The plus factors of pressure steam cooking with the benefits of Nilma technology

HIGH OUTPUT IN MINIMAL SPACE

200 kg of spinach, 100 kg of meat and 200

Quick Steam cooks with dry saturated steam at a pressure of **0.8 bar** (**116°C**). At this temperature, vegetables are ready in just a few minutes.



Fish and meat take a quarter of the time needed for cooking in water or in steam at atmospheric pressure. In spite of its compact size (little more than half a square metre), in one hour Quick Steam cooks 60 kg of potatoes, 40 kg of spinach and 15 kg of meat or fish.



In little more than one square metre, in one With the dry saturated steam produced by the steam generator, **Vaphoor** and **Quick Steam** hour Vaphoor cooks: 400 kg of potatoes, provide healthier, more rational cooking. This conserves foods' shape and colour and their nutrients such as proteins, vitamins and mineral salts. Vegetables are tastier, requiring less kg of fish. Without emitting heat and steam seasoning, while cooked meats will be tenderer and will retain better their shape.

> Vaphoor provides a choice of two cooking pressures depending on the type of food (see the "COOKING TIMES AND OUTPUT" table). Steam cooking is offered at 110°C (0.5 bar) or 120°C (1bar). Quick Steam, with its lower loading capacity, uses a cooking pressure of 0.8 bar with a temperature of **116°C**.

LABOUR SAVING

The only manual procedure when using the Vaphoor and Quick Steam ovens is placing the rack into the cooking chamber.

The oven sees to the rest, regulating the pressure and cooking time as programmed. After cooking, the containers are easily removed from the rack. With Vaphoor, the extraction of the rack with product is facilitated by the provided trolley.

At the end of the working day, Vaphoor is cleaned without wasting time or effort: it has the automatic washing of the cooking chamber to simplify the procedure.

ENERGY SAVING

Thanks to the perfectly insulated cooking chamber and steam generator, together with the precise control of cooking pressure, in one hour of continuous operation, **Vaphoor** and **Quick Steam** consume only one third of their power



REACTIVATE PRECOOKED AND **FROZEN FOODS**

Vaphoor and Quick Steam are able to reactivate and cook refrigerated or frozen foods. Simply add the reactivation or thawing time to the cooking time. Foods will be ready for serving in just a few minutes.

SAFETY FIRST

Vaphoor Vaphoor has been tested by a certifying body at a pressure above the maximum cooking pressure. The door, mounted inside the cooking chamber, is larger in size than the loading aperture.

Two pressure switches and a safety valve guarantee the control of the operating and maximum pressures in both the cooking chamber and the generator.

Quick Steam adopts the same safety standards as Vaphoor and also has a device which prevents the door from opening if there is steam in the cooking chamber.



Pressure steam ovens

Pressure steam cooking is the best way to shape and are brighter in colour, guaranteeing cook foods, since it offers major benefits compared to pan cooking, or atmospheric pressure steam cooking in combi ovens.

Unlike boiling, pressure steam cooking maintains foods' sensory characteristics virtually intact, since the vitamins, proteins and mineral salts are not dispersed in water.

sure steam cooking better conserves foods' heat-sensitive components, since **cooking times** are more than **halved**.

conserve a drier appearance, retain a firmer range food preparation centres.

better flavour and presentation.

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The operating benefits of **Vaphoor** and Quick Steam are smaller size combined with high output, user-friendliness, operating safety and impressive energy saving. Vaphoor and Quick Steam are able to cook vegetables, meat, fish, shellfish, crustaceans, rice, pasta and Compared to atmospheric steam cooking, pressupport soups to the highest gastronomic standards. Also ideal for cooking frozen products and reactivating precooked and vacuum-packed foods, Vaphoor and Quick Steam are the best in-What's more, with pressure steam cooking foods vestment for every modern kitchen and 5th



VAPHOOR

LA SCIENZA DELLE GRANDI CUCINE



TECHNICAL DRAWINGS QUICK STEAM VAPHOOR RACK TROLLEY 1370

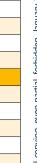
TECHNICAL DATA							
VAPHOOR	electric	indirect steam					
Softened water connection Ø	1/2"	1/2″					
Steam connection Ø	-	3/4"					
General drain Ø	1″ 1/2	1″ 1/2					
Steam trap Ø	-	1/2"					
Steam consumption kg/h	-	200					
Electrical power kW	73	1					
Electrical connection V	3/N~230/400V50Hz+PE	1~230V50Hz+PE					
Appliance weight kg	725	675					
QUICK STEAM	electric	-					
Softened water connection Ø	3/4"	-					
General drain Ø	3/4"	-					
Electrical power kW	12	-					
Electrical connection V	3/N~230/400V50Hz+PE	-					
Appliance weight kg	98	-					

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VAPHOOR & QUICK STEAM

Pressure steam ovens



VAPHOOR

Vaphoor takes the stress and effort out of kitchen procedures.

