# WOOD FIRE COOKERS

## User and maintenance handbook





1660 Whalebone Dr. Kalispell MT 59901 www.woodstoves.net www.stove-parts.net

1. SAFETY RULES

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## **WOOD-FIRED COOKERS**

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ightharpoonup Rules and/or instructions marked with this symbol are associated with safety!



## 1. SAFETY RULES

The following rules and precautions help you to avoid the risks associated with use of this appliance:

- ⇒ The appliance must be installed according to the rules in section 4.2 of this handbook;
- ⇒ Installation must be carried out in conformity with all rules at the workplace, as well as with all domestic and European regulations;
- ⇒ Make sure the flue is suitable before connecting the cooker to it:
- ⇒ It is strictly forbidden to use chemical products for lighting the cooker such as alcohol, oil, petrol, etc.
- ⇒ Do not put in too much fuel as this can produce excessive heat and overheat the appliance, causing potential damage;
- ⇒ The cooking plate can reach high temperatures of up to around 400 °C; be careful therefore and do not touch it without appropriate protection the same applies to the other components such as the fire chamber and oven doors and their respective handles, glass surfaces and the flue pipe;
- ⇒ Do not put any plastic bottles or spray cans on top or in the immediate vicinity of the appliance (risk of fire and explosion);
- ⇒ Warn children of the risks and keep them away from the stove when it is in operation;
- ⇒ Place sheet metal protection on the floor under the fill opening, especially if the floor is made of lino or wood:
- ⇒ Use only natural fuel such as: wood, blocks of compressed wood and lignite briquettes;
- ⇒ Do not burn any plastics, treated wood (e.g. chipboard) or textiles;
- ⇒ Clean the flue on a regular basis.

## 2. IDENTIFICATION OF THE APPLIANCE

## 2.1 IDENTIFICATION PLATE

There is an identification plate at the back of the appliance that indicates model, serial number and date of manufacture.

## 2.2 TABLE OF TECHNICAL SPECIFICATIONS

		CLASSIC			
Technical Specifications	um	F 450	F 6000	F 800	F 900
External dimensions: I x d x h	cm	45x60x86	60x60x86	80x60x86	90x60x86/51
Heating plate   I x d	cm	31x45	48x45	68x45	74x45
Net weight/with packaging	kg	115/125	170/180	180/200	180/200
Required flue depression	mbar	0.12	0.12	0.12	0.12
Nominal thermal output	kW	5	7.5	9.5	9.5
Co at 13% O <sup>2</sup>	%	0.21	0.21	0.22	0.22
Mean flue gas temperature	°C	262	262	303	241
Flue gas mass flow	g/s	12	11.8	11.6	10.3
Efficiency	η	70%	75.5%	73%	73%

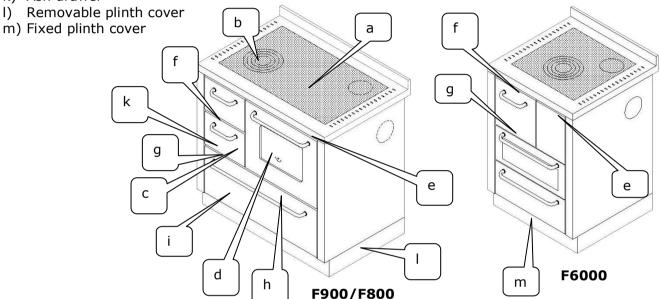
		DOMINO			
Technical Specifications	um	D6	D6maxi	D8	D8maxi
External dimensions I x d x h	cm	60x60x85	60x60x85	80x60x85	80x60x85
Heating plate I x d	cm	45x48	45x48	66x48	66x48
Net weight/with packaging	kg	180/195	180/195	195/215	195/215
Required flue depression	mbar	0.12	0.12	0.12	0.12
Nominal thermal output	KW	7.5	7.5	10	10
Co at 13% O <sup>2</sup>	%	0.21	0.21	0.12	0.12
Mean flue gas temperature	°C	262	262	293	271
Flue gas mass flow	g/s	8.5	8.5	14.9	14.1
Efficiency	η	75.5%	75.5%	72.5%	72.5%

			Cucine a legna			
Caratteristiche Tecniche	um	E60	E80	E90	A900	
External dimensions $I \times p \times h$	cm	60x60x86	80x60x86	90x60x86	90x60x86	
Heating plates I x p	cm	48x45	68x45	74x45	74x45	
Net weight/with packaging	kg	130/140	165/180	175/190	180/200	
Required flue depression	mbar	0.12	0.12	0.12	0.12	
Nominal thermal output	KW	6	7	8	8	
Co at 13% O <sup>2</sup>	%	0.15	0.13	0.13	0.13	
Mean flue gas temperature	°C	263	228	228	228	
Flue gas mass flow	g/s	10.9	13.7	13.7	13.7	
Efficiency	η	70%	71%	71%	71%	

Internal diameter of test flue: D = 150mm;

