

### Cervap

#### Annular steam tubes oven - Fuel-oil/Gas



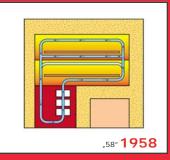


Its outstanding flexibility, combined with its exemplarily reliability, makes the Cervap the ideal oven for baking all types of bread.

With a wide-ranging choice of models, from 6 to 12 doors in width of 600 mm, and from 4 to 12 doors in width of 750 mm and 5 doors in width of 800 mm, with a baking area from 4,5 to 24 m<sup>2</sup> enabling different products to be mixed on 3 or 4 decks, there is always a Cervap to meet the expectations and requirements of the baker.









"Cyclair" **1962** 





#### BONGARD means Oven History : 1922 - 2006

**1922** Oscar BONGARD founded the BONGARD company which is located in the Alsace region of France. The first oven to be patented was a brick oven with an intermittent direct heating system. This was called the "Gueulard oven". In the beginning, the BONGARD company manufactured dough mixers as well as other bakery related accessories. This was the start of export sales on a small scale.

#### **1946** Brick oven (indirect heating) wood or coal fired with "Perkins" steam tubes

At the end of the second world war, BONGARD introduced a brick oven with an indirect heating system made with "Perkins " steam tubes . In 1948, the BONGARD family moved to Holtzheim, near Strasbourg, France to build a small factory and expand the family business.

#### 1956 "58" steam tube oven with masonry furnace

In 1958, BONGARD introduced the "58", an improved version of the original Steam tube oven. This new version was heated by natural "thermosiphon" distribution of steam through the annular tubes.

#### 1962 "Cyclair" cyclothermic oven (hot air)

BONGARD introduced the "CYCLAIR" oven fitted with a conveyor loader. The "CYCLAIR" oven achieved great success thanks to very responsive and flexible heat control advantages suitable mainly for French Baguettes.

#### **1966** "Superambassador" cyclothermic oven (smoke combustion)

In 1961, BONGARD designed the "Ambassador", a new oven heated by recycling smoke combustion. This was followed by the "Super Ambassador", which was able to double the smoke combustion recycling process, a genuine revolution in the bakery.

#### 1967 "Cervap" The major breakthrough

In 1967, after several years of research, BONGARD registered a worldwide protected patent. The "Cervap" was born. It was a genius discovery. The oven was featured as follows: ring shaped steam tubes around a refractory stainless steel furnace.

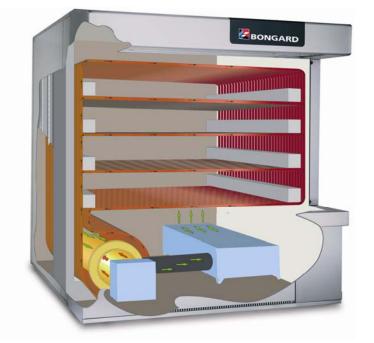
#### 1986 - 2006

#### "Cervap" Compact

Since 1986, the "Cervap" has had a couple of new face lifts. Some new "Cervap" models have been added, especially the more compact 5 deck series, designed for unique applications where space is at a premium. Options include a retractable hearth deck, a computerized control panel and an integrated lifter/ loader system.



# "Cervap" the derivative of "Circular Vapor"



Despite the technological advances achieved in cyclothermic ovens, BONGARD remained convinced of the superiority of steam tube ovens. At that time, all steam tube ovens were equipped with masonry (brick lined) furnaces.

The major breakthrough came in 1967, when BONGARD was granted a worldwide patent for a circular steam tube oven with a stainless steel furnace.

BONGARD had succeeded in combining the responsiveness of a cyclothermic oven and the superior baking performance of a steam tube oven. This was the birth of the CERVAP oven.

#### The ingenious CERVAP system

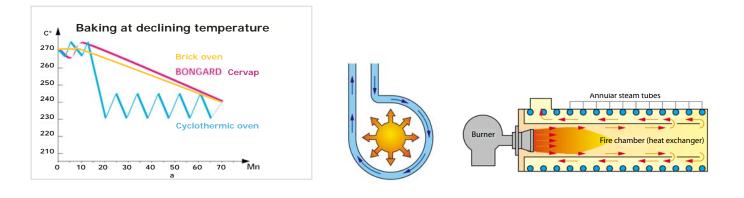
The core of the oven is made up of several vertical sections of continuous individual steel tubes. Each section of tubes has a minimum gap space inbetween each tube that will ensure uniform heat distribution.

This steel tubing is considered to be the highest and strongest grade available. Each tube forms a separate circuit, which is filled with a precisely calculated quantity of water in the lower part of the loop, and then sealed permanently.

