

## Operating Instructions

### W 300

Surface Grinding Machine



# Operating Instructions

---

## W 300 Surface Grinding Machine

### Manufacturer

KNECHT Maschinenbau GmbH  
Witschwender Straße 26  
88368 Bergatreute  
Germany

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

mail@knecht.eu  
www.knecht.eu

### Documents for machine operator

Operating Instructions

### Date of issue of the operating instructions

March 5, 2026

### Copyright

These operating instructions as well as the operating documents remain the copyright property of KNECHT Maschinenbau GmbH. They are supplied only to customers and operators of our products and belong to the machine.

Without our express permission, these documents may neither be duplicated nor made accessible to third parties, in particular competitor companies.

# Table of Contents

---

<b>1.</b>	<b>Important notes</b>	<b>7</b>
<b>1.1</b>	<b>Preface to the operating instructions</b>	<b>7</b>
<b>1.2</b>	<b>Warnings and symbols in the operating instructions</b>	<b>7</b>
<b>1.3</b>	<b>Warning and mandatory signs and their meaning</b>	<b>8</b>
1.3.1	Warning and mandatory signs on/in the grinding machine	8
1.3.2	General warning- and mandatory signs	8
<b>1.4</b>	<b>Rating plate and machine serial number</b>	<b>9</b>
<b>1.5</b>	<b>Figure and position numbers in the operating instructions</b>	<b>9</b>
<b>2.</b>	<b>Safety</b>	<b>10</b>
<b>2.1</b>	<b>Basic safety instructions</b>	<b>10</b>
2.1.1	Observe notes in the operating instructions	10
2.1.2	Obligation on the part of the operator	10
2.1.3	Obligation on the part of the personnel	10
2.1.4	Hazards involved in handling the grinding machine	10
2.1.5	Malfunctions	11
<b>2.2</b>	<b>Intended use</b>	<b>11</b>
<b>2.3</b>	<b>Warranty and liability</b>	<b>11</b>
<b>2.4</b>	<b>Safety regulations</b>	<b>12</b>
2.4.1	Organizational measures	12
2.4.2	Protective equipment	12
2.4.3	Informal safety measures	12
2.4.4	Selection and qualification of personnel	12
2.4.5	Machine control system	13
2.4.6	Safety measures in normal operation	13
2.4.7	Hazards due to electrical power sources	13
2.4.8	Particular hazard areas	13
2.4.9	Servicing (maintenance, repair) and fault rectification	13
2.4.10	Structural alterations to the grinding machine	14
2.4.11	Cleaning the grinding machine	14
2.4.12	Lubricants/oils and greases	14
2.4.13	Relocation of the grinding machine	14
<b>3.</b>	<b>Description</b>	<b>15</b>
<b>3.1</b>	<b>Intended use</b>	<b>15</b>
<b>3.2</b>	<b>Technical specifications</b>	<b>15</b>
<b>3.3</b>	<b>Functional description</b>	<b>16</b>
<b>3.4</b>	<b>Description of the assemblies</b>	<b>17</b>
3.4.1	Rotary table	18
3.4.2	Centering pieces	18
3.4.3	Feed levers for rotary table and grinding unit	18
3.4.4	Switching the grinding machine on/off	19
3.4.5	Control panel	20
3.4.6	Belt filter coolant unit	21
3.4.7	Suction unit	21

# Table of Contents

---

<b>4.</b>	<b>Transport</b>	<b>22</b>
<b>4.1</b>	<b>Transport aids</b>	<b>22</b>
<b>4.2</b>	<b>Transport damage</b>	<b>22</b>
<b>4.3</b>	<b>Transport to another installation site</b>	<b>22</b>
<b>5.</b>	<b>Installation</b>	<b>23</b>
<b>5.1</b>	<b>Selection of qualified personnel</b>	<b>23</b>
<b>5.2</b>	<b>Installation site</b>	<b>23</b>
<b>5.3</b>	<b>Supply connections</b>	<b>23</b>
<b>5.4</b>	<b>Settings</b>	<b>23</b>
<b>5.5</b>	<b>Initial start-up of the grinding machine</b>	<b>24</b>
<b>6.</b>	<b>Commissioning</b>	<b>25</b>
<b>7.</b>	<b>Operation</b>	<b>28</b>
<b>7.1</b>	<b>Switch on the grinding machine</b>	<b>28</b>
<b>7.2</b>	<b>Surface grinding mincer plates</b>	<b>28</b>
7.2.1	Moving the rotary table to the change position	28
7.2.2	Clamping the mincer plate	29
7.2.3	Setting the working position	30
7.2.4	Moving the grinding unit to the grinding position	31
7.2.5	Surface grinding the mincer plate	31
<b>7.3</b>	<b>Surface grinding cross knives</b>	<b>34</b>
7.3.1	Moving the rotary table to the change position	34
7.3.2	Clamping the cross knife	34
7.3.3	Setting the working position	36
7.3.4	Moving the grinding unit to the grinding position	37
7.3.5	Surface grinding the cross knife	37
<b>7.4</b>	<b>Grinding without magnet</b>	<b>40</b>
<b>7.5</b>	<b>Setting the coolant supply</b>	<b>41</b>
<b>7.6</b>	<b>Dressing the CBN grinding wheel (optional)</b>	<b>42</b>
7.6.1	Positioning the dressing stone on the rotary table	42
7.6.2	Setting the working position	43
7.6.3	Moving the grinding unit into position	43
7.6.4	Dressing the grinding wheel	44
<b>7.7</b>	<b>Replacing the grinding wheel</b>	<b>45</b>
<b>8.</b>	<b>Care and maintenance</b>	<b>47</b>
<b>8.1</b>	<b>Cleaning</b>	<b>47</b>

# Table of Contents

---

8.1.1	Cleaning agent and lubricant table	47
8.1.2	Cleaning the rotary table	48
8.1.3	Cleaning the drip ring	49
8.1.4	Checking the suction unit	49
8.1.5	Cleaning the suction hoses	50
<b>8.2</b>	<b>Maintenance plan (one-shift operation)</b>	<b>52</b>
<b>8.3</b>	<b>Lubrication</b>	<b>53</b>
<b>8.4</b>	<b>Coolant additive</b>	<b>54</b>
8.4.1	Measuring the cooling lubricant concentration	54
8.4.2	Maintenance schedule for cooling lubricant	55
<b>9.</b>	<b>Disassembly and disposal</b>	<b>56</b>
<b>9.1</b>	<b>Disassembly</b>	<b>56</b>
<b>9.2</b>	<b>Disposal</b>	<b>56</b>
<b>10.</b>	<b>Service, spare parts and accessories</b>	<b>57</b>
<b>10.1</b>	<b>Postal address</b>	<b>57</b>
<b>10.2</b>	<b>Service</b>	<b>57</b>
<b>10.3</b>	<b>Wear and spare parts</b>	<b>57</b>
<b>10.4</b>	<b>Accessories</b>	<b>58</b>
10.4.1	Abrasives used etc.	58
<b>11.</b>	<b>Appendix</b>	<b>59</b>
<b>11.1</b>	<b>EU Declaration of Conformity</b>	<b>59</b>

# 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 Surface Grinding Machine, hereafter referred to as grinding machine and to properly utilize its features.

