

Operating Instructions

A 950 II

Grinding Machine for Sickle-shaped and Circular Knives



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A 950 II Grinding Machine for Sickle-shaped and 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 grinding machine for sickle-shaped and circular knives, hereafter referred to as the grinding machine, and to properly utilize its features. The term “knife” can also be used for the term “slicer knife”.

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

The operating instructions must be permanently available at the place of use of the grinding machine.

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

- transportation, 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:



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” is written in places where special attention must be paid to prevent damage or destruction of the grinding machine or its surroundings.



“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/in the grinding machine

The following warnings and mandatory signs have been affixed on/in the grinding machine:



CAUTION! DANGEROUS ELECTRICAL VOLTAGE (warning notice on the control panel)

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



CAUTION! RISK OF INJURY FROM KNIFE (mandatory sign on the base plate)

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

Wearing protective gloves is mandatory when carrying out such work.

Caution when transporting knives! Use the protective equipment provided by the knife manufacturer. Wear safety shoes and safety apron.

1.3.2 General mandatory signs

The following general mandatory signs must be observed:



CAUTION! RISK OF INJURY FROM ABRASIVE PARTICLES DURING DRESSING

Dressing the grinding wheels gives rise to grinding particles that could enter the eyes.

Wearing eye protection is mandatory when carrying out such work.

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 behind the control cabinet.

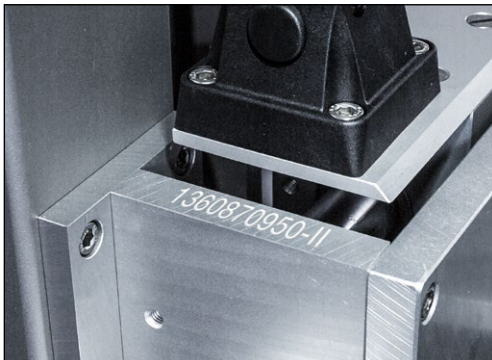


Figure 1-2 Machine number

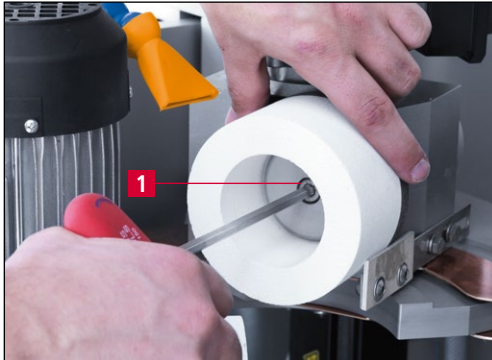
The machine serial number (1-2) is located on the rating plate (1-1) and at the front left on the machine.

1. Important notes

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: (7-22/1) means picture number 7-22, position 1.



With a hexagon screwdriver AF6 mm, loosen the screw in the center of the grinding wheel (7-22/1) counterclockwise and remove it.

Remove the front or rear grinding wheel and, if applicable, the intermediate flange (7-23/1) and mount the new grinding wheel in the reverse order.

Figure 7-22 Replacing the grinding wheels

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 grinding machine is knowledge of the basic safety instructions and regulations.

- These operating instructions contain important notes on how to operate the grinding machine safely.
- All persons carrying out work on the grinding 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 grinding machine, who

- are familiar with the occupational safety and accident prevention regulations and have received instruction in handling the grinding 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 grinding 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 grinding machine

The grinding machine has been built to the latest technological standards and the recognized rules of technical safety. Nevertheless, its use may result in danger to life and limb of the user or third parties, or damage to the grinding machine or other property.

The grinding 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. Safety

2.1.5 Malfunctions

If safety-relevant malfunctions occur with the grinding machine, or if the processing behavior indicates that such malfunctions may have occurred, the grinding 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 grinding machine is only suitable for grinding slicer knives. Before working on a slicer knife, it must first be checked whether the slicer knife fits onto the cam plate. Only then may the slicer knife be clamped onto the cam plate.

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 grinding machine exists, for example, if:

- **the slicer knife is sharpened without the cam plate.**
- **fixtures are not properly attached.**

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 grinding machine,
- improper transport, commissioning, operation, and maintenance of the grinding machine,
- operating the grinding 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 grinding machine,
- unauthorized structural alterations to the grinding machine,
- unauthorized modification, e.g. of the drive conditions (output and speed),
- failure to monitor machine parts that are subject to wear, and

2. Safety

- 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 grinding machine, ensure that all protective equipment is properly mounted and in functional condition.

Protective equipment may be removed only after the grinding 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 grinding 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 grinding machine must be complete and clearly legible.

2.4.4 Selection and qualification of personnel

Only trained and instructed personnel may work on the grinding 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 grinding machine under the permanent supervision of an experienced person!

2. Safety

2.4.5 Machine control system

Under no circumstances make program changes to the software. Parameters that the operator can set himself are excluded from this (e.g. setting the number of cycles).

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 grinding machine if all the safety devices are installed and fully functional.

At least once per shift (or per day), check the grinding 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 grinding machine and secure it against restart.

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

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

2.4.7 Hazards due to electrical power sources

The control cabinet must always be kept closed. Only authorized personnel must be allowed to access it.

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.



The yellow power supply cable is electrically live even when the main switch is turned off.

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. Safety

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 grinding 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 grinding machine

Do not make any changes, additions or conversions to the grinding 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 any machine parts that are not in a serviceable state.

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 grinding 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 grinding machine

Disconnect the grinding machine from any external power supply, even in the event of a minor change of location. Before restarting the grinding 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.

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

2. Safety

Only lift the grinding machine correctly with a suspension device in accordance with the operating instructions (attachment points for load suspension devices, etc.). Only use a suitable transport vehicle with sufficient load-bearing capacity. Secure the load reliably. Use suitable attachment points. (Chapter 4.1).

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

3. Description

3.1 Intended use

The A950 II Grinding Machine for Sickle-shaped and Circular Knives grinds slicer knives (sickle-shaped or circular) up to a maximum size of 900 mm.

3.2 Technical specifications

Height	_____	approx. 1880 mm
Width	_____	approx. 1715 mm
Depth	_____	approx. 960 mm
Space requirement (WxDxH)	_____	approx. 3000x2000x2200 mm
Weight	_____	approx. 400 kg
Power supply*	_____	3x 400 V
Mains frequency*	_____	50/60 Hz
Output*	_____	0.5 kW
Power consumption*	_____	1.9 kW
Current consumption*	_____	4 A
Back-up fuse*	_____	16 A
Control voltage*	_____	24 V DC
Compressed air supply according ISO 8573-1:2010 [1:4:2]	_____	6 bar (50 l/min)
Operating noise level (measured A-weighted emission sound pressure level at the workplace LpA)**	_____	approx. 72 dB(A)
Speed of grinding wheels, front/rear	_____	255 rpm
Grinding wheel front/rear	_____	d.100xd.40x60

*) This information may change depending on the electrical power supply.

**) Two-digit sound emission value according to EN ISO 4871. Emission sound pressure level according to EN ISO 11201, measurement uncertainty KpA. 3dB(A). A slicer knife was ground (type known to KNECHT Maschinenbau GmbH).

3. Description

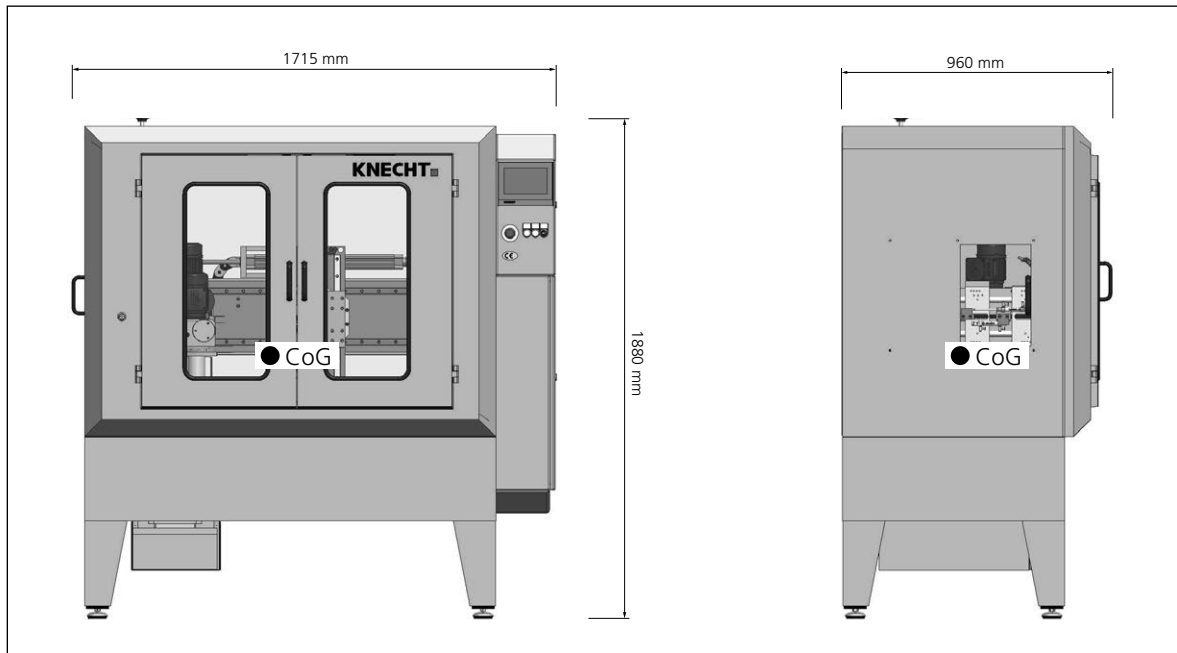


Figure 3-1 Dimensions in mm and center of gravity (CoG) of the machine

3.3 Functional description

The grinding machine can be used to automatically sharpen and deburr slicer knives (sickle-shaped or circular knives) with a size of maximum 900 mm.

The slicer knife is clamped onto a cam plate and sharpened along the knife edge by the grinding wheels precisely according to its shape.

In the event of an emergency, the grinding machine can immediately be stopped by pressing the "Emergency Stop" button.

