

As consumers' lifestyles continue to accelerate, they increasingly demand food in seconds rather than minutes. At the same time, foodservice kitchens are shrinking. In some cases, there's no kitchen at all; operators are purveying more meals and snacks in places like c-stores, supermarket delis, airport concourses, and office-building and hospital lobbies.

Ventless, countertop-sized fast-cook ovens, aka accelerated, high-speed or rapid-cook ovens, have empowered this new era of kitchen-less foodservice. First used widely in Starbucks and Subway, then increasingly in c-stores, they're now used everywhere from neighborhood bars to hospitals to catering operations. Conventional restaurants with kitchens and exhaust

hoods also find them handy, since they can set them up behind the front counter or in any odd corner in the back-of-house to handle customized and made-to-order fare with high throughput per linear inch of

Keep your fast-cook oven up and running by choosing a maker with a solid program for after-sale support, both culinary and service. *Courtesy of Merrychef.*  There's no standard definition of a fast-cook oven except that it uses multiple ways of heating to cut cooking time—some units are marketed as twice as fast as conventional ovens, others up to 15 times or more the speed of conventional baking. A food that cooks in a high-speed pizza conveyor oven in 3 or 4 minutes can emerge from a fast-cook oven in 1 to 1½ minutes.

#### **How Does It Work?**

Typically, fast-cook ovens combine microwave cooking with convection, impingement and/or infrared heating. One company uses a patented technology that integrates hot air and infrared in a way that achieves rapid cooking with no microwave element. "The key to the lightning-fast speeds is in the balance of heating technologies," says one product marketing manager. "Balanced systems ensure the most efficient delivery of technologies to gain the best culinary results."

Fast-cook ovens are really versatile and cook a wide assortment of foods to ideal doneness: microwaves penetrate into the surface to cook foods, while the convection, infrared and/or impingement heating can brown crisp or

caramelize the surface of foods in a way that regular microwave cooking can't. While places like Subway may only use the units for toasting sub sandwiches, these ovens can handle "baking, grilling, roasting, steaming, air frying and retherming both fresh and sous-vide foods," says a chef at one manufacturer. "They can cook grilled vegetables, salmon, scallops, flat breads, quick high-quality pizza, fast sandwiches." Foods such as French fries and fried wings are eminently doable as long as operators use "ovenable" products that already have an oil coating. Baked goods, including cookies, also belong in fast-cook ovens (although they're not recommended for delicate items like croissants). Fast-bake ovens also can produce items directly from a frozen state, with the microwave element defrosting

Small and ventless, high-speed

ovens are ideal for c-stores,

quick-serve restaurants and

delis. This unit cooks a frozen

14-in. pizza in less than 2 min.

the item before the other heating methods take over; obviously, items cooked from frozen will take a little longer. Multi-step cooking programs are typically preprogrammed and downloadable by USB port, so an untrained employee can produce the desired food at the touch of a button or screen icon.

The technology continues to advance. Manufacturers are developing fast-cook ovens that don't use microwave technology, since some restaurants have a "no microwaves" policy. Eliminating the microwave element also allows similar mixed-method fast-bake technology to be used in a conveyor oven as well as in an enclosed-cavity oven.

Further down the road, new technology may substan-



### **OUIPMENT** COMPARISON

tially improve cooking results. "In the next three to five years, you're going to have digital rapidcook ovens, referred to as RF cooking, that provide the ability to get feedback from the food item as you cook it so you can modify the setting almost in real

Some makers can finish ovens in red, green, with stainless. Choose a colorful model for your Courtesy of TurboChef.

time," says the president of one oven company. However, he adds, these units are likely to be quite expensive at first (although expect substantial savings in reduced electrical needs).

#### **Ready To Specify**

Considering the purchase of one of these small but speedy appliances? Here are some questions to ask yourself and your dealer:

blue and black along display kitchen.

> What foods do you plan to cook, and what speed and throughput do you need? Will the staff be producing multiple foods at once or in short order, or are you planning to cook the same things over and over? Will you use the oven for baking? (If so, you'll probably want a convection

component rather than impingement, since the air flow of convection is much gentler.) You may not need a fast-bake oven at all. If employees are just steaming vegetables or producing simple egg sandwiches, a commercial microwave oven may be most appropriate. For other needs, a conveyor or combi oven might be best.

What's your perfect balance between oven capacity and compactness? In some operations, counter space is extremely tight, so the smaller, the better. In other cases, high production needs or the capacity to fit a 16-in. pizza may dictate a larger cavity size. (See the Gallery for dimensions of most recent models from seven suppliers.) Some ovens are stackable; a pair of stacked ovens might be the best solution if you need to cook multiple foods at the same time. If you expect to place ovens behind the front counter in view of customers, aesthetics may be important; for instance, some ovens are available in different color finishes.

Do you have the right electrical outlets? These ovens take a lot of juice, so electrical service must be 240V or 208V and 20, 30 or 50 amps.

Is the unit UL listed for ventless operation? While manufacturers market all fast-cook ovens today for ventless operation, not all have the UL seal.

Is the unit easy, safe and comfortable for the employees who will be using it? Are the icons easy to understand and use? How many programs and how many steps in the cooking process will the oven accommodate, and are they downloadable by USB? Is the exterior cool to the touch? Is the oven door configured for safe and easy loading and unloading of food?

