

**Slicer  
GSP H  
GSP HD**

**Instruction manual NSF**

38111381003 en-US



Training videos:



**Bizerba Service**  
**www.bizerba.com**

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Bizerba SE & Co. KG,  
72336 Balingen

Postfach 10 01 64  
72301 Balingen, Germany  
Telephone (+49 7433) 12-0, Fax (+49 7433) 12-2696  
E-mail: [marketing@bizerba.com](mailto:marketing@bizerba.com)  
Internet: [www.bizerba.com](http://www.bizerba.com)

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# 1 About these instructions

Read the instruction manual very carefully before connecting and switching on the machine to ensure that you utilize the full quality and potential of this machine and avoid any potential risks.

This instruction manual covers the use, installation, operating, cleaning and maintenance of the machine.

Our products undergo continuous further development and are subject to different country-specific regulations. Examples of pictures and graphics included in these instructions may vary from the version you have received.

## 1.1 Safe-keeping

The owner's manual are an integral part of the machine and must be stored close to the machine to be easily accessible to others.

If the machine is sold, the owner's manual must be included in its entirety.

## 1.2 Target group



The machine may only be operated by trained personnel. This means that the operator has to be familiar with the contents of the instruction manual.

The minimum age of the operating personnel by German law is 14. Other age limits may apply according to the corresponding national regulations. Therefore the operating company must check the legislation at the place of machine installation.

Installation, maintenance and repair works must be performed by Bizerba authorized specialists only.

## 1.3 Symbols used

Various symbols are used in these instructions.

| Icon  | Description   |
|---|---|
|  | Text with arrow prompts you to carry out an action. |
|  | Item number in figure.                              |
| <Key>   | Text within <> refers to a key.                     |
| "Display"   | Text within "" shows the display text.              |

Requirements are displayed with a gray background.

### Instruction



These instructions are mandatory for you.

**Information**



This information is intended for better understanding.

**1.4 Warnings**

Warnings are divided into danger levels by the signal word above the warning symbol. Structure of warnings and meaning of signal words are described in these instructions as follows.

|  |   |
|--|---|
|  | <p><b>⚠ DANGER</b></p> <p><b>Source of danger with high risk of imminent danger to persons!</b><br/> <b>The consequences are:</b><br/> <b>life threatening injuries,</b><br/> <b>serious health damage</b></p> <ul style="list-style-type: none"> <li>– Measurements for prevention of danger are specified.</li> </ul>                                 |
|  | <p><b>⚠ WARNING</b></p> <p><b>Source of danger with medium risk of possible danger to persons!</b><br/> <b>The consequences can be:</b><br/> <b>serious injuries,</b><br/> <b>damage to health,</b><br/> <b>serious damage to property</b></p> <ul style="list-style-type: none"> <li>– Measurements for prevention of danger are specified.</li> </ul> |
|  | <p><b>⚠ CAUTION</b></p> <p><b>Source of danger with low risk of possible danger to persons!</b><br/> <b>The consequences can be:</b><br/> <b>injuries,</b><br/> <b>damage to property.</b></p> <ul style="list-style-type: none"> <li>– Measurements for prevention of danger are specified.</li> </ul>   |
|  | <p><b>NOTICE</b></p> <p><b>Source of danger, improper use!</b><br/> <b>Damage to property can result.</b></p> <ul style="list-style-type: none"> <li>– Measurements for prevention of danger are specified.</li> </ul>  |

## 2 About this machine

### 2.1 Intended use

Bizerba slicers are intended for use at work only.

They may only be operated by instructed personnel over the age of 14. [▶ 6]

As regards manual slicers GSP H, GSP H W, GSP H Flex, the carriage is moved forwards and backwards by hand for slicing.

In the event of automatic gravity feed slicers GSP HD, GSP HD W the carriage is driven by a motor for slicing. In addition, the stroke width can be adjusted to the size of the product and the number of carriage strokes can be changed as well.

Manual slicing with the GSP HD, GSP HD W is possible. The servo-motor support comes automatically into action during the manual carriage movement. [▶ 49]

#### Permitted product

Approved sliced products, taking sizes into consideration

- All kinds of cold cuts, deli meat
- Ham, bacon
- Smoked ham with / without rind
- Roast meats, roast beef
- Meat, roulades
- Sliceable cheese
- Fruit, vegetables
- Bread

Note: If cheese is the main product being sliced, we recommend using a special cheese blade.

Slicing of other materials requires prior written approval by Bizerba product management.

#### Non-permitted product

The following may not be sliced due to risk of injury and damage:

- NON-FOOD articles
- Bone-in products
- Frozen products
- Substances representing a health risk, in particular toxic, corrosive, highly and extremely inflammable and explosive substances

#### Applications

The slicing machines are intended for installation in the sales area. The use in the preparation area is permitted taking into account cleaning procedures and protection class.

Permissible ambient temperatures from -10°C to 40°C (+14 to +104 degF).

#### Operating time

The slicers are designed for permanent operation.

## 2.2 Machine description

### Designations and variants

GSP H = Manual gravity feed slicer

GSP H W = Manual gravity feed slicer with portion scale

GSP H Flex = Combination of metrologically approved PC scale and manual gravity feed slicer

GSP HD = Automatic gravity feed slicer

GSP HD W = Automatic gravity feed slicer with portion scale

### Drive

The blade of this gravity feed slicer is operated electrically. The low-noise, low-maintenance drive is effected via an AC motor.

The blade drive can be switched on/off via the membrane keyboard. [▶ 33] to [▶ 36]

Keys green = <I>, red = <O> have a signal lamp for activation control (GSP H, GSP HD). For the red key a reduced operating force is needed reacting at a slight touch.

Further function keys are integrated in the membrane keyboard, e.g. number of carriage strokes and stroke width for motor-driven carriage (GSP HD, GSP HD W).

The contactor control with self-locking circuit prevents automatic restarting after a power cut.

### Carriage

Since the carriage with product and product holder are at an angle the product is fed towards the blade by means of the product's own weight.

A carriage inclination between 0° or 18° with a low depositing height and 25° with low or high depositing height (GSP H, GSP HC) can be chosen.

Also a carriage inclination between 18° with a low depositing height and 25° with low or high depositing height (GSP HD, GSP HDC) may be selected.

The carriage is optionally available as one part made of anodized aluminum with Ceraclean finish (GSP HC).

The one-piece carriage has an inclination of 25°.

For better gliding of the product, parts which are in contact with the product to be sliced are provided with grooves.

A slice thickness setting below "0" unlocks the tilting lock of the carriage. This allows the carriage to be tilted to the outside in any position.

### Scale

The slicers GSP H W, GSP HD W are fitted with a scale which is not metrologically approved. The portion scale is not metrologically approved and cannot be used for legal for trade applications.

Slicer GSP H Flex with connected metrologically approved scale allows sliced product to be weighed at the same time.

### Materials

The complete machine housing as well as the gauge plate, blade cover and carriage, are made of anodized aluminum. Optionally the surface can have a Ceraclean finish (GSP HC, GSP HDC).

Carriage rear wall, pusher guard and remnant holder plate are made of break-proof and food-grade plastic. A one-piece carriage in anodized aluminum with Ceraclean finish is optionally available.

All components getting in direct contact with food and materials used in the working area comply with the food hygiene regulations. Bearings in visual range are lubricated with food-grade lubricants.

### **Vibration**

The total vibration of the items, which get into contact with hand and arm is below  $2.5 \text{ m/s}^2$  and therefore below the required limited value.

### **Work place-related emission noise level value**

GSP H:  $L_{pA} = 55 \text{ dB (A)}$

GSP HD:  $L_{pA} = 61 \text{ dB (A)}$

The value takes into consideration an instable measuring of 3 dB.

### **Operating time**

The slicers are designed for continuous operation.



## 2.2.1 Components of the manual slicer

- ① Blade cover
- ② Blade
- ③ Blade guard ring
- ④ Handle for product holder
- ⑤ Guard plate
- ⑥ Clamp handle for remnant holder plate
- ⑦ Remnant holder plate
- ⑧ Product fixation device
- ⑨ Carriage
- ⑩ Carriage handle
- ⑪ Rear wall
- ⑫ Star knob screw on carriage foot
- ⑬ Identification plate / CE mark
- ⑭ Slice thickness adjustment
- ⑮ Lifting device
- ⑯ Rubber base
- ⑰ ON / OFF buttons with signal lamp (GSP H, GSP H Flex)
- ⑱ Membrane keyboard with HMI touchscreen (GSP H W)
- ⑲ Weighing module (GSP H W, GSP H Flex)
- ⑳ Load platter (GSP H W, GSP H Flex)
- ㉑ Gauge plate
- ㉒ Deflector

The machines are available in different versions. Figures show examples.

### Names of components GSP H



Fig. 1: GSP H with carriage inclination 18°

### Names of components GSP H W

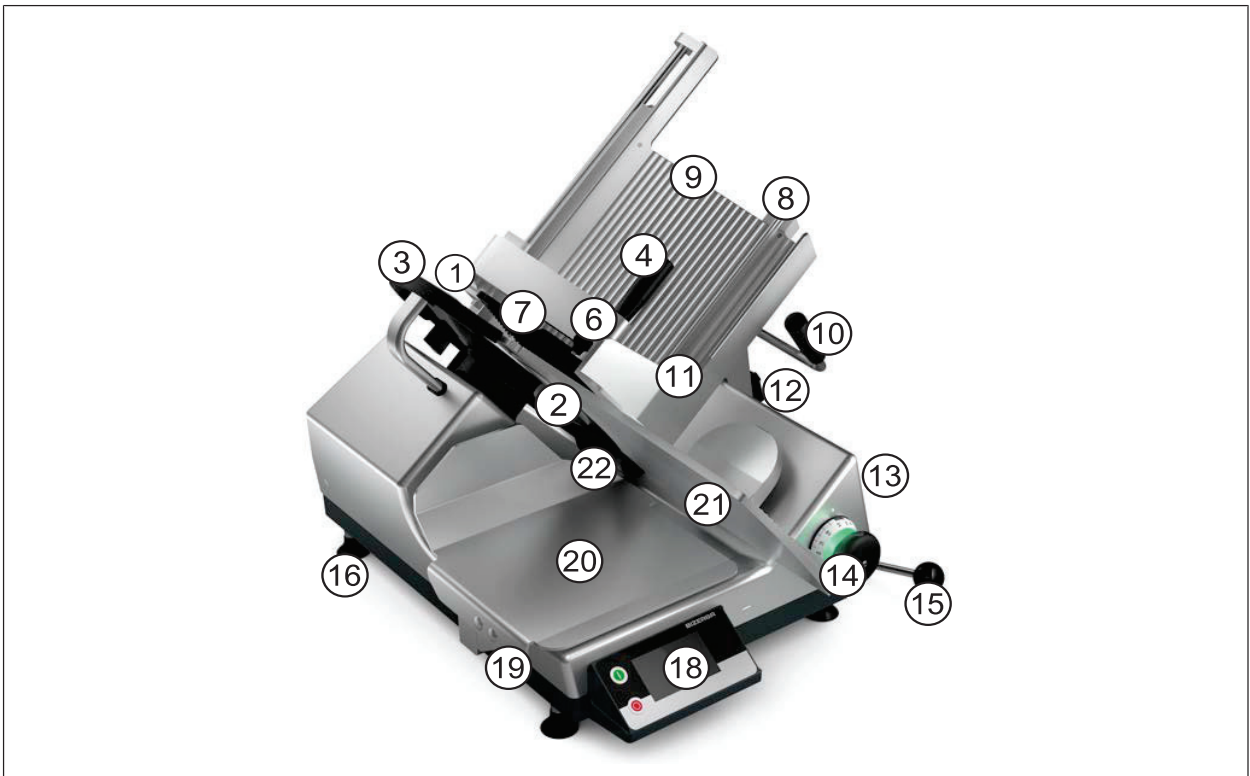


Fig. 2: GSP H W

### Names of components GSP H Flex

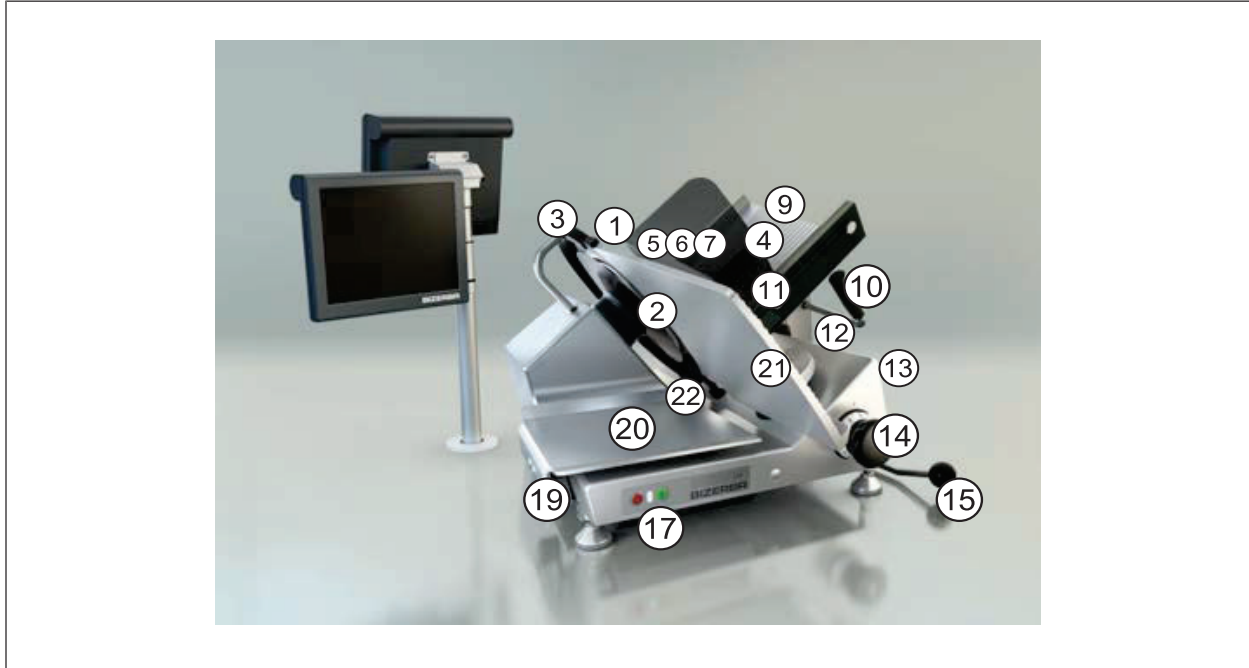


Fig. 3: GSP H Flex



## 2.2.2 Components of the automatic slicer

- ① Blade cover
- ② Blade
- ③ Blade guard ring
- ④ Handle for product holder
- ⑤ Guard plate
- ⑥ Clamp handle for remnant holder plate
- ⑦ Remnant holder plate
- ⑧ Product fixation device
- ⑨ Carriage
- ⑩ Carriage handle
- ⑪ Rear wall
- ⑫ Star knob screw on carriage foot
- ⑬ Identification plate / CE mark
- ⑭ Slice thickness adjustment
- ⑮ Lifting device
- ⑯ Rubber base
- ⑰ Membrane keyboard with ON / OFF buttons (GSP HD)
- ⑱ Membrane keyboard with HMI touchscreen (GSP HD W)
- ⑲ Weighing module (GSP HD W)
- ⑳ Load platter (GSP HD W)
- ㉑ Gauge plate
- ㉒ Deflector

The machines are available in different versions. Figures show examples.

### Names of components GSP HD

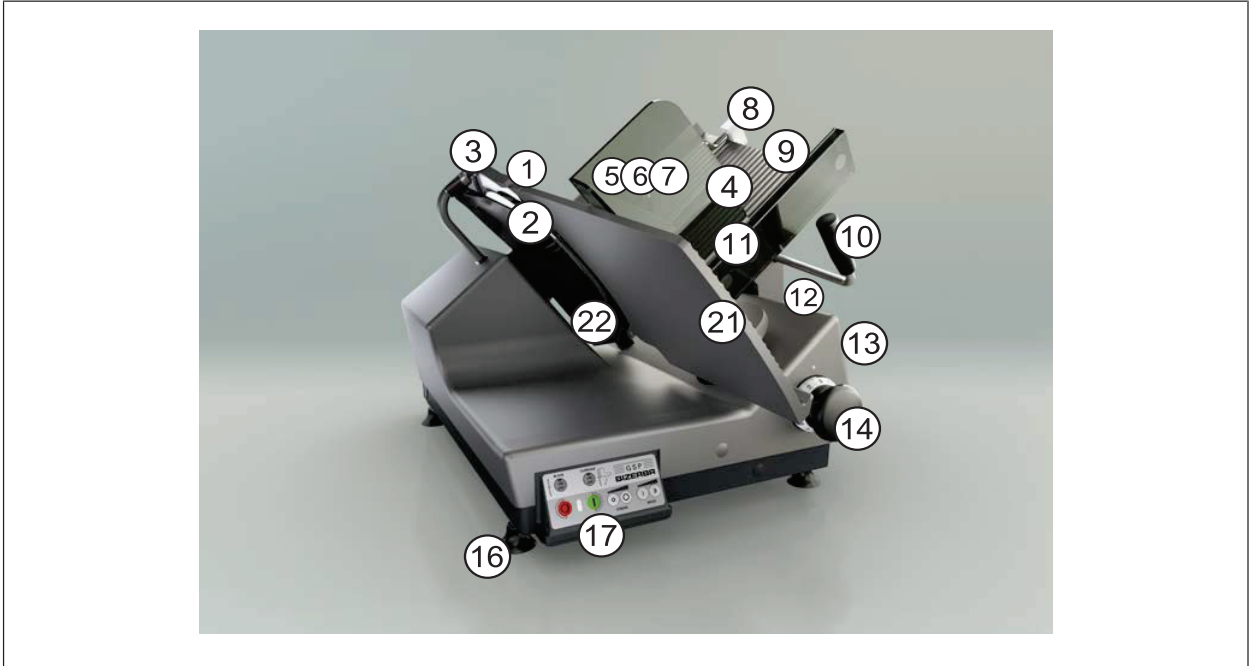


Fig. 4: GSP HD with carriage inclination 18°

### Names of components GSP HD with HMI

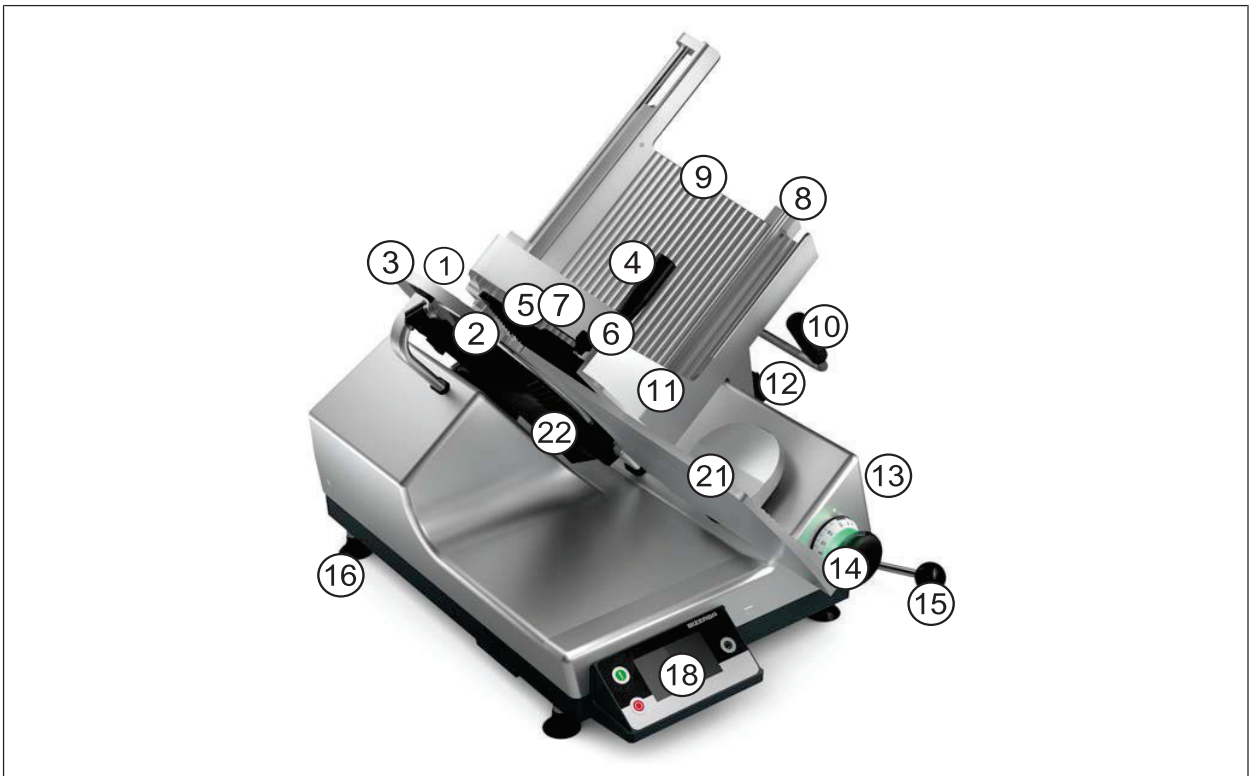


Fig. 5: GSP HD with HMI

## Names of components GSP HD W

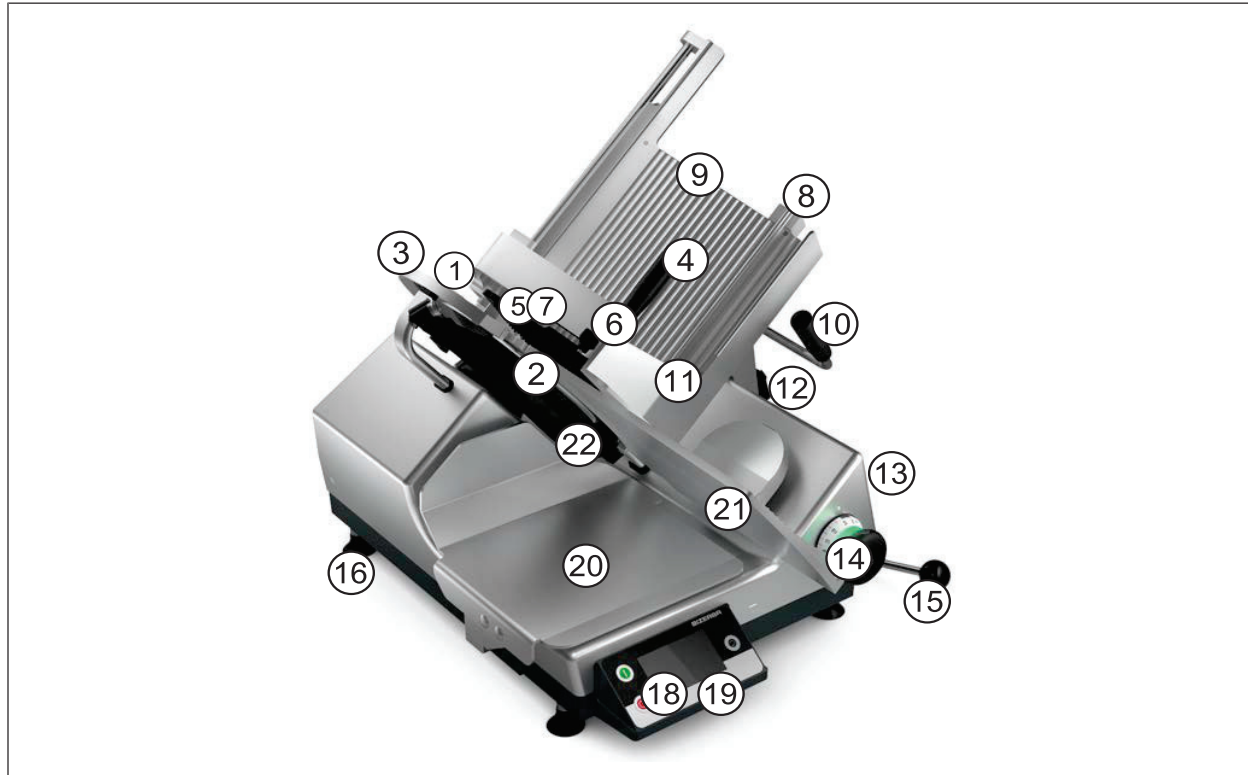


Fig. 6: GSP HD W

### 2.2.3 Accessories

For the machines we offer a wide range of accessories for different application areas.