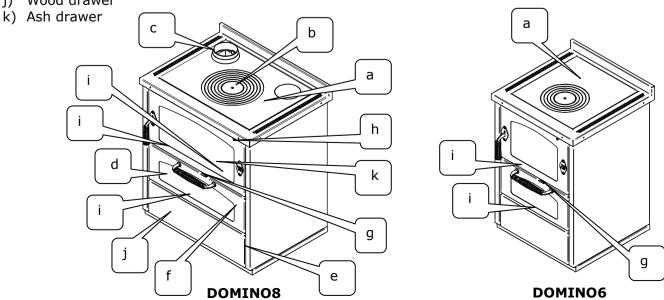
## 2.3 DESCRIPTION OF THE CLASSIC COOKER

- a) Iron cooking plate
- b) Set of cooking rings or high yield disk, available on request
- c) Height-adjustable hearth grille for F800/900/910 and rustic series
- d) Oven with tempered glass window, thermometer
- e) Starter for starting the cooker up from scratch
- f) Lever for primary air adjustment, situated under the ash drawer
- g) Lever for secondary air adjustment, situated under the fire drawer
- h) Access for cleaning the flue gas circuit
- i) Wood drawer
- j) Cover on the flue gas outlet at side (specific version)
- k) Ash drawer



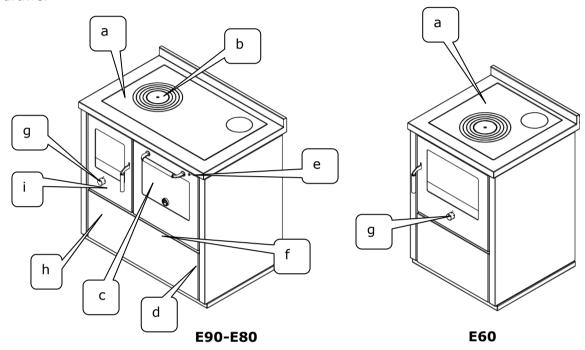
## 2.4 DESCRIPTION OF THE DOMINO COOKER

- a) Iron cooking plate
- b) Set of cooking rings or high yield disk, available on request
- c) Iron fitting for flue gas connection
- d) Oven with tempered glass window, thermometer, grill pan and grill
- e) Oven light switch
- f) Oven valve for discharging humidity
- g) Lever for primary air adjustment, situated under the door of the combustion chamber
- h) Starter for starting the cooker up from scratch
- i) Access for cleaning the flue gas circuit
- j) Wood drawer



## 2.5 DESCRIPTION OF THE ECO COOKER

- a) Iron cooking plate
- b) Set of cooking rings or high yield disk, available on request
- c) Oven with tempered glass window, thermometer, pan and grill
- d) Oven light switch
- e) Starter for starting the cooker up from scratch
- f) Access for cleaning the flue gas circuit
- g) Lever for primary air adjustment
- h) Wood drawer
- i) Ash drawer



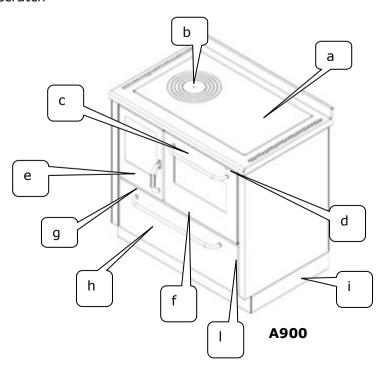
## 2.4 DESCRIPTION OF THE A900 COOKER

- a) Iron cooking plate
- b) Set of cooking rings or high yield disk, available on request
- c) Oven with tempered glass window, thermometer, pan and grill
- d) Starter for starting the cooker up from scratch
- e) Lever for primary air adjustment
- f) Access for cleaning the flue gas circuit
- g) Wood drawer
- h) Ash drawer
- i) Removable plinth cover
- I) Oven light switch

## **ACCESSORIES PROVIDED**

The cooker comes with these accessories:

- This handbook and guarantee
- Grill handle (model F800, F900)
- Bar for moving the rings
- Baking pan
- Oven glove



## 3. INSTALLATION

## 3.1 HANDLING AND INSTALLATION

Make sure the flue is suitable before connecting the cooker to it (see chapter 3.2).

#### NOTES

- ⇒ The appliance must be installed on a floor of sufficient weight-bearing capacity. If it is not satisfactory, take the appropriate measures (e.g. weight distribution plate);
- ⇒ The appliance must be installed to ensure easy access for cleaning the same appliance, the gas discharge pipes and flue pipe.
- ⇒ The appliance cannot be connected to a shared flue pipe.
- ⇒ Air extraction devices must not be used in the same room as the appliance, unless there is a suitable air ventilation system.
- ⇒ Install the appliance in a room of a size suited to its potential and that is sufficiently ventilated (window or specific air vent).

