting injuries are possible.

Wear protective gloves.

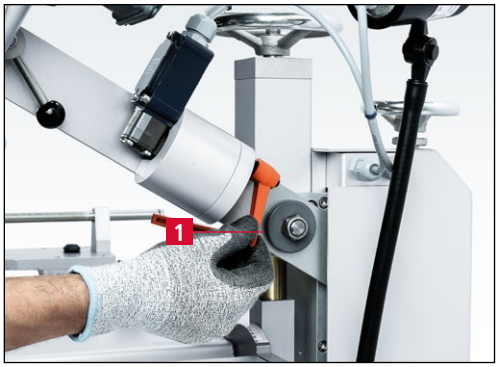


Figure 7-76 Loosening the "Mounting arm" clamping lever

Loosen the "Mounting arm" clamping lever (7-76/1).

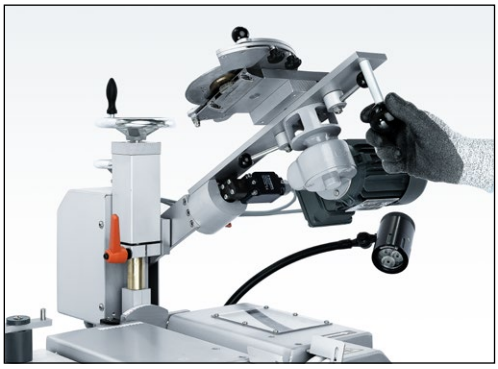


Figure 7-77 Bringing the circular knife grinding attachment into the clamping position

Swivel the circular knife grinding attachment clockwise as far as it will go into the horizontal position (Figure 7-77).

Tighten the "Mounting arm" clamping lever (7-76/1).

Slowly push the circular knife grinding attachment up until the locking mechanism opens.

Now carefully lower the circular knife grinding attachment into the clamping position.

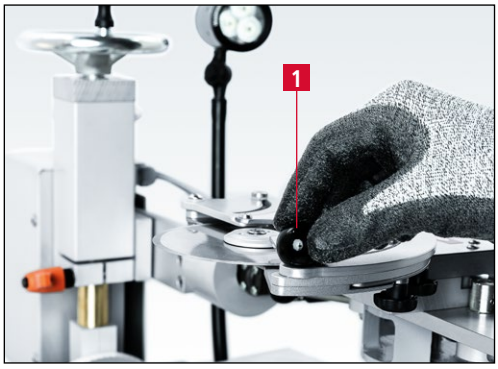


Figure 7-78 Opening the safety screen

Open the safety screen (7-78/1).

Attach the knife protector to the circular knife (see Figure 7-58).

Unclamp the knife.

7.3.10 Water tray

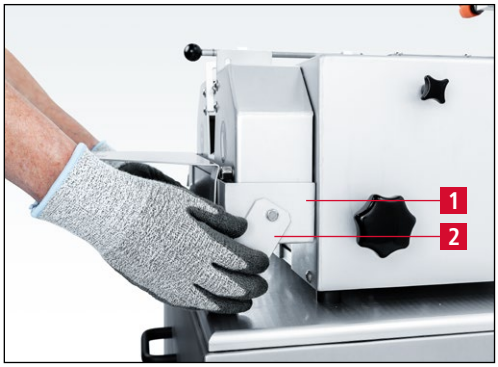


Figure 7-79 Folding the water tray away

After completing the sharpening work, the water tray (7-79/1) must be folded down so that the grinding wheels are no longer in the water (see Chapter 8.1 Cleaning).

To do this, fold the support bracket (7-79/2) in the direction of the operator.

The water tray can now be moved down.

ATTENTION

The grinding wheels may not stand in water for a long time when the machine is switched off, otherwise they will become out of round.

7.3.11 One-sided cutting edge – Option 1 Version with infinitely variable speed control of the grinding wheels

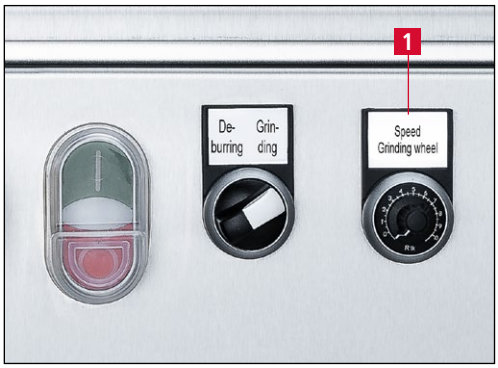


Figure 7-80 Speed control of the right grinding wheels

To produce a one-sided cutting edge, turn the speed controller (7-80/1) counterclockwise as far as it will go.