Only use the original Bizerba spare parts and accessories in order to ensure safe and trouble-free operations.



If cheese is the main product being sliced, we recommend using a special cheese blade.

| Designation                        | Blade diameter | Carriage angle |
|------------------------------------|----------------|----------------|
| Special channeled blade for cheese | 330 mm         | 18° / 25°      |
| Serrated blade for bread           | 330 mm         | 18° / 25°      |
| Blade removal aid                  | 330 mm         | 18° / 25°      |
| Product fixation device            |                | 0° / 18°       |
| Product guide height 3cm           |                | 0° / 18° / 25° |
| Product guide height 7cm           |                | 25°            |
| Product feed for tomatoes          |                | 25°            |

| Designation                   | Blade diameter | Carriage angle |
|-------------------------------|----------------|----------------|
| Vegetable hopper with stomper |                | 0° / 18° / 25° |

## 2.3 Warranty

We are not responsible for damages caused by:

- Non-compliance with the instruction manual
- or unauthorized and incorrect electrical installation by the customer
- incorrect operation, utilization contrary to terms and conditions
- structural modifications, removal of protective devices
- use of replacement parts and accessory components or third-party resources that are not Bizerba originals
- natural wear and tear

In such cases, the user is acting at his own risk and is responsible for any damage occurred.

## 2.4 Disposal of the machine / environmental protection

This machine is an electronic device as per definition of the WEEE Directive.

To ensure that the machine is recycled environmentally friendly, return the machine to the manufacturer or the dealer after intended use has expired.

Naturally, Bizerba and its dealers will take back free of charge old machines no longer in operation.

Please contact your specialist in this case.






The application of these disposal regulations are based upon legal regulations of the respective country.

---

## 3 Safety instructions

### 3.1 General notes on safety



|   |  |
|---|--|
|    | <p><b>⚠ DANGER</b></p> <p><b>Damaged power supply cables or faulty protective devices!<br/>danger to life due to electric current Acute risk of injury of operating personnel.</b></p> <ul style="list-style-type: none"> <li>– Damaged supply lines must be replaced immediately with new cables and installed by a professional electrical company or by Bizerba Service.</li> <li>– The mains cable must be routed in a way that it is no cause of risk.</li> <li>– Protective devices must be checked every day with regards to function before start-up.</li> <li>– Protective devices may not be removed, modified or bypassed.</li> </ul> |
|   | <p><b>⚠ DANGER</b></p> <p><b>Open the electrical installation area!<br/>danger to life due to electric current</b></p> <ul style="list-style-type: none"> <li>– The electrical installation area may only be opened by Bizerba Service.</li> <li>– Pull power plug before moving the machine.</li> </ul>   |
|  | <p><b>⚠ WARNING</b></p> <p><b>Unauthorized persons!<br/>Serious injuries to fingers and hands and damage to health.</b></p> <ul style="list-style-type: none"> <li>– Only trained personnel over 14 years may operate, clean and maintain the machine. [▶ 6] Subsequent training to be repeated on a regular basis.</li> <li>– Unauthorized persons, particularly children, may not stay in the work area of the machine.</li> </ul>   |

#### Medical information for persons with active implants



Active implants are, e. g. pacemakers or defibrillators. If a safety distance of 30 cm is maintained between field source and implant, it might be very unlikely that active implants are affected in any way.


Non-ionizing radiance is not generated intentionally, but is a technical effect caused through electrical equipment: e.g. electric motors, high-voltage cables or magnetic coils.

### 3.2 Safety instructions for transport and installation


|   |  |
|---|--|
|  | <b>⚠ CAUTION</b>   |
|   | <p><b>Carriage might move due to its unladen weight.</b><br/> <b>Risk of hand injuries due to crushing!</b></p> <ul style="list-style-type: none"> <li>– Be careful when unpacking.</li> </ul>   |
|  | <b>⚠ WARNING</b>   |
|   | <p><b>Incorrect supply voltage!</b><br/> <b>Destruction of electric components, fire hazard.</b></p> <ul style="list-style-type: none"> <li>– Do not connect the machine to the power supply if the power supply data does not correspond to the machine's connection values.<br/> <b>Mains data must be identical.</b></li> <li>– Inform Bizerba Customer Service.</li> </ul> |


### 3.3 Safety instructions during operation, slicing

|   |  |
|---|--|
|  | <b>⚠ WARNING</b>   |
|   | <p><b>Rotating blade!</b><br/> <b>Cut injuries.</b></p> <ul style="list-style-type: none"> <li>– Do not allow yourself to become distracted. Concentrate on the task in hand and avoid time pressure.</li> <li>– When slicing, the carriage may only be moved by the handle.</li> <li>– Do not put your hand underneath the remnant holder plate.</li> <li>– During operation, do not reach into the path of the carriage.</li> <li>– <b>Never</b> push product ends towards blade by hand.</li> </ul> |
|  | <b>⚠ WARNING</b>   |
|   | <p><b>Moving components!</b><br/> <b>Risk of entanglement, shearing, crushing and being hit.</b></p> <ul style="list-style-type: none"> <li>– Do not wear loose clothing or wear hair down.</li> <li>– Do not reach into paths of carriage, product holder, gauge plate, depositing system, conveyor and depositing table.</li> <li>– Only clean machine when switched off and power plug is pulled.</li> </ul>  |

|   |  |
|---|--|
|  | <b>⚠ CAUTION</b>   |
|   | <p><b>There are spikes on the product holder!</b><br/> <b>Risk of injury.</b></p> <ul style="list-style-type: none"> <li>– Use handle when working with product holder.</li> <li>– Before you begin slicing, always position the product holder on or behind the product.</li> </ul> |

### 3.4 Safety instructions for sharpening, cleaning

|   |   |
|---|---|
|  | <b>⚠ WARNING</b>  |
|   | <p><b>Unprotected blade!</b><br/> <b>Coming in contact with the sharp blade can lead to serious injuries.</b></p> <ul style="list-style-type: none"> <li>– Always wear cut-proof gloves during the cleaning and sharpening procedures and shoes with toe caps when the blades are replaced.</li> <li>– Do not clean the blades when operating the machine.</li> </ul> |

|   |  |
|---|--|
|  | <b>⚠ WARNING</b>   |
|   | <p><b>Missing components!</b><br/> <b>The operator can only be protected from injuries and the machine protected against damage if all the components of the machine are assembled properly.</b></p> <ul style="list-style-type: none"> <li>– Check if the machine is complete before it is re-started.</li> <li>– Check if components are positioned correctly and firmly.</li> <li>– Only use original Bizerba spare parts and accessories.</li> </ul> |

### 3.5 Protective and safety devices

- Blade guard ring, stationary, cannot be removed
- Blade cover closed, stationary, can be removed
- Carriage rear wall with thumb guard, non-removable
- Product holder on or behind the product
- Gauge plate, covering carriage stroke area
- Protective circuit for voltage cutoff
- Sharpener with protective cover of open blade area



Remaining risks that cannot be excluded by technical measures:

- Risk of tripping/slipping if the work area is not kept tidy.
  - Risk of injury if the required personal protective clothing is not worn.
-

## 4 Installation

### 4.1 Transport and storage



When transporting the machine, shoes with toe caps must be worn and suitable lifting devices must be used.

For moving the machine at least two people are required. Weight of machine is higher than 25 kg.

The machine has to be transported and stored in accordance with the symbols on the packaging.

Before installation, store and transport the machine in the original packaging. We recommend keeping the original packaging.

### 4.2 Installation and assembly

Installation, start-up, as well as instructions on how to operate, clean, maintain and service the device are initially provided by the relevant Bizerba service or Bizerba specialist.

Only lift the machine at the lifting straps. The drawing "Packing/unpacking the machine" is included.

|  |  |
|--|--|
|  | <b>⚠ CAUTION</b>   |
|  | <p><b>Risk of crushing!</b><br/> <b>Carriage might move due to its unladen weight.</b><br/>         – Be careful when unpacking.</p> |



The lifting straps must only be used for machine handling before unpacking. They must not be used as load-carrying equipment.

When installing slicer, including connecting a metrologically approved scale (e.g. K-flex, XC), make sure that the weighing range can be seen by the customer.

#### 4.2.1 Installation requirements

The installation surface must be:



- large enough, [▶ 90] [▶ 91]
- horizontal and flat,
- slip and tilt-proof,
- stable and firm, [▶ 90] [▶ 91]

The recommended table height is approx. 800 mm.

## 4.2.2 Electrical connection

### Information on identification plate

|                               |   |
|-------------------------------|---|
| <b>Bizerba logo</b>           | BIZERBA   |
| <b>Machine type</b>           | GSP H<br>GSP HD   |
| <b>Machine description</b>    | Slicer  |
| <b>Machine number</b>         | ...   |
| <b>Production code</b>        | X-..  |
| <b>IP rating</b>              | IP33  |
| <b>Electrical data</b>        | see identification plate  |
| <b>Manufacturer's address</b> | Bizerba SE & Co. KG<br>Wilhelm-Kraut-Straße 65<br>72336 Balingen, Germany |

|   |  |
|---|--|
|  |  <b>WARNING</b>   |
|   | <p><b>Incorrect supply voltage!</b><br/> <b>Destruction of electric components, fire hazard.</b></p> <ul style="list-style-type: none"> <li>– Do not connect the machine to the power supply if the power supply data does not correspond to the machine's connection values.<br/> <b>Mains data must be identical.</b></li> <li>– Inform Bizerba Customer Service.</li> </ul> |



#### Check before connecting to mains

Before connecting the machine, check the mains data on the rating plate with the mains data of the power supply.

#### Installation of power supply provided by customer

The installation of the power supply to connect our machines must be carried out in accordance with country-specific regulations and rules derived thereof. These essentially include the recommendations of at least one of the following commissions:

- International Electro-technical Commission (IEC)
- European Committee for Electro-technical Standardization (CENELEC)

The machine has been built according to Protection Type I and has to be connected to the protective conductor.

**Measures for suppressing interference:**

In case of a severely contaminated power supply (e.g. when thyristor-controlled systems are used) measures must be taken on site to suppress interferences, e.g.:

- A separate supply line must be planned for Bizerba machines.
- In problem cases, install capacitively decoupled isolating transformers or other suppressors into the supply mains prior to Bizerba machines.

**Availability of the power plug used as a supply circuit disconnect**

Make sure that any access point allows you to check whether the plug is disconnected.

**4.2.3 Leveling**

In order to ensure the scale's accuracy, machine must be installed horizontally.

**Leveling of GSP H Flex**

⇒ Turn feet of machine until air bubble is in the center of the spirit level ②.

Machine ① is installed horizontally.

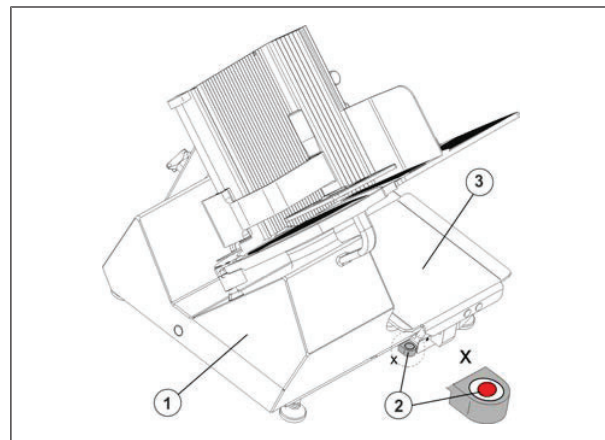


Fig. 7: Leveling



Re-level scale after each change of location.

#### 4.2.4 Attaching product feed for tomatoes

These machines allow the product fence and product feed for tomatoes (accessories) to be easily attached.

- ⇒ Set slice thickness below "0".
- ⇒ Switch off machine.
- ⇒ Move carriage towards operator.
- ⇒ Using handle, move product holder away from blade and swivel it up.
- ⇒ Push both product fences onto guide shaft.

They must be attached in a way that the special remnant holder with recess fits between the front fence.

- ⇒ Remove remnant holder plate .
- ⇒ Insert the remnant holder for tomatoes into the pusher guard, taking the attachments into account.
- ⇒ Fasten with handle.

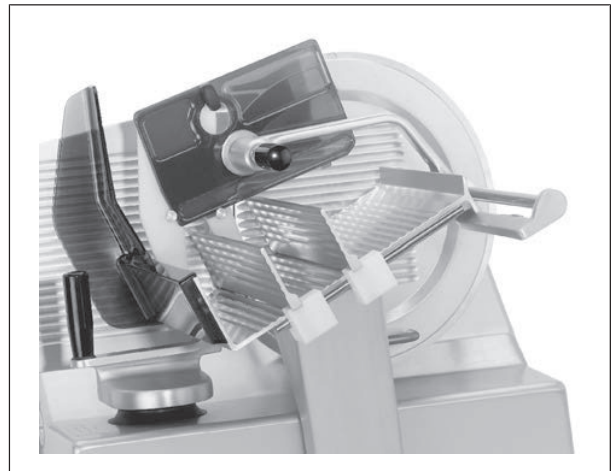


Fig. 8: Attaching product fences

#### 4.2.5 Attaching vegetable hopper

These machines allow the vegetable hopper (accessories) to be attached very easily.

- ⇒ Set slice thickness below "0".
- ⇒ Switch off machine.
- ⇒ Move carriage towards operator.
- ⇒ Using the handle, move product holder away from blade and tilt it up.
- ⇒ Place vegetable hopper on carriage, against the carriage back wall. Use pin to position vegetable hopper in groove (see arrow) and fasten to carriage by star knob.

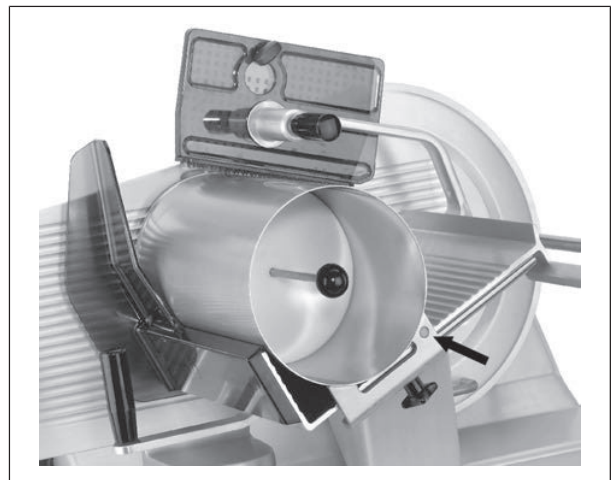


Fig. 9: Vegetable hopper with stomper

### 4.3 Start-up

Putting into operation, as well as instructing in operation, cleaning, maintenance and servicing is carried out by the relevant Bizerba customer services office or the Bizerba specialist.

### Use of lubricants in the production process.



Substances not intended to get in contact with food could be present on the surfaces of the machine.

- Clean thoroughly before start-up. [▶ 59]

## 4.3.1 Switching the slicer on

- Requirement for some options [▶ 37]:
- The slice thickness at the rotary knob must be smaller/ equal "0".

<I> (green) Used to switch on blade motor

<O> (red) Blade motor is switched off (reduced operating force)

GSP H, GSP H Flex:

- ⇒ Press <I> (green).
- Signal lamp (white) lights up.
- The blade motor rotates.

GSP HD:

- ⇒ Press <I> (green).
- Signal lamp (white) lights up as soon as mains voltage is applied.
- Blade starts running automatically, if option blade start [▶ 37] is activated.

GSP H W, GSP HD W:

- ⇒ Press <I> (green).
- Blade starts running automatically, if option blade start [▶ 37] is activated.



Fig. 10: ON / OFF button

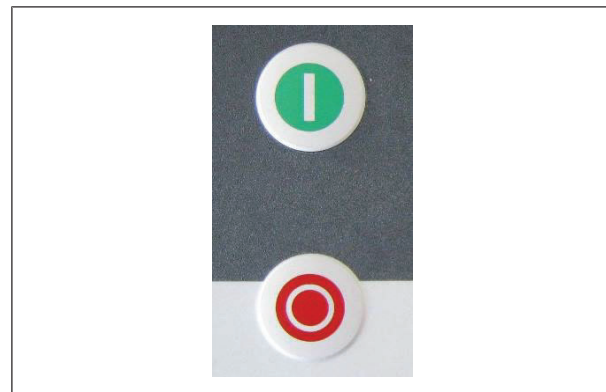


Fig. 11: ON / OFF button

## 4.3.2 Switching the machine off

- ⇒ Press <O> (red). (reduced operating force)

or

- ⇒ Option switch-off zero [▶ 37]: set the slice thickness at the rotary knob smaller/equal "0" while the blade motor runs.
- ⇒ Remove the AC power plug.
- Machine is switched off.

### 4.4 Customer technician menu

Service technician or customer provided technician accesses the menu with a password.

- ⇒ Using your finger, wipe from right to left on the touch screen.  
The adjacent picture appears.
- ⇒ Tap the <Settings> icon.

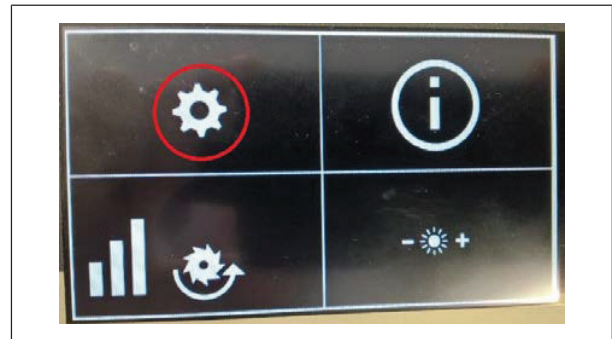


Fig. 12: Start

- ⇒ Tap the <Customer technician> icon.  
Blue indicates the selected option.
- ⇒ Enter 3-digit password. (initial: "123")  
Red (\*\*\*) means the entered password is wrong.

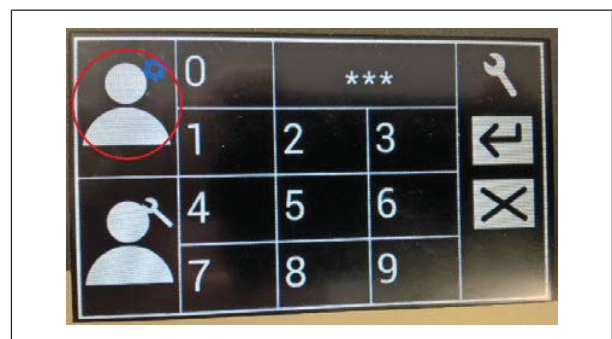


Fig. 13: Login

The customer technician menu is used to set when and at which intervals the machine has to be cleaned or the blade has to be sharpened.

Cleaning:

- without request
- at certain times
- regularly after x hours

Grinding:

- without request
- regularly after x days
- after reaching a throughput of x

The selected icon is shown in blue. Tap icon to access the relevant submenu.

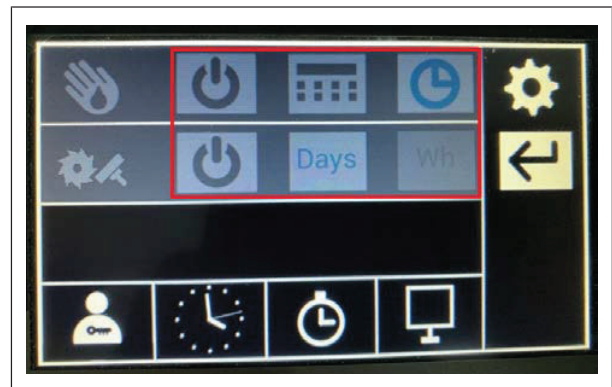


Fig. 14: Customer technician menu

### Cleaning at certain times

Max. 5 times can be set via the slider.

By tapping the respective boxes, activate or deactivate days and times for cleaning and <Confirm>.

After reaching a scheduled time, a cleaning icon is displayed, prompting the operator to clean the machine.

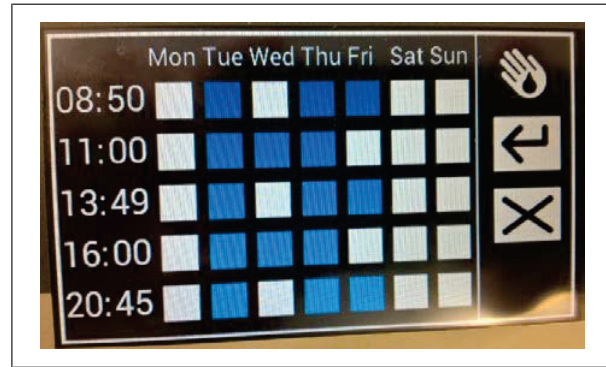


Fig. 15: Cleaning at certain times

### Cleaning after x hours

Slider allows to set a value between 1 and 24 hours.

After x hours, a cleaning icon is displayed, prompting the operator to clean the machine.



Fig. 16: Cleaning after hours

### Sharpening after x days

Slider allows to set a value between 1 and 30 days.

After x days, a sharpening icon is displayed at the set time. It prompts the operator to sharpen the blade.

In addition the sharpening and honing time can be set.

Slider allows to set a time between 5 and 45 seconds for sharpening and between 1 and 4 seconds for honing.



Fig. 17: Sharpening after days

### Sharpening after reaching a throughput of x

Slider allows to set a value between 10 and 3000 Wh (default 500 Wh).

After reaching a throughput of x the sharpening icon is displayed, prompting the operator to sharpen the blade.

In addition the sharpening and honing time can be set.

The teach function can be enabled/disabled.