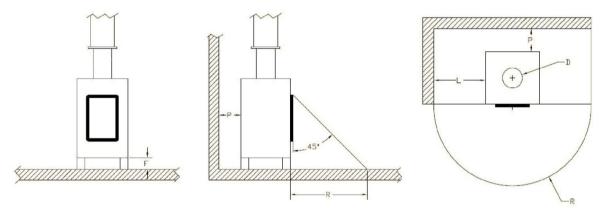
## WARNING: do not lift the cooked by its handrail

## To move the cooker, remove the plinth cover if present.

Wood cookers have removable plinth covers. The F600 and DOMINO wood cookers however have fixed plinth covers.

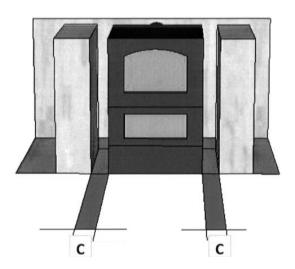
## Safety distances from inflammable materials:

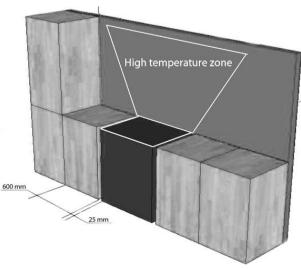
- Distance between cooker and wall at side: L = 600mm;
- Distance between cooker and wall at back: D = 200mm + reflective steel plate of 20/10
- Distance above floor: F = 0
- Distance at front from inflammable material: R > 60cm;



## Safety clearances from inflammable materials: built-in furniture side

- Minimum distance between cooker and built-in inflammable furnitures C= 25 mm





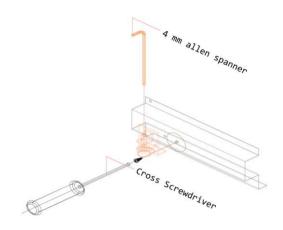
The cooker must be installed in a room of a size suited to its potential and that is sufficiently ventilated (window or specific air vent).

Burning 2 kg of wood requires the reintegration of around 30 cubic metres of air. Failing this, the environmental conditions will not be suitable for people due to impoverished oxygen supply and the wood will not burn well due to a lack of combustion air.

## **CLASSICA PRODUCTS**

Place the cooker on the floor, pull out the wood drawer, remove the 4 screws on the plinth cover (2 on each side), remove the plinth cover, install the cooker in the required position, connect it to the flue, and level the cooker by adjusting the feet using a 4 mm allen wrench.

The F6000 has a sliding plinth cover. To level the cooker, turn the four screws on the outside; to move back the plinth undo the 4 screws on the inside, move the plinth and then attach the same screws using a 6 mm allen wrench.



The DOMINO and ECO cookers has a fixed plinth.

If the cooker is to be installed between other units, leave a gap of at least 2 mm on each side as the cooker tends to expand with heat.

## 3.2 DOMINO PRODUCTS

## Inversion of the flue gas outlet: from right-hand outlet to left-hand outlet

- 1. Remove the cooking plate, the ash drawer, the fender, the ash tray and iron grill in the hearth
- 2. Remove the cover on the flue gas pass under the ash drawer; the 80 cm model has twoon the left and right.
- 3. Remove the cap on the flue gas pass from its right-hand housing (at the side of the oven), turn it 180° and place it in the left-hand housing.
- 4. Turn the starter from right to left: undo the knob, slide out the pin from the hinge and remove the panel-valve; then remove the control rod.

Undo the M5 bolts on the cover of the left-hand flue's starter and re-assemble on the righthand one. Use an 8 mm socket wrench and an 8 mm tubular spanner.

Remove the screw on the hole of the starter's rod opposite the position of the removed rod.

5. Reassemble the starter's components in order on the left-hand side

(NB: the flue gas outlet, flue gas pass cover and starter must be on the same side)

NOTE: to invert the top flue gas outlet

- domino6: you need to order the specific iron plate
- domino8: simply open the hole to be used and close the one on the opposite side

## Adjusting the fire door lock

- 1. Use a Phillips screwdriver to undo the top and bottom screws
- 2. Use a 3 mm hexagonal allen wrench and:
- tighten to reduce play of the closure
- loosen to increase play of the closure
- 3. Re-attach the two screws

## 3.3 THE FLUE SYSTEM

## FLUE PIPE CHARACTERISTICS

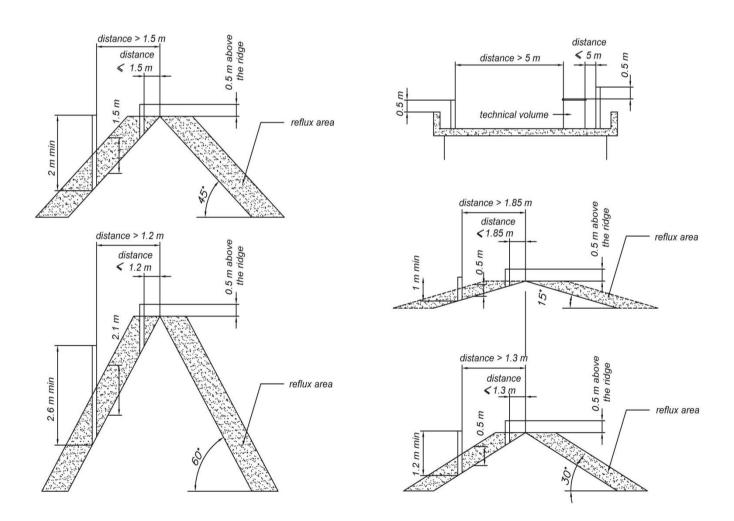
It is essential that the flue is suitable for the appliance to work correctly.

