





## Introduction

A close-knit kitchen crew, led by an experienced chef, is not always sufficient to assure the expected success in a professional kitchen. Modern kitchens are ever more similar to laboratories hosting innovative and reliable appliances and equipment that are able to assist the chef and his staff during the various working stages.

Among all the equipment, the oven has become now a unique tool. It frees the chef from all the strenuous and repetitive tasks, carrying on cooking cycles and phases in total autonomy. The chef gains time to be dedicated to the finest expression of his creativity in the innovative combination of flavors and extraordinary mise-en-place.

When deciding to purchase a professional oven, there are many considerations to make: first, is the technology "user friendly," efficient and versatile; second, is it a helpful, stress-free "reliable partner," and finally, is it quality at a reasonable price. You are looking for an easy-to-drive car, that may face the "culinary journey" safely and with pleasant results.

# The selection of available appliances is great: it is not easy to find your way in this market!

You need to have competent and correct information, this is what INOX-TREND, with the aid of this BOOKLET, is trying to offer, not only to the 'end user', but especially to sales people and specifiers.

**INOXTREND**'s target is to make work in the kitchen easier for professionals, keeping the best quality standards of food for a healthy and more natural nutrition. A simple and clear philosophy that always considered Research & Development as the cornerstone of its activity.

**INOXTREND** offers the most suitable solution for every kitchen, whether it be: a fast food, a restaurant, a snack-bar, a hotel, a marine, catering, a canteen, a delicatessen, a supermarket, a hospital, a retirement home, or prison. Width and variety of the range, backed up by specialization and by a solid manufacturing facility, determine the medium-high **INOXTREND** brand positioning on the market with the chance of a competitive and attractive proposal.

With over thirty years experience, **INOXTREND** takes pride in the development of professional ovens for the catering world. The quality we offer comes from constant interaction with our customers; our designers, well aware of the specific needs within a kitchen, translate requirements into solutions. **INOXTREND** brand stands for sturdy, reliable and long lasting appliances but most of all technology and innovative and patented systems, efficient and easy to use and maintain. A strong technical support and an appropriate customer service complete our offer, to guarantee "total quality".

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Combi ovens for passion

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# **CRITERIA TO CHOOSE AN OVEN**



Often, when a customer decides to purchase an oven, he refers to his trusted salesman, without knowing the types, functions and differences among the various models available. It is the salesman's duty to "guide" the customer in the choice of the oven that best suits his requirements keeping into account the following:

#### **1a Area of use**

- FOODSERVICE (hotels, restaurants, fast food, snack bars etc.)
- **CATERING INDUSTRY** (canteens, hospitals, prisons, army, schools, kindergartens, caterers, marine, etc.)
- **COMMERCIAL FOODSERVICE** (supermarkets, butchers-delicatessens, malls, gas-stations etc.)

#### Preparation of personnel using the oven.

Often, both in the Catering industry and commercial Foodservice sector, the personnel does not have cooking skills comparable to those of a chef working in a hotel or restaurant.

In these cases we suggest to offer 2 alternatives:

- Oven with electromechanical controls for the simplicity of use and reduced number of functions.
- Oven with touch screen panel to enable the Chef to select one or more automatic cooking
  programs (or create new ones expressly) and make them available to the personnel using the
  oven. In this way the recipes can be repeated always with the same results, despite of the
  operator's skills.

#### Volume of work and working hours.

Normally, in the kitchens of the FOODSERVICE sector, the work is divided in: cooking, "mise en place", express cooking service.

In the CATERING INDUSTRY the food is normally cooked at a different time from the service and the quality level expected is not the same as in the FOODERSERVICE sector. Caterers instead are expected to give a gastronomy quality level comparable to the FOODSERVICE sector with the need to transport and regenerate the food.

COMMERCIAL FOODSERVICE presents several types of working processes:

Supermarkets and Deli's where the same cooking processes are repeated several times a day, often by different people, in different shifts.

Bars, coffee-shops and gas-stations where the use of pre-cooked or frozen food is often used to conceive a recipe.

Number of meals.

Variety of meals or standardization of food.

#### **1b** Type of installation

There are generally 2 types of installations:

- fixed, if the oven remains always in the same position.
- mobile, when it is necessary to move the oven in different places.

All **INOXTREND** ovens are fit for fixed installation, but, upon request and in special cases, they may be installed on castors.

For a mobile installation, the following factors must be kept into account:

- safety;
- connections: electric, hydraulic, gas;
- drain.

Installation must always be effected respecting the instructions on the installation manual.

## **1c** Type of supply

- electric
- gas

The choice depends on the economic convenience of the country involved. In most cases, gas ovens have less economic consumption than electric, but they require: greater initial investment, more frequent maintenance, an efficient combustion fumes evacuation system and especially **an installer and/or maintenance technician with specific technical skills.** 

# **1d Productivity**

*Quantity of food the oven is required to cook and consequently finding the oven capacity required (nr. trays).* 

Example parameters:

- one tray GN 1/1, 40 mm high can contain approximately 3 kgs of food and can supply about 10-12 servings.
- one tray GN 2/1, 40 mm high can contain approximately 7-8 kgs of food and can supply about 25-30 servings.

These values are indicative and may vary according to the type of food and type of servings.

# 1e Type of cooking processes

- Process of a limited number of traditional gastronomy recipes using mainly temperatures, between 150 and 200 °C, with or without humidification.
   In this case a convection with humidification oven is sufficient.
- Preparation as above plus steamed food and side-dishes. *A combi oven is the best solution.*
- Steam cooking processes (it could be the case in canteens and hospitals). In this case, an oven with boiler gives a greater steam saturation and consequently better results.

(For the cases described above the controls of the oven can be, indistinctively, electromechanical, electronic or touch screen).

Sous-vide cooking.

An oven equipped with boiler is recommended (in order to have a good steam saturation also at low temperature) with touch screen for the precision necessary to control the parameters.

#### **1f Methods of use**

- For manual cooking processes with electromechanical controls;
- For cooking processes with the view and control of the main parameters, with electronic controls
- For advanced cooking processes with touch screen control panel.

The touch screen control panel represents the most innovative type of control system and it is available in 2 versions:

**XT Touch Key** (on XT Touch ovens) with a 9" screen. **XT Touch Small** (on XT Simple and XT Compact ovens) is made of a hybrid system composed of a 5" screen and a number of button keys.

## **1g** Cleaning

- Manual
- Automatic



Are the following:

- static oven
- convection oven
- convection oven, with humidification
- mixed or combination oven
- steam oven

## 2a Static oven

These are ovens that bake with dry heat only, without any ventilation; they are seldom used in a professional kitchen, because they have been overcome by the new generation ovens that speed up the cooking process.

#### **2b** Convection oven

(convection is the means of heat diffusion)

These are ovens that bake with forced hot air, generated by a system that connects a fan to electric or gas heating elements.

The working mode operates with hot ventilated air only. These ovens are equipped with electromechanical control panels.

### **2c** Convection oven with humidification

These are ovens that bake with forced hot air and humidity. The addition of humidity is obtained by igniting water on the fan, which is atomized by the fan itself and is then evaporated by means of the heating system.

In this type of ovens, humidity can be either adjustable or fixed (according to the models).

Thanks to its great flexibility, you can cook using both forced hot air with a temperature range from 30 °C to 270 °C, and with **forced humidified hot air** for those foods requiring a certain range of humidity.

Convection cooking also enables you to grill meat and vegetables, fry (pre-fried frozen products), brown or cook au gratin.

These ovens are equipped with electromechanical control panels: the plumbing connection is required for steam production.

# **2d** Combination oven

The "best seller" combination oven gets its name from its functions; it is able to cook with all three different cooking cycles , which are:

- convection (cooking with hot ventilated air)
- steam (cooking with steam)
- combi (cooking with hot ventilated air + steam)

this oven enables diverse cooking methods using only one appliance. The advantages include:

- it is versatile, because it allows you to cook in many different modes,
- it reduces the number of the appliances needed in the kitchen,
- it saves space and rationalizes the layout of the kitchen,
- it cooks greater quantities in less time, without jeopardizing the quality of the final result,
- it reduces time and energy consumption
- it gives the chef free time for other tasks,
- it reduces costs creating higher efficiency.

The steam inside the cooking chamber may be produced:

- by means of water injection, with adjustable intensity, directly on the heating elements of the forced air ventilation system (direct injection)
- by means of the steam generator/boiler

The boiler guarantees an optimal and continuous production of saturated steam, needed to effect certain recipes. However, although the presence of the boiler represents a plus, it also means particular heed must be given to the treatment of the water feeding the oven and particularly the boiler.

The installation of a water softener is necessary in case of water containing a high lime scale concentration. It is also essential to effect regular cleaning and maintenance routines of the boiler to avoid scale build-up and functional damage.

In the combi mode of the ovens with boiler the steam is produced by means of water injection directly on the air ventilation system. This is to contain the loading power, which considerably reduces energy consumption.

