

# **Operating Instuctions for Food Slicer**

# **Model General 2**

# Contents

1. General Information	3
1.1. Notes regarding the operating instructions	3
1.2. Notes regarding warranty	3
1.3. Notes regarding security	3
1.4. General plan of the machine	
1.5. Dimensions of the machine and technical data	
1.6. Description of the machine	5
1.7. Usage	6
2. Installation and initial operation	6
2.1. Checking the contents of the carton	6
2.2. Installation	6
2.3. Electrical installation	6
2.4. Checking the direction of blade rotation	7
3. Operation	7
3.1. Important notes before switching on the machine	7
3.2. Switch functions	7
3.3. Thickness of slices	7
3.4. Automatic and manual movement of the carriage	7
3.5. Operation	88
3.6. Slicing of end pieces	88
3.7. Placing end pieces into the carriage	88
4. Cleaning	g
4.1. How to proceed with cleaning	9
4.2. Taking off removable parts	9
4.2.1. Taking off the receiving tray	9 9
4.2.2. Taking off the stacking comb	s
4.2.4. Taking off the deflector	g
4.2.5. Taking off the end piece holders	
4.2.6. Tilting the carriage aside	
4.3. Cleaning the blade	
4.4. Cleaning the single parts	
4.5. Reassembling the parts	
5. Sharpening the blade	
5.1. Sharpening device	
5.2. How to proceed for sharpening	
5.3. Sharpening the blade	
5.4. Remove sharpening device	
6. Cleaning and Maintenance	
7. Trouble shooting	
8. Waste disposal	15

#### 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 this 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 this 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 this 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.

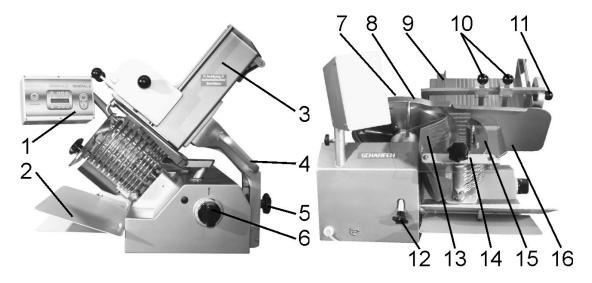
In case the current supply cable or the plug are defective, these parts have to be exchanged or repaired by your after sales service or an electrician.

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. General plan of the machine



- 1 on/off switch
- 2 receiving tray
- 3 carriage
- 4 handle
- 5 star knob
- 6 thickness knob
- 7 blade guard
- 8 fixed ring around the blade
- 9 adjusting bar

- 10 end piece holder
- 11 guiding axle for end piece holder
- 12 fixing screw for blade guard
- 13 deflector
- 14 stacking device with protecting cover
- 15 spiked slice catcher
- 16 thickness plate

#### 1.5. Dimensions of the machine and technical data



overall dimensions 670 x 565 x 600 mm counter space required 580 x 390 mm max. cutting size app. 210 x 175 mm thickness of slices (infinitely variable) 0 – 10 mm Manufacturer: Hermann Scharfen GmbH & Co. Maschinenfabrik KG Ruhrstr. 76-76a, D - 58452 Witten, Tel. 02302/282770

blade diameter 330 mm sound level < 70 db(A)

voltage cycles

weight

s see name plate

app. 75 kg

power

year of production

# 1.6. Description of the machine

This food slicer is fully automatic with integrated stacking device. The carriage is moved automatically.

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 automatic carriage is moved by a strong d.c. motor.

The food product is moved towards the blade by its own 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.

The complete machine body, the thickness plate, the blade guard and the carriage are made of anodised aluminium.

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 there is used the green push button on the display and for switching off there is used the red push button in the display which fulfils also the function of an emergency stop button. When the machine is switch on the signal lamps are illuminated.

Self-starting of the machine after a voltage drop is avoided by an electric controlled contactor.

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

# 1.7. 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

# 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

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.



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

# 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 to following contents:

- · Scharfen food slicer model General 2
- as well as the following equipment:
- · sharpening device
- · these operating instructions

#### 2.2. Installation

The food slicer model General 2 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.