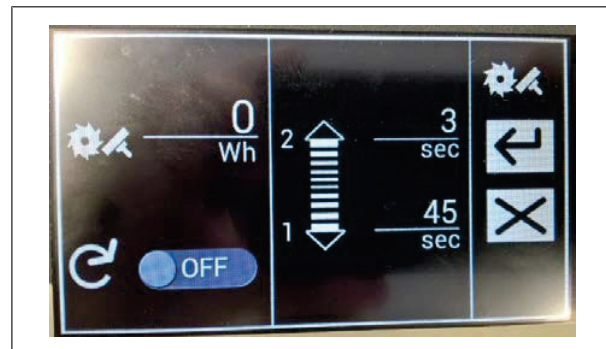


Fig. 18: Honing after reaching throughput

**More setting options in the customer technician menu:**

- Change customer password
- Date, time
- Offset of indicator message
- Screen saver

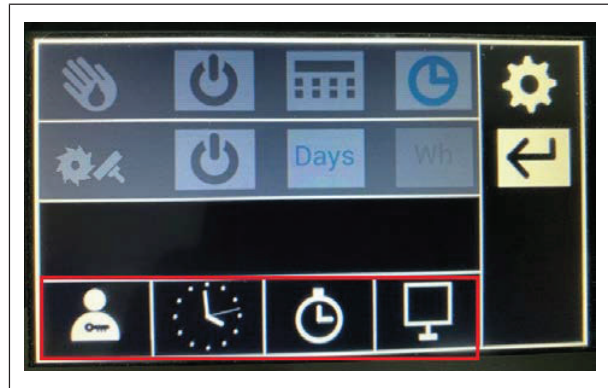


Fig. 19: Customer technician menu

**Changing the customer password**

- ⇒ Enter the current password.
- ⇒ Enter and confirm new password.

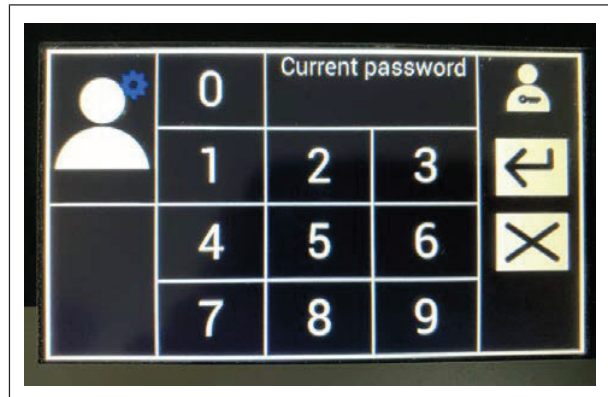


Fig. 20: Changing the customer password

**Setting date and time**

- ⇒ Tap date, set it using slider and confirm.
- ⇒ Tap time to set it and confirm.

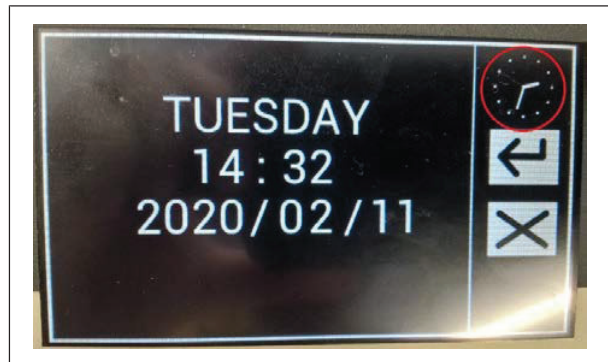


Fig. 21: Setting date and time

**Offset of indicator message**

X minutes after postponing the task, the relevant icon flashes on the display as a reminder to perform the task (cleaning, sharpening, maintenance).

Slider allows to set a value between 10 and 180 minutes.

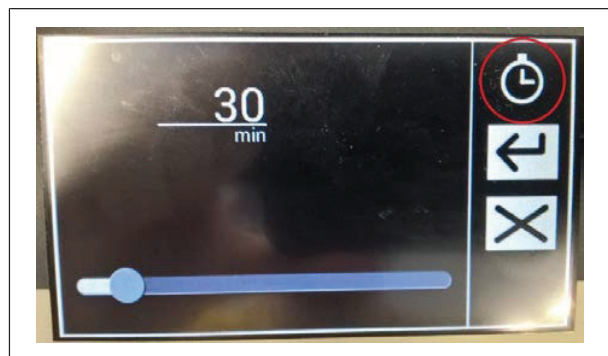


Fig. 22: Reminder after minutes

### Screen saver

Slider allows to set a value between 1 and 10 minutes.

Display goes into stand-by mode when machine is not in use for x minutes:

- Blade is at a standstill
- Scale not used
- Touch screen not used

Display leaves the stand-by mode:

- Switch-on of blade
- Use of the scale
- Touching the touch screen

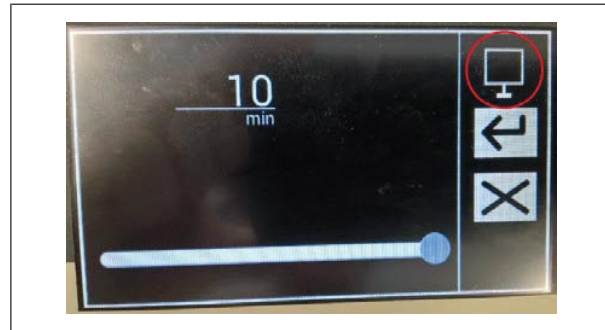


Fig. 23: Screen saver after minutes

## 4.5 Decommissioning

If the machine is not going to be used for a longer period of time:

- ⇒ Switch off machine.
- ⇒ Pull out power plug.
- ⇒ Clean machine as per cleaning instructions.

## 5 Machine and operating elements

### 5.1 Membrane keyboard GSP H

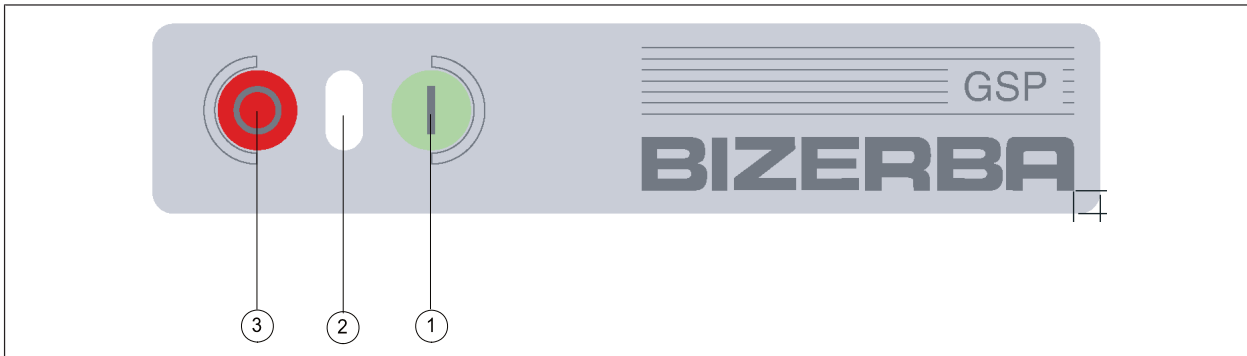


Fig. 24: Membrane keyboard GSP-H

- ① <I> (green) Used to switch on blade motor
- ② Signal lamp (white) - display for blade motor on/off
- ③ <O> (red) Blade motor is switched off (reduced operating force)

#### 5.1.1 HMI touch screen GSP H W

HMI = Human Machine Interface

- ④ Display of current weight value, taring <T>
- ⑤ Visualized power consumption (visible if no indicator is active)

The blade symbol on the touch screen rotates as soon as the blade motor rotates.

Cleaning icon, sharpening icon, maintenance icon indicate that the relevant task is to be carried out.

- ⑥ Slice counter indicates the current number of slices

Using your finger, wipe from right to left on the touch screen. The following adjacent image comes up.

- ⑧ to Service technician or Customer technician menu
- ⑨ Device information
- ⑩ Blade speed selection
- ⑪ Display brightness

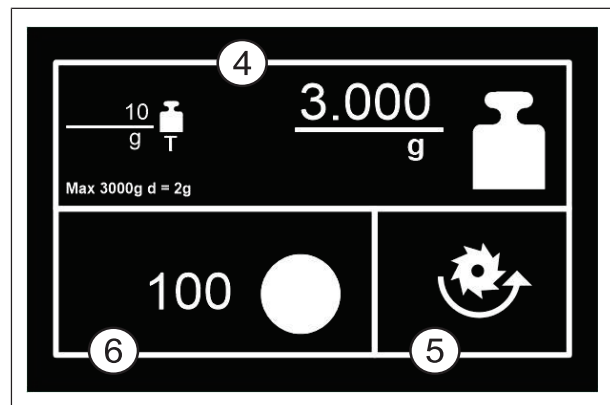


Fig. 25: HMI touch screen GSP H W

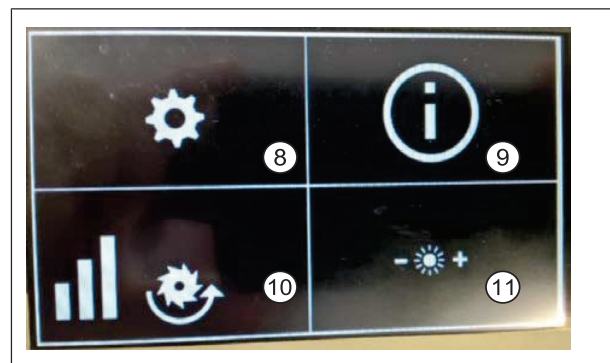


Fig. 26: HMI touch screen GSP H W

## 5.2 Membrane keyboard GSP HD

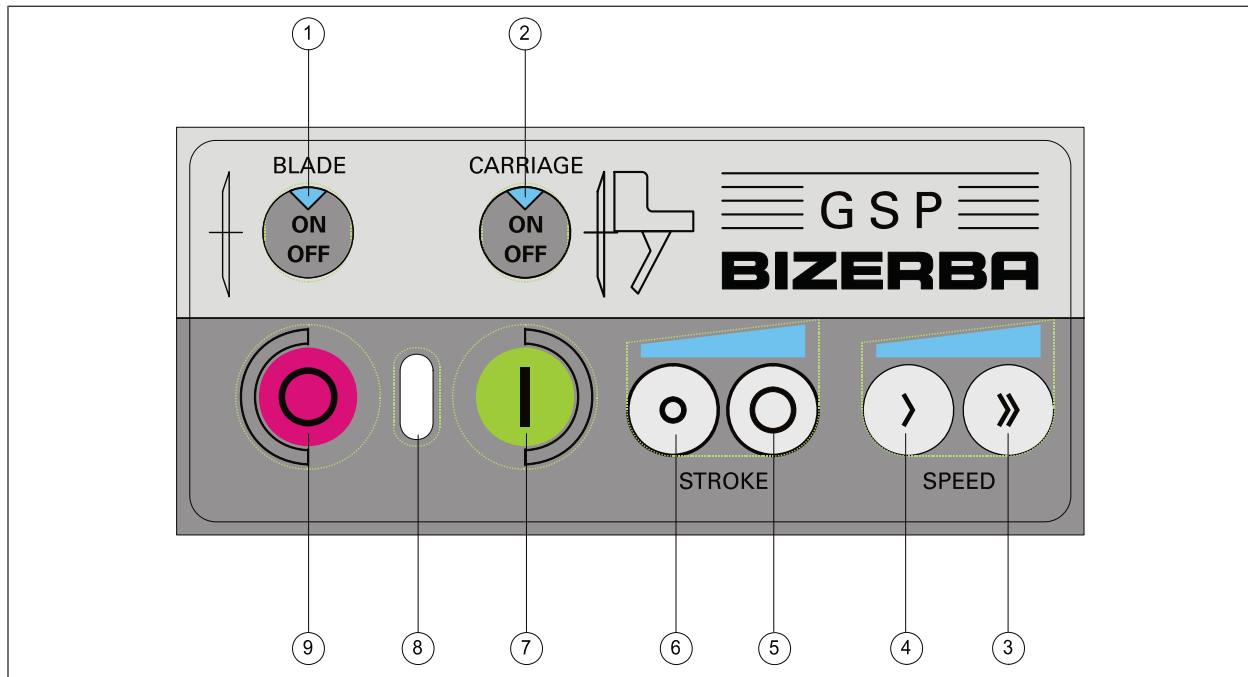


Fig. 27: Membrane keyboard GSP HD

- ① Blade drive on (red LED) / off
- ② Carriage motor on (red LED) / off
- ③ Set max. number of carriage strokes
- ④ Gradually reduce number of carriage strokes
- ⑤ Set max. stroke width
- ⑥ Gradually reduce carriage width
- ⑦ <I> (green) voltage is applied
- ⑧ Signal lamp (white) lights up when mains voltage is applied
- ⑨ <O> (red) The machine will be switched off (reduced operating force)

### 5.2.1 HMI touch screen GSP HD

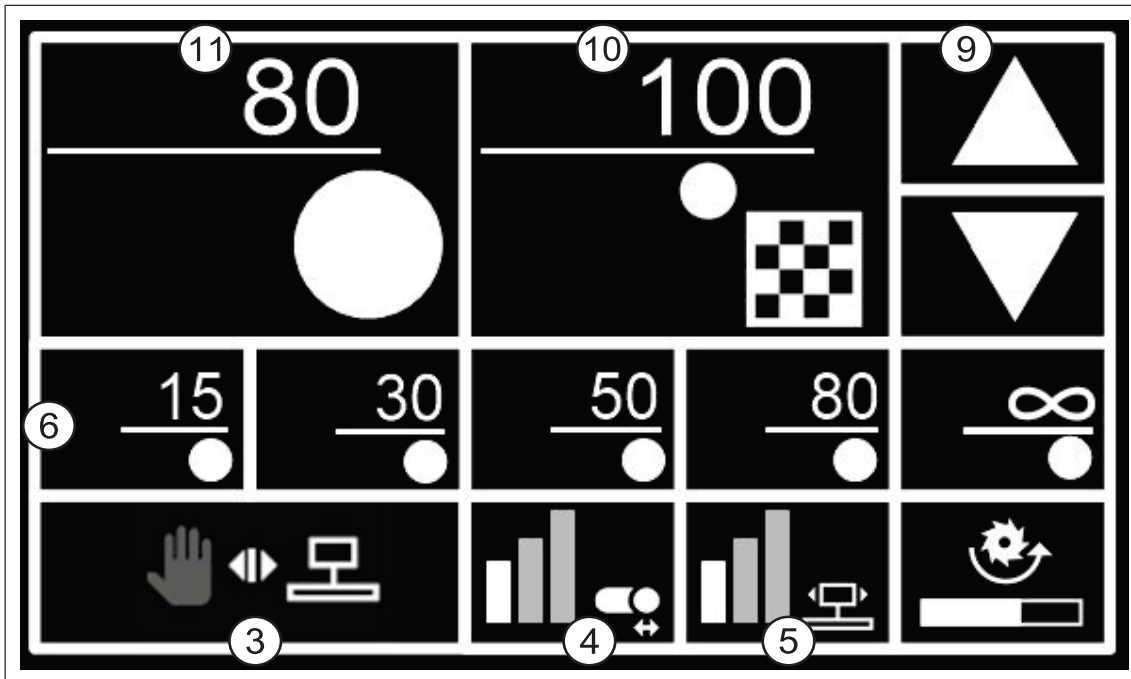


Fig. 28: HMI touch screen GSP HD

- ③ Toggling between manual operation and automatic operation
- ④ Stroke width selection
- ⑤ Selection of number of carriage strokes
- ⑥ Direct selection keys for target number of slices
- ⑨ Increasing / reducing the number of slices by 5
- ⑩ Target number of slices
- ⑪ Display of current number of slices

Using your finger, wipe from right to left on the touch screen. The following adjacent image comes up.

- ⑦ to service menu
- ⑧ Select a blade speed / blade speed for sharpening

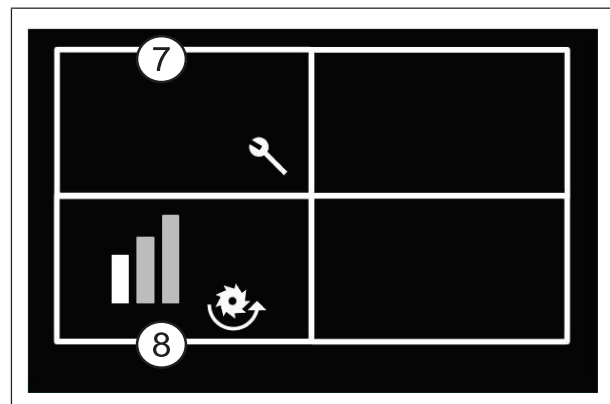


Fig. 29: HMI touch screen GSP HD

## 5.2.2 Membrane keyboard GSP HD W with HMI touch screen

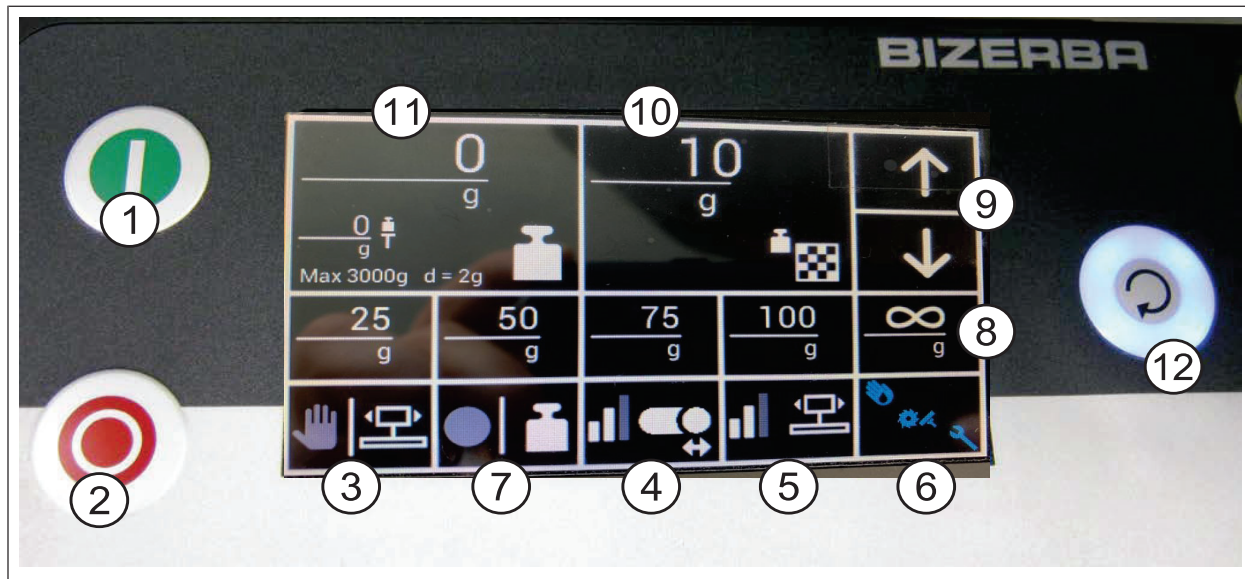


Fig. 30: Membrane keyboard GSP HD W

- ① <I> (green) voltage is present at the drives
- ② <O> (red) The drives will be switched off (reduced operating force)
- ③ Toggling between manual operation and automatic operation
- ④ Stroke width selection
- ⑤ Selection of number of carriage strokes
- ⑥ Visualized power consumption (visible if no indicator is active)  
Cleaning icon, sharpening icon, maintenance icon indicate that the relevant task is to be carried out.
- ⑦ Toggling between slicing to number of target slices and slices to target weight
- ⑧ Direct selection keys for number of target slices / target weight value
- ⑨ Increasing / reducing the number of slices by 5 or the weight by 0.05 oz (2 g)
- ⑩ Number of slices (target/current) / target weight value
- ⑪ Display of current weight value  
Tare <T>
- ⑫ <Execute> (pulsating if an action can be started; lights up during slicing)  
Starting and stopping of the slicing process

Using your finger, wipe from right to left on the touch screen. The following adjacent image comes up.

- ⑧ to Service technician or Customer technician menu
- ⑨ Device information
- ⑩ Blade speed selection
- ⑪ Display brightness

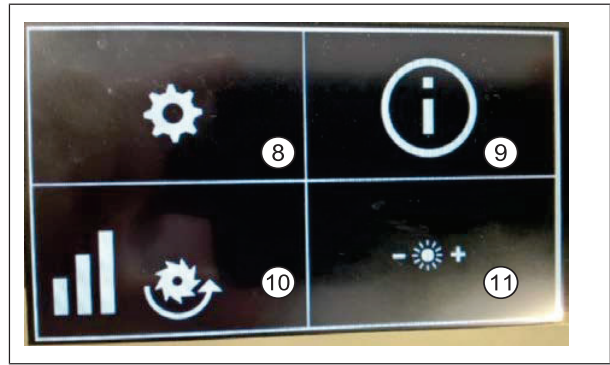


Fig. 31: HMI touch screen GSP HD W

### 5.3 Slice thickness adjustment

The slice thickness is adjusted by means of the rotary knob. Infinitely adjustable up to 22 mm.

Large fine adjustment range between 0 to 3 mm.

Recommendation: Turn dial beyond desired value in order to return it to the desired value.

A slice thickness setting below "0" unlocks the tilting lock of the carriage (black marking). The carriage can only be tilted outwards in this position. (e.g. for cleaning).



Fig. 32: Slice thickness adjustment

#### Displaying of operating status (optional)

The different operating states are defined by means of the lighting of the scale ring.

| No lighting                             | Constantly flashing green | Constantly flashing red | Flashing red     |                    |
|---|---------------------------|-------------------------|------------------|--------------------|
| No supply voltage or failure of machine | Gauge plate closed        | Gauge plate open        | Gauge plate open | Gauge plate closed |
|   | Blade off                 | Blade rotates           | Blade off        | Blade rotates      |

### 5.4 ON / OFF switch options



The options need to be selected when ordering a machine.  
Only the Bizerba customer service can set them at a later point of time.

#### Option Blade start

After switching on <I> of the machine the blade starts running automatically.

### Option Switching on at zero

The machine can only be switched on if the slice thickness setting at the knob is smaller/equal "0".

### Option automatic switch-off

In manual mode.

If the blade drive runs for n seconds (default 15 seconds) without the machine being used, its is automatically switched off.

Blade motor and servo support are switched off.

### Option setting zero

The machine switches off as soon as the slice thickness is set equal or smaller "0" and while the blade motor runs.

## 5.5 Product holder

### Machines with a carriage inclination of 0° and 18°

#### GSP H:

When placing the product on the carriage, the product holder can be lifted up to its unstable equilibrium.

For slicing purposes, the product holder is set on top or behind the product. The product is moved towards the blade by means of its own weight.



Fig. 33: GSP H, example

#### GSP HD:

In order to position the product, the product holder is moved outwards and up and locked in its final position.

For slicing purposes, the product holder is set on top or behind the product. The product is moved towards the blade by means of its own weight.

