





## Dear client, thank you for choosing a SENKO cooker!

This product was designed and manufactured to its minutest details in order to fulfill your every need for functionality and safety.

This *Instruction manual* will teach you to operate your cooker properly, so please read the manual carefully before using the cooker.

Senko management

## Symbols used in this INSTRUCTION MANUAL:

ATTENTION 
 WARNING







ADVICE AND RECOMMENDATIONS





# **CONTENTS**

1.	GENERAL	4
	1.1. FUEL	6
	1.2. FEEDING	6
	1.3. CHIMNEY	.7
	1.3.1. CHIMNEY CAP	7
	1.3.2. CHIMNEY FUNCTION	8
	1.4. INSULATION1	0
2.	WARNINGS AND SAFETY1	0
3.	TECHNICAL FEATURES1	1
4.	INSTALLATION1	3
	4.1. POSITIONING	3
	4.2. CHIMNEY PREPARATION AND CONTROL1	4
	4.3. CONNECTING TO CHIMNEY1	4
	4.4. FRESH AIR VENTS	7
	4.5. OVEN THERMOMETER	7
	4.6. INSTALLATION TESTING	7
5.	HANDLING THE PRODUCT1	8
	5.1. DIRECTING THE FLUE GAS	8
	5.2. AIR ADJUSTMENT AND REGULATION1	9
	5.3. FIREBOX GRATE	0
	5.4. FIRING	<u>'</u> 1
	5.4.1. PROCEDURE	1:1
	5.4.2. OPTIMUM USE VALUES2	1:
	5.4.3. ADDING FUEL2	2
	5.4.4. FEEDING IN TRANSITION PERIOD2	23
	5.5. OVEN DOOR	:3
	5.6. FUEL BOX	4
	5.7. HEIGHT ADJUSTMENT2	25



6.	CLEANING	25
	6.1. CLEANING THE FLUE GAS CHANNEL	26
7.	MAINTENANCE	27
	7.1. OLD COOKER DISPOSAL	.27
	7.2. SPARE PARTS	.27
8.	MALFUNCTIONS / CAUSES / SOLUTIONS	.28
9.	TECHNICAL SUPPORT	.29
10.	TECHNICAL DATA	30
11.	TERMS OF WARRANTY	31
WA	RRANTY	32
INS	TALLATION REPORT	.33
CE	MARKING	.34



#### 1. GENERAL

Classical solid fuel cookers

- ♦ E2375L SG-75 inox
- ◆ E2375D SG-75 inox
- ♦ E2190L SG-90 inox
- ♦ E2190D SG-90 inox

are models from the SENKO cookers palette which can accommodate your needs in the best possible way. Therefore, we ask you to CAREFULLY READ THESE INSTRUCTIONS, which will help you to achieve the best possible results already during the initial use.



The manufacturer is not responsible for any consequences (people or animal injuries or property damages) resulting from failure to comply with this *Manual*. The cooker is hot during operation and the use of protective heat insulated gloves is compulsory during handling. Children and infirm individuals are not allowed to handle the cooker.



The external appearance of the cooker is shown on the first page of this Manual. Cooker principal parts are made of stainless steel boiler plates and castings of quality grey cast. The cookers are produced with flue gas connection point on the left or the right side. When ordering the cooker or the spare parts, it is necessary to state its full designation, for example: cooker E2375D SG-75 inox lux; which means that the flue gas connection is on the right side, if the stove is observed frontally.



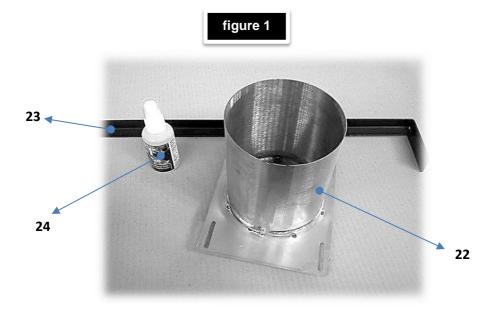
The cookers are manufactured and certified in accordance with the EN 12815 standard and comply with all the requirements set by this standard.

These SENKO cookers are intended for cooking, baking and space heating!



The cooker is packaged in a EURO pallet. During transport, the cooker must be properly fastened in order to prevent tumbling or damages. **The standard delivered cooker set consists from:** 

- cooker,
- instruction manual,
- chimney terminal extension (22),
- cooker cleaning tool (23),
- CF agent for removal of soot and grease from glass surfaces (24).





CAUTION! The cooker weighs between 130 and 200 kg. Extra caution is necessary when unloading, transferring, moving and installing the cooker in order to avoid physical injury.



## 1.1. FUEL

The use of moist and low-calorie wood is not recommended. The **wood** moisture must be lesser than 17%. The energy content of moist wood is low, at approx. 2,3 kWh/kg and it greatly pollutes the door glass, as well as the chimney and the cooker.



