

GAS BURNER MLL 14.2 FOR  
RED PASSION OVENS  
MARGHERITA  
AND  
MANGIAFUOCO



**I N D E X**

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## FIELD OF APPLICATION

The gas burners Millberg model **MLL 14.2** have been designed and manufactured to be used within RED PASSION OVENS of FONTANA SRL . Ovens built in stainless steel suitable for cooking and refractory material, combined with gas burners, specifically for products for Pizzeria, Bakery, Gastronomy and Catering.

The gas burners Millberg model **MLL 14.2**, inserted into RED PASSION OVENS replace the charcoal or wood used as fuel for cooking pizza, pasta, meat in the pan, grilled or barbecued, for direct cooking of food, ensuring the same cooking results and reducing the environmental pollution that instead the combustion of wood produces.

It is known that soot emissions and outdoors associated with the combustion of wood as it burns in a barbecue or charcoal grill can be a source of disagreement between neighbors and civil cases. The use of RED PASSION gas ovens eliminates these problems thanks to the reduced atmospheric emissions.

## PRECAUTIONS FOR SAFE USE

Read the instructions carefully before using the system.

The equipment must be used ONLY by people of proven confidence.

Incorrect installation may cause damages to persons, animals or things, for which the manufacturer is not responsible. Make sure that the burner is used in an open place with the minimum ventilation as required by mandatory laws, so that the combustion fumes can be evacuated in the environment without causing damage to property or persons, and in any case sufficient to obtain a perfect combustion.

Do not obstruct the ventilation openings of the place where the equipment is installed, in order to avoid overheating of the equipment, ensure the correct combustion of the gas, and evacuate the combustion fumes.

The system is easy to use for the operating staff and thanks to the gas control system with thermocouple for flame monitoring, is it possible to keep the flame lit for safety.

**To ensure the working area it is essential to delimit the area with barriers and warning signs for open flames.**

This burner must be used only for the purpose for which it has been built.

The ignition must be performed by persons trained on the features and functioning of the system, as well as on the gas adjustments, and the dangers associated with its use.

Do not touch the hot parts of the equipment, both during use and after use.

When the system is turned off, make sure that the general gas taps are closed.

When you decide to perform routine maintenance, turn off the gas supply on the fixed pipes.

During the phases of cleaning, be careful not to wet the electrical equipment with water or any other liquids.

Do not strike any part of the burner, with any kind of object in order to obtain voluntary or involuntary damage to the system itself.

**Avoid tampering or modifications not conform to the type of equipment.**

Any mechanical or electrical part that needs to be replaced for maintenance, should correspond to the same component installed.

In the event that not suitable devices or extraneous to the system are found installed on it, without the approval of the manufacturer, the latter rejects any responsibility in case of damage to persons or property of others.

## TECHNICAL DATA FOR THE GAS CONNECTION

The gas inlet pipe of your network must NOT be less than:

Ø 1/2" = Ø 14 mm	for METHANE gas
Ø 1/4" = Ø 8 mm	for PROPANE gas

The recommended pressure for the burner functioning is of:

20 mbar	for METHANE GAS
30 mbar	for PROPANE GAS

The maximum power with a pressure of 20 mbar using methane gas is

12000 Kcal/h = 14 KW

The maximum power with a pressure of 30 mbar using propane gas is

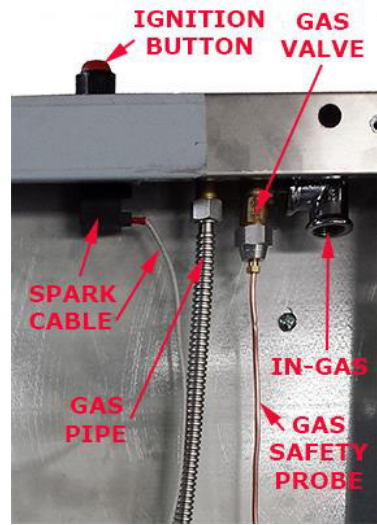
12000 Kcal/h = 14 KW

Hourly consumption with methane gas 1,4 m<sup>3</sup>/h

Hourly consumption with propane gas 1,0 kg/h

Internal view of the thermoelectric gas safety valve installed on the burner, complete with thermocouple for flame detection and gas safety.