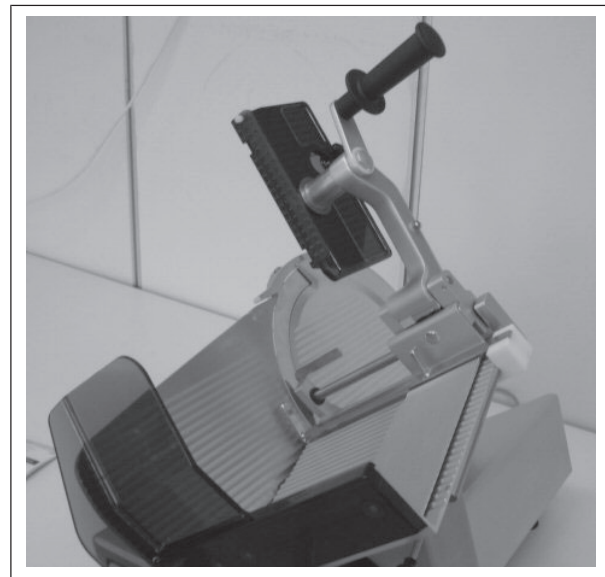


Fig. 34: GSP HD, example

### Machines with carriage inclination of 25°

For slicing purposes, the product holder is set on top or behind the product. The product is moved towards the blade by means of its own weight.

When the product is extremely long, it does not make sense to use the product holder. Therefore, use handle to move it to the extreme right and position it underneath the carriage. Does not apply to carriage versions.

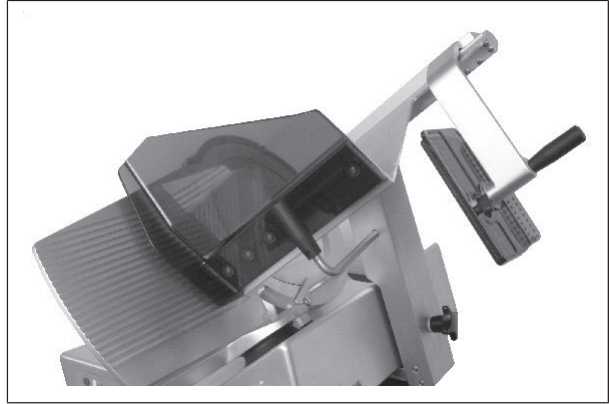


Fig. 35: GSP H, example

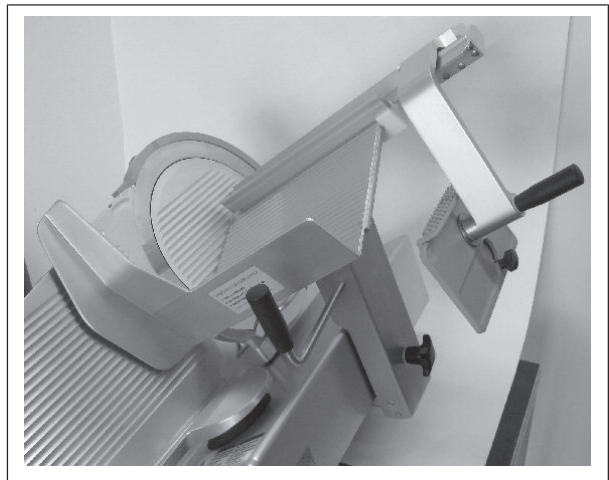


Fig. 36: GSP HD, example

## 5.6 Product fixation device / product guide

The product fixation device or product guide prevent the product from deflecting or tilting during slicing.

The product guide is irreversibly self-locking on its shaft and is moveable across the full width of the carriage. This way, it can be positioned on any product dimension.

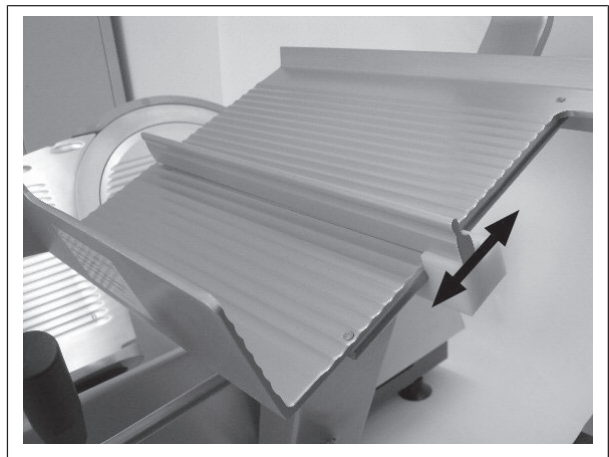


Fig. 37: Product guide

The product fixation device is irreversibly self-locking on its shaft and is moveable across the full width of the carriage. This way, it can be positioned on any product dimension.

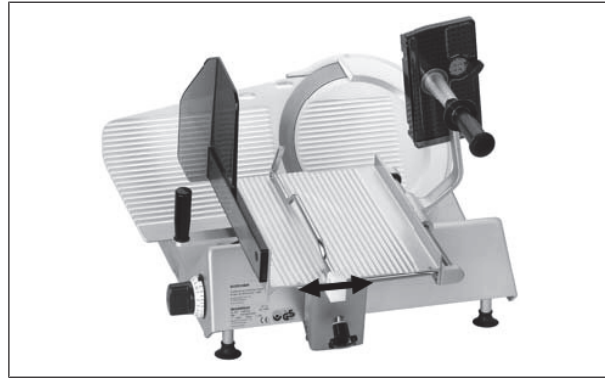


Fig. 38: Product clamping GSP H

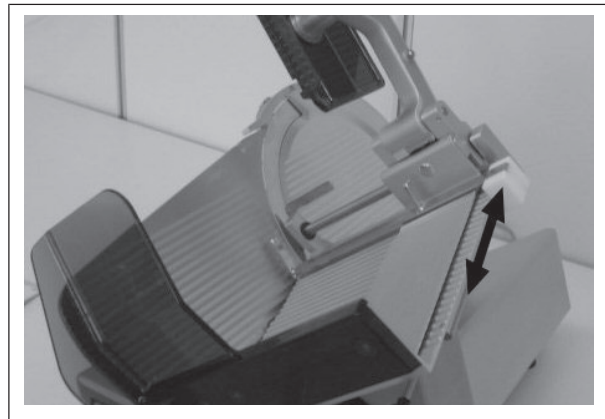


Fig. 39: Product clamping GSP HD

## 5.7 Lifting device

The lifting device enables easy cleaning under the machine.



The effort and strength required for lifting and lowering the machine is about 6 kg.



### **⚠ CAUTION**

**When lowering!**  
**Risk of crushing.**  
 – Effort and strength required.

- ➔ Move carriage away from operator side until it comes to a stop.
  - ➔ Slightly lift machine up from the front using the knob and push the lifting device backwards as far as possible using the handle.
- The area underneath the machine is now easy to clean.
- ➔ Hold the machine via the thickness knob and pull the lifting device back into its initial position.



Fig. 40: Lifting device GSP H

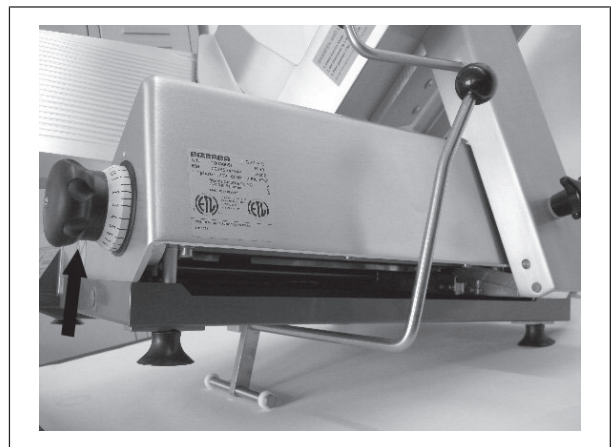


Fig. 41: Lifting device GSP HD

## 5.8 Connected scale at GSP H Flex



The device and operating elements of the individual components are described in detail in the KF II operating instructions, chapter 5.



Fig. 42: GSP H Flex

## 6 Operation

### 6.1 Working with the manual slicer

|  |   |
|--|---|
|   | <b>⚠ WARNING</b>  |
|  | <b>Rotating blade!</b><br><b>Cut injuries.</b> <ul style="list-style-type: none"><li>– Do not allow yourself to become distracted. Concentrate on the task in hand and avoid time pressure.</li><li>– When slicing, the carriage may only be moved by the handle.</li><li>– Do not put your hand underneath the remnant holder plate.</li><li>– <b>Never</b> push product ends towards blade by hand.</li></ul> |
|  | <b>⚠ CAUTION</b>  |
|  | <b>There are spikes on the product holder!</b><br><b>Risk of injury.</b> <ul style="list-style-type: none"><li>– Use handle when working with product holder.</li><li>– Before you begin slicing, always position the product holder on or behind the product.</li></ul>  |

#### 6.1.1 Slicing long product

- ⇒ Move carriage towards operator.
- ⇒ Use the handle to pull the product holder outwards and swivel it up.



Fig. 43: Preparation of machine

- ➔ Place product on carriage rear wall and move to gauge plate.
- ➔ Position the product fixation device or product guide against the product.
- ➔ Turn in product holder and position on the product.
- ➔ Switch on machine .
- ➔ Set slice thickness at knob.



Fig. 44: Load the product

- ➔ Using the handle, move carriage uniformly forth and back.  
Slices drop on depositing area or are manually removed from deflector.
- ➔ If necessary, re-clamp product holder.
- ➔ Once the slicing process is completed set slice thickness to "0".
- ➔ Switch off machine.



Fig. 45: Slice product



Extra care must be taken due to additional risk of injury if product holder is not used and positioned underneath the carriage.

### 6.1.2 Slicing product ends



The product holder is force-guided in an area of < 60 mm to the blade and cannot be swiveled up.

As soon as product ends fit between gauge plate and remnant holder, proceed as follows:

- ➔ Move carriage towards operator.
- ➔ Use the handle to pull the product holder outwards and swivel it up.



Fig. 46: Preparation of machine

- ➔ For tied product ends to be cut by hand.
- ➔ Place product end against the rear wall, making sure that the original cut surface faces the remnant holder plate.
- ➔ Position the product fixation device against the product.
- ➔ Using handle, swivel in product holder and position it behind the product.
- ➔ Switch on machine .
- ➔ Set slice thickness at knob.



Fig. 47: Load the product

- ➔ Using the handle, move carriage uniformly forth and back.  
Slices drop on depositing area or are manually removed from deflector.
- ➔ Once the slicing process is completed set slice thickness to "0".
- ➔ Switch off machine.



Fig. 48: Slice product

### 6.1.3 Weighing operation with GSP H W

The portion scale is not metrologically approved and cannot be used for legal for trade applications.

During start-up the portion scale is calibrated by the customer service at the place of installation. The unit to be displayed will be set.

#### Weight display

The current weight value is constantly displayed according to the load.

#### Display of number of slices

The current number of slices is constantly displayed.

Pressing the number of slices sets the current number of slices to zero.

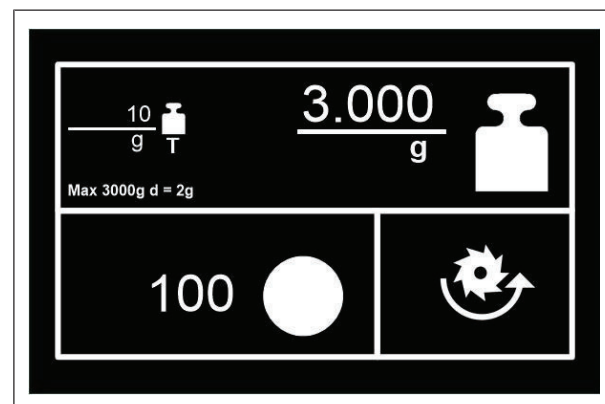


Fig. 49: HMI touchscreen

#### Tare

The complete weighing range can be used for tare. The tared value is subtracted from the entire weighing range.

- ➔ Apply tare, wait until scale comes to a standstill.

- ⇒ Press <T>.

The weight display goes to zero. The scale is ready for operation for net weighing.

### Delete tare

- ⇒ Unload scale.

Tare is automatically deleted, weight display changes to zero.

### Select a blade speed

- ⇒ By pressing the button of the blade speed you may choose between 3 preset blade speeds (illuminated bars).

### Blade speed for sharpening

- 3 bars are illuminated.

- ⇒ Press blade speed button.

Symbol "Blade sharpening" appears. The relevant blade speed is set.

### Change preset blade speeds

Three preset values are symbolized by bars of different lengths.

- ⇒ Press and hold button for blade speed for more than 1.5 seconds.  
The preset values are displayed.
- ⇒ Press a value and hold for more than 1.5 s.  
The image to change the blade speed is shown.



Fig. 50: Preset blade speeds

- ⇒ The value can be changed by moving the control knob in the desired direction.
- ⇒ To adopt the value press <Enter>.
- ⇒ To cancel the action press <X>.



Fig. 51: Change blade speed

- ⇒ The changed values are saved with <Enter>.
- ⇒ Press the upper right icon to exit the menu without saving.

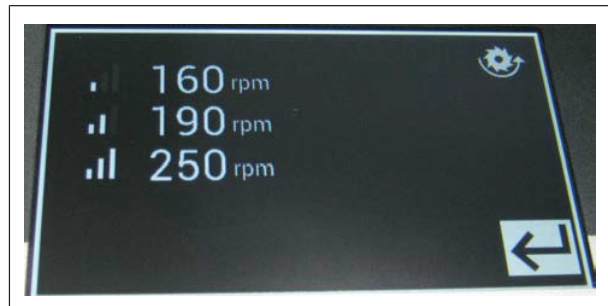


Fig. 52: Changed blade speeds

### 6.1.4 Weighing operation with GSP H Flex



Slicer GSP H Flex with connected metrologically approved scale allows sliced product to be weighed at the same time.

The operation of individual components is described in detail in the KF II operating instructions, chapter 6.



Fig. 53: GSP H Flex

### 6.2 Working with the automatic slicer

|   |  |
|---|--|
|   | <p><b>⚠ WARNING</b></p>  |
|   | <p><b>Rotating blade!</b><br/><b>Cut injuries.</b></p> <ul style="list-style-type: none"> <li>– Do not allow yourself to become distracted. Concentrate on the task in hand and avoid time pressure.</li> <li>– When slicing, the carriage may only be moved by the handle.</li> <li>– During operation, do not reach into the path of the carriage.</li> <li>– <b>Never</b> push product ends towards blade by hand.</li> </ul> |
|  | <p><b>⚠ CAUTION</b></p>  |
|   | <p><b>There are spikes on the product holder!</b><br/><b>Risk of injury.</b></p> <ul style="list-style-type: none"> <li>– Use handle when working with product holder.</li> <li>– Before you begin slicing, always position the product holder on or behind the product.</li> </ul>  |

## 6.2.1 Slicing long product

- ⇒ Move carriage towards operator.
- ⇒ Using handle, pull product holder outwards, swivel it upwards and lock it in end position.

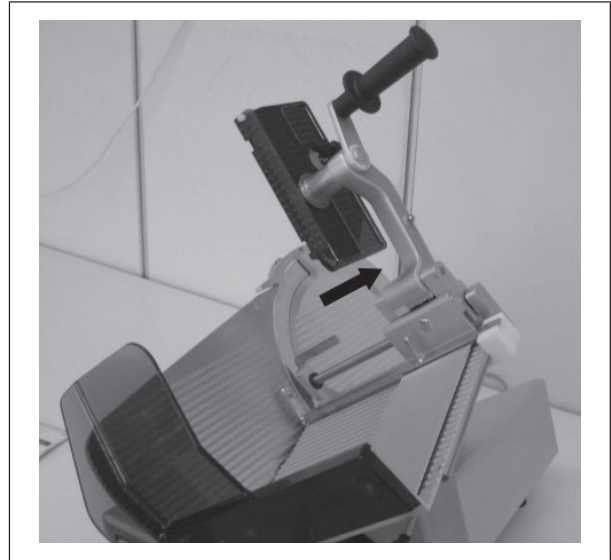


Fig. 54: Preparation of machine

- ⇒ Place product on carriage rear wall and move to gauge plate.
- ⇒ Position the product fixation device or product guide against the product.
- ⇒ Turn in product holder and position on the product.
- ⇒ Switch on machine.
- ⇒ Set slice thickness at knob.
- ⇒ Set stroke width and number of carriage strokes or change after start.

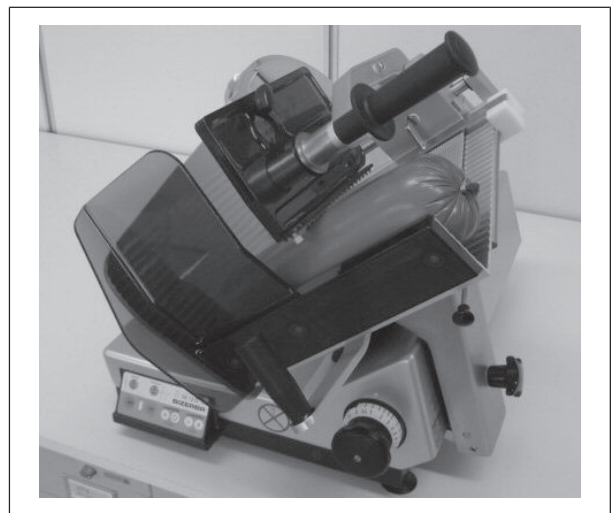


Fig. 55: Load the product

- ➔ Start carriage motor.  
Slices drop on depositing area.
- ➔ Stop carriage motor.  
The carriage runs towards the operator, the blade is on hold.
- ➔ Once the slicing process is completed set slice thickness to "0".
- ➔ Switch off machine.

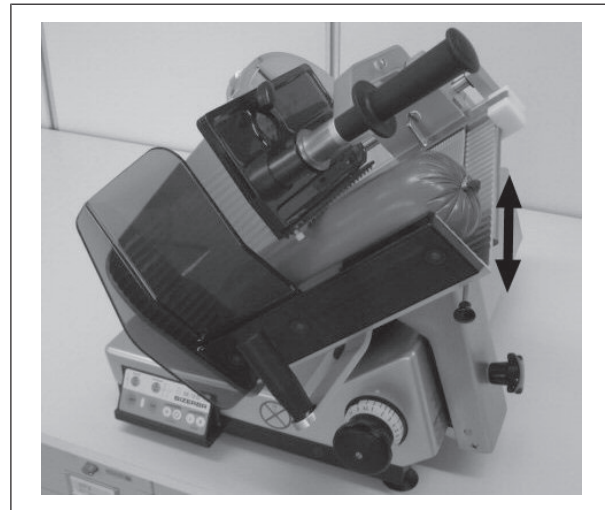


Fig. 56: Slice product



Extra care must be taken due to additional risk of injury if product holder is not used and positioned underneath the carriage.

## 6.2.2 Slicing product ends



The product holder is force-guided in an area of < 60 mm to the blade and cannot be swiveled up.

- ➔ Move carriage towards operator.
- ➔ Using handle, pull product holder outwards, swivel it upwards and lock it in end position.

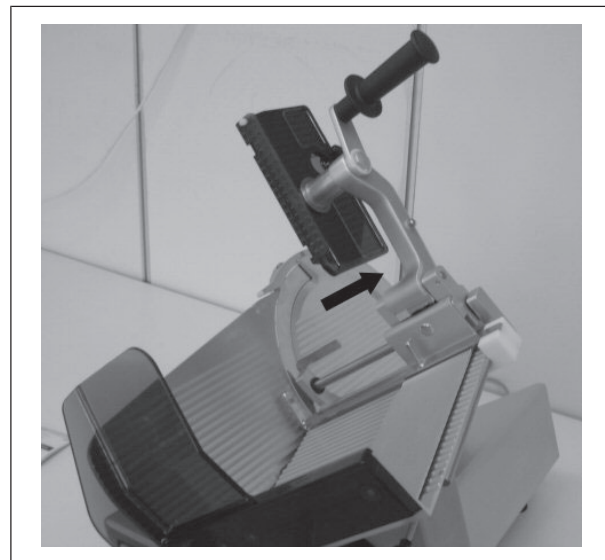


Fig. 57: Preparation of machine

- ➔ For tied product ends to be cut by hand.
- ➔ Place product end against the rear wall, making sure that the original cut surface faces the remnant holder plate.
- ➔ Position the product fixation device against the product.
- ➔ Using handle, swivel in and hold product holder.
- ➔ Place product holder behind product.
- ➔ Switch on machine.
- ➔ Set slice thickness at knob.
- ➔ Set stroke width and number of carriage strokes or change after start.



Fig. 58: Load the product

- ➔ Start carriage motor.  
Slices drop on depositing area.
- ➔ Stop carriage motor.  
The carriage runs towards the operator, the blade is on hold.
- ➔ Once the slicing process is completed set slice thickness to "0".
- ➔ Switch off machine.

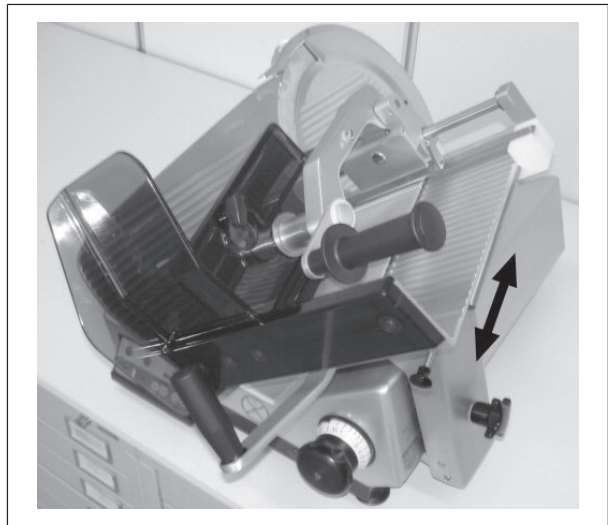


Fig. 59: Slice product

### 6.2.3 Manual carriage guide with servo support

The following description applies to all carriage versions, for long product or remnant pieces:

Application:

- with product that is difficult to slice
- with low number of slices
- thick slices

The servo-motor support comes automatically into action during the manual carriage movement.

The servo support can be adjusted in three steps via <SPEED> keys:

- Level 1 = light support, 1 LED lights up
- Level 2 = medium support, 2 LEDs light up, pre-set as standard
- Level 3 = max. support, 3 LEDs light up

Stroke width and number of carriage strokes have no effect.

- ⇒ Switch on machine.  
Blade starts running automatically, if option blade start is activated.
- ⇒ If the option blade start is not active, switch on <Blade drive>.
- ⇒ Set slice thickness at knob.
- ⇒ Move the carriage back and forth by means of the guide or handle.  
Slices drop on depositing area or are manually removed from deflector.
- ⇒ If necessary, re-clamp product holder.
- ⇒ Once the slicing process is completed set slice thickness to "0".
- ⇒ Switch off the <blade drive>.
- ⇒ Switch off machine.