## Use only recommended fuel:

- wood: common beech, common hornbeam, oak, black locust
  - ⇒ air dried for a minimum of 2 years
  - ⇒ relative humidity 15-17%, energy content at approx. 4,2 kWh/kg
- wood briquettes: energy content at approx. 4,4 kWh/kg



## 1.2. FEEDING

- manually when necessary
- we recommend the logs to be of 50 x 50 mm vertical cut, up to 2/3 of the firebox length
- use smaller logs for a more intensive fire, and more massive logs to maintain fire



- the minimum distance between the logs must be 1 cm, the same distance of 1 cm applies for the briquettes
- to maintain constant oven temperature, add smaller quantities of fuel occasionally ⇒ approx. 0,5 kg
- it is necessary to use protective heat insulated gloves when adding fuel to the firebox
- protective heat insulated gloves must also be used when opening and closing the oven and firebox door and removing the tray from the oven and ash box





#### 1.3. CHIMNEY



The cooker is connected to the chimney via 120 mm diameter sliding rosette. It is necessary to execute the connection of the rosette and the chimney tightly and impermeably. If the cooker is separated from the chimney opening (not recommended) the connection is made via standard 120 mm diameter smoke venting pipe.



We also advise to equip the chimney with solid material and possible condensation products collection chamber and to install the chamber in question beneath the smoke channel inlet, in a manner which allows easy access and inspection via impermeable door.

## 1.3.1. CHIMNEY CAP

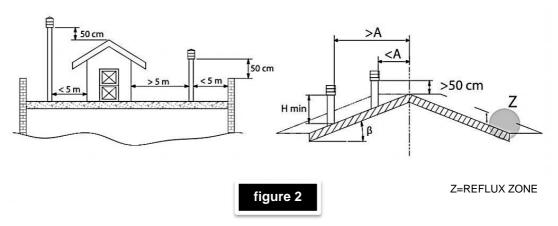
Chimney cap must fulfil the following prerequisites:



- identical internal cross-section to that of the chimney,
- operational exit cross-section no less than the double inner cross-section of the chimney,
- constructed to prevent rain, snow, leaves and other foreign bodies from entering the chimney,
- constructed to enable expulsion of combustion products in case of wind from any direction and incline,
- installed to enable proper dispersion and dilution of combustion products outside the reflux zone (backflow) because the counter pressure occurs here. Therefore, it is necessary to adhere to limitations listed in figure 2,
- mechanical appliances for flue gases suction are not allowed.



FLAT ROOF PITCHED ROOF



Roof slope	Distance between the roof ridge and the chimney	Minimum chimney height (measured from the roof surface)
β	<i>A</i> , m	<i>H</i> <sub>min</sub> , m
15°	< 1,85	0,5 m above the roof ridge
15	> 1,85	1 m from the roof
30°	< 1,5	0,5 m above the roof ridge
30	> 1,5	1,3 m from the roof
45°	< 1,3	0,5 m above the roof ridge
45	> 1,3	2 m from the roof
60°	< 1,2	0,5 m above the roof ridge
60	> 1,2	2,6 m from the roof

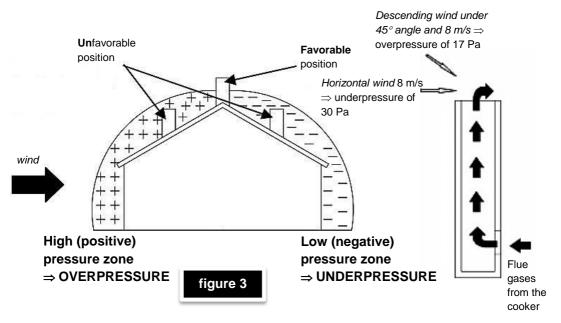
#### 1.3.2. CHIMNEY FUNCTION

Among all the meteorological and geographical factors that influence the chimney function (rain, fog, snow, insolation period, etc.) **the wind is most certainly the crucial one**. Apart from the pressure caused by the temperature difference between the flue gases and the outer chimney air, there is another type of pressure – **wind dynamic pressure**.



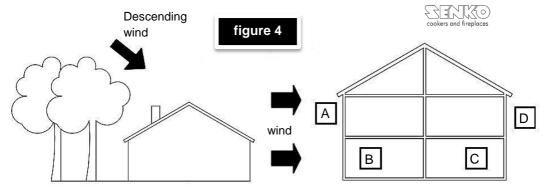


Ascending wind ALWAYS has the effect of increasing the pressure, i.e., underpressure (flue draught), provided the chimney is properly installed. Descending wind ALWAYS has the effect of decreasing the draught  $\Rightarrow$  overpressure occurs. Apart from wind direction and velocity, chimney position in relation to the house roof and surrounding area is also important (figure 3).



The wind also influences the chimney function indirectly by creating areas of high (overpressure) and low (underpressure) pressure, both inside and outside the residential area (*figure 4*).

Pressure that facilitates chimney function can occur in rooms directly exposed to the wind (B), but it can also adversely affect the chimney through external pressure if the chimney is situated on the side exposed to wind (A). Contrary to that, underpressure can occur in lee rooms (C), adversely affecting functions of the chimney situated on the opposite side (D) from the wind direction.



A-B zones in overpressure C-D zones in underpressure

## 1.4. INSULATION

Cooker is to the outer surfaces isolated with chamotte plates 20 mm thick. The sides are chamber derived and cooled with the natural air circulation. The depth of the chamber is 25 mm. Other parts of the cooker interior are lined with chamotte brick, 40 mm thick.

## 2. WARNINGS AND SAFETY

When connecting the cooker to the chimney, adhere to national and European norms and local regulations.



Prior to use, verify with the local authorized chimney-sweeper whether the cooker is properly connected to the chimney (the chimney-sweeper must complete the installation report at the end of this *Manual*).



Special attention must be paid that there is enough air for combustion being supplied to the room cooker is installed in.