- IGNITION BUTTON  
To make spark and ignite fire
- GAS VALVE  
Gas Valve for Gas System Safety
- SPARK  
Ignition transformer
- CABLE  
Silicone cable for the spark
- GAS PIPE  
Gas Pipe for the burner
- IN-GAS  
Inlet Gas
- GAS SAFETY PROBE



**TECHNICAL SPECIFICATIONS OF THE BURNER**

The gas burners Millberg model **MLL 14.2**, are made of stainless steel to withstand high temperatures.

These burners are atmospheric, commonly called aspirated burners, and use a Venturi cone for the aspiration of atmospheric air for the combustion of the gas used. The start is provided by **an ignition electrode and thermocouple** with thermoelectric valve with adjustment tap for the control of the burner's flame.



POWER AND ADJUSTMENT KNOB OF THE BURNER



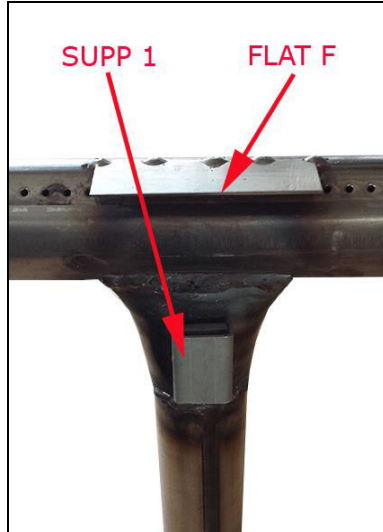
FLAME POWER BUTTON WITH INTERNAL BATTERY AA 1,5V

