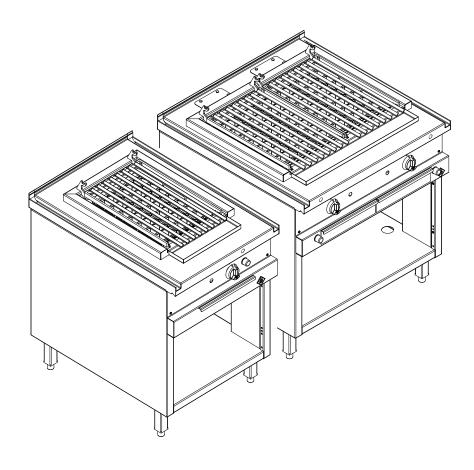




# Read the operating instructions prior to commissioning

## Operating instructions

## Lava stone grill



Unit	Type of energy	Unit type	Model
Argentina 1 Gas Argentina 2	Floor-standing unit	OPGGSGARG HLGGSGARG	
		Countertop unit	SLGGSGARG
		Weld-in	ESGGSGARG

## **Operating and display elements**

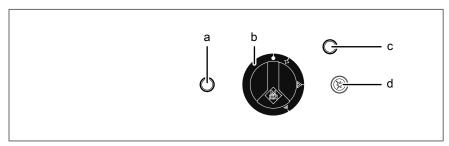


Image: Argentina 1 lava stone grill

- a Inspection port for *Flame* monitoring
- b Burner control knob
- c Inspection port for *Pilot burner* monitoring
- d Piezo pilot ignitor button

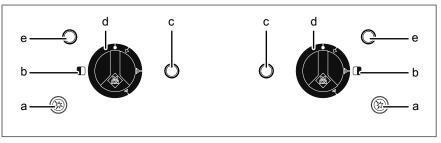


Image: Argentina 2 lava stone grill

- a Piezo pilot ignitor button
- b Heat zone identification
- c Inspection port for *Flame monitoring*
- d Burner control knob
- e Inspection port for *Pilot burner* monitoring

#### Manufacturer

MKN Maschinenfabrik Kurt Neubauer GmbH & Co. KG Halberstädter Strasse 2a 38300 Wolfenbüttel Germany

Phone +49 5331 89-0 Fax +49 5331 89-280 Internet www.mkn.eu

#### Copyright

All rights to text, graphics and pictures in this documentation are held by MKN Maschinenfabrik Kurt Neubauer GmbH & Co. KG. Distribution or duplication is only permitted with the prior written consent of MKN.

Copyright by MKN Maschinenfabrik Kurt Neubauer GmbH & Co. KG.



1 Introduction  1.1 About this manual  1.1.1 Explanation of signs  1.2 Intended use  1.3 Warranty	<b>7</b> 8
2 Safety information	10
3 Rules of conduct when the smell of gas is detected	13
4 Description of the unit	14
4.1 Overview of the unit	
4.1.1 Floor-standing unit	
4.1.2 Countertop unit	
4.2 Function of the operating and display elements	
<b>4.3 Application</b> 4.3.1 Fill quantities	
5 Operating the unit	
5.1 Tips on using	
5.2 Switching the unit on and off	
5.2.1 Switching on	
5.2.2 Switching off	
5.3 Basic functions	
5.3.1 Setting the grate height	
5.3.2 Loading in the water	
5.3.3 Adjusting the output	
5.4 Grilling	
5.5 Pauses and end of use	
5.5.1 Brief pauses	
5.5.2 Long pauses and end of use	21
5.6 Emptying the collection container	21
6 Cleaning and caring for the unit	
6.1 Preventing corrosion	
6.2 Eliminating rust spots	
6.3 Cleaning the housing	
6.4 Cleaning the grate	
6.5 Cleaning the collection container6.6 Cleaning the lava stones	
6.7 Performing a visual inspection	
7 Troubleshooting	
7.1 Cause of failure and remedy	



7.2 Nameplate	25
8 Carrying out maintenance	26
9 Disposing of the unit in an environmentally responsible manner	
10 Manufacturer's declaration	28





### 1 Introduction

#### 1.1 About this manual

The operating instructions are part of the unit and contain information:

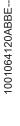
- On safe operation,
- On cleaning and care,
- On remedies in case of faults.

