

# **Operating instructions**

Grain mill HM 120

Translation of the original operating instructions



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#### 1 Welcome ...



# ... to our world of milling, kneading, baking, and pasta making!

Häussler stands for doing it yourself. Our devices will give you fabulous delicacies which will treat your taste buds to a truly unique experience. Lose yourself in our world of milling, kneading, baking, grilling, and pasta making.

Häussler stands for uncompromising quality – Made in Germany. Decades of experience and thousands of devices delivered worldwide speak for themselves.

Häussler stands for customer service. Even after you have made your purchase, you can rely on us to be at your side – with no ifs or buts. We want you to enjoy your device for many years, to keep picking up tips and discovering new recipe ideas from us.

Great fun and consistent success.

The Familien Haußler-

# 2 For your safety

# List of symbols

Des	Description of symbol		
$\triangle$	Hazard symbol		
•	Call to action		
i	Notice		
•	Bullets		

Tab. 1:List of symbols

#### Intended use

Milling of various types of grain including: wheat, spelt, rye, Khorasan wheat, amelcorn, small spelt, barley, corn, rice, milo, buckwheat (including husks). A very few types of oily seed may be added to the mill.

#### **Basic rules**

- ▶ Read the operating instructions carefully before putting the device into operation.
- Note the safety instructions and warnings in the operating instructions.
- ► The device must only be operated if it is in perfect working order.
- ► Keep the operating instructions readily available with the device.
- ▶ Do not pass on the device without these operating instructions.
- ► Always carry out a visual inspection before starting up the device.

# Safety instructions

# **△** Allergic reaction to flour dust

▶ If you experience allergic symptoms, seek medical advice immediately.

# **△** Risk to life from flour dust explosion

- Avoid flour dust turbulence.
- ▶ There must be no ignition sources in the hazardous area.

## ⚠ Pulling in and severing of limbs by rotating parts

- ▶ Do not leave the device unattended when in operation.
- Keep the device out of the reach of children younger than 14 years and always supervise children.
- ▶ Do not start up the device without the guard and housing parts.
- ▶ Do not reach into the rotary air lock and do not take hold of the drive belts during operation.
- ► Always switch off the device before commencing maintenance work or troubleshooting.

# **⚠** Risk of falling due to tripping and slipping

- Clean the area around the platform and the steps at regular intervals.
- ▶ Always keep one hand on the rail when climbing the steps.
- ▶ When carrying loads onto the steps, check that the weight can be borne safely.

# **△** Crushing of limbs when setting up the mill

- ▶ The device is heavy; take care during transport.
- ▶ Prior to lifting, check that the weight can be borne safely.
- Prior to lifting the mill or any of its components, secure the load against crashing down.
- ▶ The device must always be set up on a stable surface.

# △ Damage to the motor system due to heavy weight

- ▶ When carrying loads, check that the weight can be borne safely.
- ▶ Adopt the correct ergonomic posture when filling the mill.
- ► Lift heavy loads from your legs.

# Signs and warnings

- For the safety of those persons working on the machine, safety notices in the form of ANSI-compliant safety stickers have been attached at accessible hazard points.
- Safety stickers must be checked regularly to ensure that they are present and correct.
- ► Check that the safety stickers are always visible and legible.
- ► Remove soiling with a damp cloth.
- ▶ Damaged or illegible safety stickers must be replaced with new ones which should be attached to the machine in the appropriate places.

i The series of photographs below shows where the necessary ANSI safety stickers are attached to the machine.





"Crush hazard"

Position: mill, on drive belt cover, to right of motor.





"Burn hazard"

Position: mill, on motor, at front, on lower cover, center.



"Rotating parts inside"

i Position: sifting device, above the two doors, center.







"Crush hazard" (a), "Burn hazard" (b)

Position: sifting device (a) on drive belt cover, centre; (b) in center on motor, visible from above.

# 3 Product overview

# **Product description**

The HM 120 is manufactured from a combination of stainless steel and wood. As well as looking good, this design has significant advantages:

Thanks to the self-supporting tubular frame construction and the relatively low weight, the carrier structure is extremely stable and torsion-free.

The mill housing and the sifting device are made from Swiss pine. This has the advantage that condensation cannot form and there is very little risk of mould. Furthermore, the resin-scented Swiss pine acts as a pest-repellant. Coated with natural varnish, the exterior of the equipment is easy to clean.

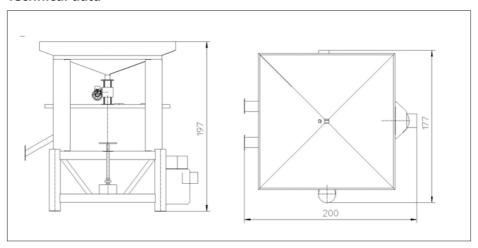
The millstones are clearly visible behind glass, making the mill a real eye-catcher even in areas that are frequented by customers.

The quantity of grain fed into the mill can be precisely controlled with the patented electric metering device. The upstream natural magnet separates out any iron parts. The low speed of the millstones protects the nutrients, milling the grains to create wonderfully soft wholegrain flour. Heat rise is also minimized.

There is an infinitely adjustable handwheel for setting the fineness of the flour. The mill can be retrofitted with a flour sifting device at any time.

Häussler grain mills are quick and easy to operate and maintain. Designed for continuous operation and setting a high quality standard, the mill is an excellent long-term investment.