According to the model, the control panel may be either electromechanical (knobs), electronic or touch screen.

## **2e** Steam oven

This is an oven that cooks only by means of the steam produced by a boiler.

Steam cooking at 100 °C perfectly replaces boiling with great advantages.

An ambient with saturated steam results in a better thermal efficiency than any other ambient, it contains weight loss and guarantees delicate cooking.

Due to its essential functions, the control panel is electromechanical; a plumbing connection is required.

## **2f Ovens with electric or gas heating**

According to the country, local customs and cost of energy supply, there are different requirements for the heating of an oven.

Regarding gas heated ovens, INOXTREND has developed an innovative system that produces and transmits heat providing great performances, reliability, high efficiency and a reduction in harmful emissions in the atmosphere (see **XT PREMIXER** and **XT FORCE**).

### 2g Table-top ovens

These are ovens with cooking chamber capacity from 3 to 11 **levels** (= runners inside the cooking chamber that hold the trays 2/3, 1/1 or 2/1 GastroNorm, and/or 60x40 cm, far from each other, that is with **pitch**, from 65 to 85 mm according to models) which can be placed on a stand or table.

**INOXTREND** offers 3 types of stands:

- a welded, sturdy 18/10 stainless steel unit,
- an economic, 18/10 stainless steel unit, to be assembled with screws,
- an inexpensive, enameled steel unit, to be assembled with screws.

The dimensions of the stands are related to those of the ovens (installation requires slotting in the feet).



To ensure safety and to avoid problems such as improper door closing and/or uneven grid-holders, it is very important to correctly position and assemble the oven on the stand or table.

**INOXTREND** offers open stands or cupboards (neutral or warm).

All these models are equipped with feet with adjustable height (+20 -10 mm.) and perfect leveling.

On request we can offer stands with marine execution, with slots for oven feet and feet conveniently flanged.

In the table-top ovens the grid holders, inside the cooking chamber, are made of 2 removable panels, equipped with non-tilting runners, placed on the two sides of the chamber itself.

On request, these ovens may be equipped with roll-in racks that can be easily handled by an appropriate trolley for insertion or removal.



# **2h** Floor-standing ovens

These are ovens with a capacity from 15 to 20 levels; considering the dimensions, they do not require any stand and they are placed directly on the floor.

The 20 level ovens, with capacity of 20 trays Gastro Norm 1/1(=mm 325x530) or 2/1 GN (mm 650x530) with capacity 40 trays, are equipped with a standard mobile oven rack, that facilitates ease of handling when loading and unloading trays in and from the oven.

Plate rack trolleys are also available for this type of oven, (capacity n° 52-104 plates,  $\emptyset$  31 cm).

These trolleys facilitate regeneration, directly in the plate, of a large quantity of portioned food, ready to serve to a great number of people at the same time (banqueting system).





**INOXTREND** offers 4 main combi oven lines:

# TOUCH

INOXTREND

cooking no limits

Top level =gas or electric ovens, super performances, wide range, full optional

XT COMPA

# everyday cooking Medium level =gas or electric ovens, great value for money, wide range

# easy cooking

Basic level =electric ovens, super compact, competitive quality and price

**SNACK** 

Electric ovens, compact size, low consumption.

piccolo chef

These are appliances with the following renowned general features: sturdiness, reliability, easy to use and to service, design, equipped with innovative patented devices, durability, wideness of the range and choice of models.



With this range **INOXTREND** ovens reach the heights of achievement satisfying the requirements of those who demand quality and high level performance; these state-of-the-art ovens are easy to use, and pay particular attention to hygiene and savings in compliance with contemporary culinary requirements. **XT TOUCH** is the result of important research and development and the continuous attention towards our Customers' needs, and the continuous follow up and reviews of the installations of our ovens.



- steam generation:
- distance between trays: table-top ovens: 70 mm floor-standing ovens: 65 mm
- n° available sizes: 6 x 1/1 GN 10 x 1/1 GN 10 x 2/1 GN 20 x 1/1 GN 20 x 2/1 GN



**XT TOUCH** ovens have a new accessory: the smoker

From being a centuries-old traditional method, smoking has become the current trend; combining aromas of wood and spices countless new flavors are created, with one only limit, chef's imagination.

By connecting the smoker to the oven, the display automatically shows a screen that enables to control the duration and intensity of the smoking.

## **XT SMOKER**



The control panel, called **XT TOUCH KEY**, is equipped with a capacitive 9" touch screen display that, thanks to the intuitive graphic menu system, enables perfect cooking executions.

The setting of the parameters is easy and intuitive, enough to enable the most innovative cooking techniques, whenever precision is most required.

It is sufficient to select the desired program, press Start and follow the assistant instructions.

The automatic programs are divided into 6 groups, according to the type of food, in order to make research and management easier.

It is possible to modify the pre-set programs to adapt them to your own taste or create new programs to be included in the corresponding food group.

This accurate management enables to repeat the same cooking quality results every time, even without operator surveillance or during the night.

The quality and taste of the food may be replicated infinitely, guaranteeing high productivity. Once personalized, the programs can be stored and transferred to other **XT TOUCH** ovens, by means of a simple USB pen drive or sent by e-mail.

Among the features that make of **XT TOUCH** ovens instruments of creativity there are:



Wizard

the assistant guiding the user in choosing the parameters of the functions to use and makes everything easier.

#### **Help function**

Thanks to the integrated "Help" function, it is possible to access the user instructions, without having to consult the manuals.



#### Multiple cooking

**XT TOUCH** is able to cook different food at the same time.



#### Profiles

In **XT TOUCH** ovens, it is possible to manage 3 different profiles (besides the default).



**Smoker** Allows to experiment new flavors through cold smoking.

**XT TOUCH** is "full optional": anything a chef may require, in order to express his creativity, is standard. **INOXTREND:** ovens with state-of-the-art technology, but easy to use, for real gastronomy experts!

# INOXTREND





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# **3b COMPACT** everyday cooking

Is the medium range of INO**XT**REND ovens, a compact construction, innovative heating system, with direct action onto the food to be cooked, for maximum efficiency (**BOXTOR**=Inoxtrend patent); including gas or electric heated models.

Steam is generated through the direct system inside the cooking chamber; some electric models are available with boiler.



**XT COMPACT** ovens are characterized by reduced external dimensions: only 80 cm width and 80 depth in the 1/1 GN table-top models.

**XT COMPACT** offers a wide and versatile range equipped with:

- patented automatic chamber washing system XT SIMCLEANER with tablet detergent Detabinox<sup>©</sup> and sparkling aid tablet Brillinox<sup>©</sup>, available for all models with electronic or touch screen control panel.;
- boiler steam generating system for immediate steam availability (XT STEAMJET);
- advanced heating systems for gas ovens (XT PREMIXER + XT FORCE).
- **XT FORCE:** is **INOXTREND's** new technology consisting of a burner, fitted inside an innovative heat generator. It can withstand very high temperatures and is housed entirely within the oven cooking chamber. The advantages speak for themselves: thermal efficiency is increased by 30%; the oven reaches the required temperature in no time at all and cooking times are reduced.
- **XT PREMIXER** is an electronic system which creates an optimal flow of combustion, with the right quantities of air and gas every time, to ensure the burners work properly, even inside hermetically sealed casings.
- Accessories and devices (standard on some models and optional on others) as double speed fan, autoreverse, hand shower and automatic washing system.





Roll-in racks are available upon request. They may be inserted into the cooking chamber using the special trolley, made to facilitate the insertion and extraction of the rack.

On request, all models may be supplied with right hinged door (standard is left hinged).

The sturdiness of construction in **XT COMPACT** ovens enables also the "**Tower**" version, possible in various combinations in very limited space.

**XT COMPACT** stands out both for its wide and versatile range, and for the exclusive and patented innovative technologies that guarantee to satisfy any demand; it is the ideal solution for distributors searching for alternative products to add to their portfolio.



Is the basic range of **INOXTREND** ovens, a super-compact construction, innovative heating system, with direct action onto the food to be cooked, for maximum efficiency (**XT BOXTOR** = Inoxtrend patent). It includes only electric heated models.

Steam is generated through the direct system inside the cooking chamber.

Ideal for those searching for an oven with minimal overall dimensions (i.e. only 71 cm. width in 1/1 GN models).

**XT SIMPLE** has a very competitive price, without compromising: quality, sturdiness, ease of use, programmable controls and a patented automatic chamber washing system (**XT SIMCLEANER** = Inoxtrend patent) with tablet detergent Detabinox.