The flames and the fumes in the furnace (heat exchanger) heat the tubes that form the loop and cause the water within the tubes to convert to steam.

Silently, and without any form of mechanical assistance, the steam rises through the tubes according to the basic laws of physics (thermosiphon). The steam distributed throughout the tubes radiates a smooth, uniform heat to the surrounding area of each deck. Thus duplicating a brick oven environment.

The heat is withdrawn when the dough is loaded onto the oven hearth, as the dough absorbs the heat, the steam in the tubes then condenses and the condensation water runs back down to the bottom of the loop, where it is reheated and the cycle repeats endlessly.





#### The ALL in ONE oven



The Cervap gentle radiated heat provides the oven's exceptional baking characteristics, in combination with natural convection, high deck clearance (7 ¼" or 8"), and thick refractory cement hearth stones. This all adds up to superior continuous baking performance. From light dinner

rolls to large hearty loaves, or Pies to Danish pastries - all taste outstanding and as if they had been baked in an original Bongard brick oven. All types of products baked in a Bongard "Cervap" oven have superior Fragrance, Flavor, and Texture.

#### The Cervap oven generates a sound level of only 58.5 dBA

One may even hear the clock ticking in the bakery. The owners of BONGARD Cervap ovens can rejoice in the unaccustomed quietness in the bakery - especially if they are used to the constant hum of cyclothermic and rack ovens.

It is possible to talk without raising your voice.

The sound level of a Cervap oven is only 58.5 dBA with the burner operating, and it's otherwise practically silent. Bongard "Cervap" ovens do not need loud fans. The pleasure of baking in a "Cervap" gives you real piece of mind, knowing that you have a reliable oven that you can count on time and time again.

#### As we see it – No oven can be more flexible than the "CERVAP"

Oven temperature: 480°F - 1st deck: Country loaves -2nd deck: Wholegrain loaves - 3rd deck: Baguettes and rolls

 4th deck: Danish pastries and croissants

- 5th deck: Brioches and Challahs

All at the same time! Thousands of bakeries using our Cervap ovens, can confirm that it is indeed possible.

With gentle radiated heat,

high heat retention and natural convection - there is no risk of burning.

This makes it possible to bake a wide variety of products at a single temperature at the same time.





Using only residual oven heat (390 °F) the tray of croissants has been perfectly baked, in 18 minutes, with no burning

#### Energy savings - Very low gas and electric consumption

You'll be pleased by the energy efficiency too!

Thanks to its heavy mass and inertia, superior insulation and optimized heat accumulation, a "Cervap" oven only requires a fraction of the energy needed by other ovens.



It begins in the early morning, when the oven is fired. Due to the "Cervap" high heat retention the oven can have a residual temperature of at least  $250^{\circ}$ F (after 12 hours of resting from an operating temperature of  $500^{\circ}$ F).

Now in order to bring up the oven temperature to  $500^{\circ}F$ , you only have to supply an additional  $250^{\circ}F$ .

Once the oven is heated to the operating temperature, it will then drop temperature very slowly, and gradually, until the next morning, just like the original Bongard brick oven.

Immediately, there are 2 distinct benefits: First, the burner switches on less frequently, which automatically reduces the consumption of primary energy Secondly, you have the ideal conditions for baking superior products, which rely either on constant or gradually declining temperatures.

Crusts and textures can develop naturally, without any risk associated with other ovens.

#### Steaming ahead!



The steam generated in a bread oven has an important role to play. On one hand it ensures that the dough remains elastic, and expands without cracking, and on the other

hand it helps to reinforce the edges, as well as to produce a shinier crust.

The ideal steam generator should:

- Act immediately on the dough, and hence not be excessively hot

- Be available in sufficient quantity, especially when baking continuously.

At BONGARD, we have worked to optimise this part of the process, so that steam output corresponds to exact customer requirements.

# First of all, take a look inside!



All parts requiring maintenance and service are easily accessible from the front.

Admittedly, there's not a lot to do but that's intentional. The fewer number of moving parts that you have means the fewer the possibilities for something to go wrong.

The burner and the water injection pipes are visible and readily accessible. There are no fans, valves or other such source of breakdown associated with cyclothermic ovens.

A CERVAP can be brought in through any standard 30" wide door, and is assembled in the bakery itself. There is no welding to be done, and no wall needs to be demolished. This is another reason why used Bongard ovens maintain a high resale value in the event of relocation.