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

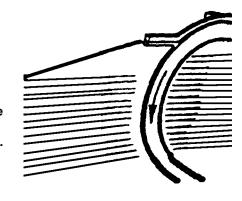
Switch on the machine at the green push button

The signal lamps are 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.

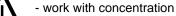


# 3. Operation

#### 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



- never touch the blade

# 3.2. Switch functions

- upper green push button = switching the machine on
- red push button = switching the machine off



#### 3.3. Thickness of slices

The thickness of slices is infinitely variable from 0 to 10 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.



#### 3.4. Automatic and manual movement of the carriage

The machine has to be operated only with automatic carriage movement. The automatic carriage movement has to be disengaged only for cleaning and sharpening. The carriage can then be moved by hand.

automatic movement = lever in upper position movement by hand = lever in lower position

#### Adjusting automatic movement

- Switch off the machine at the red switch button.
- Pull lever in upper position.
- · Move the carriage by hand until it is engaged.
- The carriage can no longer be moved by hand now.

# Disengaging the carriage for manual movement (only for cleaning and sharpening)

- Switch off the machine at the red switch button
- Push lever in lower position.
- The carriage can be moved by hand now.



# 3.5. Operation

- Pull the carriage backwards for loading the carriage (the machine has to be in manual mode, lever in lower position).
- Pull the end piece holder upwards.
- Lay the food product against the back of the carriage.
- Adjust the adjusting bar according to the size of the food product, push the strap for moving it.
- The end piece holder can be moved on the guiding bar according to the size of the food product.
- For this purpose loosen the fixing knob of the end piece holder and move it to the required position.
- Fix the screw of the end piece holder.
- Push the needles of the end piece holder into the food product.
- Adjust the thickness of the slices with the thickness knob.
- Switch on the machine at the green switch.
- The carriage moves automatically.
- · After having finished the slicing procedure turn thickness knob to zero.
- · Switch off the machine.









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!

# 3.6. 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!

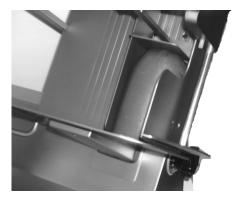
Never hold the end pieces by hand. Always use the end piece holder. In case the end piece should move or be jammed, always proceed as follows:

switch off the machine

- check if the adjusting bar is fixed
- pull the end piece holder upwards
- only then place the end piece into the carriage as described below:

# 3.7. Placing end pieces into the carriage

- switch off the machine at the red main switch
- turn thickness knob to zero, otherwise there is a risk of getting hurt.
- pull end piece holder upwards
- lay the food product against the back of the carriage
- adjust the adjusting bar according to the size of the food product, push the strap for moving it
- move the end piece holder on the guiding axle according to the size of the food product.
- push end piece holder downwards and place it behind the food product
- adjust the thickness of slices with the thickness knob
- switch on the machine
- the food product is moved towards the blade by its own gravity
- the carriage is moved automatically
- when the slicing procedure is terminated turn slice thickness to zero



switch off the machine



Never try to reload 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:

Attention: 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

#### 4.2. Taking off removable parts

#### 4.2.1. Taking off the receiving tray

Lift up the receiving tray slightly and pull it backwards. Now you can take the receiving tray off.

# 4.2.2. Taking off the stacking comb

It is very important that the spiked slice catcher and the stacking comb are completely separated. In case the spikes of the spiked slice catcher are situated between the stacking comb proceed as follows:

- switch on the machine shortly
- stop the machine when the carriage is in back position
- spiked slice catcher and stacking comb are completely separated now
- take off the stacking comb (only in one direction upwards) by pulling the star knob.



When the spiked slice catcher is still situated between the stacking comb, never try to take off the stacking comb by turning and pulling it at the same time. Be turning the stacking comb out of its position while pulling it the plate springs will be worn out quickly and can break.