**MAINTENANCE OR REPLACEMENT OF THE INJECTOR AND THERMOCOUPLE FOR**

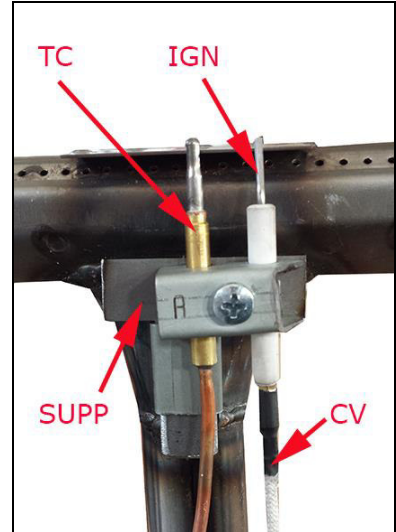
## GAS SAFETY



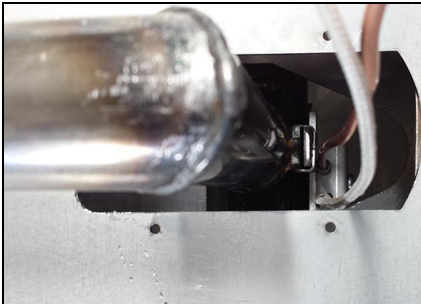
PUSH UP INSIDE  
THE HOLE



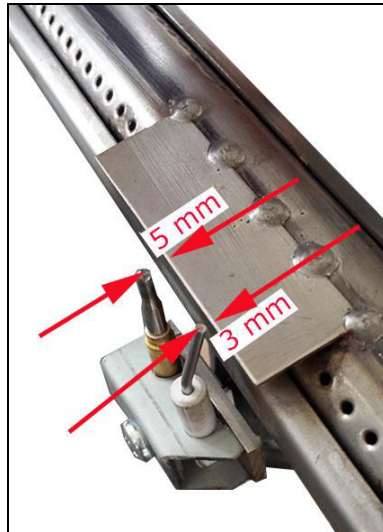
PUT INSIDE THE SUPPORT  
SUPP 1



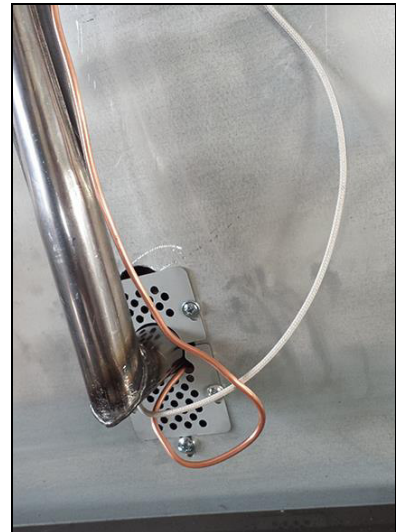
THEN PLACE SUPP IN THE RIGHT  
POSITION



CHECK RIGHT POSITION



RESPECT DISTANCE



CLOSE THE HOLE

## **SWITCHING THE BURNER SYSTEM**

Before performing the ignition ensure that the gas pipe is connected properly, and that the pressure used is that recommended. Make sure that the flue, if present, is connected correctly.

Follow carefully the procedure for the first ignition.

Open the main gas valve, or open the valve of the gas cylinder

**point 1A**

Press and turn the red knob in the position of minimum or maximum flame.

Press the red button to execute the discharge on the electrode and the burner.



Wait some seconds until you see the flame of the burner lit.

The flame will hit the thermocouple for flame detection which is located nearby; releasing only the red button wait 10-15 seconds to ensure the insertion of the safety valve for the gas.



Release the red knob to verify the activation of the gas safety.

If the pilot flame turns off, repeat the operation **from point 1A**

Once the flame remains lit, the gas safety valve has been activated.

Turn the red knob to the desired position for the use of the oven.

In case of accidental extinguishing of the flame, the valve will close the gas flow as soon as the thermocouple, cooling down, no longer transmits the flame signal in a time of about 20-30 seconds.

In case of re-ignition of the flame, be very careful, and wait some minutes before restarting again. Always pay close attention to the flames and the parts of the oven that will heat at high temperatures.

After using the oven, close the gas valve first, and when the pipe is empty and the burner is off, proceed to the closing of the valves and the mouth of the oven if desired.

### ADJUSTING THE AIR / GAS

Use a correct AIR/GAS mixing has many advantages:

Execution of the job with less risk

Saving in consumption of gas used

Less wear of the burner

Better result of the work

Higher efficiency of the flame

**ATTENTION:**

If the terminal part of the flame is yellow, it means that you are using an excess of gas.

**Move the position of the AIR REGULATOR to have a higher air intake by loosening the SAR screw, move the bushing then lock the screw again.**

If the flame is very small and blue with a tendency to burn out, we are in excess of air.

**Move the position of the AIR REGULATOR closer to have a lower air intake by loosening the SAR screw, move the bushing then lock the screw again.**

The pressure levels indicated provide a sufficient quantity of gas for the functioning of the system and a saving in the gas consumption in compliance with the characteristics of the equipment used.

Propane Gas : 30 mbar - Low pressure regulator 4 kg/h

Butane Gas : 20 mbar - Low pressure regulator 4 kg/h



### GAS SAFETY EQUIPMENT

The thermoelectric valve for gas safety PEL 20 S installed provides an adequate safety applied to the type of burner and job for which it has been installed.

The thermoelectric valve for gas safety PEL 20 S installed is used with a thermocouple coated in copper for flame detection. These devices are installed in accordance with the current safety standards.

#### **EN 125 "Flame control thermoelectric safety devices for gas appliances"**

In the event that the flame accidentally extinguishes, the thermocouple, no longer feeling the heat, intervene to close the thermostatic valve in a time of 20-30 seconds, in compliance with the current regulations for the safety of atmospheric gas burners.

### **ORDINARY MAINTENANCE**

In order to maintain the efficiency of the burner system it is sufficient to perform a periodic cleaning of the safety components and execute the routine maintenance.

The main parts to inspect periodically to always have an efficient system are:

#### **THE THERMOCOUPLE FOR FLAME DETECTION**

It is a delicate component and must be handled with care. If used properly it can last for a long time.

Clean the terminal part with an iron brush removing the dirt that settles, thus maintaining its monitoring function.

#### **THE GAS SAFETY VALVE**

Carefully operate the valve knob. Avoid subjecting it to strong impacts. Do not tamper in any way the button of the thermoelectric valve for gas safety.

Keep the adjustment zone clean.