#### 3. TECHNICAL FEATURES

SG-75 and SG-90 SENKO cookers are intended for cooking, baking and household heating. They are equipped with an oven just like the traditional kitchen cooker. Cookers are suitable for installation between other kitchen appliances without heating risks.

They are made of stainless steel boiler plates and castings of quality grey casts. The boiler is made of 5 mm thick boiler plate. The cooking plate (1) is made of 8 mm thick fireproof plate. Cooker interior is lined with chamotte and chamotte plates.

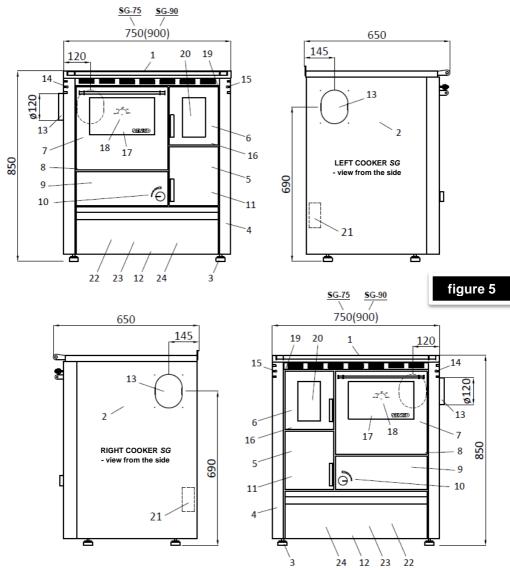
The fuel box (12) is on the frontal side, at the bottom, just above the manual primary air regulator (10) and the ash box (11). Above them is a firebox (6) with a movable grate (16) and the oven (7) with door and thermometer (18).

Also, the cooker is on the front equipped with two handles, one serves as a flue gas deflector (14) and is located on the side where is the chimney connection point, while the other (15) serves as a lever for moving the firebox grate (16).

The following figure display the schematic of the cookers and their accompanying parts.

#### SCHEMATIC DISPLAY FOR SG COOKERS





## THE KEY:

- 1. Cooking plate
- 2. Frame
- Cooker base with screws for 3. height adjustment
- 4. Cooker housing
- 5. Lower door
- Firebox door 6.
- 7. Oven with door
- 8. Oven door hinge

- Cleaning hatch lid 9.
- 10. Primary air manual regulator
- 11. Ash box
- 12. Fuel box
- 13. Chimney connection point
- 14. Flue gas deflector
- 16. Movable grate
- 17. Oven door glass 18. Oven thermometer
- 15. Handle for grate moving
- 23. Cooker cleaning tool 24. CF agent for removal of soot

19. Door hinge bolt

extension

20. Firebox door glass

21. Primary air inlet hatch

22. Chimney connection point

and grease from glass surfaces



## 4. INSTALLATION



Once you have removed packaging from the cooker, it is necessary to make a detailed inspection in order to determine any potential damages that might have occurred during transport. Nay detected damages must instantly be reported to the manufacturer.

In places of any connection points on the cooker (chimney, air inlet), inspection hatches must be installed for system maintenance and servicing purposes.

## 4.1. POSITIONING



A spirit level must be used to place the cooker in a horizontal position with no incline. It is necessary to ensure the minimum distance of the cooker from any flammable objects; such as wood, chipboard, cork and similar. If the materials are easily combustible such as PVC, polyurethane and similar, the necessary safety distances need to be doubled.



The minimum distance from any flammable surfaces is 1000 mm above and 800 mm in front of the cooker, and 200 mm in all other directions.

When mounting the cooker on the floor made from easily combustible material (wooden floors), the cooker must be mounted on an insulating noncombustible surface, 60 mm thick. The surface must cover the layout area of 800 mm in front of the cooker and 400 mm in all other directions.





It is explicitly RECOMMENDED by the manufacturer to place the cooker as close as possible to the chimney hole, i.e. next to the chimney hole itself in order to avoid using an additional smoke uptake pipe. If the additional smoke uptake pipe is not used, maximum efficiency of the cooker, i.e. fuel is additionally assured!



#### 4.2. CHIMNEY PREPARATION AND CONTROL

Prior to cooker mounting, it is necessary to check the chimney – the diameter, height, possible clogging or damages. The chimney must be **certified by an authorized local chimney-sweeper.** The effective **chimney height** must be **at least 5 meters** from the point of flue gases outlet (*figure 6b*).



Flue draught must be within parameters  $12 \pm 2$  Pa.

The chimney must be at least 0,5 meters above the roof ridge. The minimum distance between the two connections on the same chimney must be 60 cm (*figure 6d*).



Chimney diameter is chosen according to information provided by the chimney manufacturer – e.g., for flue draught of 12 Pa, the diameter is usually 130 mm.

The chimney must be smooth on the inside, well insulated and well fastened. All cleaning hatches must be well fastened. All gaskets must be regularly inspected and replaced when necessary.