These operating instructions contain important notes on how to operate the grinding 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 grinding machine.

The operating instructions must always be stored in the location that the grinding machine is used.

The operating instructions must be read and applied by every person tasked with working with the grinding 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:



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.

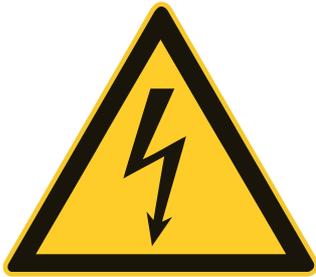
# 1. Important notes

---

## 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! CAUTION! DANGEROUS ELECTRICAL VOLTAGE! (warning sign on the control cabinet)**

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! PACEMAKER (prohibition sign on the safety flap)**

A strong magnet is built into the machine. To avoid any adverse effects on persons with a pacemaker, a minimum distance of 30 cm must be maintained between the rotary table and the implant.

### 1.3.2 General warning- and mandatory signs

The following general mandatory signs must be observed:



#### **CAUTION! RISK OF INJURY FROM KNIFE!**

Working with the grinding 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.

Protective gloves must also be worn when changing the coolant (see Chapter 8.1).

# 1. Important notes

## 1.4 Rating plate and machine serial number



Figure 1-1 Rating plate

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



Figure 1-2 Machine number

The machine serial number (1-2) is located on the rating plate (1-1) and at the top of the machine compartment, visible through the KNECHT logo.

## 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: (7-10/1) means picture number 7-10, position 1.



Figure 7-10 "Grinding unit" fine adjustment

*For grinding, feed the grinding unit with the fine adjustment (7-10/1) using the hand wheel of the right feed lever until a clear spark is visible.*

# 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. 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 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 surface grinding cutting sets for mincers, inline grinders and emulsifiers, hereinafter also called workpiece.

All workpieces must be clamped centrally on the magnetic rotary table.

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:**

- **fixtures are not properly attached.**
- **workpieces other than those described in Chapter 2.2 are ground.**

## 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

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

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 wheel there is a hazard of pinching and of drawing 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.

## 2. Safety

---

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 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 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.

Only lift the grinding machine properly with lifting gear as specified in the operating instructions. Only use a suitable transport vehicle with sufficient load-bearing capacity. Secure the load reliably. Use suitable attachment points.

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

# 3. Description

---

## 3.1 Intended use

The W300 Surface Grinding Machine sharpens cutting sets for mincers, inline grinders and emulsifiers up to a diameter of 300 mm (optionally 400 mm).

## 3.2 Technical specifications

Height (maximum, when feed lever is up) _____	approx. 2095 mm
Width (incl. belt filter coolant unit) _____	approx. 1665 mm
Depth (incl. belt filter coolant unit and suction unit) _____	approx. 1700 mm
Space requirement (WxD) _____	2000 x 2200 mm
Weight _____	approx. 650 kg
Weight Belt filter coolant unit _____	approx. 90 kg
Power supply* _____	3x 400 V
Mains frequency* _____	50 Hz
Power output* _____	4 kW
Power consumption* _____	6 kW
Current consumption* _____	9 A
Back-up fuse* _____	25 A
Operating noise level (measured A-weighted emission sound pressure level at the workplace LpA)** _____	approx. 72 dB (A)
Rotary table diameter _____	300 mm (optional 400 mm)
Rotary table speed _____	31 and 62 1/min
Grinding wheel diameter _____	200 mm
Grinding wheel speed _____	3000 1/min
Cutting speed with grinding wheel d. 200*** _____	31 m/s

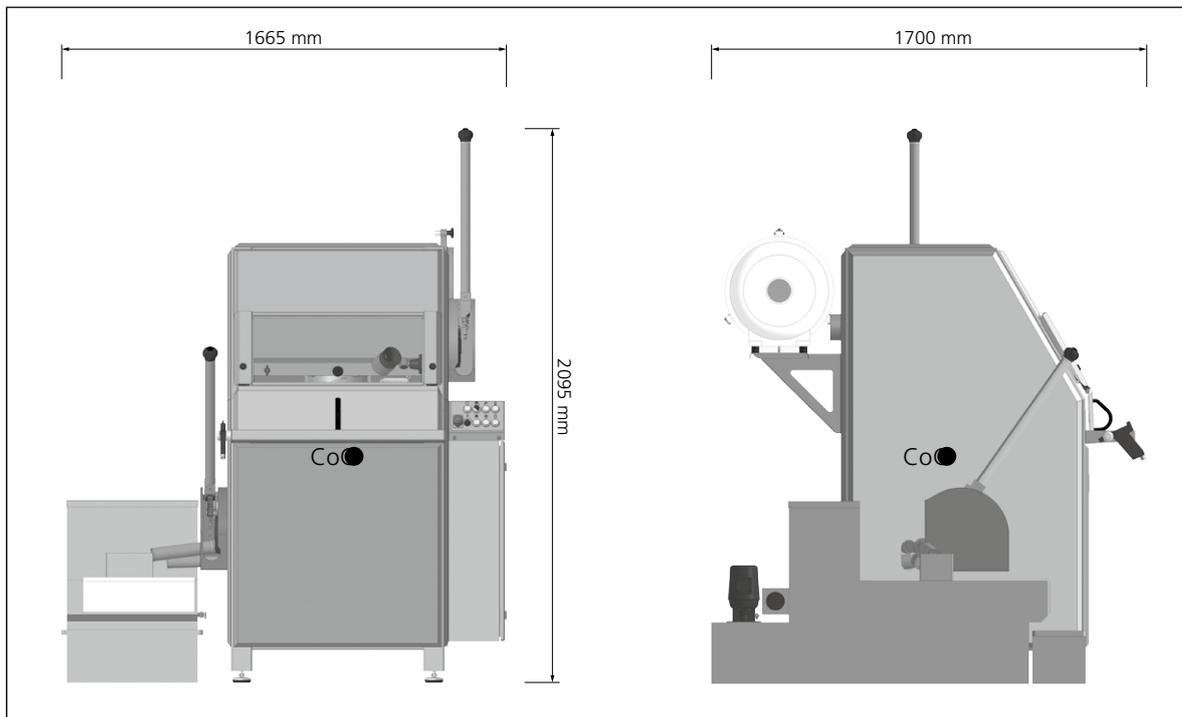
\*) This information may change depending on the electrical power supply.