#### **THE BURNER MLL 14.2**

It is not subject to heavy wear because it is made of stainless steel, but must be kept efficient and clean from residues due to cooking.

Be very careful when cleaning, never use water to clean the equipment.

#### **Operations to be performed with the system cold.**

Keep clean from incrustations and residues of cooking the tubular element of the burner using a dry cloth.

The dirt that settles on the holes for the gas outlet will not allow a correct combustion of the flame.

#### **PIEZOELECTRIC IGNITION**

Periodically check that the AA battery 1.5 V is in good condition and not leaking oxides. Replace in case of damage or loss of power.

### **SAFETY REGULATIONS IN FORCE REFERRING TO THE SYSTEM**

The system has been built in compliance with the legal provisions laid down by the Regulations of European Community:

*Reference standards EU/90/396/EEG,*

*EN 203-1/2005 Harmonized Standards for Gas Professional Equipment*

*EN 126/2004 Gas equipment*

*EN 13611 + EN 125 (Surveillance systems for thermoelectric safety)*

*EN 746-2 Directive on thermal processing equipment and safety requirement,*

*Directive 142/2009/EC, Directive on Appliances Burning gaseous fuels 90/396/EEC, (93/68/EC),*

*Directive on Machines 2006/42/CE and New Harmonized UNI EN ISO 14121-1*

*Directive 91/368/EEC, 93/44/EEC, and following changes*

*EN 60335 partially*

The material installed for the functioning of the thermal plant in question is the following:

no. 01	Tap with thermoelectric valve for gas safety	PEL	20 S
no. 01	Red knob	PEL	MR 45
no. 01	Thermocouple for flame detection	SIT	TC 1000 x M8
no. 01	Flame ignition electrode	MILLBERG	KS ACC
no. 01	Piezoelectric ignition with battery	MILLBERG	ITQ 1.5
no. 01	Burner DIS. MLL 14.2	MILLBERG	560MLL/FF

### **WARRANTY CONDITIONS**

RULES FOR THE VALIDITY OF WARRANTY

The system must be in possession of the original purchaser, if it is sold after the first ignition, the same warranty is not valid.

The Warranty Certificate must be presented to the staff Millberg in case of assistance required.

#### WARRANTY AND RESPONSIBILITY

Millberg guarantees all its products from the date of testing for a period of 12 months.

The warranty excludes any electrical parts, glass components and paints.

#### DURING THE WARRANTY PERIOD

Millberg undertakes to repair or replace (at its discretion) free of charge the parts that present defects in materials or construction.

If the intervention is not covered within the terms of warranty, the costs for dismantling and assembling the parts repaired or replaced will be at the purchaser's charge, as well as the costs for the transport of materials and the travel expenses of the staff MILLBERG.

The buyer must ensure that the plant conditions allow, on the occasion of the visit, to carry out the operations of intervention required. If it will not be possible to perform the intervention for reasons not attributable to MILLBERG, the purchaser will be charged the cost of intervention as described in the previous paragraph.

If the buyer wishes to have the immediate exchange of the faulty piece, without waiting for the control of the personnel employed by MILLBERG, he can request it upon payment in advance.

MILLBERG reserves the refund at its sole discretion.

The parts to repair or replace must be sent to MILLBERG at the expense and risk of the purchaser. Replacement parts will be returned to the buyer free of charge, if it fulfills the terms of the warranty, cash on delivery otherwise. The parts replaced will remain property of MILLBERG.

MILLBERG does not recognize the refund of any costs of repair or intervention carried out directly by the buyer, unless it has been previously authorized.

MILLBERG is not responsible for any damages, direct or indirect, caused to persons or things by damage of the appliance or resulting from the forced suspension of the use of the same.

#### INVALIDATION OF THE WARRANTY

The warranty is void if it occurs even one of the following circumstances:

The buyer does not respect even only in part the payment terms established in the order.

The installation is performed without complying with the Pertinent regulations and the instructions for use and installation in the manual.

The electrical connection is not performed in accordance with the instructions given in the scheme attached to the manual.

The electrical and hydraulic system do not comply with the Pertinent regulations and with the directions in the instruction manual.

Inefficiency of the air draft of the venting channels and/or adverse conditions of the fumes exhaust.

