

The logo consists of the word "SCHARFEN" in a bold, white, sans-serif font, centered within a solid blue rectangular background.

Operating Instructions for Food Slicer

Model G330D

Model G350D

Model G330DW

Model G350DW

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1. General Information

1.1. Notes regarding the operating instructions

Read the following hints before installing and operating this machine!

Make yourself familiar with this machine by reading this operating instructions carefully.

Within these operating instructions there are indicated the following safety notes and hints:



means Attention. Notes for probable danger and for avoiding mistakes.



means notes and hints regarding certain operation procedures.

1.2. Notes regarding warranty

The installation and initial operation has to be done by an authorised supplier or service technician.

Only trained persons are allowed to operate this machine. When required, the training has to be repeated.

Supervisory and operating staff have to read the operating instructions carefully before initial operation of this machine. Starting, operating and cleaning have to be done according the operating instructions and are only allowed after having been introduced to the way of working.

In case of

- unauthorised installation
- unauthorised electrical installation
- wrong operation
- misuse
- constructional alteration
- detaching security or protecting equipment
- and in case of using non-original Scharfen spare parts

any responsibility from our side is refused.

In above cases the operator acts on his own risk and is responsible himself for damages which might occur.



Therefore, only use original Scharfen spare parts!

In case high pressure or steam cleaning devices or water plugs are used any claims regarding warranty will be refused.

This is valid also for faults and damages which are caused by natural wear and tear.

The pictorial representation might differ from the machine supplied because of regional specific requirements or as a result of technical improvement.

The contents of these operating instructions is not affected by that.

1.3. Notes regarding security

This machine corresponds to legal security and hygienic requirements. Nevertheless there is a risk of getting hurt in case of wrong or inattentive operation or maintenance. Especially for your hands or fingers there is a risk of injury.

This machine is only for commercial purposes. Children below 14 are not allowed to work with the machine. The operator commits himself to allow only persons to work with the machine who know the basic regulations of occupational safety and accident prevention and are carefully trained in handling the machine.

All persons entrusted with work on the machine are obliged to observe the basic regulations on work safety and accident prevention before starting work, to read and understand the safety regulations and warnings in this operating manual.

The operating staff has to be trained carefully how to operate and maintain this machine according to these operating instructions.

Pay attention in any case to the following notes regarding security:



See to it that unauthorised, untrained persons and in particular children cannot start the machine.

It is not allowed to detach, to modify or to disregard protecting or security equipment.

Otherwise there is a high risk of injury.

- ☐ Always work with concentration, do not let distract yourself from your work.
- ☐ Only cut food products as indicated in these operating instructions.
- ☐ Never carry out experiments. Never try to cut foreign material.
- ☐ Never cut deep frozen products.
- ☐ Never check the sharpness of the blade with your fingers.
- ☐ Never detach the blade without suitable devices.
- ☐ Never use the machine as a place to put something on or to do other work on.
- ☐ Take care that the floor space is clean, dry and non-slip.
- ☐ Ensure sufficient lightning of at least 300 Lux
- ☐ For hygienic reasons, place the machine in air-conditioned or chilled rooms
- ☐ In case the current supply cable or the plug are defective, these parts have to be exchanged or repaired by your after sales service or an electrician.
- ☐ For cleaning pull the plug in any case.
- ☐ In case of non-typical noise switch off the machine immediately.
- ☐ The electrical installation frame may only be opened by electro technically trained persons.
- ☐ The power plug must be freely accessible and can be monitored from any access point.
- ☐ The warning light of the pushbutton must be checked regularly for function.
- ☐ Use in an explosive atmosphere is not intended.
- ☐ Non-ionizing radiation is not generated in a targeted manner, but is only emitted by the electrical equipment (for example, from electric motors or magnetic coils) for technical reasons. The machine does not have strong permanent magnets. If a safety distance (distance from field source to implant) of 30 cm is maintained, the influence of active implants (for example, cardiac pacemakers, defibrillators) can be excluded with high probability.
- ☐ In case the fault cannot be put right by yourself, you have to inform your after sales service.
- ☐ Always transport the machine with two people and ensure a secure grip on the machine feet. If possible, use a transport cart that is stable.
- ☐ Wear safety-approved footwear during transport.

1.4. Description of the machine

This gravity feed slicer is a semi-automatic food slicer. The carriage is either moved backward and forward automatically or the automatic drive of the carriage can be disengaged for manual operation.

The blade is driven electrically with a 1-phase or 3-phase motor. This motor is maintenance-free and air-cooled. By means of a special air circulation the warming up of the motor is very low, especially around the blade. The automatic carriage is moved by a strong D. C. motor.

The food product is pushed against the blade by its own weight (gravity).

The material used in the food zone corresponds to all requirements of food hygiene.

The complete machine body, the thickness plate, the blade guard and the carriage are made of stainless steel. The blade is hard chromed.