3. Description

3.4 Description of the assemblies



Figure 3-2 General view of grinding machine

- 1 Hand wheel for grinding depth
- 2 Front and rear grinding unit
- 3 Water tray
- 4 Control unit with control panel
- 5 SP 116 Cam plate (with knife)
- 6 Machine feet

3. Description

3.4.1 Grinding unit

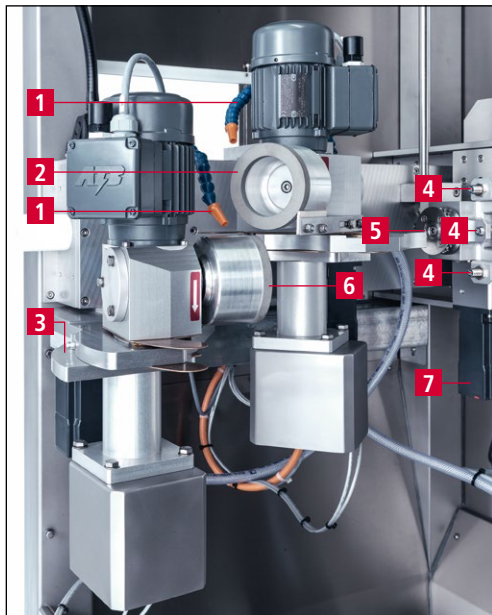


Figure 3-3 Grinding unit

- 1 Coolant hose
- 2 Grinding wheel (rear)
- 3 Angle adjustment scale
- 4 Inductive switch
- 5 Drive pinion of cam plate
- 6 Grinding wheel (front)
- 7 Cam plate drive (servo motor)

3.4.2 Holding fixture cam plate

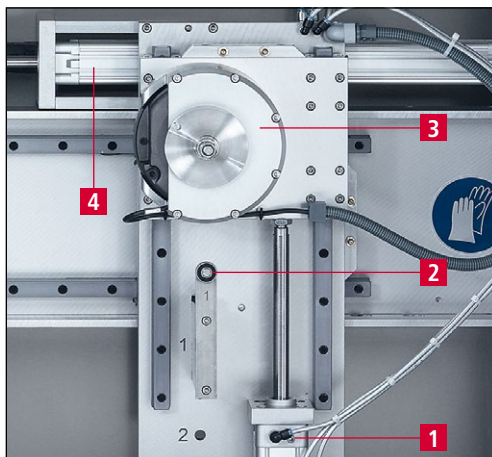


Figure 3-4 Holding fixture cam plate

- 1 Cylinder cam plate up/down
- 2 Z-coupling
- 3 Holding fixture cam plate
- 4 Cylinder for pressing on cam plate

3. Description

3.4.3 Pneumatics

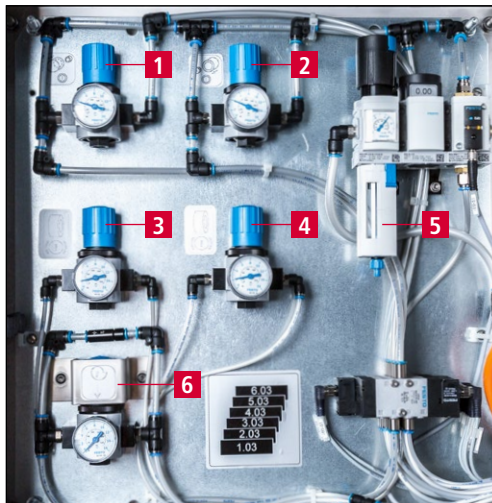


Figure 3-5 Pneumatics

- 1 Pressure on front grinding wheel
- 2 Pressure on rear grinding wheel
- 3 Clamp front grinding wheel
- 4 Clamp rear grinding wheel
- 5 Maintenance unit
- 6 Cam plate pressure

3.4.4 Switching the grinding machine on/off



Figure 3-6 Main switch

- 1 Main switch

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

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

3. Description

3.4.5 Control panel



Figure 3-7 Control panel

- 1 Touch panel
- 2 "Emergency stop" button
- 3 "Control ON" button
- 4 "Start/Stop" button
- 5 "Service on/off" key switch: position "1" for setup mode, position "0" for automatic mode.

3. Description

3.4.6 Layout of user interface (main screen)

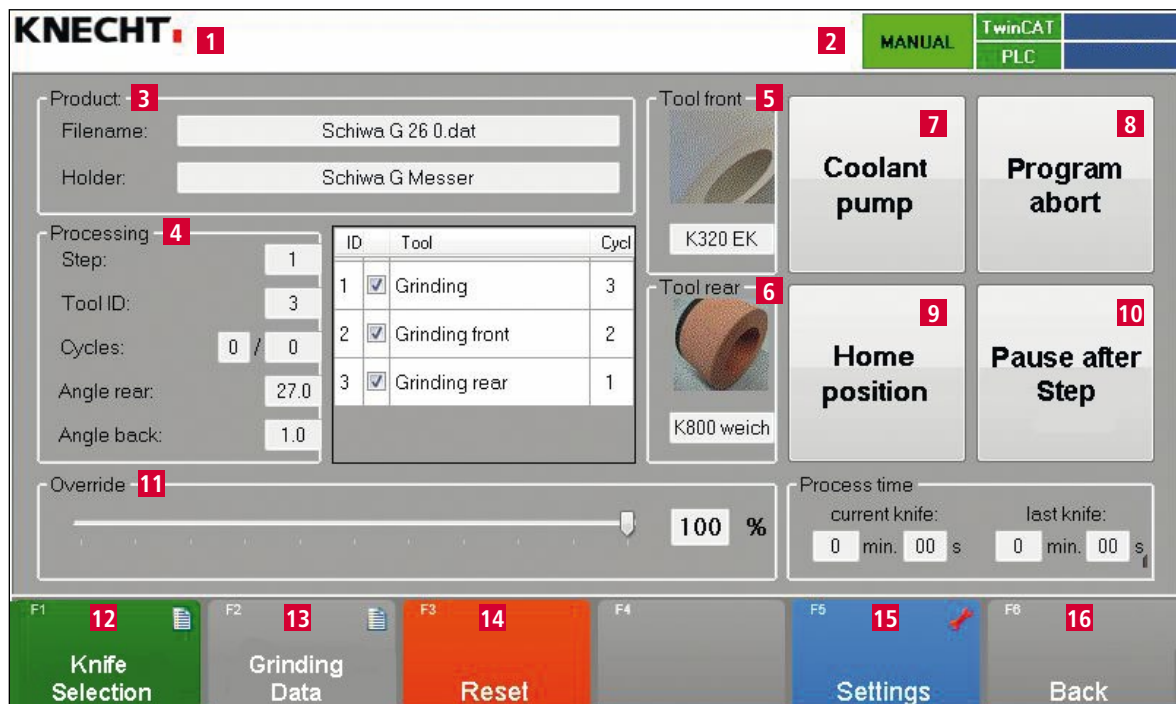


Figure 3-8 Main screen

- 1 Error messages
- 2 Status display
- 3 Product (loaded product data – grinding program and holder)
- 4 Processing (current settings of the processing steps (stored in grinding program))
- 5 Tool front (selected front grinding wheel)
- 6 Tool rear (selected rear grinding wheel)
- 7 **“Coolant pump”**: manual switching on/off the coolant pump
- 8 **“Program abort”**: reset program after stop
- 9 **“Home position”**: moves the cam plate to the change position
- 10 **“Pause after step”**: pauses the grinding program after a completed step
- 11 **„Override”**: reduce the speed of the cam plate specified in the grinding data for the current moment
- 12 **“Knife Selection”**: select the knife to be processed; see Chapter 8.2
- 13 **“Grinding Data”**: see Chapter 8.3
- 14 **“Reset”**: delete temporary fault messages
- 15 **“Settings”**: see Chapter 8.4
- 16 **“Back”**: switch to the previous display or close user interface

NOTE

The assignment of the touch panel fields varies according to the current display screen. The respective assignment is indicated by text.

4. Transport



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

Only transport the grinding machine with the machine feet facing downwards.

4.1 Transport aids

For transporting and for setting up of the grinding machine, only use adequately dimensioned transport aids e.g. truck, forklift or hydraulic lifting truck. Remove the water tray before transporting.

When using a forklift or a lifting truck, move the fork under the grinding machine.

Note the machine's center of gravity when transporting. The center of gravity (CoG) is shown in Figure 3-1.

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 grinding 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 permitted electrical connection, pneumatic connection and network connection must be available at the new installation site. The grinding 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 installation work on the grinding 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 grinding machine (see Chapter 3.2). The machine may only be stored or operated in dry rooms.

5.3 Supply connections

The grinding machine is provided ready to connect with the corresponding connection cable.

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

The compressed air supply and the network connection must be installed on site by a qualified technician.



Only connect compressed air when the doors are closed.

Never cut off the compressed air while the knives are clamped.
Serious injuries are possible.

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 grinding machine.

5. Installation

5.5 Initial start-up of the grinding machine

Place the grinding machine at the installation site on a level base.

Compensate for uneven floors by turning the machine feet (3-2/6) with an AF 19 mm open-end wrench. Align the machine using a spirit level. To do this, place the spirit level on the frame of the grinding machine.

Dismantle all transport devices on the machine. Ensure that all the axes can move freely.

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

Have the compressed air supply and the network connection installed on site by a qualified technician.

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.

Observe the locally applicable safety and accident prevention regulations.

Only connect compressed air when the doors are closed.

Never remove compressed air when the knife is clamped.
Serious injuries are possible.

Fill the water tray (3-2/3) with approx. 20 litres of water to 3 cm below the rim.

NOTE

The use of a coolant additive is not intended.

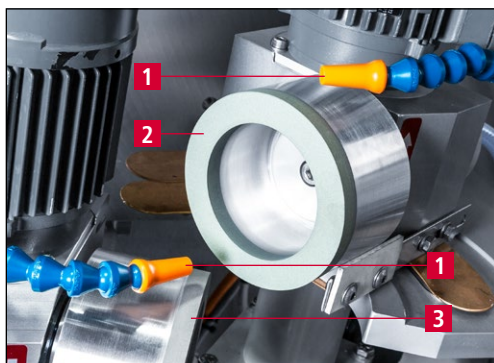


Figure 6-1 Positioning the coolant hoses

Open the safety doors.

Position the coolant hose (6-1/1) as shown in the figure. The distance to the rear grinding wheel (6-1/2) and the front grinding wheel (6-1/3) should be approx. 5 mm. The coolant hose may not touch the grinding wheel.

Close the safety doors.

ATTENTION

Maintain a minimum distance of 5 mm between the coolant hose and the grinding wheel, since the grinding wheels rotate during the grinding process.

Connect the power plug to the socket provided on site (3x 400 V, 16 A).

6. Commissioning

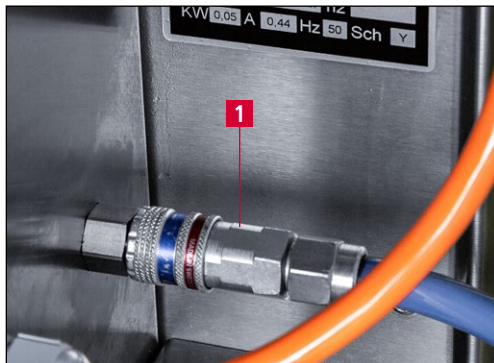


Figure 6-2 Compressed air connection

Plug in the compressed air hose at the compressed air connection (6-2/1).

Use the control knob (3-6/3) to set the pressure to 6 bar.

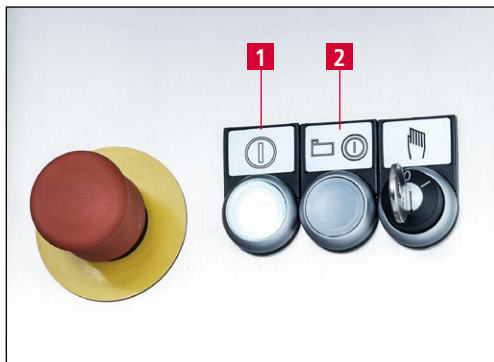


Figure 6-3 Control panel

Set the main switch (3-6/1) to the "1 ON" position and wait for the controls to initialize.

When the "Control ON" button (6-3/1) flashes, switch on the control unit with the "Control ON" button (6-3/1).

ATTENTION

Do not press the "Start/Stop" button (6-3/2) under any circumstances.

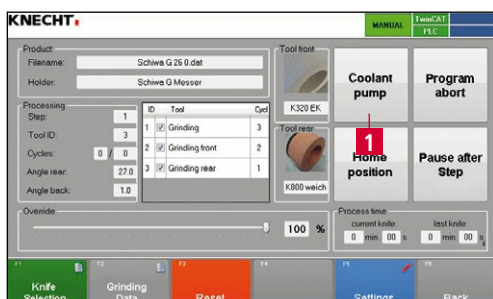


Figure 6-4 Main screen

To turn on the coolant pump, press the **"Coolant pump"** touch panel field (6-4/1) on the main screen.

6. Commissioning

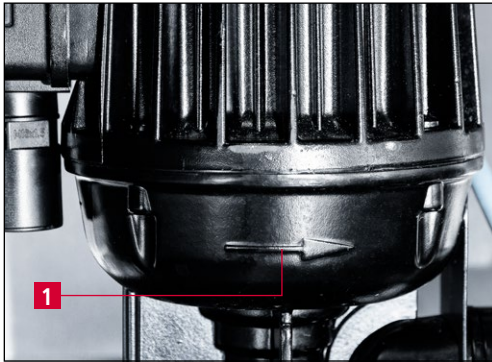


Figure 6-5 Checking rotating direction

Check the direction of rotation of the coolant pump.

