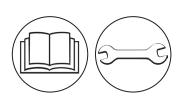


# Minimat

The Hot Air In-Store Baking Oven





Original Operation Manual



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# 1 Explanation of the User Information

The equipment is a machine in the sense of Machine Directive 2006/42/EC. This user information provides information on intended and safe operation and contains important instructions on how to operate the device safely, appropriately, and economically. Read the instructions before starting to use the equipment. Depending on the model, the illustrations may differ from the product. The control's operating Instructions supplement this user information. Depending on the version of the device, it is completed by the user information of the options.

Paying attention to the user information helps to avoid danger and to optimise and speed up process flows. It helps to minimise downtimes and the costs of repairs and to increase the device's reliability and extend its service life.

This documentation applies to the following device types and their options:Minimat 43 SItem number X1000, X1001Minimat 64 MItem number X1120, X1121Minimat 64 LItem number X1220



This user information is an integral part of the product and must be kept in close proximity to the machine, and stored such that it is easily accessible for operating personnel to consult it at all times. Everybody who works with the machine must have completely read the user information before starting work.

## 1.1 Legends

## 1.1.1 Degrees of danger/symbols

Symbol	Declaration of Conformity
<b>A</b> DANGER	<b>Danger</b> Indicates a danger that directly and with certainty will result in death or serious, permanent injuries if the appropriate precautions are not taken.
	<b>Warning</b> Indicates a danger that will probably result in death or serious injuries if the appropriate precautions are not taken.
	<b>Caution</b> Indicates a danger that will possibly result in slight injuries if the appropriate precautions are not taken.
NOTICE	<b>Notice</b> Indicates a danger that will result in significant damage to the machine or material if the appropriate precautions are not taken.

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## 1.1.2 Safety information and symbols

Symbol	Declaration of Conformity	Symbol	Declaration of Conformity
	Warning of a hazardous location	BIB	Warning of a crushing hazard
4	Warning of a dangerous electrical voltage		Warning of irritants
	Warning of a hot surface		Warning of a tipping hazard
	Warning of fire hazard	$\bigwedge$	Warning of scalding hazard
<b>A</b>	Equipotential bonding		
СНЕСК	Check before starting work		Disconnect from power supply
	Use hand protection		Use eye protection
X	Electrical connection		Exhaust air connection
	Fresh water connection		Waste water connection
	Read the user information be- fore use		Before starting work, read the service information
	Reference to information that facilitates handling and working with the product.		



# 1.2 Type plate

WIESHEU GmbH	WIESHEU	Pos
Schleifwiesenstraße 27 71723 Großbottwar, Germany		10
Service Hotline: +49 7148 1629		20
	Made in Germany	30
Artikel: Item: (10)		40
Seriennr.:	Daviahri 🙃	50
Serial-no:	Baujahr: Manuf. date: 30	60
Bemessungss-	Frequenz	70
Pannung: Rated voltage:	frequency:	80
Bemessungsstrom 60	Bemessung- sleistung: Rated load:	90
IP-Schutzgrad: 80		
Wasserdruck: Water pressure: 90		
CEX		The typ the dev side of

Pos.	Designation
10	Item
20	Serial number
30	Year of construction
40	Rated voltage (V)
50	Frequency (Hz)
60	Rated current (A)
70	Rated output (kW)
80	IP protection class
90	Water pressure (kPa)

The type plate contains the most important information about the device. The type plate is located on the right- or left-hand side of the device (depending on the model).



## **1.3 Excerpt from the EU Declaration of Conformity**

The manufacturer,

WIESHEU Wolfen GmbH Kekuléstraße 1 06766 Bitterfeld-Wolfen Deutschland

hereby declares that the devices named below comply with the following directives and standards:

DIRECTIVES	STANDARDS
2006/42/EC: Machinery Directive	EN 60335-2-42:2003 + AC:2007 + A1:2008 + A11:2012 EN ISO 12100:2010 EN ISO 13732-1:2008
Name and address of the Documenta- tion Officer	WIESHEU GmbH Schleifwiesenstraße 27 71723 Großbottwar
2014/30/EU: EMC Directive	EN 55014-1:2006 + A1:2009 + A2:2011 EN 55014-2:1997 + AC:1997 + A1:2001 + A2:2008 EN 61000-3-2:2014 EN 61000-3-3:2013
Other:	EN 82079-1:2012

PRODUCT LINE	MINIMAT
Description of appliance	Convection oven
Appliance type as described in the user information and the following appliance types	Minimat 43 S Minimat 64 M Minimat 64 L
Item no.	X1000 X1120, X1121 X1220
Serial number from	12008214



# 2 Product Description

## 2.1 Function/overview

Using the WIESHEU oven, it is possible to heat and bake commercial baking goods.

## 2.2 Intended use

The device is technical equipment. It is not intended for use in the home.

The device is designed exclusively for baking and cooking commercial baking goods.

The device is intended for indoor use only.

With the "safety lock" option, the device can be installed in the food retail sector.

Optional enhancements or modifications to the device must only be implemented in designs approved by WIESHEU GmbH.

Any other enhancements and/or modifications to the device are not permitted.

Any other usage extending beyond this is not regarded as intended usage.

WIESHEU GmbH is not liable for damages resulting from such unintended use.

## 2.3 Reasonably foreseeable misuse

The device is not intended to be located in cold stores. Complete functionality can only be guaranteed at temperatures of a minimum of +10 and a maximum of +40 °C.

The device is not intended to be set up in kitchens.

The device is not intended for use in trains or mobile shops, on ships or outdoors.

The device is not intended for drying or curing objects.

The device is not suitable for heating liquids or food which will liquefy.

