

METAL INDUSTRY AD 17500 VRANJE , SERBIA Radnička 1,Tel. 017/421-121

# solid fuel stove

# **DONNA 70**



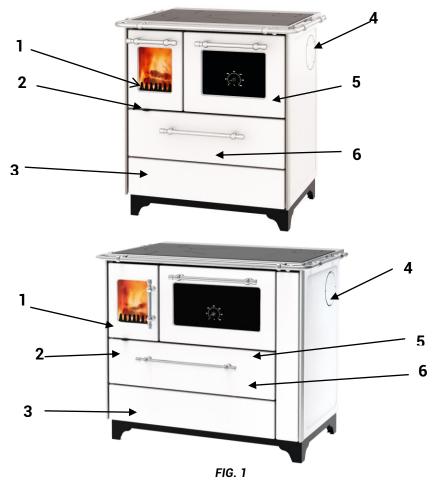
**DONNA 90** 



Instructions for installation and handling



This product meets the requirements of the Ecodesign Directive in terms of efficiency and air pollution level, in order to contribute to the reduction of energy consumption and negative environmental impact.



# Solid fuel stove DONNA 70 and DONNA 90

- 1.Door of the firebox
- 2. Sliding handle (air regulator)
- 3.Drawer for fuel
- 4.Lateral flue connection
- 5.Double-glass oven door
- 6. Cover of the opening for cleaning

# INSTRUCTIONS FOR INSTALLATION, USE AND HANDLING

These instructions for installation, use and handling is applicable for the following type of stove:

## **DONNA 70 and DONNA 90**

During stove use you must comply with the national and European norms and regulations.

#### Important prior to use

- \* In order to have properly functioning stove, it is important to carefully read these instructions and to precisely follow the quidelines within it.
  - \* Use only recommended types of fuel (beach wood).
  - \* The required pressure in the flue, during normal operational load should be
  - ca. 12 Pa. In case of load above 15 Pa, a damper should be embedded in the flue.
- \* You must make sure that the space where the device is placed for kindling gets sufficient supply of fresh air. If the windows and the doors are sealed, or if other devices such as steam vacuum cleaner, dryer, extractor etc. are located in the space where the stove is installed, and they take away the air, than the combustion air (fresh air) should be brought from outside.

#### Anyway, in that regard before installation of the stove you should talk with a competent chimney sweep.

- \* No flammable materials should be kept in the ashtray.
- The height of ash filling must not exceed the height of the lateral walls of the ash drawer.
- \*The door of the firebox must be constantly closed (except during stoking, during fuel filling and when ash is taken out) in order to prevent exhaust of gases from the stoking.
  - \* No components of the stove may be replaced with components different than our tested original components.
- \*In an event of burning of the flue, keep the stove door closed and set the air regulation to zero. Never attempt to extinguish the burning flue with water.

Abrupt creation of water steam may cause flue cracking. If necessary, call fire-fighters.

# **Contents:**

1. TECHNICAL DATA	
2. INSTALLATION OF THE STOVE	1
3. HANDLING	1
3.1. HANDLING WITH THE ASHTRAY	
3.2. AIR REGULATION	2
3.2.1. PRIMARY AIR	2
3.3. HEATING FLAP	2
3.4. OVEN DOOR (Figure 1, Position 6)	
3.5. Fuel drawer (figure 1, position 3)	
4. STOVE COMMISSIONING	2
4.1. STOKING	2
4.2. ADDING FUEL	3
4.3. COOKING	
4.3.1. COOKING DURING SUMMER	
4.3.2. COOKING DURING WINTER	
4.4. BAKING COOKIES AND BAKING PASTRY	3
4.5. STOKING IN A TRANSITORY PERIOD	3
5. MAINTENANCE AND CLEANING OF THE STOVE	
5	4
5.1. OPENING FOR CLEANING	
5.2. MAINTENANCE AND CLEANING OF THE COOKIING PLATE	
5.3. REMOVAL OF SLAG AND ASH	
6 GENERAL NOTES	Δ