The direction arrow (6-4/1) indicates the rotating direction of the pump.

If the direction of rotation is not correct, have the phase reversed by a qualified electrician.

After ensuring the prescribed direction of rotation, turn off the grinding machine.

To do this, turn the main switch (3-8/1) to the position "0 OFF".

ATTENTION

Ensure that the power supply is connected correctly.

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

NOTE

The coolant flow is regulated via the tap on the coolant hose.

7. Operation



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

Observe the locally applicable safety and accident prevention regulations.

Never mount the knife without knife protector. Serious injuries are possible.

7.1 Switch on the grinding machine

Set the main switch (3-6/1) to the “1 ON” position. Wait for the controls to initialize. The main screen appears on the control panel (3-8).

When the control is ready, the “Control ON” button (3-7/3) flashes.

Press the “Control ON” button (3-7/3) to activate the control system. If activation was successful, the “Control ON” button will light up continuously.

Turn the key switch (3-7/5) to position “0” (automatic mode).

7.2 Grinding knives

7.2.1 Loading the grinding program

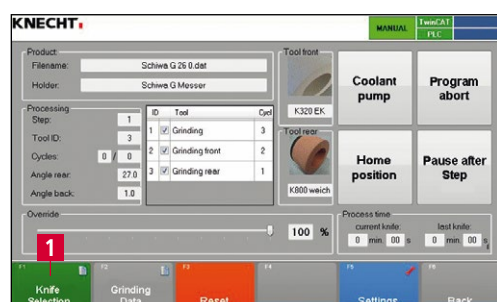


Figure 7-1 Main screen

On the main screen, press the touch panel field **“Knife Selection”** (7-1/1). The “Open” dialog box appears.

The grinding programs are located in the “Product data” folder.

7. Operation

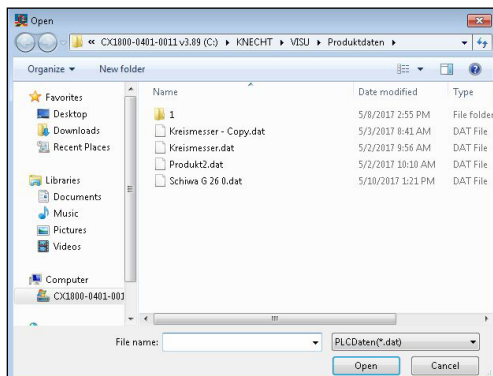


Figure 7-2 Selecting a grinding program

Select the desired grinding program by double-clicking on the corresponding file. (Grinding programs have ".dat" in the file name).

The grinding program is now loaded and the "Open" dialog closes.

ATTENTION

Use the grinding program that matches the knife. An incorrect grinding program can damage the machine and the knife.

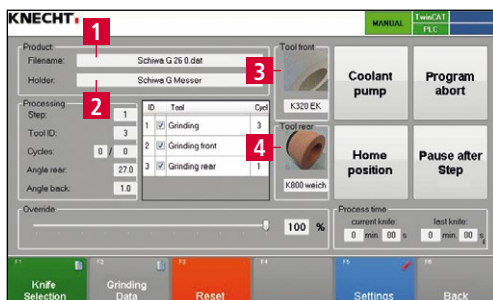


Figure 7-3 Main screen

The selected grinding program appears in the "File name" line (7-3/1) on the main screen.

Check the abrasives used (7-3/3) and (7-3/4) and exchange them if necessary.

The images and data must match the abrasives used.

NOTE

The name of the cam plate matching the grinding program appears on the main screen under "Holder" (7-3/2). This name is engraved on the cam plate.

Each knife and each grinding program may require individual abrasives.

7. Operation

7.2.2 Mounting the SP 116 Cam plate

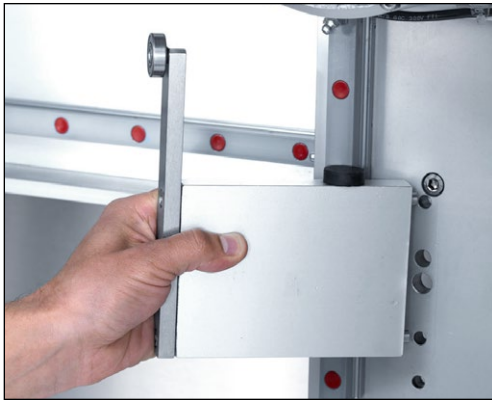


Figure 7-4 Mounting the Z-coupling

Open the safety doors.

Mount the Z-coupling on the SP 116 Cam plate as described and tighten using combination wrench AF 19 mm. Here, care should be taken to note the relevant marking on the Z-coupling and the base plate.



Figure 7-5 Mounting the SP 116 Cam plate

Place the SP 116 Cam plate (7-5/1) on the holding fixture (3-4/3) and tighten with an open-end wrench AF 19 mm.

Turn the cam plate by hand so that the holes (7-5/2) are aligned with the grinding wheels.

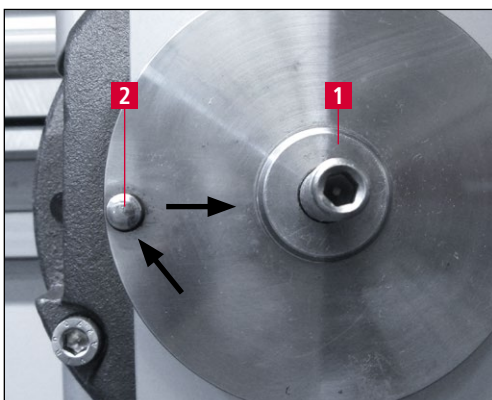


Figure 7-6 Centering collar and centering pin

The centering collar (7-6/1) and centering pin (7-6/2) must engage appropriately in the cam plate.

7. Operation

ATTENTION

Incorrect positioning of the SP 116 Cam plate can damage the limit switches and the drive pinion.

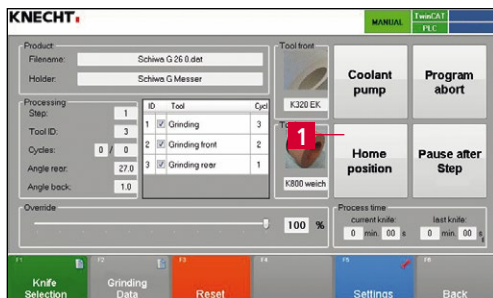


Figure 7-7 Moving the cam plate into change position

Close the safety doors.

Press **"Home position"** (7-7/1) on the touch panel in the main menu to move the cam plate into the change position.

The cam plate moves to a position suitable for placing of knives.

7.2.3 Grinding the slicer knife without suspension attachment

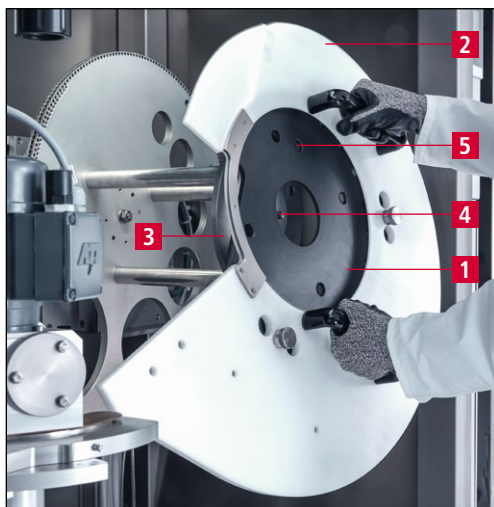


Figure 7-8 Placing the knife on the cam plate

Open the safety doors.

Place the knife (7-8/1) with the knife protector (7-8/2) on the centering collar of the cam plate (7-8/3).

Align the knife until the centering bolt (7-8/4) of the cam plate engages in the centering hole (7-8/5) of the knife.

The contour of the cam plate corresponds to the contour of the knife.



Never mount the knife without knife protector.

Serious injuries are possible.

ATTENTION

Only use a knife that fits the cam plate. Compare the inscriptions on the cam plate and knife.

7. Operation

ATTENTION

Using an incorrect cam plate can damage the knife and machine.

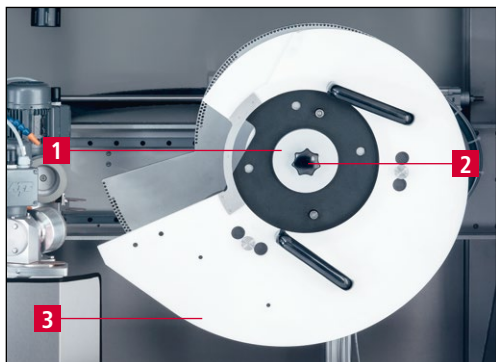


Figure 7-9 Clamping the knife

Secure the knife, with the knife protector (7-9/3), with one hand to prevent it from falling out and, with the other hand, attach the clamping flange (7-9/1) and mount the star knob (7-9/2).

Tighten the star knob (7-9/2).

Finally, remove the knife protector (7-9/3).

Close the safety doors.



Sharp cutting edge, can result in serious injuries.

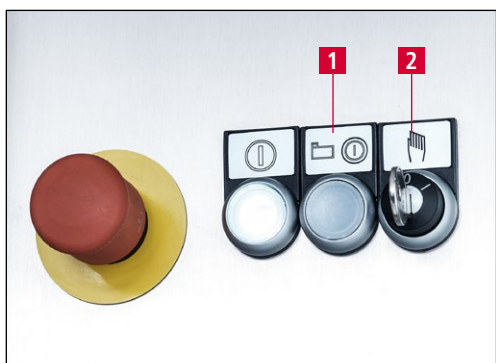


Figure 7-10 Control panel

Turn the key switch (7-10/2) to "0" and press the "Start/Stop" button (7-10/1).

The machine starts the grinding process.

When the knife is in working position, press the "Start/Stop" button (7-10/1) again to stop the machine.

NOTE

Briefly pressing the "Start/Stop" button interrupts the program flow and the button flashes. The grinding program continues when the button is pressed again.

Pressing the "Start/Stop" button for 3 seconds aborts the program. The button no longer flashes. Pressing the button again starts the program flow once more from the beginning.

7. Operation

7.2.4 Grinding the slicer knife with suspension attachment

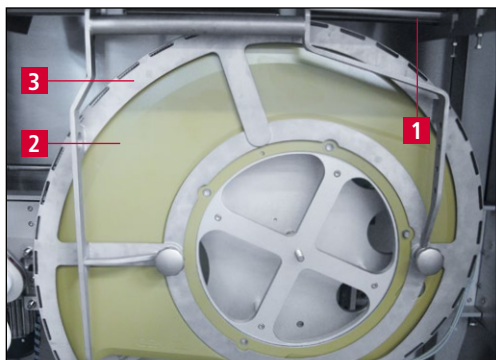


Figure 7-11 Suspension points in the grinding machine

Open the safety doors.

Hook the knife (7-11/2) with knife protector (7-11/3) into the suspension points (7-11/1) of the grinding machine.

Place the knife (7-11/2) with knife protector (7-11/3) on the centering collar of the cam plate (7-12/1).

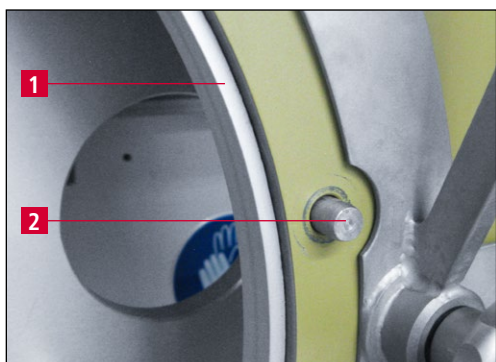


Figure 7-12 Centering bolt of the cam plate in centering hole of the knife

Align the knife until the centering bolt (7-12/2) of the cam plate engages in the centering hole of the knife.