## 2.4 Liability

The customer and operating personnel are obliged to observe the instructions in the user information

WIESHEU GmbH assumes no liability for damage which occurs as a result of incorrect or negligent operation, working with the wrong operating parameters, servicing or maintenance or non-intended use. This also applies to changes, enhancements and modifications to the combined unit. Any factory guarantee will thus become null and void.

Only use spare parts approved by the manufacturer. WIESHEU GmbH will not accept liability for damage resulting from the use of non-approved spare parts.

NOTICE

The work steps below must only be carried out by authorised WIESHEU GmbH service engineers:

- Installation
- Assembly
- Initial commissioning
- Maintenance / Service



## 2.5 Technical Specifications

The maximum number of trays the appliance can hold is specified in the technical specifications. Regardless of the number of trays indicated, the device can be operated with fewer trays. The settings of the baking parameters should be adjusted accordingly when required. The maximum load weight of 5 kg per tray must not be exceeded.

Item no.		X1000	X1120	X1220
Appliance designation		Minimat 43 S	Minimat 64 M	Minimat 64 L
Designation		Convection oven	Convection oven	Convection oven
Version		230 V 50Hz	400 V 50Hz	400 V 50Hz
Control unit		Comfort, Classic manual	Comfort, Classic manual	Comfort, Classic manual
Door		Double-glazed	Double-glazed	Double-glazed
Steam injection		Pipe steam injection	Pipe steam injection	Pipe steam injection
Width	mm	600	760	760
Depth	mm	780	770	770
Height	mm	550	595	745
Weight with "Tank" option	kg	52.5 54.0	70.0 71.5	89.5 91.0
Number of chambers				
Size number of shelves	mm	3 x 440 x 350	3 x 600 x 400	5 x 600 x 400
Back-up fuse	Α	1 x 16	3 x 16	3 x 16
Current consumption	Α	13.5	7.7	11.3
max. permitted leakage current	mA	10	7.7	10
Chamber heating	kW			
Heating DE	kW			
Connected load	kW	3.1	5.3	7.8
Heating	kW	3	5	7.5
Heating of cascade	kW			
Motor	kW	0.035	0.2	0.2
Protection class	IP	X3	Х3	X3
Temperature range	°C	30 - 250	30 - 250	30 - 250
Ambient temperature	°C	+10 - +40	+10 - +40	+10 - +40
Ambient humidity	%rH	30 - 60	30 - 60	30 - 60
Water connection with "Tank" option	"	3/4	3/4	3/4
Water pressure	kPa	150 - 600	150 - 600	150 - 600
Waste water connection	mm Ø			
Exhaust connection	mm Ø	50	50	50
Condensate connection	mm Ø	12	12	12
Workplace-specific sound emission value	dB(A)	< 70	< 70	< 70

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# 2.5 Technical specifications custom version

Item no.		X1001	X1121
Appliance designation		Minimat 43 S	Minimat 64 M
Designation		Convection oven	Convection oven
Version		200V 2/PE 50/60 Hz	230 V 1/N/PE 50/60 Hz
Control unit		Comfort, Classic manual	Comfort, Classic manual
Door		Double-glazed	Double-glazed
Steam injection		Pipe steam injection	Pipe steam injection
Width	mm	600	760
Depth	mm	780	770
Height	mm	550	595
Weight with "Tank" option	kg	52.5 54.0	70.0 71.5
Number of chambers			
Size number of shelves	mm	3 x 440 x 350	3 x 600 x 400
Back-up fuse	А	1 x 16	1 x 16
Current consumption	А	15.0	14.35
max. permitted leakage current	mA	10	10
Chamber heating	kW		
Heating DE	kW		
Connected load	kW	3.1	3.3
Heating	kW	3	3
Heating of cascade	kW		
Motor	kW	0.035	0.2
Protection class	IP	X3	X3
Temperature range	°C	30 - 250	30 - 250
Ambient temperature	°C	+10 - +40	+10 - +40
Ambient humidity	%rH	30 - 60	30 - 60
Water connection with "Tank" option	"	3/4	3/4
Water pressure	kPa	150 - 600	150 - 600
Waste water connection	mm Ø		
Exhaust connection	mm Ø	50	50
Condensate connection	mm Ø	12	12
Workplace-specific sound emission value	dB(A)	< 70	< 70



## 2.6 Risk of injury / residual risks

This device has been produced by WIESHEU GmbH according to the latest best available technology. All appliances that leave the factory have been subjected to thorough testing.

Nevertheless, if the appliance is used improperly, hazards to life and limb of the user or a third party may result, or the appliance or other assets may be damaged.

General safety instructions are summarized in this chapter. Specific safety instructions are described in the sections where operators are directly confronted with risks.

The following safety instructions must be understood as a supplement to the pre-existing applicable national accident prevention guidelines and laws.

Existing accident prevention guidelines and laws must be adhered to in any case.

All appliances must be installed categorically in accordance with the valid, local safety regulations.

#### 2.6.1 Obligation of the customer

The customer is obliged to only allow people to work with the device who are acquainted with the fundamental instructions regarding work safety and accident prevention and have been instructed in handling the device. Operating companies are obliged not to allow people to work with the appliance who suffer from impairments with respect to their physical, mental, and sensory capabilities. Children under the age of 14 must be supervised to ensure that they do not play with the device.

#### 2.6.2 Obligation of the staff

Before starting work on the appliance, everybody who works with it must have read this user information, be familiar with its contents and pay attention to it. The persons confirm this by their signature.

#### 2.6.3 General risk of accidents



Comply with the general accident prevention regulations when working with and on the appliance.