#### 4.3. CONNECTING TO CHIMNEY

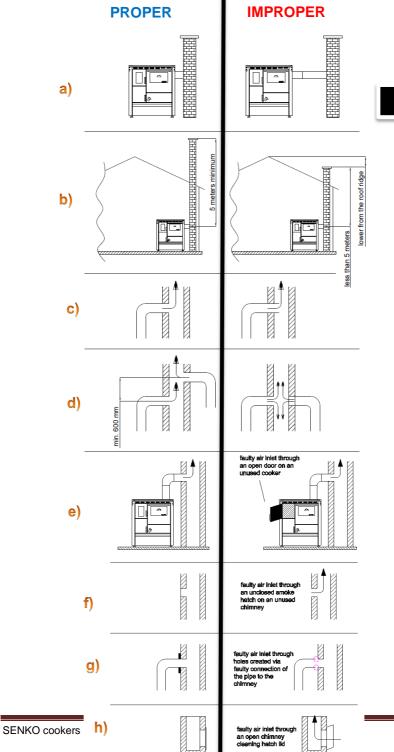
When connecting the cooker to the chimney it is necessary to adhere to local, national and European regulations (norms) – **DIN 4705**.

It is necessary to ensure that the connection between the cooker and the chimney is executed tightly and impermeably. Smoke outlet pipe must have a suitable incline in cases where the cooker is removed from the chimney opening.



Smoke outlet pipe must not penetrate into the chimney clear opening (figure 6c).

Differences between the proper and improper connection of the cooker to the chimney are displayed in the following figure.



cookers and fireplaces

figure 6

Differences between the proper and improper connection of the cooker to the chimney

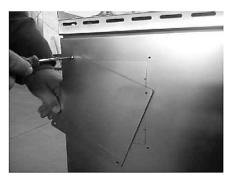


Connect the cooker to the chimney using a sliding rosette, 120 mm in diameter. Specially designed sliding rosette enables the adjustment of the chimney opening in tolerance of 1,5 cm upwards, i.e. downwards.

In case it is necessary to keep the cooker removed from the chimney opening, use the standard smoke outlet pipe, 120 mm in diameter. It is not allowed to reduce the prescribed pipe diameters!

If the cooker is further removed from the chimney opening, it is connected via extension tube and an elbow. The extension smoke inlet pipe must have an appropriate incline and must not exceed 125 cm in length. The connection of the chimney and the smoke inlet pipe must be completely fastened!





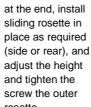
remove the cover on the side of unscrewing the 4 screws for sheet metal



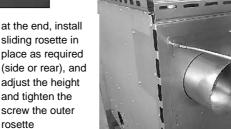
remove the following cover by pressing the weakest connection



do the same on the outside and inside sheet







SENKO cookers SG-75 and SG-90



## 4.4. FRESH AIR VENTS

The room where the cooker is installed **must be provided with** sufficient air inflow to ensure combustion. The area must be regularly ventilated.



The fresh air vent must be situated **near the room floor** and allow the inflow of fresh air into the room. **The minimum dimension of the vent must be 6 cm<sup>2</sup> per kW of nominal power** (e.g. for 30 kW  $\Rightarrow$  180 cm<sup>2</sup>  $\Rightarrow$  10 x 18 cm vent).

A pipe can also be installed on the existing opening (21) on the rear side of the cooker for the purpose of entering fresh outside air.

## 4.5. OVEN THERMOMETER



Thermometer (18) indicates the oven temperature; this value is informative. If the oven temperature exceed 300 °C, the oven must be partly opened to prevent damage to the thermometer, oven door hinge and oven door.

The warranty will be void in case the damage to the parts listed before occurred from excessive oven temperature.

## 4.6. INSTALLATION TESTING



**Prior to initial firing** it is necessary to check if the smoke uptake pipe is properly fastened.

17



## 5. HANDLING THE PRODUCT

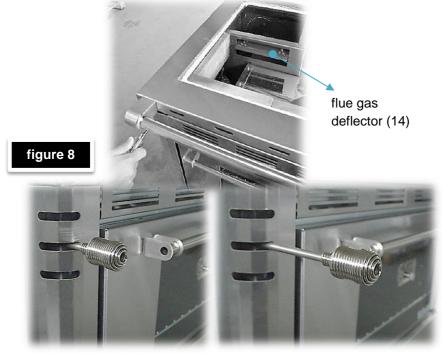
⇒ holding the cooker frame is **not allowed** while handling the appliance!



## 5.1. DIRECTING THE FLUE GAS

Flue gas deflector (14) accelerates the expulsion of flue gas from the cooker when this is necessary. It is primarily **used during initial stages of firing or when larger quantities of fuel are added** into the firebox.





closed flue gas deflector (14)

open flue gas deflector (14)

Flue gas deflector (14) can also be used to regulate the oven temperature (7)  $\Rightarrow$  if the flue gas deflector is opened (pulled outwards), the oven is cooling.





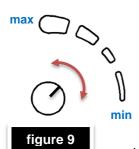
## 5.2. AIR ADJUSTMENT AND REGULATION

## **CHIMNEY**



If the chimney is equipped with a vent damper, it must be adjusted to keep the **chimney flue draught within the limitations**  $12 \pm 2$  Pa.

#### PRIMARY AIR



Primary air is the air that flows directly through the firebox grate. There is a manual primary air regulator (10) between the fuel box (12) and oven (7).

Turning the PVC wheel of the manual regulator regulates primary air flow. Regulator is set in accordance with the desired temperature in the cooking plate or oven. The division ranges from min

(minimum slit) to max (maximum slit):

- min ⇒ manual regulator is closed and there is no primary air flow,
- max 
   primary air opening is completely open and the flow is at its maximum.



figure 10

There is a rectangular connection point for the intake of external primary air on the cooker rear side, onto which a rectangular pipe (21), dimensions 110 x 55 mm, can be connected.