The contour of the cam plate corresponds to the contour of the knife.

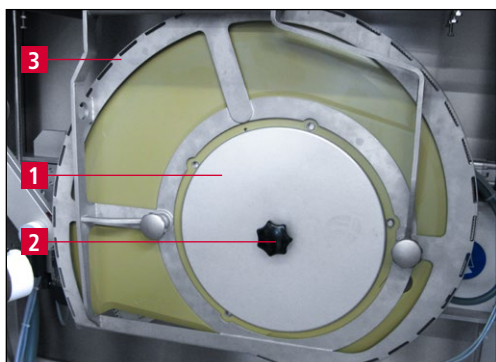


Figure 7-13 Knife protector with suspension attachment

Secure the knife, with the knife protector (7-13/3), with one hand to prevent it from falling out and, with the other hand, attach the clamping flange (7-13/1) and mount the star knob (7-13/2).

Tighten the star knob (7-13/2).

Finally, remove the knife protector (7-13/3).

ATTENTION

Only use a knife that fits the cam plate. Compare the inscriptions on the cam plate and knife.

7. Operation

ATTENTION

Using an incorrect cam plate can damage the knife and machine.

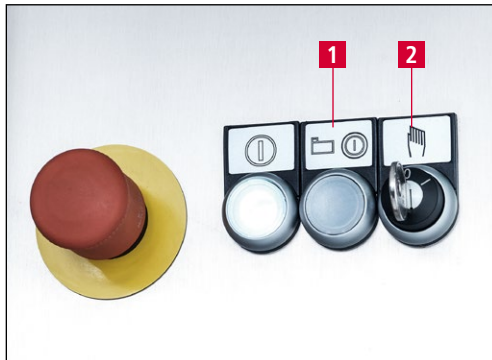


Figure 7-14 Control panel

Close the safety doors.

Turn the key switch (7-14/2) to "0" and press the "Start/Stop" button (7-14/1).

Open the coolant tap.

The machine starts the grinding process.

When the knife is in working position, press the "Start/Stop" button (7-14/1) again to stop the machine.

NOTE

Briefly pressing the "Start/Stop" button interrupts the program flow and the button flashes. The grinding program continues when the button is pressed again.

Pressing the "Start/Stop" button for 3 seconds aborts the program. The button no longer flashes. Pressing the button again starts the program flow once more from the beginning.

7.2.5 Grinding the circular knife

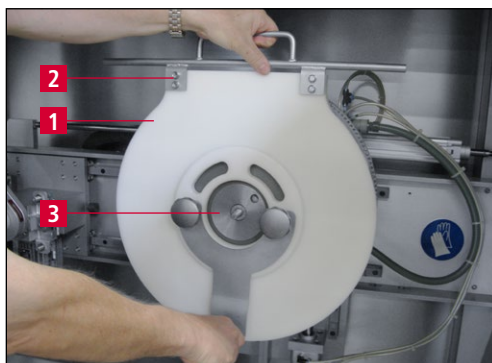


Figure 7-15 Placing the circular knife

Open the safety doors.

Place the knife (hidden behind protector (7-15/1)) with the knife protector (7-15/2) on the centering collar of the cam plate (7-15/3).

The contour of the cam plate corresponds to the contour of the knife.

7. Operation

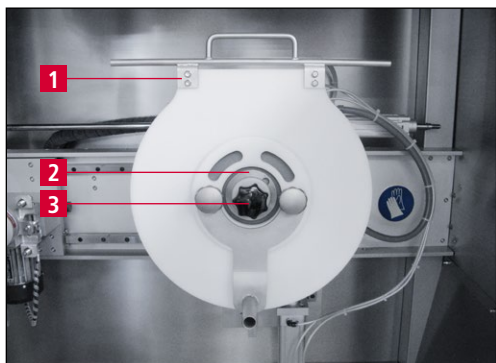


Figure 7-16 Circular knife

Secure the knife, with the knife protector (7-16/1) with one hand to prevent it from falling out, and with the other hand, place the clamping flange (7-16/2) and fit the star knob (7-16/3).

Tighten the star knob (7-16/3).

Finally, remove the knife protector (7-16/1).

Close the safety doors.

ATTENTION

Only use a knife that fits the cam plate. Compare the inscriptions on the cam plate and knife.

Using an incorrect cam plate can damage the knife and machine.

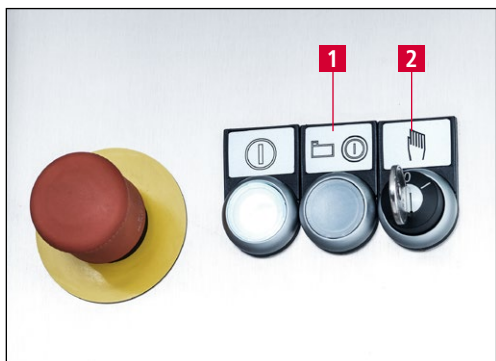


Figure 7-17 Control panel

Turn the key switch (7-17/2) to "0" and press the "Start/Stop" button (7-17/1).

Open the coolant tap.

The machine starts the grinding process.

When the knife is in working position, press the "Start/Stop" button (7-17/1) again to stop the machine.

NOTE

Briefly pressing the "Start/Stop" button interrupts the program flow and the button flashes. The grinding program continues when the button is pressed again.

Pressing the "Start/Stop" button for 3 seconds aborts the program. The button no longer flashes. Pressing the button again starts the program flow once more from the beginning.

7. Operation

7.2.6 Aligning the knife to the centre of the grinding wheels

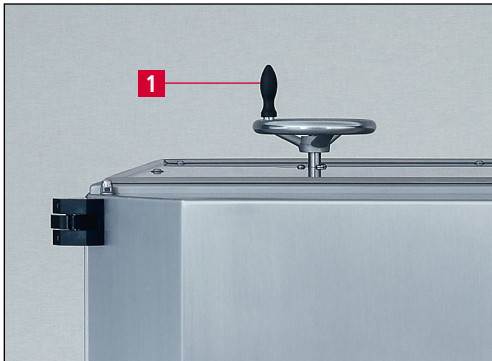


Figure 7-18 Aligning the knife

Align the knife with the hand wheel (7-18/1) in such a way that the knife edge passes through the center of the rear grinding wheel.

Check sharpness when the program ends ("Start/Stop" button no longer flashes).

If the knife is not yet sharp, mark the cutting edge on both sides with a Permanent Marker and grind again.

The marked areas indicate whether the knife has been completely ground down. If not, increase the grinding angle.

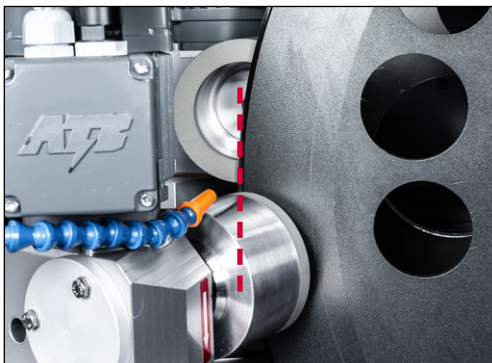


Figure 7-19 Correct

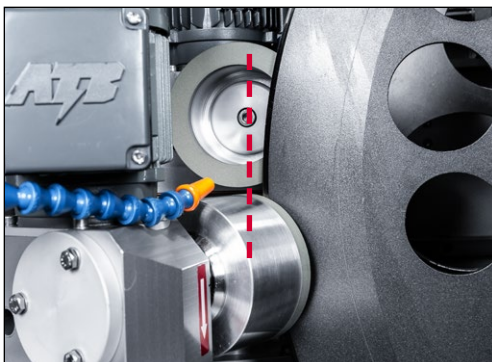


Figure 7-20 Incorrect

7. Operation

7.3 Replacing the front/rear grinding wheels



For all work on the sharpening and polishing 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.

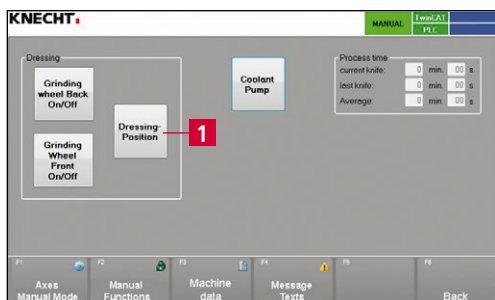


Figure 7-21 Settings

Close the safety doors.

The settings screen appears via **“Settings”** (3-8/15) on the main menu.

Move the grinding wheels to the dressing position with the touch panel field **“Dressing Position”** (7-21/1).

Open the safety doors.

ATTENTION

Turn the key switch (3-7/5) to position **“1”**.

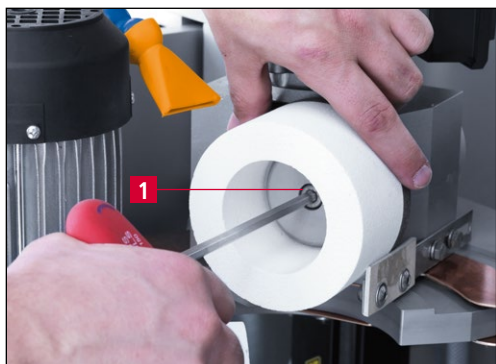


Figure 7-22 Replacing the grinding wheels

With a hexagon screwdriver AF6 mm, loosen the screw in the center of the grinding wheel (7-22/1) counterclockwise and remove it.

Remove the front or rear grinding wheel and also the intermediate flange (7-23/1) if necessary and mount the new grinding wheel in the reverse order.

ATTENTION

Only original abrasives from KNECHT Maschinenbau GmbH are permitted to be used.

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

7. Operation

7.3.1 Intermediate flange for ceramic grinding wheels



Figure 7-23 Intermediate flange

If ceramic grinding wheels are used, an intermediate flange (7-23/1) must be mounted from a wear of 50% (less than 40 mm grinding wheel thickness).

Use the M8x40 cylinder head screw supplied for this purpose.

NOTE

The intermediate flanges and corresponding screws must be ordered separately. The ordering information is provided in Chapter 11.4.1.

7. Operation



When the machine is running, there is a risk of clothing and hair being pulled in and hands being crushed. Serious injuries are possible.

To prevent dust formation, only dress the grinding wheel under coolant supply.

Never dress with the knife clamped in place. Serious cutting injuries are possible.

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

7.4 Dressing the front/rear ceramic grinding wheels

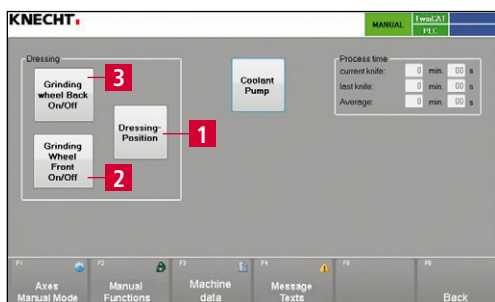


Figure 7-24 Settings

If the grinding wheels are out of round or clogged, they must be dressed.

Close the safety doors.

Change to settings via the main menu **"Settings"** (3-8/15). Move the grinding wheels to the dressing position with the touch panel field **"Dressing Position"** (7-21/1).

ATTENTION

Turn the key switch (3-7/5) to position **"1"**.