Be aware of the following notes and adhere to them:

- Read the operating instructions completely before operating the unit for the first time.
- Make the operating instructions available to the operator at all times at the operating site of the unit.
- Insert any supplements from the manufacturer.
- Keep the operating instructions throughout the service life of the
- Pass on the operating instructions to any subsequent operator of the unit.

**Target group** The target group of the instruction manual is the operator, who is entrusted with the operation, cleaning and care of the unit.

**Figures** All figures in this manual are intended as examples. Discrepancies between these and the actual unit can arise.



#### 1.1.1 Explanation of signs



#### **DANGER**

#### Imminent threat of danger

Failure to comply will lead to death or very severe injuries.



#### **WARNING**

#### Possible threat of danger

Failure to comply can lead to death or very severe injuries.



#### **CAUTION**

#### **Dangerous situation**

Failure to comply can lead to slight or moderately severe injuries.

#### **ATTENTION**

#### **Physical damage**

Failure to comply can cause physical damage.



Notes for better understanding and operation of the unit.

Symbol / sign	Meaning
•	Listing of information.
$\rightarrow$	Action steps, which can be performed in any sequence.
1.	Action steps, which must be performed in the specified sequence.
2.	in the specified sequence.
<b>└</b> →	Result of an action performed or additional information about it.



#### 1.2 Intended use

This unit is intended to be used solely for commercial purposes, particularly in commercial kitchens.

This unit may only be used with suitable accessories and for the cooking of food.

## It is forbidden to use the unit for purposes, which include the following:

- Drying cloths, paper or dishes
- Heating acids, alkaline solutions or other chemicals
- Heating of warmer plates
- Heating rooms
- Direct grilling on the lava stones
- Direct grilling on the support grate of the lava stones
- Grilling in pots, pans or aluminium bowls on covered grates

#### The use of the unit is prohibited in the following countries:

- USA
- Canada

## 1.3 Warranty

The warranty is void and safety is no longer assured in the event of:

- Improper fitting or technical modifications of the unit.
- Use that is not intended.
- Improper commissioning, operation or maintenance of the unit.
- Problems resulting from failure to observe these instructions.



## 2 Safety information

The unit complies with applicable safety standards. Residual risks associated with operation or risks resulting from incorrect operation cannot be ruled out and are mentioned specifically in the safety instructions and warnings.

The operator must be familiar with regional regulations and observe them.

**Operation** During operation, the following group of individuals must be supervised by an individual who is responsible for safety:

> Individuals with physical, sensory, or mental handicaps, or who lack the knowledge and experience to operate the unit properly.

The supervising individual must be familiar with the unit and the risks associated with it.

#### Hot surfaces Risk of burns from hot surfaces

- Protect arms and hands by wearing suitable protective gloves.
- Do not touch heating elements, hot surfaces or accessories immediately after use.
- Allow surfaces to cool prior to cleaning.

#### Hot liquids Risk of scalding from hot oil

- Protect arms and hands by wearing suitable protective gloves.
- Do not operate the unit without the receiver tank.

#### Risk of chemical burns from evaporating cleaners

Follow the instructions of the cleaning agent manufacturer.

#### Defective unit Risk of injury from a defective unit

- Use gas shut-off valve to isolate unit from gas supply.
- Do not operate a defective unit.
- Allow only an authorized technician to repair the unit.

#### Escaping gas or exhaust Risk of asphyxiation and explosion from escaping gas

Follow the rules of conduct when the smell of gas is detected (see "Rules of conduct when the smell of gas is detected").