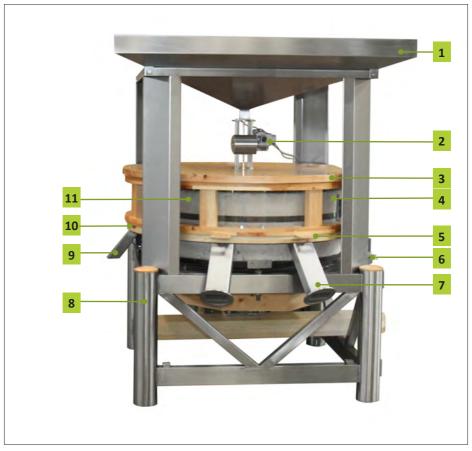
# **Technical data**



Name	Value
Width	177 cm
Height	197 cm
Depth	200 cm
Weight	1705 kg
Motor output	13 kW
Power supply	480 V / 60 Hz
Stone revolutions/min	195
Funnel content	approx. 285 kg
Stone diameter	120 cm
Output fine wholegrain, approx.	140 kg/h

Tab. 2: Technical data

# 4 Scope of supply



No.	Designation	No.	Designation	No.	Designation
1	Funnel	5	Slider for sack filling	9	Outfeed for sifting device
2	Rotary air lock	6	Adjusting wheel	10	Slider for sifting device
3	Wooden cover	7	Outfeed for sack filling	11	Perspex ring
4	Millstone	8	Tubular frame		

Tab. 3: Scope of supply

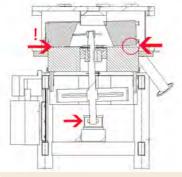
## Setting up the device

#### **△** CAUTION

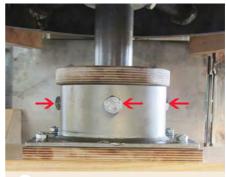
#### Risk of crushing when setting up the mill

Injuries to limbs

- ▶ The device is heavy; take care during transport.
- ▶ Prior to lifting, check that the weight can be borne safely.
- Prior to lifting the mill or any of its components, secure the load against crashing down.
- ▶ The device must always be set up on a stable surface.
- Häussler runs in its mills prior to delivery. Due to vibrations during transport and prevailing local conditions, the mill must be realigned on site.
- i When setting up the mill, take care to ensure that it is perpendicular and in true alignment. You may need to use a spirit level to check this.
- instructions.
- ► Insert the mains plug into the socket.
- Switch on the main switch.



- 1. Contact point of the stones
- With the machine running, slowly turn the adjusting wheel until the stones make contact.



- 2. Align the millstone.
- Turn the three adjusting bolts to align the millstones until the grinding noise stops.
- ► Turn the adjusting wheel until a grinding noise can be heard again.
- ► Continue with the alignment process until the grinding noise evens out.

# 5 Milling

#### **△ WARNING**

#### Risk to life from flour dust explosion

Burns, serious injuries, death. Material damage to machine and building

- Avoid flour dust turbulence.
- There must be no ignition sources in the hazardous area.
- ► The entire mill and its surroundings must be cleaned at regular intervals to remove flour and dust

#### **△ WARNING**

Allergic reaction to flour dust

Allergic reaction

▶ If you experience allergic symptoms, seek medical advice immediately.

#### **△ WARNING**

Pulling in and severing by rotating parts

Injuries to hands and forearms

- ▶ Do not start up the device without the guard and housing parts.
- ▶ Do not reach into the rotary air lock and do not take hold of the drive belts during operation.
- Always switch off the device before commencing maintenance work or troubleshooting.

#### **△** CAUTION

Risk of falling due to tripping and slipping

Injuries to all parts of the body

- Clean the area around the platform and the steps at regular intervals.
- ► Always keep one hand on the rail when climbing the steps.
- When carrying loads onto the steps, check that the weight can be borne safely.

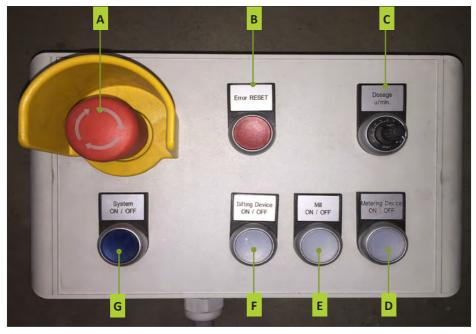
# **△ CAUTION**

# Risk of injury due to heavy weight

Damage to the motor system due to heavy weight

- ▶ When carrying loads, check that the weight can be borne safely.
- ▶ Adopt the correct ergonomic posture when filling the mill.
- Lift the weight from your legs.

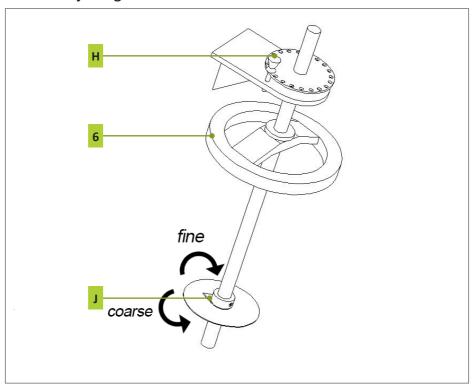
# HM 120 control panel



No.	Designation	No.	Designation
Α	"EMERGENCY OFF" switch	E	"Mill ON/OFF"
В	"Error RESET"	F	"Sifting Device ON/OFF"
С	"Dosage u/min"	G	"System ON/OFF"
D	"Metering Device ON/OFF"		

Tab. 4: HM control panel120

# HM 120 adjusting wheel



No.	Designation	No.	Designation
Н	Fixing bolts	6	Adjusting wheel
J	Pointer for fineness		

Tab. 5: HM 120 adjusting wheel

- In the event of faults and/or imminent danger, press the "EMERGENCY OFF switch"

  A
- ► Toactivate the "EMERGENCY OFF switch", A press it in.
- ► To deactivate the "EMERGENCY OFF switch" A, turn the "EMERGENCY OFF switch" A clockwise until it is pushed back out by the internal spring and locks.

# Switching on the machine

- i The names of the parts are listed in Tab. 3 on page 10, Tab. 4 on page 13, and Tab. 5 on page 14.
- Before switching on the machine, turn the adjusting wheel to move the millstone up.
- i If grain is too moist, the millstone may become soiled, leading to the formation of mould.
- ▶ Do not mill grain with a residual moisture content of more than 13 15%.
- ► Unlock the "EMERGENCY OFF switch" A by pulling the switch out and turning it clockwise.
- ▶ Next, open the slider for the flour outfeed, sack filling 5, or the sifting device 10.
- ► Then switch on the sifting device 10, if there is one. Follow the operating instructions for the sifting device, if you are using one.
- ► Press the "Mill ON/OFF" switch E.
- i Wait for the machine to reach full speed. The controller disables metering so that the millstones are not blocked by grain when the motor starts up.
- ► Turn the adjusting wheel 6 slowly towards "Fine" until the millstones just about make contact.
- i You will hear an audible grinding noise when the stones come into contact.
- ► Tighten the fixing bolts H to secure the adjusting wheel 6.
- ► Turn the "Dosage u/min" switch C to the center position.
- ► Press the "Dosage u/min" switch C.
- i Adjust the dosage controller ("Dosage u/min" E) to vary the throughput rate.
- ► Set the adjusting wheel 6 to the required milling fineness while the grain is being fed into the mill.
- ► Turn the fixing bolts H to secure the adjusting wheel 6.