The right grinding wheels now work at minimum speed. As a result, almost no grinding abrasion takes place.

7.3.12 One-sided cutting edge – Option 2 Version without infinitely variable speed control of the grinding wheels

Figure 7-81 Use of the hardened steel wheel

Replace the grinding wheels on the right side with the hardened steel wheel.

As a result, almost no grinding abrasion takes place.

7. Operation

7.4 Dressing the grinding wheels

CAUTION

There is a risk that hands, hair and clothing may be pulled in while the circular knife sharpening machine is switched on.

Dressing produces abrasive particles that can enter the eyes. Wear safety glasses.

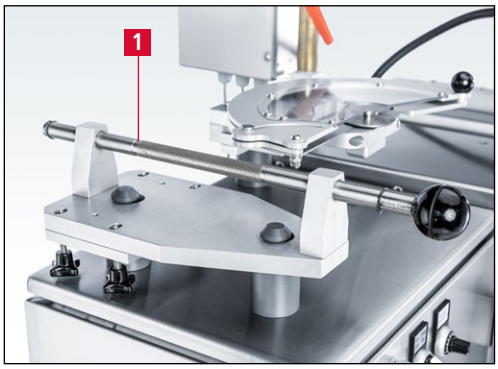


Figure 7-82 HV 156 Dressing device

With the HV 156 Dressing device (7-82/1), grinding wheels that have become out-of-round are straightened round again.

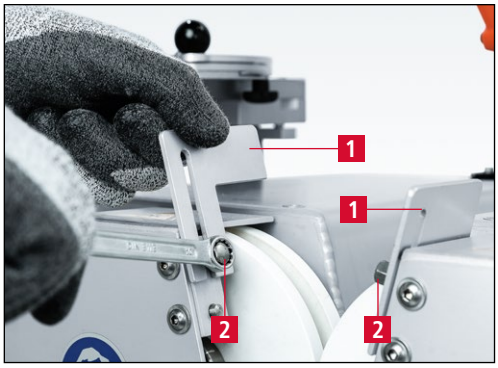


Figure 7-83 Removing the safety slides

For dressing, the adjustable safety slides (7-83/1) on the protection hood must be removed.

To do this, loosen the cap nuts (7-83/2) with an open-end wrench AF 10 mm and pull the safety slides upwards.

Figure 7-84 Opening the grinding wheels

Open the grinding wheels with the star knob (7-84/1) as far as it will go.

7. Operation

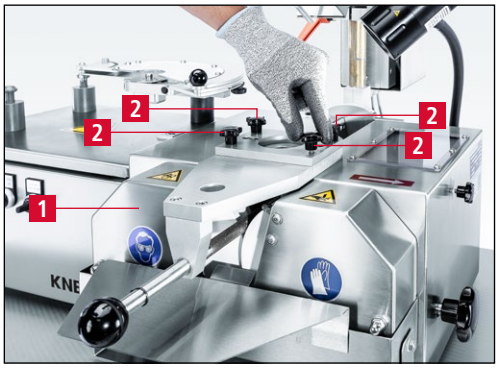


Figure 7-85 Mounting the dressing device

Mount the dressing device (7-85/1) with the four star handles (7-85/2) on the top of the machine.

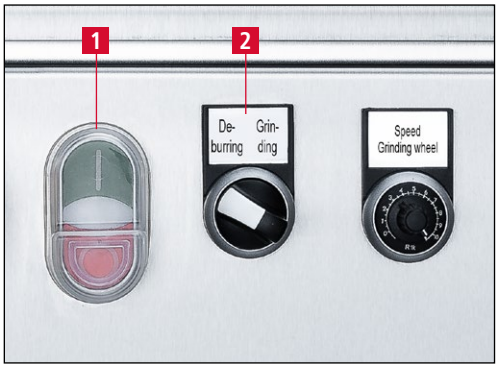


Figure 7-86 Switching on the circular knife sharpening machine

Press the "Control On / Off" button (7-86/1).

Turn the selection switch (7-86/2) on the control panel to position "Deburring".

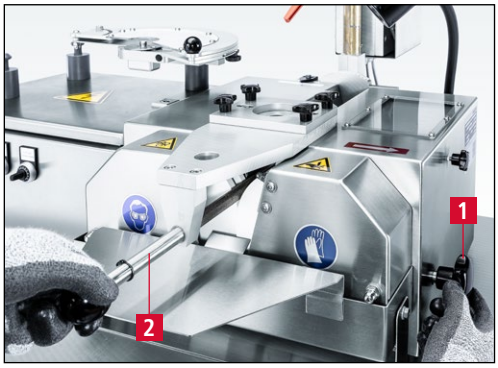


Figure 7-87 Dressing the grinding wheels

Close the grinding wheels with the star knob (7-87/1) until the diamond dressing rod engages with the grinding wheels.