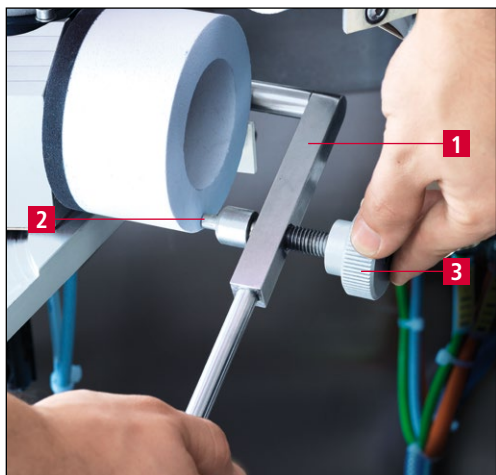


Figure 7-25 Dressing the front grinding wheel

Open the safety doors.

Insert the truing device (7-25/1) as far as it will go into the relevant bushing.

Switch on the front grinding wheel.

To do so, press **"Grinding Wheel Front On / Off"** (7-24/2) on the touch panel.

Move the dressing diamond (7-25/2) with the truing device evenly over the rotating grinding wheel.

The dressing diamond is fed in by turning the feed nut (7-25/3) clockwise.

7. Operation

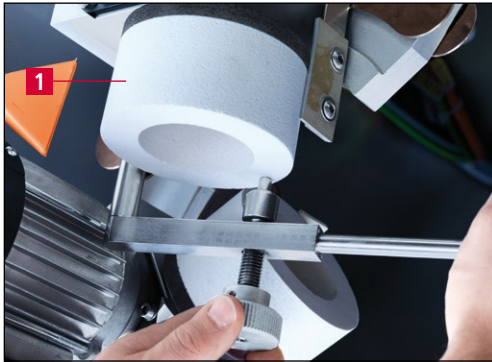


Figure 7-26 Dressing the rear grinding wheel

Insert the truing device (7-25/2) into the designated socket of the front grinding unit as far as it will go.

Switch on the front grinding wheel (7-23/1).

To do so, press **"Grinding Wheel Rear On / Off"** (7-21/3) on the touch panel.

Dress the grinding wheel as described in Figure 7-25.

7. Operation

7.5 Setting the grinding angle



Figure 7-27 Setting the grinding angle

The grinding angle of the grinding wheels, is adjusted based on the parameters in the grinding program (see Chapter 8.3.3).

8. Control

8.1 Main screen

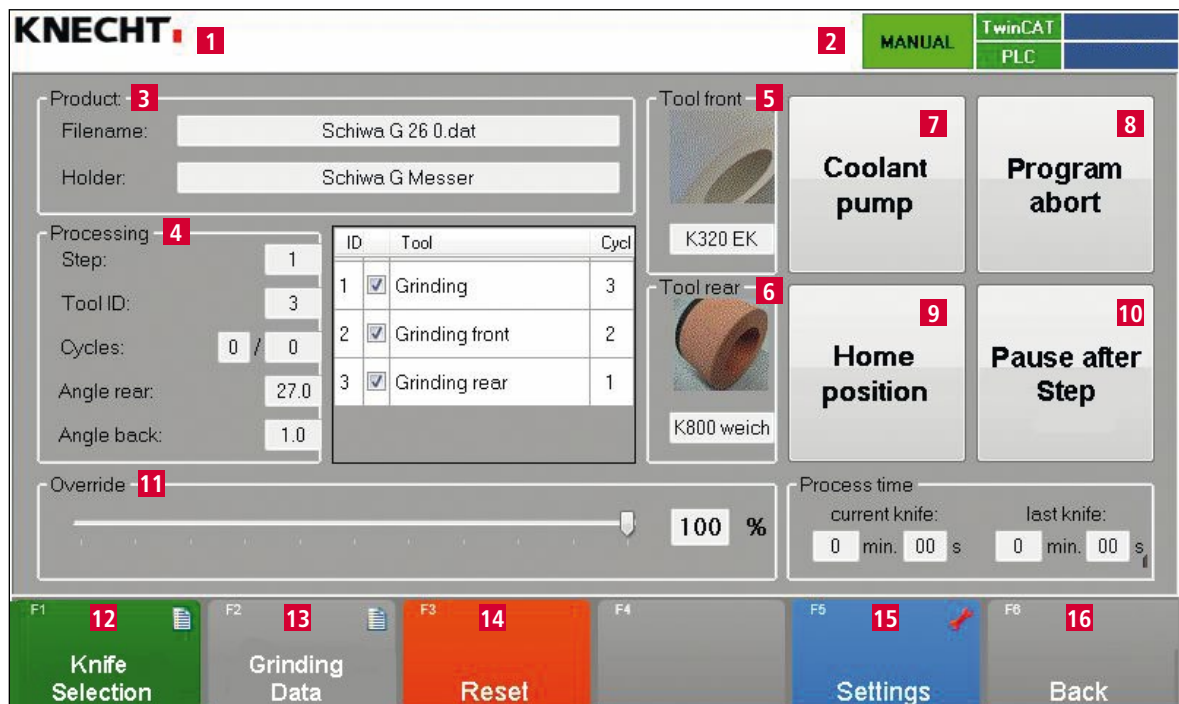


Figure 8-1 Main screen

- 1 Error messages
- 2 Status display
- 3 Product (loaded product data – grinding program and holder)
- 4 Processing (current settings of the processing steps (stored in grinding program))
- 5 Tool front (selected front grinding wheel)
- 6 Tool rear (selected rear grinding wheel)
- 7 **“Coolant pump”**: manual switching on/off the coolant pump
- 8 **“Program abort”**: reset program after stop
- 9 **“Home position”**: moves the cam plate to the change position
- 10 **“Pause after step”**: pauses the grinding program after a completed step
- 11 **„Override”**: reduce the speed of the cam plate specified in the grinding data for the current moment
- 12 **“Knife selection”**: select the knife to be processed; see Chapter 8.2
- 13 **“Grinding data”**: see Chapter 8.3
- 14 **“Reset”**: delete temporary fault messages
- 15 **“Settings”**: see Chapter 8.4
- 16 **“Back”**: switch to the previous display or close user interface

NOTE

The assignment of the touch panel fields varies according to the current display screen. The respective assignment is indicated by text.

8. Control

8.2 Knife selection

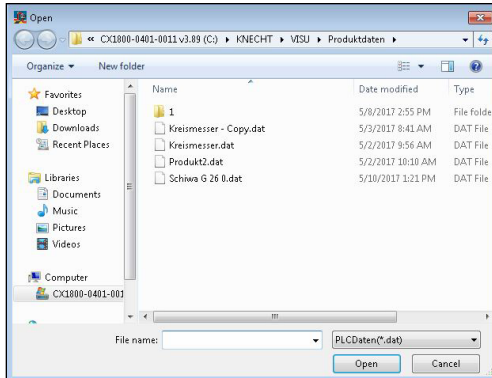


Figure 8-2 Select grinding program

Press **"Knife Selection"** (8-1/12) on the main screen.

The "Open" dialog box (8-2) from Windows appears. The folder "C:\Product" is automatically displayed. The grinding programs for the individual knives are stored in this folder. The grinding programs have the ending ".dat" in the file name.

To load a grinding program, proceed as follows: Select the desired grinding program. The name of the selected grinding program appears in the File name column. The grinding program is loaded with one click on the **"Open"** button.

The "Open" dialog box is closed and the selected grinding program is displayed in the main menu.

8. Control

8.3 Grinding data

Go to the submenu **"Grinding Data"** (8-1/13) via the main screen.

In the "Grinding data" (8-3) display, data for the grinding process is entered. These data are knife-dependent. The data are saved in a file and can be reloaded from the file.

ATTENTION

Changes to the grinding data can lead to malfunctions and machine damage.

Changes may only be made under the supervision of KNECHT technicians or by persons who have been trained by KNECHT Maschinenbau.

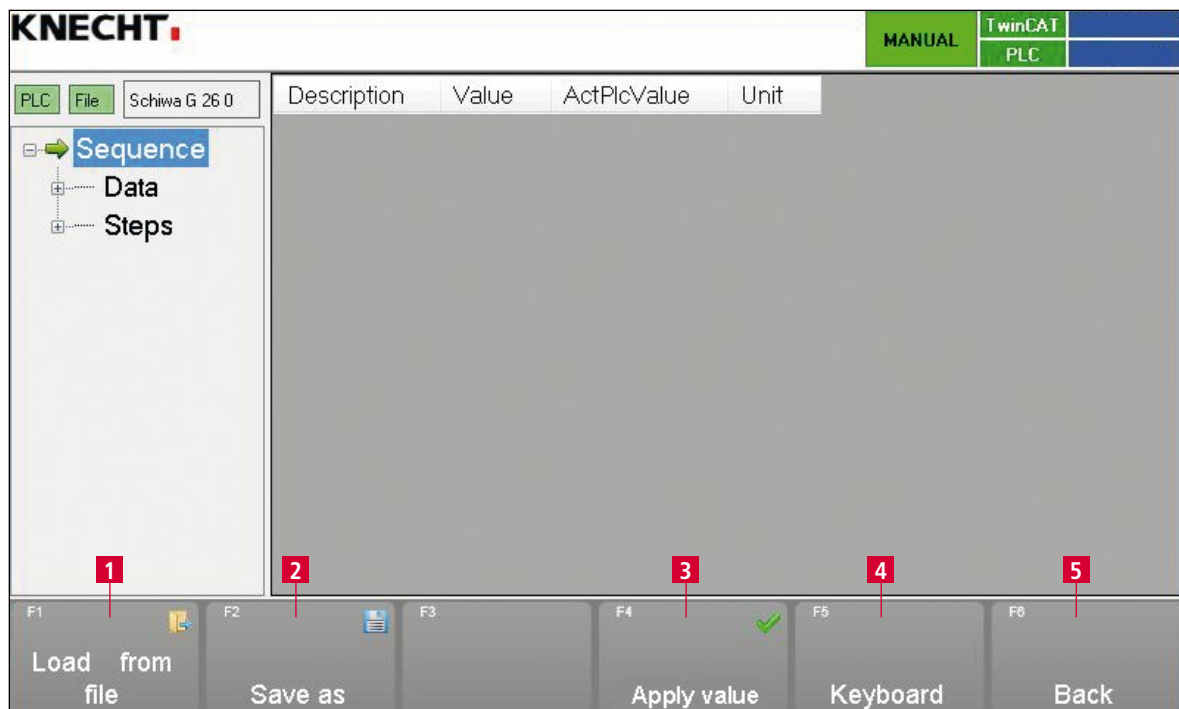
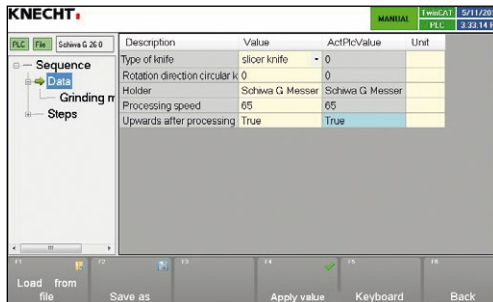


Figure 8-3 Grinding data

- 1 "Load from file"
- 2 "Save as"
- 3 "Apply value"
- 4 "Keyboard"
- 5 "Back": switch to the previous display

8. Control

8.3.1 Data



Description	Value	ActPlcValue	Unit
Type of knife	slicer knife	0	
Rotation direction circular k	0	0	
Holder	Schwa G Messer	Schwa G Messer	
Processing speed	65	65	
Upwards after processing	True	True	

Figure 8-4 Grinding data "Processing – Data"

Type of knife: Circular/sickle-sickle shaped knife

Direction Circular Knife: 0 = left, 1 = right

Holder: index on which holder the knife is processed (suitable holder data are set in the settings under "Machine data – Holder data" (8-1/6))

Process Speed: Processing speed at which the cam plate rotates during the grinding process (mm/s)

Upwards after processing: true = yes, false = no (for better assembly or assembly with suspension protection)