#### 2.6.4 Danger of fire/explosion



#### Danger of fire!

There is a danger of fire if the device overloads electrically. The fuse protection of the plug socket must be ensured. Do not attach foil, paper, stickers etc. to the device. Remove all protective sheeting from the device before initial commissioning. Do not store items or foreign objects in, on, or near the device. Never heat up alcoholic items or items that are flammable or explosive!



#### 2.6.5 Danger from contact with electrics

<b>Risk of electric shock!</b> The electrical connection and any work on the electrical equipment of the device must only be carried out by an electrician trained in the workings of this particular product, and in full compliance with industry standards and regulations.
Protect all electrical assemblies from damp, moisture and dust. Important functions, e.g. safety circuits can fail and lead to people being injured and appliance parts being damaged.
A defective appliance can cause an electric shock. Only use the device when it is in technically perfect condition. Before starting work, check the device for damage. Pull the mains plug if damaged or switch off the circuit breaker! Secure the mains plug / circuit breaker against reactivation. All parts must be correctly assembled and fulfil all conditions to ensure problem-free operation.

#### 2.6.6 Danger of burns



#### **Risk of burning!**

To prevent scalding from heated liquids, do not push containers into the device with liquids or with food that will liquefy when heated. Never prepare any products that can be expected to exude more that 100 ml of liquid per loading procedure.

There is a danger of being burnt by hot liquids and steam. Do not open the door while the program is running.



Hot steam exits through the exhaust connection on the back of the device. Set the device up such that no personal injury or material damage can occur as a result of exiting steam. Shut off the construction-side water supply immediately if the solenoid valve is defective, or if the steam injection valve is permanently open. Any other operation is prohibited as there is a risk of burns from hot steam.

#### 2.6.7 Water damage



The water tap installed by the customer near the device may only be turned on if the device is running and must be turned off again afterwards. The flow pressure of the water may not exceed the pressure stated on the type plate. If necessary, a pressure regulator must be installed by the customer.

#### 2.6.8 Danger of non-ionising radiation



Non-ionising radiation is not generated purposefully; it is emitted by electrical equipment

(e.g. electric motors, power lines or solenoid coils) due to the technology. Apart from this, the appliance does not have any powerful permanent magnets. If a safety distance of at least 30 cm is kept between the field source and the implant, it is possible to virtually rule out completely active implants (like pacemakers or defibrillators, for example) being affected.



#### 2.6.9 Risk of technical damage



#### Technical damage!

The device is equipped with a frequency converter which can be damaged by power surges. After disconnecting the mains plug from the power supply, wait 1 minute until all components have discharged fully. Only then reconnect the mains plug to the power supply.

## **3 Transportation and Setup**

#### 3.1 Transport

NOTICE	<b>Technical damage!</b> Always transport the device or the combined unit vertically; otherwise, damage can be caused.
	The device or combined unit is packed on a transport pallet. The transport pallet can be driven underneath using a lifting truck.
	Danger of crushing! Do not stand under or reach under raised, suspended loads!
	<b>Danger of tilting!</b> When transporting with a transport pallet, it is important to ensure that the pallet is positioned completely underneath the lifting truck. Secure the pallet with the combined appliance onto the lifting truck prior to lifting. Use a suitable lashing strap.
	The combined appliance may be moved a maximum distance of three metres for servicing, maintenance and cleaning purposes. Only transport the combined appliance in conjunction with the transport pallet and with a suitable lifting truck.

Transport the entire combined appliance to the set up location and position.

If the combined appliance cannot be transported to the installation location as a whole, then the individual appliances must be removed from the combination. Pay attention to all notices in the chapters "Unpacking" and "Dismantling / Installing the appliance/combined appliance".

## 3.2 Unpacking



The device's door is made of glass and there is a risk of the glass breaking. Carefully check for any glass damage when unpacking and wear appropriate protective gloves to prevent cuts.

The appliance/combined appliance is packed onto a transport pallet at the factory. Remove all foil and cardboard packaging. Comply with packaging disposal regulations. The transport pallet is reusable and can be sent back to the manufacturer.

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Minimat



## 3.3 Installing / dismantling the appliance combination



This manual provides examples for safe and quick dismounting/mounting. Of course, it is not possible to show or describe in detail every exceptional case at the customer's. All safety instructions must be complied with, whatever the situation.

If the combined appliance cannot be transported to the installation location as a whole, then the individual appliances must be removed from the combination.

Remove the waste water pipe / exhaust air pipe. Use suitable slinging gear when lifting and carrying the individual elements. For example scissor lift, lifting truck with narrow forks, carrying straps, carrying aid, lashing straps.

Component	Description D= Dismantling / M= Mounting	Support material	
Steam reducer	D: Loosen the mounting screws at the rear of the steam reducer. Push the steam reducer backwards. Take off the steam reducer upwards.	Allen key 2.5	
	M: Lift off the steam reducer and place it on the appliance combination. Attach the fastening screws on the rear of the steam reducer. Tighten the fastening screws.		
Minimat 43	D: Lift off the Minimat toward the top.	mobile platform	
Minimat 64	M: Position the Minimat on the prover, base frame, or storage compartment. If a base cover is used, lower the Minimat 64 into the position openings of the base cover.	truck	
Storage compart-	D: Lift off the storage compartment / base frame toward the top.	mobile Platform	
ment	M: Position the storage compartment / base frame on the prover or base frame	truck	
Base frame /		mobile platform	
prover	M: Move the base frame / prover to the place of installation.	truck	
Base cover Minimat 64	The base cover for the Minimat 64 is used in appliance combinations and comes ready mounted. Position the base cover on the prover, base frame, or the bottom Minimat 64. Using the base cover is mandatory for installations in areas with customer traffic.		
Base cover Minimat 43	The base cover of the Minimat 43 is used in appliance combinations. Clip the base cover onto the support feet of the Minimat 43. Using the base cover is mandatory for installations in areas with customer traffic.		



