

**OVEN LINE** 

# **STEAM TUBES**

FOR BREAD AND PASTRY



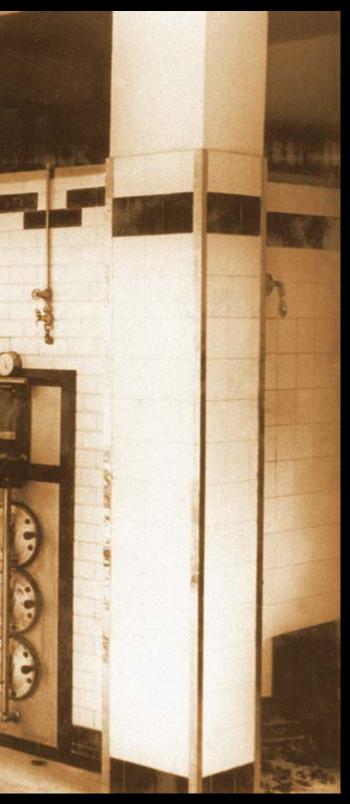






# THE ART OF CREATING HEAT, SINCE 1929





A Polin installation from the 1960s

"We have always considered heat as being an actual ingredient in bread as with the other ingredients it must be of the highest quality."

For over ninety years we have been designing and building ovens to create the ideal baking conditions for bakers and pastry makers.

For them we produce the highest quality products, able to provide specific production requirements and to respond to the need to optimize time and costs.

Our long history as leading company, popular worldwide for our professionalism and reliability, is founded on the values of Quality, Clarity and Honesty.

Today, as always, we want to offer our customers a technological innovation to offer the best performance and great reliability over time.



# A REFERENCE POINT THROUGHOUT THE WORLD FOR QUALITY BAKING

### STEAM TUBE TECHNOLOGY THAT ENSURES UNIQUE PERFORMANCE LEVELS

### To meet all baking requirements

other traditional tube ovens.

We have been closely engaged in designing and building steam tube ovens for almost a century. The technology we have developed up to now is known all over the world for its design value, production quality and high level of performance. All Polin Steam Tube oven users notice that heat is used in an exceptional way, providing almost twice the yield of ovens of the same kind with an enormous reduction in consumption compared to

Working on a daily basis, users realise that it has been designed to offer unparalleled baking, production flexibility, optimum work efficiency and energy savings.



Over the years we have developed all the considerable potential of this technology creating ovens capable of meeting the specific needs of each particular production unit and providing excellent uniform baking quality even in the exceptional case of a 7-deck oven.

Today, the outcome of this painstaking work is a range of high-performance ovens, each available in different versions, also Industry 4.0: T.V. Drago, T.V. Avant, T.V. Synt, T.V. Synt AX, T.V. Syncron. Each oven version can be fired with methane, LPG, diesel, pellets or wood chips.

### A gentle heat that envelops the product



With a Polin Steam Tube oven, you can achieve exceptional temperature balance between the inside and surface of your product. The heat in the oven chamber is gentle, uniform, and spread evenly through a superb radiating surface.

### Gentle steam on the dough surface



The quantity and quality of the steam reaching the baked product are fundamental in achieving phenomenal baking.

A Polin Steam Tube oven envelops the product with moist steam that easily clings to the product since it is extremely close to condensation temperature.





### **TECHNOLOGY**

# GREAT SAVINGS ON CONSUMPTION AND MAINTENANCE

### Designed for energy saving



Achieving top energy efficiency has always been one of the goals in the design of our Steam Tube ovens. Combining innovative technological solutions with advanced control functions secures energy savings that makes this oven unique, when compared to those in the same category. There are many elements that contribute to energy savings: from the materials used for thermal insulation to low-emission glass; from the highefficiency combustion chamber to the motorised flue damper that allows you to gauge emissions to best effect and ensure effective heat exploitation.

## 25% more savings compared to traditional tube ovens



We are delighted to confirm that the energy consumption measurements taken on Polin Steam Tube ovens ensure the highest savings by far compared to ovens in the same category, and that the savings increase considerably when compared to old-style traditional ovens.

Our ovens offer a truly supreme energy system, with consumption reduced by at least 25% compared to other traditional tube ovens, and 50% compared to that of cyclothermic ovens.

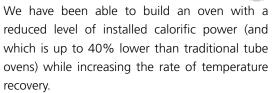


You can prove the efficiency of the heat system of the Polin Steam Tubes by measuring the temperature of combustion gases when discharged: they are just a few degrees higher than the temperature in the chamber throughout the baking process.



Efficiency Certified and Filed with the DVGW Certification Body

### ■ Faster recovery times and 40% less calorific power



### **Increased productivity**

A Polin Steam Tube oven is a truly high-performance oven. It can reach its operating temperature in about an hour from being switched on.