#### Risk of asphyxiation and poisoning from exhaust gases

- Ensure that air inlet openings are free and that a sufficient amount of the necessary combustion air is supplied.
- Ensure that the exhaust gas outlet openings are free and that the exhaust gases are discharged properly.

#### Fire prevention Risk of fire from dirt and grease deposits

Clean the unit when finished using it.



#### Risk of fire from overheating

- Observe the unit during operation.
- Check the water level of the receiver tank regularly.

#### Risk of fire from objects

Do not obstruct the exhaust gas duct.

#### **Firefighting**

- In the event of a fire, use the gas shut-off valve to isolate the unit from the gas supply.
- Use a Fire Class F fire extinguisher, never water, to extinguish grease fires. Other fires, for instance, can be extinguished with fire extinguishers suitable for Fire Classes A, B, C, CO<sub>2</sub> fire extinguishers or extinguishing media suitable for the fire class confronted.

#### Improper cleaning Risk of chemical burns from cleaning agent

- Follow the instructions of the cleaning agent manufacturer.
- Take appropriate protective measures when handling aggressive cleaning agents.

#### Risk of falling on smooth floors

Keep the floor in front of the unit clean and dry.

#### Risk of physical damage from improper cleaning

- · Clean the unit after using it.
- Do not clean the unit with a high-pressure cleaner or water jet.
- Do not clean the housing with highly abrasive or chemically aggressive cleaning agents.
- Do not clean the housing with highly abrasive sponges.
- Follow the instructions of the cleaning agent manufacturer.
- Do not cool shock the unit by cooling it abruptly.
- Do not immerse the housing in water.

#### Hygiene Health risk from insufficient hygiene

- Observe applicable regional hygiene regulations.
- Follow the cleaning instructions.

#### Improper use Risk of physical damage from improper use

- Do not operate the unit outdoors.
- · Use only original accessories.
- Train operators regularly.
- Do not heat food warmer plates or tins of preserved food.
- Observe the unit during operation.



- Do not place any plastic or aluminium materials on the grilling stones.
- Do not put pots, pans or aluminium trays on the grates or grilling stones.
- Do not grill directly on the grilling stones.
- Do not operate the unit without grilling stones or grates.
- · Use appropriate cooking utensils.



## 3 Rules of conduct when the smell of gas is detected



#### **DANGER**

Risk of asphyxiation and explosion from escaping gas

Follow the rules of conduct when the smell of gas is detected.

- Remain calm.
- Open windows and doors and ventilate rooms.
- Avoid rooms with the smell of gas.
- Do not smoke.
- Do not ignite any flames. Extinguish flames.
- Do not create any sparks. Do not operate any switches, electrical devices or use telephones.
- Remove mobile phones and radio-controlled devices from the hazard area.
- Close gas shut-off valves at the gas meter, at the main supply and, if possible, at the units.
- Warn other individuals in the building. Call out and knock, do not ring doorbells.
- Leave the building and prevent entry by others.
  - Notify the gas utility stand-by service.
  - Do not try to eliminate damage to the gas system by yourself.
- Observe the safety instructions of the gas utility.
- Once outside the building, notify the responsible parties:
  - If the smell of gas comes from the unit, notify Customer service.
  - If the source of the gas smell can not be localised immediately, notify the gas utility.
  - If the escaping gas is audible, leave the building immediately, prevent others from entering and notify the fire brigade, police and gas utility.
  - If the smell of gas comes from inaccessible rooms, notify the fire brigade, police and gas utility.



## 4 Description of the unit

The unit is intended for universal use in commercial kitchens for cooking food. Suitable for cooking with contact heat, for frying fast-fry food and for grilling.

