

Understanding Pizza Equipment

Pizza represents huge business for caterers. It provides a focused menu, fast throughput of customers, has global appeal and does not require the kind of kitchen staff training that a full service restaurant needs. There is also a range of dedicated kitchen equipment available which makes preparation and cooking of pizzas consistent and quick.

Dough mixers

There are three types of mixers - planetary, spiral and vertical cutter mixers. The spiral mixer has a large bowl and an agitator that looks like a giant corkscrew. These are excellent for mixing dough, but some do not have attachments for additional preparation work such as sauce preparation, cheese grating or chopping vegetable toppings.

Vertical Cutter Mixers

These are high speed mixers with agitator speeds at about 1700 rpm. The dough mixing times for vertical cutters is between 75 to 120 seconds. This is useful if you like to mix your dough fresh during the day rather than a large batch done ahead of opening time. This type of mixer can also be used to grate cheese, but is not recommended for sauces because they can pulverise items such as chunky tomato sauce.

Planetary Mixers

A planetary mixer consists of a large bowl for ingredients and a dough hook agitator that stirs the dough. There is also usually an attachment point for driving a grater or vegetable preparation equipment. The planetary action causes the agitator to move in a figure-eight motion, allowing the dough to uniformly mix.

Rolling and forming

Low volume outlets can weigh out a doughball and roll with a wooden pin doing work and turn to fit the baking dish or required diameter. Hand-tossing is wonderful cooking theatre, but requires great skill by the pizza chef.

Using mechanical presses gives a uniform shape and thickness. There are three types of mechanical pizza press, the sheet roller, the cold press and the hot press. The sheet roller is a type of pastry roller, through which dough is fed to produce a large flat sheet. A hand cutter is then used to cut out the required diameter of pizza dough and the leftover dough goes back into the roller. This is for very high volumes of fresh pizza.

A cold dough press has a portion of dough placed on a baking dish and the dough is pressed to shape. Cold pressing gives a very uniform crumb structure, more like a bread than a crispy thin pizza. Hot pressing forms a skin on the pizza dough, which can allow for a rising up of the edges (deep-pan) and give a more crispy finished base after cooking than cold pressing does.

Refrigerated preparation tables

These are essential for any busy pizza operation. They combine three things for speed and food safety. There is a flat surface for working, usually in stainless steel but can be in granite or Corian, which is an acrylic polymer which has many of the features of granite. At the back of the work surface should be pick-bins, which will contain all the ready-prepared toppings such as onion, tomato base, olives, ham, etc, and all within reach for the pizza maker. Below the preparation surface will be refrigerated drawers for items that need keeping under refrigeration, such as extra cheeses, speciality ham, tuna, prawns, etc, as well as dough balls for rolling out. Most pizza preparation units are standard zero-plus refrigeration, but it is possible to get them with both freezer and refrigerated compartments.

Pizza Ovens

The way the pizza is cooked is as important to the finished quality of the pizza as is the dough. There are traditional stone ovens and high-speed ovens – the choice is as much about the volumes needed as the style of pizza offering and restaurant ambience. The fastest type of pizza oven is the conveyor oven, either radiated heat or forced hot air (impinger ovens), both of which are covered in the fast food cooking systems section of this guide. These are the fastest ways to cook pizzas from scratch, but they may not deliver the final taste, appearance and restaurant atmosphere the high end of pizza restaurants want.

There are two speciality pizza ovens, the deck oven and the traditional stone oven.

Traditional stone ovens

Open brick ovens are wonderful theatre reminiscent of old Naples and produce a pizza with a great taste and crispness, but require more effort and experience by the operator. They can come as wood-fired, gas or electric ovens.

The taste varies from pizzas cooked in conveyors because the pizza is placed directly on the cooking surface and bakes the bottom crust differently. Another difference in the crust is that the bottom is usually coated with flour or cornmeal to prevent the pizza from sticking to the surface, which adds a different texture, appearance and taste.

Stone baking surfaces have several advantages. Because pizza is best cooked from the bottom up to get a crispy crust and cook toppings, stone works well. Stone holds heat on the surface better than metal,

so less heat is lost in cooking. Another advantage to stone is that it absorbs oils and moisture that is released from pizzas making them dryer. These ovens can be used for much more than pizza, such as toasting the surface of a lasagne, making garlic bread or cooking meat and fish in a cooking dish.

Pizzas cooked in wood-fired ovens look and can taste different and are generally darker in colour than those cooked in other styles of ovens. Partly because they absorb some of the smoke, depending on the type of wood used, and the bottom crusts tend to be a little crispier because of the intense heat of the cooking stone.

Deck ovens

These are multi-level conventional-style ovens each with their own door. There may be as few as two decks or as many as five or even more. This allows many pizzas to be cooked in the one unit with different start and finish times. Because they are for pizza production, each oven is quite shallow. The base is usually stone or ceramic tile, so the effect on the finished pizza is similar to the traditional. They are controlled in the same way as a conventional oven and have a door to keep the heat in.

How do I find out more about Pizza Production?

Talk to the experts.

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