This ability for prompt use, combined with its recovery speed allows you to reduce production times and also, for example, to make 5 bakes instead of 4, with the certainty of always achieving a perfect bake.

### Large mass and large-sized steamers

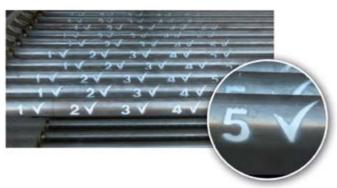
Specific designing was devoted to steamers with the aim of ensuring high efficiency. They have a large mass to allow improved energy accumulation, and a large size to ensure prompt, higher steam production capacity.

### High reliability: all tubes are tested 5 times

Savings are not only the result of lower consumption and easier maintenance, but are also achieved through technical and construction choices aimed at ensuring exceptional reliability and minimising the likelihood of faults.

For this reason, the tubes are made of high quality materials, coming exclusively from approved foundries. They are thicker to ensure maximum strength, and are arranged along a geometric path, designed to minimise thermal stress. We do not test the tubes by taking one sample and testing it several times or by testing all the tubes just once. Our testing procedure involves each single tube being tested 5 times at a pressure of 700 atmospheres (about 8 times above normal operating pressure).

This special test is a Polin exclusive and is indicated on the tubes when the oven is delivered. It is a long test process that we conduct to give our customers maximum assurance of durability.



### Easy maintenance and fully removable steamers

To make routine cleaning and maintenance even easier, all oven components are positioned so that they can be accessed from the front. Double deck light are placed at the door to enhance durability and facilitate replacement.

Since they have no concrete castings, even the steamers are always easy to fully remove, making cleaning simple and avoiding long-winded and highly expensive maintenance.





### T.V. DRAGO

# TRADITIONAL BAKING, ADVANCED TECHNOLOGY

### A large refractory mass for gentle baking



T.V. Drago is the deck oven that offers the most up-to-date operating functions and features, ensuring a baking quality typical of masonry ovens.

T.V. Drago represents the technological evolution of the traditional oven.

The refractory mass it is fitted with is large enough to provide a capacity for heat accumulation and maintenance to ensure gentle, uniform baking that compares admirably with that of a traditional wood-fired oven.

### Falling-temperature baking



T.V. Drago also offers ideal baking for those largesized products that require "falling-temperature baking" (with the burner off), where the heat accumulated by the oven is used to complete the production cycle.

### Even heat thanks to the double-tube rings



To obtain optimum, uniform diffusion of baking heat, T.V. Drago has been designed with the best manufacturing solution for steam tubes: the use of a double-tube ring system.

Combined with the particular circuit of the tubes, this makes the heat exchange surface as large as possible.



# Unrivalled productivity thanks to rapid heat recovery

The ability to retain heat thanks to the large refractory mass, combined with a temperature recovery rate unmatched by other traditional mass ovens, allows you to gain valuable time between one load and the next, ensuring unparalleled productivity.

You can specifically adjust the flexibility of T.V. Drago, if there are particular production needs, by varying the sizing of the refractory masses.

### High-performance steamers

With T.V. Drago, the steamers are positioned in direct contact with the combustion gases to ensure maximum reactivity in the production of large quantities of steam. If the energy accumulated by the steamers is not used directly, it contributes to the overall thermal inertia of the oven which is valuable for stabilising and rapidly recovering the baking temperature.





### T.V. AVANT

# GENTLE BAKING WITH MAXIMUM FLEXIBILITY

### High-speed temperature change



T.V. Avant is a blend of tradition and innovation in the field of steam tube ovens.

It creates a soft heat, ideal for gentle baking, such as that obtained from ovens with large refractory masses, while offering the advantage of enhanced flexibility.

Compared to other ovens in the same category,

it has the best control over baking temperature, and allows you to increase or reduce the baking temperature in the quickest way possible.

This provides you with a wide range of production possibilities from pastry products to small, medium and large-sized bread forms.



### Great flexibility in steam management



With T.V. Avant, the steamers are fitted into the baking deck and designed to ensure a constant and even flow of moisture-saturated steam, ready to cling to the surface of the product being baked. An exclusive, independent, two-channel extraction system allows the steam to be removed quickly from the deck, when desired, eliminating it on an even basis.

### Easy to move



If it needs to be moved, T.V. Avant is designed to facilitate any dismantling, transport and reassembly operations, because it has a structure with prefabricated modules.

### **T.V. SYNT 840**

# HIGH PERFORMANCE IN LIMITED SPACES

### Designed to occupy minimum space



T.V. Synt 840 is ideal for those artisan bakeries that have reduced production space because it offers all the flexibility and baking quality of Polin steam tube ovens, but with compact dimensions. Can be shipped fully assembled.





