# Which Commercial Oven is Right for My Business?

 When deciding upon an oven, you must take into account what you'll be using it for. Each type of oven excels at some aspect, or all aspects, with all types of price points.

## Conventional Ovens

Conventional ovens work by utilizing a burner at the bottom of the oven, heating the air and walls around the product. Food cooks from the outside in, meaning the skin will cook before the center of a roasted chicken. Conventional ovens tend to be the most economical solutions to your roasting and baking needs, and can be combined with ranges to save space. A few factors keep conventional ovens from being the most efficient or effective ovens for cooking your food products.

1. Cooking times tend to be long, and the capacity is limited, which can limit food production.
2. Cooler air is trapped in a pocket around the food products, which deflects the hot air around the cooking cavity.
3. Different types of foods and different placements of food products can result in different cooking results. Inconsistent cooking leads to inferior final products.
4. Product at the top and bottom of the oven cook faster than product in the middle.

*Conventional Ovens\*LINK\**

There are four other types of ovens for general usage:

* Convection Ovens\*LINK\*
* Accelerated Cooking Oven\*LINK\*
* Combi-Ovens\*LINK\*
* Conveyor Ovens\*LINK\*

Additionally, there are 3 types of specific purpose ovens:

* Pizza Ovens\*LINK\*
* Finishing Ovens\*LINK\*
* Toaster Ovens\*LINK\*

## Convection Ovens

Convection ovens work in a similar fashion to conventional ovens. They come in assorted sizes (accommodating various numbers of half or full size sheet pans), and can be stacked either single or double units. Convection ovens differ from conventional ovens in that they use a fan to circulate the air in the cooking area. This serves several purposes:

* The circulating air breaks the pocket of air around the food, warming it faster and more evenly
* Food cooks faster (roughly 25% faster)
* Eliminates hot and cold spots within the oven, cooking all food within the oven evenly
* Browns food more effectively than a conventional oven

Convection ovens offer superior results in virtually any type of food product, when compared to a conventional oven. Faster cooking results in better baked goods, faster cooking poultry (with golden brown skin), better caramelization on vegetables, and effective browning of meats.

Convection ovens come in counter top models, floor models, and can be ordered in half size, or full size, as well as various heights to accommodate different amounts of sheet pans. Bakery depth models arrange the sheet pans differently to allow even better airflow among the racks.

Counter top models are electric, whereas floor models can be gas or electric powered. Counter top models are not as powerful or as effective as their floor model cousins, but they are more effective than similar countertop conventional ovens.

*Counter Top Convection Ovens\*LINK\**

*Floor Model Convection Ovens\*LINK\**

## Accelerated Cooking Ovens

Accelerated Cooking Ovens combine the best of impingement ovens with the best of microwave ovens. Impingement ovens utilize high-pressure, hot air shot out of nozzles onto the food, breaking the food's natural moisture barrier. These ovens, therefore, are great at cooking the exterior of food products, but the center of the product cooks more slowly. Microwave ovens, on the other hand, are excellent at cooking the center of food products by releasing the moisture and energy, cooking the product from the inside out. Accelerated cooking ovens combine the two into one unit, creating an oven that cooks product up to 15 times faster than a conventional oven, while retaining more moisture and better flavor.

The downside to accelerated cooking ovens is that they are the smallest type of oven out there, limiting the number of products that can be cooked concurrently.

*Accelerated Cooking Ovens\*LINK\**

## Combi-Ovens

Combi Ovens are, at the basic level, a convection oven and a steamer in one unit. This space-saver allows you to use steam-only, convection-only, or varying mixes of the two. Combi-Ovens cook the same objects in roughly half the time of a regular convection oven, but with the added moisture of a steamer. Most products will lose 1/3 less moisture, meaning the unit can pay for itself very quickly. Combi-Ovens come in gas or electric, and are a great way to save time, space, and money. They are initially more expensive than other oven types, but their ability to cook large numbers of items simultaneously without any moisture loss can greatly improve your kitchen's efficiency. Additionally, their effectiveness at cooking food evenly throughout the entire product can mean more profit, as less food is wasted.

*Using a Combi-Oven's different modes:*

* ***Steam Mode:*** Ideal for cooking vegetables, causing fewer minerals to be lost\*, as well as maintaining the color and texture of the vegetables. Remember, always season vegetables after steaming them, not before.
* ***Convection Mode***:  Use exactly the same as a convection oven, ideal for baking. Utilizing the circulating fan, baked goods are cooked on all sides simultaneously, and become crispier and flakier as the butter loses its moisture faster. Anything that a normal convection oven can do, a Combi-Oven can do equally as well.
* ***Combi Mode:***  Combining the two methods gets the best of both worlds. Meats are browned perfectly from the convection oven, while retaining 1/3 more moisture, proving more flavorful, as well as preventing waste. Combi-mode is ideal for meats, poultry, or other roasts, hard-crusted bread, and most importantly, re-thermalizing frozen foods.