Once time and pressure (0.5 - 1 bar) have been programmed and the rack has been placed in the cooking chamber, just pull the door towards you and steam will start up, cooking food in a few minutes. After cooking, once you have opened the door and removed the rack on the trolley, the product will be ready for serving.

You can then immediately start a second cooking procedure with no wait between batches.

At the end of the working shift, **Vaphoor** cleans itself: simply start the automatic washing of the cooking chamber.

- Made of AISI 304 stainless steel throughout.
- · Rotating autoclave door.
- Insulated cooking chamber and steam generator.
- Trolley quick-coupling system
- Adjustable feet.
- Automatic door release.
- 24V control panel with: multifunctional soft touch cooking time programmer (optional PLC with 7" touch screen), steam generator and cooking chamber pressure gauges, 0.5 - 1 bar cooking pressure selector switch, power-on light, chamber washing switch.
- Electronic steam generator water level with sight glass.
- · Safety system disabling the heating elements in case of a lack of water in the generator.
- Steam generator safety valve, cooking chamber and generator pressure switches, safety microswitch on the door.
- Certified pressure appliance with testing certificate.



QUICK STEAM

After programming the cooking time, just place the containers into **Quick Steam** and close the door. Steam will process foods for the programmed time.

At the end of the cycle, you only have to open the door and remove the containers.

Quick Steam cooks whole, jointed, sliced or diced vegetables, meat, fish, crustaceans and shellfish, retaining their shape intact and enhancing their colour. It is also ideal for cooking deepfrozen foods in just a few minutes or for reactivating ready-made dishes or vacuum-packed foods.

- Made of AISI 304 stainless steel throughout.
- Insulated cooking chamber and steam generator.
- Adjustable feet.
- Door with gasket, closing handle and safety lock lever.
- 24V control panel with: electronic cooking time programmer, start button, power-on and operation lights, cooking chamber and steam generator pressure switches.
- Electric steam generator with pressure switch, safety valve and electronic water level control with sight glass.
- Safety device disabling the heating elements in case of a lack of water in the generator.
- 0.8-bar cooking pressure.
- Safety device preventing the steam delivery with the door open, and the door opening when chamber is pressurized.

MODELS

VAPHOOR indirect steam



QUICK STEAM electric

VERSIONS

INDIRECT STEAM

With heat-exchanger steam generator, fed with steam from the external system at a pressure from 5 to 8 bar.

With steam generator with Incoloy steel heating elements with overheating safety device.

LOAD CAPACITY

VAPHOOR

1/1 GN (530x325 mm) 18 containers of 65 mm 12 containers of 100 mm

2/1 GN (650x530 mm) 9 containers of 65 mm 6 containers of 100 mm 6 containers of 200 mm 3 containers of 200 mm

QUICK STEAM 1/1 GN (530x325 mm) 3 containers of 65 mm 2 containers of 100 mm

1 containers of 200 mm

MORE EFFICIENCY, LESS EFFORT

In **Vaphoor**, product loading and unloading are facilitated by using a rack placed on a special trolley with quick coupling for an easy and risk-free product handling, thanks to stainless steel castors and a rack lock. For an optimised and streamlined production, the use of **Vaphoor** with two trolleys and two racks is recommended.



NEAT AND ERGONOMIC

Quick Steam can be placed on a table. Otherwise, an enclosed stand, available as an accessory, places the oven door at the right height and provides neat and hygienic storage for gastronorm containers in the special compartment.



EVERYTHING UNDER CONTROL

Upon request, the most high-tech **Vaphoor** version, with PLC, provides recipe programming, HACCP parameters monitoring, self-diagnostics, displaying and logging of alarms, setting of temperatures instead of the two pressures of 0.5 and 1 bar, and using of the product core probe.