#### 4.1 Overview of the unit

#### 4.1.1 Floor-standing unit

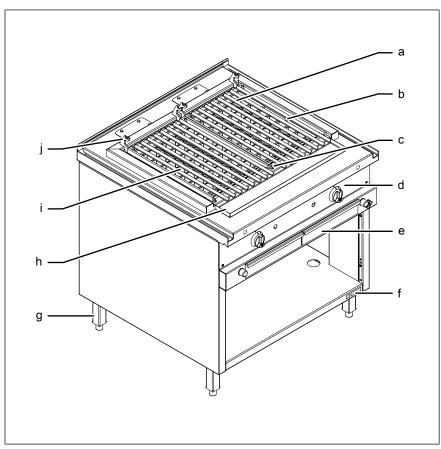


Image: Argentina 2 gas lava stone grill

- a Grilling surface with grate
- b Lava stone grate
- c Front grate holder
- d Control panel
- e Collection container

- f Nameplate and gas type supplemental label
- g Equipment leg (optional)
- h Collection plate
- i Lava stone
- j Rear grate holder



### 4.1.2 Countertop unit

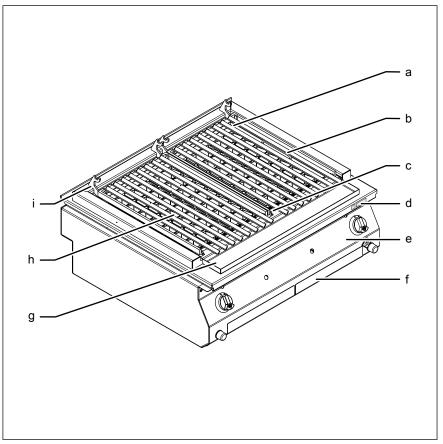


Image: Argentina 2 gas lava stone grill

- a Grilling surface with grate
- b Lava stone grate
- c Front grate holder
- d Nameplate and gas type supplemental label
- e Control panel

- f Collection container
- g Collection plate
- h Lava stone
- i Rear grate holder

## 4.2 Function of the operating and display elements

Operating/display element	Symbol	Designation	Function
Burner control knob	•	Off	Switch off gas supply
	<b>\( \rightarrow \)</b>	Ignition	Gas supply for pilot burner is released, the burner is switched off
	<b>△ △</b>	Output	Set the burner output
Piezo pilot ignitor button			Ignite pilot burner
Flame monitoring inspection port			Monitor flame
Inspection port			Monitor ignition and flame pattern

## 4.3 Application

## 4.3.1 Fill quantities

Model	Maximum fill quantity in litres
Argentina 1	1 x 3
Argentina 2	2 x 3

## 5 Operating the unit



#### **CAUTION**

#### Risk of burns from hot surfaces

 Protect arms and hands by wearing suitable protective gloves.

#### 5.1 Tips on using

In order to use the unit to its optimum and avoid heat loss:

- Utilise stored heat by switching back at an early stage.
- Avoid unnecessary continuous operation without food being cooked.
- Heat up the unit shortly before use.
- Only use one heat zone, if the load quantity is small.

#### 5.2 Switching the unit on and off

#### 5.2.1 Switching on

Requirements Gas shut-off valve on the unit is closed

- 1. Open the gas shut-off valve on the unit.
- 2. Press the *Burner* control knob and turn it to the "♦" setting.
- 3. Keep the *Burner* control knob pressed on the "♦" setting.
  - → Gas flows to the pilot burner.
- 4. After about 5 seconds also press the Piezo pilot ignitor button.
  - → The pilot burner is ignited.
- 5. Observe the ignition procedure through the inspection port.
  - → Ignition flame is burning.
- 6. After 10 seconds let go of the Burner control knob.
  - → The pilot burner continues to burn automatically.
- → Unit switched on and ready for use.



If there is no ignition, repeat the procedure.

- 7. Press the *Burner* control knob and turn it to the "\texts" setting.
  - → The burner is ignited.
- → The burner burns at full load.
- $\rightarrow$  Heat zone is on.



#### 5.2.2 Switching off



During operation the *Burner* control knob is safeguarded against unintentional shifting to the "•" setting.

- → Press the *Burner* control knob and turn it to the "•" setting.
  - → Gas supply is stopped.
  - → The burner is switched off.
  - → The pilot burner is switched off.
- $\rightarrow$  Heat zone is off.