The flue system should be inspected by a technician experienced in flues before installing the appliance, and then be checked at least once a year.

## The flue pipe must conform to the regulations in force and be kept in perfect condition.

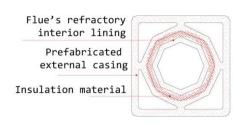
Below are several instructions on fitting the flue pipe. Non-compliance with these could compromise the appliance's yield and cause problems with combustion:

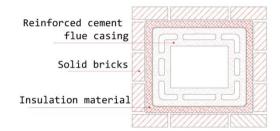
- a) **Its height must not be less than 4/5 linear metres** from the connection to the stove to the base of the chimney pot; the flue can be narrower if its height is any greater.
- b) It must be properly sealed and insulated; make sure the inspection panels close properly and that there are no cracks on any part of the flue pipe.
- c) The inside of the pipe must be smooth and the same width all the way up.
- d) The flue must be as straight as possible and the chimney pot must be in a suitable position and at an appropriate pitch, as indicated in the diagrams and examples below.
- e) The chimney pot must be double the width of the flue pipe.



CROSS-SECTION: the flue pipe's cross-section depends on the height of the flue and the thermal power of the installed cooker.

## RECOMMENDED CROSS-SECTION





To ensure the optimal yield of our cookers we recommend you use circular flue pipe with smooth interior lining and of the same length all the way up.

INSULATION: flue draught pressure also depends on the difference in the temperature of the hot flue gases and that of the air outside.

The flue pipe must be insulated to restrict absorption of heat into the walls and therefore avoid condensation, which can cause tarry residues. Use only suitable heat- and corrosion-resistant materials conforming to building and fire-prevention regulations. You should not use flue pipes comprising simple or flexible metal tubes, cement tubes for vents, etc.

DEPRESSION: the optimal depression (flue draught pressure) for de Manincor's cookers is 0.12 mbar.

At a depression below 0.12 mbar, the fire will burn too slowly and form carbon residue excessive gases. If instead depression is any greater, combustion will be too fast and not transmit as much heat to the boiler and heating plate, and will require more attention.

## **FLUE PIPE DIMENSIONS**

## **WOOD-BURNING COOKER**

WOOD BORNING COOKER							
COOKER POWER	QUANTITY OF WOOD	FLUE PIPE SHAPE AND	Li	ENGTH O	F THE FLU	JE PIPE [r	metres]
[Kw/H] BURNED (beech) [kg/h]	CROSS-SECTION	4	5	6	7	8	
10 – 5 2.5	Circle diameter [cm]	15	14	14	13	12	
	Square side x side [cm]	14	13	12	12	11	

RECOMMENDED SOLUTION

The figures in the table are valid for stainless steel tubes with 30 mm insulation and stainless steel plating.

Increase the cross-section by 10% for every 500 metres above sea level.

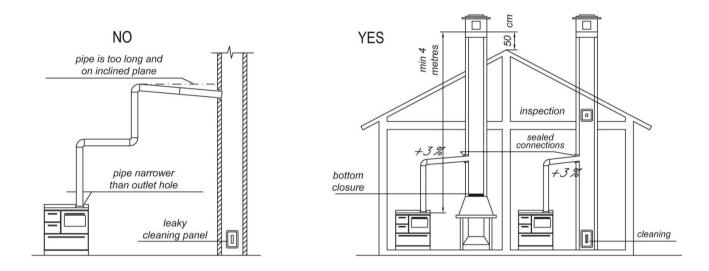
The cross-section may be changed by -10% to +30%.

Brick or refractory flue pipes do not ensure as good a draught pressure as stainless steel ones. Circular pipes should be no less than 15 cm in diameter and square ones should measure a minimum of  $15 \times 15$  cm. If this is not feasible you should contact a flue specialist.

## CONNECTION TO THE FLUE PIPE

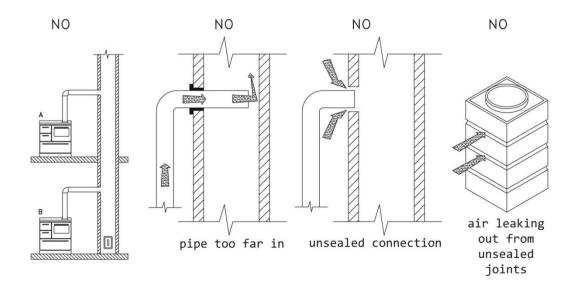
Each cooker should have its own flue pipe. Do not use the same flue pipe for more than one appliance.