Appliances / combinations may only be set up in customer areas if they are equipped with electric door lock, Comfort Control and safety lock (software) as well as base cover.

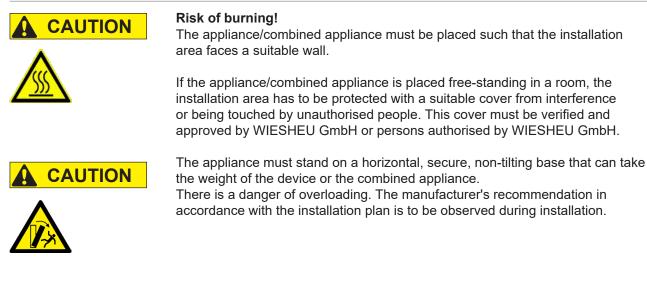
The emergency unlocking unit must be covered by a base cover for safety reasons.

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## 3.4 Place of installation and surroundings





#### Technical damage!

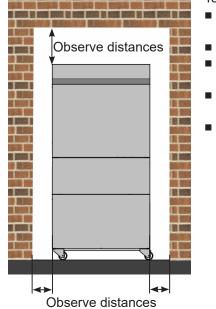
To ensure correct functioning, the appliance/combined appliance must be installed on dry, frost-proof premises.

The combined system parts must only comprise WIESHEU products or products approved by WIESHEU GmbH. Only these products have been thoroughly tested. WIESHEU GmbH accepts no liability for damage resulting from the use of non-approved products.

The maximum height of an appliance combination of the Minimat 43 appliance series must not exceed a height of 1850 mm and with the Minimat 64 a height of 1980 mm. The maximum overall height of all other appliance combinations must not exceed 2265 mm. Otherwise, ergonomic and safe operation of the combined appliance is not possible.

## 3.5 Place of installation and distances

#### 3.5.1 Free space next to, above and below the appliance/combined appliance



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To avoid heat accumulation:

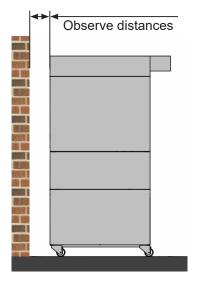
- Set up the appliance/combined appliance at a minimum distance of 20 mm from the side wall.
- Keep the air vents on the sides and on the back clear.

- Keep a minimum space of 100 mm above the appliance / appliance combination.
- We recommend not covering the space under the appliance/combined appliance.
- If the appliances / combined appliances are completely integrated, vent the exhaust air toward the front.



## 3.5 Place of installation and distances

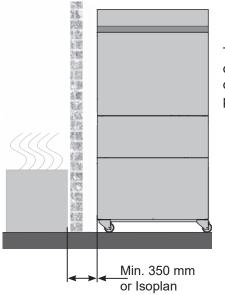
#### 3.5.2 Free space in front of and behind the appliance/combined appliance



Electricity, water, waste water and exhaust connections are located on the back of the appliance/combined appliance. These must be accessible when required.

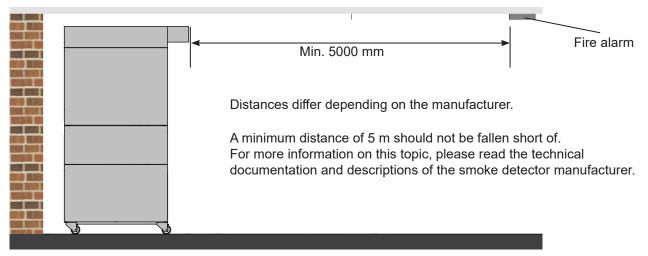
- Move the appliance/combined appliance forward to carry out maintenance.
- Keep a minimum space in front of the appliance/combined appliance of 1000 mm.
- A minimum distance of 20 mm must be maintained at the rear.

#### 3.5.3 Distances to sources of heat



The appliance/combined appliance must be installed at a minimum distance of 350 mm from other heat sources (>80 °C). If the minimum distance cannot be achieved a heat shield (e.g. Isoplan) must be provided by the customer.

#### 3.5.4 Distances to safety equipment





#### 3.5.5 Combined appliance with enclosure

Min. 600 mm	With appliances/combined appliances that are enclosed on all sides or inte- grated, the measures stated below must be implemented.
	Min. 200 mm
	<ul> <li>Ensure adequate ventilation.         <ul> <li>The temperature inside the installation space should not exceed 40 °C.</li> </ul> </li> <ul> <li>Include air vents in the upper front panelling.</li> <li>They should be at least as follows</li></ul></ul>

NOTICE

Note that the information on minimum spacing refers to appliance combinations without accessories. More information can be found in the individual installation plans.

## 3.5.6. Appliance ID



Attach the supplied identification label at a height of 1.60 m above floor level on the appliance where it can be seen clearly.

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## 3.6 Connections on-site

#### 3.6.1 Electrical connection



#### Risk of electric shock!

Electrical connection of the device may only be carried out by an electrician according to electrical industry rules. Electrical fuse protection of the plug socket must be provided with a fault-circuit current-breaker. Observe guidelines from the VDE and the local power companies. Outside Germany, observe the corresponding regulations that apply in your country.



Electrical connection installation window

t Start
1800 mm
1100 mm

The electrical connections must be made within the specified installation window, but not lower than the water connection.

Every mains plug must be accessible after installation too. If this is not possible, then a main switch must be provided on-site. This main switch must be specifically assigned to the connected units and be obvious to the user.