Characteristics of the range

 power supply: electric



- steam generation: direct system boiler (mod. VBA)
- control panel: electromechanical electronic
  - touch screen
- distance between trays:
   67 mm (mod. Gastronomy)
   70 mm (mod. Pastry)
- available sizes: 5 x 1/1 GN 10 x 1/1 GN 15 x 1/1 GN

4 x 2/3 GN (mod. 51) 4 x 1/1 GN (mod. 51) 7 x 2/3 GN (mod. 51) 7 X 1/1 GN (mod. 51)

4 x 1/1 GN - 5 x 60x40 9 x 1/1 GN - 10 x 60x40

4 x 1/1 GN (mod. VBA)

**XT SIMPLE** range has been expanded with the addition of the new **XT SIMPLE 51** models.

The control panel (either electronic or touch screen) placed on top of the door enables these new models to have only 51cm width. Door opening direction can be reversed, even after installation, on site.

These models are the ideal solution for bars, coffee shops, gas stations and all those premises needing a professional oven but have limited available space.





**XT SIMPLE** also includes models for gastronomy and, at the same time, for pastry, thanks to the special tray holder.

In the same oven, it is possible to use both GN 1/1 and pastry  $60x40cm\ trays.$ 

In these models the autoreverse function is standard.

**XT SIMPLE GASTRONOMY & PASTRY** ovens are particularly suggested for those restaurants that, besides the savory meals, they wish to bake bread or sweets.

**RRA** Regeneration ovens (available in the versions 5, 10 and 15 GN 1/1), are intended for all those premises where precooked meals are served (canteens, catering service...) needing to be reheated before service.







# Not to forget, among this range, XTSIMPLE STEAMER: the oven with boiler that cooks delicately, only with steam.

The sturdiness of construction in XT SIMPLE ovens enables also the "Tower" version, possible in various combinations, good for very limited space.

**XT SIMPLE** range ovens are, in terms of characteristics and production profile, the ideal solution for distributors searching for alternative products to add to their portfolio.

**XT SIMPLE**: easiness of use, convenience and quality results for small and medium size restaurants. Not the same old oven!



A small range for all requirements... For those who are looking for ovens with reduced dimensions, we suggest **XT SNACK** *piccolo chef*. It is a "handyman" that can cook first class dishes, on a small scale and quickly face the restaurant's or canteen's unplanned requirements.

# **SNACK & GASTRONOMY**



Characteristics mod. Gastronomy

 power supply: electric

 control panel: electromechanical

electronic

67 mm

• available sizes: 4 x 1/1 GN 4 x 1/1 GN 7 x 1/1 GN

n°

 steam generation: direct system

• distance between trays:

It is the ideal tool to effect professional cooking in reduced spaces like snack-bars, bistròs, deli's, butchers etc.

**XT SNACK** *piccolo chef* is manufactured by using the same materials and the same technological solutions of the biggest **INOXTREND** professional ovens.

Creativity of manual cooking, safe cooking results, pleasant design, total reliability are finally together, available in a small oven, sturdy, built to last in time.

## GASTRONOMY





For the models with electronic controls the following options are available:

- XT SIMCLEANER automatic washing system
- double speed fans with autoreverse

**XT SNACK** range includes Pastry & Bakery models.

These ovens have tilting door, they are available in the capacity of 3 or 4 trays 60x40 mm. They are the most reliable solution for bars, coffee shops, too often equipped with cheap products.

**XT SNACK PASTRY & BAKERY** ovens are available with electromechanical or electronic control panels.

The electrical connection can be either single phase or three phase.

Autoreverse device is standard.

The static prover **LS-608** is the ideal accessory for these ovens.

The prover with adjustable temperature and humidity, has a capacity of 8 trays 60x40mm.

The distance between trays is 75 mm.

Characteristics mod. Pastry & bakery



 power supply: electric

- steam generation: direct system
- control panel: electromechanical electronic
- distance between trays: 70 mm
- **n°** available sizes: 3 x 60x40 4 x 60x40

### **PASTRY & BAKERY**



# 4 COOKING CYCLES: MANUAL AND AUTOMATIC

**A manual cooking program** can be easily carried out by choosing a cooking mode (hot forced air, steam or combination mode) along with cooking parameter (temperature, time and percent-age of humidification) and eventually combined with auxiliary available devices ( core temperature probe, Delta T, release valve, low speed and autoreverse).

#### An operator is required, when you need to modify the preset cooking parameters.

PRH and C&H functions are not a part of the cooking program, but complementary to it, they are useful to optimize the cooking results.

It is possible to select a manual cooking program also with an oven equipped with programmable control panel.

**An automatic cooking program** is the sequence of one or more manual cooking steps, controlled automatically by the control panel of the oven, without the intervention of an operator to modify the parameters between steps.

Example of an automatic cooking program:

Program: ENTIRE CHICKEN									
Phase	Mode	°C Chamber	% Humidity	Time	°C Probe	Delta T	Ventilation	Autoreverse	Rel. valve
1/5	Convection	210		15			4	NO	NO
2/5	Convection	190		2			4	NO	YES
3/5	Combined	165	25	26			2	NO	NO
4/5	Convection	190		8			3	YES	NO
5/5	Convection	210		8			4	YES	YES

As you can see from this example, the cooking process begins with 2 steps in convection mode, with high temperature, to seal the meat, in order to reduce the loss of liquids while cooking.

In the medium step, which is when the chicken cooks internally, the temperature is lowered and steam is delicately added to keep the meat tender.

The last 2 steps are used to brown the external surface of the food and to make it crispy.

It is clear that it is almost impossible to reach this result with a manual cooking program: the operator should continuously modify the cooking parameters manually.

The most important advantages of the automatic cooking programs are:

- optimization of the cooking results
- possibility of consistently reproducing the same cooking quality
- the result is guaranteed, apart from the operator (once the chef sets the parameters, he can delegate his assistant).

# **5** COOKING MODES OF THE COMBINATION OVEN

## **5a** Convection mode (hot forced air)



Cooking is done thanks to the production and uniform circulation of forced dry hot air, by means of one or more single or double speed fans. Temperature range is between 20°C and 270°C.

This cooking method makes the external part of the food dry and crispy through the evaporation of water contained in the food.

Ideal to roast, grill or gratin ( you obtain an even better result using the release valve, when available).

## **5b Convection-steam mode or "combination"** (hot forced air and steam)



This type of cooking is facilitated through the production and uniform circulation of forced dry hot air, by the means of one or more single or double speed fans, combined with steam. This method of cooking can be generated by water injection directly on the motor fan or by the boiler (saturated steam). Temperature range is between 20°C and 270°C.

This system commonly called "combination", combines the advantages of the hot forced air (speed, energy and space saving) with that of steam (maintain of nutritional and organoleptic properties of food).

It is ideal for food, that needs to be cooked quickly, with high temperatures and a lot of steam. This method also keeps food soft and tender and limits the loss of food weight.

### **5c** Steam mode



This mode of cooking is facilitated by the uniform circulation of forced saturated steam, at atmospheric pressure, using one or more single or double speed fans. Temperature range is between 20 °C and 100 °C (130 °C in some models).

Steam cooking at 100 °C allows you to cook any kind of food, that can otherwise be boiled in water.

With this mode of cooking you obtain big advantages: no pans, more space, free stoves, no dripping, no burnings and above all a higher quality of products.

The end product is rich in taste, more natural, colorful and above all with less seasoning and salt.

Steam without pressure guarantees even and delicate cooking; minimal loss of vitamins and mineral salts and a reduction in cooking time as compared to boiling food in water.

Another advantage to this method is that you obtain perfect cooking, **without "shaking" problems** that affect the food: for ex. eggs can be put inside their container in the cooking chamber or in a bowl (cooking will be uniform and the integrity of the shell will be preserved)

Ideal to boil, defrost, sterilize and regenerate vacuum products.

# 6

# **EVOLUTION OF COOKING SYSTEMS AND TECHNIQUES**

In recent years cooking techniques have evolved due to technological improvements involving professional ovens; at the same time continuous research in the kitchen, designer innovations and consideration of customer feedback and suggestions, all contribute to the creation of new devices.

New automatisms and functions have increased the potential of the chef and his job.

We briefly illustrate the most used techniques, and necessary devices to realize these modern methods of cooking and holding the food.

#### 6a Programmable cooking

As previously explained, an automatic cooking program allows to modify the cooking parameters and manage the auxiliary devices completely automatically without any intervention of the operator.

This technique allows the chef to create, execute, store and file "standard" cooking and favorite recipes.

Any operator can manage these recipes, because the cooking program functions automatically, with more safety, guaranteed results, a higher control of the costs and last but not least, saving of precious time.

In the **INOXTREND** ovens basic preset recipes, including first courses, meat, fish, vegetables, bread and cakes, are available for you to use.

The recipes can be modified; it is always possible to add further modifications to the selected program during the automatic execution of any recipe.

In the **XT TOUCH** range ovens, each of the 4 available profiles can manage his list of favorite programs.

**XT TOUCH** oven programs can also be planned to be started at a schedules time (delayed start).

In all **INOXTREND** ovens with touch screen control panel, the automatic pre-heating is foreseen to effect automatic cooking programs in the best conditions.