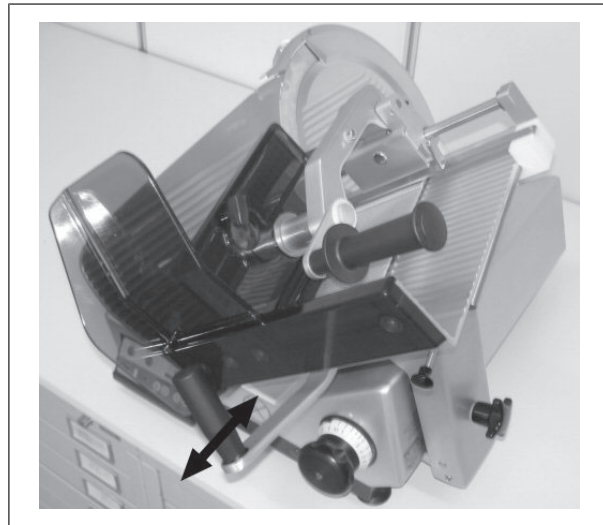


Fig. 60: Slice product

#### 6.2.4 Weighing operation with GSP HD W

The portion scale is not metrologically approved and cannot be used for legal for trade applications.

During start-up the portion scale is calibrated by the customer service at the place of installation. The unit to be displayed will be set.

##### Reference run

After the machine was disconnected from the power supply and the first switch-on a reference run is necessary.

- Machine is switched on.
- Carriage unloaded.
- ⇒ Set slice thickness greater than "0" using the slice thickness knob.  
The adjacent picture appears on the touch screen.
- ⇒ Press <Execute>.  
Machine carries out a reference run.

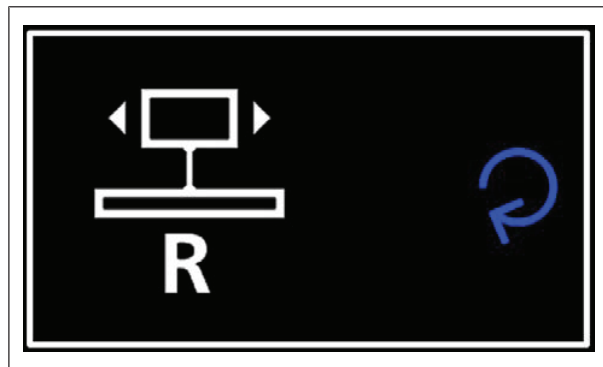


Fig. 61: Perform reference run

## Slicing to target weight

In manual mode

- ⇒ Switch to manual mode by tapping the lower left button ③.
- ⇒ Switch to slicing to target weight by tapping the lower right button ⑦.
- ⇒ Select the blade speed by tapping button ⑥.
- ⇒ Select a target weight via the direct selection keys ⑧.



Fig. 62: Manual operation to target weight

or

- ⇒ Press and hold the target weight for more than 1.5 seconds and enter the weight via the displayed numeric keypad.
- ⇒ Press <Execute>.  
Blade rotates.
- ⇒ Using the handle, move carriage uniformly forth and back.

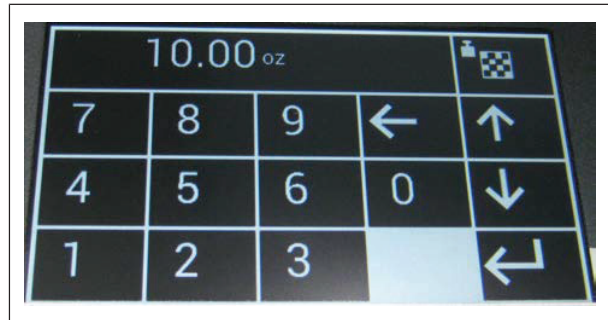


Fig. 63: Target weight input via numeric keypad

The current weight value is constantly displayed according to the load.

Machine does not stop when reaching the target weight.

## In automatic operation

- ⇒ Switch to automatic mode by tapping the lower left button ③.
- ⇒ Switch to slicing to target weight by tapping the lower right button ⑦.
- ⇒ Select stroke width ④, number of carriage strokes ⑤ and blade speed ⑥ by tapping the relevant button.
- ⇒ Select a target weight via the direct selection keys ⑧ or via the numeric keypad.
- ⇒ Press <Execute>.  
Blade rotates. Carriage starts moving.



Fig. 64: Automatic operation to target weight

Once the target weight is reached, the machine stops the slicing procedure.

If the weight does not increase after several strokes, the machine stops the slicing procedure. (product to be sliced used up)

## Slicing to number of target slices

In manual mode

- ⇒ Switch to manual mode by tapping the lower left button ③.
- ⇒ Switch to slicing to number of slices by tapping the lower right button ⑦.
- ⇒ Select the blade speed by tapping button ⑥.
- ⇒ Select a number of slices via the direct selection keys ⑧ or via the numeric keypad.
- ⇒ Press <Execute>.
- Blade rotates.
- ⇒ Using the handle, move carriage uniformly forth and back.

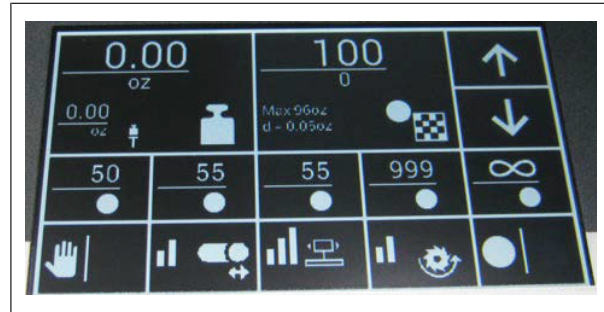


Fig. 65: Manual operation to number of slices

The current weight value is constantly displayed according to the load. The current number of slices (small number) is constantly displayed.

Machine does not stop when reaching the number of target slices.

After stopping and restarting of the slicing process the current number of slices will be set to zero.

## In automatic operation

- ⇒ Switch to automatic mode by tapping the lower left button ③.
- ⇒ Switch to slicing to number of slices by tapping the lower right button ⑦.
- ⇒ Select stroke width ④, number of carriage strokes ⑤ and blade speed ⑥ by tapping the relevant button.
- ⇒ Select a number of slices via the direct selection keys ⑧ or via the numeric keypad.
- ⇒ Press <Execute>.
- Blade rotates. Carriage starts moving.



Fig. 66: Automatic operation to number of slices

After reaching the number of target slices the machine stops the slicing procedure.

## Tare

The complete weighing range can be used for tare. The tared value is subtracted from the entire weighing range.

- ⇒ Apply tare, wait until scale comes to a standstill.



Fig. 67: Apply a tare

- ⇒ Press <T>.

The weight display goes to zero. The scale is ready for operation for net weighing.

### Deleting tare:

- ⇒ Unload scale.

Tare is automatically deleted, weight display changes to zero.



Fig. 68: Tare

## Changing values of the direct selection keys

- ⇒ Press a direct selection key and hold for more than 1.5 s.

The numeric keypad to change the value (weight or number of slices) is shown.

### Change of preset parameter values

Three preset values are symbolized by bars of different lengths.

#### Blade speed

- ⇒ Press and hold button for blade speed for more than 1.5 seconds.  
The preset values are displayed.
- ⇒ Press a value and hold for more than 1.5 s.  
The image to change the parameter value is shown.



Fig. 69: Blade speed

- ⇒ The value can be changed by moving the control knob in the desired direction.
- ⇒ To adopt the value press <Enter>.
- ⇒ To cancel the action press <X>.



Fig. 70: Change of preset parameter values

- ⇒ The changed values are saved with <Enter>.
- ⇒ Press the upper right icon to exit the menu without saving.



Fig. 71: Blade speed

### Stroke width

- ⇒ Press and hold button for stroke width for more than 1.5 seconds.  
The preset values are displayed in percent.  
The carriage position is displayed in percent.



Fig. 72: Stroke width

- ⇒ Press the carriage icon.  
The current carriage position will be adopted.
- ⇒ Press a value and hold for more than 1.5 s.  
The image to change the parameter value is shown.

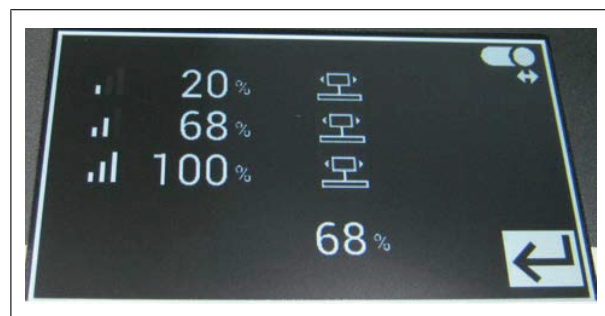


Fig. 73: Change of preset parameter values

- ➔ The value can be changed by moving the control knob in the desired direction.
- ➔ To adopt the value press <Enter>.
- ➔ To cancel the action press <X>.



Fig. 74: Change of preset parameter values

- ➔ The changed values are saved with <Enter>.
- ➔ Press the upper right icon to exit the menu without saving.

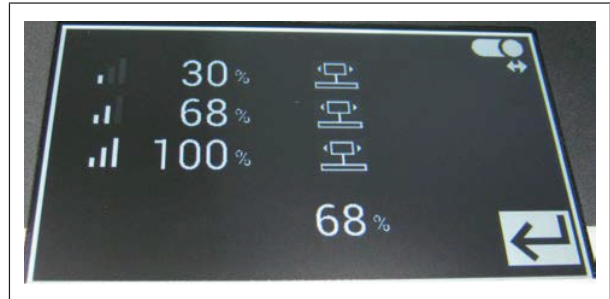


Fig. 75: Stroke width

**Number of carriage strokes**

- ➔ Press and hold button for number of carriage strokes for more than 1.5 seconds. The preset values are displayed in percent.
- ➔ Press a value and hold for more than 1.5 s. The image to change the parameter value is shown.
- ➔ The value can be changed by moving the control knob in the desired direction.
- ➔ To adopt the value press <Enter>.
- ➔ To cancel the action press <X>.

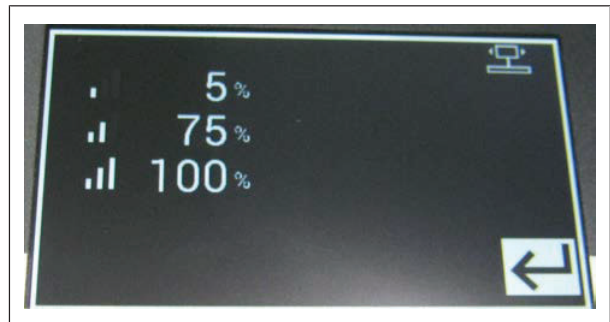


Fig. 76: Number of carriage strokes



Fig. 77: Change of preset parameter values

- ➔ The changed values are saved with <Enter>.
- ➔ Press the upper right icon to exit the menu without saving.



Fig. 78: Number of carriage strokes

### 6.3 Slicing with product feed for tomatoes

The product feed for tomatoes allows double slicing of tomatoes or similar vegetable to be sliced. The applied product fixation device holds the product in position during slicing preventing the product from tipping over.

The product fences are irreversibly self-locking on their shaft and can be moved across the full width of the carriage.

- Requirement:
- The product feed for tomatoes has been attached. [ ▶ 27]

- ➔ Position product on gauge plate of carriage between both product fences.
- ➔ Fasten both sliders with fence on product.
- ➔ Using handle, swivel in product holder and position it behind the product.
- ➔ Switch on machine.
- ➔ Set slice thickness at knob.
- ➔ Using the handle, move carriage uniformly forth and back.  
The slices drop onto the depositing area or can be removed directly by hand.
- ➔ Once the slicing process is completed set slice thickness to "0".
- ➔ Switch off machine.

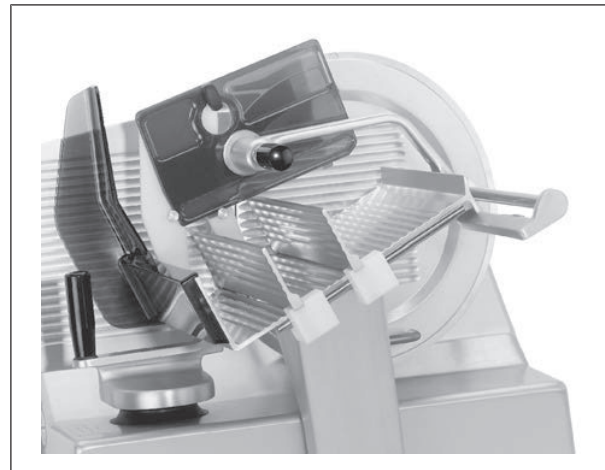


Fig. 79: Product feed for tomatoes

### 6.4 Slicing with vegetable hopper

The vegetable hopper with stomper is specially designed for vegetables of all kinds.

The product is moved by means of its own weight and the weight of the stomper to the blade.

- Requirement:
- The vegetable hopper has been attached. [ ▶ 27]

- ⇒ Load product into vegetable hopper.
- ⇒ Place stomper in vegetable hopper behind product.
- ⇒ Using handle, swivel in product holder and position it on vegetable hopper.
- ⇒ Switch on machine.
- ⇒ Set slice thickness at knob.
- ⇒ Using the handle, move carriage uniformly forth and back.

The slices drop onto the depositing area or can be removed directly by hand.

- ⇒ Once the slicing process is completed set slice thickness to "0".
- ⇒ Switch off machine.

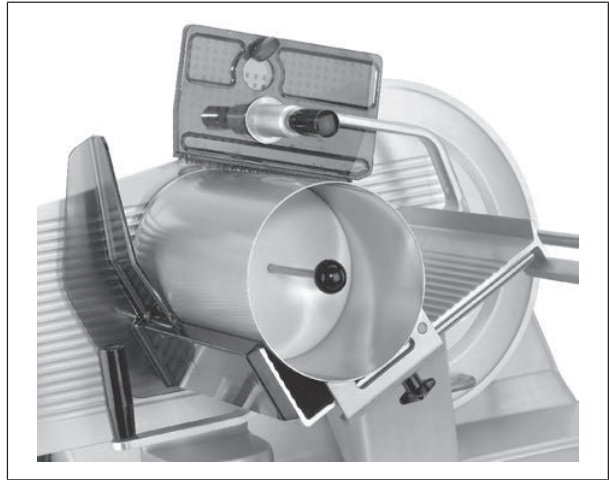


Fig. 80: Vegetable hopper

# 7 Troubleshooting

## 7.1 Procedure



Should there be a stoppage and the problem cannot be corrected right away, food products have to be removed for protection in compliance with the maximum limit of 30 minutes for products to remain on the machine.

- ⇒ Switch off machine immediately if untypical noises are heard or if there is a suspected risk of injury.
- ⇒ Inform your respective Customer Services if you cannot remove the fault yourself.
- ⇒ Please provide the Bizerba customer service with the following information:
  - Machine type (see identification plate),
  - Machine number (see identification plate),
  - Error description.

This will make preparation of the customer service assignment much easier.

## 7.2 Fault description

The described malfunction can be remedied by the user himself.

| Interference  | Possible cause                                       | Solution   |
|---|--|--|
| Machine does not react to touch of the touch screen | Cleaning agents residues                             | Clean operating terminal with keypad and touch screen using a damp cloth<br>Clean your hands |
| Carriage can not be tilted outwards                 | The tilt lock has not been released                  | Set cutting thickness with turning knob to below "0"   |
| Dissatisfactory slicing result                      | Blunt blade  | Resharpener blade [▶ 74]   |
| Poor sharpening result                              | Grinding disks are dirty or greasy                   | Clean the sharpening stone [▶ 74]  |
| It is not possible to sharpen the blade             | The blade has been sharpened past the permitted 6 mm | Replacing blade  |


## 8 Maintenance

### 8.1 Preparation for cleaning

Clean thoroughly:

- before putting into operation
- depending on use and application frequency
- depending on the product
- depending on the ambient temperature
- if extremely soiled, several times a day
- after sharpening
- after longer downtimes



|   |   |
|---|---|
|  | <b>⚠ WARNING</b>  |
|   | <p><b>Unprotected blade!</b></p> <p><b>Coming in contact with the sharp blade can lead to serious injuries.</b></p> <ul style="list-style-type: none"> <li>– Always wear cut-proof gloves when cleaning.</li> <li>– Do not clean the surfaces of the blade when operating the machine!</li> </ul> |

#### Machine with HMI

The icon in the lower right field indicates that the machine has to be cleaned.

- ⇒ Touch the cleaning icon in the lower right field.



Fig. 81: Cleaning indicator function

- ⇒ Touch the cleaning icon.
- ⇒ Switch off machine.
- ⇒ Remove the plug and protect against moisture.
- ⇒ Clean the machine.

or

- ⇒ Cancel cleaning with <X> and carry out later.



Fig. 82: Cleaning indicator function

GSP HD, GSP HD W:

- ⇒ Switch off machine.
- ⇒ Remove the AC power plug.
- ⇒ Set slice thickness below "0" (black marking).



Fig. 83: Slice thickness below "0"

GSP H, GSP H W, GSP H Flex:

- ⇒ Switch off machine.
- ⇒ Remove the AC power plug.
- ⇒ Set slice thickness below "0" (black marking).



Fig. 84: Slice thickness below "0"

## 8.2 Removing components



Do not place parts on top of each other to avoid mechanical damage.

**Remove components as follows:**

**Tilt the carriage to the outside**

- ⇒ Turn out star-grip screw on carriage foot.
- ⇒ Tilt carriage outwards following the direction of the arrow.

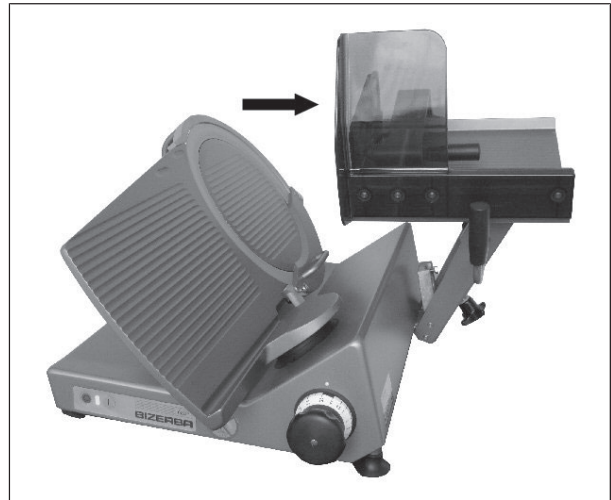


Fig. 85: Carriage GSP H

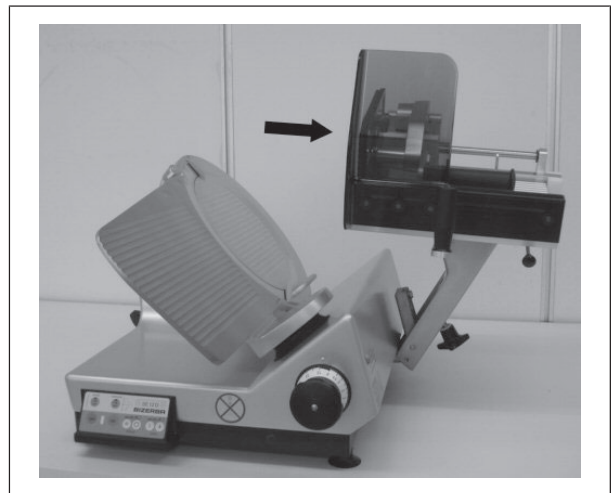


Fig. 86: Carriage GSP HD

### Remnant holder plate

- ⇒ Using handle, move product holder away from blade and swivel it up.
- ⇒ Loosen handle or star knob.
- ⇒ Remove the remnant holder plate from the pusher guard.

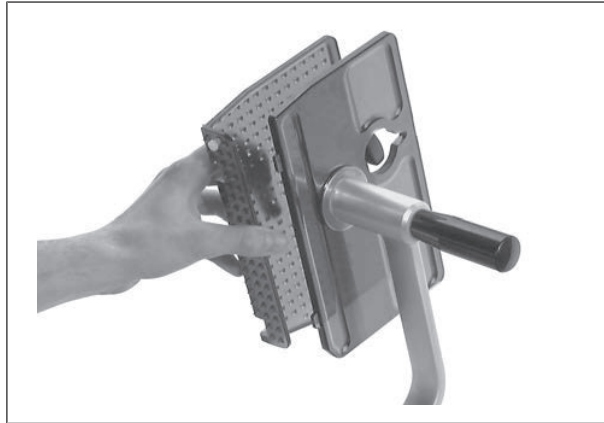


Fig. 87: Remnant holder plate

### Product fixation device

- ⇒ Pull the product fixation device as far as it will go towards the operator and pull off the guide shaft, moving it to the right.

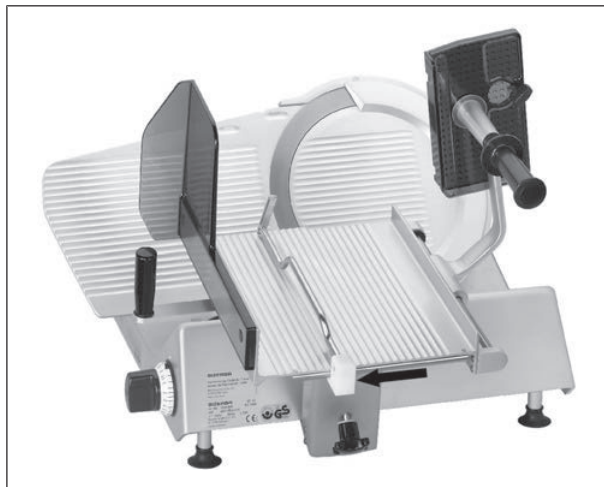


Fig. 88: Product clamping GSP H

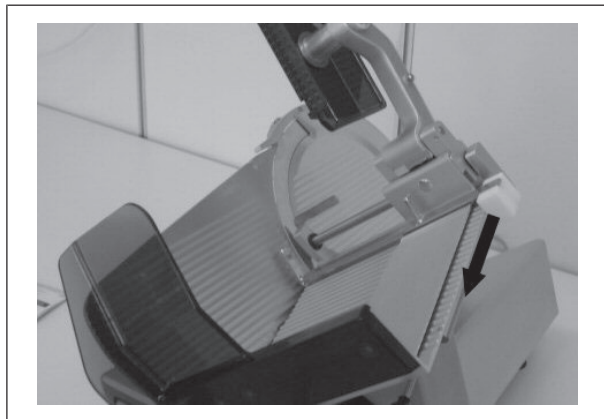


Fig. 89: Product clamping GSP HD

### Product carriage

- ⇒ Loosen handle on guide element.
- ⇒ Remove support plate in an upward direction.

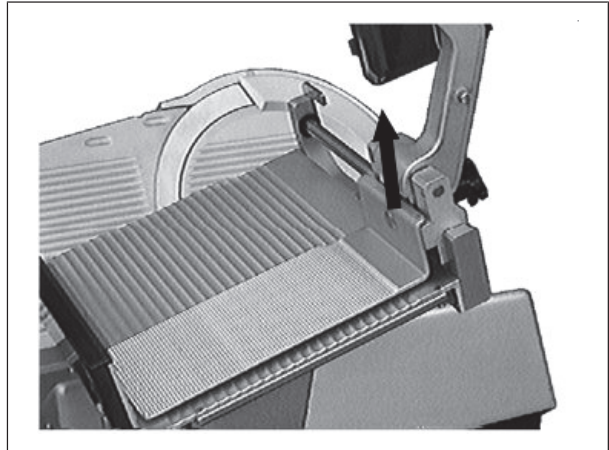


Fig. 90: Support plate GSP HD

### Vegetable hopper

- ⇒ Remove the stomper from the vegetable hopper.
- ⇒ Release the star knob and remove the vegetable hopper from the carriage in an upwards direction.