If necessary, the rectangular cross-section may be reduced and turned into a round

opening (minimum diameter 100 mm). The connecting pipe or the reduction must be made out of non-flammable

material (in accordance with DIN 4102-B1). *Figure 10* shows an example of reduction (reduction is not supplied with the cooker).



## SECONDARY AIR

Secondary air is the air that flows into the firebox to facilitate maximum combustion, reducing harmful substances to ashes and discharging flue gas with low capacity for pollution into the chimney.



Regulation of secondary air is automatic through the holes that are located in chamotte plates in the firebox (*figure 11*).

figure 11



#### 5.3. FIREBOX GRATE

Firebox grate is movable. It moves by a handle (15) which is located to the right of the left cooker firebox respectively, to the left of the right cooker firebox..





By moving the grate can be further controlled

figure 12

**a primary air inlet**, for better and slower fuel burning. When the handle (15) is pulled out – the grate is open, otherwise it is closed.

If between openings of the grate come solid residues of non-combustible materials (nails, etc.), the grate cannot move. In this case it is necessary to clean the grate in order to be moved.



 wide grate openings must be positioned facing upwards at all times to allow the ashes to fall down!





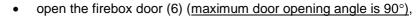
## 5.4. FIRING

#### 5.4.1. PROCEDURE



**Prior to every firing**, follow the following procedure :

- if the chimney is equipped with a vent damper, open it completely,
- open the flue gas deflector (14) and set the manual primary air regulator (10) to maximum,



- put the kindle wood into the firebox and ignite it,
- close the firebox door (6),
- monitor flame progression through the firebox door,
- once the fire is in full flame, add wooden logs as necessary,
- close the flue gas deflector (14),
- regulate the fire intensity by regulating the volume of primary air via manual regulator (10).



WARNING! <u>Never use flammable liquids</u>, such as petrol and similar to ignite the fire and always keep these and similar liquids away from your cooker.

## 5.4.2. OPTIMUM USE VALUES



Primary air volume and chimney flue draught must be adjusted to levels that prevent oven temperature from exceeding 300°C.

Maximum quantity of fuel that can be accommodated in the firebox:

• 2-3 kg (wood); 1,5-2 kg (briquettes).



Adding fuel in regular intervals, in quantities of 0,5 to 1 kg, is recommended.





When using the oven for baking, it is recommended (to maintain constant temperature in the oven) to add 0,5 kg of fuel in regular intervals. It is also recommended to rotate the tray from 180° halfway through the baking process to ensure uniform baking!



Cooker optimum values may be achieved only if the cooker nominal power was chosen in accordance with the rules of profession and object energetic efficiency.

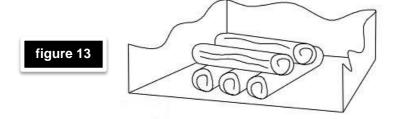


## 5.4.3. ADDING FUEL

Apart from use of appropriate fuel and satisfactory chimney flue draught, the manner in which the cooker is fuelled **also influences the glass cleanness**.

We recommend only one layer in each fuel refill and, if possible, the use of logs of length up to 2/3 of the firebox length. There should be a minimum distance of 1-2 cm between the logs.





**Briquettes should be used** in amount that only covers the firebox surface, also with a **minimum distance of 1-2 cm** between them.

WARNING! <u>New fuel quantities</u> should be <u>added</u> only on top of embers, i.e., not on the flames, but only <u>on top of embers (approx. 1</u> cm thick).







Primary air manual regulator (10) must be completely closed at least ten seconds before opening the firebox door (6) to prevent the breach of flue gases into the residential area.

The door must be opened slowly. After adding the fuel, close the door slowly. Open the primary air manual regulator (10) to decrease the time of fuel combustion.

Once the fuel starts burning, adjust the primary air manual regulator (10) to a desired position  $\Rightarrow$  in accordance with *chapter 5.2*.



Flue gas deflector (14) MUST BE opened before opening the door!

## 5.4.4. FEEDING IN TRANSITION PERIOD

During the transition period, i.e. when outdoor temperatures are higher, sudden increase in outdoor temperature can cause chimney malfunction (decreased chimney flue draught) resulting with not all flue gases being expelled into the atmosphere.



It is therefore recommended to **use less fuel and smaller logs** during the transition period in order to achieve a more lively flame, as well as to **adjust the primary air volume** in order to improve the expulsion of flue gases from the chimney.

#### 5.5. OVEN DOOR

Oven door are removed as shown in the following figure :





- open the oven door all the way
- ◆ move the safety all the way back on the left and right oven hinges



 close the door halfway ensuring that the safeties lean against the door slits

figure 14

♦ lift the ajar door upwards for approx. 2 mm and lightly pull them towards yourself, inclining the door toward the cooker simultaneously

 ◆ pull the door from the cooker hinge bearing

Reverse the procedure to mount the door back!



WARNING! <u>Always make sure</u> that the hinge safeties properly fit in their bearings prior and after the removal of door! Otherwise they might suddenly pop out during door removal or mounting, i.e. the hinge might suddenly close due to strong springs, which might cause injuries!