The cross-sections of the connection lines conform with the power consumption and the local conditions.

Use a separate fuse-protected supply cable for each appliance.

#### 3.6.1.1 Connection of the equipotential bonding

The connection for equipotential bonding is located at the rear of the appliance. It is marked with the standard symbol. If stipulated, make the connection with the equipotential bonding conductor provided by the customer.

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**A** 



#### 3.6.2 Plumbed-in water connection for the steaming unit

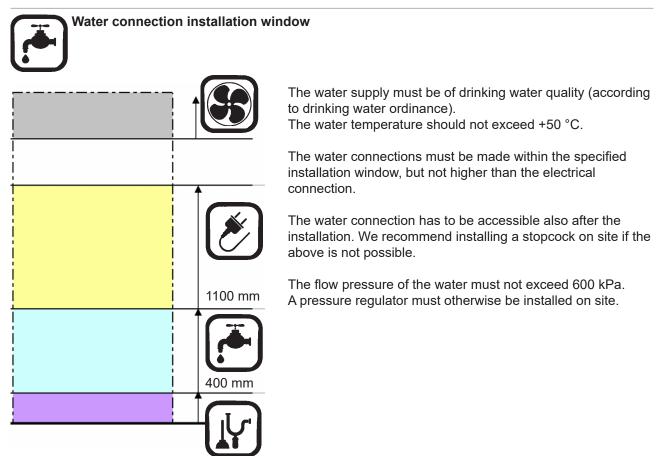


A tap with pipe aerator and backflow preventer, tested according to DIN - DVGW, must be available on site for the water connection. A class "ED" backflow preventer must not be used.

Outside Germany, observe the corresponding regulations that apply in your country.

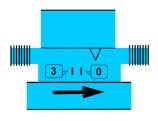
Only ever use the supplied new water intake hose for the water connection. This is a food-grade ½" pressure hose with a ¾" threaded joint tested according to DIN-DVGW (WIESHEU GmbH item no. 104476). Make the connection flexible such that it is possible to move the appliance one metre away from the wall for servicing.

Do not use any old hose sets to connect the appliances.



#### 3.6.2.1 Connecting a water filtration system

The steaming unit should only be supplied with drinking water, which flows through an appropriate water filter.



What is known as "complete demineralisation" of the water is important for the proper functioning of the appliance and its steam system. The filter-head is set to level "0". The entire water volume flows through the water filter so that no unfiltered water is mixed in via the bypass.

Pay attention to the notices in the user information of the water filter.



#### 3.6.3 Exhaust air connection

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NOTICE
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#### Technical damage!

If no steam reducer is installed, the escaping/rising steam can negatively affect the existing store safety devices, or even trigger them.

- Vent the exhaust air upwards from the rear of the appliance.
- $\rightarrow\,$  The exhaust air should not come close to the area of the side air vents.
- Vent the exhaust air upwards individually for each appliance.
- The exhaust air from several ovens must not be merged.
- The exhaust air routing is stipulated for the Minimat and installed rigidly in the installation space; it must not be altered.
- Lay the exhaust line from the bottom.
  - $\rightarrow$  The cross-sections of the exhaust line must not be reduced.
- Vent the condensate that accumulates via a hose.
- $\rightarrow$  The condensate hose must not be kinked.
- Drain the condensate on the construction side via an appropriate medium.
- $\rightarrow\,$  Via a heat- and corrosion-resistant canister, a channel or a siphon, for example.



The steam reducer of the Minimat is not equipped with an air exhaust.

- ightarrow It is not possible to connect it to an existing exhaust air system.
- $\rightarrow$  Where required, integrate a central air exhaust system.

# 3.7 Commissioning

	Each time the device is used, the customer assumes full responsibility for the safety of any people nearby.
	<ul> <li>Before starting work on the appliance, read the associated user information.</li> <li>Ensure that it is possible in an emergency, to take the correct measures and to switch off and secure the appliance(s).</li> </ul>
<b>WARNING</b>	<b>Danger of explosion!</b> There is a risk of explosion due to residues caused by manufacturing the trays. Clean the trays thoroughly before initial commissioning.
<b>!</b>	<b>Irritant to respiratory tract!</b> When the oven is heated, substances can escape which arise from the manufacturing process. These substances may cause irritation to the respiratory tract. Ensure that the area is well ventilated at initial commissioning.
	<ul> <li>Heat the device with inserted, cleaned trays for approx. 30 minutes at 180 °C before initial commissioning.</li> </ul>

.





## Risk of burning!

Otherwise, there is a risk of being scalded by escaping hot liquids when you open the door.

Before commissioning the oven every time, ensure that there is no water in the oven chamber.

Under no circumstances must the oven be commissioned, if due to an error, liquid is in the oven chamber. Disconnect the device from the mains. To eliminate the damage, inform an authorised service partner.



The device is equipped with a safety thermostat.

It switches the device off once a temperature below -8  $^{\circ}$ C or +329  $^{\circ}$ C is reached inside the baking chamber. If the ambient temperature is less than -8  $^{\circ}$ C, you will not be able to turn on the device.

#### 3.7.1 Inspections to be carried out before commissioning



Carry out the following steps before operating the device:

- Check the device for obvious defects.
- Check the mains plug/power cable for obvious defects.
- → You must not put into service any appliances that have a defective mains plug/cable.
- → Only authorised and trained WIESHEU GmbH service partners are allowed to repair defective mains plugs/cables.
- Check that the door seals tightly.
- Check that the door locking system functions correctly.
- Check if there is any dirt, product residue, or other contaminants lodged between the door seal and pane.
- $\rightarrow$  If necessary, remove it.
- Check whether the fan cover is installed.
- $\rightarrow$  The device must not be operated without the fan cover.
- Check whether the fan cover is correctly suspended and fastened in its bracket.
- Check whether the tray frames are suspended correctly in the baking chamber.
- Check whether the required power supply is available.