In all **INOXTREND** ovens with touch screen control panel, by means of the USB connection, it is possible to copy and transfer the automatic programs from one oven to the others in order to repeat the same automatic recipes in different ovens installed in different places.

Briefly with programmable cooking we obtain a guaranteed quality, that can be endlessly repeated!

To achieve this type of cooking it is obviously necessary to have an oven with touch screen control panel.



## **6b Vacuum cooking**

It's the most used and in-fashion technique, both in the creative/refined cuisine as well as in the catering sector, because it allows you to preserve food longer, after chilling.

You just need to put individual portions of food in special plastic bags (from which 99% of air is extracted), this food must be baked in steam mode, with a temperature varying from 55 °C to 90 °C.

The cooking time has to be extremely precise, and in most cases, it is around 10 minutes.

The precision in the temperature is essential for this type of cooking; incorrect and too high temperatures can damage the plastic bag, inside which there are the cooking products.

Once the vacuum cooking is over, if the portions are not served immediately, they can be chilled and then preserved for about 1-2 weeks at a temperature of 2-4 °C and around 3 months at a temperature of -18 / -20 °C.

The advantages offered by this system are clear:

- the food doesn't require any additional seasoning and preserves inside its packaging all original organoleptic properties;
- possibility of creating refined plates in a very little time;
- a reduced loss of weight, thanks to the low cooking temperature;
- possibility of planning the preparation of food, thanks to good preserving period of time;
- the service is quick, because the plates, which were previously baked and chilled, only need to be regenerated;
- possibility of transporting the packed food in a safe and healthy way;
- energy saving.







To adequately realize the vacuum technique, we suggest you to use a combination oven with boiler (optimal saturated steam, continuous, even at a low temperature), with a programmable control panel to allow the operator to store the recipes.

## **6c** Regeneration

It means to bring at service conditions (in its ideal condition) food, that has been baked (both traditional and vacuum packed) and then refrigerated or frozen.

A hot topic in the modern catering equipment sector revolves around regeneration, which has to do with the correct preservation of plates.

For banqueting or catering, the process is not difficult: first food is pre-heated prior to service time, then rapidly cooled in a blast-chiller, and at the end the food is put into the oven, where the cooking product is regenerated.

Regeneration is done mostly using combination mode, with temperature ranging between 140 °C-160 °C and a percentage of humidification varying between 15% and 50%.

It is important to regenerate the food in a similar place, as it has been baked (with similar parameters): this way you will obtain the best results.

Depending on the destination of the food, regeneration can be done on a tray, on a service plate or in the vacuum pack.

Food that is regenerated directly on the plate, is usually put in suitable plate rack trolleys, to limit service operations.

You can also regenerate food on a tray and use the same suitable plate rack trolley.

In both cases we advise using a special heat retaining hood, that wraps the mentioned rack trolleys and permits to hold the food at service temperature for approximately 20-30 minutes.

This makes the programming of the serving time easier.

The correct evaluation of time is extremely important, because the plates must reach the customer at the proper temperature, with no humidity traces or water drops.

This quick and economic technique (related to the earlier cooking programming), allows you to provide impeccable service of great quantity of plates, in a calm stress-free environment; this is why it is becoming more and more popular, also in small and medium-size restaurants.

If the regeneration is done with **INOXTREND** specific regeneration ovens, banquets are more easily facilitated and helps catering too, it permits the preparation of more plates at one time and with a "fresh made" look.

## 6d Cooking at low temperature

It's ideal to cook big pieces of meat (such as game, whole roasted pig etc), because low temperature (between 55 °C and 90 °C) reduces the loss of food weight, approximately 15-20%, versus traditional cooking temperatures which lose 40%-50%.

This cooking method can require up to 8-10 hours: we advise to use this method at night.

For this technique we suggest an oven equipped with programmable control panel, including a core probe with Delta T system and Cook & Hold function.



#### **6e** Steam cooking, at low temperature



This cooking mode uses steam at varying temperatures between 50°C and 80°C. Steam at low temperature, also called aimed steam, is a cooking method that has gained popularity, especially for those seeking a healthy and light diet.

It's ideal to cook delicate food such as: creams, soufflé, flans, paté, mushrooms etc.

Steam at atmospheric pressure guarantees an even and delicate cooking; there is almost no loss of vitamins and minerals and cooking time is reduced compared to cooking in water (bainmarie).

For this type of cooking we suggest using a combination oven with boiler, equipped with programmable control panel to select with utmost precision the parameters: time, temperature and humidification (saturated steam at low temperatures).

## 6g Cooking with core probe and Delta T device

This delicate cooking system is carried out with a double control of core probe and cooking chamber temperatures, producing tasty, soft and tender food, that is never burnt on its surface. It's ideal for big pieces of meat.

For this type of cooking we suggest a programmable oven.



## **6h Spit-Roast**

When you cook poultry on the spit , it's not so easy to make tender and juicy meat along with a crispy surface.

Thanks to **INOXTREND** convection with humidification oven and the special poultry grids, it is extremely easy to cook chickens, cocks, ducks, pigeons etc, similar to that on the spit, but much better...

Meat is cooked evenly inside with a crispy outside, unmistakable aroma and taste, perfect browning, digestibility, all without the addition of any fat or extra effort.

Unlike cooking on the spit, this method prevents meat from getting too dry or too browned.



## 6i Cook & Hold

The C&H function has the important role to limit bacterial proliferation; it allows you to keep the plates, that are just cooked and ready to be served, at a suitable temperature and with a steady percentage of humidification. The holding temperature is 50 °C.

Here is an example. The operator begins a cooking phase and already knows he will not be there at the end of the cooking time to take the food out of the oven. If he selects the function C&H: in this way, at the end of the cooking cycle, a holding cycle will start automatically and the bacterial proliferation will be reduced.

For this type of cooking we suggest a touch screen oven.

## **61** Dehydration

This technique is used to make some food parts crispy, for decorative plating purposes (ex. Leaf of fruit/vegetables (1-2 mm), grated cheese on a little mould etc.).

To get the desired crispiness, we suggest using the oven in convection mode, with a temperature around 35-40 °C, to allow the water contained in the food to evaporate.

For this type of technique we advise an oven with double speed fan; use low speed to prevent movement of the food, once it is dehydrated.



#### **6m** Pasteurization

It's a thermal treatment used for food, which has the aim of minimize health risks associated with pathogenic microorganisms, bacteria, etc, thereby increasing preservation time of the same food. Pasteurization is mostly used for catering service.

The process of pasteurization is as follows:

- 1. Cooking of various kinds and quantities of food, using different cooking modes and parameters
- 2. Dividing food portions and vacuum packing
- 3. Pasteurization of the vacuum packed food with low temperatures (60-65 °C)
- 4. Chilling of the vacuum packed food
- 5. Regeneration and eventual holding

For this technique we suggest using a programmable combination oven with suitable core probe for vacuum packing.

# 7 PATENTS, POINTS OF SALE AND INNOVATION

As a result of continuous research and passion, all of our **INOXTREND** ovens contain devices/functions/innovative systems.

We call them "*points of sale*": these points represent the character of our ovens and identify our brand and slogan: **INOXTREND - combi ovens for passion** -.



XT SIMCLEANER ensures many advantages:

- it removes the dirt, without damaging the steel and the oven has a longer life,
- zero costs for auxiliary workers,
- protection of customer health, by eliminating bacteria proliferation.

**XT SIMCLEANER** uses  $Detabinox^{\circ}$  detergent in tabs and eventually the rinse aid  $Brillinox^{\circ}$ , which have been studied and produced by **INOXTREND**.

The tabs, packed one by one and inserted in buckets with hermetic seal, can be stocked anywhere and are easy to transport, unlike liquid detergent, which is impractical.



**XT SIMCLEANER** is state of the art cleaning technology, that solves the clearing problem.

Just insert the detergent tablet in the appropriate receptacle (see picture), select the cleaning program and the cleaning will proceed automatically.

A combination of water and air melts the detergent and ensures it gets into every corner of the cooking chamber by means of a fan (built-in in the upper part of the same cooking chamber. The mechanical together with the chemical action guarantees cleanliness and hygiene also in the most difficult spots of the chamber.

The use of detergent tab Detabinox<sup> $\circ$ </sup>, exclusively produced for **INOXTREND** ovens apart from the automatic washing of the cooking chamber removes also any damaging/rusting (that is common while using unsuitable detergents and tools) of the stainless steel surfaces and of the internal components of the cooking chamber, difficult to reach manually.



In the models with touch screen control panel, in which the automatic washing system is standard, there are 2 receptacles: 1 for the Detabinox detergent tablets and the other for Brillinox sparkling aid tablets.

In the models with electronic control panel, in which the automatic washing system is optional, there is only one receptacle. The detergent is to be inserted before starting the washing cycle and the sparkling aid before the rinsing phase. For this reason, the washing cycle effects a pause in order to enable the user to insert the sparkling aid tablets.