### T.V. SYNT AX SERIES

# STEAM TUBE TECHNOLOGY AT THE SERVICE OF LARGE PRODUCTION

### The Steam Tube oven designed for large production

We knew that our steam tube technology had enormous potential and for this reason we launched a research project to make all its advantages available to those needing large-scale production and great flexibility.

After 5 years of continuous refinements, we have developed a range of ovens ideal for flexible, large-scale production. With the T.V. Synt AX Series, the pitch of the rings is even denser to ensure unparalleled reactivity; the steamers are further enhanced to provide large quantities of steam, whenever required. These and many other technological features have been added to create

5- and 6-deck ovens, overcoming the difficult technical challenge of obtaining identical baking quality in each of them.

The advantage of having so many decks is that you can create a larger production area with respect to the actual occupied floor space.

The AX Series of T.V. Synt is designed for the use of an automatic loading and unloading device. The possibility of installing several ovens side by side, served by a single automatic loading device with a useful width equal to that of the baking deck also offers the advantage of greater production flexibility, with a consequent reduction in operating costs.



An example of how AX Series T.V. Synt ovens can be installed side by side and combined with an automatic loading and unloading device.







## T.V. SYNCRON

# FOR MAXIMUM PRODUCTION DIVERSIFICATION

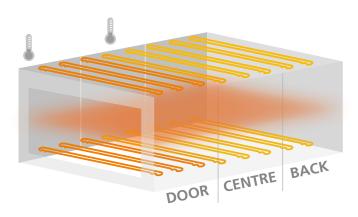
### The flexibility of an independent electric deck



T.V. Syncron combines all the production power and baking quality of a steam tube oven, with the versatility and practicality of an electric oven. In addition to the three tube decks, there is also an independent one, heated by the exclusive Polin

ceramic heating elements, capable of achieving gentle baking thanks to their high thermal mass. T.V. Syncron allows a wide and diversified production for those bakers who also want to bake pastry products and who need particular production flexibility.





### EXCLUSIVE 🔁

# Dynamic regulation of the energy supplied to the baking deck. (TZS three-zone system)

Long stops or continuous loads will no longer be a problem for energy consumption and temperature uniformity in the chamber. The unique 3-zone dynamic control system (TZS) adjusts the distribution of energy over the entire depth of each individual deck.

Thanks to a probe at the oven door and a probe on the oven ceiling, the oven "perceives" temperature changes during baking and automatically adjusts the energy supplied to the heating elements in the door area, central area and back area. The three groups of heating elements are independent from each other.

In this way the oven keeps heat under constant control in the three areas of the deck: door area (1), central area (2) and back area (3).

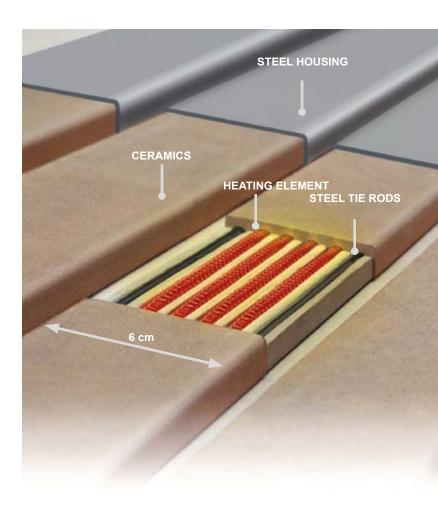
# Special electric, ceramic heating elements for gentle baking as with a T.V. oven.

The electric deck of T.V. Syncron offers gentle baking completely comparable to that of the tube decks, because it is heated by special heating elements.

The large ceramic mass that surrounds them releases heat at a lower temperature with greater continuity compared to traditional armoured heating elements. This has 5 distinctive advantages:

- 1) gentle, even baking that does not attack the product, thanks to a greater uniformity in temperature;
- 2) perfect baking of any product, both large and small forms due to enhanced temperature stability;
- 3) reduced temperature drop when loading the oven:
- 4) significant reduction in lost time between one load and the next;
- 5) greater insulation of the electrical parts which means longer life and greater reliability of the heating elements.

Materials and components of the ceramic heating elements with increased mass





### T.V. LINE FIRED BY PELLETS

## SAME PERFORMANCE LEVELS WITH THE LOWEST OPERATING COSTS IN THE WORLD

# With between 30 and 60% savings, it helps you to recover your margins



We have targeted pellets because they cost much less than electricity, diesel, and LPG, but also less than methane.