All visible bearings as well as open sliding surfaces are lubricated only with lubricant suitable for food zones.

For switching the machine on and off there is used a double red/green push button with integrated signal lamp on a key board. When the machine is switched on the signal lamps are illuminated.

The red main button fulfils the requirements as emergency stop switch.

With the other push buttons of the key board there can be adjusted different functions for the automatic operation.

Self-starting of the machine after a voltage drop is avoided by the electric control.

The carriage can only be tilted aside when the automatic drive is disengaged and the thickness plate is closed completely. When the carriage is tilted aside, the thickness plate is locked in this position.

The protecting and security equipment as well as electrical and mechanical components correspond to regulations in force.

The machine is equipped with the following security equipment:

- ☐ no self-starting of the machine after a voltage drop
- ☐ double push-button

- ☐ fixed ring around the blade, non-removable
- ☐ central blade protection, fixed, removable
- ☐ locked thickness plate when the carriage is tilted aside

1.5. Usage

The following food products can be sliced by taking into account the maximum cutting capacity:



The machine is only approved for cutting sliceable food

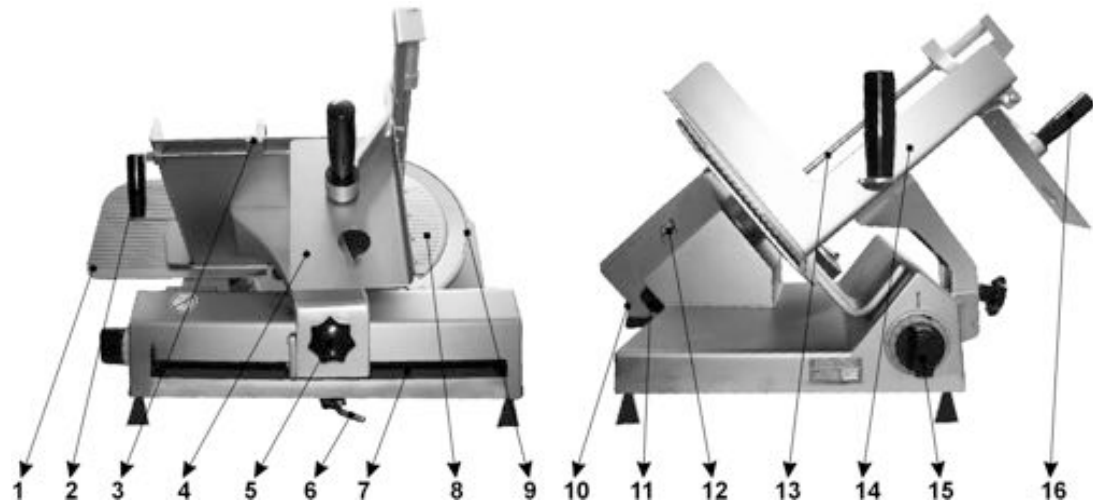
Do not cut deep frozen food products

For slicing cheese we recommend the teflonized execution. Carriage, thickness plate, blade guard and blade are teflonized.

For slicing bread we recommend to use a toothed blade on the machine.

The machine has to be installed in a shopping room. The installation in moist rooms is allowed. The machine is drip-proof only. High air humidity and condensation water may damage the machine. The machine is **not splash-proof**.

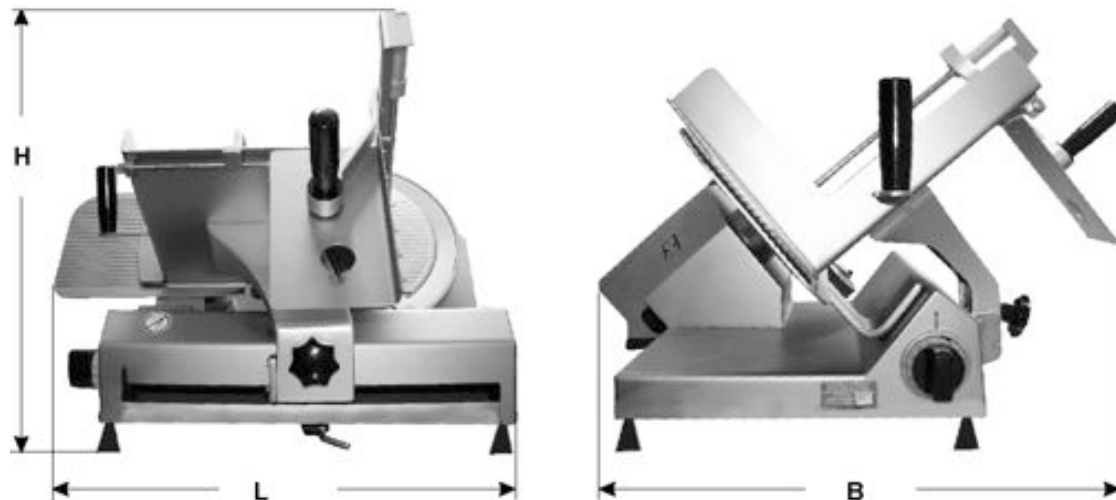
1.6. General plan of the machine



- 1 thickness plate
- 2 handle
- 3 adjusting bar
- 4 end piece holder
- 5 star knob
- 6 lever automatic / manual
- 7 guiding axle carriage
- 8 blade guard