\*\*) Two-digit sound emission value according to EN ISO 4871. Emission sound pressure level according to EN ISO 11201 (measurement uncertainty KpA. 3 dB(A)). A mincer plate (d. 200 mm) from the company Turbocut was ground.

\*\*\*) Caution! The cutting speed of 31 m/s is achieved at 50 Hz. An electrical supply with a higher frequency results in higher cutting speeds. Only use abrasives permitted for this purpose.

### 3. Description

---



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

### 3.3 Functional description

The W 300 Surface Grinding Machine is used to grind cutting sets for mincers, inline grinders and emulsifiers up to a diameter of 300 mm (optionally 400 mm).

Workpieces are fixed and ground on the rotary table of the W 300 Surface Grinding Machine using centering pieces and magnetic clamping. When grinding without magnetic clamping, the workpieces are only fixed and ground on the rotary table of the W 300 Surface Grinding Machine using centering pieces.

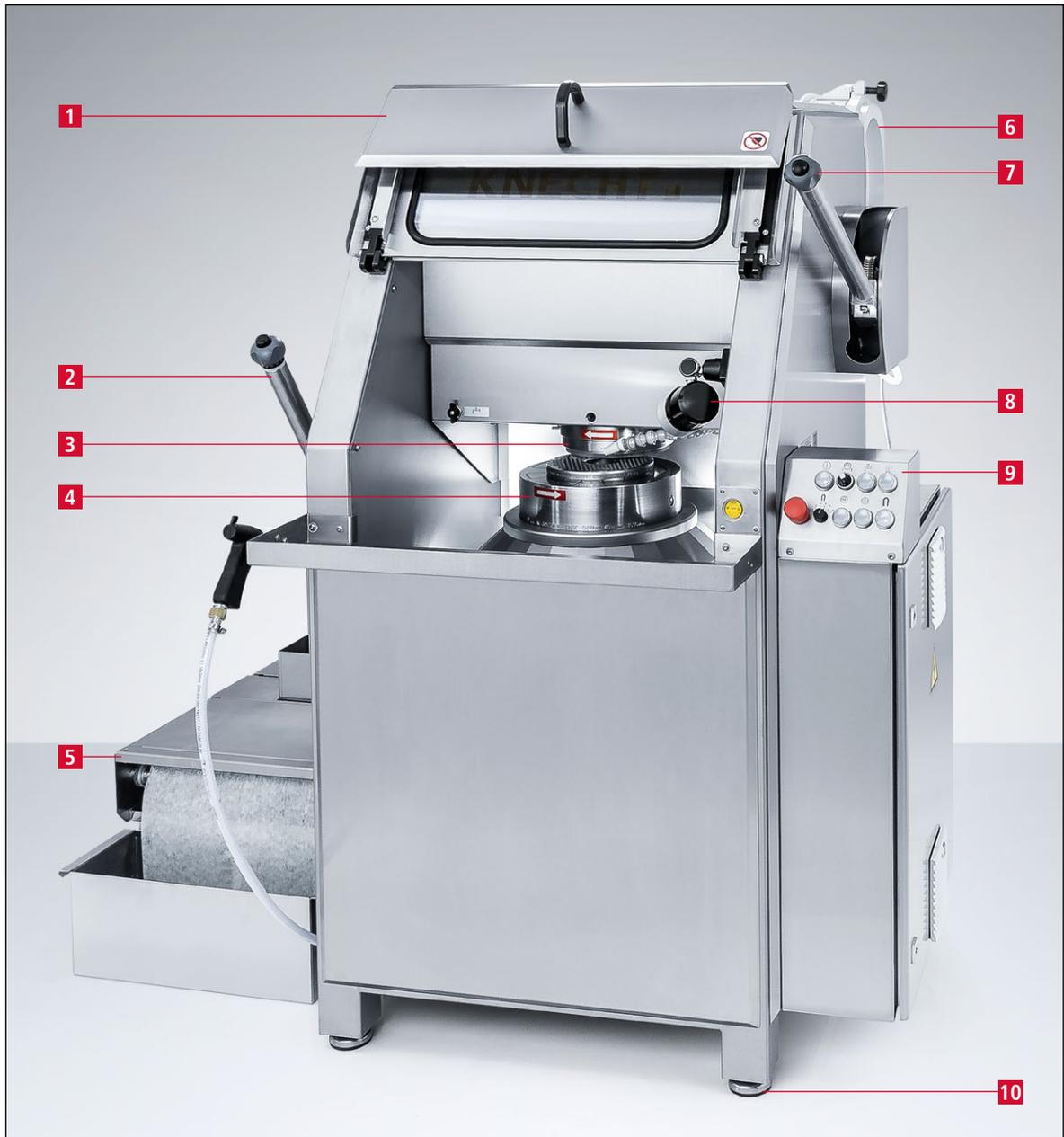
Cross knives are fixed for surface grinding on a mincer plate with the enclosed centering piece for cross knives.

Special fixtures are also available for special applications.

The machine is supplied as standard with a CBN grinding wheel, an air cleaning unit (hereinafter called suction unit) and a belt filter coolant unit.

# 3. Description

## 3.4 Description of the assemblies



**Figure 3-2** General view of grinding machine

- 1 Safety flap
- 2 "Rotary table" feed lever
- 3 Grinding unit
- 4 Rotary table
- 5 Belt filter coolant unit
- 6 Suction Unit
- 7 "Grinding unit" feed lever
- 8 LED work light
- 9 Control panel
- 10 Adjustable machine feet

# 3. Description

---

## 3.4.1 Rotary table



Figure 3-3 Rotary table

For processing, the workpieces are placed and centered on the rotary table (3-3/1). The rotary table has an electromagnet to hold the workpiece in place. The strength of the magnetic field is divided into six levels.