What culinary and service support does the manufacturer offer? You'll want support should you run into any issues. At least one manufacturer has a 24/7 service support call center.

## FAST-COOK OVEN GALLERY

#### **ACP AMANA XPRESS IO ARX SERIES**

Amana Commercial Xpress IQ ARX Series high-speed ovens are ventless, compact and energy-efficient—ideal for front-of-house and cook-to-order applications. Ovens operate 15 times faster than conventional ovens. Units feature a large True-Touch HD touchscreen display. Customizable smart interface supports 25 languages, stores up to 1,200 programmed menu items, and allows for simple programming through Wi-Fi, Ethernet, and USB flash drive. Flexible programming allows for endless combinations of impingement, convection and microwave energies. Exterior dimensions are 14½-in.W x 29¼-in.D x 22¾-in.H; cavity measures 12<sup>1</sup>/<sub>4</sub>-in.W x 12<sup>1</sup>/<sub>4</sub>-in.D x 7-in.H.

acpsolutions.com

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#### **BAKERS PRIDE E300 SPEED OVEN**

Bakers Pride ventless E300 Speed Oven combines microwave power and top and bottom air impingement to provide impressive cooking speed in a small footprint. The side-launch microwave design accepts low-profile metal pans, and the air speed is adjustable (from 10%-100%) so you can cook, reheat, bake, or brown any combination of proteins, vegetables, or baked goods. Program up to 384 recipes with 6 cooking steps each from the easy-to-navigate touchscreen display. Overall dimensions are about 223/4-in.W x 33-in.D x 20-in.H; cook chamber measures 15-in.W x 14-in.D x 8-in.H.

bakerspride.com

#### Merrychef eikon e2s High Speed Oven combines tuned impingement, microwaves and convection for ventless, quiet rapid cooking—up to 20 times faster than a conventional oven. Convection fan setting varies from 10%-100% in 1% increments. User-friendly features include cool-to-touch exterior, icon-driven screen controls, 1,024 cooking profiles transferable by USB, built-in diagnostic testing, easy-access front-mounted filter, and accessory storage on top of oven. Overall size of Classic model is 14-in.W x 23<sup>2</sup>/<sub>5</sub>-in.D x 24<sup>2</sup>/<sub>5</sub>-in.H; cavity measures 12-in.W x 12-in.D x 7-in.H. Options include red or black exterior.

**MERRYCHEF EIKON E2S HIGH SPEED OVEN** 

merrychef.com



Transform your business into a food preparation powerhouse with the ventless MultiChef XL by MTI Products. It uses convection, rapid impinged air, bottom infrared and precision microwave to reduce cook times by more than 80%. Create up to 80 preset menu items; the USB port uploads and downloads recipes. Unit is easy to use and clean; 2-step cooking system puts prepared menu items just a few taps away. Unit overall measures 21-in.W x 313/4-in.D x 251/3-in.H. Internal dimensions are  $15\frac{1}{2}$ -in.W x  $14\frac{1}{4}$ -in.D x  $5\frac{3}{4}$ -in.H.

multichef.com





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## FAST-COOK OVEN GALERY



#### **OVENTION DOUBLE MILO-16 OVEN**

Ovention's Double MiLO-16 Oven uses decoupled air and top and bottom infrared (IR) technology (no microwaves), one of the first successful integrations of hot air and IR in an oven that applies the strength of each technology to achieve fast cook times. Unit features 2 independently controlled top and bottom cavities, each with its own control panel and interior light. UL-listed ventless operation provides installation flexibility. Touchscreen display comes with security passcode and countdown timer. Use the USB port to upload and download recipes; stores 1,000 recipes per cavity. Exterior measurements are about 29-in.W x  $32^{1/2}$ -in.D x 31-in.H and cavity dimensions are  $17^{1/2}$ -in.W x  $18^{1/3}$ -in.D x 4-in.H.

oventionovens.com



#### PRATICA ROCKET EXPRESS SPEED OVEN

Pratica's Rocket Express Speed Oven uses a combination of convection heat, impinged air, bottom infrared, and precision microwave to reduce cook times by more than 80% with chef-quality results. A removable catalytic converter breaks down grease-laden vapors allowing for ventless operation. Unit stores up to 1,024 recipes with ability for 8 steps each; USB port uploads/downloads recipes. Other features include a user-friendly interface in multiple languages, cool-to-the-touch exterior and ventless side panels that allow for zero side clearance installation. Unit exterior dimensions are 21-in.W x  $31^3/_4$ -in.D x  $25^3/_8$ -in.H; interior chamber measures  $15^1/_2$ -in.W x  $14^1/_4$ -in.D x  $5^3/_4$ -in.H.

praticausa.com



#### **TURBOCHEF ECO**

The Eco is one of TurboChef's most energy-efficient ovens and has one of the smallest footprints. The control system precisely coordinates impinged airflow with top-launched microwave to deliver product-specific results. Integral catalytic converters allow for UL-listed ventless operation. Smart menu system stores up to 256 recipes. Customize menu settings via Wi-Fi, USB or manual entry. Single unit measures about 16-in.W x  $23\frac{1}{2}$ -in.D x  $21\frac{1}{2}$ -in.H; cook chamber is  $12\frac{1}{2}$ -in.W x  $10\frac{1}{2}$ -in.D x  $7\frac{1}{5}$ -in.H. Powder-coated color options include red, green, white, black and blue.

turbochef.com

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