8.3.2 Abrasives



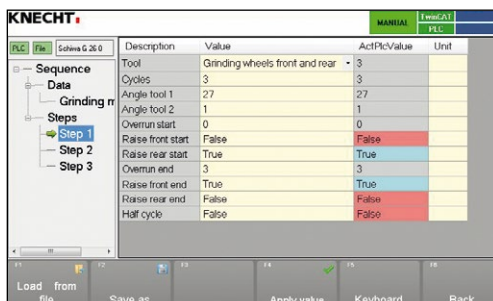
Description	Value	ActPlcValue	Unit
Grinding wheel front	K320 EK	K320 EK	
Grinding wheel rear	K800 weich	K800 weich	

Figure 8-5 Grinding data "Processing – Data – Abrasives"

Grinding wheel front: selection of the front grinding wheel

Grinding wheel rear: selection of the rear grinding wheel

8.3.3 Steps – Step 1



Description	Value	ActPlcValue	Unit
Tool	Grinding wheels front and rear	3	
Cycles	3	3	
Angle tool 1	27	27	
Angle tool 2	1	1	
Overrun start	0	0	
Raise front start	False	False	
Raise rear start	True	True	
Overrun end	3	3	
Raise front end	True	True	
Raise rear end	False	False	
Half cycle	False	False	

Figure 8-6 Grinding data "Processing – Steps – Step 1"

Tool: Selection of the abrasives

Cycles: Number 1, 2, 3

Angle tool 1 (front): angle adjustment front grinding wheel

Angle tool 2 (rear): angle adjustment of rear grinding wheel

Overrun start: Distance limit switch is reached

Raise front start: Front grinding wheel is raised, true = yes, false = no

Raise rear start: Rear grinding wheel is raised, true = yes, false = no

Overrun end: Distance limit switch is reached

Raise front end: Front grinding wheel is raised from knife, true = yes, false = no

8. Control

Raise rear end: Rear grinding wheel is raised from knife, true = yes, false = no

Half Cycle: Tool only does half cycle

8. Control

8.4 Settings

Settings other than the basic “Start” and “Stop” functions of the machine are made in the main menu under **“Settings”** (8-1/15).

ATTENTION

Changing the settings can damage the machine.

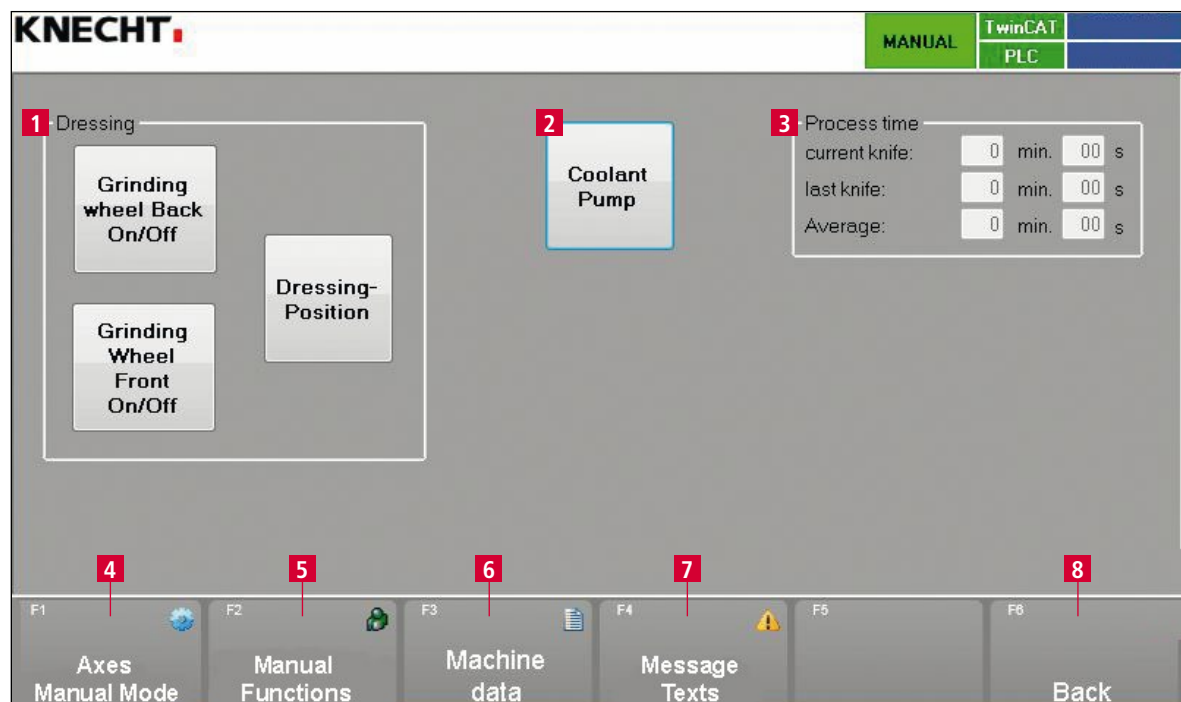


Figure 8-7 Settings

- 1 Dressing (manual operation of the grinding wheels during dressing)
- 2 **“Coolant Pump”**: manual switching on/off the coolant pump
- 3 Processing period (current knife, last knife and average in mins/secs)
- 4 **“Axes Manual Mode”**: move axes individually in manual mode; see Chapter 8.5
- 5 **“Manual Functions”**: permits manual operation of the machine; see Chapter 8.6
- 6 **“Machine data”**: display/edit factory-set machine data; see Chapter 8.7
- 7 **“Message Texts”**: displays all error messages continuously (number, frequency, start; see Chapter 8.8)
- 8 **“Back”**: switch to the previous display

8. Control

8.5 Axes manual mode

Go to the submenu **"Settings"** (8-1/15) via the main screen and open the menu **"Axes Manual Mode"** (8-7/4).

The "Axes Manual Mode" (8-8) display screen shows the status of the CNC driven machine axes. The axes can also be controlled manually here. The individual axis positions are displayed at the top left of the sub-menu "Axes manual mode".

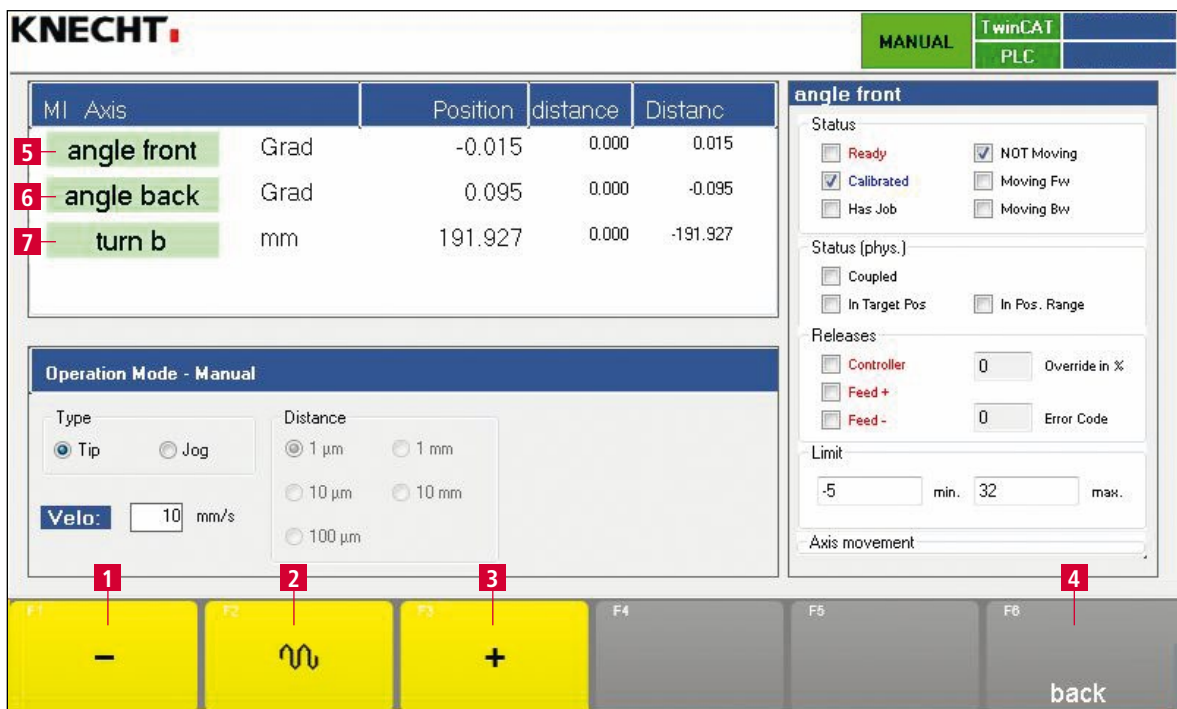


Figure 8-8 Settings "Axes manual mode"

- 1 **"-"**: movement of the selected axis in negative direction
- 2 **"~"**: in combination with **"-"** or **"+"** activate rapid traverse in the relevant direction
- 3 **"+"**: movement of the selected axis in positive direction
- 4 **"Back"**: switch to the previous display

8. Control

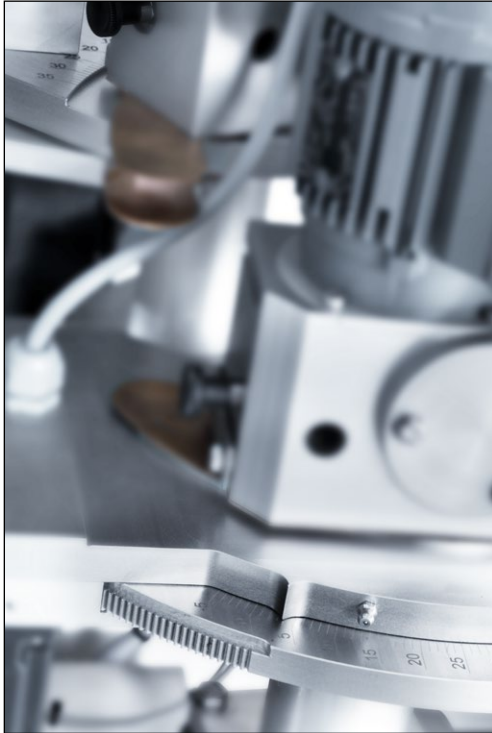


Figure 8-9 Angle grinding wheels

The angle movement of the front grinding wheel is designated "angle front" (8-8/5). That of the rear grinding wheel is designated "angle back" (8-8/6).

For a manual axis movement, select the desired axis on the touch panel. The selected axis is highlighted in blue.

With the touch panel fields "–" (8-8/1) and "+" (8-8/3) the axes can be moved.

The touch panel field "~" (8-8/2) activates the rapid traverse.

8. Control

8.6 Manual functions

The manual functions permit manual operation of the machine. They can be accessed via the main menu **"Settings"** (8-1/15) followed by **"Manual Functions"** (8-7/5).

Various functions of the grinding machine, such as adjusting the grinding wheels, as well as test runs, can be carried out individually.

ATTENTION

Buttons highlighted in green are active.
Buttons highlighted in gray are inactive

NOTE

All functions are only active when the safety doors are closed.

8.6.1 General

When the sub-menu "Manual Functions" (8-7/5) is accessed, the screen initially switches to the general manual functions (8-10).