One of the best applications for a Combi-Oven is for catering and banquet halls. The larger combi-ovens can have a sheet rack roll right into the unit, and it can retherm the entire rack's worth of plates in 7 minutes or less. In other words, pre-plate your food the day before the event, and when the food is required, you roll the cart in, and 7 minutes later you have all your plates hot and ready for service. This alone could save enough money on labor costs to pay for the unit itself.

Combi-ovens come in half size (accommodating 6, 10, or 20 racks at a time) and full size (accommodating 7, 10, 12, or 20 racks at a time). The first two of each (6, 10 half-racks, 7, 10 full-racks) are designed as countertop models, while the larger units are floor models that have carts that can be wheeled into them.

### Steam-Generator vs. Boilerless

Steam generator models are best suited for high volume applications. They require more regular service, and more parts on the units need to be serviced. This leads to a higher operational cost. Boilerless models, on the other hand, are not as suited for high volume applications, but they have a lower operating cost due to less frequent maintenance and cleaning.

### Water Filtration Systems

Installing a water filtration system for your combi-oven is absolutely vital and necessary. Not only does it keep your food free of contaminants, it also reduces the mineral build up within the unit itself. Reducing cleaning maintenance and improving the taste of your cooked products should convince you to install a quality water filtration system for your combi-oven.

**Final Note:**

 All models of combi-ovens require proper ventilation and drainage within 6 feet.

*Half Size Combi-Ovens\*LINK\**

*Full Size Combi-Ovens\*LINK\**

## Conveyor Ovens

 Conveyor Ovens use a conveyor belt to bring uncooked food into a cooking area, where it is cooked via radiant heat or impingement. The belt speed and temperature in the cooking area are controllable, allowing for consistent cooking of high volume product. Conveyor ovens are stackable up to 3 units tall, providing a convenient solution to supporting more volume without taking up additional floor space.

 **Why use a conveyor oven?**

1. Consistently bakes or roasts pizzas, subs, or other items with little fuss or monitoring.
2. Can help break down your operation to prep, cook, and finish steps, allowing a chain of assembly to be built.
3. Ease of operation means anyone can use it without training.
4. Consistency in cooking means your customers know exactly what they're getting every time.

###  Radiant Heat vs. Impingement

The easiest way to think of the difference between these two options is that radiant heat is like a conventional oven. Heating elements on the top and bottom of the cooking area heat the air and walls. Impingement, on the other hand, uses nozzles to push high-pressure hot air around the food, cooking it more evenly and thoroughly, as well as browning more effectively. Impingement ovens also cook 3 to 4 times faster than radiant heat models.

 Other than these four types of general ovens, there are 3 additional type of specific-purpose ovens. These ovens are ideal for generally one application or use, but in a pinch can be used for general heating as well.

## Pizza Ovens

 Pizza ovens utilize a stone or brick deck, heated by a source below the deck. The cooking area has a height of 7". This low clearance prevents the normal cold spot in the middle of convential ovens, and helps to equalize cooking times between the dough and the toppings of the pizza. Deck pizza ovens can operate via gas or electric power. Electric pizza ovens utilize an additional heating element in the top of the oven to further help cook the toppings at the same speed as the crust. There are two types of pizza oven; deck and counter top.

### Why should I use a Deck Oven?

* Best crust
* Traditional Taste
* Requires expertise to properly make pizza
* Cooking times are long
* Enough room to cook multiple pies at once, as well as reheat individual slices
* Can be stacked to have 2 full ovens in the foot print of a single oven

### Why should I use a Counter Top Pizza Oven?

* Require less space
* Use less energy
* Require less expertise
* Smaller, can only support one to two pizza's at a time
* Some models can be stacked, some as high as 3 ovens
* Made for establishments that cook 12-14" pizza's less frequently than a pizzeria

*Deck Pizza Ovens\*LINK\**

*Counter Top Pizza Ovens\*LINK\**

## Toaster Ovens

 Toaster ovens use fast heating infrared heating elements at the top and bottom of the oven. They have one to two metal racks that food is placed on. Toaster ovens are a more efficient way to toast sandwiches and bread-products than using the range oven or other oven. Toaster ovens come in both radiant heat (relies on natural air currents to heat food, can lead to uneven toasting) and convection (uses a fan to blow hot air around, toasting the entire product evenly) models.

Toaster ovens have other practical uses, but mainly, are used to take the work load away from other, more powerful and more frequently used, pieces of equipment.

*Radiant Heat Toaster Ovens\*LINK\**

*Convection Toaster Ovens\*LINK\**

## Finishing Ovens

 As the name implies, finishing ovens use overfire heat to put the finishing touch on a dish before it is ready to be served. Cheese caps are melted, desserts are glazed, and meat is browned. There are three main types of finishing ovens, which can be read about here\**LINK TO SALAMANDER / CHEESE MELTER / BROILER/GRIDDLE GUIDE\**. Depending on the model selected, they can have either movable heating elements, or moveable wire racks, to change the intensity of the heat. Additionally, some models have high/low temperature switches.

*Salamanders\*LINK\**

*Cheese-Melters\*LINK\**

*Broiler/Griddles\*LINK\**