The cooker should be connected to the flue pipe avoiding as far as possible any bends, diversions and downward or horizontal sections (if these are unavoidable, the gradient should be 2-3 cm per metre).



Connecting pipes must be perfectly sealed to each other and to the stove and flue pipe. These precautions must be taken:

- a) Use a seal to avoid infiltration of air into the flue
- b) The pipe must not be narrower at the end
- c) The end of the pipe must not protrude into the flue



## 4. INSTRUCTIONS ON USE

## **INITIAL NOTES**

- $\Rightarrow$  Do not use the appliance as an incinerator or in any way for which it was not intended.
- $\Rightarrow$  Do not use fuel other than that recommended.
- ⇒ Do not burn any plastics or treated wood (such as chipboard) or textiles.
- $\Rightarrow$  Do not use liquid fuel.
- ⇒ The appliance, especially its outer surfaces, can become extremely hot to the touch when in use; handle with care to avoid burning yourself.
- ⇒ Do not put any plastic bottles or spray cans on top or in the immediate vicinity of the appliance (risk of fire and explosion);
- ⇒ Warn children of the risks and keep them away from the stove when it is in operation;
- ⇒ Do not make any unauthorized changes to the appliance.
- ⇒ Do not put in too much fuel as this can produce excessive heat and overheat the appliance, causing potential damage;
- ⇒ Use only original spare parts approved by the manufacturer.



## WHAT TO DO IN THE EVENT OF A FIRE IN THE FLUE PIPE

The use of damp and inappropriate fuel or operating the stove at too low a capacity can cause easily inflammable substances, such as and soot, to accumulate in the flue pipe. **This** can in the long term be a potential cause of fire in the flue pipe!

In the event of this happening:

- · Shut off the flow of primary and secondary air
- Make sure everybody leaves the apartment or house
- Call the fire brigade (telephone number: 115 in Italy)

## **FUEL**

The appliance is designed for burning solid fuel: wood, blocks of compressed wood and lignite briquettes. We recommend you use reasonably small pieces of wood that have been seasoned for at least two years in a ventilated and covered area. They should ideally measure 6-10 cm in diameter and 25-30 cm in length.

Dry wood ensures minimal gas emissions and the easier it is to burn, the less gas and soot it will produce. We advise you bring wood into the house a few days before burning it so the heat in the home will dry it out more quickly.

## **INITIAL USE**

The flue system should be inspected by a technician experienced in flues before installing the appliance, and then be checked at least once a year.

Check the following before lighting the wood-fired stove:

Check the grill is in its correct position in the hearth: the narrow end of the slits should face upwards.

Check the combustion chamber is clean.

Check the ash drawer is empty.

## **4.1 WOOD-FIRED COOKER OPERATING INSTRUCTIONS**

**WARNING:** when you use the cooker for the first time, it is normal for condensation to form due to humidity in the refractory materials. Start with a small fire and keep the fill opening and ash drawer ajar for a few hours to encourage evaporation.

If the stove has not been used for a long time, start the initial fire with just newspaper and then kindling.

## **INITIAL START-UP**

After putting dry kindling into the hearth for your initial fire, continue as follows:

- Pull the starter to let the gases flow directly into the flue pipe
- Fully open the primary air source by turning the lever all the way round to the right
- Load the kindling and igniting material: balls of newspaper or other small dry fuel
- Light the fire
- When the fuel is burning brightly and the flue has heated up sufficiently (this may take 30 minutes or more), close the starter and put in some larger pieces of wood
- **WARNING**: (hearth with glass door) to **prevent the glass from getting dirty** leave the door ajar with the handle in closed position (see photo 5) and wait for ten minutes or so for the glass **to heat up** and thereby avoid **condensation on the inside** due to the difference in the temperature of the flames and the internal surface of the glass.



## DO NOT USE ALCOHOL OTHER FUEL TO ENCOURAGE OR SPEED UP THE FIRE.

## OPERATING THE WOOD-FIRED COOKER

LIGHTING THE FIRE IS THE MOST CRITICAL PHASE FOR GENERATING FLUE DRAUGHT PRESSURE; AFTER THIS YOU SHOULD KEEP MONITORING THE FIRE.

**It is possible that the wood will not catch fire** and that your initial fire might go out after a few minutes. This is because *the flue pipe is cold and there is insufficient flue draught pressure*. Start your fire again using easily combustible material: thin dry sticks, shrubs, pine cones and newspaper are ideal for this first phase.

When the wood has caught fire, regulate the primary air supply by turning the lever under the ash drawer or under the hearth door (F6000 and *Atmosfera*) or turning the thermostatic control (ECO line), so that the logs burn well with tall flames. Avoid too great a flue draught pressure but also don't let combustion get too slow as this can result in the deposit of soot in the stove. Try not to open the stove door too often to add wood.

Make sure there is always a good bed of glowing embers at the bottom of the stove and add wood as soon as the previous logs have turned into embers: the bed of embers maintains the temperature required for igniting more wood and ensures correct combustion. Always arrange the logs crosswise so that air can pass between them and ensure good oxygenation. Try and keep the flames burning; most heat is generated by the combustion of the gases. If the flames die down completely, unburned gases are produced that waste energy and pollute.