# Maximum/optimum fineness

i Once the grain to be milled has been fed in and the adjusting wheel 6 has been set to "Fine", the top millstone is supported by the grain. Maximum/optimum milling fineness is recognizable because the adjusting wheel 6 can be moved to this setting easily, with a little play.

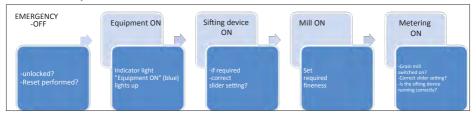
# Switching off the equipment

- ► Press the "System ON/OFF" switch G.
- The equipment switches itself off automatically in the following predefined order: metering device (duration approx. 18 seconds), mill (duration approx. 18 seconds), sifting device (duration approx. 2 min). Do not intervene in the process. This order of events results ensures that there is no grain left in the milling chamber after the millstones have come to a standstill. Any leftover grain would cause a blockage of the millstones on starting up.
- ► After milling, turn theadjusting wheel 6 to set the mill to "Coarse".

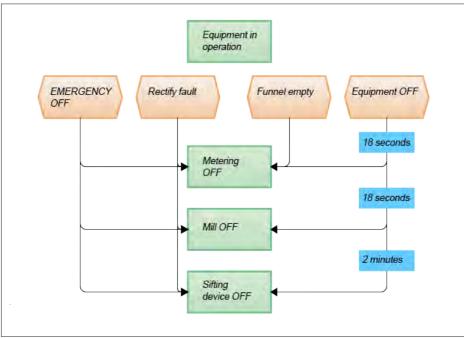
# **Functional diagram**

i The switch-on and shutdown cycles are illustrated in the schematic functional diagram below.

#### Switch-on sequence



#### Shutdown sequence



# 6 Cleaning

#### **△ WARNING**

Danger to life from mains voltage 480 V / 60 Hz

Electric shock

- Disconnect the device from the power supply.
- ▶ The device can be cleaned with a damp cloth only.

#### **△** CAUTION

Danger of crushing by rotating parts

Injuries to limbs

Prior to cleaning, disconnect the device from the power supply.

#### **ATTENTION**

Damage caused by incorrect cleaning

Water can get into the device and damage its inner workings

Do not use a water jet or high-pressure cleaner to clean the device.

#### **ATTENTION**

Damage caused by incorrect cleaning

Abrasive objects and corrosive chemicals can damage the mill

- ▶ Do not use pointed or sharp objects to clean the device.
- Do not use abrasive chemicals to clean the device.
- i Cleanliness is a mandatory requirement for hygienic mill production.
- i Before taking the mill out of service for a prolonged period, remove all traces of flour and dust from the inside of the mill.
- i To prevent dust explosions, the entire mill and its surroundings must be cleaned at regular intervals to remove flour and dust.
- i Clean the steps and platform at regular intervals to keep the surfaces safe.
- i Clean the mill at least once or twice a year.
- i Coarse-mill 25 kilos of natural rice through the mill every 1 to 2 months.
- i Rice is hard and odorless. It cleans the pores of the millstones and the milling chamber very effectively.

i There should be virtually no traces of grain or flour between the stones after running empty. In this case, cleaning is not necessary. However, if you do need to clean the millstones to resolve a fault, follow the instructions under "Cleaning millstones".

#### Disconnect the power supply

- Switch off the device.
- Switch off the main switch.

#### Disassembly

- Unscrew the bolts on the upper section.
- ▶ Remove the cover and the funnel.
- ► Lift off the perspex ring.

#### Clean the parts

- ▶ Use a long-handled or short-handled brush to clean the funnel. You may also need to wipe the funnel with a damp cloth.
- Use a short-handled brush, a vacuum cleaner or similar to clean the grain infeed and the flour area of flour and dust residue.
- ▶ Use a long-handled or short-handled brush to clean the perspex. You may also need to wipe the perspex with a damp cloth.

#### Mill assembly

- ► Reattach the perspex ring.
- ▶ Reattach the cover and funnel.
- Screw the bolts back into place.

# Cleaning the millstones

- Remove the cover as described under "Disassembly".
- ▶ Remove and clean the runner stone as illustrated in the schematic diagram.
- Please note that the illustrated instructions below are intended to serve solely as a reminder. They are not original images.
- ► Use suitable lifting gear, e.g., a crane or lift truck, for assembly and disassembly. Ensure that the load is sufficiently secured to prevent crashing down.

#### Removing the runner stone



#### Release

► Turn the connecting bolts one revolution to release.



#### 3. Hammer strike

► Lightly strike the connecting bolt with a hammer.



5. Lift off

► Lift off the runner stone.



# 2. Set the adjusting wheel

► Set the adjusting wheel to "Fine" until the wheel has some play.



#### 4. Unscrew fully

► Fully unscrew the connecting bolt once the runner stone has released.



#### 6. Clean

Use a long-handled or short-handled brush to clean the stones. Use a wire brush to remove stubborn stains.

## Runner stone assembly

- ► Replace the runner stone.
- ► Turn the connecting bolt one revolution to screw it in.
- ► Turn the adjusting wheel to "Coarse".
- ► Tighten the connecting bot.
- ► Reassemble the mill as described under "Mill assembly".

#### 7 Maintenance

#### **△ WARNING**

Danger to life from mains voltage 480 V / 60 Hz

Electric shock

- Always disconnect the device from the power supply before commencing maintenance work.
- Only qualified specialist personnel are permitted to carry out maintenance work on electric components.

#### **△ WARNING**

Pulling in and severing of limbs by rotating parts

Injuries to fingers, hands, and forearms

- Always switch off the device before commencing maintenance work or troubleshooting. Do not start up the device without the guard and housing parts.
- ▶ Do not reach into the rotary air lock and do not take hold of the drive belts during operation.