Slowly move the diamond dressing rod (7-87/2) back and forth with your left hand. While doing so, constantly turn it slowly clockwise and counterclockwise.

At the same time, close the grinding wheels in millimeter steps. Do not build up too much pressure, but wait until the grinding wheels have ground themselves free again.

Feed until the grinding wheel surfaces are white again.

Switch off the circular knife sharpening machine.

Remove the dressing device and place it in the holder.

7. Operation

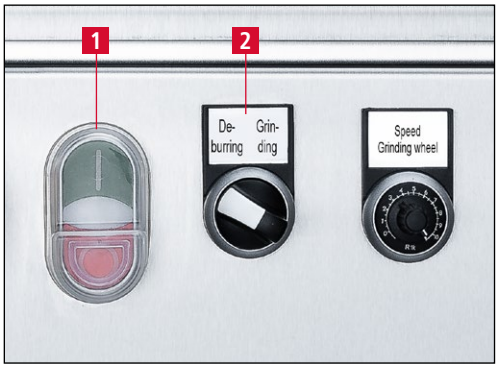


Figure 7-88 Switching on the circular knife sharpening machine

Press the "Control On / Off" button (7-88/1).

Turn the selection switch (7-88/2) on the control panel to position "Deburring".

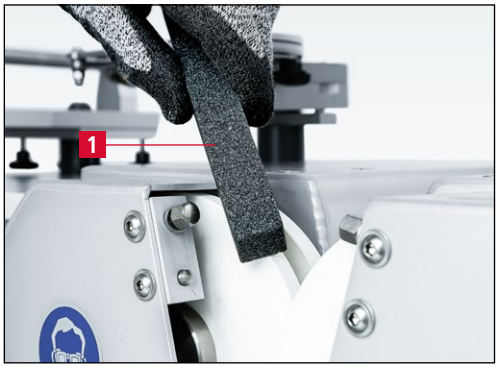


Figure 7-89 Rounding off the grinding wheel edges

Slightly round off the grinding wheel edges with the dressing stone (7-89/1).

Switch off the circular knife sharpening machine.

NOTE

The edges of the grinding wheels must always be rounded off after dressing. Sharp edges may cause the grinding wheels to break out.

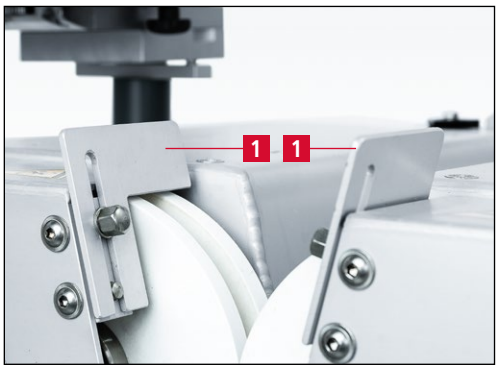


Figure 7-90 Mounting the safety slides

Mount the safety slides (7-90/1) again.

The distance to the grinding wheels must not exceed 3 mm.

7. Operation

CAUTION

The safety slides must always be adjusted in such a way that the maximum distance to the grinding wheels is 3 mm.

If the safety slides are set incorrectly, there is a risk of drawing in fingers, hair and clothing.

NOTE

After each dressing, the grinding wheels must be readjusted (see Chapter 7.2.2 / 7.3.2).

7. Operation

7.5 Changing the grinding wheels

CAUTION

For all work on the circular knife sharpening machine, observe the locally applicable safety and accident prevention regulations as well as instructions in the "Safety" and "Important notes" section of the operating instructions.

Disconnect the power plug before changing the grinding wheels.

Never turn on the machine without protective covers. Risk of injury!

Figure 7-91 Removing the water tray

To change the grinding wheels, the water tray (7-91/1) must be removed.

To do this, fold the support bracket (7-91/2) in the direction of the operator.

The water tray can now be moved down and removed.

Figure 7-92 Unscrewing the cap nuts

Unscrew the cap nuts (7-92/1) on the protective hood with an AF 13 mm open-end wrench.

Figure 7-93 Removing the protection hood

Then remove the protection hood (7-93/1).

Figure 7-94 Changing position of the grinding wheels

Move the grinding wheels with the star knob (7-94/1) until the scale display is below "0" and the grinding wheels are so far apart that they can easily be removed.