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• Check whether the tap is open.



# 4 Operation







#### **Risk of burning!**

In spite of the safety technology, hot steam and heat exit when you open the door. The frame and glass of the appliance get hot. Put on heat-resistant gloves and open the door carefully.

#### Danger of crushing!

There is a risk of crushing on the movable parts. When closing the door, ensure that no parts of your body or foreign bodies are between the door and the appliance seal.

## 4.1 Switching the in-store baking oven on/off



The in-store baking oven is switched on/off at the operating control of the control unit. You will find a description of the operating controls in the separate operating manual for the control system.

# 4.2 Opening/closing the door

#### 4.2.1 Opening/closing of "manual" Minimat oven door



- Ensure that no one is located in front of the door opening.
   Steam and heat are emitted.
- Give the handle one strong pull to open the door.
- First open the door slightly.
- Let the hot steam escape.
- Swing the door open.

## 4.2.2 Opening/closing of "electrical" Minimat oven door



- Ensure that no one is located in front of the door opening.
  → Steam and heat are emitted.
- → Steam and neat are emit.
   Press the "Door" button.
- $\rightarrow$  The door springs open slightly.
- $\rightarrow$  The door springs open slightly
- Let the hot steam escape.

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Swing the door open.



#### 4.2.3 Emergency unlocking if equipped with electrical door lock



If necessary, the door of the Minimat can be opened manually via the emergency unlocking function.

The emergency unlocking device is located on the side of the door lock.

- Pull on the ring/lug (A) on the bottom/side of the appliance base.
- $\rightarrow$  The electric door magnet is unlocked.
- $\rightarrow\,$  The door springs open slightly.

#### 4.3 Inserting/removing bakery products



#### **Risk of burning!**

In spite of the safety technology, hot steam and heat escape when opening the door. It is hot inside the device; there is a risk of burns from the hot surfaces. Wear heat-resistant gloves and open the door carefully and avoid touching the hot surfaces.

#### Place the baking goods inside

- Place the baking goods on the trays.
- Open the door.
- Ensure that the hanging racks have been hung correctly.
- Push the loaded trays into the device.
- Push the loaded trays all the way into the tray frame.
- Close the door.

#### Remove the baked goods

- Open the oven door.
- Remove the baked goods from the oven.
- Put the baked goods down at a suitable place.

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Close the oven door.



## 4.4 Setting the baking parameters



Baking parameters are set on the control unit's operator panel. You will find a description of the operating controls in the separate operating manual for the control system.

## 4.5 Removing/installing the tray frames





The support racks can be easily dismantled without the use of tools.

#### Removing:

- Lift the tray frame slightly.
- The support frame detaches from the holder (A) at the top.
- Tilt the tray frame.
- Lift the tray frame tilted forwards and remove from the oven.
   → Carry out removal on both sides.

#### Installation:

- Lift the tray frame at an angle into the oven.
- Suspend the hooks into the holder provided.
- Press the tray frame downwards with slight pressure.
- The tray frame latches in place into the holder.
  - $\rightarrow$  Install in the same manner on both sides.



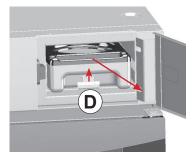
# 4.6 Tank option

## 4.6.1. Removing/filling/inserting the water tank

The Minimat "mobile" is fitted with a water tank with a capacity of max. 1.8 litres. This has the advantage of using the oven in a versatile manner and independent of water connections. To fill and clean the water tank it must be removed from the oven.



- Press down on the cover (C) on the operating panel.
   → The cover will open a little.
- Reach into the opening and tilt open the cover.



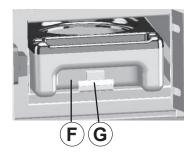
- Reach for the recessed grip (D) of the water tank.
- Lift the water tank.
- Pull out the tank.
- Place the tank on a flat surface.
- $\rightarrow$  The filling opening is located on top of the tank.



We recommend using only distilled water for filling the water tank to prevent bacterial contamination.



- Lift off the tank cover.
- Fill the water tank.
- Close the cover of the water tank.
- Press down the cover only lightly.
- $\rightarrow$  Is water escaping from the vent opening in the cover?
- $\rightarrow$  Has the cover been pushed in too far?
- $\rightarrow$  Has too much water been filled into the tank?



- Push the tank against the stop into the location provided.
- Make sure that the plastic lip (F) of the tank snaps in place behind the stainless steel lug (G).
- Swing the cover shut on the operating panel.
- Press on the cover.
- $\rightarrow$  The cover latches.



The devices with Classic manual control are not equipped with a fill level sensor. Periodically check and refill the level of the water tank by checking it visually.

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# **5** Cleaning

## 5.1 General cleaning work

Maintain and clean the in-store baking oven with great care. Only clean devices ensure the preparation of hygienically perfect products. There is a risk of germs forming if used for longer periods under 100 °C. This chapter provides basic information on how to clean the device.



#### **Risk of electric shock!**

Any damp that enters can cause an electric shock. Switch off the device and disconnect it from the mains before starting any cleaning work. Never use high-pressure cleaners, steam cleaners or water jet sprays for cleaning.



#### **Risk of burning!**

There is also a danger of being burnt on hot surfaces. Allow the device to cool down before carrying out cleaning work.