The Cervap is backed by extensive warranties :

- 10 years on the steam tubes heating system
- 5 years on the furnace (heat exchanger)
- 1 year on the burner and electrical parts

For any baker a Bongard "Cervap" is a valuable investment and a total piece of mind !

## Minimum space / Maximum production

800 Series offers a total baking area of 71 sq ft to 106 sq ft within a width of 47"! The door width of 31  $\frac{1}{2}"$  allows you to load standard baking trays and increase Hearth bread capacity as well.



# Ergonomic operation - easy on your arms and legs

The one-man integrated lifter and loader clears the space in front of your oven. You can load and unload your oven without any additional assistance. When the loader is not in use, the area in front of your oven is completely clear, enabling you to load trays or operate with the peel without encumbrance. On request, it can also be adapted to 2 and 3 door wide ovens.

#### Personalize your oven

The BONGARD ovens can be adapted to your personal requirements. In this way, the oven becomes an integral part of your shop's interior design and helps to emphasize the particular character and style of your bakery.

You can choose the material and accessories as you wish, and combine them as desired. The façade illustrated here shows just one of many possibilities. And despite its "old world" appearance, you don't have to relinquish the conveniences of modern-day ovens.



#### All around top engineering quality 5.16 / 10.16, 5.20 / 10.20, and 800 Series

There is room for our ovens in even the smallest bakery.

The Cervap series offers all the convenience of Cervap baking quality with the added benefits of 8" high crown decks and a minimal footprint. The loading height on the lower deck is  $25 \frac{1}{2}$ " and on the top deck it is 64".

Each deck has its own steam generator, steam operating push button, and door handle.

A powerful steam generator provides bursts of intense moist steam produced free of charge by using the residual heat from the exhaust fumes.



Cervap XT - XL



#### **GME**, the unique combination – Two ovens in one!

The CERVAP GME is a unique combination of a Cervap oven and an electric oven.

The 3 lower decks are gas fired, while the top deck is electric heated.

This gives the baker a whole new feeling of flexibility and freedom. - For example, the baker can work

during the week with 75% of the baking capacity, and increase it to 100% for the busy days.

- The Baker can add a batch of cakes and cookies in the afternoon, using only the electric top deck.

- Separate Upper and lower heat thermostats will give you total control of the heat on the top deck. With deck clearance height of 9 1/2", the top deck can be used for baking larger items such as "Kugelhopf", or "Panettone" as well as a variety of other high products.

The baker can bake lower temperature products such as Croissant at 350°F in the top electric deck while baking higher temperature products in the lower 3 decks, all at the same time.



# BONGARD

#### With your Cervap oven you have a choice of controls

230°C



#### "Ergocom" - Electromechanical control

All the Cervap ovens are equipped, on standard, with the Bongard electromechanical control providing

- · Visual information on the operation of the oven
- A temperature regulator
- A baking timer
- · An on/off switch
- A steam injection
- · Control of steam damper opening

- · A steam timer in the front
- An automatic start-up timer

#### **Optional additional accessories** on the control

- An extractor fan on/off
- · A twin ventilation speed

of the residual oven temperature

- · Automatic starting to the required baking time
  - Stopping of the burner
  - · Timed and pulsating steam injection



#### Opticom control

The Cervap range can also be equipped, optionally, with the electronic Opticom control which allows :

- · Operation in manual mode
- · Operation in automatic mode with storage of 30 recipes
- Optimised pre-heating which takes account

General features for Cervap range ovens	
Burner	
Gas burner	•
Fuel-oil burner	
Heating elements (Cervap GME only)	
Access heating elements on the right	•
Access heating elements on the left	
"F" door handles	
1 door handle on the left	•
2 door handles - 1 on the left - 1 on the right	•
3 door handles - 2 on the left - 1 on the right	•
Controls	
Electromechanical control on the left	•
Opticom control on the left	
Steam vent	
Without steam vent	
Steam vent on each deck	•
Double steam vent on each deck (Cervap DT only)	•
Steam generator	
Reinforced steam generator	•
Dual steam push button on each deck	⊒€