# 1. TECHNICAL DATA

TYPE:	DONNA 70	DONNA 90
Rated heating capacity (kW)	5 kw with split logs	5 kw with split logs
Temperature of waste gases (°C)	290 with split logs	290 with split logs
Required pressure in the flue (Pa)	12	12
Dimensions of the stove (width x depth x height)	700x600x850	900x600x850
Dimensions of the oven (width x depth x height)	330x440x260	460x440x260
Diameter of flue extension (mm)	120	120
Height from the floor to axis of flue extension	back side 432	back side 432
	laterally 690	laterally 690
CO (mg/Nm <sup>3</sup> )	1250 with split logs	1250 with split logs
Efficiency degree (%)	79,3 % with split logs	79,3 % with split logs
Weight (kg)	110	126

# 2. INSTALLATION OF THE STOVE

During installation of the stove you should pay attention to the valid regulations about the valid civil and fire-preventive regulations and provisions. The installation of the stove must be monitored by an expert.

The connection of the stove with the flue from the sides, at the back side and on the top left or right.

Depending on whether you've decides to buy a 'left' or 'right' stove.

Pay attention to the spot where the stove is installed, it should be horizontal.

If the floor is flammable (wood, plastics, carpet...), you should use sheet metal of steel or copper or some other nonflammable material. This base must exceed the outlines for at least 30 cm and from the sides where it is being handled it should exceed 50 cm. The distance between all sides of the stove and the parts of furniture made of wood or plastics is at least 20cm, and from the lateral sides at least 30cm. Embedded parts of flammable material must be at a distance of least 80cm from the opening for filling of the stove towards the sides.

Safety distance at objects that should be protected (walls which might be burned, kitchen cabinets and bearing walls of steel concrete) is at least 20cm, and 30cm laterally.

Around the stove you should provide sufficient distance in regard to the flammable objects (which have wooden coating, furniture, curtains etc.).

No upgrading is allowed above the steel plate of the stove during its use.

When moving the waste gases exhaust pipe, you should keep a minimal distance of 40cm in relation to flammable

#### Before connecting the stove to the flue you must compulsorily consult a chimney sweep.

The connection of the stove to the flue is performed with appropriate connection parts according to SRPS.M.R4.031 (DIN 1298.ili DIN EN 1856-2).

You should make sure that the connecting joint of the flue and the flue pipe must not intersect with the flue for exhaust gases and should be mutually sealed.

#### For chimney measurement EN 13 384 applies.

If you want your stove to achieve the desired capacity, you must pay attention to perform the installation properly and above all the flue must function flawlessly.

In any case, you should check the existing pressure in the flue, prior to commissioning of the stove

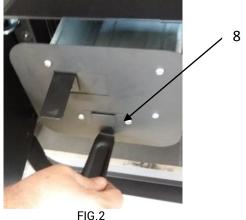
The easiest way to control the strength of the flue draught is by keeping a flame of a candle under the opening of the flue. The draught is sufficient if the candle flame bends towards the opening of the flue.

Slow bending of the flame is an indicator of poor draught.

If two units for stoking are installed on one floor at and on one flue (multiple load), the distance between the connections must not be less than 50 cm.

# 3. HANDLING

#### HANDLING WITH THE ASHTRAY 3.1.



We take out the ashtray with a special key (by raising up), removal and returning of the ashtray through the ashtray bracket as shown in figure 2 pos.8.

#### 3.2. AIR REGULATION



FIG.3

We perform air regulation with a special key over the sliding handle as shown in figure 3.

#### 3.2.1. PRIMARY AIR

The primary combustion air, thereby the capacity of heating of the stove is determined with the primary combustion air. This air is regulated by means of the sliding handle for primary air on the ashtray bracket (figure 1 position 2).

The sliding handle of the ashtray bracket (figure 3 pos.9) shows the direction of opening and closing of the slide rule. For kindling, the sliding handle for air should be maximally open.

Note: In order to prevent overhearing of the stove, it is not allowed that the quantity of fuel is more than 1,6 kg dry per one hour at an appropriately adjusted combustion – air.

## 3.3. HEATING FLAP

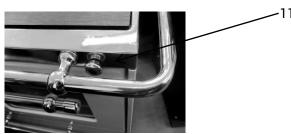


FIG.4

Moving of the heating flap is performed by pulling the knob (figure 4, position 11) which is positioned above the oven door. It is used for shortening of the path of flue gases during stoking.

