



Operating Instructions for Food Slicer

Model ES 300

**Scharfen Slicing
Machines GmbH**

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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. 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.

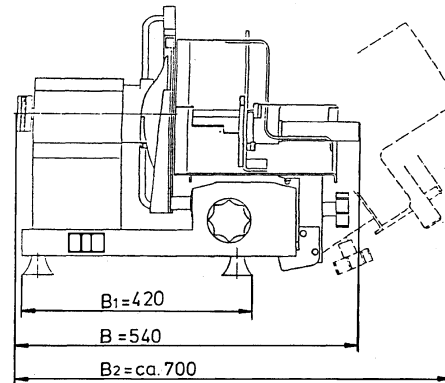
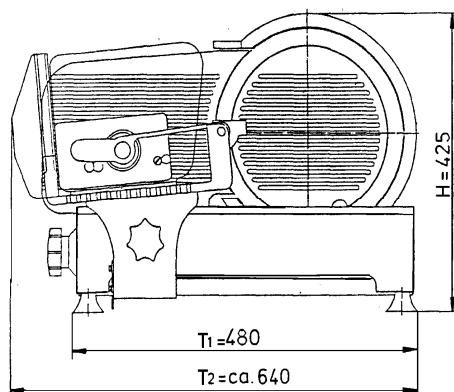
In case the current supply cable or the plug are defective, these parts have to be exchanged or repaired by your after sales service or an electrician.

For cleaning pull the plug in any case.

In case of non-typical noise switch off the machine immediately.

In case the fault cannot be put right by yourself, you have to inform your after sales service.

1.4. Dimensions of the machine and technical data



overall dimensions

counter space required

working space

max. cutting capacity

thickness of slices (infinitely variable)

diameter of blade

vibration total value

sound level

weight

voltage and cycles

power

year of production



640 X 540 X 425 mm

480 X 420 mm

640 X 700 mm

□ ca. 250 X 200 mm

○ ca. 200 mm

0 - 25 mm

300 mm

< 2,5 m/s²

< 70 db(A)

about 50 kg

see rating plate

Manufacturer: Hermann Scharfen GmbH & Co. Maschinenfabrik KG
Ruhrstr. 76-76a, D - 58452 Witten, Tel. 02302/28277-0

1.5. Description of the machine

The blade is driven electrically with a 1-phase or 3-phase gear motor. This gear 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 carriage with the food product has to be moved forward and backward by hand. The food product has to be pushed against the blade by hand.

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.

The hand protection of the carriage and the protecting plate of the end piece holder are made of a break-proof plastic allowed for food processing.

The rifled plate of the end piece holder is made of aluminium

For switching the machine on and off there is used a double red /green push button which is illuminated when the machine is switched on.

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

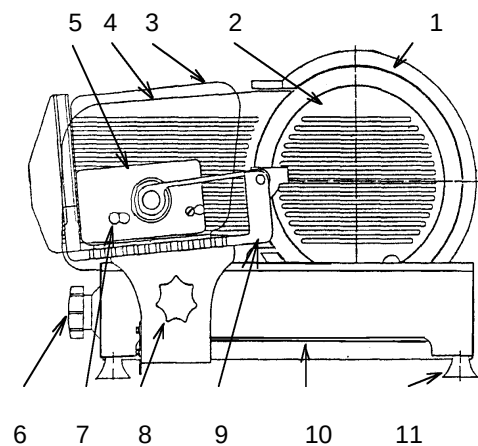
The carriage can only be tilted aside when the thickness plate is closed completely. When the carriage is tilted aside, the thickness plate is locked in this position.

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

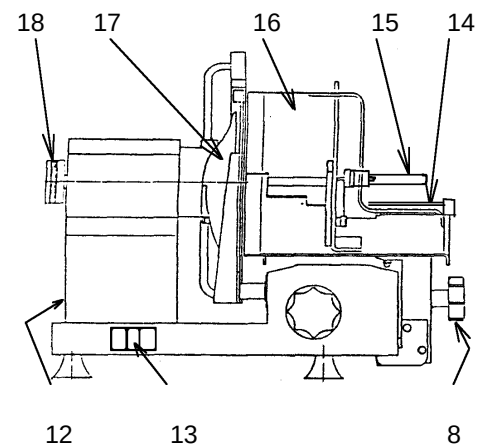
The machine is equipped with the following security equipment:

- no self-starting of the machine after a voltage drop
- double push-button
- carriage with large non-removable hand protection on the operator's side
- fixed ring around the blade, non-removable
- central blade protection, fixed, removable
- locked thickness plate when the carriage is tilted aside
- sharpening device with cover plate in the area of the blade edge