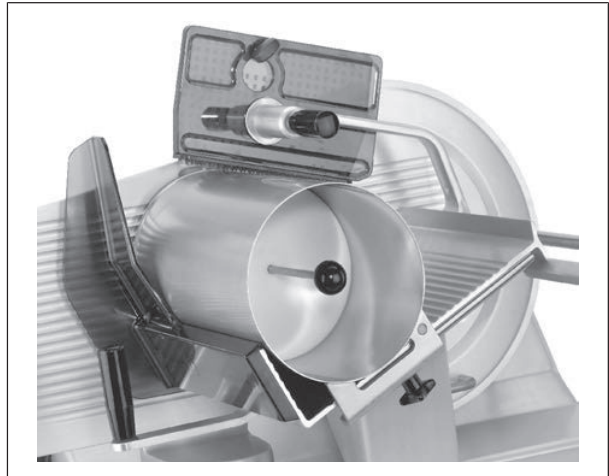


Fig. 91: Vegetable hopper

### Product fences for tomatoes and other products

- ⇒ Pull the product fences one after the other towards the operator as far as they will go and then remove from the leading axle, moving them towards the right.

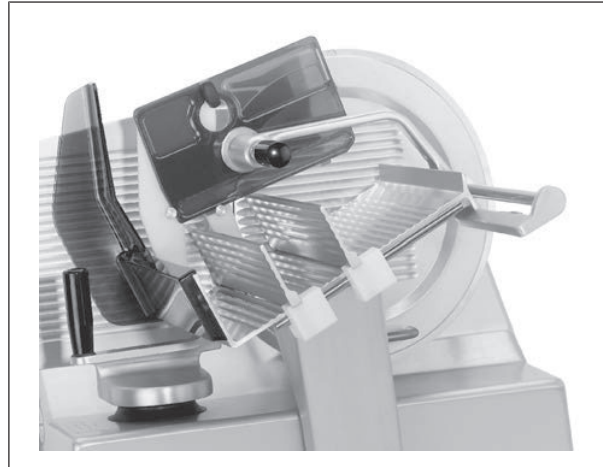


Fig. 92: Product fences for tomatoes and other products

### Blade cover

- ⇒ Hold the blade cover at the handle with your right hand.
- ⇒ Loosen the catch behind the blade guard ring with the left hand and remove the blade cover.



Fig. 93: Blade cover

### Load platter GSP H W, GSP HD W, GSP H Flex

- ⇒ Pull load platter towards operator until guide bolts come loose from the holes of the lateral support and remove.

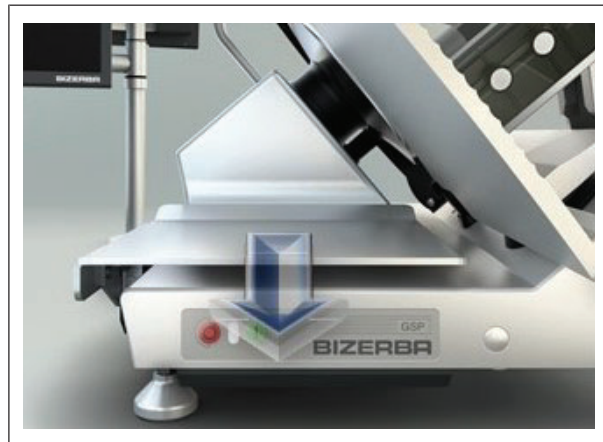


Fig. 94: Load platter

**Deflector**

- ⇒ Move deflector in a downwards direction away from the blade.

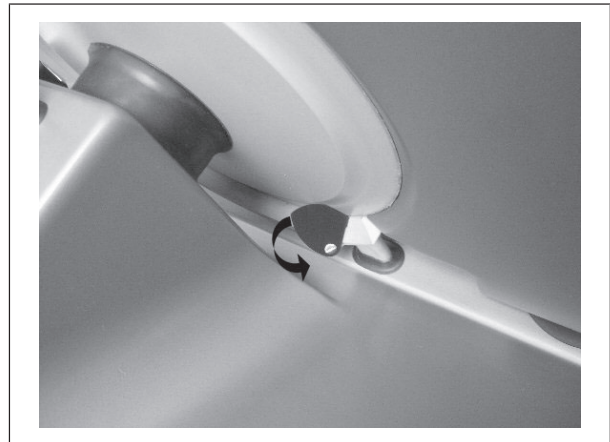


Fig. 95: Deflector GSP H

- ⇒ Remove deflector from magnet lock and swivel it upwards.



Fig. 96: Deflector GSP HD

Now the machine is ready for cleaning.

**8.3 Cleaning**



Do not clean the machine using a high-pressure cleaner.  
Do not use any abrasive cleaning devices since they can damage the Ceraclean machine parts!

| <b>NOTICE</b> |   |
|---------------|---|
|               | <p><b>Dishwasher!</b><br/><b>Dishwasher cleaning agents damage component surfaces.</b></p> <ul style="list-style-type: none"> <li>– Do not clean aluminum components (also made of anodized aluminum) in the dishwasher.</li> <li>– Wash parts in warm water using a soft cleaning agent. Leave to dry in the air.</li> </ul> |

- ⇒ Press a wet disposable cloth against the blade surface and slowly wipe away from the center.
- ⇒ Clean the back of the blade in the same manner.
- ⇒ After this process, repeat using a dry disposable cloth.



Fig. 97: Blade cleaning

- ⇒ Thread a moist disposable cloth from the front between blade and guard ring.



Fig. 98: Blade guard ring

- ⇒ Using your hands, turn blade and disposable cloth; while doing so, slightly press cloth against inner side of the guard ring.



Fig. 99: Blade guard ring

- ⇒ Cleaning, rinsing and disinfecting all surfaces as per cleaning plan.



Fig. 100: Fixed machine parts

- ⇒ Wipe off gauge plate in the direction away from blade. Never wipe towards the blade.

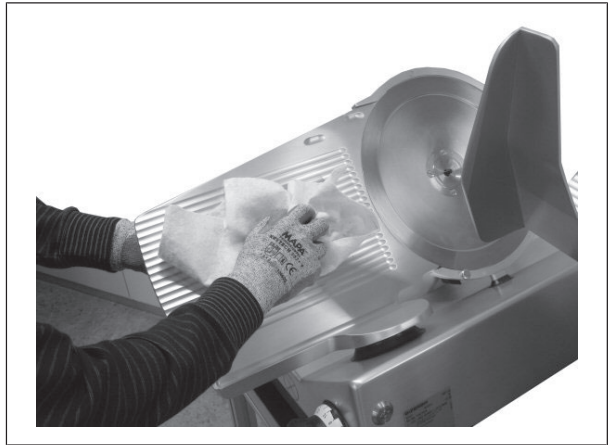



Fig. 101: Gauge plate

- ⇒ Wipe off the carriage. Leave surfaces dry in the air.



Fig. 102: Carriage

## 8.4 Cleaning plan for slicers

| Work steps   | Recommended cleaning agents  | Procedure  | Cleaning devices  | Notes   |
|--|--|--|---|---|
| Preparatory measures   |  | Close slice thickness, switch off machine, pull out power plug |   |          |
| Disassemble all removable parts  |  | according to instruction manual                                |   |   |
| Rough cleaning<br>(not necessary for machines with Ceraclean)                      |  | Remove any product remnants manually                           | Plastic deflector, plastic spatula, brush                               | Start immediately after production has finished, if necessary, begin with the removed parts |
| Cleaning   | 1% P3-steril   | After thorough pre-rinsing with water                          | manually, brush (not for slicers with Ceraclean), tub, disposable cloth | all disassembled and permanent parts of machine<br>Water pressure < 6 bar                   |
|  |  |  | Manual sprayer  | * see comment   |
|  |  |  | Dishwasher  | Removed parts except blade cover  |
| Acid cleaning<br>Additional measure<br>(not necessary for machines with Ceraclean) | squirt some Renolit Surf in the pail<br>reaction time max. 15 min. | Manually, mechanically   | Brush for removing lime residue   | only if required for lime residue<br>rinse immediately after cleaning                       |
|  |  | Foam without pressure  | Manual sprayer  | * see comment   |
| Rinse  |  | Rinse with drinking water                                      | Water hose<br>Manual sprayer  | removed parts<br>Water pressure < 6 bar   |
| Checking   |  | visually on optical cleanliness                                |   |   |
| Drying   |  | rub dry or leave to dry  | Disposable cloth  | Leave dismantled parts apart from one another to dry  |

| Work steps                         | Recommended cleaning agents   | Procedure  | Cleaning devices | Notes   |
|------------------------------------|---|--|------------------|---|
| Disinfection<br>Additional measure | Use P3-al-codes in concentrated form<br>Reaction time according to product data sheet | Manual   | Disposable cloth | should be completely wet  |
|                                    |   | spray  | Manual sprayer   | * see comment<br>Add. safety: distance to surface when spraying, 0.30 m       |
| Care<br>Additional measure         | Bizerba machine oil   | Apply to shafts and bearings according to instruction manual | Disposable cloth | Product-parts that touch products must be rinsed before commencing operations |
| Mounting                           |   | in reverse order like disassembly, see instruction manual    |                  | Personnel must have clean and disinfected hands                               |
| Precautionary measures             | Cover the machine when cleaning surroundings using spray and/or pressurized water     |  |                  |   |



\* Comment: Appropriate precautionary measures have to be taken to ensure that no damage is done to the environment!



The safety sheets and product sheets supplied with the cleaning and disinfectants must be read.

<https://safetydata.ecolab.eu/>



If cleaning agents are used that have not been recommended by the manufacturer, damage can be caused to the machine, which is no longer protected by guarantee.



If a chemical cleaning agent except chlorine, iodine or quaternary ammonium is used, it must be applied as per instructions of the approved EPA identification.



This machine must be cleaned and disinfected in regular time intervals in order to meet national, legal and/or local health regulations.



Depending on the product, there could still be a risk from viruses and bacteria which cannot be completely eliminated despite regular cleaning.

The following cleaning agents can be acquired from the Bizerba customer service:

| Designation         | Order no.   | Packaging unit |
|---------------------|-------------|----------------|
| P3-steril           | 50003250000 | 5 liters       |
| Renolit Surf        | 94008963000 | 1 liters       |
| P3-alcodes          | 50003260000 | 5 liters       |
| Bizerba machine oil | 94008900022 | 400 ml         |

## 8.5 Preparing the machine for operation

Attach the components as follows:

### Deflector

- ⇒ Swivel deflector upwards towards the blade ensuring exact positioning with respect to the blade.

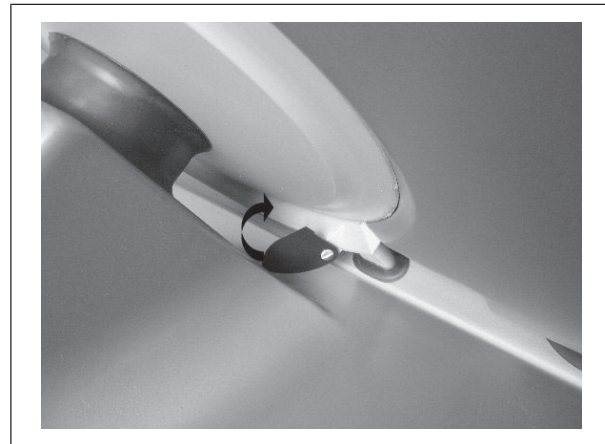


Fig. 103: Deflector GSP H

- ⇒ Swivel deflector downward to magnetic lock while observing exact positioning in recess of blade guard ring.



Fig. 104: Deflector GSP HD

### Load platter GSP H W, GSP HD W, GSP H Flex

- ⇒ Fasten load platter in holes of lateral support by means of the guide bolts and move it towards the back as far as it will go.

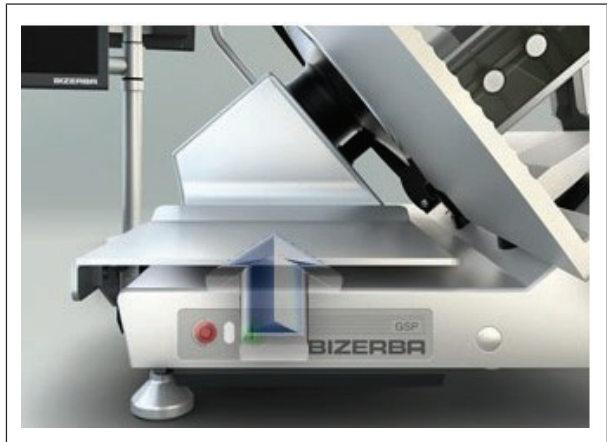


Fig. 105: Load platter



The scale must be dry to avoid a force shunt during operation.

### Blade cover

- ⇒ Hold blade cover at handle with your right hand, tilt towards blade and fix into position with the stud.
- ⇒ Fasten the catch behind the blade guard ring with the left hand.



Fig. 106: Blade cover

### Product carriage

- ⇒ From the top, place support plate in groove.
- ⇒ Screw into place with the grip on the guide element.

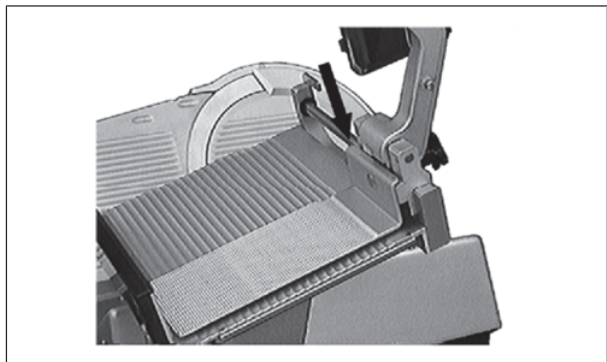


Fig. 107: Support plate GSP HD

### Product fixation device

- ⇒ On the operator side of the carriage (see arrow), place product fixation device horizontally into the guide shaft and push it onto the guide shaft.



Fig. 108: Product clamping GSP H

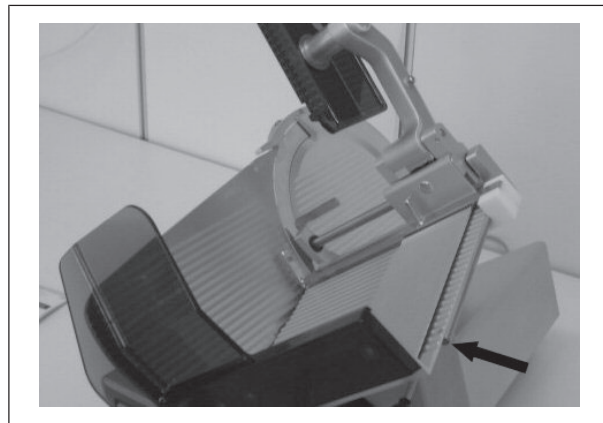


Fig. 109: Product clamping GSP HD

### Remnant holder plate

- ⇒ Insert the remnant holder plate in to the pusher guard, taking the attachments into account.
- ⇒ Fasten with handle.

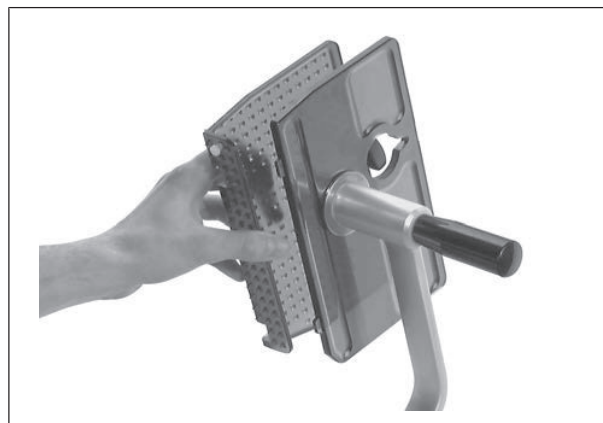


Fig. 110: Remnant holder plate

### Tilt carriage inwards

- ⇒ Place the product holder on the carriage.
- ⇒ Tilt the carriage in the direction of the arrow.
- ⇒ Using handle, screw into place on the carriage foot.



Fig. 111: Tilt carriage inwards GSP H

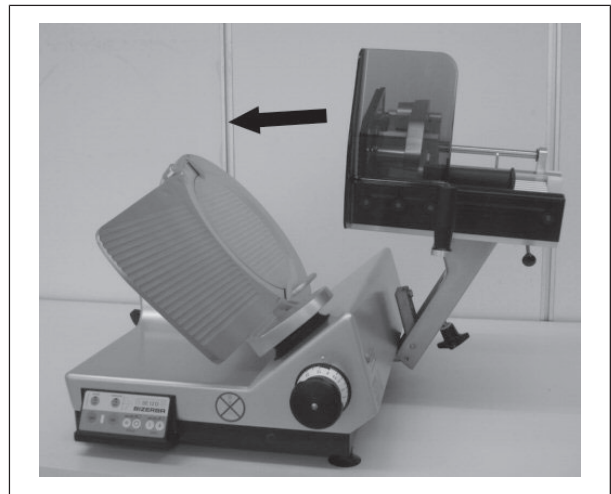



Fig. 112: Tilt carriage inwards GSP HD

The machine is ready for operation.

|   |  |
|---|--|
|  | <b>⚠ WARNING</b>   |
|   | <p><b>Missing components!</b></p> <p><b>The operator can only be protected from injuries and the machine protected against damage if all the components of the machine are assembled properly.</b></p> <ul style="list-style-type: none"> <li>– Check if the machine is complete before it is re-started.</li> <li>– Check if components are positioned correctly and firmly.</li> <li>– Only use original Bizerba spare parts and accessories.</li> </ul> |

### Machine with HMI

- ⇒ Confirm cleaning of machine with <Enter>.

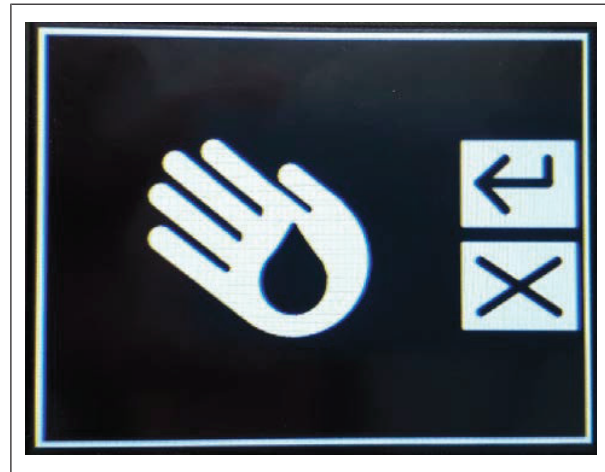


Fig. 113: Cleaning

## 8.6 Blade sharpening

Re-sharpening is necessary if the slicing result is unsatisfactory.

The time intervals are dependent on the wear and tear of the blade and/or its operating usage as also the properties and conditions of the product.

**NOTICE!** For safety reasons, the blade may only be ground to an annular gap of max. 6 mm between blade and guard ring.

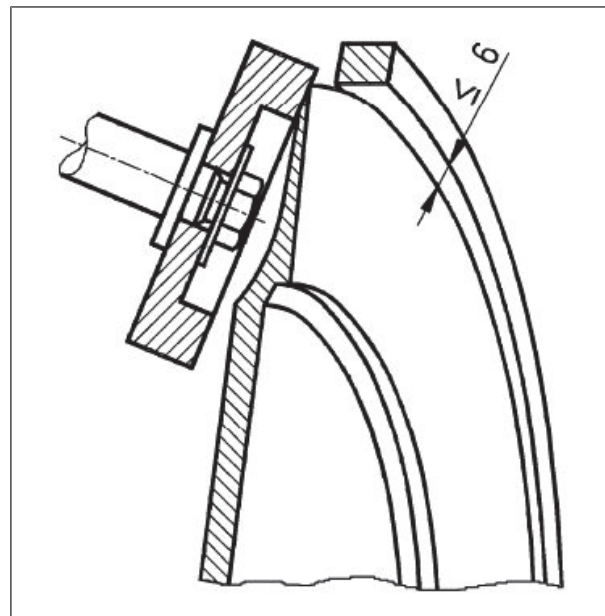


Fig. 114: Annular gap

### 8.6.1 Sharpening device

The sharpener identified by the machine number has been adjusted for this machine.

The device is fitted with a coarse sharpening stone and a finely grained honing stone. Dirty or greasy sharpening stones do not sharpen well.

- ⇒ Before sharpening, clean with brush and solving detergent.
- ⇒ If sharpening stones are worn, replace stones.

Replacement parts are supplied by Bizerba customer services.




When replacing, do not confuse sharpening and honing stones.

### 8.6.2 Preparation for sharpening

- ⇒ Remove parts and clean machine. [▶ 59]
- ⇒ Tilt the carriage back in and screw into place.
- ⇒ Place paper felt or thin cardboard on carriage and cut off a few strips in order to entirely remove grease from blade.
- ⇒ Switch off machine.
- ⇒ Remove the paper felt.
- ⇒ Tilt deflector away from blade.

### 8.6.3 Attaching the sharpener

|   |  |
|---|--|
|  | <b>⚠ WARNING</b>   |
|   | <p><b>Unprotected blade!</b><br/> <b>Coming in contact with the sharp blade can lead to serious injuries.</b></p> <ul style="list-style-type: none"> <li>– Wear cut-proof gloves when cleaning and sharpening.</li> <li>– Do not clean the blades when operating the machine.</li> </ul> |



- ⇒ Set slice thickness knob to "24" or open until stop.
- ⇒ Sharpener marking must be at "0".
- ⇒ Move carriage to relevant position.
- ⇒ Mount sharpener to gauge plate from the top.

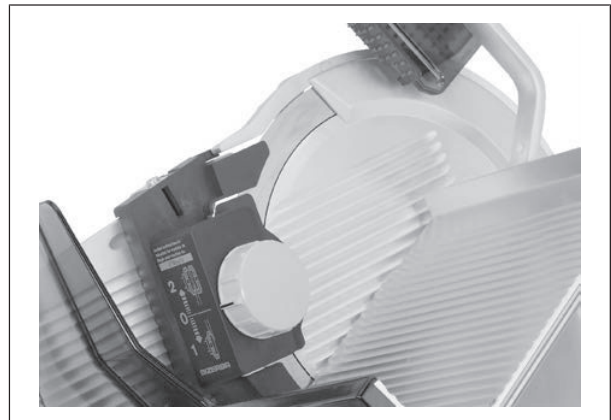


Fig. 115: Attaching the sharpener

- ⇒ Push the sharpener and carriage towards the blade until the adapter contacts the front of the blade guard ring.
- ⇒ Keep the sharpener in this position and use the star knob to screw it to the gauge plate.