#### **△** CAUTION

Risk of cutting due to sharp edges

Injuries to fingers and hands

Wear protective gloves during maintenance.

i The rotary air lock 2 does not require any maintenance.

# Oiling the thread

► Lightly oil the thread of the adjusting wheel 6 every 3 to 4 weeks.

# **Lubrication of bearings**

- ▶ Lubricate the bearing mount of the drive shaft after every 50 hours of operation.
- ► Top up the bearing with lubricating grease.
- When lubricating grease starts to leak out of the top of the bearing, the bearing is full.

# Checking and setting the tension of the drive belt

- ► Check the tension of the drive belt after the first 5 hours of operation. Retension the belt if necessary.
- ► Check the drive belt after every 50 hours of operation.
- i You need a Phillips screwdriver to remove and assemble the cover.
- i You need a size A/F 17 wrench to set the tension of the drive belt.

#### Disconnect the power supply

Switch off the main switch.

#### Remove the protective cover

▶ Unscrew the bolts and set the protective cover down on the motor.

#### Check the tension of the drive belt

- ► Take hold of a drive belt with one hand and turn it through 90 degrees.
- i To turn the drive belt through more than 90 degrees, you must retension the belt.

#### Retension the drive belt

- Unscrew the locking nuts.
- ▶ Turn the adjusting bolt to set the tension of the drive belt.
- ► Then screw the locking nuts tight again.

#### Assemble the protective cover

- ▶ Lift up the protective cover and line it up with the protective motor housing.
- Screw the protective cover back onto the protective motor housing.

# 8 Troubleshooting

- in the event of a fault, the machine will automatically switch itself off according to a predefined shutdown sequence (metering device, mill, sifting device) and the "Error RESET" button flashes.
- ▶ Unload the mill by setting the adjusting wheel 6 to "Coarse".
- ▶ Rectify the fault as described in the table below.
- ► Acknowledge the fault by pressing the "Error RESET" button B.
- Switch on the mill as described in the "Switching on the machine" chapter on page 15.

Fault	Cause	Solution	
Mill is shutting down during milling	Motor is overheating because:	Allow the motor to cool down.	
	<ul> <li>The fan blades are soiled</li> </ul>	► Clean the fan blades.	
	33.134	► Clean the motor.	
	<ul><li>The motor is soiled</li><li>The drive belt tensi-</li></ul>	<ul><li>Retension the drive belt (page 22).</li></ul>	
on is too low	<ul> <li>Have the mains voltage checked and if necessary</li> </ul>		
	<ul><li>The mains voltage is not correct</li></ul>	corrected by an electrician.	
		<ul> <li>Open the motor circuit breaker inside the switch box.</li> </ul>	
Rotary air lock metering wheel jammed	Foreign bodies inside the metering device	<ul> <li>Switch off the machines.</li> <li>Switch off the main switch.</li> <li>Remove the foreign bodies.</li> </ul>	

# Troubleshooting

Fault	Cause	Solution
Motor or millstone jammed	Very hard grain, e.g., corn	<ul> <li>Switch off the mill.</li> <li>Set the adjusting wheel to "Coarse".</li> <li>Switch the mill back on.</li> <li>With the mill running, slowly set the required fineness.</li> </ul>
	Flour outfeed blocked	<ul> <li>Switch off the machines.</li> <li>Clean the flour outfeed.</li> <li>Check the slider setting and correct it if necessary.</li> </ul>
Millstone clogged	too moist very coarse an will absorb the  Remove the coperspex ring as	<ul> <li>Mill dry rice. Dry rice is very coarse and hard, and will absorb the soiling.</li> <li>Remove the cover and perspex ring as described</li> </ul>
	Fine milling of oily seeds without adding other grains	<ul> <li>in the "Cleaning" chapter.</li> <li>Use a wire brush to remove the soiling around the outer edge of the stone.</li> <li>If necessary, clean the</li> </ul>
	Excess heat rise of grain due to too fine a setting, leading to clogging	millstones as described in the "Cleaning" chapter.
	Soiled ventilation grilles	<ul> <li>Clean the ventilation grilles with a vacuum cleaner.</li> <li>You may need to retrofit a extraction unit.</li> </ul>

Fault	Cause	Solution
Mould in the mill	Ambient air or grain is too moist	<ul> <li>Switch off the mill.</li> <li>Dismantle the mill as described in the "Cleaning" chapter.</li> <li>Lift off the millstone.</li> <li>Wipe the moisture from the affected parts with vinegar water.</li> <li>Allow to dry completely.</li> <li>Ensure that the air in the room is dry.</li> <li>Do not mill grain with a residual moisture content of more than 15%.</li> </ul>

Tab. 6:Troubleshooting

Should further problems occur, please call our service team on the following number:

+49 73 71/93 77-13

# 9 Disposal

- i Used equipment contains valuable materials that can be recycled and put back into circulation.
- ► Therefore, you should suitable collection systems to dispose of used equipment.



# 10 For specialist personnel: Circuit diagrams and parts lists

#### **△ WARNING**

The following pages are intended for trained technical personnel only!

- ▶ Do not undertake work on the equipment without seeking assistance.
- i Take the operating instructions with you to your specialist dealer.