- 9 fixed ring
- 10 name plate
- 11 star knob of fixing screw for blade guard
- 12 keyboard with main switch on/off
- 13 guiding axle end piece holder
- 14 carriage
- 15 thickness knob
- 16 handle of end piece holder

1.7. Dimensions of the machine and technical data



overall dimensions l x w x h 720 x 790 x 620 mm
 counter space required 550 x 420 mm

max. cutting size G 330 A app. 320 x 220 mm
 with G 350 A app. 320 x 235 mm

thickness of slices 0-25 mm (infinitely variable)

diameter of blade 330 mm (G330D)
 diameter of blade 350 mm (G350D)
 sound level < 70 db(A)

weight approximately 66 kg

voltage, cycles, power,
 year of production

see rating plate

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2. Installation and initial operation



First read the operating instructions very carefully!

You have to pay attention to all notes.

Operating procedures have to be carried out as described.

Always work carefully and with concentration, this way you can avoid damages and injuries. The installation, introduction and initial operation has to be done by an authorised supplier or service technician.

2.1. Checking the contents of the carton

The supplied carton has to have the following contents:

- ☐ **SCHARFEN** food slicer model G 330 A or G 350 A
- ☐ sharpening device
- ☐ these operating instructions

2.2. Installation



The food slicer model G330D or G350D has to be installed on a plain, horizontal, non-slip and stable surface. If necessary the machine has to be screwed tight in addition.

Recommended height of the working surface about 800 mm. Pay attention to the required counter space.

2.3. Electrical installation

Before you plug in the machine, you have to check if the current supply is the same as indicated on the rating plate. In case there are discrepancies you have to inform the supplier or technical service.

Under no circumstances plug in the machine!

The socket-outlet has to be equipped with earthing contact. It has to be connected according to customary regulations.

A defective socket-outlet may damage the machine or endanger the operator.

The socket has to be installed at a place which can be reached easily by the operator, so that in case of emergency the plug can be pulled out quickly. **In any case the socket must not be under the counter or at a place which cannot be reached easily.**

In case it is necessary to exchange the plug, this has to be done by an electrician or the after sales service.

2.4. Checking the direction of blade rotation

Switch on the machine. Push the green push button main switch on.

Signal lamp is illuminated

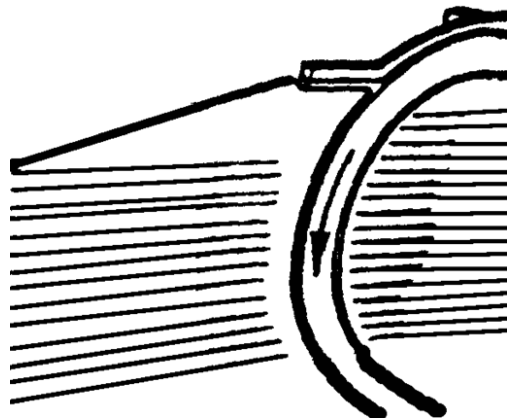
The knife will be switched on by pushing the yellow push button 1 for more than 1 second.

For machines with 3-phase motor:

The blade has to rotate in direction of arrow (counter clockwise).



In case the blade rotates in wrong direction, the positions of the poles in the plug have to be changed by an electrician or service technician.



3. Operation

3.1. Important notes before switching on the machine

Because of security reasons pay attention to the following notes:



- first read these operating instructions carefully
- take care that the machine is placed on a stable and secure surface
- work with concentration
- never touch the blade

3.2. Switch functions (main switch with signal lamp)

- ☐ green push button = main switch on
- ☐ red push button = main switch off

3.3. Thickness of slices

The thickness of slices is infinitely variable from 0 to 25 mm. In order to adjust the thickness of the slices you have to turn the thickness knob. Turning to the right: thickness plate opens. Turning to the left: thickness plate closes. The scale on the thickness knob serves as adjusting aid. In order to adjust a slice thickness of more than 15 mm you have to turn the thickness knob over 15 mm. For the maximum slice thickness you have to turn the thickness knob nearly two complete rotations.

3.4. Automatic or manual movement of the carriage

The machine is equipped with an automatic carriage movement which can be disengaged. The carriage can then be moved by hand.

automatic movement = lever turned to the front (left side)

movement by hand = lever turned to the back (right side)

Adjusting automatic movement

Switch off the machine at the red main switch.

Turn lever to the front.