#### 5.3 Basic functions

#### 5.3.1 Setting the grate height

The grate height adjustment can be set at 4 different drain angles. The distance from the lava stones is also set.

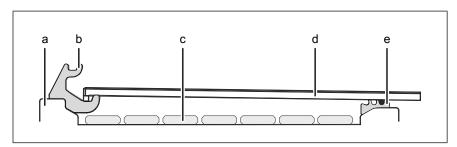
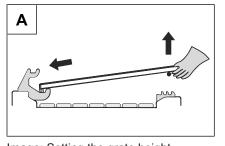


Image: Grate height adjustment

- a Unit
- b Top holder with level 4
- c Lava stone

- d Grate
- e Bottom holder with level 1 to 3



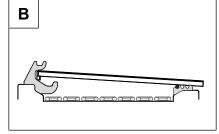


Image: Setting the grate height

#### Requirements Grate has cooled down

- 1. Lift the grate out of the front holder.
  - → Select the desired drain angle.
- 2. Slide the grate backwards.
- 3. Place the grate on the front holder.
- → The grate height is set.



#### 5.3.2 Loading in the water

#### Tip

Water prevents the dripping grill residue from igniting and burning.

When loading the water, observe the fill quantity and check it regularly during operation.

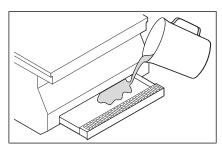


Image: Loading in the water

- 1. Remove the collection container from the unit.
- 2. Load the water into the collection container.
  - → Observe the fill quantity (see "Fill quantity").
- 3. Insert the collection container again.

#### 5.3.3 Adjusting the output



During operation the *Burner* control knob is safeguarded against unintentional shifting to the "●" setting.



Increase output: Turn the Burner control knob in the "A" direction.

Reduce output: Turn the Burner control knob in the "a" direction.

The output can be freely adjusted between the maximum and minimum output.

Requirements Heat zone is on

- 1. Press the *Burner* control knob and turn it to the "\texts" setting.
  - → The burner is ignited.
  - → The unit operates at maximum output.
- 2. Turn the Burner control knob to the "A" setting.
  - → The unit operates at minimum output.



#### 5.3.4 Placing the lava stones in position

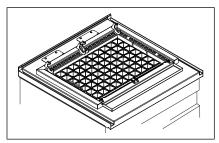


Image: Placing the lava stones in position

Requirements Unit switched off and cooled down

Grate has cooled down

- 1. Remove the grate from the unit.
- 2. Place one layer of lava stones in position.
  - → Maintain a small distance between the lava stones.
- 3. Replace the grate.

### 5.4 Grilling

#### Requirements Water is loaded

Collection container inserted

Grate placed in position

Grilling surface cleaned

- 1. Brush the grate thinly with frying fat or oil.
- 2. Switch on the unit.
- 3. Set the desired output.
  - → The grate is heated up.
- 4. Place the food to be cooked on the hot grilling surface of the grate.
- 5. Free the grate of grilling residue after you have finished each grilling process (see "Cleaning and caring for the unit").
- 6. Check the water level regularly.



#### 5.5 Pauses and end of use

Switch off the unit during pauses and at end of use.

#### 5.5.1 Brief pauses



When restarting the unit after pauses, first check the function of the pilot burner in order to prevent a flash fire.

- 1. Press the *Burner* control knob and turn it to the "♦" setting.
  - → The burner is switched off.
  - → The pilot burner remains on.
- 2. Continuing after a pause in operation:
- 3. Press the *Burner* control knob and turn it to the "\texts" setting.
  - → The burner is ignited.
  - → The burner burns at full load.
- $\rightarrow$  Heat zone is on.

#### 5.5.2 Long pauses and end of use



After being out of operation for a longer period of time, the unit must be checked by an expert, who is approved by the gas utility.