The rotary table is driven by a spur gear. Two speeds are available.

## 3.4.2 Centering pieces



Figure 3-4 Centering piece

Centering pieces (3-4/1) are used to hold and correctly align the workpieces on the rotary table.

The centering piece matching the cutting tool is inserted into the hole in the middle of the rotary table.

## 3.4.3 Feed levers for rotary table and grinding unit



Figure 3-5 Feed levers

The grinding unit and rotary table are moved into position using the respective feed levers (3-5/1) and (3-5/2).

## 3. Description

---

### 3.4.4 Switching the grinding machine on/off



**Figure 3-6** Main switch

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

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 "Control On" button: Activate PLC control
- 2 "Rotary table I/II" selection switch: Change rotary table speed
- 3 "Coolant On/Off" button: Switch on/off the coolant pump
- 4 "Drives On/Off" button: Switch on/off drives for grinding wheel, rotary table, coolant pump and suction unit (only works when the magnet is switched on)
- 5 "Magnetic holding force" selection switch: Regulates the magnetic field strength of the rotary table
- 6 "Rotary table On/Off" button: Switch on/off rotary table rotation
- 7 "Grinding wheel on/off" button: Switch on/off the grinding wheel (only works when the magnet is switched on).
- 8 "Magnet On/Off" button: Switch on/off the rotary table magnet
- 9 "Emergency stop" button

# 3. Description

---

## 3.4.6 Belt filter coolant unit



**Figure 3-8** Belt filter coolant unit

The belt filter coolant unit (3-8/1) is located on the left-hand side of the machine.

## 3.4.7 Suction unit



**Figure 3-9** Suction unit

The suction unit (3-9/1) is located at the rear of the surface grinding machine.

## 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.

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 permissible electrical connection must be provided 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 the 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).

## 5.3 Supply connections

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

The power supply must be installed on site by a qualified electrician.



Check that the power supply is connected correctly.

If the connection to the voltage supply is incorrect, the grinding wheel 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 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 uneven floors by turning the machine feet (3-2/10) with an AF 19 mm open-end wrench.

The power supply must be 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.

Observe the locally applicable safety and accident prevention regulations.

Check that the power supply is connected correctly.

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

Observe the prescribed rotating direction.



**Figure 6-1** Filling the belt filter coolant unit

Set up and connect the belt filter coolant unit (6-1).

Fill with approx. 140 liters water and approx. 7 liters Colometa SBF-PN coolant additive (mixing ratio 1:20) (see Chapter 8.4).

Connect the power plug to the socket provided on site (3x 400 V, 32 A) and set the main switch (3-6) to the position "1 ON".



**Figure 6-2** Control panel

Press the "Control On" button (6-2/1) on the control panel. The PLC control is activated when the button lights up.

Close the safety flap (3-2/1).

Switch on the magnet of the rotary table with the "Magnet On/Off" button (6-2/3).

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

The rotary table rotates.

# 6. Commissioning

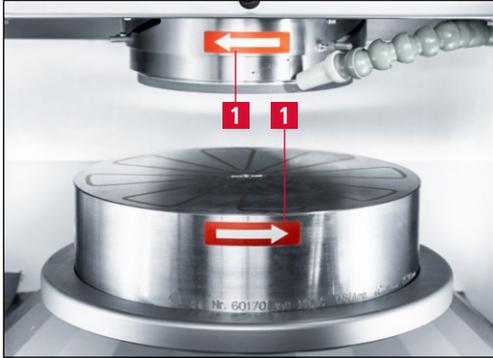


Figure 6-3 Checking rotating direction

Check the rotating direction.

The direction arrows (6-3/1) indicate the rotating directions of the rotary table and grinding wheel.

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

After ensuring the prescribed rotating direction, press the "Rotary table On/Off" button (6-2/2) again to switch off the rotary table.

**ATTENTION**

**When commissioning, first check the direction of rotation of the rotary table. The rotary table must rotate counterclockwise.**



Figure 6-4 Coolant tap

Switch on the coolant pump by pressing the "Coolant On/Off" button (6-2/4).

The coolant supply is regulated using the coolant tap (6-4/1) (see Chapter 7.5).



Figure 6-5 Coolant hose

The coolant hose (6-5/1) is flexible and must be positioned so that the coolant flows directly to the grinding point between the workpiece and grinding wheel.

Switch off the coolant pump by pressing the "Coolant On/Off" button (6-2/4) again.

**ATTENTION**

**Check the coolant level regularly before grinding.**

## 6. Commissioning

---

### **ATTENTION**

**Always grind with coolant, otherwise there is a risk of overheating the workpieces and a fire hazard in the suction unit!**

Switch off the grinding machine.

To do this, turn the main switch (3-6) to the position "0 OFF".

# 7. Operation

---



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

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

## 7.1 Switch on the grinding machine

Set the main switch (see Figure 3-6) to the "1 ON" position. Press the "Control On" button (3-7/1). The PLC control is activated when the button lights up.

## 7.2 Surface grinding mincer plates

### 7.2.1 Moving the rotary table to the change position



**Figure 7-1** "Rotary table" feed lever

Open the safety flap (3-2/1).

For loading the mincer plate, move the rotary table to the change position.

The rotary table position is set using the "Rotary table" feed lever (7-1/1) on the left-hand side of the machine.

The feed lever must first be unlocked electro-mechanically. To do this, press the button (7-1/2) on the hand wheel of the feed lever.

Pull the feed lever down to move the rotary table forwards to the change position.

Once the desired position has been reached, release the button (7-1/2). The feed lever is locked again electromechanically.

# 7. Operation

## 7.2.2 Clamping the mincer plate

### NOTE

The rotary table must be cleaned before clamping the mincer plate (see Chapter 8.1.2).

The workpieces are held and correctly aligned on the rotary table using centering pieces.

Insert the centering piece (7-2/1) that matches the mincer plate into the hole (7-2/2) in the middle of the rotary table.



Figure 7-2 Centering piece



Figure 7-3 Placing the mincer plate on the rotary table

Place the mincer plate (7-3/1) over the centering piece on the rotary table.

Fix the mincer plate in position by pressing the "Magnet On/Off" button (7-4/1).