1.6. General plan of the machine



- 1 fixed ring
- 2 blade guard
- 3 protecting plate of end piece holder
- 4 thickness plate
- 5 end piece holder plate
- 6 thickness knob
- 7 knurled knob for end piece holder plate
- 8 star knob
- 9 carriage



- 10 guiding axle for carriage
- 11 rubber foot
- 12 name plate
- 13 push button with signal lamp
- 14 guiding axle end piece holder
- 15 handle
- 16 hand protection carriage
- 17 deflector
- 18 star knob fixing screw blade guard

1.7. Usage

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

- all kinds of sausages
- ham / bacon
- roast meat / cooked ham
- meat
- cheese
- bread

The following products are not allowed to be sliced because of danger to get injured:



- NON FOOD articles
- food products with bones
- deep frozen food products



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

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 room temperature must not go under the limit of 10°C and not over the limit of 40°C.

The machine is drip-proof only.

High air humidity and condensation water may damage the machine. The machine is **not splash-proof**.

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 ES 300
- sharpening device
- these operating instructions

2.2. Installation



The food slicer model ES 300 has to be installed on a plain, horizontal, non-slip and stable surface. 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.

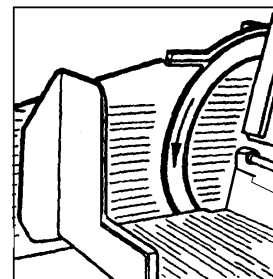
A defective socket-outlet may damage the machine or endanger the operator.

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.
- Signal lamp is illuminated.
- 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)

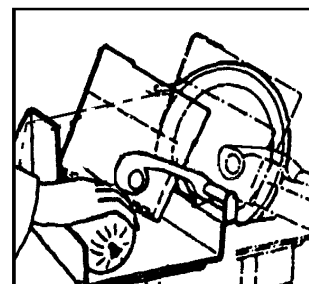
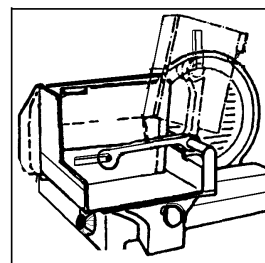
- green push button = main switch on
- red push button = main switch off

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. Operation

- Pull the carriage backwards for loading the carriage.
- Pull back the end piece holder from the blade by using the handle (for security reasons the end piece holder cannot be lifted up within the area < 60 mm distance to the blade)
- Lift up end piece holder
- Lay the food product against the back of the carriage.
- Push the end piece holder by hand towards the thickness plate
- Place the end piece holder upon the food product
- Adjust the thickness of the slices with the thickness knob.
- Switch on the machine at the green main switch.
- Hold carriage and food product by hand.
- Push food product with slight pressure towards the thickness plate.
- Move carriage forward and backward.
- After having finished the slicing procedure turn thickness knob to zero.
- Switch off the machine.



3.5. Slicing of end pieces



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!

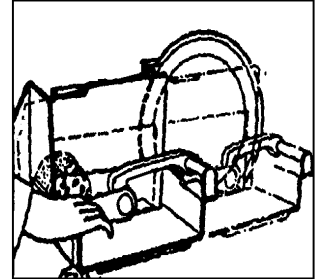
**Never try to hold the food product by hand, you may hurt yourself seriously!
Always use the end piece holder.**

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

- Switch off the machine
- Pull up the end piece holder
- Place the end piece into the carriage as described below in chapter 3.6.

3.6. Slicing end pieces

- Pull the carriage backwards for loading the carriage.
- Pull back the end piece holder from the blade by using the handle (for security reasons the end piece holder cannot be lifted up within the area < 60 mm distance to the blade)
- Lift up end piece holder
- Lay the food product against the back of the carriage.
- Push the food product by hand towards the thickness plate.
- Place the end piece holder behind the food product.
- Adjust the thickness of the slices with the thickness knob.
- Switch on the machine at the green main switch.
- Hold carriage by hand.
- Push end piece holder with slight pressure towards the thickness plate.
- Move carriage forward and backward.
- After having finished the slicing procedure turn thickness knob to zero.
- Switch off the machine.



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:

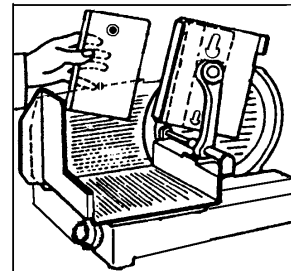
Risk of getting hurt!