**XT BOXTOR**, abbreviation for "**BOX** Side Convec**TOR**", is an efficient system that introduces directly in the cooking chamber the whole heat production system, both in electric and in gas heated ovens.

Advantages:

- the cooking chamber heats up quicker,
- reduced cooking time,
- reduced external dimensions of the oven,
- easy maintenance,
- easy access for cleaning.

In traditional systems, the cooking chamber and the deflector are the technical parts that permit to convey the forced hot air on the food to be cooked. Problem: extremely complicated construction for the cooking chamber, components difficult to access.

With **XT BOXTOR** technology, thanks to the exclusive removable and rotating conveyor, that brings hot air towards the food, the problem is solved: the chamber is linear and the inspection of its components is easy.



# **7C XI PREMIXER XI FORCE**

**XT PREMIXER** is an electronic system that creates an optimal mix of combustion (air and gas in the right ratio), to ensure the burner works properly, also inside sealed covering.

**XT FORCE** is the new type of burner, in special stainless steel, withstanding very high temperatures, designed and planned to be mounted inside the heat exchanger.

The advantages are clear: there is a 30% thermal yield improvement compared to gas heating systems of atmospheric type; the time for heating up the oven is very reduced and the cooking cycles are quicker; there is also a considerable reduction of harmful emissions.

**XT PREMIXER** and **XT FORCE** are the frontrunners for quality, reliability and long life of the innovative **INOXTREND** gas ovens.



# 7d XI STEAMJET

The boiler has a technology named **XT STEAMJET**, that generates quick steam, ready to be used in less than 5 minutes from ignition of the oven; the steam saturation inside the cooking chamber and the continuity in steam supply is good. Ideal to cook small food quantities.

The advantages of this system are as follows:

- quick to reach the selected temperature in steam mode,
- continuous steam generation,
- quality saturation inside the cooking chamber, even at low temperatures.

# 7e XT TOUCH SMALL

In **XT SIMPLE** and **XT COMPACT** ovens the programmable control **XT TOUCH SMALL**, through the combination screen/buttons, manages manual cooking cycles (convection, steam and combination), automatic cooking cycles, automatic washing cycle and complementary functions.

**XT TOUCH SMALL** introduces a new, easy and clever way of working; it allows you to easily store recipes and create a file of useful information to repeat the best plates and/or create new ones.

The ease of use and the intuitive graphics enable the user to learn quickly all the functions of the oven, in this way allowing him to use all the potential of the control system.

The possible anomalies or malfunctions are visualized by means of messages on the screen, that give the technical service a valid support concerning the maintenance required.





# **7f** XI TOUCH KEY

**XT TOUCH** control panel is a real revolution: an interactive system enables to set functions and instructions, in the meantime choose the favorite language, simply using the appropriate icon.

**XT TOUCH KEY** control panel uses a tactile capacitive screen, best quality on the market.

The graphics and position of the icons are the product of an in depth cognitive ergonomic research; the result is a system endowed with a vast range of controls and functions, but, at the same time, intuitive and easy to use.

The fuctions are similar to the XT Touch Small control panels with the addition of some functions for the more demanding Chefs:

- Multi Cook, enables to cook several types of food at the same time,
- 4 working profiles, 1 for the Chef with the possibility to modify permanently the automatic cooking programs and 3 with the possibility to make temporary modifications. Each profile may chose the favorite language to use for the visualization of the information on the screen.



They are a valid help to improve the cooking result. They are manually managed in ovens with electronic control panel and automatically managed in ovens with programmable control panel.

According to the model of the oven these functions can be:

- standard
- on request (optional)
- not available



The release valve has the function of adjusting humidification inside the cooking chamber.

It is well known that water contained in the food tends to evaporate if we increase the temperature.

Inside the cooking chamber evaporation causes a progressive increasing in humidity, that is not always beneficial to the desired cooking results.

If, for example, we want to bake some potatoes and we want them to be dry and crispy, we should let the excess steam exit the cooking chamber.

The release valve, in this case, becomes a fundamental element: we keep it closed in the first cooking step, to utilize the humidity generated by evaporation to aid the cooking of the potatoes inside, without burning the external surface.

We will open it at the final step, to exhaust the steam and finish the cooking in a dry chamber; the result will be excellent: dry, crispy and well baked potatoes.





In the **XT SIMPLE** and **XT COMPACT** oven series the release valve can be opened and closed using a little knob see fig. (A) ...or by pressing the appropriate button (B).

In the **touch screen** ovens series this operation is directly managed by the control panel.

# 8 Ventilation speed

The normal fan speed is used in almost all cooking cycles. In specific cases the reduction of the speed improves the final cooking result.

Lower speeds are mainly used:

- in the cooking of stewed meat (where it is necessary to keep the meat moist especially on the external surface of the food),
- in steam cooking (if the oven is loaded less than half of its capacity),
- in vacuum cooking,
- in the cooking at low temperature (considering long cooking time and low temperature, it is sufficient a low speed to guarantee even cooking),
- while cooking small portions of food like puff pastry, or dehydrated food (to avoid movement due to ventilation).

In the **XT SIMPLE** and **XT COMPACT** oven series with touch screen control panel double speed ventilation is standard. In **XT TOUCH** series ovens there are, standard, 4 speed.



Food always contains a more or less large store of microorganisms.

The cooking process has to appropriately reduce them, in order they do not pose a health hazard to the consumer.

The critical state of the cooking can be briefly summarized in an inadequate control of the temperature and in the consequent excessive overheating of the food, that can lead to food poisoning.

With the help of the devices installed on our **touch screen** ovens, we are able to monitor all cooking steps, to meet safety standards.

Using a simple USB flash-key it is possible to record and store all cooking parameters, up to the recommendations of the European Directive **Hazard Analysis and Control of Critical Points**.

With suitable software and a PC, cooking data can be processed, visualized and eventually printed.





It's nothing but a great precision and practical skewerlike sensor device, able to test (to be positioned in the core of a product to be cooked), the core temperature of the food while it is cooking.

The cooking cycle stops exactly when the selected temperature is reached.

The core probe helps you achieve excellent cooking control and a proper food holding environment wherever required. The control of the core temperature of the food can be used as an alternative to the cooking time, the parameter to determine the duration of a cooking cycle.

For example, when cooking big pieces of meat or we would like to reach a specific cooking point in the core of the product and this cannot be done accurately through sight alone, the core probe is the perfect device to achieve the desired result.

For example, the difference between "underdone" and "well done" roast beef is a matter of a 10 °C temperature difference in the core of the product.

It's very difficult to establish on experience and visually if roast beef is underdone or well done, and it is clear that the most safe method to always determine the same cooking point, is the use of the core probe.

The control of the temperature in the core of the product can be used also during a step of an automatic cooking program, even if the other steps are controlled by time.





In the **XT SIMPLE** and **XT COMPACT** oven series, with touch screen control panel and in the ovens series XT TOUCH the core probe is standard supplied (optional in models with electronic control panels).

A MULTIPOINT CORE PROBE is supplied as an accessory (in the **XT TOUCH** model series).

The skewer with 4 sensors ensures absolute and precise monitoring; the distance between one detection point and the other is approximately 15 mm.

Therefore if the skewer is inserted incorrectly or if it touches bones of the meat, fat pockets or too little pieces of product, no problem will occur. The multipoint core probe guarantees the desired temperature in the core of the product to be reached, even if the core of the product is not hit.



# Δ**T**<sub>8e</sub> Core probe with Delta-T (ΔT) system

When cooking large pieces of meat (for ex.: saddle of pork, ham, breast of turkey, whole roasted pork) it is necessary to maintain a minimum and constant difference between the temperatures of the cooking chamber and the food core (=Delta-T parameter).

The smaller this difference is, the better the cooking results will be, however the cooking time will be longer. The value to be set for  $\Delta t$  varies from 30 °C to 150 °C.

The use of the core probe with  $\Delta t$  system allows a more delicate cooking process. The result is tender and homogeneous meat, from the food core to the surface and furthermore a lower loss of weight.

This system is particularly useful to preserve salts and organoleptic substances of the food.

The electronic system detects the core temperature of the product every 10 seconds to establish the cooking chamber temperature relative to the  $\Delta t$  temperature. The core probe with  $\Delta t$  allows you to maintain a constant difference between cooking chamber temperature and core temperature of the food.



Difference between core probe and core probe with Delta T:

1-**CORE PROBE** ex.: select a cooking mode (hot forced air, combination or steam); then select a temperature for the cooking chamber and a temperature for the core probe. Once the cooking cycle is started, the cooking chamber will increase its temperature until the selected temperature is reached; this temperature will be maintained until the selected core temperature is reached.

2-**CORE PROBE WITH DELTA T** ex.: select a cooking mode (hot forced air, combination or steam); Select a temperature for the core probe, start the Delta T function and select a temperature for it.