T.V. Drago, T.V. Avant, T.V. Synt 840, T.V. Synt AX, T.V. Syncron, today can offer all the high performance and excellent baking quality, for which they are universally recognized, with the great savings ensured by pellets. A pellet-fired version has been developed for each of these ovens, in which the tube technology has been perfectly designed to handle this type of energy feed.

Compared to similar ovens on the market, these have the lowest operating costs in the world.

Those who have changed their old deck oven for a Polin pellet-fired T.V. oven have registered savings from 30 to 60%, depending on the type of production and previous fuel.



# Immediately attractive: with a lease purchase, you already start saving in the first month



Savings on fuel are so significant that the cost of the oven can be amortised in virtually no time. If you choose to lease your pellet-fired Steam Tube oven, the overall monthly cost (oven lease instalment + pellet cost) may even be lower than the fuel costs of your old oven.

#### Lower installation costs



A pellet-fired T.V. oven offers a number of advantages that differently powered ovens do not have:

- 1) Greater freedom with respect to fire regulations, and it does not fall under the Gas Directive;
- 2) There are no connection costs;
- 3) It has very low initial installation costs compared to a gas oven.

### Considerable working capacity



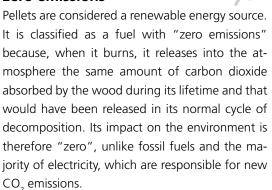
The opportunity of choosing the pellet tank that suits your needs best ensures that you have the desired production capacity while requiring modest space for storing the pellets.

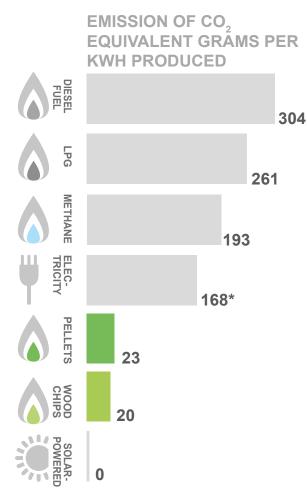
### Just 2 minutes for cleaning



Thanks to the limited amount of ash produced by pellets and the efficiency of the Polin burner, the oven only requires an average of two minutes a day to perform the easy cleaning operations.

### An oven with zero emissions





Emission of  ${\rm CO_2}$  equivalent grams per kWh produced.

\* Production of CO<sub>2</sub> at origin (over 60% of electricity in Italy is obtained by burning fossil fuels - data from Terna Rete Italia)

Source: Sinanet - National Environmental IT system Network



### WOOD CHIP FIRED T.V.

### Same performance also with wood chips



We have created a new burner system designed and manufactured in all its parts - hopper, screw feeder, burner - to ensure maximum effective use even with wood chips (G30-G50) whilealso guaranteeing the same performance as other Polin Steam Tube ovens at all times.

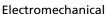


System with wood-chip burner



# TO BAKE YOUR BREAD THE WAY YOU WANT TO







Digital

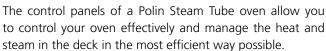


Touch

### **Spare keyboard**

Polin Steam Tube ovens have an unusual feature in that they are equipped with spare controls that can be ready for use in an emergency and avoid production downtime.

### **Perfect control**



Whether you choose an electromechanical, digital or touch control panel, each one allows quick, user-friendly control of all the oven's essential functions.

The Digital keypad also allows you to program the daily and weekly automatic start-ups of the oven, display the temperature of each deck and indicate the baking and steam production times for each one. It helps the baker by signalling the end-of-bake time and manages the steam release system by controlling the two-speed fan.

The Touch 7" keyboard puts the oven into the 4.0 class and allows you to store 200 recipes with all their baking data. It also has other features such as programming for automatic shutdown and the management of the motorised valves.

With a few simple touches the Touch control allows you to take advantage of its ability to be managed via computer, performing check ups, displaying alarms and blocking access to programs thanks to a software key.



### Hybrid control for an electric deck in the T.V. Syncron oven.

Advanced features, touch-screen monitors and fixed keys. Everything designed to work better and faster. HYBRID CONTROL is the new computerised control system with an even simpler and more user-friendly interface featuring a 5" touchscreen.

With an enhanced processor, it allows you to easily control standard and advanced system functions and new added functions, such as the TZS three-zone system and dynamic QR-Codes.