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.
- Pull off the plug.
- Close the thickness plate completely by turning the thickness knob to the left.

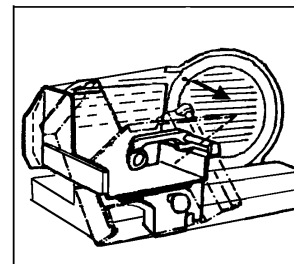


Remove end piece holder plate

- Pull the carriage to the front.
- Pull end piece holder to the back and turn it upwards
- Loosen knurled knob of the end piece holder plate
- Push end piece holder plate slightly downwards
- Take off end piece holder plate
- Turn back end piece holder

Tilt carriage aside

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

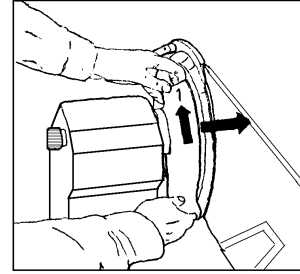


The carriage cannot be tilted aside in case

- the thickness plate is still opened
- 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.



Remove deflector

- Push deflector upwards and take it off to the front.



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

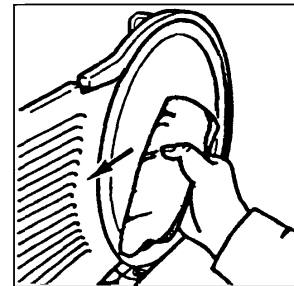
Clean all removed parts separately with warm water. Wash them up with clear water and dry them.

4.3. Cleaning the blade



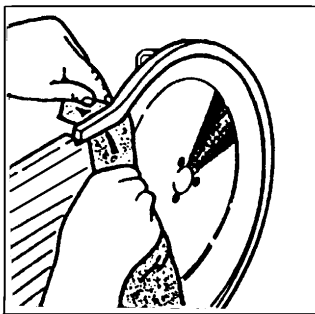
Attention! Risk of getting hurt!

- Make sure that the thickness plate is closed completely
- When the thickness plate is closed completely 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.

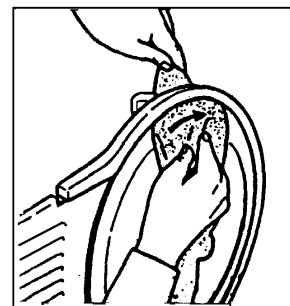


1. Put a moist cloth between the blade and the fixed protecting ring.
2. Turn the blade by hand one complete rotation and push the moist cloth against the protecting ring while turning.

1.



2.



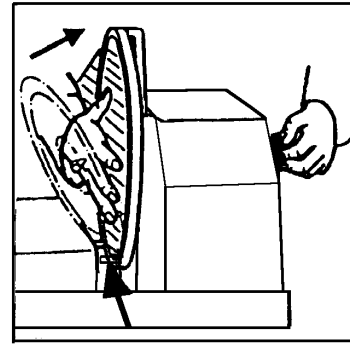
4.4. Reassembling the parts

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 knurled knob



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 loose their efficiency. In case this should happen anyway, clean the stones carefully with washing liquid and a brush.

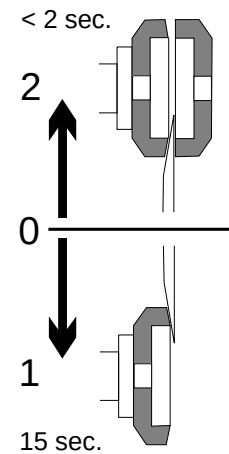
5.2. Mounting the sharpening device

- Open the thickness plate completely.
- Position the carriage in the centre.
- 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 yellow handwheel 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 yellow handwheel 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 yellow handwheel 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

cleaning	detergent	procedure	cleaning device	procedure after 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.

For lubricating only use acid free oil.

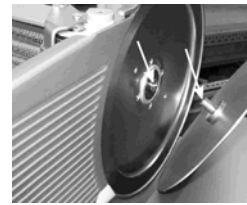
Oiling points:

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 (we recommend Autol Top 2000, which is used in our factory)

Lubricate the thread of the star knob at the bottom of the carriage arm (we recommend Autol Top 2000, which is used in our factory)



7. Trouble Shooting

Trouble

grinding noise

Solution

blade guard has not been mounted correctly
loosen blade guard, mount it again and fix it
deflector has not been mounted correctly
blade guard or deflector are dirty
clean as described in chapter 4.

machine stops automatically
machine is getting warm

short-term voltage drop, switch on the machine again
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.