Figure 7-4 Activating the magnet

# 7. Operation

## 7.2.3 Setting the working position



Figure 7-5 Rotary table in working position

Move the rotary table to the working position.

The working position of the rotary table varies depending on the workpiece size. The correct working position is reached when the entire cutting surface of the workpiece is covered by the grinding wheel.

### NOTE

**The grinding wheel must not protrude beyond the center of the workpiece.**



Figure 7-6 "Rotary table" feed lever

The rotary table position is set using the "Rotary table" feed lever (7-6/1) on the left-hand side of the machine.

The feed lever must first be unlocked electro-mechanically. To do this, press the button (7-6/2) on the hand wheel of the feed lever.

Push the feed lever upwards to move the rotary table backwards or pull it downwards to move the rotary table forwards.

Once the desired position has been reached, release the button (7-6/2). The feed lever is locked again electromechanically.



Figure 7-7 "Rotary table" fine adjustment

For workpieces with a collar, the position of the rotary table is finely adjusted using the hand wheel (7-7/1) of the feed lever.

# 7. Operation

## 7.2.4 Moving the grinding unit to the grinding position



Figure 7-8 "Grinding unit" feed lever

Use the "Grinding unit" feed lever (7-8/1) on the right-hand side of the machine to lower the grinding unit to just above the mincer plate.

To do this, unlock the feed lever by pressing the button (7-8/2) on the hand wheel and pull it down.

Once the desired position has been reached, release the button (7-8/2).

**ATTENTION**

The grinding wheel may only touch the mincer plate when the drives are switched on.

## 7.2.5 Surface grinding the mincer plate



Figure 7-9 Control panel

Close the safety flap (3-2/1).

Start the rotary table, grinding wheel, coolant pump and suction unit by pressing the "Drives On/Off" button (7-9/1).

**ATTENTION**

Always grind with coolant, otherwise there is a risk of overheating the workpieces and a fire hazard in the suction unit!

**NOTE**

The machine has two rotation speeds for the rotary table. The rotary speed is selected using the "Rotary table I/II" selection switch (7-9/2). With the fast rotary table speed "II", more material is removed.

# 7. Operation

## NOTE

The slow rotary table speed "1" provides a better surface quality of the workpiece.

The machine is electrically secured and the units can only be operated when the safety flap is closed and the magnet is active.

For grinding, feed the grinding unit with the fine adjustment (7-10/1) using the hand wheel of the right feed lever until a clear spark is visible.



Figure 7-10 "Grinding unit" fine adjustment



Figure 7-11 Grinding mincer plates

Allow the machine to work without further infeed until the sparking subsides. Feed repeatedly until the workpiece is evenly surface-ground.



Figure 7-12 Moving the grinding unit upwards

After the grinding process, move the grinding unit up using the right feed lever (7-12/1) until the drives stop automatically.

To do this, unlock the feed lever by pressing the button (7-12/2) on the hand wheel and push it upwards.

Switch off the magnet of the rotary table using the "Magnet On/Off" button (7-9/3).

# 7. Operation

---



**Figure 7-13** Rinsing the mincer plate and rotary table

Open the safety flap (3-2/1).

Remove the mincer plate from the rotary table.

Rinse the mincer plate and rotary table (7-13).

**Turn the mincer plate over and grind the back as described below.**

**Clamp the mincer plate (Chapter 7.2.2)**

**Set the working position (Chapter 7.2.3)**

**Move the grinding unit into the grinding position (Chapter 7.2.4)**

**Surface grind the mincer plate (Chapter 7.2.5)**

Remove the mincer plate from the rotary table.

Rinse the mincer plate and rotary table (7-13).

Then oil with a lubricant approved for use in the food industry to prevent corrosion (see Chapter 8.1.1).

## NOTE

**The rotary table must be cleaned after each grinding process (see Chapter 8.1.2).**

**In order to prevent corrosion, oil the cutting tool after grinding with a lubricant approved for use in the food industry (see Chapter 8.1.1).**

# 7. Operation

---

## 7.3 Surface grinding cross knives

### 7.3.1 Moving the rotary table to the change position



Figure 7-14 "Rotary table" feed lever

Open the safety flap (3-2/1).

For loading the cross knife, move the rotary table to the change position.

The rotary table position is set using the "Rotary table" feed lever (7-14/1) on the left-hand side of the machine.

The feed lever must first be unlocked electro-mechanically. To do this, press the button (7-14/2) on the hand wheel of the feed lever.

Pull the feed lever down to move the rotary table forwards to the change position.

Once the desired position has been reached, release the button (7-14/2). The feed lever is locked again electromechanically.

### 7.3.2 Clamping the cross knife

#### NOTE

**The rotary table must be cleaned before clamping the cross knife (see chapter 8.1.2).**



Figure 7-15 Centering piece

Insert the centering piece (7-15/1) that matches the cross knife into the hole (7-15/2) in the middle of the rotary table.

# 7. Operation



**Figure 7-16** Placing the mincer plate on the rotary table

First place the matching, surface-ground mincer plate (7-16/1) over the centering piece (7-16/2) on the rotary table.



**Figure 7-17** Cross knife on rotary table

Then place the cross knife (7-17/1) on the mincer plate (7-17/2).

The collar of the cross knife (7-17/3) lies in the hole of the mincer plate.



**Figure 7-18** Activating the magnet

Fix the workpiece by pressing the "Magnet On/Off" button (7-18/1).

## NOTE

The knife is not held by magnetic force. Switching on the magnetic table in this case only serves to enable the control unit so that the grinding drives can be switched on.

# 7. Operation

## 7.3.3 Setting the working position



Figure 7-19 Rotary table in working position

Move the rotary table to the working position.

The working position of the rotary table varies depending on the workpiece size. The correct working position is reached when the entire cutting surface of the workpiece is covered by the grinding wheel.

### NOTE

**The grinding wheel must not protrude beyond the center of the workpiece.**



Figure 7-20 "Rotary table" feed lever

The rotary table position is set using the "Rotary table" feed lever (7-20/1) on the left-hand side of the machine.

The feed lever must first be unlocked electro-mechanically. To do this, press the button (7-20/2) on the hand wheel of the feed lever.

Push the feed lever upwards to move the rotary table backwards or pull it downwards to move the rotary table forwards.

Once the desired position has been reached, release the button (7-20/2). The feed lever is locked again electromechanically.