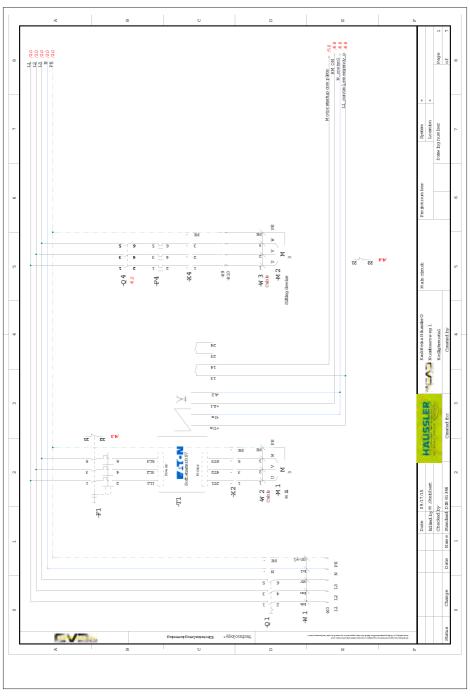
# **Circuit diagrams**

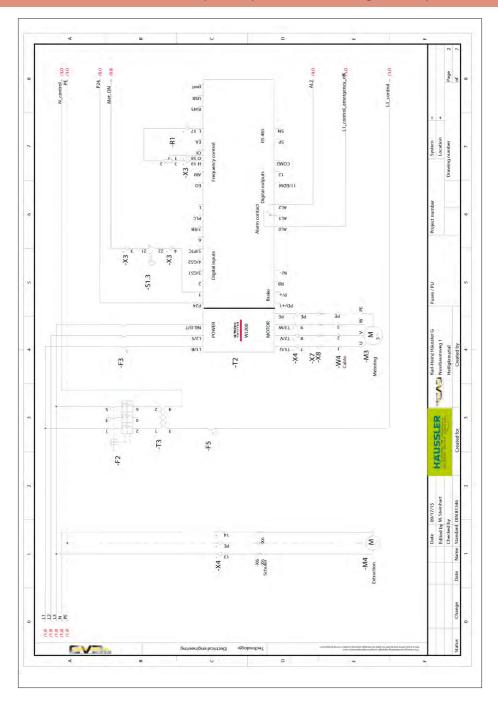
#### **△ WARNING**

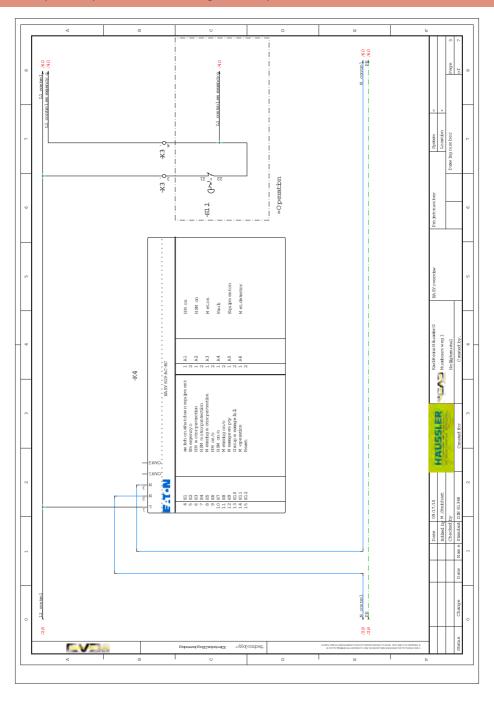
Danger to life from mains voltage 480 V / 60 Hz

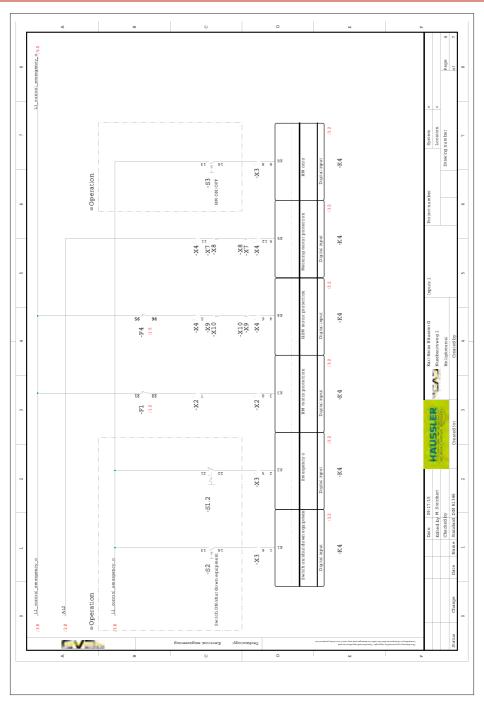
Electric shock

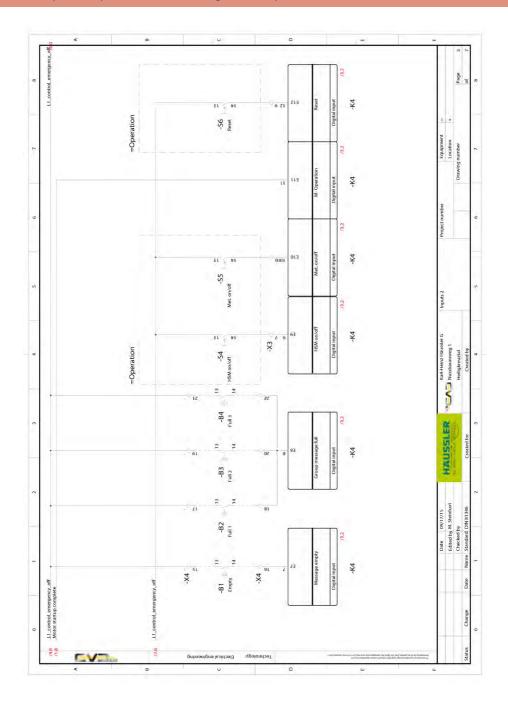
- Always disconnect the device from the power supply before commencing repair work.
- Never carry out work on the equipment electronics.
- If you have problems with the electronics, consult a trained electrician.