You can adjust the air control devices and grill to increase or decrease combustion speed and therefore the heating or cooking temperature:

- **Fast combustion**: primary air lever "g" open (fully to right) secondary air lever "f" open (fully to right) CLOSED OPEN
- **Slow combustion**: primary air lever "g" closed (fully to left) secondary air lever "f" open (fully to right) CLOSED OPEN (only F6000 secondary air OPEN CLOSED )

For DOMINO, ECO and ATMOSFERA models: operate only on primary air control.

IMPORTANT: during fast combustion make sure there is no more than 3 kg of wood in the stove at all times. A greater amount of fuel requires you to reduce the combustion speed proportionally by closing the primary air control and opening the secondary one. Adding more fuel without changing the combustion speed will produce thermal power greater than the cooker – environment exchange capacity. This will not only waste fuel but could also damage and deform the appliance.

**Avoid overloading the appliance**. A relatively small and well oxygenated fire will burn better and produce more heat than a large stack of wood blocking the hearth.

The ideal load for efficient and clean combustion is 2 kg of wood per hour.

**WARNING**: Thermal shock caused by a sudden increase in temperature can form small cracks in the refractory bricks. These cracks will not compromise the structure and resistance of the bricks or cooker in any way.

**When combustion has ended** close the primary air lever and any secondary air slits to prevent the heat in the stove escapes with the flow of air in the flue.

**Lack of flue draught pressure.** A column of cold air could form in the flue pipe for a variety of reasons. These could be low atmospheric pressure, humidity, strong winds or depression in the house (e.g. if the hood above your kitchen stove is switched on).

**In the event of low atmospheric pressure or rain**, the flue draught pressure will not be nearly as good as on a clear day or during a cold, dry winter. Humidity can also form in the flue pipe if the stove is not used for a long period of time. It is worth keeping the stove's doors ajar to let air circulate in the flue pipe.

## **4.2 USING THE OVEN**

The oven always needs to be pre-heated for cooking. Leave the fire to burn for about an hour with the primary air valve open and then wait for about ten minutes after the flames have died down in the combustion chamber.

For baking, keep the temperature constant by adding thin wood to the stove measuring about 3 cm in diameter and weighing 600 to 800 grams, for about 40 minutes, at a rate of one or two pieces every ten minutes.

Add a suitable amount of fuel to the combustion chamber, open the primary air lever and close the secondary air lever to obtain the required temperature.

## **DOMINO MODELS: Oven chamber steam release valve**

On the right-hand side of the oven is a valve for releasing any steam generated during the cooking phase. To operate the valve, simply turn it with the poker.

## 4.3 USEFUL NOTES

## HEAT DIFFUSER PLATE

The iron heat diffuser plate must never become incandescent. Always use receptacles with flat heavy bases (for maintenance see chapter 5.2)

## HEARTH GRILL

Poking the embers on the iron grille in the combustion chamber will make the ash fall through into the ash drawer below. This clears the way for the supply of primary air to the combustion chamber – particularly important when starting up your fire.

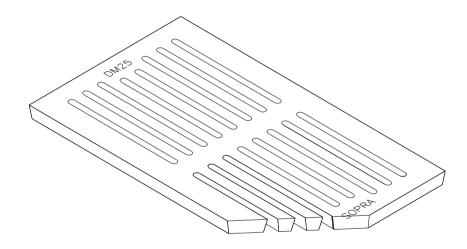
The slits in the grill have two specific functions: they let combustion air pass through and, at the same time, enable the disposal of the embers and ash.

The slits are wide enough to let through the ash and any dead embers; while the walls of the slits are conical so as to not block the flow of air.

## **WARNING:**



The grill must be positioned with the narrow side of its slits facing upwards.



## INTERNAL ASH DRAWER

The ash drawer must be emptied on a regular basis to prevent the iron grill from overheating.

 $\sum$  There may still be some glowing embers in with the ash. Put these in a suitable metal container.

#### 4.4 TROUBLESHOOTING

Problem	Possible cause	
The stove does not	It is not connected properly to the flue (see page 11, fig. 8)	
work	The flue pipe does not conform (see fig. 8)	
	Other appliances are connected to the flue pipe	
	The hearth grill is the wrong way round	
	The hearth grill is blocked with ash	
Smoke comes out of the	No flue draught pressure	
plate	It is not connected properly to the flue (see fig. 8)	
	The starter and/or primary air valve is closed	
	The plate's seals have come loose or are broken	
Condensation in the	The wood is damp or not properly seasoned	
hearth	The flue is too wide	
	Poor flue draught pressure	
The fire lights with	The starter is not fully open	
difficulty	The flue is cold (due to a long period of inactivity)	
The oven does not get	Poor or insufficient flue draught pressure	
sufficiently hot	The internal pipes are clogged	
	The starter is open	
	(Domino model only) Check the version of the flue	

## The various reasons the stove might not work properly

## The flue pipe is at fault

<u>Too short.</u> The flue pipe stretches from the connection with the stove to the base of the chimney pot.