#### 4.2.3. Taking off the spiked slice catcher

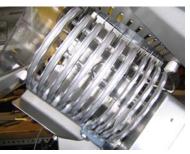
After the stacking comb has been pulled off, proceed as follows:

- switch on the machine shortly
- stop the machine when the carriage in front position
- take off the spiked slice catcher (only in one direction upwards)
   by pulling the loop of the spiked slice catcher

# 4.2.4. Taking off the deflector

After the spiked slice catcher has been pulled off, proceed as follows:

- unscrew the two knurled knobs of the deflector
- take off the deflector





# 4.2.5. Taking off the end piece holders

- adjust the manual movement of the carriage (see chapter 3.4)
- pull of the plug
- close the thickness plate completely
- · pull the carriage to the front
- loosen the fixing screws of the end piece holders at the guide axle
- take off both end piece holders



# 4.2.6. Tilting the 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
- the carriage has not been adjusted to manual movement.

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





# 4.2.7. Taking off the blade guard

- take off the 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.



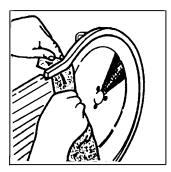
The machine is only drip-proof. Therefore do not use high pressure cleaning devices, water hoses or similar devices. Furthermore you must not pour water over the machine. Danger of short circuit or machine defect. In such cases any claims regarding warranty will be refused.

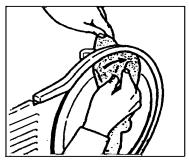
#### 4.3. Cleaning the blade

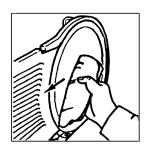


# Attention! Risk of getting hurt!

- clean the inside of the blade with a wet cloth by wiping from the centre of the blade to the outside
- proceed for the backside of the blade in the same way
- dry the inside and the backside of the blade carefully







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

1. 2.

# 4.4. Cleaning the single parts

Clean the single parts separately in warm water, wash up with clear water and dry the parts, please also see chapter 6. Cleaning and maintenance.

# 4.5. Reassembling the parts

Reassemble the parts in reverse order  $(4.3. \rightarrow 4.1)$ 

#### Attention! Risk of getting hurt!

- · always work 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 star knob by hand
- never work with violence
- tilt the carriage back and fix it with the star knob
- position the end piece holders on the guiding axle and fix them
- place the deflector on the bolts and fix it with the knurled knobs







When mounting the **spiked slice catcher** pay attention to the following: There is a red mark on the upper shaft and a red mark on the edge of the bushing of the spiked slice catcher. See to it that the red marks are building "one line". Then push the spiked slice catcher onto the shaft so the shaft is completely covered by the bushing of the spiked slice catcher.

When having done so switch on the machine shortly in order to move the spiked slice catcher back towards the deflector.



Now you can mount the **stacking comb** onto the second shaft. Please see to it that the small bolt of the spiked slice catcher is situated correctly between the shaft and the plate springs. Only push the stacking comb, do not turn it as otherwise the plate springs can break.





Check again the complete machine. Only after having checked the machine plug it in, engage the carriage for automatic operation and work with the machine.

# 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



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. How to proceed for sharpening

- Adjust the machine to manual operation (see chapter 3.4)
- · 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.

# < 2 sec. 2 0 1 15 sec.

# 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. Cleaning and Maintenance

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

#### Exchanging the blade

Remove the blade guard as described in point 4.2.7.



Upon request there will be supplied a knife removal device. The knife removal device has to be mounted on the blade. For this purpose put the two bolts of the knife removal device into the borings of the blade and fix the device with the star knobs.

Loosen the 4 fixing screws of the blade and take the blade off.

Take off the knife removal device and mount it on the new blade.

Mount the new blade on the machine and fasten it with the 4 fixing screws. Take off the knife removal device and mount the blade guard.



# 7. Trouble shooting

<u>trouble</u> <u>solution</u>

**grinding noise** 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

metallic sound check if spiked slice catcher and stacking device

Page 14





have been mounted correctly after cleaning

machine stops automatically short-term voltage drop, switch on the machine again

machine is getting warm wall socket and plug have to be checked by

an electrician.

sausage skin tears sharpen the blade and take off burr

# 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.