- 1. Press the *Burner* control knob and turn it to the "●" setting.
  - → The burner is switched off.
  - → The pilot burner is switched off.
  - $\rightarrow$  The unit is off.
- 2. Close the gas shut-off valve on the unit.
- → Unit not in operation.

### 5.6 Emptying the collection container



#### CAUTION

#### Risk of scalding from hot liquids

- Allow the collection container to cool down before emptying
- Protect arms and hands by wearing suitable protective gloves.

Requirements Collection container cooled down

- 1. Remove the collection container carefully from the unit and empty it properly.
- 2. Remove the frying residue and wipe the collection container out with kitchen paper.
- 3. Insert the empty collection container.



## 6 Cleaning and caring for the unit



#### **CAUTION**

#### Risk of burns from hot surfaces

Allow surfaces to cool prior to cleaning.

#### **ATTENTION**

#### Risk of physical damage from improper cleaning

 Do not clean the unit with a high-pressure cleaner or water jet.

#### **ATTENTION**

#### Risk of physical damage through penetration of water

• Do not close the discharge channel and do not fill with water.

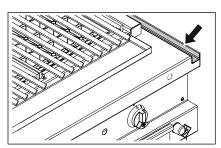


Image: Discharge channel

#### 6.1 Preventing corrosion

- Keep the surfaces of the unit clean and with access to air.
- Remove lime, grease, starch and protein deposits.
- Only expose parts made from non-rusting steel to brief contact with highly acidic foods, spices, salts or the like.
- Avoid damaging the stainless steel surface with other metal items, for example steel spatulas or steel wire brushes.
- Prevent contact with iron and steel, for example steel wool and steel spatulas.
- Do not use bleaching or chlorine-containing cleaning agents.
- Clean contact surfaces with water.

### 6.2 Eliminating rust spots

- Remove fresh rust spots with a mild abrasive or fine sandpaper.
- · Always remove rust spots completely.
- Expose treated areas to fresh air for at least 24 hours. During this time, do not allow any contact with greases, oils or foods so that a new protective layer can form.



#### 6.3 Cleaning the housing

#### **ATTENTION**

#### Risk of physical damage from improper cleaning

- Do not clean the housing with highly abrasive or chemically aggressive cleaning agents.
- Do not clean the housing with highly abrasive sponges.

#### Requirement Unit switched off and cooled down

→ Clean the housing with warm water and commercially available washing-up liquid.

#### 6.4 Cleaning the grate

Requirement Unit switched off and cooled down

Grate has cooled down

- 1. Remove the grate from the unit.
- 2. Clean the grate with warm water and commercially available cleaning agents.
- 3. Remove stubborn dirt residue with a suitable stainless steel brush and stainless steel cleaner.
- 4. Rinse with clear water and then dry.
- 5. Brush the grate thinly with frying fat or oil.
- 6. Replace the grate.

### 6.5 Cleaning the collection container

Requirement Collection container cooled down and emptied

- 1. Remove the collection container from the unit.
- 2. Remove the frying residue and wipe the collection container out with kitchen paper.
- 3. Clean it with clear water and mild cleaning agent.
- 4. Dry the collection container and insert it again.

### 6.6 Cleaning the lava stones

Requirements Unit switched off and cooled down

Grate has cooled down

- 1. Remove the grate from the unit.
- 2. Remove the lava stones from the unit.
- 3. Clean the lava stones with warm water and a commercially available cleaning agent.
- 4. Remove stubborn dirt residue with a suitable stainless steel brush and stainless steel cleaner.
- 5. Rinse with clear water and then dry.
- 6. Replace the grate.



#### 6.7 Performing a visual inspection

#### **ATTENTION**

#### Risk of physical damage from improper inspection

- Inspect in accordance with the inspection intervals.
- Have inspections performed by a capable user.
- In the event of damage or signs of wear, contact customer service immediately and stop using the unit.

Requirements Unit switched off and cooled down

Collection container emptied and cleaned

- → Inspect the housing and collection container regularly for deformation and damage.
- → Visual inspection has been performed.