Figure 7-21 "Rotary table" fine adjustment

For workpieces with a collar, the position of the rotary table is finely adjusted using the hand wheel (7-21/1) of the feed lever.

# 7. Operation

## 7.3.4 Moving the grinding unit to the grinding position



Figure 7-22 "Grinding unit" feed lever

Use the "Grinding unit" feed lever (7-22/1) on the right-hand side of the machine to lower the grinding unit to just above the cross knife.

To do this, unlock the feed lever by pressing the button (7-22/2) on the hand wheel and pull it down.

Once the desired position has been reached, release the button (7-22/2).

**ATTENTION**

The grinding wheel may only touch the workpiece when the drives are switched on.

When grinding cross knives, ensure that the grinding wheel does not touch the collar of the knife.

## 7.3.5 Surface grinding the cross knife



Figure 7-23 Control panel

Close the safety flap (3-2/1).

Start the rotary table, grinding wheel, coolant pump and suction unit by pressing the "Drives ON/OFF" button (7-23/1).

**ATTENTION**

Always grind with coolant, otherwise there is a risk of overheating the workpieces and a fire hazard in the suction unit!

# 7. Operation

---

## NOTE

The machine has two rotation speeds for the rotary table. The rotary speed is selected using the "Rotary table I/II" selection switch (7-23/2). With the fast rotary table speed "II", more material is removed.

The slow rotary table speed "I" provides a better surface quality of the workpiece.

The machine is electrically secured and the units can only be operated when the safety flap is closed and the magnet is active.



Figure 7-24 "Grinding unit" fine adjustment

For grinding, feed the grinding unit with the fine adjustment (7-24/1) using the hand wheel of the right feed lever until a clear spark is visible.



Figure 7-25 Grinding cross knives

Allow the machine to work without further infeed until the sparking subsides.

Feed repeatedly until the workpiece is evenly surface-ground.

# 7. Operation



**Figure 7-26** Moving the grinding unit upwards

After the grinding process, push the grinding unit upwards with the right feed lever (7-26/1) until the drives stop automatically.

To do this, unlock the feed lever by pressing the button (7-26/2) on the hand wheel and push it upwards.

Switch off the magnet of the rotary table using the "Magnet On/Off" button (7-23/3).



**Figure 7-27** Rinsing the cross knife

Open the safety flap (3-2/1).

Remove and rinse the cross knife (7-27).

Only rinse the mincer plate from above.

**Turn the cross knife over and grind the back as described below.**

**Clamp the cross knife (Chapter 7.3.2)**

**Set the working position (Chapter 7.3.3)**

**Move the grinding unit into grinding position (Chapter 7.3.4)**

**Surface grind the cross knife (Chapter 7.3.5)**

Remove the cross knife and mincer plate from the rotary table.

Rinse the cross knife, mincer plate and rotary table (7-27).

Then oil with a lubricant approved for the food industry to prevent corrosion (see Chapter 8.1.1).

## NOTE

**The rotary table must be cleaned after each grinding process (see Chapter 8.1.2).**

**In order to prevent corrosion, oil the cutting tool after grinding with a lubricant approved for use in the food industry (see Chapter 8.1.1).**

# 7. Operation

---

## 7.4 Grinding without magnet



Figure 7-28 Control panel

In order to be able to grind special mincer plates where magnetic clamping is not desired, the units can be switched on using a special button combination.

To do this, press the button combination "Control On" (7-28/1) and "Magnet On/Off" (7-28/3) at the same time.

The "Magnet On/Off" button (7-28/3) flashes and the units can be switched on using the "Drives On/Off" button (7-28/2).

### ATTENTION

**Grinding without a magnet is only permitted in conjunction with suitable centering pieces. Otherwise, the mincer plate may be thrown off and the machine damaged.**

**KNECHT Maschinenbau GmbH accepts no liability for improper use.**

# 7. Operation

## 7.5 Setting the coolant supply



**Figure 7-29** Switching on/off the coolant supply

The coolant pump is switched on and off by pressing the “Coolant On/Off” button (7-29/1) when the control unit is activated.



**Figure 7-30** Coolant tap

The coolant supply is regulated using the coolant tap (7-30/1).

Turning the coolant tap clockwise = less coolant

Turning the coolant tap counterclockwise = more coolant



**Figure 7-31** Coolant hose

The coolant hose (7-31/1) is flexible and must be adjusted so that the coolant flows directly onto the grinding point between the workpiece and grinding wheel.

### ATTENTION

**Check the coolant level regularly before grinding.**

**Always grind with coolant, otherwise there is a risk of overheating the workpieces and a fire hazard in the suction unit!**

# 7. Operation

## 7.6 Dressing the CBN grinding wheel (optional)

### 7.6.1 Positioning the dressing stone on the rotary table

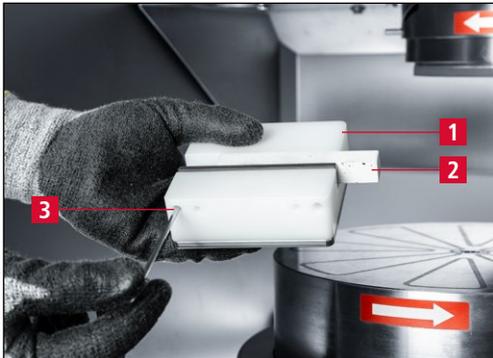


Figure 7-32 Adjusting the dressing stone

If grinding performance decreases during the grinding process, the grinding wheel must be dressed.

First open the safety flap (3-2/1).

With a hexagon screwdriver AF3 mm (7-32/3), loosen the dressing stone (7-32/2) in the truing device (7-32/1) and pull it out a little towards the front.

Tighten the dressing stone and place the truing device (7-32/1) on the rotary table.



Figure 7-33 Control panel

Switch on the magnet of the rotary table by pressing the "Magnet On/Off" button (7-33/1).

**ATTENTION**

**The rotary table may not rotate during dressing**

# 7. Operation

## 7.6.2 Setting the working position

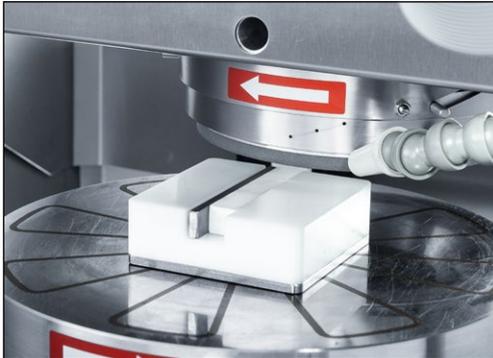


Figure 7-34 Dressing the grinding wheel

Move the rotary table to the working position.