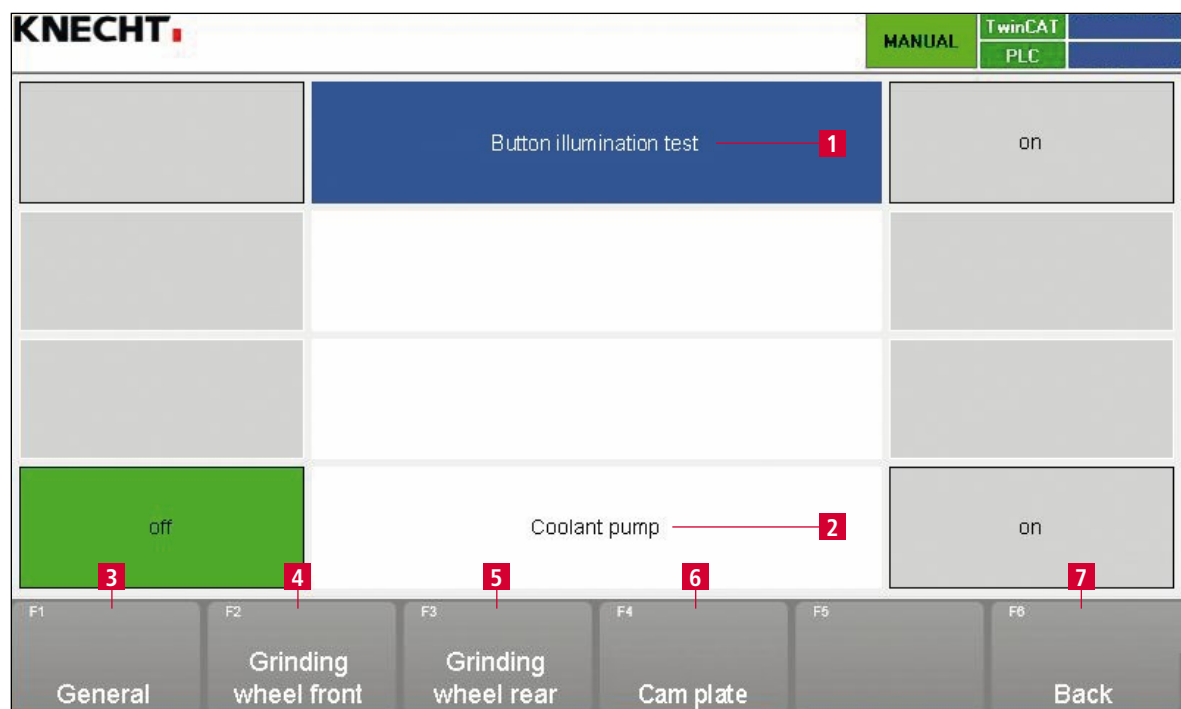


Figure 8-10 Manual functions "General"

- 1 Button illumination test
- 2 Switch coolant pump on/off

8. Control

- 3 **"General"** (current display)
- 4 **"Grinding wheel front"**: see Chapter 8.6.2
- 5 **"Grinding wheel rear"**: see Chapter 8.6.3
- 6 **"Cam plate"**: see Chapter 8.6.4
- 7 **"Back"**: switch to the previous display

8.6.2 Grinding wheel front

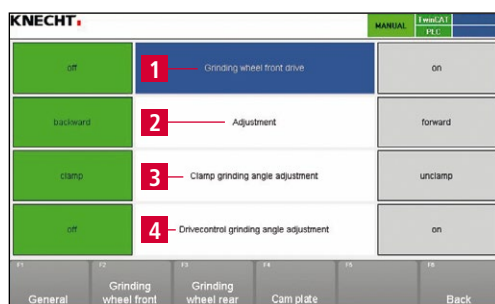


Figure 8-11 Manual functions "Grinding wheel front"

- 1 Switch on/off front grinding wheel drive
- 2 Move grinding wheel forwards/backwards
- 3 Release/clamp angle adjustment
- 4 Switch on/off drivecontrol grinding angle adjustment

8.6.3 Grinding wheel rear

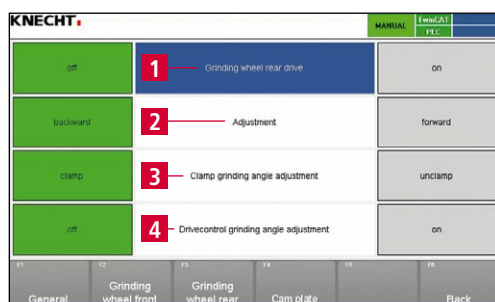


Figure 8-12 Manual functions "Grinding wheel rear"

- 1 Switch on/off rear grinding wheel drive
- 2 Move grinding wheel forwards/backwards
- 3 Release/clamp angle adjustment
- 4 Switch on/off drivecontrol grinding angle adjustment

8. Control

8.6.4 Cam plate



Figure 8-13 Manual functions "Cam plate"

- 1 Move cam plate up/down
- 2 Move cam plate forwards/backwards
- 3 Open/close brake
- 4 Switch on/off limits (machine does not move beyond the limit switches in manual mode)

ATTENTION

Only open the brake when the cam plate has previously been moved down and forwards. Otherwise there is a risk of damage to the machine, since the cam plate can impact against the side wall in an uncontrolled manner.

8. Control

8.7 Machine data

Access the sub-menu **"Machine Data"** (8-7/6) via the main menu **"Settings"** (8-1/15). The "Machine Data" display (8-14) shows the basic machine settings. The data are saved in a file and can be reloaded from the file.

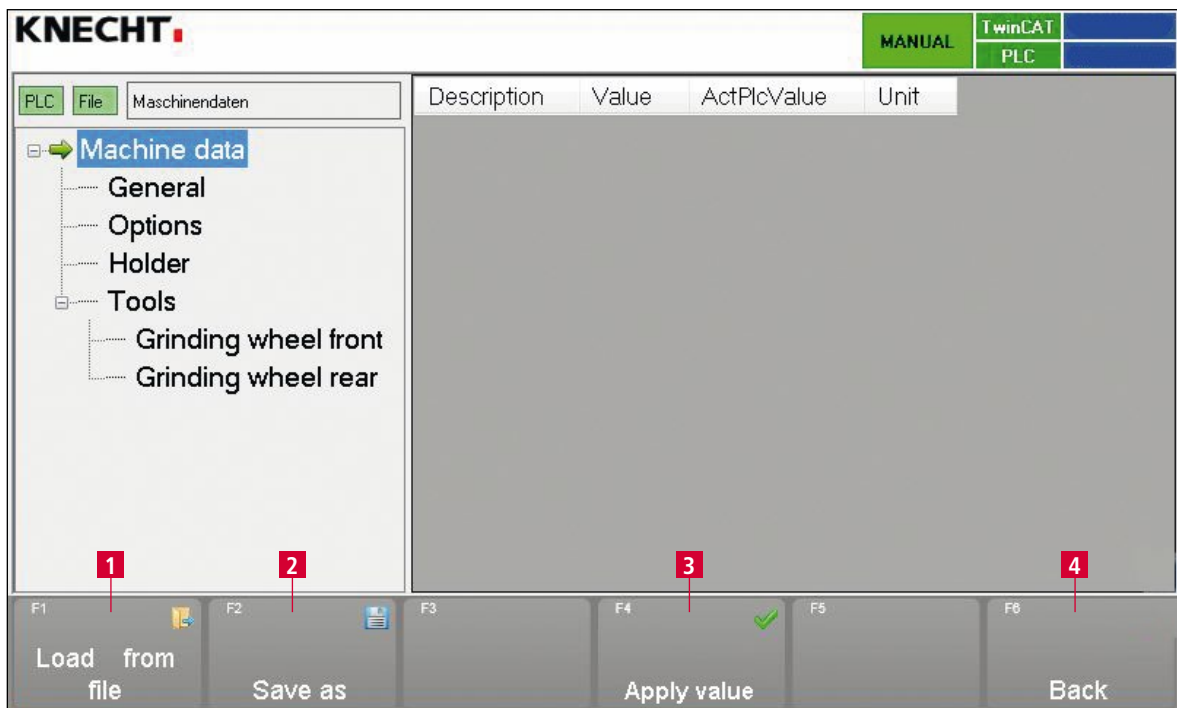


Figure 8-14 Machine data

- 1 **"Load from file"**
- 2 **"Save as"**
- 3 **"Apply value"**
- 4 **"Back"**: switch to the previous display

8.7.1 General



Coolant pump on: true = always on,
false = only on at program start

Waiting time after switching on coolant pump: (in secs)

Figure 8-15 Machine data "General"

8. Control

8.7.2 Options

Description	Value	ActPdcValue	Unit
Grinding wheel front	True	True	
Grinding wheel rear	True	True	
Coolant monitoring available	False	False	

Figure 8-16 Machine data "Options"

Grinding wheel front: true = available,
false = not available

Grinding wheel rear: true = available,
false = not available

Coolant monitoring available: true = yes, false
= no

8.7.3 Holder

Description	Value	ActPdcValue	Unit
Speed homeposition	65	65	mm/s
Speed process	65	65	mm/s
Waiting time cam plate forward/back	5	5	s
Waiting time cam plate up/down	3	3	s
Waiting time opening brake	1	1	s
Dwell time change of direction	0.5	0.5	s

Figure 8-17 Machine data "Holder"

Speed homeposition: (mm/s)

Speed process: (mm/s)

Waiting time cam plate forward / backward:
(in secs)

Waiting time cam plate up / down: (in secs)

Waiting time opening brake: (in secs)

Dwell time when reversing direction: (in secs)

8.7.4 Tools – Grinding wheel front/rear

Description	Value	ActPdcValue	Unit
Home position	3	3	mm
Service position	25	25	mm

Figure 8-18 Machine data "Tools – Grinding wheel front/rear"

Home position: (in mm)

Service position: (in mm)

8. Control

8.8 Message texts

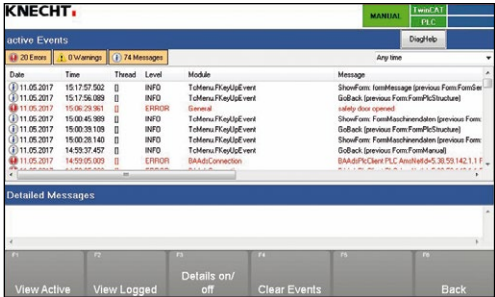


Figure 8-19 Message texts

The message texts display (8-19) is used exclusively for the detailed display of the status messages of the machine.

The Message texts screen provides an overview of the number of errors that are hindering the operation of the machine at a particular moment. In addition, the submenu provides information about which errors have occurred and since when they have been active.

NOTE

No settings can be made in the Message texts sub-menu. The errors also appear in the upper part of the main screen (8-1/1).

8. Control

8.9 Options



Figure 8-20 Main screen

Other options such as language settings can be accessed via the main menu.

Press **“Back”** (8-20/1) on the touch panel to get back to the start screen.



Figure 8-21 Start screen

Press **“Options”** (8-23/1) on the touch panel.

A new window (8-22) opens.

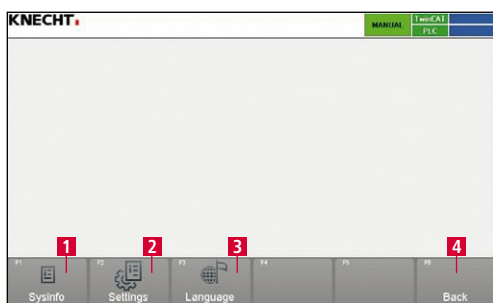


Figure 8-22 Options

- 1 **“Sysinfo”**
- 2 **“Settings”**
- 3 **“Language”**: change language
- 4 **“Back”**: switch to the previous display

8. Control

8.10 Language

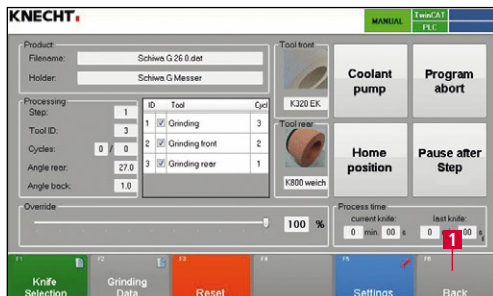


Figure 8-23 Main screen

The user interface language can be changed to the respective national language.