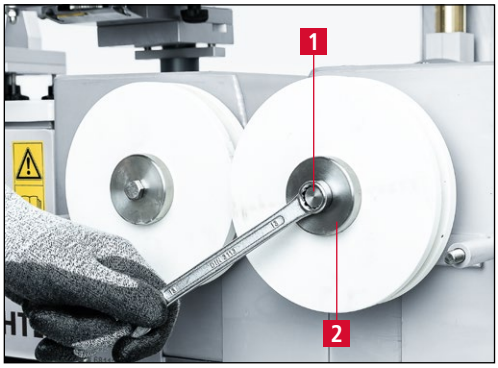


Figure 7-95 Unscrewing the right clamping screw

Unscrew the clamping screw (7-95/1) of the right grinding wheel set clockwise (left-hand thread) with an open-end wrench AF 13 mm.

Remove the clamping flange (7-95/2).

Figure 7-96 Removing grinding wheels and replacing with new ones

Remove used grinding wheels and mount new ones in reverse order.

Tighten the clamping screw counterclockwise moderately.

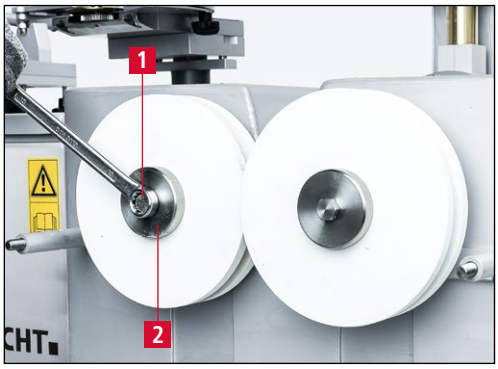


Figure 7-97 Unscrewing the left clamping screw

Unscrew the clamping screw (7-97/1) of the left grinding wheel set counterclockwise with an open-end wrench AF 13 mm.

Remove the clamping flange (7-97/2).

Figure 7-98 Removing grinding wheels and replacing with new ones

Remove used grinding wheels and mount new ones in reverse order.

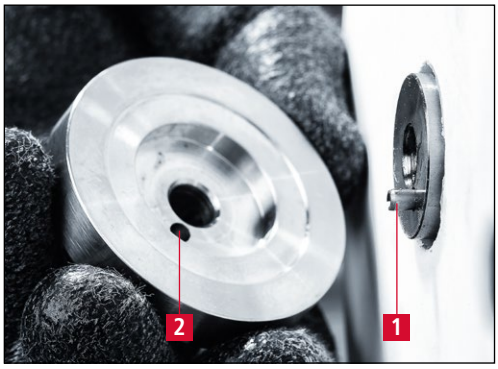


Figure 7-99 Drive pin on the holding shaft

Place the clamping flange on the holding shaft in such a way that the drive pin (7-99/1) of the holding shaft is located in the drive hole (7-99/2) of the clamping flange.

Tighten the clamping screw clockwise moderately.

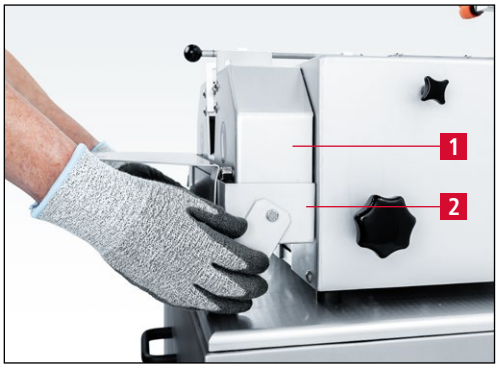


Figure 7-100 Remounting the protection hood and the water tray

Reassemble protection hood (7-100/1) and water tray (7-100/2) properly.

NOTE

After the grinding wheels have been changed, the grinding wheels must be re-adjusted (see Chapter 7.2.2 / 7.3.2).

The safety slides must also be readjusted (see Figure 7-90).

8. Care and maintenance

For all work on the circular knife sharpening machine, observe the locally applicable safety and accident prevention regulations as well as instructions in the "Safety" and "Important notes" section of the operating instructions.

8.1 Cleaning

The circular knife sharpening machine must be cleaned daily, otherwise the grinding abrasion dries and is difficult to remove.

After cleaning, we recommend the products listed below for care of the machine (see also the table of cleaning agents and lubricants in Chapter 8.1.1).

The coolant must be replaced daily. The water tray must be cleaned each time the coolant is changed.

ATTENTION

Do not spray the circular knife sharpening machine with water.