Use of the burner by methods different from those described in the instruction manual or for purposes other than those for which it is intended.

Overload of operation of the burner, excessive weather conditions to which the burner is subjected.

Use of fuels other than those specified in the instruction manual or however contaminated by foreign substances.

Malfunctions caused by external factors such as humidity, bumps, fires, short-circuits, damages and breakages caused by transportation.

Tamperings or repairs carried out by personnel not recognized by Millberg or with non-original parts.

The warranty excludes normal maintenance such as, for example, cleaning the fan, the electrodes and the burner, as well as the burden of the call of Qualified Technicians for routine and extraordinary maintenance.

MILLBERG recognizes this as the only valid warranty; No one is authorized to modify its terms or issue other warranties, either verbal or written.

CERTIFICATE OF CONFORMITY



M L L 1 1 2 2 1 8

Mr. LIBANORE DIEGO as the owner of the MILLBERG Company, operating in the wholesale and retail of equipment and gas burner for industry, Headquarter in STEZZANO 24040 Italy, C.F. LBN DGS 68A19A794M, P.IVA 02326970163 ,  
\* included in registry entities R.D. N ° 280256 - 14.07.94 of the C.C.I.A.A. of BERGAMO  
\* included in registry operators trade of BERGAMO N ° 87492

**DECLARES under its responsibility that this system**

GAS BURNERS FOR FONTANA FORNI MLL 14.2 series number 2014 MLL 114 4849

**OBSERVES THE FOLLOWING EUROPEAN NORMATIVES**

*Norme di riferimento EU/90/396/EWG,  
EN 203-1/2005 Direttiva Apparecchiature Professionali alimentate a gas  
EN 126/2004 Apparecchiature a gas  
EN 13611 + EN 125 (Sistemi di sorveglianza di sicurezza termoelettrica)  
EN 746-2 Direttiva Apparecchiature di Processo Termico e Requisiti di sicurezza,  
Direttiva 142/2009/EC, Direttiva Impianti Termici a gas 90/396/EEC, (93/68/EC),  
Direttiva Macchine 2006/42/CE e Norma Armonizzata UNI EN ISO 14121-1  
Direttiva 91/368/EEC, 93/44/EEC, e successive modifiche  
EN 60335 parzialmente*

*Standards EU/90/396/EWG*

*EN 203-1/2005 Harmonized Standards for Gas Professional Equipment  
EN 126/2004 (gas equipment) and following changes  
EN 13611 + EN 125 (flame supervision devices thermoelectric safety) and following changes  
EN 746-2 Directive Equipment of Gas Burner Systems and safety appliances,  
Directive 142/2009/EC, Directive Appliances Burning gaseous fuels 90/396/EEC, (93/68/EC),  
Directive Machine 2006/42/CE and Harmonized Standards UNI EN ISO 14121-1  
Directive 91/368/EEC, 93/44/EEC, and following changes  
EN 60335 Partially*

**TEST CERTIFICATE**

**The BURNER SYSTEM DESCRIBED ABOVE HAS BEEN SUBMITTED TO THE FOLLOWING TESTS:**

WE DECLARE THAT THE FOLLOWING OPERATIONS HAVE BEEN PERFORMED IN ACCORDANCE WITH THE CURRENT REGULATIONS:

- Inspection and verification for the ascertainment of the installation of suitable material and the absence of any defects.
- Verification of the gas group with leakage test
- Verification of the air group with leakage test
- Verifica a vuoto dell'impianto elettrico
- Collaudo completo dell'impianto con prova gas

Pressione d'ingresso		Flangia Calibrata	Consumo Gas	Potenzialità Bruciatore
Metano 20 mbar			1,4 m <sup>3</sup> /h	12.000 Kcal / h = 14,0 kW
Propano 30 mbar			2,00 l/h	12.000 Kcal / h = 14,0 kW

Il costruttore DECLINA qualsiasi responsabilità per sinistri a persone o a cose derivanti da manomissione dell'impianto da parte di terzi oppure causate da mancanza di manutenzione o riparazione dell'impianto .

Data , 25/03/2014

Il Dichiarante

**MILLBERG**  
di Libanore Diego G.  
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Partita IVA 02326970163