## 7 Troubleshooting



#### DANGER Risk of fatal injury from escaping gas

 Gas installation work on the gas system and unit may only be performed by an expert approved by the gas utility. The applicable regional regulations of the gas utility must be observed.

### 7.1 Cause of failure and remedy

Failure	Possible causes	Remedy	
Operating element does not react	Burner control knob is defective	Close the gas shut-off valve on the unit. Contact Customer service.	
The unit does not heat up	Gas supply interrupted	<ul> <li>Restore gas supply.</li> <li>Open the gas shut-off valve on the unit.</li> <li>Contact Customer service.</li> </ul>	
	Burner control knob is on the "☆" setting	Set the output.	
	Burner control knob is defective	Close the gas shut-off valve on the unit.     Contact Customer service.	
	Piezo pilot ignitor button is defective	<ul><li>Close the gas shut-off valve on the unit.</li><li>Contact Customer service.</li></ul>	
	Unit defective	Close the gas shut-off valve on the unit. Contact Customer service.	
Insufficient heat output	Burner control knob is defective	Close the gas shut-off valve on the unit.     Contact Customer service.	
	Unit defective	Close the gas shut-off valve on the unit.     Contact Customer service.	
Smell of gas	Gas is escaping	Follow the rules of conduct when the smell of gas is detected.	

### 7.2 Nameplate

When contacting Customer service, please always provide the following data from the nameplate:

Serial number (SN)	
Type number (TYP)	



## 8 Carrying out maintenance

The unit is maintenance-free, there are no maintenance requirements.



# 9 Disposing of the unit in an environmentally responsible manner

Do not dispose of unit or the unit's components together with nonrecyclable waste. If the unit is disposed of together with nonrecyclable waste or treated improperly, toxic substances contained in the unit can damage health and pollute the environment.

Dispose of the unit in accordance with local regulations for used appliances. Clarify any open questions with the responsible agencies (for instance, solid waste management).

**Oil and fat** Residue that contains oil and fat must be collected in suitable containers and disposed of in accordance with the local disposal regulations.

**Cleaning agents** Dispose of leftover cleaning agents and cleaning agent containers in accordance with the information provided by the cleaning agent's manufacturer. Observe applicable regional regulations.

1001064120ABBE--

### 10 Manufacturer's declaration



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



#### Manufacturer

MKN Maschinenfabrik Kurt Neubauer GmbH & Co. KG • Halberstädter Straße 2a • 38300 Wolfenbüttel, Germany

We hereby declare, that the following product:

Description of the unit	
Unit for cooking food in commercial applications	

Designation / Unit type	
Gas lava stone grill / XXGGSG	

Unit number							
0761602	10010246	10010641	10013252	10013253	1261602	1361602	1461602
2061602	3061602						

complies with the relevant provisions of the following directives and regulations, but does not contain any assurance of properties:

- Directive 2009/142/EC, dated 30 November 2009, relating to appliances burning gaseous fuels
- Directive 2011/65/EU (RoHS) dated 01 July 2011
- REGULATION (EC) No. 1935/2004 dated 27 October 2004 on materials and objects, which are intended to come into contact with food

We hereby declare, that the listed units comply with the type of construction described in the EU Type Examination Certificate, and that they meet the requirements of the specified Gas Appliances Directive.

Product identification number of the EU type examination certificate: CE-0085CL0514

Adduced basis for verification	
EN 203-1:2014	
EN 203-2-10:2007	
EN 203-3:2009	

The manufacturer bears the sole responsibility for issuing this Declaration of Conformity. This Declaration of Conformity becomes invalid, if changes are made which are not agreed with us.

Wolfenbüttel, 05/04/2017

Person authorised to compile the technical documents:

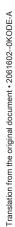
nna Peter Helm Chief Technical Officer (

ppa. Peter Helm, Chief Technical Officer (address as manufacturer)

2061602--0KOBE-A

1 / 1

en-GB



www.mkn.eu