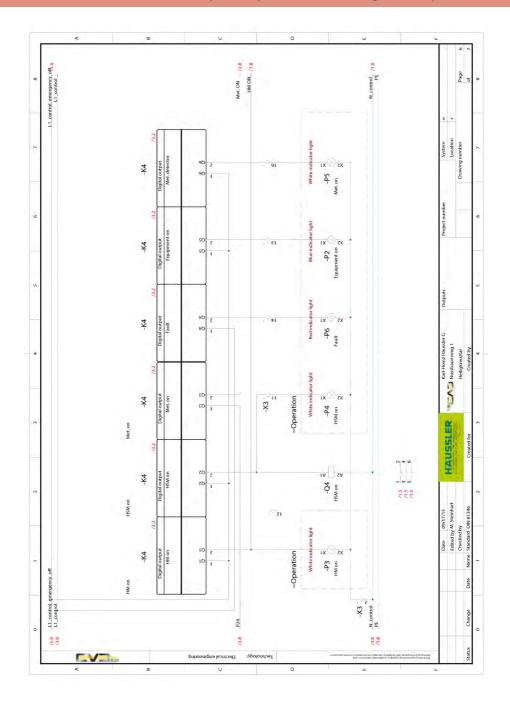




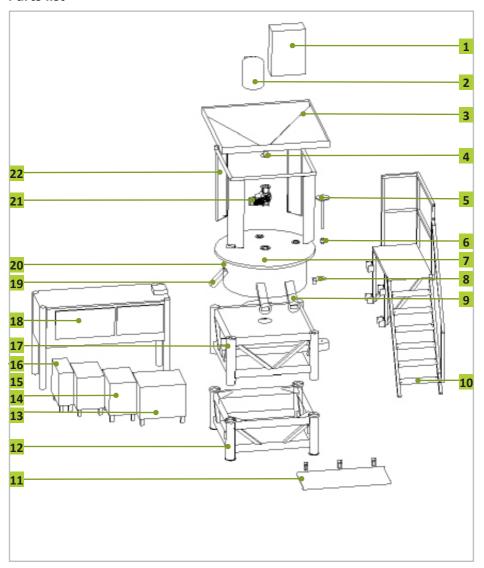








# **Parts list**



# For specialist personnel: Circuit diagrams and parts lists

Item no.	Name
1	Electric control box
2	Motor
3	Funnel
4	Funnel mount
5	Adjusting wheel
6	Pointer for fineness
7	Wooden cover
8	Indicator plate for fineness
9	Flour outfeed for sack tray
10	Platform with steps
11	Sack tray
12	Base frame
13	Large flour box
14	Medium flour box
15	Medium flour box
16	Small flour box
17	Mill frame
18	Flour sifting device
19	Flour outfeed for sifting device
20	Millstone
21	Metering device
22	Funnel frame

# 11 Accessories

#### Sifting device



The flour sifting device separates freshly milled wholegrain flour into 3 sections (various fine flours, semolina and bran) depending on the sifting method selected. The flour sifting device can be connected at any time.

Weight without boxes: 176 kg Weight with boxes: approx. 215 kg

Product ref.: 303353

#### Sack tray



The sack tray enables flour sacks to be placed directly underneath the flour ejectors.

Weight: 11 kg

Product ref.: 303361

#### Steps with platform



The steps provide you with a means of filling the mill safely and in an ergonomically correct way. They also make it easier to carry out cleaning and maintenance work.

Weight (platform with steps): 63.8 kg

Product ref.: 303358

#### **Base frame**



The base frame provides a safe and secure means of raising the mill for operation with the sifting device.

Weight: approx. 74 kg Product ref.: 303355

#### **Empty detector**



You can use the empty detector to monitor the fill level of the funnel.

When the funnel is empty, the mill switches off automatically. This leaves you free to concentrate on other things as you do not have to constantly think about the fill level. You are also protecting the equipment, because the mill will not continue to operate once it is empty.

Product ref.: 303364

#### **Full detector**



The full detector monitors the sifting device. The equipment shuts down if there is a flour blockage. This prevents damage to both the sifting device and the mill.

Product ref.: 303365

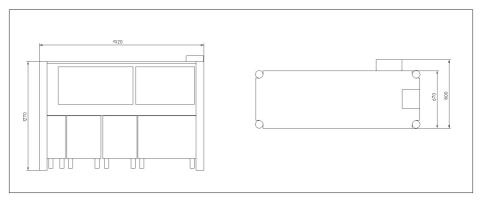
# 12 Sifting device



# **Product description**

The flour sifting device separates freshly milled wholegrain flour into 3 sections (various fine flours, semolina and bran) depending on the sifting method selected. The flour sifting device can be connected at any time.

# **Technical data**



Name	Value		
Width	1920 mm		
Height	670 mm		
Depth	800 mm		
Weight without boxes	176 kg		
Weight with boxes	with boxes approx. 215 kg		
Motor output	6.6 kW		
Power supply	480 V / 60 Hz		
Max. capacity	Large flour box approx. 175 L		
of the flour boxes	Mediumflour box approx. 101 L		
	Small flour box approx. 53 L		

Tab. 7: Technical data

# 13 Commissioning



No.	Designation	No.	Designation	No.	Designation
1	Flour infeed frame	4	Medium flour box 1	7	Safety door
2	Flour chamber with sifting device	5	Medium flour box 2	8	Sifting ele- ment
3	Large flour box	6	Small flour box	9	Housing

Tab. 8: Scope of supply

- i A list of the sifting device parts appears in Tab. 8 S.40.
- i A list of the mill parts appears in Tab. 3 S10.

## Setting up the device

#### **△** CAUTION

Crushing of limbs when setting up the mill

Injuries to limbs

- ► The device is heavy; take care during transport.
- Prior to lifting, check that the weight can be borne safely.
- Prior to lifting the mill or any of its components, secure the load against crashing down.
- ► The device must always be set up on a stable surface.

- i If a sifting device is connected to the mill, you must use the designated base frame to raise the mill. Use suitable lifting gear, e.g., a crane or lift truck, for assembly. Ensure that the load is sufficiently secured to prevent crashing down.
- i Work in twos when lifting attachments.



#### 1. Base frame

- Set the base frame down on a solid and even surface. You may need to use a spirit level to check this.
- ▶ Set the mill down on the base frame.



#### 2. Platform

 Lift the platform for assembly on the mill. Use a lift truck to do this, for example.



## 3. Screw-mounting of the platform

Use the four bolts and washers supplied with each of the four mounts to screw the platform to the mill.



## 4. Steps

► Work in twos to lift the steps for assembly on the platform.

## Commissioning



#### 5. Rail

Use the four bolts and washers supplied to screw the rail to the mounts.



## 6. Left-hand steps

 Use the two bolts and washers supplied to screw the left-hand steps to the mount.



## 7. Right-hand steps

Use the two bolts and washers supplied to screw the right-hand steps to the mount.



#### 8. Align the steps

► Unscrew the adjustable feet at the end of the steps until they are resting securely on the ground.



## 9. Attach the sack tray

► Work in twos to attach the sack tray in the required position.



#### 10. Preparation for assembly

- Unscrew the bolts on the flour infeed frame 1.
- Lift off the flour infeed frame 1 and attach it to the outfeed for the mill's sifting device 9.