### STEAM TUBE ACCESSORIES

Automatic oven start-up	Motorised steam release valves
End-of-bake timer	2-speed motor for the steam extractor hood
Spare thermostat	Standard flue gas discharge for atmospheric burner
Steamer controls with solenoid valves	Flue gas discharge kit
Spare control buttons for steamers	Draft assistance kit with air-blow burner
Controls on the right (except for pellet-fired ovens)	Steam timer
Symmetrical oven (combustion chamber on LH side)	Motorised flue damper
Baking plates in fibro-cement	Useful deck height 22 cm
Active masses for large loaves	Useful deck height 25 cm
Stainless steel doors	Integrated oven-loading system
Stainless steel exterior covering	Configured for automatic loading
Combustion chamber with enhanced insulation	Remote controls for automatic loading device
Steamer water litre counter	Large wood furnace with RH side loading
Supplementary vaporiser	Config. for connection to remote BakeApp management

#### ACCESSORIES AVAILABLE ACCORDING TO OVEN TYPE AND VERSION



### INCREASE THE COMPETITIVENESS OF YOUR COMPANY

Every oven in the Steam Tube range fitted with the touch keyboard is ready for connection to BakeApp 4.0, the software created by Polin that allows you to create a 4.0 production system.

In addition to system interfacing, ovens and machines can communicate with each other, thereby synchronising their work tasks and optimising the production flow.

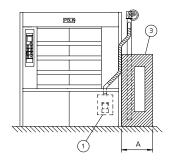
The result is a more efficient and productive artisan bakery, ready to meet the increasingly demanding challenges of a constantly-evolving competitive market.

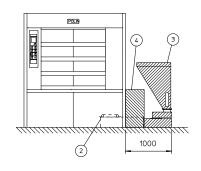
In addition to this, BakeApp 4.0 also enables you to control your ovens and machines remotely, allowing you to:

- Create, edit and manage recipes;
- Check your energy consumption at all times;
- Check the productivity of your artisan bakery and sales outlets;
- Monitor and prevent any anomalies.

### THIS VAST RANGE CERTAINLY HAS THE PERFECT OVEN FOR YOU

### SPACE OCCUPIED BY PELLET-FIRED VERSIONS

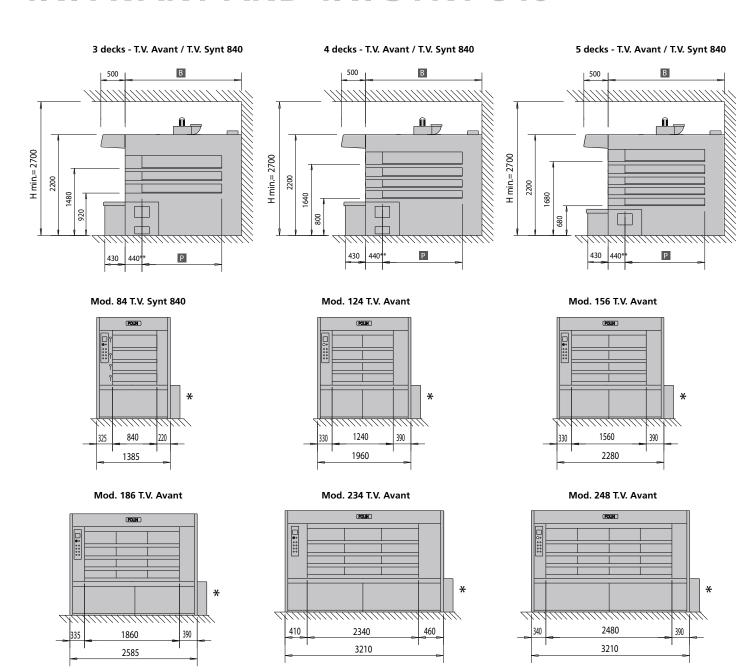




A=400 mm for STANDARD tank A=600 mm for HC tank

- 1 Pellet burner with horizontal flame
- 2 Pellet/wood chip burner with vertical flame
- 3 Pellet tank
- 4 Wood furnace unit

### T.V. AVANT AND T.V. SYNT 840



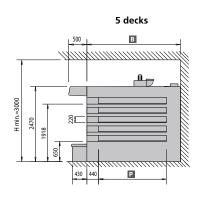
AVAILABLE FUELS: LPG, METHANE, DIESEL FUEL, WOOD, BIOMASS (PELLETS, WOOD CHIPS...)

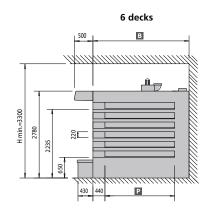
<sup>\* = 360</sup> mm space occupied for wood furnace with side loading