#### 5.6. FUEL BOX

Fuel box (12) is mounted on the guide bars. **Maximum bearing** capacity of the box is 15 kg. The box is removed as follows:

- pull the box towards yourself all the way,
- lift the box upwards for approx. 5 mm and lightly pull towards yourself.
- the box is mounted back by reversing the procedure!











## 5.7. HEIGHT ADJUSTMENT

On the cooker base (3) there are 4 feet with screw to adjust the height 850 – 920 mm of the cooker.

Adjustment is made by turning the screw M10 to the desired height. After that, the M10 nut needs to be tightened with a wrench OK17 to avoid damaging of the feet.



## 6. CLEANING

The cooker and the chimney must be regularly cleaned (at least once a month).

**The ash box (11)** and the box area must be cleaned on daily basis. Ash disposal is to be executed in environmentally acceptable manner and in accordance with safety procedure.

The glass (20) on the upper firebox door (6) should be cleaned as necessary using the soot and grease cleaning agent (24). The agent is delivered with the cooker!

**The oven (7)** should be cleaned after every instance of use.

While **cleaning the top side of the cooker**, it is necessary to remove the cooking plate (1) and thoroughly clean the soot from the firebox, around the oven and flue gas deflector, including the chimney outlet opening (13).



Cooker cleaning is to be performed only when the cooker is inactive and when it is cold!

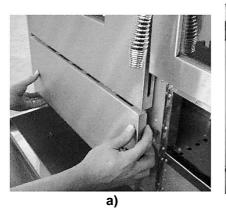


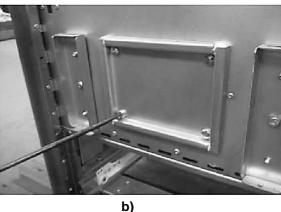


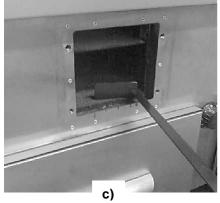
## 6.1. CLEANING THE FLUE GAS CHANNEL

When cleaning the flue gas channel, adhere to the following procedure:

- remove the manual regulator PVC wheel (10) by pulling it towards yourself,
- open the fuel box (12),
- remove the cleaning hatch lid (9) ⇒ figure 17a,
- remove the protective lid by unscrewing the 4 screws ⇒ figure 17b,
- clean and remove the soot and ashes from the cooker inside (figure 17c and d) using a scoop. After thorough cleaning, mount back the protective lid and cleaning hatch lid back into their positions.







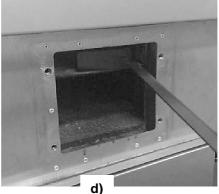


figure 17



## 7. MAINTENANCE

Following years of use, the **chamotte insulation** (consumable material) suffers damage that must be repaired with chamotte putty or refractory concrete.



After several first hours of feeding, smear the fireproof paint on the **upper plate** with a cloth imbued with edible oil.

Stainless material on the cookers is susceptible to slight colour change due to high temperatures. Stainless materials are to be maintained exclusively with stainless material maintenance agents in accordance with the manufacturer's instructions.



Handle securing bolt on upper and lower doors and firebox door protective bolt to be tightened if necessary.

## 7.1. OLD COOKER DISPOSAL



Once the cooker is no longer fit for use it must be delivered to an authorized disposal service specialized in recycling this type of waste. It is forbidden to dispose of the old cookers in the natural environment!

## 7.2. SPARE PARTS



Only original spare parts by the manufacturer are to be used. Should non-original spare parts be used or should the repair be executed by an unauthorized individual, the warranty will be void.



# 8. MALFUNCTIONS / CAUSES / SOLUTIONS



PROBLEM	POSSIBLE CAUSE	SOLUTION
FRUBLEIN	FUSSIBLE CAUSE	
Firebox door glass is black and/or the firebox is smoky (black soot)	<ul> <li>♦ insufficient flue draught (less than 10Pa)</li> <li>♦ faulty regulation</li> <li>♦ too much fuel in the firebox</li> <li>♦ fuel too moist</li> <li>♦ inadequate fuel</li> <li>♦ excessive firebox temperature</li> </ul>	⇒ check the connection of the cooker with the chimney and the chimney ⇒ study chapters 4.2 and 4.3. ⇒ study chapter 5.2. ⇒ reduce the fuel quantity ⇒ use fuel with less than 17% of relative moisture ⇒ use fuel as described in chapter 1.1. ⇒ reduce the fuel quantity and primary air volume and adjust chimney flue draught in accordance with chapter 5.2
Insufficient flue draught in the chimney; black smoke expelled from the chimney	<ul> <li>◆ chimney filled with soot</li> <li>◆ cooker filled with soot</li> <li>◆ chimney partially clogged or filled with soot</li> <li>◆ fuel not sufficiently dry</li> <li>◆ firebox cast grate turned in the wrong direction</li> <li>◆ upper or lower door opened</li> <li>◆ inadequate flue draught</li> <li>◆ faulty regulation</li> </ul>	⇒ clean the chimney ⇒ clean the cooker ⇒ unclog and clean the chimney ⇒ use fuel in accordance with chapter 1.1. ⇒ set the grate in accordance with chapter 5.3. ⇒ close the door ⇒ adjust the flue draught in accordance with chapter 4.2. ⇒ adjust the primary and secondary air in accordance with chapter 5.2.
Smoke coming out of the cooker		⇒ clean the cooker as described in chapter 6. ⇒ clean the chimney as described in chapter 6. ⇒ use fuel as described in chapter 1.1. ⇒ study chapter 4.4. ⇒ increase the firebox temperature by increasing fuel quantity ⇒ adjust the chimney in accordance with chapters 4.2. and 4.3.