Open the heating flap only in a stage of kindling of the stove.

During stoking, if the heating flat is left open, it will cause overheating of the stove, thereby damaging the parts of the stove. Besides this, open heating flat results with bigger consumption of fuel.

Pull out the knob = the heating flap is open

Push in the knob = the heating flap is closed

# 3.4. OVEN DOOR (Figure 1, Position 6)

The oven door can be in one of the two desired positions depending on the desired warmth of the room.

Over door open: Higher heat emission for heating the room.

Oven door closed: lower heat emission for heating the room.

The oven door can be removed without tools: catch it for the handle and the slightly open door pulls upwards. It can be placed back by inserting both hinges in the corresponding openings, at the front side of the oven and use pressure on the lower door edge with a knee simultaneously lightly pulling the handle up.

When the stove is in operation, the oven door must be installed.

# 3.5. Fuel drawer (figure 1, position 3)

In the lower part of the stove there is space for fuel, with guides and it is easy to lift it.

Attention: Do not store easily flammable materials such as paper etc. in that space. Pay attention to the height when filling.

# 4. STOVE COMMISSIONING

Prior to the first stoking, all enameled surfaces should be cleaned with a soft dry towel, in order to prevent creation of stains.

After becoming familiar with the handling of the stove, the first commissioning can follow. During the first stoking, open the window since the applied corrosion protection in a short time develops an unpleasant however insignificant smoke, that is, an unpleasant smell is created. This is normal and it disappears after a short time. Consider that some built-in parts of the stove (pipe for waste gases, door for filling etc.) when it is kindled, they may be hot and represent danger of burns.

Special attention should be paid to little children, so that no danger occurs.

At the first stoking, stoke the stove for two-three weak fires in order to prevent cracking of the fireclay.

#### 4.1. STOKING

\* Pull out the heating flap knob, the heating flap is open.

- Open the sliding handle for primary air at the highest level of air release.
  (figure 3, position 9)
- \* Open the firebox door
- \* Insert wood wool, sawdust or paper
- \* over this, put 2-3 small wood pieces
- \* lanite
- \* Close the door of the firebox
- \* Let the wood burn lively
- \* After stoking, press in the heating flab knob, the heating flap is closed.

# 4.2. ADDING FUEL

Upon creating the basic ember, you need to add fuel in the opening for filling. Position the sliding handle for air on the appropriate position,

When adding fuel, lightly open the door of the firebox without pulling out flue gases, in this manner you will avoid having flue gases in the room.

The rated heating capacity is achieved when you put the next fuel quantity and you adjust:

Fuel	Fuel quantity	Time of combustion	Adjustment of primary air
Cleaved wood	1,6 kg	1,0 h	Degree 1/2

Make sure than you never put more wood or briquettes than it is really required for the rated capacity of heating.

The above indicated fuel quantity must not be exceeded because this may cause overheating of the stove.

Only natural dry wood may be used according to the regulations on emission protection. The wood being used must be dry (humidity residual, 20%)

This is usually the case when wood is stored for two years in a dry spot where there is good ventilation.

Wet wood has low calorific value and causes soot deposits in the flue channels and in the flue.

Wood with treated upper surface (coated, painter, veneered and impregnated, plywood, waste of any kind (waste from packaging), plastics paper, rubber, leather, textile etc. must not be stoked.

The combustion of such materials pollutes the environment and it is prohibited by law. Besides this, damages of the flue may also occur. In this case, all kinds of guarantee by the manufacturer cease.

Unfavorable conditions and insufficient draught in the flue my cause obstructions so the flue gases are not entirely taken away. In this case you should eliminate the causes in the flue, otherwise the use of the chimney is not allowed due to safety reasons

Note: Better usability of fuel, thereby better heating of space is established by slightly or completely opening the oven door.

#### 4.3. COOKING

## 4.3.1. COOKING DURING SUMMER

During warm days, the stove on solid fuel is used mainly for cooking. The oven door is kept closed. The best is to use a pot with a heavy bottom and a corresponding cover.

#### 4.3.2. COOKING DURING WINTER

During cold days, the solid fuel stove is used mostly for heating of rooms. In order to cook faster, use dry woods.

The heating flap must be closed and the air regulation must be maximally open.