	Technical t	features for Ce	ervap standard	
Models	Baking area	Floor area	Electric power *	Heating power Fuel or Gas*
Cervap - 2 x 60	0 mm - 3 decks			
600/6.164	6,0 m²	5,3 m²	1,0 kW	48 kW
600/6.186	6,8 m²	5,8 m²	1,0 kW	52 kW
600/6.201	7,3 m²	6,1 m²	1,0 kW	54 kW
600/6.222	8,2 m²	6,6 m²	1,0 kW	64 kW
600/6.259	9,6 m²	7,3 m²	1,0 kW	71 kW
Cervap - 2 x 60	0 mm - 4 decks			
600/8.164	7,9 m²	5,3 m²	1,0 kW	64 kW
600/8.186	9,0 m²	5,8 m²	1,0 kW	68 kW
600/8.201	9,8 m²	6,1 m²	1,0 kW	72 kW
600/8.222	10,9 m²	6,6 m²	1,0 kW	76 kW
600/8.259	12,7 m <sup>2</sup>	7,3 m <sup>2</sup>	1,0 kW	83 kW
Cervap - 3 x 60	0 mm - 3 decks			
600/9.186	10,2 m <sup>2</sup>	7,5 m²	1,0 kW	78 kW
600/9.222	12,3 m²	8,5 m²	1,0 kW	83 kW
600/9.259	14,3 m <sup>2</sup>	9,5 m <sup>2</sup>	1,0 kW	95 kW
Cervap - 3 x 60	0 mm - 4 decks		·	
600/12.164	11,9 m <sup>2</sup>	6,9 m <sup>2</sup>	1,0 kW	83 kW
600/12.186	13,6 m²	7,5 m²	1,0 kW	87 kW
600/12.201	14,7 m²	7,9 m²	1,0 kW	95 kW
600/12.222	16,3 m <sup>2</sup>	8,5 m <sup>2</sup>	1,0 kW	107 kW
600/12.259	19,1 m²	9,5 m <sup>2</sup>	1,0 kW	119 kW
Cervap - 1 x 75	0 mm - 4 decks			
750/4.149	4,5 m <sup>2</sup>	3,5 m <sup>2</sup>	1,0 kW	42 kW
750/4.186	5,6 m <sup>2</sup>	4,4 m <sup>2</sup>	1,0 kW	48 kW
750/4.222	6.7 m <sup>2</sup>	5.0 m <sup>2</sup>	1.0 kW	54 kW
750/4.259	7,8 m²	5,6 m <sup>2</sup>	1,0 kW	64 kW
Cervap - 2 x 75	0 mm - 3 decks			
750/6.186	8,4 m²	6,6 m <sup>2</sup>	1,0 kW	71 kW
750/6.222	10,1 m <sup>2</sup>	7,5 m²	1,0 kW	78 kW
750/6.259	11,8 m <sup>2</sup>	8,4 m <sup>2</sup>	1,0 kW	83 kW
Cervap - 2 x 75	0 mm - 4 decks			
750/8.186	11,1 m <sup>2</sup>	6,6 m <sup>2</sup>	1,0 kW	78 kW
750/8.222	13,4 m <sup>2</sup>	7,5 m <sup>2</sup>	1,0 kW	87 kW
750/8.259	15,7 m <sup>2</sup>	8,4 m <sup>2</sup>	1,0 kW	95 kW
Cervap - 3 x 75	0 mm - 3 decks			
750/9.186	12,5 m <sup>2</sup>	8,7 m <sup>2</sup>	1,0 kW	83 kW
750/9.222	15,1 m <sup>2</sup>	9,9 m²	1,0 kW	95 kW
750/9.259	17,6 m <sup>2</sup>	11,1 m <sup>2</sup>	1,0 kW	107 kW
Cervap - 3 x 75	0 mm - 4 decks	,		
750/12.186	16,7 m <sup>2</sup>	8,7 m <sup>2</sup>	1,0 kW	107 kW
750/12.222	20,1 m <sup>2</sup>	9,9 m²	1,0 kW	119 kW
750/12.259	23,5 m <sup>2</sup>	11,1 m²	1,0 kW	135 kW
		cal features fo		
Cervan XT - 3 v	: 600 mm - 4 dec			
600/12.205	15,1 m <sup>2</sup>	8,5 m <sup>2</sup>	1.0 kW	95.0 kW
500/12.205	16,2 m <sup>2</sup>	8,8 m <sup>2</sup>	1,0 kW	100,0 kW
500/12.220	17,8 m <sup>2</sup>	9,5 m <sup>2</sup>	1,0 kW	119,0 kW
500/12.242	18,9 m <sup>2</sup>	9,5 m² 9,8 m²	1,0 kW	124,0 kW
	: 750 mm - 4 dec		1,0 NW	IZT,U NVV
750/8.205	12,3 m <sup>2</sup>	7,5 m <sup>2</sup>	1,0 kW	83,0 kW
750/8.205	13,2 m <sup>2</sup>	7,5 m²	1,0 kW	83,0 KW 87,0 KW
750/8.220	13,2 m² 14,5 m²	7,7 m² 8,3 m²	1,0 kW	95,0 kW
750/8.242	14,5 m² 15,4 m²	8,3 m² 8,6 m²	1,0 kW	95,0 kW 100,0 kW