If the flue pipe is too short, increasing its internal width will never compensate for the reduction in height as that will only increase heat dispersion, lower the temperature of the gases and potentially compromise flue draught pressure. You are better advised to use a flue pipe of the correct width and increase its height by 1 or 2 metres to ensure decent flue draught pressure.

<u>Too long.</u> This doesn't generally affect flue draught pressure; however the flue pipe should be well INSULATED to minimize heat dispersion.

<u>Too wide</u>. A flue pipe that is too wide will have a proportionally larger surface area that will encourage the gases to cool down and therefore compromise flue draught pressure. One option is to put a stainless steel pipe of suitable width inside the existing flue pipe and, after connecting it to the stove, fill the gap between the two pipes with heat-resistant granular insulation material (such as mineral perlite).

<u>Too narrow.</u> In this case you will not be able to exploit the stove's potential. We can only suggest that you reconstruct the flue pipe according to the required specifications.

<u>Tight sections.</u> Changes in the pipe's width will cause a loss of flue draught pressure, slowing down and potentially preventing the gases from leaving the flue.

<u>Too many bends</u>. Bends cause a loss of flue draught pressure, preventing the gases from leaving the flue. For each bend you need to increase the height of the flue pipe by 50 centimetres so as to ensure optimal flue draught pressure.

<u>Excessive deviations.</u> Deviations affect the discharge of gases and should generally be avoided.

<u>Horizontal sections</u>. These should be avoided or kept as short as possible and always at a minimum gradient of 2 cm per metre. You are advised to assess the depression to guarantee sufficient gas evacuation. The flue pipe should be increased in proportion to requirements.

<u>Obstruction in the flue pipe.</u> When the stove is not used for a long period of time, and especially during the summer, you might find that birds, wasps or bees will nest in the chimney pot; in which case you will have trouble lighting the stove again. Moreover, a poorly or improperly made flue pipe may cause instances of crumbling plaster or cracks through which air enters.

## Cleaning the flue pipe. The flue pipe must be cleaned on an annual basis.

## Air recovery

<u>No air recovery.</u> The stove can still be lit but soon burns up the available oxygen, reducing combustion and causing the gases to build up and come out of the stove. The purity of the ambient air is compromised as a result. In this case you definitely need an outside air vent. <u>Insufficient air recovery.</u> If there is insufficient air recovery, combustion is poor and gases will come out of the stove especially when you open the door to add more wood. If the stove is installed in a room with double-framed doors or double-glazed windows, a suitable air vent must be installed to ensure a good flow of air.

#### Other reasons

<u>The position is too windy.</u> You need to install a WINDPROOF chimney pot, otherwise any change in the direction of the wind will compromise evacuation of the gases.

<u>Presence of two flue pipes in the same room or in two adjacent rooms.</u> The flue pipe with the more powerful draught pressure will draw the gases from the one with the least powerful one; as a result gases will come out of the stove with the poorer flue draught pressure.

<u>Presence of a ventilating hood in the room.</u> The ventilating hood is normally designed to evacuate 300/400 cubic metres of air per hour. If there is insufficient air recovery, the air will be retrieved by the stove causing smoke.

If you switch on the hood while the stove is in use, you must leave a window ajar for all the time the ventilating hood is in operation.

<u>Poor connections.</u> Narrow sections, internal edges, imperfect joints and sharp bends might accidentally be created when connecting the stove to the flue that could impede the evacuation of the gases.

<u>Uninsulated flue pipe</u>. Gases passing through an uninsulated flue pipe will cool down and compromise flue draught pressure. This causes atmospheric pollution, condensation and the deposit of unburned products inside the pipe, affecting its efficiency.

Note: an uninsulated flue pipe causes the gases to cool down by 30 to 50°C per linear metre.

#### **5. MAINTENANCE**

## **5.1 ROUTINE CLEANING AND CHECKS**

The cooker is at its most efficient when all the surfaces and pipes the gases come in contact with are kept perfectly clean. We advise regular maintenance by a qualified technician.

All maintenance and cleaning must only ever be carried out when the stove has fully cooled down:

- a) Remove the iron cooking plate and clean underneath thoroughly with a brush
- b) Remove the pressurized door under the oven and use the small shovel to clean the flueways, removing all the ash at the base
- c) "Rustica" models: the pressurized door is removed by undoing its two retainer screws and removing the oven door by opening and turning the safety catches 180°.
- d) F6000 model: the flue gas pass under the oven is cleaned by removing the iron plate at the base of the oven; be careful not to damage the fibre-glass seal when you put the plate back again.
- e) DOMINO models: the flue gas pass is cleaned as above; the part above the oven, instead, is accessed by removing the closures under the ash drawer.
- f) Clean all accessible areas.

## Cleaning the ceramic glass of the combustion chamber's door

Eliminate all traces of soot on the inner side of the ceramic glass using a soft cloth dampened with a little clean ash, or with a suitable product in the event of stubborn traces of tar. Dry well afterwards.