The correct working position is reached when the protruding part of the dressing stone is caught by the grinding wheel (see Figure 7-34).



Figure 7-35 "Rotary table" feed lever

To do this, unlock the "Rotary table" feed lever (7-35/1) on the left-hand side of the machine by pressing the button (7-35/2) on the hand wheel.

Push the feed lever upwards to move the rotary table backwards or pull it downwards to move the rotary table forwards.

Once the desired position has been reached, release the button (7-35/2) on the hand wheel.

## 7.6.3 Moving the grinding unit into position



Figure 7-36 "Grinding unit" feed lever

Move the grinding wheel down to a few millimeters above the dressing stone.

To do so, unlock the "Grinding unit" feed lever (7-36/1) by pressing the button (7-36/2) on the hand wheel and pull it down.

Once the desired position has been reached, release the button (7-36/2) on the hand wheel.

# 7. Operation

## 7.6.4 Dressing the grinding wheel



Figure 7-37 Control panel

Close the safety flap (3-2/1).

Start the grinding wheel by pressing the "Grinding wheel On/Off" button (7-37/1).



Figure 7-38 "Grinding unit" fine adjustment

Feed the grinding wheel with the fine adjustment (7-38/1) using the hand wheel of the "Grinding unit" feed lever.

As soon as the grinding wheel touches the dressing stone, feed a little.

The grinding wheel is ready for use again.



Figure 7-39 Moving the grinding unit upwards

After dressing, move the grinding unit upwards with the feed lever (7-39/1) until the drives stop automatically.

To do this, unlock the feed lever by pressing the button (7-39/2) on the hand wheel and push it upwards.

# 7. Operation

## 7.7 Replacing the grinding wheel



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.



Figure 7-40 Loosening the grinding wheel

Open the safety flap (3-2/1).

The grinding wheel is easily changed using the locking pin (7-40/1) and the mounting wrench.

To release the grinding wheel, insert the locking pin (7-40/1) into the hole above the grinding wheel. To do this, turn the grinding wheel until the locking pin blocks the rotation.



Figure 7-41 Loosening the grinding wheel

Then place the mounting wrench (7-41/1) on the flange (7-41/2) from below and loosen the grinding wheel by turning it **clockwise**.



Figure 7-42 Replacing the grinding wheel

Attach the new grinding wheel and tighten **counterclockwise** using the mounting wrench (7-42/1).

Pull out the locking pin (7-40/1) again.

After replacing the grinding wheel, the grinding wheel guard must be readjusted. The grinding wheel must not protrude more than 1.5 cm below the guard.

## 7. Operation

---

### NOTE

Ensure that the locking pin (7-40/1) is removed when switching on the machine (turn the wheel briefly by hand).

### 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.

## 8. 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.

### 8.1 Cleaning

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

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

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).

#### ATTENTION

Never spray directly into the opening of the water tray when cleaning.

The grinding machine must not be cleaned with alkaline cleaning agents.

#### 8.1.1 Cleaning agent and lubricant table

Cleaning / Lubrication work	Interflon	WÜRTH	SHELL	EXXON Mobil	OEST	Ballistol
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 V1002	Mobilith SHC 100	IXELON GOC 190	
Lubrication nipple gear plate			Gadus S2 V1002	Mobilith SHC 100	IXELON GOC 190	
Lubrication nipples lubrication block			Gadus S5 V142 W0018		IXELON LT000 EP	
Lubricate cutting tools						H1 Spray

#### ATTENTION

To prevent corrosion, non-corrosion-resistant cutting tools must be oiled after grinding.

Only use lubricants approved for use in the food industry.

## 8. Care and maintenance

---

### ATTENTION

We recommend Ballistol H1 Spray.

It has NSF H1 approval in accordance with the FDA (Food and Drug Administration) and is permitted for use in the entire food industry.

### 8.1.2 Cleaning the rotary table



Figure 8-1 Rinsing the rotary table

The rotary table must be rinsed with water before and after each grinding process.

Open the safety flap (3-2/1).

Turn on the coolant pump by pressing the "Coolant On/Off" button (7-29/1) when the control unit is activated.

Rinse the rotary table.



Figure 8-2 Rubbing the rotary table

After rinsing, dry the rotary table using the squeegee.

## 8. Care and maintenance

---

### 8.1.3 Cleaning the drip ring



Figure 8-3 Removing the drip ring

Remove the drip ring (8-3/1) from the rotary table every day and remove the grinding abrasion underneath.

### 8.1.4 Checking the suction unit



Figure 8-4 Opening the suction unit

Check the suction unit weekly and replace the filter mat or metal filter if necessary.

To do this, open the three star handles (8-4/1) of the suction unit and remove the cover (8-4/2).



Figure 8-5 Removing the filter

Pull the filter (8-5/1) out towards the front.

## 8. Care and maintenance

---



**Figure 8-6** Removing the filter mat

Remove the filter mat (8-6/1) from the metal filter (8-6/2) and check both.

If the filter mat (8-6/1) is oily or heavily soiled, it must be exchanged.

The metal filter (8-6/2) must be exchanged if there are visible signs of corrosion.

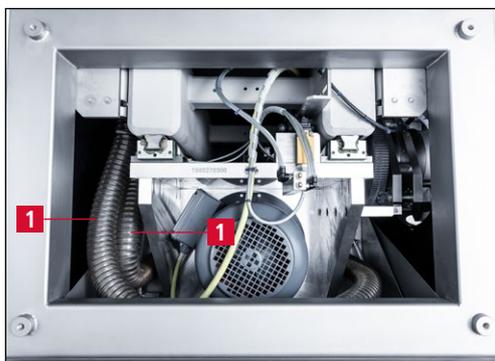
### 8.1.5 Cleaning the suction hoses



**Figure 8-7** Opening the machine cover

The D 50 mm suction hoses on the suction unit must be detached and cleaned once a year.

To do this, loosen the four screws (8-7/1) of the upper machine cover using a hexagon screwdriver AF4 mm and remove the cover.