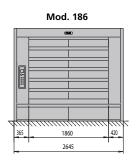
<sup>\*\* = 360</sup> mm for Mod. 84

		decks	baking	space	usable dimensions of decks						installed		min. door	weight
		No.	surf. sq.m.	occup. B mm	depth P mm	1st mm	2nd mm	height 3rd mm	4th mm	5th mm	thermal kcal/h	electric kW	passage mm	kg
	3.2 / 84x126-3	3	3.2	1910	1260	200	200	250	-	-	32,000		650x1850	1,900
	4.2 / 84x126-4	4	4.2	1910	1260	200	200	200	250	-	32,000		650x2000	2,200
	5.3 / 84x126-5	5	5.3	1910	1260	170	170	170	170	250	35,000		650x2100	2,500
	4.3 / 84x170-3	3	4.3	2350	1700	200	200	250	_	-	35,000		650x1850	2,500
40	5.7 / 84x170-4	4	5.7	2350	1700	200	200	200	250	_	40,000		650x2000	2,800
T.V. SYNT 840	7.1 / 84x170-5	5	7.1	2350	1700	170	170	170	170	250	48,000		650x100	3,100
Z	5.4 / 84x214-3	3	5.4	2790	2140	200	200	250	_	_	40,000	1.0	650x1850	3,000
> .	7.2 / 84x214-4	4	7.2	2790	2140	200	200	200	250	-	56,000		650x2000	3,400
Η.	9.0 / 84x214-5	5	9.0	2790	2140	170	170	170	170	250	60,000		650x2100	3,880
	6.5 / 84x258-3	3	6.5	3230	2580	200	200	250	-	-	56,000		650x1850	3,550
	8.7 / 84x258-4	4	8.7	3230	2580	200	200	200	250	_	60,000		650x2000	4,000
	10.6 / 84x258-5	5	10.6	3230	2580	170	170	170	170	250	65,000		650x2100	4,450
	6.3 / 124x170-3	3	6.3	2430	1700	200	200	250	-	-	48,000		650x1850	3,250
	8.4 / 124x170-4	4	8.4	2430	1700	200	200	200	250	-	56,000		650x2000	3,700
	10.5 / 124x170-5	5	10.5	2430	1700	170	170	170	170	250	60,000		650x2100	4,150
	8.0 / 124x214-3	3	8.0	2870	2140	200	200	250	-	-	56,000		650x1850	3,750
	10.6 / 124x214-4	4	10.6	2870	2140	200	200	200	250	-	60,000		650x2000	4,350
	13.3 / 124x214-5	5	13.3	2870	2140	170	170	170	170	250	70,000	1.0	650x2100	4,950
	9.6 / 124x258-3	3	9.6	3310	2580	200	200	250	-	-	60,000		650x1850	4,250
	12.8 / 124x258-4	4	12.8	3310	2580	200	200	200	250	-	70,000		650x2000	4,900
	16.0 / 124x258-5	5	16.0	3310	2580	170	170	170	170	250	75,000		650x2100	5,550
	8.0 / 156x170-3	3	8.0	2430	1700	200	200	250	-	-	56,000		650x1850	3,650
	10.6 / 156x170-4	4	10.6	2430	1700	200	200	200	250	-	65,000	1.0	650x2000	4,200
	13.3 / 156x170-5	5	13.3	2430	1700	170	170	170	170	250	70,000		650x2100	4,750
	10.0 / 156x214-3	3	10.0	2870	2140	200	200	250	-	-	65,000		650x1850	4,250
	13.5 / 156x214-4	4	13.5	2870	2140	200	200	200	250	-	75,000		650x2000	4,950
	16.7 / 156x214-5	5	16.7	2870	2140	170	170	170	170	250	80,000		650x2100	5,650