Clean the outer side of the ceramic glass with a damp cloth or, if necessary, with a little neutral detergent. Dry well afterwards.

**WARNING**: when you are cleaning make sure you do not scratch the glass with rings or other sharp objects.

## **DOMINO MODELS: Extract the oven door**

- a) Extract the door's lock using a screwdriver if necessary
- b) Turn the lock to its locking position
- c) Close the door as far as the lock permits
- d) Remove the door by lifting it and pulling it towards you

## **5.2 MAINTENANCE OF THE COOKING PLATE**

When you first use the cooker, the iron plate will gradually change colour, starting with the hottest part and, after a while, the colder parts. The plate eventually becomes all one colour. Clean the heating plate with any type of detergent; then rinse it only if it is slightly warm so that the humidity can evaporate naturally. Grease the entire plate with a cloth soaked in oil. The heating plate is made of iron so prolonged contact with humidity will cause a thin layer of rust to form on its surface. This can be removed as follows:

- a) Rub the surface of the plate with 120 grit abrasive paper
- b) Rub the surface with food oil or animal fat
- c) Clean with a dry cloth

If you plan on not using the stove for a long period of time, it is a good idea to apply a new layer of metal chrome (anti-rust) after the last use. Avoid cooking food directly on the plate treated with metal chrome; if you do intend to cook food in this way, treat the plate instead with a thin layer of food oil.

## **5.3 STRUCTURE AND OTHER EXTERNAL PARTS**

The external parts in enamelled iron can be cleaned easily with water and neutral detergent. Do not use aggressive or abrasive chemical products, especially on the smooth black glazed surfaces and all the doors in the Arte series; any spills from pans or other should be cleaned immediately.

The stainless steel parts should be cleaned when cold with neutral detergents or with vinegar in the case of persistent stains. **You must avoid using abrasive or acid products** that could damage the surface. Dry with a soft cloth, following the grain of the glazing.

## **6. GUARANTEE**

## MANUFACTURER'S DECLARATION

The de Manincor firm guarantees the appliance has passed all the in-house tests and inspections and that is it therefore up to standard and without any manufacturing or material defects.

## GENERAL TERMS

The guarantee is valid for 2 years from the date of purchase. It applies only to the original purchaser and is non-transferable. The guarantee covers original manufacturing defects and applies to all of the product's components.

To request a service under the terms of the guarantee, the customer must present a valid proof of purchase (payment receipt, invoice, etc.), The proof of purchase must be kept in good condition.

#### **CONDITIONS**

The de Manincor firm has the final say on what action should be taken to resolve any problems under the terms of the guarantee.

Any defective parts that are replaced remain the property of the de Manincor firm.

The de Manincor has the final say on whether the service under the terms of the guarantee should be done at the customer's or its own premises.

For services offered under the guarantee, the customer is required to pay the minimum charges according to the going rates. This is not the case however if the cooker is purchased less than four months previously.

For repairs at de Manincor's assistance centres, the customer is required to pay for the transport costs.

## IMPERFECTION OR DEFECT IN THE MATERIALS

Imperfection or defect in the materials must be signalled within 8 days since the customer receives the products and anyway this implies only the obligation to replace what provided, excluding any additional responsibility.

## COMPONENTS NOT COVERED BY THE GUARANTEE

The following are not covered:

- Damage to parts attributable to negligence, carelessness or ineptitude, in particular deterioration to the heating plate caused by improper or lack of maintenance.
- Damage to parts attributable to non-compliance with the instructions in this handbook.
- Damage to parts attributable to transportation and failure to comply with some or all domestic and local regulations.
- Damage to parts attributable to improper installation, insufficient capacity or faults with the electrical, hydraulic and gas connections, and inefficiency of the flues and discharge systems.
- The guarantee does not cover parts repaired by anyone not authorized by the de Manincor firm.
- Technical services requested attributable to inefficiency of the flue and/or connecting pipes are not covered by the guarantee and charged according to the going rates.
- Consumer parts like gaskets, glass, grids, refractory bricks, etc.

## SERVICES AFTER THE GUARANTEE

Any services after the period of the guarantee or which do not fall under the terms of the guarantee will be charged according to the going rates. In this case the cost of any replacements will also be charged.

## RESPONSIBILITY

The de Manincor firm cannot accept any liability for any direct or indirect harm or damage to persons or objects caused by product defects if the rules set down by domestic or local law or by this handbook have not been complied with.

## **COMPETENT COURT**

Disputes and litigations are always settled at the court of Trento.

## PRODUCT MODIFICATIONS

The characteristics of the products described in the catalogues and this user and maintenance handbook are purely indicative. De Manincor aims to constantly improve upon its products and therefore reserves the right to make any changes and improvements it considers necessary without obligation for forewarning. De Manincor is also not obliged to apply previous or current changes to products already or in the progress of being constructed and assigned to customers.



1660 Whalebone Dr. Kalispell MT 59901 www.woodstoves.net www.stove-parts.net