Move the carriage by hand until it is engaged.

Carriage can no longer be moved by hand now.

Adjusting movement by hand

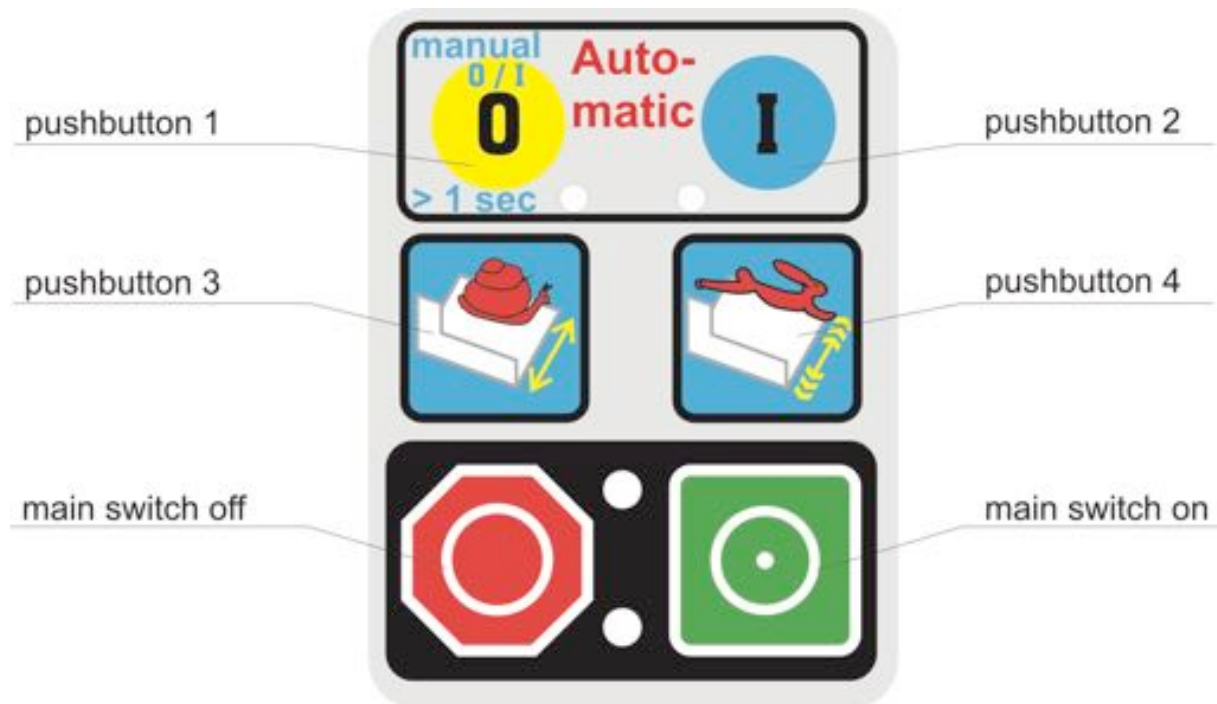
Switch off the machine at the red main switch

Turn lever to the back.

Carriage can be moved by hand now.



3.5. Electronic Control



How to use the different functions:

Switch on the machine on the main switch. The operating status is indicated by the illuminated display. The display shows $\Sigma 000 = 000 30$

In order to start the blade only, keep pushing the yellow pushbutton 1 until the blade starts turning. Now the upper left LED is illuminated. As long as you are moving the carriage backward and forward manually the blade is running continuously. Push the yellow pushbutton 1 shortly in order to stop the blade rotation.



In case the carriage will not be moved the blade stops turning automatically after about 15 seconds. In order to restart keep pushing the yellow pushbutton 1 until the blade starts turning again. Think of the automatic stop when sharpening the blade.

Automatic movement of the carriage:

Pull lever at the bottom of the carriage arm to the front. Move the carriage backward and forward until you hear that the automatic carriage drive has been engaged.

3.5.1. adjusting the slicing functions

Model G330D / G350D is equipped with a counter. You can adjust the number of slices you want to slice. The slicing process will be stopped after reaching the adjusted number of slices.

3.5.1.1. Adjusting the number of slices Modell G330D / G350D

Switch on the machine on the main switch. The operating status is indicated by the illuminated display. The display shows $\Sigma 000 = 000 30$

Press the pushbutton 3 & 4 to set the desired number of slices. The pushbutton 4 is used to count upwards starting with 1 and pushbutton 3 is used to count downwards starting with 200. Pressing and holding the respective button causes a correspondingly fast change in the numbers. For example with a set number of 100 slices the display shows $\Sigma 100 = 000 30$.

If no pre-selection is desired, do not change the setting or set the value to zero. The display then shows $\Sigma 000 = 000 30$ and the machine cuts after the start until it is switched off by pressing the yellow button 1.

Press the blue pushbutton 2 to start the cutting process. Operating status is indicated by the upper right LED.