## 11. Sifting device assembly

- Position the sifting device so that the "Outfeed for sifting device"
   (mill) and "Mill infeed"
   (sifting device) openings are located one above the other.
- Slide the flour infeed frame 1 back over the sifting device and screw the frame tight. If necessary, correct the position of the sifting device as you do this.

## Cleaning the device for the first time

▶ Prior to first use, wipe all parts with a damp cloth and allow to dry.

## Connecting the device



- 1. Insert the mains plug
- ► Insert the mains plug for the sifting device into the mill.



- 2. Lock the mains plug
- Lock the main switch with the catch lever by carefully pushing back the main switch and inserting the lever from below.

# 14 Sifting

#### **△ WARNING**

#### Risk to life from flour dust explosion

Burns, serious injuries, death; material damage to machine and building

- Avoid flour dust turbulence.
- ▶ There must be no ignition sources in the hazardous area.
- ► The entire mill and its surroundings must be cleaned at regular intervals to remove flour and dust

#### **△ WARNING**

#### Allergic reaction to flour dust

Allergic reaction

▶ If you experience allergic symptoms, seek medical advice immediately.

#### **△ WARNING**

#### Pulling in and severing by rotating parts

Injuries to hands and forearms

- ▶ Do not start up the device without the guard and housing parts.
- Do not take hold of the drive belts during operation.
- Always switch off the device before commencing maintenance work or troubleshooting.

## Switching on the machine

- i A list of the parts appears in Tab. 3 on page 10, Tab. 4 on page 13, and Tab. 5 on page 14.
- Before switching on the machine, turn the adjusting wheel to move the millstone up.
- i If grain is too moist, the millstone may become soiled and mould can form.
- ▶ Do not mill grain with a residual moisture content of more than 13 15%.
- ► Unlock the "EMERGENCY OFF switch" A by pulling the switch out and turning it clockwise.
- ▶ Next, open the slider for the flour outfeed, sack filling 5, or the sifting device 10.
- ▶ Press the "System ON/OFF" switch **G** to switch on the system.

- ▶ Then switch on the sifting device.
   ▶ Press the "Mill ON/OFF" switch E.
   i Wait for the machine to reach full speed. The controller prevents metering from being activated so that the millstones are not blocked by grain when the motor starts up.
   ▶ Turn the adjusting wheel 6 slowly towards "Fine" until the millstones just about make contact.
   i You will hear an audible grinding noise when the stones come into contact.
   ▶ Turn the fixing bolts H to secure the adjusting wheel 6.
   ▶ Turn the "Dosage u/min" switch C to the center position.
- ► Press the "Dosage u/min" switch C.
- Adjust the dosage controller ("Dosage u/min" E) to vary the throughput rate.
- ► Set the adjusting wheel 6 to the required milling fineness while the grain is being fed into the mill.
- ► Turn the fixing bolts H to secure the adjusting wheel 6.
- i Switching off the equipment
- ► Press the "System ON/OFF" switch G.

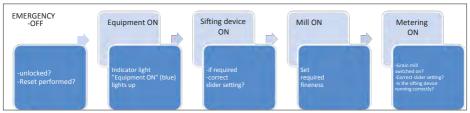
## Switching off the equipment

- ► Press the "System ON/OFF" switch G.
- The equipment switches itself off automaticallyin the following predefined order: metering device (duration approx. 18 seconds), mill (duration approx. 18 seconds), sifting device (duration approx. 2 min). Do not intervene in the process. This order of events results ensures that there is no grain left in the milling chamber after the millstones have come to a standstill. Any leftover grain would cause a blockage of the millstones on starting up.
- ► After milling, turn the adjusting wheel 6 to set the mill to "Coarse".

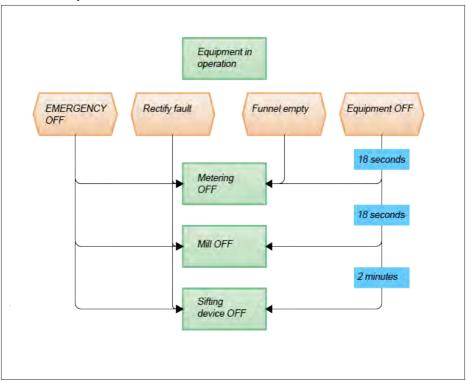
## **Function diagram**

i The switch-on and shutdown cycles are illustrated in the schematic functional diagram below.

#### Switch-on sequence



#### Shutdown sequence



## Manual shutdown of the sifting device when the grain mill is running

- ▶ Open the slider for sack filling 5 on the grain mill.
- ► Close the slider for the sifting device 10.

- ▶ Allow the sifting device to run until the sifting element is empty.
- i The sifting process takes approx. two minutes.
- ► Switch off the sifting device.
- ► Open the safety doors 7 and sweep the remaining grain into the collecting containers underneath 3 4 5 6.
- The collecting containers 3 4 5 6 can now be removed and the sifting elements 8 can be replaced.

# 15 Cleaning

#### **△ WARNING**

#### Risk to life from flour dust explosion

Burns, serious injuries, death; material damage to machine and building

- Avoid flour dust turbulence.
- ► There must be no ignition sources in the hazardous area.
- ► The entire mill and its surroundings must be cleaned at regular intervals to remove flour and dust.

#### **△ WARNING**

#### Allergic reaction to flour dust

Allergic reaction

▶ If you experience allergic symptoms, seek medical advice immediately.

#### **△ WARNING**

#### Pulling in and severing by rotating parts

Injuries to hands and forearms

- ▶ Do not start up the device without the guard and housing parts.
- ▶ Do not take hold of the drive belts during operation.
- Always switch off the device before commencing cleaning.
- i Cleanliness is a mandatory requirement for hygienic mill production.
- ▶ Empty the sifting chamber after every milling operation.
- Clean the sifting chamber and the brush shafts with a long-handled brush or a vacuum cleaner.
- ▶ Wipe the wooden parts with a dry cloth or clean them with a vacuum cleaner.

#### 16 Maintenance

#### **△ WARNING**

## Danger to life from mains voltage

Electric shock

- Always disconnect the device from the power supply before commencing maintenance work.
- Only qualified specialist personnel are permitted to carry out maintenance work on electric components.