Cooking and baking temperature too low	<ul> <li>insufficient or excessive chimney flue draught</li> <li>excessive primary air volume</li> <li>inadequate fuel</li> <li>too much fuel – combustion difficult</li> <li>flue gas deflector opened</li> <li>grate in closed position</li> </ul>	⇒ adjust the chimney flue draught in accordance with chapter 4.2. ⇒ reduce primary air volume ⇒ use fuel as described in chapter 1.1. ⇒ add less fuel to the firebox ⇒ close the flue gas deflector ⇒ set the grate into the open position	
Cooking and baking temperature too high	<ul> <li>excessive chimney flue draught</li> <li>inadequate fuel</li> <li>flue gas deflector closed</li> <li>grate in the fully open position</li> </ul>	<ul> <li>⇒ reduce the chimney flue draught in accordance with chapter 4.2.</li> <li>⇒ use fuel as described in chapter 1.1.</li> <li>⇒ open the flue gas deflector</li> <li>⇒ adjust openness of the grate as required</li> </ul>	

## 9. TECHNICAL SUPPORT

Dear client,

If you were unable to find the solution to the malfunctions, that potentially developed while using your product, in the table above, please feel free to contact our complaint and support service:

Tel.: +385 (0)40 337 344Fax.: +385 (0)40 337 906

E-Mail: <u>info@senko.hr</u>

WE'D LIKE TO TAKE THIS OPPORTUNITY TO REMIND YOU WHAT YOU NEED TO POSSES WHEN CONTACTING OUR COMPLAINT AND SUPPORT SERVICE:

Before you contact us, prepare the following documents :

purchase receipt with the date of purchase,



- warranty (at the back of this Manual),
- written installation report (at the back of this Manual),
- Instruction manual.

The documents listed above are necessary to ensure the quickest and clearest removal of the occurring malfunction!



## 10. TECHNICAL DATA

SENK	O cooker	SG-75	SG-90	
Nominal heat output, kW 7,5		,5		
Room, kW		7	,5	
Width, mm		750	900	
Depth, mm		65	50	
Height, mm		850-920		
Weight, kg		135	170	
Firebox opening	( <b>W × H)</b> , mm	165×230		
Firebox (W × D), r	nm	205×425		
Firebox volume, o	dm <sup>3</sup>	27	7,4	
Fuel consumption, kg/h			2	
Cooking plate (W × D), mm		667×492	817×492	
Cooking plate area, m <sup>2</sup>		0,328	0,401	
Oven (width), mm		330	400	
Oven (height), mm		270	230	
Oven (depth), mm		44	40	
Ash pan, L	sh pan, L 2,5		,5	
Fuel box, L		25,4	41,1	
Flue gases exhau	ıst, mm	Ø 120		
Flue gas temperature, °C		260	235	
Required flue draught, Pa		12		
CO in flue gases at 13% O <sub>2</sub> , %		0,16		
Flue gas mass flow rate, g/s		10,6		
Efficiency, %		72		
Regulation	Primary air	mai	nual	
Negulation	Secondary air	auto		
Certified in accordance with EN norm EN 1281		2815		

- technical specification apply to wood and wooden briquettes used as fuel
- technical specifications are indicative and may vary as such. The manufacturer withholds the right to change any technical specification to further improve the products



#### 11. TERMS OF WARRANTY

These warranty conditions are valid in all European countries, in which SENKO products are sold. The client addresses the manufacturer/dealer or the nearest authorized servicing agent for all complaints; providing the purchase receipt with the date of purchase, warranty and installation report in the process.

#### **DURATION OF THE WARRANTY**

Manufacturer SENKO d.o.o. provides a **2-year** warranty for its product, starting from the date of embedded boiler purchase. All other parts (thermometer, automatic regulator with the probe, regulation buttons, oven door hinges, fuel box guide bars) have a **6-months** warranty.

The manufacturer guarantees that the product was manufactured and certified according to the EN 12815 norm and that it complies with all the demands set by the norm. The user is obligated to adhere to the Instruction manual.

#### **EXCEPTIONS**

Exceptions are parts subject to wear such as chamotte and chamotte plates, cast grate, seals and glass panes.

**Chamotte plates** (changes in colour or cracks are dependent on the material and can never be completely ruled out). However, they do not impair the functioning of the appliance as long as the plates remain in the firebox.

**Glass panes** (breakage of glass because of external hazard, changes on the surface due to thermal influences such as fly-ash or soot at the surface of the glass).

**Discolouring** of paint due to overload of thermal strain.

Seals (e.g. hardening or breakage due to thermal or mechanical strain).

Surface coatings (frequent cleaning or cleaning with abrasive cleaning agents).

Castings and parts which are subject to high thermal stress such as firebox grate and cooking plate.

#### **REPAIRS**

Possible repairs within the warranty will be executed within 30 days from the date of product delivery to the manufacturer. Should the repairs not be executed within 30 days from the delivery to the manufacturer, the product will be replaced with a new one. The manufacturer will notify the client about the executed repairs. The client is obligated to take over the product within 5 days from the repair completion.

#### COSTS

The manufacturer does not defray any delivery and return costs.