Speed can be decreased or increased by pressing pushbuttons 3 & 4. After the machine has been switched on at the main switch, it always runs at 30 strokes per minute. This cutting speed is displayed in the display as the last number. For example, $\Sigma 100 = 000 30$ where the 30 indicates the speed. Then the speed set is maintained until the machine is switched off at the main switch.

During the cutting process, the speed can be changed by pressing the pushbuttons 3 or 4. Pushbutton 3 reduces the speed to a minimum of 15 strokes per minute pushbutton 4 increases the speed up to the maximum speed indicated by 50.

When there is adjusted a higher speed level (> 30 strokes per minute) the first movement always is effected with a speed of 30 strokes per minute when the automatic movement is started. After this first stroke the higher chosen speed will be effected.

The speed of the machine can not be adjusted when the machine is not in operation.

During the cutting process, the display shows beside the preset number of slices the sliced slices and the set speed. For example, a display of $\Sigma 040 = 015 46$ means the following: desired number of slices 40, already cut 15, cutting speed 46 stroke / minute.

In order to stop the automatic carriage movement push the yellow pushbutton 1 shortly. The speed of the carriage is set on slowest speed and the carriage stops in starting position. The display then always shows the slices already sliced in the second number block during the standstill.

Press the blue button 2 again to restart. Then the second number block is reset to zero and the counting process starts again. The preset number of slices as well as the set speed are retained until the values are changed or the machine is switched off at the main switch.

In case the carriage is disengaged during operation and it will not be moved backward and forward, the blade and the automatic drive will be stopped automatically after 15 seconds.

3.5.2. adjusting the scale functions for Model G330DW /G350DW

The model G330 DW / G350DW is equipped with a built-in scale in addition to the above-described disk counter. The required weight can be pre-set. The cutting operation is stopped as soon as the adjusted weight is reached.

3.5.2.1. Switching between slice counter and scale

If the machine is not in operation you can switch between slice counter and scale by pushing the yellow pushbutton 1 shortly. Pushing this pushbutton again causes another changeover. The display shows the following when the slice counter is set: $\Sigma 000 = 000 30$ and with the set scale: $gr 0000 = 0000 30$

All the description below refer to the selected scale mode.

Press the pushbutton 3 & 4 to set the desired weight. The pushbutton 4 is used to count upwards starting with 1 and pushbutton 3 is used to count downwards starting with 2000. Pressing and holding the respective button causes a correspondingly fast change in the numbers. For example with a set number of 200 gram the display shows *gr 0200 = 000 30*.

If no pre-selection is desired, do not change the setting or set the value to zero. The display then shows *gr 0000 = 0000 30* and the machine cuts after the start until it is switched off by pressing the yellow button 1.

Press the blue pushbutton 2 to start the cutting process. Operating status is indicated by the upper right LED.

Speed can be decreased or increased by pressing pushbuttons 3 & 4. After the machine has been switched on at the main switch, it always runs at 30 strokes per minute. This cutting speed is displayed in the display as the last number. For example, *gr 0200 = 000 30* where the 30 indicates the speed. Then the speed set is maintained until the machine is switched off at the main switch.

During the cutting process, the speed can be changed by pressing the pushbuttons 3 or 4. Pushbutton 3 reduces the speed to a minimum of 15 strokes per minute pushbutton 4 increases the speed up to the maximum speed indicated by 50.

When there is adjusted a higher speed level (> 30 strokes per minute) the first movement always is effected with a speed of 30 strokes per minute when the automatic movement is started. After this first stroke the higher chosen speed will be effected.

The speed of the machine can not be adjusted when the machine is not in operation.

During the cutting process, the display shows beside the preset weight the already sliced weight and the set speed. For example, a display of *gr 0200 = 0115 46* means the following: desired weight 200 gr, already cut 115 gr, cutting speed 46 stroke / minute.

In order to stop the automatic carriage movement push the yellow pushbutton 1 shortly. The speed of the carriage is set on slowest speed and the carriage stops in starting position. The display then always shows the slices already sliced in the second number block during the standstill.

Press the blue button 2 again to restart. Then the second number block is reset to zero and the counting process starts again. The preset number of slices as well as the set speed are retained until the values are changed or the machine is switched off at the main switch.

In case the carriage is disengaged during operation and it will not be moved backward and forward, the blade and the automatic drive will be stopped automatically after 15 seconds.

3.6. Operation

- ☐ Pull the carriage backwards for loading the carriage when the machine is adjusted for manual operation.
- ☐ Lift up the end piece holder.
- ☐ Lay the food product against the back of the carriage.
- ☐ Adjust the adjusting bar according to the size of the food product.
- ☐ Push the end piece holder with the spikes upon the food product.
- ☐ Adjust the thickness of the slices with the thickness knob.
- ☐ Choose automatic or manual operation (see point 3.4.).