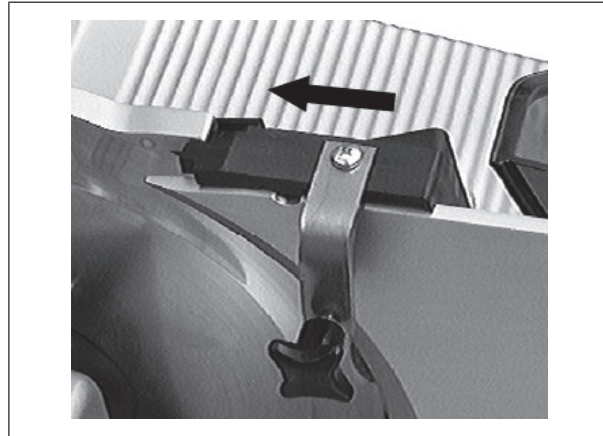


Fig. 116: Tighten sharpener

### 8.6.4 Sharpening

#### ⇒ **Wear eye protection!**

Hearing protection is recommended.

- ⇒ Switch on machine.
- ⇒ Set marking to "1".  
The sharpening stone is engaged.
- ⇒ Sharpen until right blade edge shows a burr.
- ⇒ Set marking to "0".
- ⇒ Switch machine off, wait until blade stops rotating.



Fig. 117: Marking

#### Checking burr:

- ⇒ Using a pen or pencil, touch the right edge of the blade while moving the pen from inside to outside.



Burr must be noticeable, otherwise the sharpening procedure must be repeated.

### 8.6.5 Honing

- ⇒ Start blade motor.
- ⇒ Set marking to "2".  
The honing stone is engaged.
- ⇒ Hone until a honing bevel of about 0.5 - 1 mm can be seen on the right blade edge (after about 3-4 seconds)
- ⇒ Set marking to "0".
- ⇒ Switch machine off, wait until blade stops rotating.



Fig. 118: Marking

### 8.6.6 Removing sharpener

- ⇒ Pull sharpener back after loosening the star grip screw and remove to the top.
- ⇒ **Set slice thickness immediately to "0".**

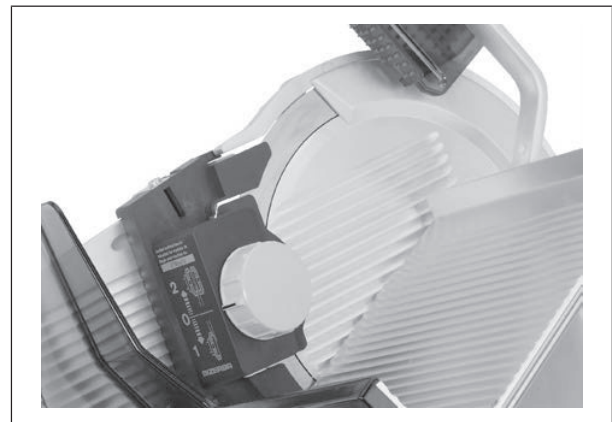


Fig. 119: Removing sharpener

### 8.6.7 Machine with HMI

In case of a machine with HMI the sharpening icon signalizes that the blade must be sharpened.

**NOTICE!** If re-sharpening is required before it is signaled by the sharpening icon, sharpening can be started by simply attaching the sharpener. Touch screen changes to "sharpening".

### Sharpening icon

- ⇒ Touch the blade icon in the lower right field.



Fig. 120: Sharpening icon

- ⇒ Touch the blade icon.  
The following shows on the touch screen the steps to be carried out for blade sharpening.



Fig. 121: Sharpening icon

- ⇒ Set slice thickness knob to "24" or open until stop.
- ⇒ Attach sharpener.
- ⇒ Confirm with <Enter>.



Fig. 122: Attaching the sharpener

**NOTICE!** Time for sharpening and honing is set in the customer technician menu. [▶ 29]

- ➔ Set marking to "1".
- ➔ Start blade motor.  
The sharpening stone is engaged. After x seconds the blade stops.
- ➔ Wait until the blade finishes rotating. Set marking to "0".
- ➔ Check burr. [▶ 76]



Fig. 123: Sharpening

- ➔ Set marking to "2".
- ➔ Start blade motor.  
The honing stone is engaged. After x seconds the blade stops.
- ➔ Wait until the blade finishes rotating. Set marking to "0".

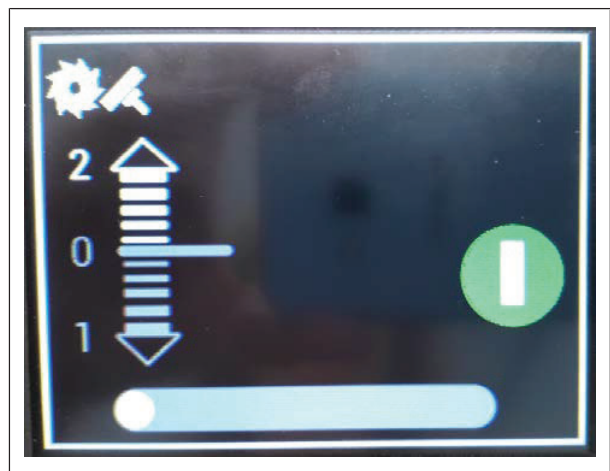


Fig. 124: Honing

- ➔ Remove sharpener.
  - ➔ Set slice thickness to "0".
  - ➔ Confirm with <Enter>.
- The cleaning icon indicates that the machine has to be cleaned.



Fig. 125: Removing sharpener

### 8.6.8 Removing sharpening dust

- Slice thickness to "0"
- Power plug disconnected

- Wear cut-resistant gloves
- Blade cover removed

- ⇒ Press a dry disposable cloth against the blade surface and slowly wipe away from the center.
- ⇒ Clean the back of the blade in the same manner.



Fig. 126: Blade cleaning

- ⇒ Insert a dry disposable cloth from the front between blade and guard ring.



Fig. 127: Blade guard ring

- ⇒ Using your hands, turn blade and disposable cloth; while doing so, slightly press cloth against inner side of the guard ring.




Fig. 128: Blade guard ring

### Machine housing:


- ⇒ Remove sharpening dust from the surfaces using a dry disposable cloth or brush.

- ⇒ If necessary, carry out a complete cleaning cycle.
- ⇒ Prepare machine for operation. [▶ 70]

|   |  |
|---|--|
|  | <b>⚠ WARNING</b>   |
|   | <p><b>Missing components!</b></p> <p><b>The operator can only be protected from injuries and the machine protected against damage if all the components of the machine are assembled properly.</b></p> <ul style="list-style-type: none"> <li>– Check if the machine is complete before it is re-started.</li> <li>– Check if components are positioned correctly and firmly.</li> <li>– Only use original Bizerba spare parts and accessories.</li> </ul> |

## 8.7 Care of machine, servicing, maintenance

- ⇒ The entire machine must be thoroughly cleaned. [▶ 59]
- ⇒ Re-sharpen blade if necessary. [▶ 74]
- ⇒ When necessary, clean or exchange the grinding discs. Caution. **Please, note! Left-handed thread!**
- ⇒ Use a small amount of Bizerba machine oil and lubricate the product holder guide shaft once a week.

|   |   |
|---|---|
|  | <b>⚠ WARNING</b>  |
|   | <p><b>Changing the blade!</b></p> <p><b>Severe injuries and damage to property.</b></p> <ul style="list-style-type: none"> <li>– For safety reasons, the blade may only be changed by Bizerba customer service.</li> <li>– This also applies when using the separately available blade removal tool.</li> <li>– Wear cut-proof gloves and shoes with toe caps.</li> </ul> |



At an annular gap of 6 mm between the blade and the guard ring, the sharpener no longer has a sharpening effect and the blade has to be replaced.

## Machine with HMI

In case of a machine with HMI the maintenance indicator signalizes that the machine requires maintenance.

⇒ Contact Bizerba Customer Service.



Fig. 129: Maintenance indicator

### 8.7.1 Checking seals and sealings



Fig. 130: Installation points for seals and sealings

- ⇒ The seals and sealings ① to ⑦ that are used in food and splash water areas need to be checked.
- ⇒ The time distance between the checks must be less than 12 months.
- ⇒ The checks need to be done by the manufacturer or one of his service agents.

|  |   |
|--|---|
|  | <b>⚠ WARNING</b>  |
|  | <p><b>Damaged or missing seals and sealings!</b><br/> <b>Damage to health, damage to objects.</b></p> <p>– In case of missing or damaged sealings the slicer must no longer be operated until the damage is remedied.</p> |

## 9 Technical data

### 9.1 Dimensions GSP H with a carriage inclination of 0°

The machines are available in different versions. Figures show examples.

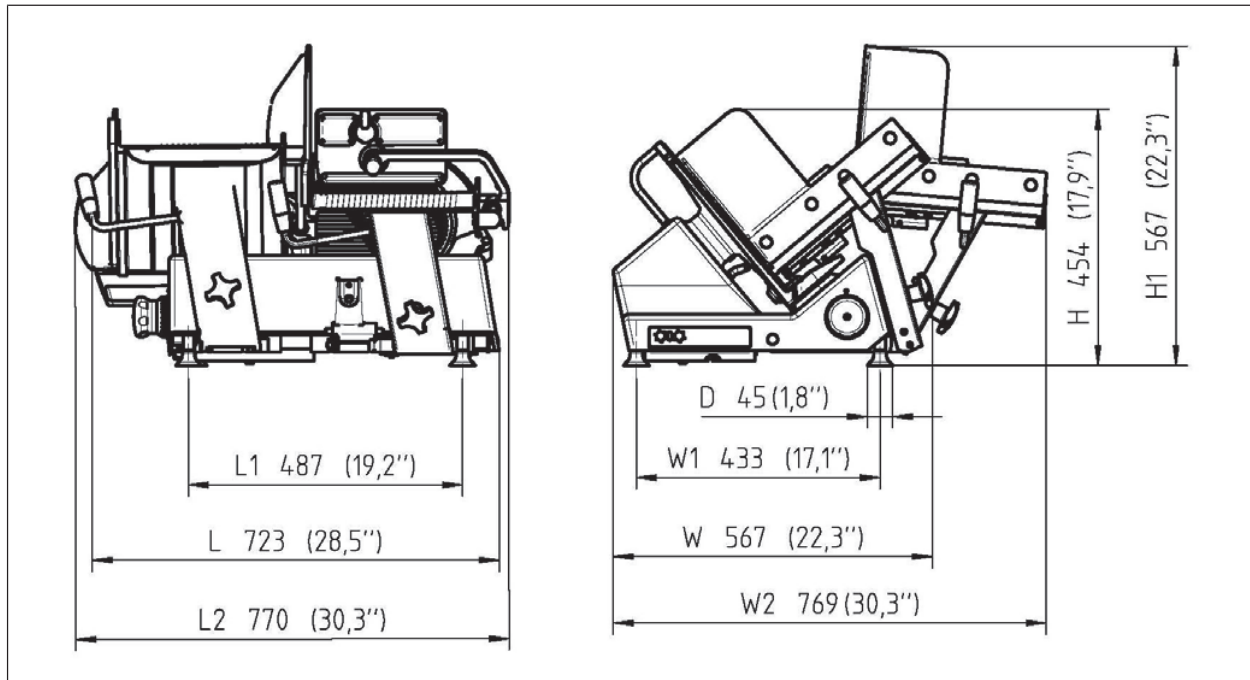


Fig. 131: GSP H 0°

|                                | Dimensions  | Notes  |
|--------------------------------|---|--|
| Installation area (L x W)      | 532 x 478 mm / 20.9" x 18.8"  |  |
| Maximum dimensions (L x W x H) | 770 x 769 x 567 mm / 30.3" x 30.3" x 22.3"                                | The work area of the machine includes the area within the max. dimensions: |
| IP rating                      | IP33  |  |
| Product size                   | Height: 246 mm / 9.7"<br>Width: 290 mm / 11.4"<br>Round: Ø 260 mm / 10.2" |  |
| Slice thickness                | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"                               | Infinitely adjustable<br>Fine adjustment                                   |
| Blade diameter                 | 350 mm / 13.8"  |  |
| Blade speed                    | 266 rpm   |  |
| Blade position                 | 40° angle   |  |
| Carriage angle                 | 0°  |  |

|   | Dimensions  | Notes          |
|---|---|----------------|
| Dimensions packaging (L x W x H)              | 820 x 700 x 823 mm / 32.3" x 27.6" x 32.4"          |                |
| Weight  | Approx. 43 kg / 94.8 lb<br>approx. 50 kg / 110.2 lb | with packaging |
| Types of current, voltages, power consumption | See identification plate                            |                |

## 9.2 Dimensions GSP H with a carriage inclination of 18°

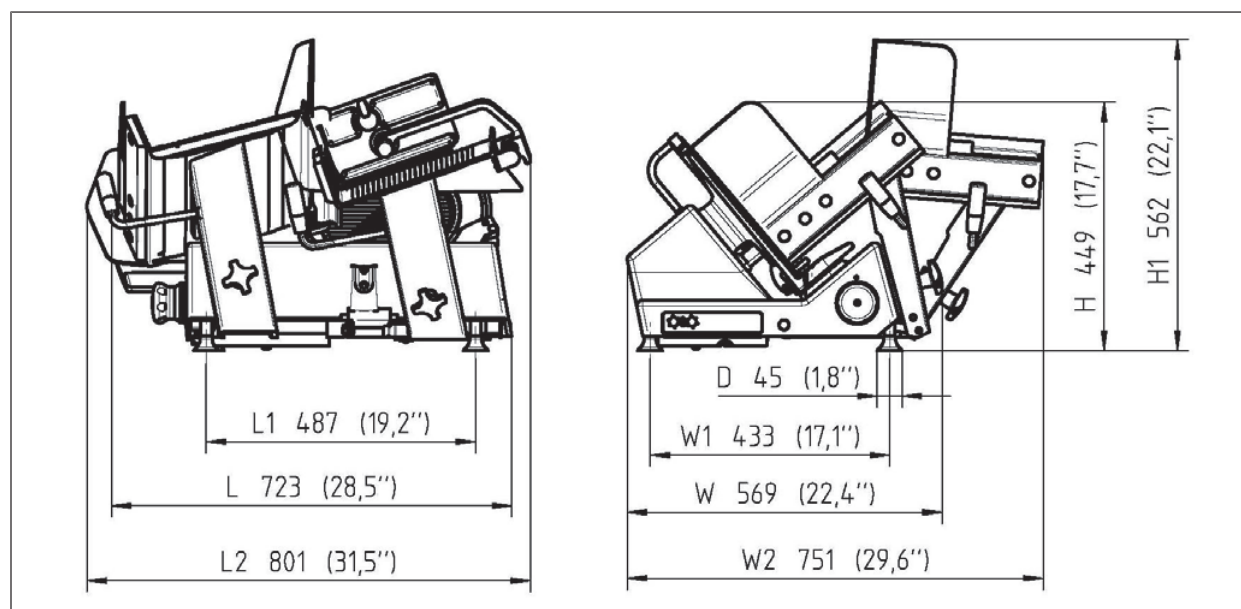


Fig. 132: GSP H 18° L

|                                | Dimensions   | Notes  |
|--------------------------------|--|--|
| Installation area (L x W)      | 532 x 478 mm / 20.9" x 18.8"   |  |
| Maximum dimensions (L x W x H) | 801 x 751 x 562 mm / 31.5" x 29.6" x 22.1"                               | The work area of the machine includes the area within the max. dimensions: |
| IP rating                      | IP33   |  |
| Product size                   | Height: 188 mm / 7.4"<br>Width: 290 mm / 11.4"<br>Round: Ø 235 mm / 9.3" |  |
| Depositing height              | 62 mm  |  |
| Slice thickness                | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"                              | Infinitely adjustable<br>Fine adjustment                                   |
| Blade diameter                 | 330 mm / 13.0"   |  |

|   | Dimensions  | Notes          |
|---|---|----------------|
| Blade speed                                   | 255 rpm   |                |
| Blade position                                | 40° angle   |                |
| Carriage angle                                | 18°   |                |
| Dimensions packaging (L x W x H)              | 820 x 700 x 823 mm / 32.3" x 27.6" x 32.4"          |                |
| Weight  | Approx. 43 kg / 94.8 lb<br>approx. 50 kg / 110.2 lb | with packaging |
| Types of current, voltages, power consumption | See identification plate                            |                |

### 9.3 Dimensions GSP H with a carriage inclination of 25°

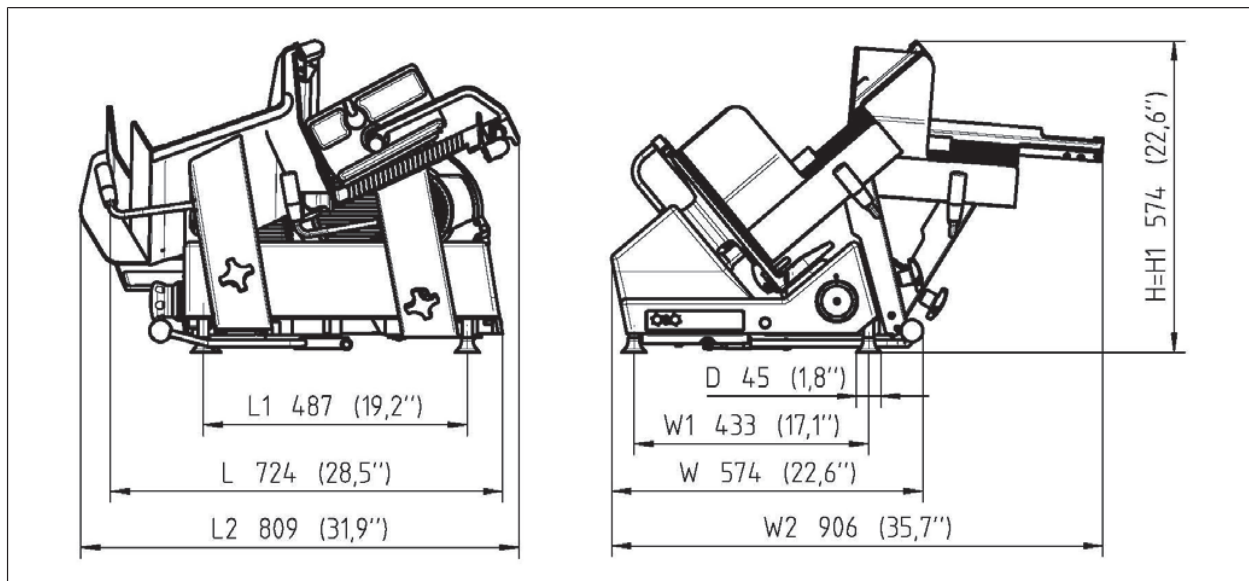


Fig. 133: GSP H 25° L

|                                | Dimensions                                 | Notes   |
|--------------------------------|--|---|
| Installation area (L x W)      | 532 x 478 mm / 20.9" x 18.8"               |   |
| Maximum dimensions (L x W x H) | 809 x 906 x 574 mm / 31.9" x 35.7" x 22.6" | GSP 25° L<br>The work area of the machine includes the area within the max. dimensions: |
| (L x W x H)                    | 808 x 908 x 598 mm / 31.8" x 35.7" x 23.5" | GSP 25° H   |
| IP rating                      | IP33                                       |   |

|  | <b>Dimensions</b>  | <b>Notes</b>                             |
|--|--|--|
| Product size                                     | Height: 160 mm / 6.3"<br>Width: 290 mm / 11.4"<br>Round: Ø 228 mm / 9.0" | GSP 25° L                                |
|  | Height: 126 mm / 5.0"<br>Width: 290 mm / 11.4"<br>Round: Ø 202 mm / 8.0" | GSP 25° H                                |
| Depositing height                                | 62 mm<br>95 mm   | GSP 25° L<br>GSP 25° H                   |
| Slice thickness                                  | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"                              | Infinitely adjustable<br>Fine adjustment |
| Blade diameter                                   | 330 mm / 13.0"   |  |
| Blade speed                                      | 319 rpm  |  |
| Blade position                                   | 40° angle  |  |
| Carriage angle                                   | 25°  |  |
| Dimensions packaging<br>(L x W x H)              | 820 x 700 x 823 mm / 32.3" x<br>27.6" x 32.4"                            |  |
| Weight   | Approx. 43 kg / 94.8 lb<br>approx. 50 kg / 110.2 lb                      | with packaging                           |
| Types of current, voltages,<br>power consumption | See identification plate   |  |

### 9.4 Dimensions GSP H W

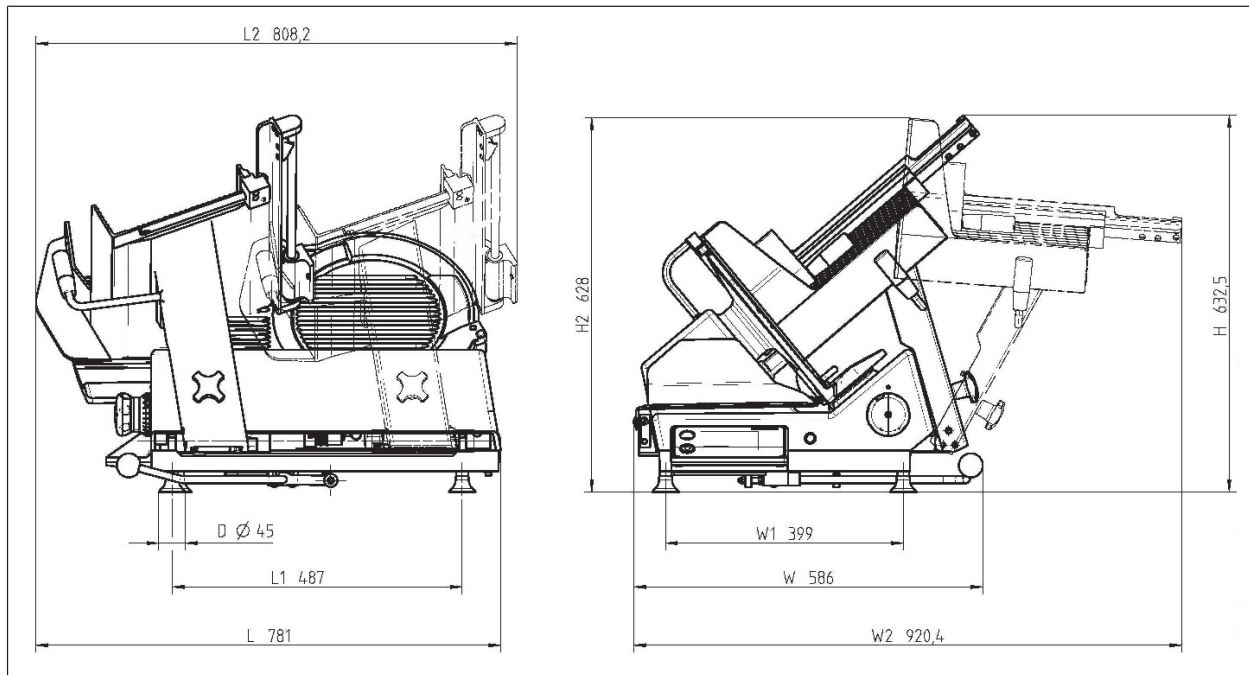


Fig. 134: GSP H W 25° H

|                                | Dimensions   | Remarks   |
|--------------------------------|--|---|
| Installation area (L x W)      | 532 x 478 mm / 20.9" x 18.8"   |   |
| Maximum dimensions (L x W x H) | 806 mm x 911 mm x 627 mm / 31.7" x 35.9" x 24.7"                         | GSP 25° L<br>The work area of the machine includes the area within the max. dimensions. |
| (L x W x H)                    | 808.2 mm x 920.4 mm x 632.5 mm / 31.8" x 36.2" x 24.9"                   | GSP 25° H<br>The work area of the machine includes the area within the max. dimensions. |
| IP rating                      | IP33   |   |
| Product size                   | Height: 160 mm / 6.3"<br>Width: 290 mm / 11.4"<br>Round: Ø 228 mm / 9.0" | GSP 25° L   |
|                                | Height: 126 mm / 5.0"<br>Width: 290 mm / 11.4"<br>Round: Ø 202 mm / 8.0" | GSP 25° H   |
| Depositing height              | 62 mm<br>95 mm   | GSP 25° L<br>GSP 25° H  |

|  | Dimensions  | Remarks                                  |
|--|---|--|
| Slice thickness                            | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"                       | Infinitely adjustable<br>Fine adjustment |
| Blade diameter                             | 330 mm / 13.0"  |  |
| Blade speed                                | 319 rpm   |  |
| Blade position                             | 40° angle   |  |
| Carriage angle                             | 25°   |  |
| Integrated portion scale                   | Weighing range: 0 - 3 kg / 0 - 6.6 lb<br>Interval: 1 g / 0.002 lb |  |
| Dimensions packaging (L x W x H)           | 820 x 700 x 823 mm / 32.3" x 27.6" x 32.4"                        |  |
| Weight                                     | Approx. 43 kg / 94.8 lb<br>approx. 50 kg / 110.2 lb               | with packaging                           |
| Current types, voltages, power consumption | See identification plate  |  |