Prior to commencement of repairs within the warranty (for damages caused by incorrect use, cooker transport and mounting), the manufacturer will notify the client about the repair price in written form. Once the client agrees, the manufacturer will execute the repairs and charge the client for the repairs.

#### SPARE PARTS

Original parts replaced within the warranty do not have to match the removed parts in external physical appearance, but they must match them in quality and functionality.

#### **DISCLAIMER OF LIABILITY**

Manufacturer cannot accept any liability for the loss or the damage of an appliance through theft, fire, vandalism or similar causes. Indirect or direct damage caused to the product, which is the result of improper transportation of the product, are excluded from the liability. We cannot accept any liability for damages caused by chemical or electrochemical effects (e.g. pollutants in the combustion air, water scale and similar) which are the result of improper installation of the product and violation of this Instruction manual.

The warranty is void if the user made alterations to the product without manufacturer's prior knowledge.

The warranty is valid if the installation was executed by an authorized professional and upon presenting the written installation report.

Possible disputes to be settled by the Court in Čakovec.



VA	RRANTY No.						
SOLI	D FUEL COOKER :						
E2	E2375L SG-75 inox						
☐ E2190L SG-90 inox ☐ E2190D SG-90 inox							
SEF	RIAL NUMBER:						
DAT	TE OF MANUFACTURE:						
	DRE NAMED ADDRESS:						
_	CLIENT NAME AND ADDRESS:						
DAT	TE OF PURCHASE:						
	DRE STAMP AND ALER SIGNATURE:						
	Faulty product date of receipt :	Faulty product date of receipt :					
	Malfunction description (client) :	Malfunction description (client):					
	Servicing agency comments :	Servicing agency comments :					
ation :	Servicing completed on date :	Servicing completed on date :					
nformation	Stamp and servicing technician signature :	Stamp and servicing technician signature :					

Complaints within warranty – product information :



## COMPLETED BY THE CHIMNEY-SWEEPER

# Chimney connection executed by the company :

	_	stamp and signature
Street:	City:	· · ·
Telephone:	Country:	
Date:	Client signature:	
Chimney		
-		
Type:		
Dimensions (mm):		
Height (m):		
Draught (Pa):		
Flue gases exit temperatur	re (°C):	
Last inspection date:		,
Number of connections:		
		,
Smoke venting pipe (if conne	ected)	
Cross-section (mm):		,
Length (m):		
Number of elbows:		

Company/Business: \_\_\_\_\_ Person in charge: \_\_\_\_\_





Senko d.o.o. Vladimira Nazora 22, Štefanec 40 000 Čakovec, Republic of Croatia

## EN 12815:2001 / A1:2004 / AC:2007

Solid fuel cookers

SG-75       SG-90         above 100 cm       front 80 cm         front 80 cm       rear 20 cm         sidebar 20 cm       sidebar 20 cm         CO emission in flue gases (at 13% O₂):       0,16 %         Flue gases temperature:       260 °C       235 °C         Heat output – space:       7,5 kW	Solid fuel cookers			
Minimum distance from flammable surfaces :front 80 cm rear 20 cm sidebar 20 cmCO emission in flue gases (at 13% O2) :0,16 %Flue gases temperature :260 °C235 °CHeat output – space :7,5 kW		SG-75	SG-90	
Minimum distance from flammable surfaces:  rear 20 cm sidebar 20 cm  CO emission in flue gases (at 13% O₂):  Flue gases temperature:  260 °C 235 °C  Heat output – space:  7,5 kW		above	above 100 cm	
rear 20 cm sidebar 20 cm  CO emission in flue gases (at 13% O₂):  Flue gases temperature:  260 °C 235 °C  Heat output – space:  7,5 kW	Minimum distance from flammable surfaces	front 80 cm		
CO emission in flue gases (at 13% O₂) : 0,16 %         Flue gases temperature : 260 °C 235 °C         Heat output – space : 7,5 kW	Minimum distance from flammable surfaces :	rear 20 cm		
Flue gases temperature : 260 °C 235 °C Heat output – space : 7,5 kW		sidebar 20 cm		
Heat output – space : 7,5 kW	CO emission in flue gases (at 13% O <sub>2</sub> ):	0,16 %		
	Flue gases temperature :	260 °C 235 °C		
	Heat output – space :	7,5 kW		
Efficiency: 72 %	Efficiency :	72 %		
Fuel type: wood, wood briquettes	Fuel type :	wood, wood briquettes		
Fuel consumption: 2 kg/h	Fuel consumption :	2 kg/h		
Certificate No: E-30-00434-12	Certificate No :			

Read and follow the Instruction manual. Use only recommended fuel.

Manufactured in the Republic of Croatia

#### **DECLARATION OF CONFORMITY**

This product is certified in accordance with the EN 12815. Test report number 30-11665/3 from June 29<sup>th</sup>, 2012.



NOTES:		

For a perfect warm home!













Vladimira Nazora 22 • Štefanec

40000 ČAKOVEC - Croatia

Tel: +385 (0)40 337 344 • Fax: +385 (0)40 337 906

E-Mail: info@senko.hr



THE SPIRIT OF TRADITION IN MODERN FORMS FOR A HEALTHY ENVIRONMENT.

You can find this Manual at http://en.senko.hr/

If you have any suggestions on how to improve this Manual or you have noticed any deficiency, feel free to contact us on tehnologija@senko.hr

SN-EN-04/14

www.senko.hr