Once the cooking cycle has started, the oven will increase the cooking chamber temperature until it reaches a temperature, equal to the addition of core probe temperature and DELTA T temperature. The cooking chamber temperature and the core probe temperature will increase in the same way, always following the formula **°C chamber = °C core probe + Delta T.** 



# **PRH**<sup>8f</sup> PRH function (pre-heating)

It's very import to pre-heat the cooking chamber, before starting a cooking cycle.

Thanks to the PRH function, the cooking chamber will heat up until it reaches a value of 30°C higher than the selected temperature for the cooking process.

This helps to compensate for the reduction in temperature when you load cold food into the cooking chamber. (When the temperature is reached, a buzzer will warn the operator).

**PRH** function avoids, as explained, the temperature drop (with consequent increasing of cooking time) and permits hot forced air to distribute more efficiently, in order to reach a better cooking uniformity.

**PRH** function, or automatic preheating, is standard available on all **XT SIMPLE** and **XT COMPACT** ovens with touch screen control panel and on all **XT TOUCH** ovens.

In these models the automatic preheating starts automatically at the beginning of cooking cycle.



This function has the purpose to cooling down quickly the cooking chamber.

It is activated by opening the oven door, in order the fans can push hot air outside the cooking chamber.

It is useful when you have to select a cooking cycle with much lower temperature compared to the previous cycle or when you have to start the washing cycle.





# 8h Autoreverse device

This device, standard in ovens with touch screen control panel and in models for pastry & bakery, is used to reverse fan rotation.

Is a result hot forced air is distributed evenly and guarantees even cooking.

It's very useful for dough with high air content (creampuff, croissant etc.) or containing yeast.

A perfect uniform distribution of forced air dough volume increased and allows an even leavening of all products.

The autoreverse device is available (as optional) also in models with electronic control panel.

This allows the chefs who use innovative cooking techniques or would like to achieve a very high quality level to reach very good results.





It is used to protect pipes from high temperatures (over 100  $^{\circ}$ C) of exhaust liquids coming from cooking steam condensation.

This device is made up of a solenoid valve, which is controlled by a thermostat, positioned on the exhaust pipe.

The solenoid valve, through a nozzle, introduces cold water into the exhaust pipe to condensate steam, when a temperature of 90°C is reached.





**INOXTREND** has designed and produced a wide range of special versions, to accomplish specific uses; here below are listed some of them:

- tower ovens (two tabletop units one on top of the other): an intelligent solution for greater flexibility in use, without any extra space needed;
- ovens with accessories for Banqueting system: ideal for those serving many types of food in ready to serve portions, in short time and in a calm atmosphere;
- ovens Marine version: versions produced upon request, in accordance with specific needs and safety regulations;
- ovens Prison versions: versions produced upon request, in accordance with safety regulations;
- ovens on wheels;
- ovens with right hinged door (INOXTREND standard is left hinged door);
- ovens with special electric supply (voltage);
- personalized ovens upon customers request.



**INOXTREND** offers accessories suitable for any need; here below are listed the main ones:

- open stands, with or without tray-slides, warm and neutral cabinets; strong stands, safe and suitable to support **INOXTREND** ovens;
- plate rack trolley and roll-in racks to optimize banqueting management;
- heat retaining hoods to hold warm food portions for about 30-40 minutes;
- various types of trays to give the right solution for any application;
- grids to cook vegetables, fish, meat as just grilled;
- special grids for poultry cooking, (to cook like SPIT-ROAST) ideal for gastronomy, butcher shops and supermarkets;
- stainless steel baskets for pre-fried food; to obtain cooked food as if it were just fried, without adding fat/oil and avoid consequent discharging problem;
- odor and condensate suction hood to extract steam and smell; necessary if the oven is in full view in supermarkets;
- fat filters to preserve motor-fan ventilator;
- water softener to soften water from excess of lime.





# 11 MANUFACTURING FEATURES

Here below are the main features:

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- stainless steel construction,
- cooking chamber made in stainless steel 18/10 AISI 304, water tight, with rounded corners,
- cooking chamber thermal insulation, with special protections,
- cooking chamber fans made of stainless steel AISI 304 or316,
- oven door with double tempered glass, for air circulation and to avoid door over-heating,
- door handle with right and left opening,
- internal door glass can be opened for cleaning,
- easy-change, silicone rubber door gasket, suitable for food contact (heat resistant and long lasting), built-in type,
- door drip pan to catch condensation during the cooking cycle, under the door/ under the glass
- release valve to evacuate the excess humidity in the cooking chamber and over-pressure safety system,
- openable control panel with hook for maintenance operations,
- heating by means of electric heating elements in stainless steel **INCOLOY** 800 (electric models),
- washing cycle with XT SIMCLEANER technology,
- ventilation management by means of XT BOXTOR technology,
- control system by means of XT TOUCH KEY and XT TOUCH SMALL technology,
- heating by means of XT PREMIXER and XT FORCE technology (gas models),
- steam generator by means of **XT STEAMJET** technology,
- automatic diagnostic with visual alerts,
- USB portal for HACCP data storage and recipe management,
- high quality components, easy to find on the global market.



# **SAFETY SYSTEMS**

Here under are listed the main ones:

- cooking chamber safety thermostat,
- cooking chamber overpressure safety system,
- steam generator overpressure safety system,
- device to evacuate the excess humidity,
- motor thermal safety switch,
- magnetic door micro-switch,
- boiler safety thermostat,
- automatic boiler level control,
- USB control system according to HACCP regulations,
- water inlet pressure stat for water pressure control,
- gas alarm safety device,
- cooling system for electric and electronic components situated behind the control panel,
- automatic diagnostic with visual messages.

CERTIFICATION 13

- CE conformity declaration
- IMQ gas safety certification

CERTIFICATO DI ESAME CE DI TIPO EC TIPE EXAMINATION CENTIFICATE

METHALIAU AUADAD II ITAND I

Forni convezione vapore per uso collettivo

Commercial steam convection ovens

Models various

31025 SANTA LUCIA DI DIANA

# **14** SAVING WITH INOXTREND OVENS

**INOXTREND** ovens offer great advantages, in terms of saving, amortization and profit because:

- they reduce energy consumption,
- they reduce cooking time,
- they reduce weight loss of the product to be cooked,
- they minimize seasoning,
- they eliminate waste due to wrong cooking cycles,
- zero dead hours, with a profitable management of the operators time,
- they increase the space in the kitchen: a unique appliance, instead of pans, pots, cookers, and other various equipment,
- they cook with high quality standard, increase customer satisfaction and have a long business relationship.









#### Is it possible to cook different foods together, at the same time, in the same oven?

Yes, in all **INOXTREND** ovens, provided that they require the same temperature and steam parameters.

**Important notice**: place the trays containing the most flavorful foods in the upper part of the cooking chamber and open the steam release valve, if working in convection or combi mode.

#### Is it possible to use trays of any height?

Yes, even if GN=GastroNorm with 20, 45 and 60 mm. height are the most commonly used.

ATTENTION: it is fundamental to leave at least a 30 to 40 mm space between the trays to permit the necessary air circulation for quality results and perfectly even cooking.

In the case of using trays higher than 60 mm they must be placed alternatively, in order to leave the space above described.





In case of trays or pans of any other size, it is always recommended to leave the necessary space for the adequate air circulation.

In order to obtain optimal cooking results the appropriate trays must be used according to the different types of foods: aluminum perforated trays for Pastry or Bakery, perforated trays for steam cooking, stainless steel basket for pre-fried potatoes, special spit grids for poultry cooking, etc. Thermal conductivity changes according to the material the trays are made of: stainless steel, aluminum, enameled plate, graphite, Teflon. In each case it is recommended to adjust the time and temperature accordingly.



#### Is it possible to cook bread and cakes in a convection oven?

Yes, but better results may be obtained in a combi-steamer; using more modes (both convection and steam) makes it possible to cook bakery and pastry with great results.

It is necessary to review the recipes normally applied in a static oven that is not fan-assisted, because the ventilation tends to increase the volume of the dough, especially if it contains baking powder/yeast.



#### Is it possible to use the core probe in sous-vide cooking?

Yes. There is a special probe with a very thin pin (needle) that is especially designed for vacuum bags; applying a special "airstop" adhesive avoids entry of air after removing the probe at the end of cooking cycle.

#### Is it possible to "fix" the parameters of the programs on a programmable oven, in order to prevent anyone from modifying them?

Yes. In **INOXTREND** ovens series **XT TOUCH** to modify permanently an automatic cooking program it's necessary to enter a password (the same one asked to access the chef profile).

The other profiles can only modify temporary the parameters of a program: after execution of a program the stored values go back to the previous ones.

All default programs are stored (also in case of modification or cancellation) and you can always restore the default configuration.

This kind of security is very useful in kitchens where several persons have access to the oven.



For example, in large catering companies where the chef can set the parameters of the cooking cycles in all the kitchens of the group, in order to have the same standards in each location.