	12.0 / 156x258-3	3	12.0	3310	2580	200	200	250	-	-	70,000		650x1850	4,850
	16.0 / 156x258-4	4	16.0	3310	2580	200	200	200	250	-	80,000		650x2000	5,650
	20.0 / 156x258-5	5	20,0	3310	2580	170	170	170	170	250	90,000		650x2100	6,050
	9.4 / 186x170-3	3	9.4	2430	1700	200	200	250	-	-	60,000		650x1850	4,050
	12.5 / 186x170-4	4	12.5	2430	1700	200	200	200	250	-	70,000		650x2000	4,650
_	15.8 / 186x170-5	5	15.8	2430	1700	170	170	170	170	250	78,000		650x2100	5,250
AVANT	12.0 / 186x214-3	3	12.0	2870	2140	200	200	250	-	-	70,000		650x1850	4,750
⋛	16.0 / 186x214-4	4	16.0	2870	2140	200	200	200	250	-	78,000	1.2	650x2000	5,550
T.	20.0 / 186x214-5	5	20.0	2870	2140	170	170	170	170	250	90,000		650x2100	6,350
	14.0 / 186x258-3	3	14.0	3310	2580	200	200	250	-	-	78,000		650x1850	5,450
	19.0 / 186x258-4	4	19.0	3310	2580	200	200	200	250	-	87,000		650x2000	6,350
	24.0 / 186x258-5	5	24.0	3310	2580	170	170	170	170	250	98,000		650x2100	7,250
	12.0 / 234x170-3	3	12.0 15.9	2430 2430	1700 1700	200	200	250	- 250	-	70,000		650x1850 650x2000	4,850
	15.9 / 234x170-4	5					170	200		250	80,000 90,000			5,600
	19.9 / 234x170-5 15.0 / 234x214-3	3	19.9 15.0	2430 2870	1700 2140	170 200	200	170 250	170	250	78,000		650x2100 650x1850	6,350 5,750
	20.0 / 234x214-4	4	20.0	2870	2140	200	200	200	250	_	98,000	1.2	650x2000	6,750
	25.0 / 234x214-5	5	25.0	2870	2140	170	170	170	170	250	105,000	1.2	650x2100	7,750
	18.2 / 234x258-3	3	18.2	3310	2580	200	200	250	-	-	90,000		650x1850	6,650
	24.2 / 234x258-4	4	24.2	3310	2580	200	200	200	250	_	105,000		650x2000	7,800
	30.2 / 234x258-5	5	30.2	3310	2580	170	170	170	170	250	125,000		650x2100	8,950
	12.6 / 248x170-3	3	12.6	2430	1700	200	200	250	-	-	70,000		650x1850	4,850
	16.8 / 248x170-4	4	16.8	2430	1700	200	200	200	250	-	80,000		650x2000	5,600
	21.0 / 248x170-5	5	21.0	2430	1700	170	170	170	170	250	90,000		650x2100	6,350
	16.0 / 248x214-3	3	16.0	2870	2140	200	200	250	-	-	78,000		650x1850	5,750
	21.2 / 248x214-4	4	21.2	2870	2140	200	200	200	250	-	98,000	1.2	650x2000	6,750
	26.5 / 248x214-5	5	26.5	2870	2140	170	170	170	170	250	105,000		650x2100	7,750
	19.2 / 248x258-3	3	19.2	3310	2580	200	200	250	-	-	90,000		650x1850	6,650
	25.6 / 248x258-4	4	25.6	3310	2580	200	200	200	250	-	105,000		650x2000	7,800
	32.0 / 248x258-5	5	32.0	3310	2580	170	170	170	170	250	125,000		650x2100	8,950