Manual operation

- ☐ Switch on the machine by pushing the green button.
- ☐ In order to start the blade keep pushing the yellow pushbutton 1 until the blade starts turning and the upper left LED is illuminated.
- ☐ The food product is pushed against the blade by its own weight (gravity).
- ☐ Move the carriage forward and backward by hand
- ☐ After having finished the slicing procedure turn thickness knob to zero.
- ☐ By pushing the yellow pushbutton 1 shortly the blade stops
- ☐ Switch off the machine at the red main switch.



Automatic operation

- ☐ Switch on the machine by pushing the green button main switch on.
- ☐ Choose electronic functions as described in chapter 3.5

- ☐ Push blue pushbutton 2 in order to start the automatic operation.
- ☐ The food product is pushed against the blade by its own weight (gravity).
- ☐ The carriage is moved automatically
- ☐ In order to stop the slicing procedure push the yellow pushbutton 1
- ☐ After having finished the slicing procedure turn thickness knob to zero.
- ☐ Switch off the machine at the red button main switch off.



Attention! Never try to load the carriage while it is moving automatically. Always switch off the machine first, otherwise there is a risk to get injured!!

3.7. variable slicing length

The machine is adjusting the slicing length by itself. This is determined by the adjustable bar. The position of the adjustable bar is always read out at the first stroke and fixed. Therefore it is necessary that the carriage is engaged and in the starting position. If the carriage is not in the starting position this process will not work and the slicing length will not be adjusted according to the product size. In such a case stop the carriage by pressing the yellow button 1. Then the carriage will return to the starting position. Start the carriage again by pushing the blue button 2. Then the position of the adjustable bar will be read again and the cutting length is adapted according to the product size.

3.8. Slicing of end pieces

Special notes regarding slicing of rests and end pieces of food products:

Before placing the remaining piece of the food product in the carriage you have to cut off the pointed end. Otherwise the food product cannot be held correctly by the end piece holder. It is even better to turn the original cutting side of the food product to the end piece holder.



**Attention! Risk of getting hurt!
Never try to hold the food product by hand, you may hurt yourself seriously!
Always use the end piece holder.**

In case the end piece should clamp or move proceed as follows:

- ☐ Switch off the machine.
- ☐ Check if the adjusting bar is fixed.
- ☐ Lift up the end piece holder
- ☐ Place the end piece into the carriage as described below

3.9. Slicing end pieces

- ☐ Pull the carriage backwards for loading the carriage when the machine is adjusted for manual operation.
- ☐ Lift up end piece holder
- ☐ Lay the food product against the back of the carriage.
- ☐ Adjust the adjusting bar according to the size of the food product.
- ☐ Place the end piece holder behind the food product.
- ☐ Adjust the thickness of the slices with the thickness knob.
- ☐ Choose automatic or manual operation (see 3.4)



Manual operation

- ☐ Switch on the machine by pushing the green button.
- ☐ In order to start the blade keep pushing the yellow pushbutton 1 until the blade starts turning and the upper left LED is illuminated.
- ☐ The food product is pushed against the blade by its own weight (gravity).
- ☐ Move the carriage forward and backward by hand
- ☐ After having finished the slicing procedure turn thickness knob to zero.
- ☐ By pushing the yellow pushbutton 1 shortly the blade stops
- ☐ Switch off the machine at the red main switch.



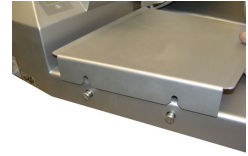
Automatic operation

- ☐ Switch on the machine by pushing the green button.

- ☐ Choose electronic functions as described in chapter 3.5
- ☐ Push blue pushbutton 2 in order to start the automatic operation.
- ☐ The food product is pushed against the blade by its own weight (gravity).
- ☐ The carriage is moved automatically
- ☐ In order to stop the slicing procedure push yellow pushbutton 1
- ☐ After having finished the slicing procedure turn thickness knob to zero.
- ☐ Switch off the machine at the red main switch.



Attention! Never try to load the carriage while it is moving automatically. Always switch off the machine first, otherwise there is a risk to get injured!!



4. Cleaning

Before initial operation and after a longer period of standstill the machine has to be cleaned carefully.

With permanent use of the machine you have to clean it at least one time per day or if necessary also a few times per day. For cleaning proceed as follows:



Risk of getting hurt!

Be careful when cleaning the machine. Especially in the area of the knife there is a risk of injury. Always work with concentration, do not let distract yourself from your work.



4.1. How to proceed with cleaning

- ☐ Switch off the machine at the red main switch.
- ☐ Adjust machine to manual operation
- ☐ Pull off the plug.
- ☐ Close the thickness plate completely by turning the thickness knob to the left.

Remove the weighing tray

- ☐ Lift the weighing tray upwards.