#### Is it recommendable to use a combi oven for banqueting?

Yes, it is the ideal equipment for banqueting, because it offers many advantages:

- many different foods can be cooked at the same time, therefore optimizing the oven load, without cross contamination of odors and taste,
- it permits the best uniformity when cooking many servings,
- it permits cooking in advance, prior to service,
- it eliminates physical stress, because you don't need to manage heavy pots and pans,
- it gets rid of dangerous work like handling boiling liquid masses,
- it permits regeneration either in trays or plates ready for service,
- it improves speedy organization in the kitchen, and puts the stress on the equipment rather than the employees, by eliminating the continuous need to control the cooking cycles,
- it reduces and simplifies the cleaning operations, thanks to the automatic cleaning systems that uses tablets,
- it makes working conditions much more comfortable by reducing heat and humidity in the atmosphere,
- all the difficult cooking tasks that require manpower and direct attention, such as: boiling, brazing, browning, stewing, bain-marie, etc., can be done in one appliance.

#### Automatic cooking and manual cooking cycle: differences?

An automatic cooking program divides cooking into various steps – in the case of **INOXTREND** combi ovens up to a maximum of 8 steps – with improved results compared to cooking with one only step. Furthermore, once the parameters are set, the cooking is carried on automatically, without the need of assistance.

In case of cooking meat, dividing into steps permits a perfect sealing at the beginning at high temperature, closing all the pores in order to avoid moisture loss.

This first step can be followed by an intermediate step at a lower temperature and a minimum percentage of steam for more precise cooking, then a final step at high temperature can be used to brown the outside of the meat and make it crispy.



#### Oven with boiler or with direct system: differences?

In **INOXTREND** combi ovens steam may be produced by:

- injection system (also called direct system)
- a boiler

Direct steam is produced by means of water injection, directly on the heating elements of the ventilation system; it guarantees a good quality and quantity of saturated steam for cooking at temperatures from 90° to 100 °C.

The quality of saturation is reduced with temperature reduction. This method does not require any complex installation and is also economic. Ovens with direct steam generation system are the most requested in consideration of the good quality of results, but also the speed in cooking and the reasonable price, compared to those equipped with boiler. The steam generations system that uses a boiler guarantees the optimal steam quality and quantity. Steam is immediately available at a perfect saturation, both at low temperature, i.e. 50 °C (normally used for vacuum, slow and low temperature cooking) and at high temperature.



The boiler is, on one hand, more flexible and complete with respect to performance, but it requires, on the other hand, greater attention in terms of the periodic maintenance of the steam generation system.

In order to guarantee correct functioning, it is important that the water feeding the oven is properly treated to maintain the correct hardness required according to the USERS' MANUAL of the appliance.

#### Is it possible to effect long overnight cooking?

Very long cooking processes are essential for some meat preparations, but this can pose obstacle to the operation of a good, functioning kitchen.

In **INOXTREND** combi ovens, with touch screen control panel, it is possible to effect cooking cycles taking advantage of the idle time overnight. These postponed cooking cycles, are planned to start at a certain time and finish in the morning, after which they can be held at optimal conditions using the Cook & Hold function.



#### How often should the cooking chamber be "thoroughly cleaned"?

Every day! If the use is daily; otherwise every time a cooking shift is completed.

**XT SIMCLEANER** system has been designed in order to effect the cooking chamber washing automatically, at the end of each working day.

A perfectly clean chamber is above all hygienic, and prevents food from absorbing bad tastes or smells.

All **INOXTREND** ovens with touch screen control panel can be equipped with the exclusive automatic washing system **XT SIM-CLEANER** with tablet detergent Detabinox and rinsing aid tablet Brillinox.

Your oven is guaranteed to be clean and efficient, without incrustation, rust or bad odors.

**XT SIMCLEANER** automatic washing system is available as optional also in the ovens with electronic control panel.

#### Does more technology mean more risk of break down?

The answer is NO, if the oven is used and maintained appropriately on a regular and diligent basis.

Before entering the market, all **INOXTREND** ovens are strictly tested one by one. Additionally, all their functions are tested in the various working phases. All the components of **INOXTREND** ovens are tested in the most extreme working conditions (working temperature up to 70 °C).

The inconveniences occurred on **INOXTREND** ovens, in 30 years of manufacturing history, are almost totally due to external circumstances and not related to the appliance, as for example:

- faulty installation, performed by personnel without the necessary specific experience,
- installation not complying with the indications given in **INOXTREND** instruction manuals,
- periodic maintenance totally or partially carried out without the due care,
- wrong replacement of spare parts, without the actual solution of the problem,
- replacement of parts with non-original spares,
- improper use, due to the lack of knowledge, of the appliance or negligence of the personnel,
- cleaning not performed on a regular basis or with inappropriate means/materials/products (i.e. detergents containing chlorine),
- lack of personnel with the appropriate training for the use of the oven,
- lack of adequate knowledge concerning the gas heating system,
- an installation not complying to the rules and regulations.



# How can we help the Customer choose the oven most suitable to his requirements?

The sales person is responsible for the correct orientation of the Customer, accompanying him in the choice of the appliance. At this time, it is essential to:



- listen to the requirements of the end user,
- get an idea of the quantity of food the oven will be cooking daily,
- consider the type of service: express or postponed,
- analyze the type of menu,
- consider if it is a new place or if it has been working for a long time,
- consider the operational ability of the end user, his technical skills, ambitions, etc.,
- consider the option: traditional cuisine, or modern, innovative etc.

All this information will enable us to find the most suitable oven, matching "quality of the Customer with quality of the appliance".

Let's analyze the information gathered.

#### Choice of the oven according to the user's requirements

Each Customer may find the perfect fit to his kitchen among the wide range of INOXTREND ovens, whether it is for a restaurant, a canteen, a hospital, a school, a banqueting service or any other location in which the daily task is cooking food.

The specific requirements and the cooking methods of the end user therefore must be perfectly understood.

Choosing an oven only according to the daily quantity of food to be cooked and/or the price, is one of the most common mistakes, this may turn into the greatest disappointment that has no solution.

#### Daily quantity of food to be cooked

Having an idea regarding the capacity/dimensions of the oven with respect to the load of work to be undertaken is a very important factor to consider.

#### Type of service for which the meals are intended

Let's compare the difference between 100 meals to be made in a restaurant and 100 meals to be made in a canteen.

In a restaurant normally there is a longer serving time with many pauses and with great attention to the quality of the food that is cooked at the point of service. Therefore we are speaking of "made to order" courses.

In a canteen, 100 meals are almost always served all together, with very tight service schedule and, in most cases, the food is cooked before service time. We are speaking about "postponed" service.

#### Type of menu – new place or has it been working for a long time

the type of oven to be offered to the Customer must be applicable to his cooking style.

to a creative chef willing to use up-to-date cooking techniques, you may propose a more versatile oven, equipped with programmable controls and with all the optional devices that enable him to manage a cooking cycle with various modes and steps (i.e.: core probe with "Delta T" control system, equipped with boiler, if vacuum or low temperature cooking modes are required, etc....).

A traditional chef may probably feel more at ease using an analog controlled oven, equipped with secure grip knobs, and devoid of any special accessories that would probably never be used.

It is recommended to analyze the menu selection (for places that have been working for a long time) as well as the menu the Customer is planning to create (for new places or those developing/ improving their activity).



#### User's operational capacity, technical skills, targets etc.

It is important to consider the difference between the two different kinds of working conditions, as illustrated in the previous example: in a restaurant we can find an experienced chef bind to traditional cooking techniques, or a young chef willing to experiment new techniques as vacuum or low temperature cooking modes.

In a canteen the chef may have rather limited field of action; his creativity is almost certainly not expressed and his greatest worry and responsibility will be to manage a group of workers that have no culinary "vocation" or skills!

#### Cooking style chosen: traditional or modern, innovative etc.

For all traditional cooking cycles it is suggested to chose a simple oven, convection with humidification, with electromechanical controls, ideal for the cooking of traditional 'tried and tested' dishes.

For the more adventurous chef who is willing to try new techniques, it is suggested to chose an oven from the top range, with boiler and programmable controls. He will have a "full optional" appliance at his disposal: the ideal solution.

The more information we gather, the more we narrow the field, the model to recommend will appear automatically. By this brief analysis it is easy to understand that the Customer's satisfaction begins with the full comprehension of his needs.

#### Which kinds of control panels are available?

**INOXTREND** ovens are available with three different types of control panels: electromechanical (or analog), electronic and touch screen.

The choice of the control panel does not affect in any way the performance of the oven in terms of power, temperature and consumption, however, it does affects the working modality.

The main difference among the control panels is in their capabilities and potential functions depending on the oven on which they are installed.