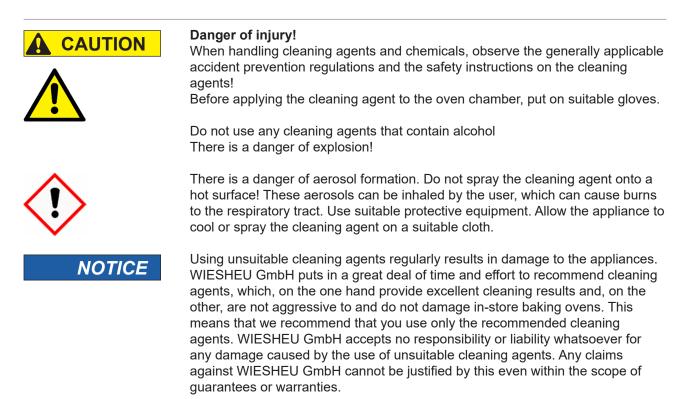
#### Danger of crushing!

There are movable parts on the appliance. There is a risk of crushing/injury on these parts. When cleaning the appliance, make sure that there are no body parts, foreign bodies, or other moving parts between the door and the door seal.

**NOTICE** Remove salt and aggressive alkaline solution residues from the oven chamber daily.



## 5.2 Cleaning agents





Always keep your cleaning cloths and brushes in a sterile condition. We recommend using a disinfectant suitable for use in the food industry and for materials and surfaces. Use the cleaning equipment exclusively for the same applications.

Designation	Unification	Item number
Vinegar essence	-	-
Commercial washing-up liquid	-	-
Commercial glass cleaner without silicone additives	-	-
Oven cleaner	2 litres	57105
Commercial stainless steel cleaner	-	-

.



## 5.3 Cleaning instructions and cleaning agents



Designation	Frequency	Cleaner	Support material
Baking trays	daily	Commercially available washing-up liquid	Sponge cloth or microfibre cloth
Baking chamber (A)	daily	Oven cleaner	Plastic brush Sponge cloth
<ul><li> Apply the oven cleane</li><li> Remove heavier containing</li></ul>	er and allow the clea aminants with a plas per with lots of clean r with a lint-free cloth	tic brush. water and a sponge cloth.	
Internal glass panel	daily	Commercial glass cleaner	Microfibre cloth or
		without silicone additives	paper tissue

• Clean the inside and outside of the glass panels with glass cleaner and soft cloths.

Close the oven door.

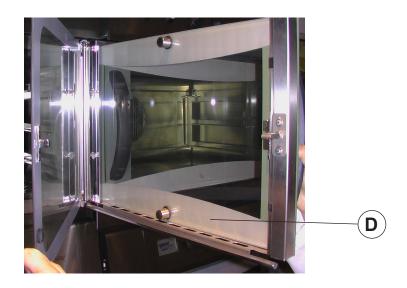
Door seal (B)	daily	Commercially available washing-up liquid	Sponge cloth or microfibre cloth
Door handle	daily	Commercially available washing-up liquid	Sponge cloth or microfibre cloth
Glass surface on the control unit	daily	Commercially available glass cleaner without silicon additives	Microfibre cloth or paper tissue
Support frames (C)	1 x weekly	Oven cleaner	Plastic brush, sponge cloth or microfibre cloth

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- Remove the tray frames.
- Carry the support frames to a suitable sink.
- Apply the oven cleaner and allow the cleaner to work.
- Remove heavier contaminants with a plastic brush.
- Rinse the tray frames with plenty of clean water and a sponge cloth.
- Dry the support frames with a lint-free cloth.
- Insert the tray frames.



## 5.3 Cleaning instructions and cleaning agents



Designation	Frequency	Clea	aner	Support material
Between the glass panels (D)	1 x weekly		Commercial glass cleaner without silicone additives	Microfibre cloth or paper tissue

- Open the oven door.
- Reach between the viewing and sealing panels.
- Carefully pull the two panels apart.
- Clean the inside of the glass panels with glass cleaner and soft cloths.
- Push the panels together again until they engage.
- Close the oven door.

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Lateral surfaces	1 x weekly	Stainless steel cleaner	Microfibre cloth or paper tissue
Appliance cover	1 x weekly	Stainless steel cleaner	Microfibre cloth or paper tissue
Front panel	1 x weekly	Stainless steel cleaner	Microfibre cloth or paper tissue
Tank	daily	fresh drinking water, with essence of vinegar if required	Bottle brush

• Remove the water tank.

- Lift off the cover and open the water tank.
- Empty the water tank.
- Clean the water tank with a bottle brush.
- Rinse the water tank after cleaning with plenty of clean drinking water.
- Fill the cleaned water tank with distilled water.
- Put the water tank back into place.

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## 5.4 Descaling



Descaling the different components may only be carried out by an authorised and trained WIESHEU GmbH service partner.

# 6 Servicing

## 6.1 General maintenance work



All maintenance and service work must only be carried out by an authorised WIESHEU GmbH service partner. The device must be checked once a year by a competent person to ensure that it is working safely. The customer must arrange the inspection. Have the electrical safety inspected once a year; in Germany according to DIN VDE 0701-0702.

## 6.4 Faults/causes/remedies



#### Danger of injury!

Only use the device when it is in technically perfect condition. Check the device for damage before starting any work. All parts must be correctly assembled and fulfil all conditions to ensure perfect operation of the appliance. If damages are identified, pull out the mains plug, mark the damage clearly and set up a notice. Contact the WIESHEU SIC

(Service Information Center) Telephone +49 7148 1629-400.