Remove end piece holder plate

- ☐ Pull the carriage to the front.
- ☐ Loosen the star knob of the end piece holder plate
- ☐ Take off end piece holder plate



Tilt carriage aside

- ☐ Loosen the star knob of the carriage.
- ☐ Pull the carriage to the utmost front position.
- ☐ Tilt the carriage aside.



The carriage cannot be tilted aside in case the thickness plate is still opened or the machine has not been adjusted to manual operation.

Always tilt the carriage with care, do not use force!



Remove blade guard

- ☐ Loosen the star knob and hold the blade guard with the other hand.
- ☐ By pushing against the star knob the blade guard is tipped against your hand and you can take the blade guard off.



For cleaning only use usual washing-up liquids. Do not use scratching or scouring cleansing agents or devices.





The machine is only drip-proof. Therefore do not use high pressure cleaning devices, water hoses or similar devices. Furthermore you must not pour water over the machine. Danger of short circuit or machine defect. In such cases any claims regarding warranty will be refused.



4.2. Cleaning the single parts

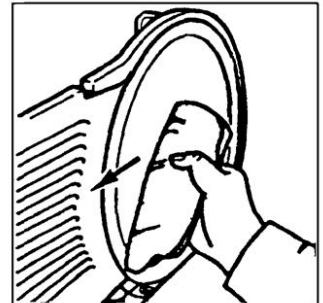
Clean all removed parts separately with warm water. Wash them up with clear water and dry them. **See also chapter 6. Cleaning.**

4.3. Cleaning the blade



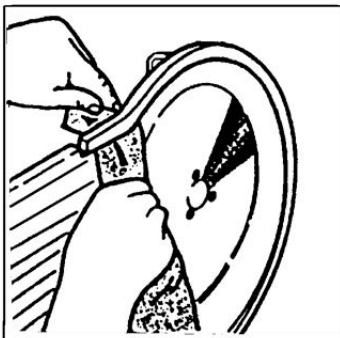
Attention! Risk of getting hurt!

- ☐ clean the inside of the blade with a wet cloth from the centre towards the edge.
- ☐ Proceed for the backside of the blade in the same way.
- ☐ Dry the inside and the backside of the blade carefully.

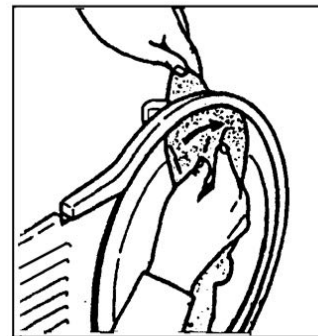


1. Put a moist cloth between the blade and the fixed protecting ring.
2. Turn the blade by hand one complete rotation and push the moist cloth against the protecting ring while turning.

1.



2.



4.4. Reassembling the parts

Reassemble the parts in reverse order. (4.3. -> 4.1).



Attention! Risk of getting hurt!

- ☐ Reassemble the parts with concentration
- ☐ Do not let distract yourself from your work
- ☐ Place the splice bar of the blade guard onto the plastic bolt.
- ☐ Turn the blade guard to the blade and see to it that the flange of the blade guard is positioned in the centre of the blade.
- ☐ Tighten the blade guard by turning the star knob clockwise by hand.
- ☐ Do not use force.
- ☐ Turn the carriage back.
- ☐ Tighten the star knob of the carriage.
- ☐ Mount the end piece holder plate
- ☐ Screw tight the star knob
- ☐ Insert the weighing tray with the slots from above into the holder



Check again the complete machine. Only after having checked the machine plug it in for operation.



5. Sharpening the blade

In case the cutting result should no longer be satisfactory or the food products are getting "beards", the blade has to be sharpened. There cannot be indicated a certain period for sharpening as this depends on the time of operation and the kind of food products.



Pay attention to the fact that the blade has to be exchanged if the gap between blade edge and the fixed protecting ring is more than 5 mm. According to security regulations further sharpening of the blade it is not allowed when the gap is more than 5 mm.

The supplied sharpening device is loosening its effect. A further sharpening is forbidden.

In case it is necessary to exchange the blade this has to be done by a service technician.

5.1. Sharpening device



Every sharpening device is marked with the serial number of the machine. Only this sharpening device may be used for sharpening.

Usage of other sharpening devices can cause serious injuries or damage the machine. Never use another sharpening device.

The sharpening device is equipped with two fine sharpening stones, 1 stone for sharpening and 1 stone for taking off the burr.

Never use the sharpening device on an uncleaned machine as the stones will then lose their efficiency. In case this should happen anyway, clean the stones carefully with washing liquid and a brush.

5.2. How to proceed for sharpening



**Important! Adjust the machine to manual carriage movement (see chapter 3.4.)
Take off all removable parts (see chapter 4.1.)**

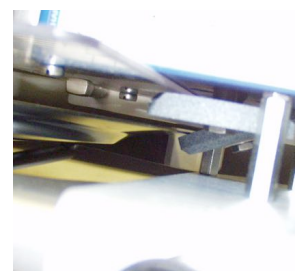
Attention! Risk of getting hurt!