#### **Electromechanical control panels**

The following devices can be found on the panel:

- mode selector: oven ON and OFF. Cooking cycle choice: convection, steam (in the models where this is available), combination (with progressive steam regulation, fast cooling function.
- temperature selector, with a regulation range from 50 to 270 °C;
- **time selector**, with minutes regulation (0-120) or infinite position (endless operation);
- lighting switch for the cooking chamber.
- "reset gas" switch on gas heated ovens.

#### **Electronic control panels**

The following devices can be found on the panel:

- **display to visualize parameters:** these displays show temperature, time, percentage of humidification and core probe parameters;
- keys: to select cooking mode and modify cooking parameters: temperature, time, humidification and core probe. some of the keys of the control panel permit the activation of accessory functions as reduced ventilation or autoreverse (available as optional);
- ON/OFF key;
- "reset gas" switch on gas heated ovens.

The electronic control panels can be vertical (**XT SNACK**, **XT SIMPLE** and **XT COMPACT** ovens) or horizontal type (**XT SIMPLE 51**).







#### **Touch small control panels**

These enable to select cooking parameters by means of various electronic devices:

The following devices can be found on the panel:

ON/OFF switch to turn on and off the oven;

**Display** 5" touch screen to visualize and select the cooking mode, the automatic cooking programs, the washing and maintenace programs.

#### Buttons to activate complementary functions:

- cooking chamber lighting;
- Opening and closing of the cooking chamber release valve;
- Cook & Hold to turn on the holding at the end of the selected cooking cycle.
- ventilation speed (high or low);
- activation of autoreverse function;
- activation of fast cooling;
- cancellation of a program;

#### **Buttons to select cooking mode:**

- cooking chamber temperature;
- cooking time;
- cooking control with core probe;
- Delta T function;

**START/STOP** to start or stop a cooking cycle or cooking.

In this kind of control panel are available:

- 150 stored cooking programs, divided in 6 groups;
- 2 automatic washing programs and 1 rinsing program.



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The touch small control panel is also available in horizontal version for the ovens series **XT SIMPLE 51**. Performances and controls are the same of the vertical version.



#### Touch key control panels

This type of control panel, where all controls are managed by a 9" touch screen, is installed in all **XT TOUCH** ovens.

**Touch key** panels include all performances of **touch small** panels and furthermore other specific functions of the series.

Among functions of these ovens we find:

- 4 ventilation speed with autoreverse;
- management of ventilation by inverter with a magnetic brake function during inversion of the rotation or door opening;
- possibility to use core probe with multipoint control (4 detection points);
- possibility to use thin probe for vacuum cooking;
- 4 differents working profiles;
- integrated Help function;
- 150 automatic cooking programs stored;
- 2 automatic washing programs, 1 rinsing program and 1 decalcification program (mod. with boiler);
- possibility for the user to create up to 150 new programs;
- management of simultaneous cooking Multi Cook;
- diagnosis system with screen display of malfunctioning or anomalies;
- USB connection for software upgrade, backup of the oven, and HACCP parameters management;
- possibility to manage, directly from the control panel, the XT smoker (optional);



#### How do you correctly install an oven?

Installation is a delicate operation and must be carried out by qualified personnel only.

You have to strictly follow the instructions of **INOXTREND INSTALLATION MANUAL** (you can find it inside the cooking chamber of each oven) and the relative safety standards.

Our advice on how to ensure a correct installation is as follows:

1-position **INOXTREND** oven properly by following the minimum required distances described in the installation manual. This operation will facilitate the following service operations. Make sure there are no heat sources close to the control panel.

2-Make sure the oven is leveled in perfect horizontal position (if this condition is not respected, eventual cooking liquids in the trays may move to one side causing non homogeneous cooking).

3-ensure that the electric connection is done with feed cable of adequate section, as indicated in the technical data table of the INSTALLATION MANUAL and that there is a protection switch upstream, in accordance with current regulation.

4-make sure the water connection is in accordance with connection of solenoid valves G 3/4'' placed on the back of the oven.

Water must have a pressure between 1,5 and 2,5 bars, and must not to be chalky: accepted hardness between 4 and 8 French degrees.

It is always advisable to install an upstream softener that will maintain the hardness level at the mentioned values.

Ovens running with water that has higher hardness levels will experience quicker scale formation on the wall, inside pipes and on the devices causing malfunctioning and further on the breakdown.

## Eventual technical assistance required to repair damages due to limestone and /or the supply of spare parts cannot be covered by INOXTREND warranty.

Both in case of electric and gas heated oven, make sure the installer duly respects all instructions of the installation manual.

When the installation is over, the installer must fill in and sign the "chart to check correct installation" delivered along with the oven.

This chart must be kept by the customer and will be asked by the constructor in case of warranty issue.



5- Connect the cooking chamber drain exactly as indicated in the **INSTALLATION MANUAL** and as illustrated on the label on the back of the oven. The drain must have no trap and be made in rigid pipes able to withstand temperature of 110 °C.

Under no circumstances must pipe diameter be reduced, it should be at atmospheric pressure with appropriate funnel type air intake. If the drain pipe is clogged for any reason, steam can escape from the door and bad smells can be produced in the cooking chamber.

**Gas heated ovens:** the oven connection to the gas main must be:

-done with metal pipes, either in galvanized steel or copper, situated where they can be seen;

-the appliance must be connected to an on-off mains valve, that is easy to operate. Use a three piece metal joint for connection between the pipe and the appliance; the seal of the joint threads is guaranteed using declared materials, suitable also for LPG.

-supplied with the specific gas type stated and required by the customer (for gas types see "technical data table in INOX-TREND INSTALLATION MANUAL) also indicated in the technical features label on the right panel of the oven.

When the installation is complete, it is advisable to check for any gas leaks in the environment. The check must be done putting brush-strokes of soapy water on joints and connections; a soap bubble warns there is a gas leak.

Gas heated ovens are supplied with a flue that releases combustion fumes outside of the kitchen (the oven can be also installed under an extractor, in this case it does not need a flue).



ATTENTION: the gas system of INOXTREND ovens is an air and gas premix system (PRE-MIXER); following modifications/transformations for a different gas type must be done by qualified personnel only, appropriately trained by INOXTREND and who have the suitable tools (see INSTALLATION MANUAL).

#### What does the installer have to check?

When the installation is complete, before the cook starts the oven, the installer will test the oven and will check the rotation of the motor (he will check it is in accordance with direction indicated on the panel for fan protection, if it is not, he will change a phase on the final terminal board).

The installer will check the whole functioning of the whole oven.

During cooking phases in steam mode he will check:

1- for any leaks in the pipes of the plumbing system and that the discharge works properly,

2- for any steam leaks coming from the bottom of the oven.

Other important inspections include the proper opening/closure of the oven door (when the oven is off and in operation) and steam tightness of the gasket.

If necessary he will also adjust the handle lock, the hinges and their alignment.

If the oven is equipped with steam condensation system, the installer will also check for proper functioning.

#### Cyclical maintenance: which controls to carry out?

We suggest to make a first check 10/15 days after the oven has been running. Check the connections and proper functioning of the door closure, and pay special attention to the blocking of the handle and lock screws (because the initial temperature ranges can produce some release, that if not adjusted in time, can cause the handle to break)

We advise to make a second check after 6 months from installation and control in detail:

- the whole functioning;
- the condition of the components by dismounting the side panel (where the controls are); if necessary, remove any dust or dirt from the components, from their connections and from air circulation slits on the bottom of the oven;



- the slits to cool down electrical components, so that they are free and not obstructed;
- the condition of the fan, opening the special protection panel (XT BOXTOR) inside the cooking chamber, rotating it from right to left;
- the thermostat bulbs;
- the efficiency of the plumbing system (for ex.: proper water output, eventual leaks, etc); if lime scale is found inside the cooking chamber, proceed with the cleaning of the injectors situated on the outlet of the solenoid valves;
- efficiency of the door closure; if necessary adjust the lock and the hinges;
- the perfect tightness of the gaskets.



In order to make a happy Customer out of those who purchased an **INOXTREND** oven, we remind you to:

- **listen** very carefully to what the buyer has to say in order to understand exactly the level of his culinary skills, how he intends to use the oven and which is the best choice to fit his requirements;
- **carry out** the installation according to the instructions in INOXTREND instruction manuals, taking very good care of the positioning, the electric and plumbing connections and especially those concerning the gas installation;
- check that the Customer has perfectly understood how to work the oven;
- **explain**, step by step, all the various functions of the appliance, how to use the accessories as well as the complementary functions;
- carry out very carefully the recommended controls.

In order to supply all the possible information about the proper functioning of the ovens, **INOX-TREND** organizes training courses for technical and sales personnel at its premises; furthermore, **INOXTREND** has a cooking demonstration schedule, that is planned with an expert chef in order to fully demonstrate the appliances' potential in order to respond to the user's requirements.



The **INOXTREND** team is always available to give you support and advice, and to receive your suggestions and feedback, because **INOXTREND's** target is:

- to do better,
- faster,
- with better organization and with lower expenses.

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