Symptom	Cause	Remedy
Oven cannot be switched on	1. Internal blocking of the controller	1. Disconnect from power supply
	2. No on-site power supply	2. Check
	3. STL (chamber) has triggered	3. Contact WIESHEU SIC*
	4. Input fuse defective	4. Contact WIESHEU SIC*
	5. On switch/main switch defective	5. Contact WIESHEU SIC*
	6. Internal fuse defective (power section)	6. Contact WIESHEU SIC*
Oven door does not close	1. Door seal defective	1. Contact WIESHEU SIC*
	2. Door latch defective	2. Contact WIESHEU SIC*
	4. Electrical door operator switch stuck	4. Contact WIESHEU SIC*
	5. Too little / much initial tension on door	5. Contact WIESHEU SIC*
	6. Door latch loose	6. Contact WIESHEU SIC*



## 6.4 Faults/causes/remedies

Symptom	Cause	Remedy
Oven door not sealed tight	1. Too much steaming (time/quantity)	1. Less steaming
	2. Door seal defective	2. Contact WIESHEU SIC*
	3. Door seal dirty	3. Check
	4. Door hinges loose	4. Contact WIESHEU SIC*
	5. Internal pressure too high, exhaust point blocked	5. Contact WIESHEU SIC*
	6. Door latch loose / not set	6. Contact WIESHEU SIC*
	7. Drainage section blocked	7. Contact WIESHEU SIC*
	8. Exhaust air path clogged / blocked	8. Contact WIESHEU SIC*
	9. Door seal incorrectly mounted	9. Contact WIESHEU SIC*
Oven is not heating up	1. Door limit switch not operated / defective	1. Contact WIESHEU SIC*
	2. Temperature not set	2. Check
	3. Heating system contactor defective	3. Contact WIESHEU SIC*
	4. Heating defective	4. Contact WIESHEU SIC*
	5. STL (chamber) has triggered	5. Contact WIESHEU SIC*
	6. Motor safety thermostat has triggered	6. Contact WIESHEU SIC*
	7. Chamber sensor defective	7. Contact WIESHEU SIC*
	8. Connecting cable defective	8. Contact WIESHEU SIC*
Fan wheel is not running	1. Internal blocking of the controller	1. Disconnect from power supply
	2. Main switch on oven not switched on	2. Check
	3. No mains voltage	3. Check
	4. Fan wheel is blocked mechanically	4. Check
	5. Door is not closed correctly	5. Check
	6. STL (chamber) has triggered	6. Contact WIESHEU SIC*
	7. Motor defective / phase missing	7. Contact WIESHEU SIC*
	8. Motor safety thermostat has triggered	8. Contact WIESHEU SIC*
Water is in the baking cham-	1. Internal blocking of the controller	1. Disconnect from power supply
ber	2. Too much steaming (time/quantity)	2. Less steaming
	3. Drain blocked/connected incorrectly	3. Check
	4. Pressure switch defective (with ProClean option)	4. Contact WIESHEU SIC*
	5. Ball cock defective	5. Contact WIESHEU SIC*
	6. Pressure regulator defective	6. Contact WIESHEU SIC*
	7. Water pressure too high	7. Contact WIESHEU SIC*
	8. Solenoid valve defective	8. Contact WIESHEU SIC*

\*WIESHEU (SIC) Service Information Center Phone: +49 7148 1629-400

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## 6.4 Faults/causes/remedies

Symptom	Cause	Remedy
No steaming no steam	1. Steam pipe / humidifying connection clogged with limescale	1. Check
	2. Water feed not open	2. Check
	3. Dirt filter clogged	3. Check
	4. Hose kinked/pinched off	4. Check
	5. Wrong programme contents	5. Check
	6. Solenoid valve defective	6. Contact WIESHEU SIC*
	7. Hose connections defective	7. Contact WIESHEU SIC*
	8. Heating defective	8. Contact WIESHEU SIC*
	9. Flow rate gauge dirty	9. Contact WIESHEU SIC*
Control message: "Water valve defective! Please notify Service"	Water flows uncontrolled into the baking chamber,	Shut off water supply, Disconnect appliance from mains, Contact WIESHEU SIC*
Control message: "Water meter defective or no water flow"	No water during steaming	Check the water tap, check the strainer
Control message: "Low water pressure! Is the water tap open?"	No water during steaming.	Check water tap, check strainer, inquire of water pressure at water utility
Control message: "Change water filter"	Residual capacity of the water filter 10 %	Contact WIESHEU SIC*
Control message: "Water tank empty"		Replenish water tank, check tank position
Control message: "Motor temperature too high, motor switched off"	Sensor in motor has tripped, no further operation possible	Disconnect the appliance from mains, Contact WIESHEU SIC*
Control message: "Hardware short circuit detection has switched off motor"	Sensor has tripped, no operation possible	Disconnect the appliance from mains, Contact WIESHEU SIC*
Control message: "Overcurrent detection has switched off motor"	Sensor has tripped, no operation possible	Disconnect the appliance from mains, Contact WIESHEU SIC*
Control message: "Temperature of the motor control too high"	Sensor has tripped, no operation possible	Disconnect the appliance from mains, Contact WIESHEU SIC*
Control message: "Temperature of control unit too high"	Temperature on control PCB too high, appliance continues working	Air vents covered? Check installation position
Control message: "Temperature of control unit too high, actuators switched off"	Temperature on control PCB too high, safety shut-down has tripped, no operation possible	Air vents covered? Check installation position Contact WIESHEU SIC*
Control message: "Short circuit in lighting system"	Lighting defective, oven is dark, baking possible	Contact WIESHEU SIC*

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# 7 Disposal



The products put into circulation by WIESHEU GmbH meet the requirements of EU directive 2002/96/EC (ElectroG) (WEEE Reg. No. DE 30999946). If you have any queries about eco-friendly waste disposal, please contact WIESHEU GmbH +49 7148 1629-400

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