8.1.1 Cleaning agent and lubricant table

Cleaning / Lubrication work	Interflon	Würth	SHELL	EXXON Mobil
Cleaning and care of machine parts	Dry Clean Stainless Steel	Stainless steel care spray	Risella 917	Marcol 82
Lubrication of threads and sliding surfaces	Fin Grease	Multi-purpose grease	Gadus S2	Ronex MP

8. Care and maintenance

8.2 Maintenance plan (one-shift operation)

Interval	Assembly	Maintenance task
Daily	Water tray	Change coolant.
	All machine surfaces	Clean with soft cloth and care spray.
Weekly	Star handle threads and clamping levers	Lubricate with multi-purpose grease.
Weekly	Excentric bolts, locating bolts and holding gear of the grinding arm; Thread of hand wheel “Fine adjustment”; Guide shaft height adjustment of circular knife grinding attachment	Lubricate with multi-purpose grease.
	Clutch of the star knob for the grinding wheel adjustment	Lubricate with multi-purpose grease.
Annually		Contact the service department of KNECHT Maschinenbau GmbH.

9. Disassembly and disposal

9.1 Disassembly

All operating materials must be disposed of properly.

Secure moving parts against slippage.

Disassembly must be conducted by a qualified specialist.

9.2 Disposal

After the machine has reached the end of its service life, it must be disposed of by a qualified specialist. In exceptional situations, and after consultation with KNECHT Maschinenbau GmbH, the machine may be returned.

Operating materials (e.g. grinding wheels etc.) must be disposed of correctly.

10. Service, spare parts and accessories

10.1 Postal address

KNECHT Maschinenbau GmbH
Witschwender Straße 26
88368 Bergatreute
Germany

Phone +49-7527-928-0
Fax +49-7527-928-32

mail@knecht.eu
www.knecht.eu

10.2 Service

Service line:
For address, see postal address

service@knecht.eu

10.3 Wear and spare parts

If you need spare parts, please use the spare parts list provided with the machine. Please place your order using the format described below.

When ordering, please always provide:	**(example)**
Machine type	(KLA220-HV153II)
Machine number	(6811269220-153)
Designation of assembly	(drive left)
Designation of individual part	(gear KN 4/14 i = 17:1 left)
Item number (position number)	(16)
Drawing number (article number)	(411M-25-0000)
Quantity	(1 pc)

We are always happy to answer any questions.

10. Service, spare parts and accessories

10.4 Accessories

10.4.1 Abrasives used etc.

Designation	Dimensions	Grain	Order number	Notes
Grinding wheel A, white	d.150x10xd.25	280	412E-12-0485	installed on delivery
Grinding wheel Rec. Ark.	d.150x10xd.25	1000	412F-06-0472	for super fine cutting edges
Grinding wheel Steel C45	d.150x10xd.25		412S-03-0000	for one-sided cutting edges
Dressing diamond D126	d.15x375		412Q-10-0557	installed on delivery
Dressing stone C	20x20x150		412P-03-0471	included in scope of delivery

ATTENTION

Only original abrasives, wear and spare parts from KNECHT Maschinenbau GmbH are permitted to be used.

KNECHT Maschinenbau GmbH assumes no responsibility for the use of non-original parts.

If you require abrasives or other accessories, please contact our sales staff and distributors, or KNECHT Maschinenbau GmbH directly.

Thank you for choosing KNECHT!

11. Appendix

11.1 EU Declaration of Conformity
in accordance with Directive 2006/42/EC

- Machinery 2006/42/EC
- Electromagnetic Compatibility 2014/30/EU

We hereby declare that the machine designated as follows, due to its construction and design, as well as the version we introduced on the market, complies with the relevant basic safety and health requirements of the applicable EU Directive.

In case of a modification of the machine not agreed with us, this declaration loses its validity.

Designation of machine:	Sharpening Machine for Circular Knives
Model designation:	KLA 220 – HV 153 II
Machine number:	from no. 6830970220-153
Applicable harmonized standards, in particular:	DIN EN 12100-1 DIN EN 12100-2 DIN EN 60204-1 ISO 13857 DIN EN 349
Responsible for documentation:	Andreas Doerr (State-certified technician) Phone +49-7527-928-81 a.doerr@knecht.eu
Manufacturer:	KNECHT Maschinenbau GmbH Witschwender Straße 26 88368 Bergatreute Germany

A complete technical documentation is available. The operating instructions document for the machine is available in its original version and in the native language of the user.

The validity of the declaration expires in the event of changes to the legal requirements.

Bergatreute, August 7, 2024

KNECHT Maschinenbau GmbH

Markus Knecht
CEO

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mail@knecht.eu ▪ www.knecht.eu