

Series 4

Rotary rack oven





For pastry chefs and bakers, Series 4 rotary rack ovens concentrate a range of technology to ensure real benefits:

- Extremely compact
- Excellent performance
- Ecological
- Guaranteeing remarkable and even baking quality
- Versatile (baking and pastry cooking)
- Easy cleaning and maintenance



Series 4 A complete range to satisfy all your needs

Choosing a Series 4 oven means being assured of achieving absolutely consistent baking results from the lower to the top level of your rack.

A Series 4 rotating rack oven will meet the expectations of the most demanding professionals:

■ The operating principle of the exchanger and **Soft Flow Technology** featured on the oven ensure even baking of a wide range of baked goods.

• A steam generator composed of structured cast-iron gutters produces high quality, constantly available steam.

To meet specific, higher capacity needs, it is possible to further increase the production capacity of steam, by adding an **ESG steam generator** (optional).

Day after day, you will thus be able to offer customers first-class products, perfectly risen and baked to the core!



8.64 MG/E 600 x 800 mm 19 levels Baking surface: 9,1m² Baking capacity per batch: 152 baguettes



8.84 MG/E 1000 x 600 mm 19 levels Baking surface: 12,6m² Baking capacity per batch: 190 baguettes



12.84 MG 2x 600 x 800 mm 19 levels Baking surface: 18,2m² Baking capacity per batch: 304 baguettes



The most sensitive products are perfectly treated



The hot air flow introduced into the baking chamber is very gentle. It is used **to bake light products** that cannot handle excessive blowing.

Do not hesitate to cook delicate products: thanks to soft flow, meringues, fillings, choux pastries and icing sugar remain perfectly in place on the trays!

Slow speed of 8 and 12 metres per second depending on the model of oven. Hot air flow

Even, high quality baking



The specially designed geometry of the blowing system allows hot air diffusion throughout the entire height of the rack. This effect, combined with the continuous rotation of the rack in the same direction, allows **very even baking of the products**.

The direction of hot air flow in the baking chamber is upward, which has the advantage of producing a good **sole on bread**.

There is no need to adjust the airflow during the recipe, the oven's **original and unique** setting will satisfy all your products.

3 blow slots extend over the entire height of the baking chamber







Viennese pastries, baking and pastry products, whether standard, complex, light, liquid or delicate: all your recipes will be cooked to perfection in a Series 4 oven.













Generous steam production

Series 4 steam generators are composed of 37 to 160 rows of structured cast iron gutters (standard).

These appliances are ideally positioned inside the oven so as to benefit from very rapid heating:

- More than 95% of their surface is in contact with the heat exchanger unit.
- The heating circuit is such that the gutters are literally surrounded by the flow of hot air.

This produces very good heat exchange between hot air and the cast iron: high quality steam is supplied throughout successive baking.

Steam generator consisting of cast iron gutters

Exchanger unit
Row of gutters
Hot air flow

Need more steam? It's possible!



Standard steam appliance

To meet the highest requirements, **Series 4** ovens may be equipped with 2 additional optional ESG type steam appliances.

The addition of two complementary ESG units in an 8.64 oven, for example, can increase the steam production capacity from 3.5L to 9L for 20 min of baking time.

ESG : Egg Steam Generator

With its European patent pending, the ESG (egg-shaped steam generator) is e x c l u s i v e t o BONGARD.

A column is composed of 36 stacked ESG modules, i.e. 100 kg of iron.





An oven adapted to demanding applications

Robust technical features

Oil / gas exchangers are equipped with a high performance flue exchanger entirely built in refractory stainless steel.

The exchanger has been specially designed for optimal flame length. However to deal with any variations, the exchanger is systematically fitted with a **reinforced base** with a thickness of 2 x 2mm to ensure its longevity.

Similarly, the heating elements used in the electric versions are carefully selected and tested to ensure their good resistance over time.





Smart design

- The door handle (1) is purposely designed as a bumper that protects glazing and the control.
- Tried and tested door hinges (2) are oversized and ensure the integrity of the door.
- A simple and efficient anti-return door system allows totally safe loading and unloading operations.
- The noblest materials are used: from the façade (3) and steel baking chamber in stainless steel to the brass solenoid valves!

Working comfort for bakers: a subject at the heart of our concerns!

The baking chamber on Series 4 ovens is designed for easy cleaning and improved hygiene to meet the most stringent European standards.



Built entirely of stainless steel, the baking chamber is assembled without apparent welding to present a smooth and healthy structure. The use of non-perforated solid sheets and hidden steam appliances into the ducts also reduces the accumulation of residue.

This same concern has guided our work on the floor of the chamber, its 45° raised edges offer easy access for cleaning.

This is what led us to choose a standard rack lift system that allows us to achieve a perfectly flat and easy to clean floor. The turntable is optional .

At BONGARD, we do not believe in design for design's sake!