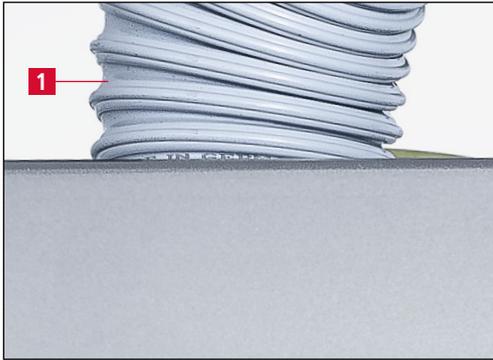
**Figure 8-8** Cleaning the suction hoses D 50 mm

Detach the two suction hoses (8-8/1) and rinse with warm water.

Then reattach the suction hoses (8-8/1) and close the cover (8-7).

## 8. Care and maintenance

---



**Figure 8-9** Detaching and cleaning suction hose D 100 mm

Once a year, the suction hose D 100 mm must be detached from the suction unit and rinsed with warm water.

# 8. Care and maintenance

---

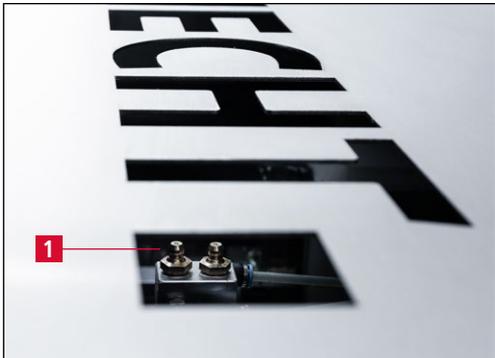
## 8.2 Maintenance plan (one-shift operation)

Interval	Assembly	Maintenance task
Daily	All machine surfaces	Clean with soft cleaning cloth and care spray.
	Grinding room	Clean metal sheets with a washing brush.
		Remove the drip ring from the rotary table and clean (see chapter 8.1.3).
	Safety flap	Clean the safety flap windows.
	Belt filter coolant unit	Check the filling quantity. If water has been added, be sure to measure the concentration of the coolant lubricant (see Chapter 8.4.1) and top up if necessary.
Weekly	Suction Unit	Clean the hose nozzle.
		Check the filter (see Chapter 8.1.4).
Monthly	Rotary table	Check for any unevenness and, if necessary grind flat.
	Recirculating ball bearing guides	Lubricate the lubrication nipples on the lubrication block for the recirculating ball bearing guides (see Chapter 8.3)
Annually	Suction Unit	Clean suction hoses (see Chapter 8.1.5).
	Gear plate	Lubricate the lubrication nipple on the gear plate by KNECHT Service. Lubricant: OEST IXELON GOC 190.
		Contact the service department of KNECHT Maschinenbau GmbH.

## 8. Care and maintenance

---

### 8.3 Lubrication



**Figure 8-6** Lubrication nipples on the lubrication block for the recirculating ball bearing guides

All bearing points are equipped with waterproof, grease-lubricated roller bearings and therefore maintenance-free.

The recirculating ball bearing guides on the grinding unit and rotary table must be lubricated with fluid grease every four weeks. This is done through the KNECHT lettering in the cover of the machine.

Attach the grease press to the two lubrication nipples (8-10/1) and lubricate the recirculating ball bearing guides on the grinding unit and rotary table.

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

The lubrication nipple on the gear plate must be lubricated once a year with "OEST IXELON GOC 190" **by KNECHT Service.**

The front plate of the machine must be removed for this purpose.

## 8. Care and maintenance

---

### 8.4 Coolant additive

It is absolutely essential to add a corrosion-inhibiting coolant additive to the coolant water. To do this, add approx. 140 liters of water with approx. 7 liters of Colometa SBF-PN coolant additive to the coolant unit (mixing ratio 1:20).

#### ATTENTION

**No other coolant additive may be used without the permission of KNECHT Maschinenbau GmbH.**

#### 8.4.1 Measuring the cooling lubricant concentration

#### ATTENTION

**Measurement errors are eliminated by carrying out a zero line adjustment with the provided calibration fluid before using the refractometer.**

**To do this, turn the small upper screw of the measuring device until zero is displayed.**



**Figure 8-11** Measuring the cooling lubricant concentration

The concentration of the cooling lubricant is measured using the hand refractometer supplied.

To do this, use the pipette (8-11/1) and place a few drops of the coolant water on the test area (8-11/2) of the refractometer.



**Figure 8-12** Reading the refractive index

Then read off the refractive index of the liquid (Figure 8-12).

The value read in °Brix multiplied by 1.6 gives the concentration in %.



# 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, coolant 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(0)7527-928-0  
Fax +49(0)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)**

Type of machine	(W300)
Machine serial number	(380155300)
Designation of assembly	(Table incl. drive)
Designation of individual part	(Wattdrive gearbox)
Item number (position number)	(30)
Drawing number (article number)	(410GA25-0100)
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	Article number	Note
CBN-grinding wheel	d.200xd.78x50	412F-80-0435	installed on delivery
Dressing device for CBN-grinding wheel, including dressing stone		014G-50-0300	
Dressing stone for CBN-grinding wheel		412P-05-0515	
Filter mat (suction unit)	d200*x340	418P-55-0300	installed on delivery
Coolant additive Colometa SBF-PN		417C-25-0011	included in scope of delivery
Fluid grease IXELON LT000 EP	900g	417B-02-0100	included in scope of delivery
Hand refractometer with calibration fluid		413L-20-0100	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 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 placed on the market, complies with the relevant fundamental 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.

<b>Designation of the machine:</b>	Surface Grinding Machine
<b>Model designation:</b>	W 300
<b>Machine number:</b>	from no. 1590566300
<b>Applicable harmonized standards, in particular</b>	DIN EN ISO 12100 DIN EN ISO 13857 DIN EN ISO 16089 DIN EN 61000-3-2 DIN EN 61000-3-3 DIN EN 55014-1 DIN EN 13854
<b>Responsible for documentation:</b>	Andreas Doerr (State-certified technician) Phone +49-7527-928-81 a.doerr@knecht.eu
<b>Manufacturer:</b>	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, March 5, 2026

KNECHT Maschinenbau GmbH

  
Markus Knecht  
CEO

**KNECHT Maschinenbau GmbH**

Witschwender Straße 26 · 88368 Bergatreute · Germany · T +49(0)7527-928-0 · F +49(0)7527-928-32  
mail@knecht.eu · www.knecht.eu