Upon termination with cooking, you should put the air regulation in a position for rated heat capacity.

# 4.4. BAKING COOKIES AND BAKING PASTRY

For baking cookies and baking pastry, evenly distributed heat is required.

In order to achieve this evenness and sufficiently high temperature, the oven must be closed and the heating flap must be closed. Depending on the type of food which is baked, the oven must be heated in advance. It the stove has heated up to the desired temperature, but what you plan to bake inside the oven. Do not let creation of a very strong ember, you should rather frequently add fuel in small quantities.

Put high baking molds in the lower groove of the oven. You should bake all cookies with such shape on a moderate temperature. At flat cookies or pastry both grooves may be used. During this, we recommend slightly higher oven temperature.

For baking pasty you need importantly higher temperature than when baking cookies. Hence, the time of preparation (with prior warming) is a bit longer and necessary...

#### 4.5. STOKING IN A TRANSITORY PERIOD

At outdoor temperatures over 15°C s that on the basis of low transporting pressure, small fire in the flue occurs. This creates more soot in the flue channels of the stove and the flue. Increase the inflow of primary air and make more frequent ember burning and more frequently add small pieces of cleaved wood in order to reduce the soot in the transitory period.

# 5. MAINTENANCE AND CLEANING OF THE STOVE

Regular maintenance and care such as cleaning of the stove, the flue channels and flue extension is important for safe operation and thriftiness.

Maintenance of enameled surfaces of the stove is recommended only in cold state.

The stove is cleaned with clean water and soft towel and in separate cases, with suds as well.

The cleaning intervals depend mostly on the use of fuel, the period of use of the stove and the manner of its use.

Unnecessary creation of dust may be avoided, if the following sequence of cleaning is maintained:

- \* Removal of the cooking plate and thorough cleaning of the same outside.
- \* Cleaning soot deposits from the upper side of the oven and in parts where flue gases pass.
- \* Placing the plate.
- \* Opening of the protective cover for cleaning (below the oven door) and removal of the cover.
- \* Removal of soot and ash with a partitioning sheet metal.
- \* Removal of soot and ash from the stove bottom.
- \* Tightening the cover to the front side and closing the protective cover.

NOTE: During stoking of the stove, make sure that the door glass of the firebox does not become smoky. Smoke occurs due to bad combustion, for many reasons.

Bad draught of the flue (bad flue), the stove is improperly used, for example, the supply of oxygen is dampened too early. We cannot influence on these factors.

For this reason we do not provide a guarantee for the glass.

# 5.1. OPENING FOR CLEANING



FIG.5

Behind the protective cover of the opening for cleaning, there is a cover (figure 5 position 13).

It is fastened with a butterfly nut at the front side of the stove and in order to clean the internal part of the stove, it should be removed.

Before re-screwing it, you need a sealing braid which is on the cover in order to control the sealing, and it necessary, it should be changed.

## 5.2. MAINTENANCE AND CLEANING OF THE COOKIING PLATE

For maintenance of the cooking plate, it is recommended that you constantly apply oil that does not contain acids on the cooking plate.

For cleaning of the cooking plate, use small sandpaper or abrasive. And during cleaning of the plate, wipe it with a semi-wet towel and in the end with a dry towel.

Make sure that the stretching grooves on the cooking plate remain free with no crust, in order to enable stretching of the plate as an action of heat.

Seizing food scraps or parts of slag in the grooves may cause deformation of the cooking panel.

Do not leave pots or pans on the cold cooking plate.

Edges may be created by corrosion, which are difficult to remove.

# 5.3. REMOVAL OF SLAG AND ASH

Slag is removed with the supplied accessories, blades.

The ashtray should be emptied on a regular basis during every kindling.

You should clean the trash rack 1-2 times per week. It the air openings are clogged with slag, crust or some other burning remains, take out the trash rack and clean it.

## 6. GENERAL NOTES

If you follow the instructions for installation and handling, the stove represents safe household appliance.

All drawbacks of Your stove can be removed at our customer service department.

For complaints related to mistakes which occur or drawbacks in terms of functionality, contact our customer service department.

The same help in the supply of spare parts (it uses only original parts).

The entire stoking unit must be regularly controlled by an expert.