Press the **“Back”** touch panel field (8-23/1) on the main menu to return to the start screen.



Figure 8-24 Start screen

Touch panel field **“Options”** (8-24/1) switches to the „Options“ display (8-25).

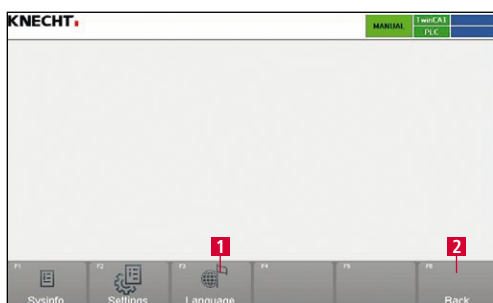


Figure 8-25 Options

Touch panel field **“Language”** (8-17/1) switches to the „Language“ display (8-26).

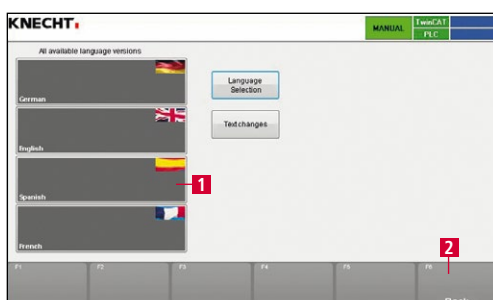


Figure 8-26 Selecting the language

The desired language is selected and automatically activated by pressing the corresponding touch panel field (8-26/1).

Then use the touch panel field **“Back”** (8-26/2) to return to “Options” (see Figure 8-25).

Pressing **“Back”** (8-25/2) again in the menu brings up the start screen (see Figure 8-24).

8. Control

The main screen appears by tapping the **"Production"** touch panel field (8-24/2) on the start screen.

8. Control

8.11 Setting up an internet connection

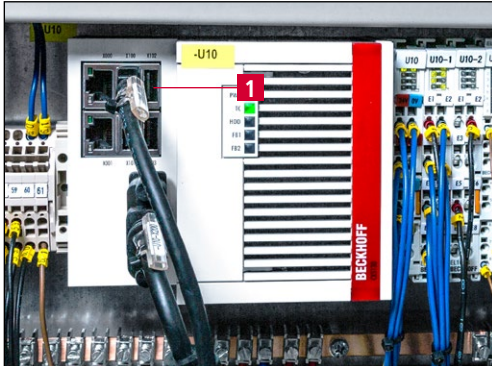


Figure 8-27 Network connection

The machine is equipped with an ethernet port. A secure connection between the machine and KNECHT Maschinenbau GmbH can be established via the integrated VPN router. The connection can be activated or deactivated by the operator using the key switch on the control cabinet (8-27/1).

This connection gives the KNECHT service technician access to the control and allows him to diagnose the machine, change the software settings and upload or edit new grinding programs.

There must be an active Internet connection to initiate the connection.

NOTE

When commissioning, the VPN router is configured according to the specified IT infrastructure so that the machine communicates exclusively with KNECHT Maschinenbau GmbH via the VPN server. Any communication within the customer network is excluded. The customer network is therefore optimally protected.

In order to establish the internet connection, plug the supplied ethernet cable into the on-site network socket (RJ45) and the network port on the control cabinet of the grinding machine.

9. Care and maintenance



For all work on the grinding 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.

9.1 Replacing the coolant water

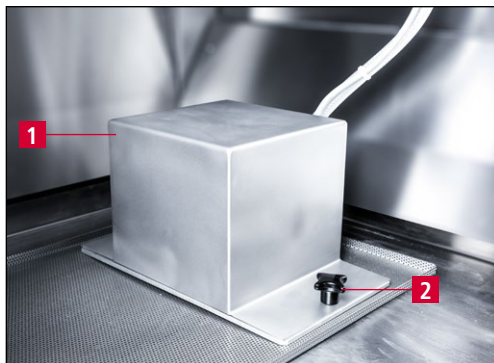


Figure 9-1 Water tray

The coolant water has to be replaced every week and the water tray must be cleaned.

The water tray must always be filled with approx. 20 litres of water up to 3 cm below the rim.

The water tray can be pulled out towards the front for filling and cleaning.

The pump (9-1/1) including the guard can be removed by unscrewing the star handles (9-1/2).

NOTE

The use of a coolant additive is not intended.

9.2 Cleaning the grinding machine

The machine must be cleaned after each grinding operation, otherwise the grinding abrasion dries and is difficult to remove.

For pre-cleaning, we recommend a commercially available wet vacuum cleaner. For final cleaning we recommend soft cleaning cloths.

Clean the windows with soft cleaning cloths and window cleaning agent.

After cleaning the grinding machine, we recommend using the products listed in the Cleaning agent and lubricant table for care of the machine (see Chapter 9.2.1).

ATTENTION

The grinding machine must not be sprayed with water nor cleaned with alkaline cleaning agents. Machine components may be damaged or destroyed.

9. Care and maintenance

9.2.1 Cleaning agent and lubricant table

Cleaning / Lubrication work	Interflon	WÜRTH	SHELL	EXXON Mobil	OEST
Cleaning and care of machine parts	Dry Clean Stainless Steel	Stainless steel care spray	Risella 917	Marcol 82	New Process Multispray
Lubrication of threads and sliding surfaces	Fin Grease	Multi-purpose grease	Gadus S2	Mobilith SHC 100	Multi-purpose grease LT 190 EP
Lubrication nipples	Grease MP 100		Gadus S5 V142 W0018	Mobilith SHC 100	IXELON LT000EP

9.3 Maintenance plan (one-shift operation)

Interval	Assembly	Maintenance task
Daily	All machine surfaces	Clean with soft cleaning cloth and care spray.
	Angle adjustment	Clean angle adjustment with brush and cleaning cloth and oil.
Weekly	Star handle threads	Lubricate with multi-purpose grease.
	Water tray	Replace coolant and clean water tray.
	Angle adjustment	Lubricate the lubrication nipples at the front and rear (see Chapter 9.4.2).
Monthly		Clean and oil steel shafts.
	Slide grinding wheels	Lubricate the lubrication nipples (see Chapter 9.4.1).
	Axes	Lubricate the lubrication nipple of the cross table (see Chapter 9.4.1).
Annually		Contact the service department of KNECHT Maschinenbau GmbH

9. Care and maintenance

9.4 Lubrication points

9.4.1 Lubricating the grinding wheel slide

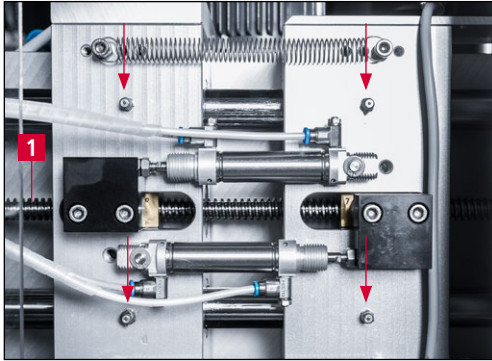


Figure 9-2 Lubricating the grinding wheel slide

Once a month, use the grease press to apply one stroke of grease to the marked points on the lubrication nipples.

We recommend "OEST IXELON LT 000 EP" or a corresponding commercial fluid grease.

Grease the spindle (9-2/1) once every month.

9.4.2 Lubricating the angle adjustment

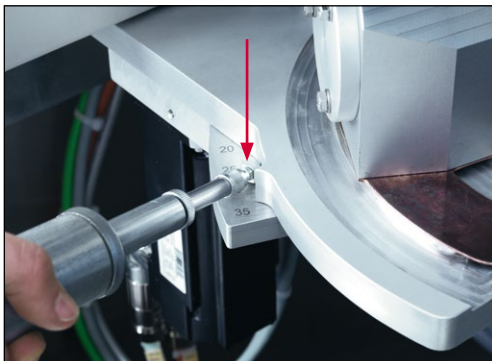


Figure 9-3 Lubricating the front of the angle adjustment

To lubricate the angle adjustment, the safety doors of the machine must be opened.

Apply the grease press to the lubrication nipple (9-3) on the front and lubricate the angle adjustment.

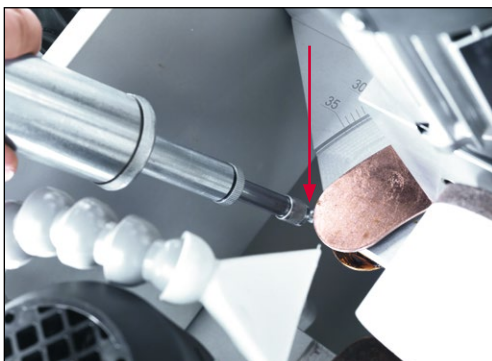


Figure 9-4 Lubricating the rear of the angle adjustment

Apply the grease press to the lubrication nipple (9-4) on the rear and lubricate the angle adjustment.

We recommend "OEST IXELON LT 000 EP" or a corresponding commercial fluid grease.

Weekly press one stroke of grease into the lubrication nipples using the grease press.

9. Care and maintenance

9.4.3 Lubricating the cross table

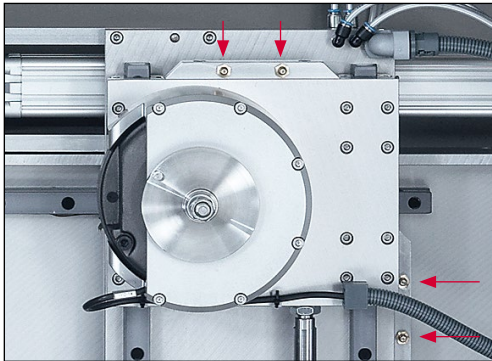


Figure 9-5 Lubricating the cross table

Place grease press on the lubrication nipples and lubricate the cross table.

We recommend "OEST IXELON LT 000 EP" or a corresponding commercial fluid grease.

Monthly press one stroke of grease into the lubrication nipples using the grease press.

10. Disassembly and disposal

10.1 Disassembly

All operating materials must be disposed of properly.

Secure moving parts against slippage.

Disassembly must be conducted by a qualified specialist.

10.2 Disposal

At the end of service life, the machine must be disposed of by a qualified specialist company. In exceptional situations, and after consultation with KNECHT Maschinenbau GmbH, the machine may be returned.

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

11. Service, spare parts and accessories

11.1 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

11.2 Service

Service line:

For address, see postal address

service@knecht.eu

11.3 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	(A 950 II)
Machine number	(1360870950-II)
Designation of assembly	(Slide X module)
Designation of individual part	(Cam plate bearing shaft Z axis)
Item number (position number)	(12)
Drawing number (article number)	(2000130-12428)
Quantity	(1 pc)

We are always happy to answer any questions.

11. Service, spare parts and accessories

11.4 Accessories

11.4.1 Abrasives used

Designation	Dimensions	Grain	Article number	Notes
CBN grinding wheel 15/10	d.100x60x40	B 46	412F-73-1510-46	installed on delivery
Intermediate flange for ceramic grinding wheel with clamping screw M8x40	d.60x25		2000060-8039	for operation with ceramic grinding wheels

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!

12. Appendix

12.1 EU Declaration of Conformity in accordance with EU Directive 2006/42/EU

- Machinery 2006/42/EU
- 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 the machine:	Grinding Machine for Sickle-shaped and Circular Knives
Model designation:	A 950 II
Machine number:	from no. 1360870950-II
Applicable harmonized standards, in particular:	DIN EN ISO 12100 DIN EN ISO 13850 DIN EN ISO 13857 DIN EN 13218 DIN EN 60204-1 DIN EN 13854
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, February 6, 2026

KNECHT Maschinenbau GmbH


Markus Knecht
CEO

KNECHT Maschinenbau GmbH

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