- ☐ Clean the machine carefully, as described in chapter 4.
- ☐ Turn the carriage back. Tighten the star knob of the carriage. Put a beer mat or paper felt on the carriage and cut a few strips (This way the fat will be totally removed from the blade edge).
- ☐ Check again if the machine is adjusted to manual operation.
- ☐ Pull the carriage completely to the front.
- ☐ Remove the beer mat or paper felt.



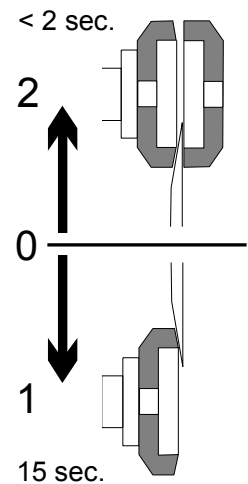
Attention! Risk of getting hurt!

- ☐ Lift up end piece holder
- ☐ Mount the sharpening device in such a way to the thickness plate that the cone of the sharpening device fits into the slit on the bottom of the thickness plate (direction of arrow)
- ☐ Pull out the pin on top of the sharpening device in direction of arrow and move the sharpening device over the edge of the thickness plate.
- ☐ Move the sharpening device with the pulled out pin to the front in direction of the blade (direction of arrow), so that the pin is engaged in the hole of the thickness plate.
- ☐ The sharpening stones are now in the correct position, i.e. the blade edge is positioned between the two sharpening stones.



5.3. Sharpening the blade

- ☐ Switch on the machine
- ☐ Turn the hand wheel of the sharpening device in direction 1. By means of this the sharpening stone sharpening the blade is pushed towards the blade.
- ☐ Approximately 15 seconds are enough.
- ☐ Switch off the machine
- ☐ check if there has been built a visible burr at the edge of the blade
- ☐ If not: Sharpen again
- ☐ Switch on the machine again
- ☐ For taking off the burr turn the hand wheel in direction 2. Now both sharpening stones are touching the blade.
- ☐ Approximately 2 seconds are enough to take off the burr.
- ☐ When the sharpening procedure is terminated turn the hand wheel to 0.



5.4. Remove sharpening device

- ☐ Switch off the machine.
- ☐ Pull the pin of the sharpening device upright in direction of arrow.
- ☐ Tilt the sharpening device aside to the right.
- ☐ Remove the sharpening device.

Now clean the machine entirely from wheel swarf, see chapter 4. Cleaning. First clean the machine with a dry cloth. Then make a complete wet cleaning.



Attention! Risk of getting hurt!

**Always work with concentration! Do not let distract yourself from your work!
Never check the sharpness of the blade with your fingers.**

6. Maintenance and cleaning

machine	warm water, detergent, acid free from chlorine	manually	cleaning rag, cleaning brush	wash up with clear water, dry
machine with tefloned parts	warm water, detergent, acid free from chlorine	manually	cleaning rag, cleaning brush	wash up with clear water, dry dry tefloned parts very carefully
detached parts	warm water, detergent, acid free from chlorine	manually	cleaning rag, cleaning brush	wash up with clear water, dry
blade	warm water, detergent, acid free from chlorine	manually	cleaning rag or sponge	wash up with clear water, dry
sharpening stones	warm water, detergent, acid free from chlorine	manually	cleaning brush	degrease with degreasing agent (spirit or similar)

Clean the machine at least one time per day.

If necessary sharpen the blade.

The blade has to be exchanged if the gap between blade edge and the fixed protecting ring is more than 5 mm.

If necessary clean or exchange the sharpening stones.

To lubricate the machine, use only lubricants intended for use in foodstuffs (according to USDA type H1).

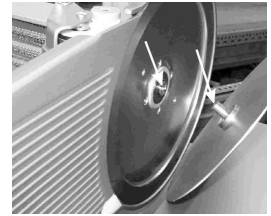
Oiling points:

Guiding axle of end piece holder (1 time per week)

Guiding axle of carriage (as required)



Take off the blade guard and lubricate the threaded bushing, the adapter, and the fixing screw of the blade guard.



Lubricate the thread of the star knob at the bottom of the carriage arm.



7. Trouble Shooting

Trouble

grinding noise

Solution

blade guard has not been mounted correctly
loosen blade guard, mount it again and fix it

blade guard is dirty
clean as described in chapter 4.

machine stops automatically

LED is not illuminated

short-term voltage drop, switch on the machine again

fuse for electronic control is defective, install new fuse
(only for 110V execution)

machine is getting warm

wall socket and plug have to be checked by an electrician

8. Waste disposal

The producer is obliged to take back the machine for waste disposal. For this purpose the machine can be returned to the manufacturer free of charge.