The "Hallmark" of the Series 4, the glass façade on the ovens is designed to integrate hygiene and cleanability.

We have worked to make the space between the two front windows easily accessible for easy cleaning and to keep a clear view.



With its sloping edges, the space between the two windows can limit the accumulation of residue and allows perfect cleaning.



Magnets allow easy opening of the outer glass.

A wide choice of controls!



Electronic Control **Opticom** (standard)



Electronic Control **Intuitiv'** (optional)



Electromechanical Interface **Ergocom** (optional)

Maximise space in your bakery

In an environment where every square metre costs money and must be used, Series 4 ovens will optimise your space, ensuring maximum baking surface.





Built-in on both sides, Series 4 fuel-oil / gas ovens can be installed in a row or in a corner of the bakery.

• The door handle and the control panel are located on the left as standard. However, this can be easily inverted when you order, without additional cost in order to meet all configurations.

The most compact ovens on the market!

For example, an 8.64MG oven is 1440mm wide, 2080mm deep and 2300mm high.



You don't need to heat the whole world!

The Series 4 rack oven exchanger has been specially designed with the objective of optimising performance while ensuring sustainability.

Air flow and combustion gases circulate in opposite directions: this is the principle of counter-current heating, the most efficient in terms of heat Due to this design, the outlet exchange. temperature of combustion gases is greatly reduced.

Significant energy savings:

For a baking temperature of 250°C combustion gas temperature is below 290°C, for example, for a 8.64 MG oven.

A clear environmental benefit:

Lowering the temperature of combustion gases minimises the production of polluting gases and irritants such as nitrogen oxides (heavily involved in acid rain and altering the ozone layer).



Models	8.64 E	8.64 M <u>G</u>	8.84 E	8.84 MG	12.84 M <u>G</u>
Drive system					
Mechanical rack lifting system					
Turntable					
Burner					
Gas burner	*		*		
Fuel-oil burner	*		*		
Access burner on the left	*		*		*
Access burner on the right	*		*		*
Access burner on the front	*	*	*	*	
Fresh air inlet on the burner	*		*		
Door handle and control panel					
Left					
Right					*
Controls					
Electronic controls Opticom					*
Computerized controls Intuitiv	⊒€	⊒€	⊡€	⊡€	
Electromechanical controls Ergocom					*
Headband - Hood - Exhaust fan					
Headband					
Hood with exhaust fan	⊒€	⊒€	⊒€	⊡€	⊒€
Additional options					
Steam pulsed injection					
Reinforced steam generator	⊒€	⊒€	*	⊡€	⊒€
Brass water solenoid valve					
Water filter to prevent scale deposits	⊒€	⊒€	⊒€	⊡€	⊒€
Pressure reducing valve kit					
Stainless steel outer panels	⊒€	⊒€	⊒€	⊡€	⊒€
Electrical supply					
400 V TRI + N 50/60 Hz					
Standard /□ Option / □ € Option against	extra charge	· ·	•	•	*

Power features	8.64 E	8.64 MG	8.84 E	8.84 MG	12.84 MG
Total connecting power	65 kW	2,5 kW	78 kW	2,5 kW	3,3 kW
Exhaust fan connecting power	0,18 kW	0,18 kW	0,18 kW	0,18 kW	0,18 kW
Heating power	57 kW	70 kW	69 kW	100 kW	150 kW
Average gradient of temperature rise		+-13°C/min			
Maximum baking temperature of the oven	280°C				280°C

Dimensional features	8.64 E	8.64 MG	8.84 E	8.84 MG	12.84 MG
Oven dimensions					
Depth with hood	2330 mm	2530 mm	2520 mm	2730 mm	2760 mm
Depth with headband	1880 mm	2080 mm	2080 mm	2280 mm	2060 mm
Depth on the floor	1880 mm	2080 mm	2080 mm	2280 mm	2060 mm
Depth (door opened)	2700 mm	2900 mm	3100 mm	3300 mm	3070 mm
Width on the floor	1440 mm	1440 mm	1640 mm	1640 mm	2720 mm
Total height, overall	2600 mm	2600 mm	2600 mm	2600 mm	2770 mm
Total height, oven front	2300 mm	2300 mm	2300 mm	2300 mm	2400 mm
Floor area	2,71 m²	2,99 m²	3,41m ²	3,74 m²	5,60 m ²
Total weight	1270 kg	1390 kg	1550 kg	1580 kg	2500 kg
Baking chamber					
Maximum rack height	1900 mm	1900 mm	1900 mm	1900 mm	1960 mm
Maximum rack width	680 mm	680 mm	880 mm	880 mm	870 mm
Maximum rotation Ø	1120 mm	1120 mm	1320 mm	1320 mm	1630 mm
Total acceptable payload	300 kg	300 kg	350 kg	350 kg	600 kg
Space required to access building site					
Minimum door clearance	830 mm	830 mm	930 mm	930 mm	1200 mm

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