### T.V. SYNT AX Series







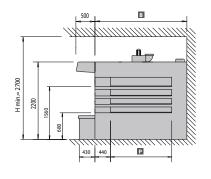
Available on request:

- 1) With useful depth 302 mm;
- 2) With deck heigh H=25 cm

AVAILABLE FUELS: LPG, METHANE, DIESEL FUEL, BIOMASS (PELLETS, WOOD CHIPS...)

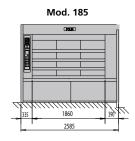
	decks	baking surf.	space occup.	depth of decks	installed thermal	weight	
	No.	sq.m.	B mm	P mm	kcal/h	kW	kg
15.8 / 186x170-5	5	15.8	2430	1700	78,000		5,400
18.9 / 186x170-6	6	18.9	2430	1700	90,000		5,900
20.0 / 186x214-5	5	20.0	2870	2140	90,000		6,550
23.8 / 186x214-6	6	23.8	2870	2140	98,000	1.2	7,200
24.0 / 186x258-5	5	24.0	3310	2580	98,000		7,300
28.8 / 186x258-6	6	28.8	3310	2580	125,000		8,250

### T.V. SYNCRON





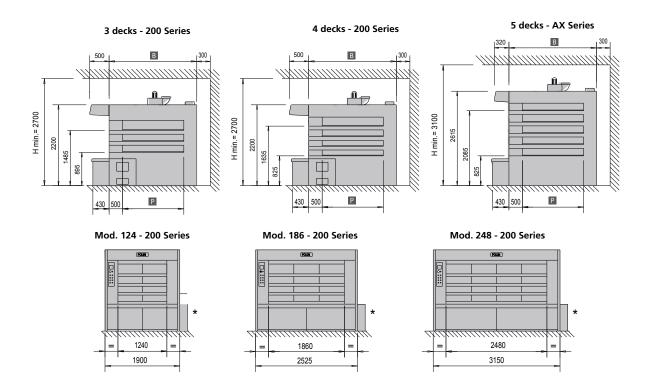




	decks	baking	space	u	ısable dir	nensions	of decks		installed power		min. door	weight
		surf.	occup.	depth	height					electric	passage	
	No.	sq.m.	B mm	P mm	1st mm	2nd mm	3rd mm	4th mm	kcal/h	kW	mm	kg
4.2 / 84x126-4		8.4	1910	1260					35,000	8.7	650x1180	2,150
5.7 / 84x170-4	1	10.6	2350	1700					40,000	9.9		2,750
7.2 / 84x124-4		12.8	2790	2140					45,000	11.6		3,350
8.7 / 84x258-4		12.8     3230     2580       8.4     2430     1700					56,000	13.9		3,950		
8.4 / 124x170-4							48,000	11.2		3,600		
10.6 / 124x214-4		10.6	2870	2140	200	200	200		56,000	14.8	650x1700	4,250
12.8 / 124x258-4	3+1	12.8	3310	2580				250	60,000	15.4		4,800
10.6 / 156x170-4		10.6	2430	1700					56,000	12.9		4,100
13.5 / 156x214-4		13.5 2870 2140				65,000	15.4	650x1900	4,850			
16.0 / 156x258-4		16.0	3310	2580					70,000	18.0		5,550
12.5 / 186x170-4		12.5	2430	1700					60,000	13.4		4,550
16.0 / 186x214-4		16.0	2870	2140					70,000	16.1	650x2200	5,450
19.0 / 186x258-4		19.0	3310	2580					78,000	18.8		6,250

AVAILABLE FUELS: LPG, METHANE, DIESEL FUEL, BIOMASS (PELLETS, WOOD CHIPS...)

### T.V. DRAGO 200 and AX Series



Available on request versions with 3 decks h25 and 4 decks h22

\* = 360 mm space occupied for wood furnace with side loading

		decks	baking	space	usable dimensions of decks						installe	d power	min. door	weight
			surf.	occup.	depth			height			thermal	electric	passage	
		No.	sq.m.	B mm	P mm	1st mm	2nd mm	3rd mm	4th mm	5th mm	kcal/h	kW	mm	kg
	6.3 / 124x170-3	3	6.3	2575	1700	200	200	250	-	-	65,000			5,850
	8.4 / 124x170-4	4	8.4	2575	1700	170	170	170	250	-	70,000			6,500
	8.0 / 124x214-3	3	8.0	3015	2140	200	200	250	-	-	70,000			6,850
	10.6 / 124x214-4	4	10.6	3015	2140	170	170	170	250	-	75,000	1.0	650x1700	7,600
	9.6 / 124x258-3	3	9.6	3455	2580	200	200	250	-	-	73,000			7,830
	12.8 / 124x258-4	4	12.8	3455	2580	170	170	170	250	-	80,000			8,700
	9.4 / 186x170-3	3	9.4	2575	1700	200	200	250	-	-	78,000	1.2		6,750
ES	12.5 / 186x170-4	4	12.5	2575	1700	170	170	170	250	-	80,000			7,750
200 SERIES	12.0 / 186x214-3	3	12.0	3015	2140	200	200	250	-	-	85,000		650x1700	7,850
S 00	16.0 / 186x214-4	4	16.0	3015	2140	170	170	170	250	-	93,000			8,950
7	14.0 / 186x258-3	3	14.0	3455	2580	200	200	250	-	-	90,000			8,950
	19.0 / 186x258-4	4	19.0	3455	2580	170	170	170	250	-	96,000			10,330
	12.6 / 248x170-3	3	12.6	2575	1700	200	200	250	-	-	85,000			7,700
	16.8 / 248x170-4	4	16.8	2575	1700	200	200	200	250	-	96,000			8,900
	16.0 / 248x214-3	3	16.0	3015	2140	200	200	250	-	-	98,000	1.2	650x1700	8,770
	21.2 / 248x214-4	4	21.2	3015	2140	200	200	200	250	-	115,000			10,200
	19.2 / 248x258-3	3	19.2	3455	2580	200	200	250	-	-	105,000			9,760
	25.6 / 248x258-4	4	25.6	3455	2580	200	200	200	250	-	125,000			11,500
ES	15.8 / 186x170-5	5	15.8	2575	1700	220	220	220	220	220	93,000			8,700
SERIES	20.0 / 186x214-5	5	20.0	3015	2140	220	220	220	220	220	115,000	1.2	650x2250	10,500
AX S	24.0 / 186x258-5	5	24.0	3455	2580	220	220	220	220	220	122,000			12,200

AVAILABLE FUELS: LPG, METHANE, DIESEL FUEL, WOOD, BIOMASS (PELLETS, WOOD CHIPS...)

### Since 1929 leader in the world of "Arte Bianca"

We represent the largest Italian industry in the production of ovens and machines for bread, pizza, pastry and biscuits.

We entirely produce the most complete range of high quality machinery for the modern laboratory of "Art of Baking".

For over 90 years we have been offering the world the outstanding performance of technology sparked by our ingenuity.



















### Ing. Polin e C. S.p.A.

Viale dell'Industria, 9 - 37135 Verona - Italy - Tel. +39 045 8289111 - Fax +39 045 8289122 polin@polin.it - www.polin.it