\*(1kW=860.4 kcal/h - 1kW=3415 BTU)

General features for Cervap range ovens	
Hood - Extractor	
Hood without extractor	
Hood with exhaust fan	
Hooks for loader - unloader	
Without	
With	⊒€
Additional options	
Adaptation for integrated lifter	
Baking time on each deck	⊒€
Pulsed steam injection	•
Brass water solenoid valve	⊒€
Water filter to prevent scale deposits	⊒€
Fresh air inlet on burner	
Pressure reducing valve kit	⊒€
Electric power	
400 V TRI+N 50/60 Hz (Cervap GME only)	•
230 V SINGLE PH + N 50 / 60 Hz	

■ Standard /□ Option / □ €Option against extra charge

Technical features for Cervap DT							
Models	Baking area	Floor area	Electric power *	Heating power Fuel or Gas*			
Cervap DT - 2	Cervap DT - 2 x 600 mm - 3 decks						
600/6.184	6,8 m²	5,8 m²	1,0 kW	52 kW			
600/6.205	7,5 m²	6,1 m²	1,0 kW	54 kW			
Cervap DT - 2	2 x 600 mm - 4 de	ecks					
600/8.169	8,3 m²	5,3 m²	1,0 kW	64 kW			
600/8.184	9,0 m <sup>2</sup>	5,8 m²	1,0 kW	68 kW			
600/8.205	10,0 m²	6,1 m²	1,0 kW	72 kW			
600/8.242	11,9 m²	7,3 m²	1,0 kW	83 kW			
Cervap DT - 3	s x 600 mm - 3 de	ecks					
600/9.184	10,2 m <sup>2</sup>	7,5 m²	1,0 kW	78 kW			
600/9.205	11,3 m²	8,5 m²	1,0 kW	83 kW			
Cervap DT - 2 x 750 mm - 3 decks							
750/6.184	8,4 m²	6,6 m²	1,0 kW	71 kW			
750/6.205	9,3 m <sup>2</sup>	7,5 m²	1,0 kW	78 kW			
750/6.242	11,0 m²	8,4 m²	1,0 kW	83 kW			
Cervap DT - 2	2 x 750 mm - 4 de	ecks					
750/8.184	12,5 m <sup>2</sup>	8,7 m²	1,0 kW	78 kW			
750/8.205	13,9 m²	9,9 m²	1,0 kW	87 kW			
750/8.242	16,4 m²	11,1 m²	1,0 kW	95 kW			
Cervap DT - 3 x 750 mm - 4 decks							
750/12.184	16,7 m²	8,7 m²	1,0 kW	83 kW			
750/12.205	18,6 m²	9,9 m²	1,0 kW	95 kW			
750/12.242	21,9 m <sup>2</sup>	11,1 m²	1,0 kW	107 kW			
Technical features for Cervap XL							
Cervap XT - 3	x 600 mm - 4 de	cks					
600/12.205	12,3 m <sup>2</sup>	8,5 m²	1,0 kW	100,0 kW			

Technical featu	ires for Cervap G	ME			
Models	Baking area	Floor area	Electric power *	Heating power Fuel or Gas*	
Cervap - 2 x 60	00 mm - 3 decks				
600/8.164	7,9 m²	5,3 m²	11,9 kW	48 kW	
600/8.186	9,0 m²	5,8 m²	12,6 kW	52 kW	
600/8.201	9,8 m²	6,1 m²	13,3 kW	54 kW	
600/8.222	10,9 m²	6,6 m²	14,1 kW	64 kW	
600/8.259	12,7 m <sup>2</sup>	7,3 m²	15,6 kW	71 kW	
Cervap - 2 x 750 mm - 4 decks					
750/8.186	11,1 m²	6,6 m²	12,7 kW	71 kW	
750/8.222	13,4 m²	7,5 m²	14,2 kW	78 kW	
750/8.259	15,7 m <sup>2</sup>	8,4 m²	15,7 kW	83 kW	
Cervap - 3 x 600 mm - 3 decks					
750/12.186	16,7 m²	8,7 m²	19,4 kW	83 kW	
750/12.222	20,1 m <sup>2</sup>	9,9 m²	22,0 kW	95 kW	
750/12.259	23,5 m <sup>2</sup>	11,1 m²	24,7 kW	107 kW	

9,8 m<sup>2</sup>

1,0 kW

129,0 kW



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15,4 m<sup>2</sup>

600/12.257