#### **△ WARNING**

## Pulling in and severing of limbs by rotating parts

Injuries to fingers, hands, and forearms

- ▶ Always switch off the device before commencing maintenance work.
- ▶ Do not start up the device without the guard and housing parts.
- Do not reach take hold of the drive belts during operation.

#### **△** CAUTION

## Risk of cutting due to sharp edges

Injuries to fingers and hands

Wear protective gloves during maintenance.

# Checking and setting the tension of the drive belt

i	Check the tension of the	e drive belt afte	r the first 5	hours of	operation.	Retension
	the belt if necessary.					

i	Check th	ne drive	belt after	every 50	hours of	operation
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- i You need a Phillips screwdriver to remove and assemble the cover.
- i You need a wrench to set the tension of the drive belt.

## Disconnect the power supply

Switch off the main switch.

#### Remove the protective cover

Unscrew the bolts and lift off the protective cover.

#### Check the tension of the drive belt

- ▶ Take hold of a drive belt with one hand and turn it through 90 degrees.
- i To turn the drive belt through more than 90 degrees, you must retighten the drive belt.

#### Tension the drive belt

- ► Unscrew the locking nuts.
- ▶ Turn the adjusting bolt to set the tension of the drive belt.
- ▶ Then screw the locking nuts tight again.

#### Assemble the protective cover

- ▶ Line up the protective cover with the drive belt housing.
- Screw the protective cover back into place.

## Replacing the sifting elements

#### Disconnect the power supply

- ► Switch off the device.
- ▶ Switch off the main switch.

#### Remove the sifting elements

- ▶ Open the safety doors.
- ▶ Open the tension locks on the sifting elements and remove the sifting elements.

## Insert the sifting elements

- ▶ Insert the required sifting elements and close the tension locks.
- Close the doors.
- Switch on the main switch.
- The sifting elements have now been replaced and the sifting device is ready for operation again.

# 17 Troubleshooting

i Thus far, we are not aware of any faults affecting the sifting device.

Should further problems occur, please call our service team on the following number:

+49 73 71/93 77-13

# 18 Disposal

- i Used equipment contains valuable materials that can be recycled and put back into circulation.
- ► Therefore, you should suitable collection systems to dispose of used devices.



# 19 Accessories

# Sifting elements



Sifting elements with mesh of varying lengths.

#### **EC Declaration of Conformity** 20

## **EC Declaration of Conformity**

According to the Machinery Directive 2006/42/EC, Annex II A

Manufacturer

Person established in the Community with authorization

to put together technical documentation

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Description and identification of the machine

Product / Commodity

Grain mill HM120 N HM-2015-001

Serial number

Model

Project number

PRJ-2015-09-22-0001

Order

Häussler grain mill HM120 N-Kombi

Trade name

No. 90967

Function

Mill: mills various types of grain (wheat, spelt, rye, Khorasan wheat, amelcorn, small spelt, barley, corn, rice, milo, buckwheat (including hulls) and even some oily seeds) Sifting device: separates milled wholegrain flour

into fine flour, semolina and bran

We hereby declare that the machine meets the requirements of all applicable provisions of the following EC Directives.

2006/42/EC

Directive 2006/42/EC of the European Parliament and Council of May 17, 2006, on machinery and to modify Directive 95/16/EG (new version) (1)

## 21 Warranty

Your device is supplied with a 12-month factory warranty commencing on the date of invoice.

The device has been built by Karl-Heinz Häussler GmbH in accordance with the state of the art. All of the devices that leave our factory are made from high-quality materials and have undergone thorough checks.

## Warranty

Dear Customers,

Thank you for putting your trust in a Häussler device. We are delighted that you have made a choice in favor of quality. The factory warranty is valid for 12 months from date of invoice. The legal guarantee is valid for 24 months. Work carried out under the warranty does not extend the warranty period.

The following are excluded from the warranty

- All wear parts e.g., drive belts,
- fragile parts,
- damage caused by improper or incorrect use,
- damage caused by noncompliance with the operating instructions, and
- devices whose serial number has been changed, damaged, or removed.

## We will rectify defects free of charge if

- it can be demonstrated that they are due to material or machining defects occurring during manufacture
- they are reported to us immediately they are discovered
- are reported to us within the warranty period.

All work (repairs, for example) carried out under and in addition to the terms of the warranty is subject to charge. This also includes transport, packaging, and journey times to and from site. Replaced parts shall become our property (they must be sent back to us at the customer's expense). Any further or other claims, especially those for damage occurring outside the device, are excluded unless responsibility is legally binding.

# Work carried out after the warranty period

We do of course remain at your disposal once the warranty period has elapsed. Should a malfunction occur, please send us a description of the problem. Please include your telephone number in case of queries. You are also welcome to call our customer service team.

## Warranty

## Service hotline: +49 73 71/93 77-13

The latest version of our terms and conditions of business also apply. The place of fulfillment and legal venue is 88499, Riedlingen, Germany.

# 22 For your notes

# Visit our Baking Village...

At HÄUSSLER, we have been focusing on enjoyable do-it-yourself for over 35 years.

A family business with more than 90 employees, we are based in Heiligkreuztal in the Upper Swabia region of Germany. This is where we manufacture our products, such as our wood burning ovens, ourselves.

Come and visit us in our Baking Village! This is the name we have affectionately given to our exhibition and sales space, where you can browse and experience the products of your choice first hand. The Häussler family and our skilled team of employees will be delighted to advise you and show you our stone ovens, dough kneading machines, pasta machines, etc. in day-to-day applications. We also offer numerous baking and pasta demonstrations all year round. You'll never regret paying us a visit.

You can also visit our Baking village online at www.backdorf.de



## Our service to you

- Information about nearby tourist attractions and overnight accommodation
- Comfortable consulting spaces
- Children's play area
- Visitor toilets with baby-changing facilities
- Seating areas
- Shipping service
- On-site service for your equipment at our premises

## We can also offer you

- Seminar rooms with projector
- Reservation service for overnight stays
- Regular baking, pasta, and curing demonstrations
- Demonstrations for groups and clubs on request

## How to get to the Baking Village



#### By train or air

Enjoy a stress-free and jam-free journey. We will happily collect you from the station at Riedlingen or the airport at Mengen. Simply give us a call.



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Publication date: February 2, 2016