Moreover, with the CCMP Software, **Vaphoor** becomes interactive with the chef's PC, enabling the complete traceability of recipe ingredients, data saving, recipe programming and appliance diagnostics, remotely.

Not to mention the control of **Vaphoor**'s operations from a tablet or a smartphone.



ACCESSORI

VAPHOOR

- · Rack trolley made of tubular AISI 304 stainless steel with handles, quick coupling to oven entrance, rack lock device and four castors, two with brake. Dimensions: 830x630x960 (h) mm.
- 1/1 or 2/1 GN rack made of AISI 304 stainless steel, with handle, stainless steel wheels and container runners.

QUICK STEAM

- · Completely enclosed stand made of satin-finished AISI 304 stainless steel. with two doors with handles, 16 container runners and height-adjustable
- Dimensions: 750x800x795 (h) mm.

COOKING TIMES AND OUTPUT

Product cooking times provided in the table may vary depending on the temperature of foods when loaded, the piece size and the and quality, and are counted from when the cooking chamber reaches the operating pressure.

Foods		king re (bar)		GN ainer		ainers ded		ity per er in kg		g time in utes	Product	tion per in kg
VEGETABLES	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S
sliced potatoes	1	0.8	h 65	h 65	18	3	5	5	10/12	10/12	90	15
sliced carrots	1	0.8	h 65	h 65	18	3	4	4	10/12	10/12	72	12
cauliflower	1	0.8	h 200	h 200	6	1	8	8	8/10	8/10	48	8
spinach	0.5	0.8	h 200	h 200	6	1	4	4	6/8	5/6	24	4
fennel	1	0.8	h 100	h 100	12	2	6	6	8/10	8/10	72	12
broccoli	1	0.8	h 100	h 100	12	2	4	4	8/10	8/10	48	8
peas	0.5	0.8	h 65	h 65	18	3	3	3	6/8	4/5	54	9
sliced courgettes	0.5	0.8	h 65	h 65	18	3	4	4	6/8	4/5	72	12
sliced beetroot	1	0.8	h 65	h 65	18	3	4	4	12/15	12/15	72	12
MEAT	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S
beef	1	0.8	h 100	h 100	12	2	6	6	80/90	80/90	72	12
pork	1	0.8	h 100	h 100	12	2	6	6	60/80	60/80	72	12
chicken quarters	1	0.8	h 100	h 100	12	2	3	3	25/30	25/30	36	6
FISH	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S
trout	0.5	0.8	h 65	h 65	18	3	3	3	8/10	6/8	54	9
cod	1	0.8	h 65	h 65	18	3	4	4	8/10	8/10	72	12
salmon	1	0.8	h 65	h 65	18	3	3	3	2/4	2/4	54	9
PASTA AND OTHER FOODS	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S	V	Q-S
vegetable minestrone	1	0.8	h 100	h 100	12	2	12 I	12 I	15/20	15/20	144 l	24 I
pasta	1	0.8	h 100	h 100	12	2	2 + water	2 + water	8/12	8/12	24	4
rice	1	0.8	h 100	h 100	12	2	4 + water	4 + water	12/15	12/15	48	8
eggs	0.5	0.8	h 65	h 65	18	3	100 p.	100 p.	5/6	4/5	1800 p.	300 p.
V - VAPHOOR Q-S - QUICK STEAM												

CONSERVATION OF NUTRIENT VALUES

The table shows how well pressure steam cooking conserves vegetables' nutrients compared to water cooking or atmospheric pressure steaming.

Loss during cooking

Vegetables	Main nutrient values	Content in mg per hg	water or atmospheric steam	pressure steam
peas	iron	1.8	61%	27%
	potassium	259	51%	18%
	magnesium	35	61%	10%
beans	iron	3	18%	4.8%
	potassium	220	21%	16%
	magnesium	30	24%	16%
	calcium	44	43%	26%
potatoes	potassium	498	53%	19%
spinach	iron	2.9	58%	42%
	vitamin A	485	64%	38%
	vitamin B2	0.37	55%	19%
broccoli	calcium	28	41%	31%
carrots	vitamin A	1148	38%	31%
french beans	vitamin A	41	19%	8%
	vitamin C	16	48%	31%