### 9.5 Dimensions GSP H Flex

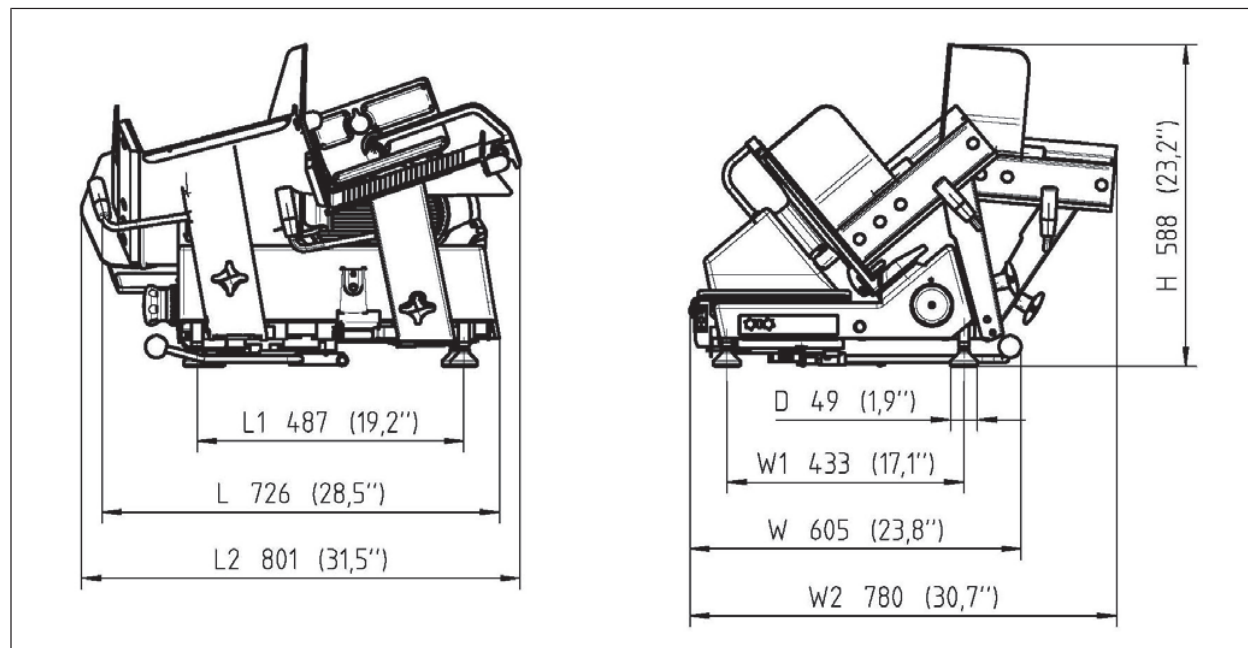


Fig. 135: GSP H 18° L Flex

|                           | Dimensions                   | Notes |
|---------------------------|------------------------------|-------|
| Installation area (L x W) | 536 x 482 mm / 21.1" x 19.0" |       |

|   | <b>Dimensions</b>   | <b>Notes</b>  |
|---|---|---|
| Maximum dimensions<br>(L x W x H)             | 770 x 798 x 593 mm / 30.3" x 31.4" x 23.3"<br>801 x 780 x 588 mm / 31.5" x 30.7" x 23.1"<br>809 x 935 x 600 mm / 31.9" x 36.8" x 23.6"<br>808 x 937 x 624 mm / 31.8" x 36.9" x 24.6"  | GSP H 0°<br>GSP H 18° L<br>GSP H 25° L<br>GSP H 25° H<br>The work area of the machine includes the area within the max. dimensions: |
| IP rating                                     | IP33  |   |
| Product size                                  | Width: 290 mm / 11.4"<br>Height: 246 mm / 9.7"<br>Round: Ø 260 mm / 10.2"<br>Height: 188 mm / 7.4"<br>Round: Ø 235 mm / 9.3"<br>Height: 160 mm / 6.3"<br>Round: Ø 228mm / 9.0"<br>Height: 126 mm / 5.0"<br>Round: Ø 202 mm / 8.0" | For all the same<br>GSP H 0°<br><br>GSP H 18° L<br><br>GSP H 25° L<br><br>GSP H 25° H   |
| Slice thickness                               | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"   | Infinitely adjustable<br>Fine adjustment  |
| Blade diameter                                | 350 mm / 13.8"<br>330 mm / 13.0"  | GSP H 0°<br>GSP H 18°L, GSP H 25° L,<br>GSP H 25° H   |
| Blade speed                                   | 319 rpm<br>255 rpm<br>266 rpm   | GSP H 25° H, GSP H 25° L<br>GSP H 18° L<br>GSP H 0°   |
| Blade position                                | 40° angle   |   |
| Carriage angle                                | 0°, 18° or 25°  |   |
| Dimensions packaging<br>(L x W x H)           | 820 x 700 x 823 mm / 32.3" x 27.6" x 32.4"  |   |
| Weight  | Approx. 43 kg / 94.8 lb<br>approx. 50 kg / 110.2 lb   | with packaging  |
| Types of current, voltages, power consumption | See identification plate  |   |

### 9.6 Dimensions of GSP HD with carriage inclination 18°

The machines are available in different versions. Figures show examples.

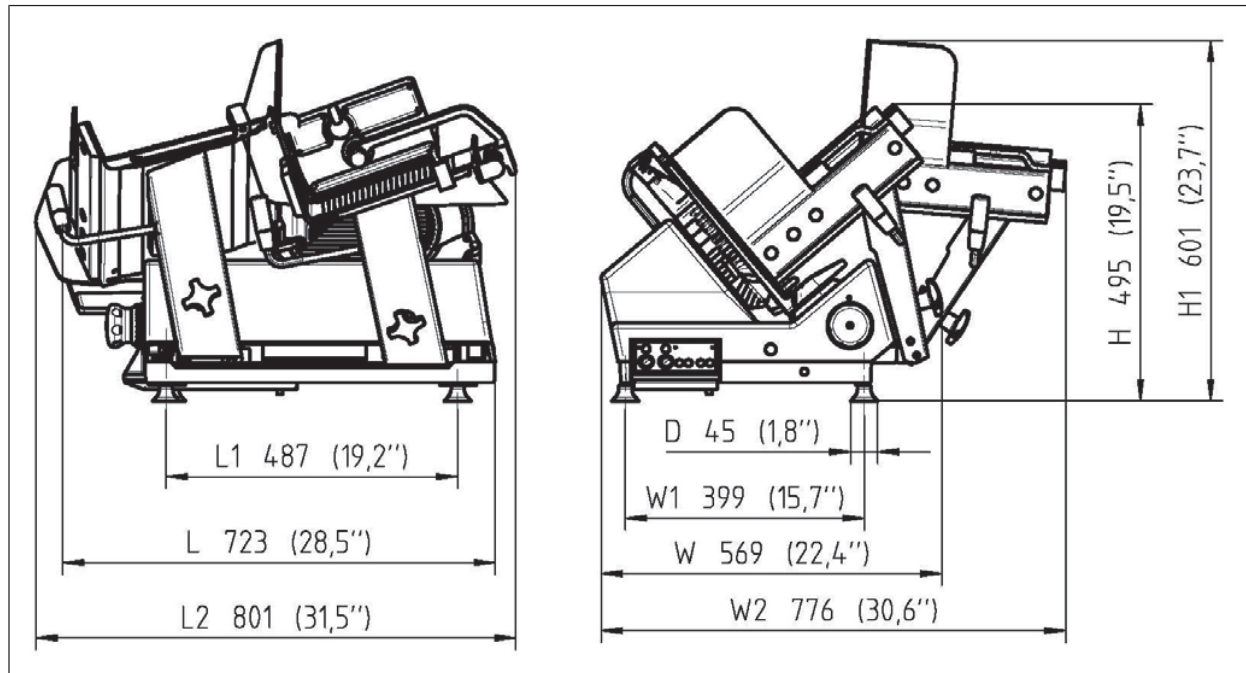


Fig. 136: GSP HD 18° L

|                                | Dimensions   | Notes  |
|--------------------------------|--|--|
| Installation area (L x W)      | 532 x 444 mm / 20.9" x 17.5"   |  |
| Maximum dimensions (L x W x H) | 801 x 776 x 601mm / 31.5" x 30.6" x 23.7"                                | The work area of the machine includes the area within the max. dimensions: |
| IP rating                      | IP33   |  |
| Product size                   | Height: 188 mm / 7.4"<br>Width: 290 mm / 11.4"<br>Round: Ø 235 mm / 9.3" |  |
| Depositing height              | 62 mm  |  |
| Slicing performance            | 35 - 90 slices per minute  |  |
| Slice thickness                | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"                              | Infinitely adjustable<br>Fine adjustment                                   |
| Blade diameter                 | 330 mm / 13.0"   |  |
| Blade speed                    | 255 rpm  |  |
| Blade position                 | 40° angle  |  |
| Carriage angle                 | 18°  |  |

|   | Dimensions   | Notes          |
|---|--|----------------|
| Dimensions packaging (L x W x H)              | 820 x 700 x 823 mm / 32.3" x 27.6" x 32.4"           |                |
| Weight  | Approx. 50 kg / 110.2 lb<br>approx. 57 kg / 125.7 lb | with packaging |
| Types of current, voltages, power consumption | See identification plate                             |                |

### 9.7 Dimensions of GSP HD with carriage inclination 25°

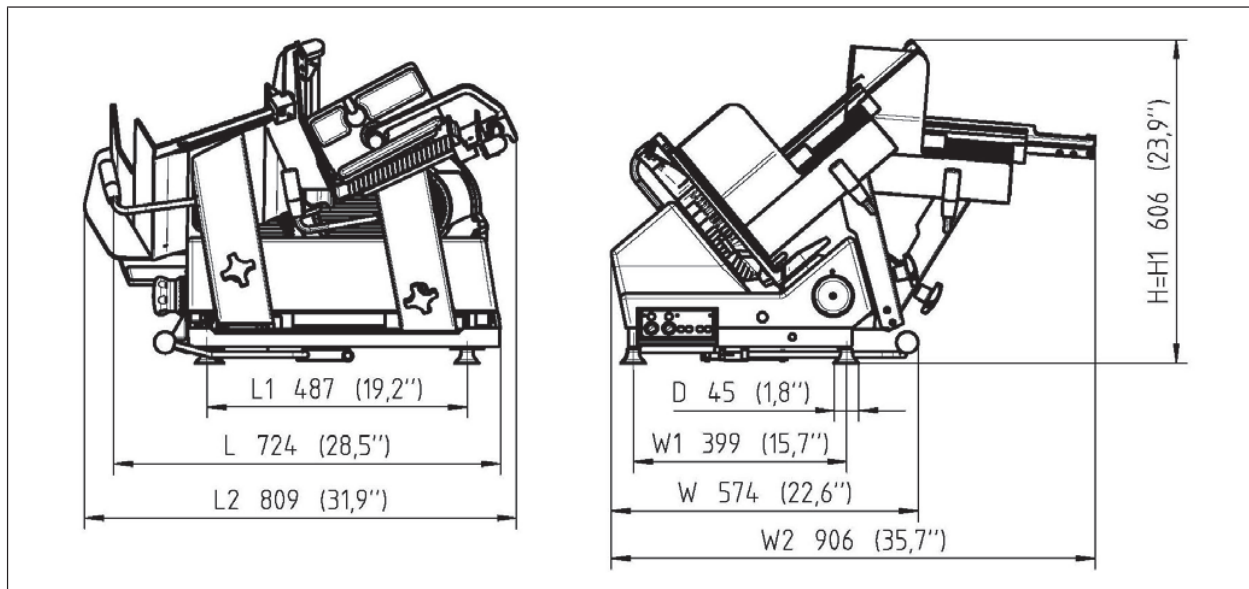


Fig. 137: GSP HD 25° L

|                                | Dimensions   | Notes   |
|--------------------------------|--|---|
| Installation area (L x W)      | 532 x 444 mm / 20.9" x 17.5"   |   |
| Maximum dimensions (L x W x H) | 809 x 906 x 606 mm / 31.9" x 35.7" x 23.9"                               | GSP 25° L<br>The work area of the machine includes the area within the max. dimensions: |
| (L x W x H)                    | 808 x 908 x 630 mm / 31.8" x 35.7" x 24.8"                               | GSP 25° H   |
| IP rating                      | IP33   |   |
| Product size                   | Height: 160 mm / 6.3"<br>Width: 290 mm / 11.4"<br>Round: Ø 228 mm / 9.0" | GSP 25° L   |

|  | Dimensions   | Notes                                    |
|--|--|--|
|  | Height: 126 mm / 5.0"<br>Width: 290 mm / 11.4"<br>Round: Ø 202 mm / 8.0" | GSP 25° H                                |
| Depositing height                                | 62 mm<br>95 mm   | GSP 25° L<br>GSP 25° H                   |
| Slice thickness                                  | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"                              | Infinitely adjustable<br>Fine adjustment |
| Blade diameter                                   | 330 mm / 13.0"   |  |
| Blade speed                                      | 255 rpm  |  |
| Blade position                                   | 40° angle  |  |
| Carriage angle                                   | 25°  |  |
| Dimensions packaging<br>(L x W x H)              | 820 x 700 x 823 mm / 32.3" x<br>27.6" x 32.4"                            |  |
| Weight   | Approx. 50 kg / 110.2 lb<br>approx. 57 kg / 125.7 lb                     | with packaging                           |
| Types of current, voltages,<br>power consumption | See identification plate   |  |

### 9.8 Dimensions GSP HD W

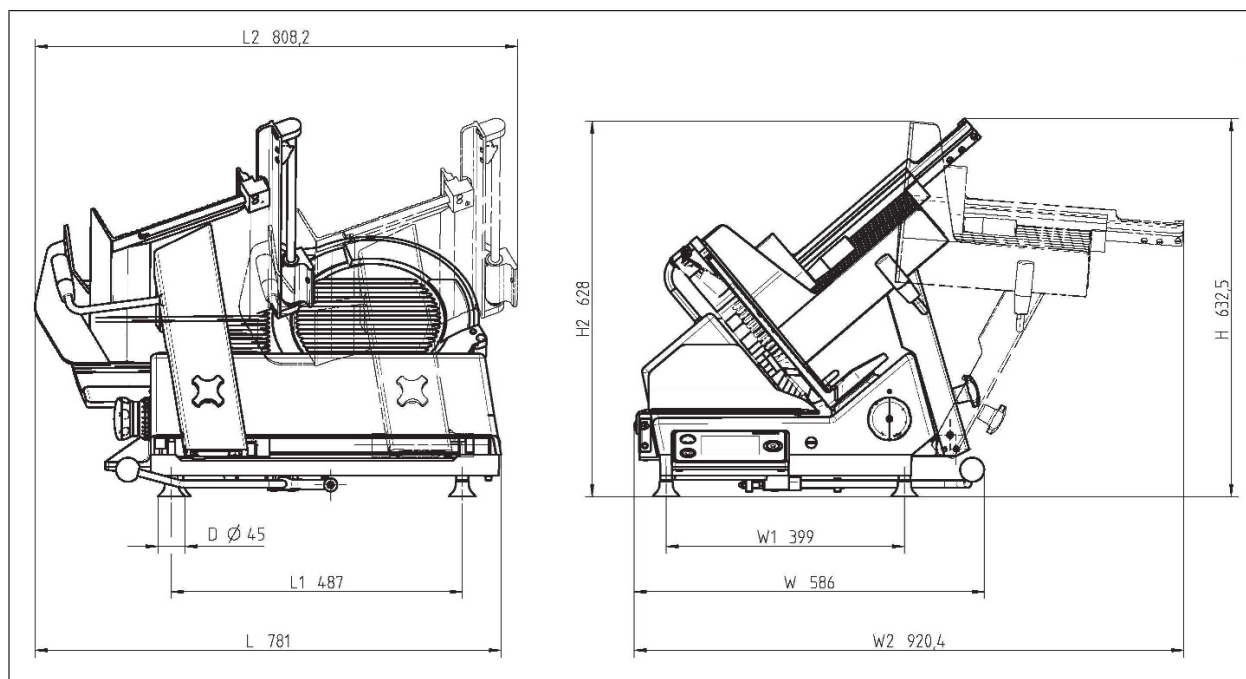


Fig. 138: GSP HD W 25° H

|  | Dimensions   | Remarks   |
|--|--|---|
| Installation area (L x W)                  | 532 x 444 mm / 20.9" x 17.5"   |   |
| Maximum dimensions<br>(L x W x H)          | 806 mm x 911 mm x 627 mm / 31.7" x 35.9" x 24.7"                         | GSP 25° L<br>The work area of the machine includes the area within the max. dimensions. |
| (L x W x H)                                | 808.2 x 920.4 x 632.5 mm / 31.8" x 36.2" x 24.9"                         | GSP 25° H<br>The work area of the machine includes the area within the max. dimensions. |
| IP rating                                  | IP33   |   |
| Product size                               | Height: 160 mm / 6.3"<br>Width: 290 mm / 11.4"<br>Round: Ø 228 mm / 9.0" | GSP 25° L   |
|  | Height: 126 mm / 5.0"<br>Width: 290 mm / 11.4"<br>Round: Ø 202 mm / 8.0" | GSP 25° H   |
| Depositing height                          | 62 mm<br>95 mm   | GSP 25° L<br>GSP 25° H  |
| Slicing performance                        | 35 - 90 slices per minute  |   |
| Slice thickness                            | 0 - 24 mm / 0 - 0.9"<br>0 - 3 mm / 0 - 0.1"                              | Infinitely adjustable<br>Fine adjustment  |
| Blade diameter                             | 330 mm / 13.0"   |   |
| Blade speed                                | 255 rpm  |   |
| Blade position                             | 40° angle  |   |
| Carriage angle                             | 25°  |   |
| Integrated portion scale                   | Weighing range: 0 - 3 kg / 0 - 6.6 lb<br>Interval: 1 g / 0.002 lb        |   |
| Dimensions packaging<br>(L x W x H)        | 820 x 700 x 823 mm / 32.3" x 27.6" x 32.4"                               |   |
| Weight                                     | Approx. 50 kg / 110.2 lb<br>approx. 57 kg / 125.7 lb                     | with packaging  |
| Current types, voltages, power consumption | See identification plate   |   |

## 9.9 Power supply

### Technical data of power supply

- **Mains supply**

Single-phase alternating current, see identification plate.

- **Permissible mains voltage tolerance (static) normal**

At 100 to 240 V: +6% to -10% of nominal value

- **Mains frequency: 50 (60) Hz**

Permissible tolerance of mains frequency: +2% to -2% of nominal value

Admissible distortion factor of mains voltage: less than or equal to 5 %

## 9.10 Ambient conditions

- **Humidity**

IP33 protection. High air humidity and the formation of condensation water can result in damage to the machine.

- **Relative humidity**

for operation and storage: 90 % (condensation of the unit is not permissible)

- **Ambient temperature**

for operation and storage: -10 to +40°C (+14 to +104 degF)

- **Required lighting**

500 Lux

## 10 Attachment

### 10.1 Notes regarding the OpenSource software

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit.

(<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young.

([eay@cryptsoft.com](mailto:eay@cryptsoft.com))

### 10.2 Checklist installation and start-up

#### Installation requirements to be met by customer

|   | Done                     |
|---|--------------------------|
| The machine and components to be installed are located at the place of installation.  | <input type="checkbox"/> |
| Machines for which the power is supplied via power plug (Schuko, CEKON, Perilex, ...) must be fitted with a suitable power socket within the connection range (max. distance of 1 m) of the machine allowing the machine to be connected with the provided mains cable. | <input type="checkbox"/> |
| For machines which are provided with a permanently connected power supply by the factory a suitable supply circuit disconnect is provided for each machine.   | <input type="checkbox"/> |
| The supply circuit disconnect is accessible to the Bizerba service technician at any time and w/o tools (ladder etc.).  | <input type="checkbox"/> |

#### Scope of performance regarding installation

|   | Done                     |
|---|--------------------------|
| Installation between Bizerba and end customer coordinated.  | <input type="checkbox"/> |
| Machines and components were unpacked and packaging returned.   | <input type="checkbox"/> |
| Machine has been correctly installed and aligned.<br>(Machine is secured accordingly: if table mounted, holes for fixing pins are drilled or if bench mounted, machine is fastened with fixing pins.) | <input type="checkbox"/> |
| Machine is connected to customer provided socket.   | <input type="checkbox"/> |
| Functionality of machine and provided components tested, trial run and optimizations carried out.   | <input type="checkbox"/> |
| Electrical safety meets relevant country-specific regulations. (In Germany DIN-VDE 0701)  | <input type="checkbox"/> |

|  | Done                     |
|--|--------------------------|
| Staff was instructed. <ul style="list-style-type: none"><li>– Operation of the machine</li><li>– Maintenance, care, cleaning as described in instruction manual</li><li>– Disassembly of the parts that require cleaning and cleaning of the machine</li><li>– Information on blade sharpening by using sharpening service, disassembly of blade</li></ul> | <input type="checkbox"/> |
| Installation and training approved and signed on service report.   | <input type="checkbox"/> |

Date:

Signature service technician:

Signature customer: