



Whitepaper:

How can combi ovens benefit your foodservice operation?

Combi oven integration into U.S. foodservice operations poised to take off as technology delivers versatility and savings worldwide

Julia Child famously encouraged viewers to *“find something you’re passionate about and keep tremendously interested in it.”* Considering the source, this advice rings particularly true for anyone who prepares food for a living. Whether crafting a meal for discerning patrons at a white tablecloth restaurant, or planning to serve hundreds in an institutional setting, success comes through enthusiasm and dedication to career-long learning. It requires staying open to new techniques and being willing to integrate the latest advancements in technology.

In foodservice operations of all sizes around the world, the most recent game-changing advancement has been the availability and growing acceptance of combination ovens – more commonly called “combi” ovens. Most culinary professionals are already well aware of what a combi oven is and how the technology can be utilized to significantly enhance food preparation and production. By combining the functionality of a convection oven and a steamer, combi ovens balance convected heat and humidity to dramatically accelerate cooking times and produce more desirable results.

Numerous Benefits

Everything prepared in a combi oven benefits from an optimal level of moisture and heat. Roasted meats stay tender and juicy, steamed vegetables keep their natural color while retaining key nutrients and puff pastries turn out light and flakey. A wide variety of items can even be cooked together without the worry of flavor transfer.

Of course, when asked to identify the primary benefit of combi ovens, most users quickly point to the overall versatility they provide. Combi ovens make it possible for foodservice professionals to perform an impressive array of functions within a single piece of equipment – cooking, roasting, steaming, smoking, grilling, braising, dehydration, baking, retherming, oven frying, and more. Because the cooking environment in a combi oven can be precisely controlled, they are ideal for more sophisticated cooking techniques including sous vide, and many chefs are even using the technology to infuse a variety of surprising flavor profiles into their dishes.

“Until somewhat recently, this type of all-in-one food preparation solution would have been considered space-age technology,” says Robert Simmelink, executive chef at Alto-Shaam. “But, today combi ovens are readily available and they’re helping to revolutionize food preparation worldwide. We’ve found that these ovens can increase food yield by 20 percent, cut preparation times in half, and increase production rates by 40 to 60 percent. Needless to say, this translates to significant savings for foodservice operations of all types.”

Based on the unequalled advantages delivered by combi ovens, many industry insiders are surprised the technology isn’t integrated into even more kitchens. While widely used in a variety of cooking environments throughout Europe, it’s estimated that fewer than 10 percent of kitchens in the United States are currently taking advantage.



Why has the domestic market been slower to adopt combitherm technology? Let's take a closer look.

Investment

Bringing in industry-changing technology requires a capital investment. But, before making any major equipment purchase, it's important to closely examine the savings a machine can deliver over the long term. Design and functionality advancements built into combi ovens make the units extremely energy efficient. In fact, combi ovens have been shown to cut water consumption by up to 70 percent while lowering gas or electric use by as much as 50 percent.

To help put the potential savings offered through energy efficiency into perspective, the Food Service Technology Center reported that if the foodservice industry could reduce the amount of energy it uses by just 1 percent, the industry as a whole could save nearly \$2 billion.

Leading oven manufacturers, like Alto-Shaam, are constantly refining combi oven technology to maximize energy usage and help end users save money. The company has placed energy savings at the very heart of its product development process. Through its EcoSmart® philosophy, Alto-Shaam stays focused on helping customers control and enhance food through the efficient use of utility resources.

Foodservice operators using combi ovens also find savings through labor efficiencies. For example, a combi oven can be programmed to prepare items overnight and then hold completed food at the ideal temperature until it's ready to serve, extending preparation times well beyond typical work hours. Because combi ovens are also incredibly easy to use, a greater number of employees can participate in the food preparation process. This helps to maximize available resources while also freeing over-scheduled chefs and busy facility managers to focus on other important tasks.

"The oven cuts back our cooking times allowing us to double up our production loads," says Andy Dombrowski, corporate executive chef with Zack Bruell Restaurants, Cleveland Ohio. "We braise beef shoulders in the combi and have reduced cooking times from 6-7 hours to 4 hours. And we've achieved a better quality. Overnight cooking in the oven allows us to do 2-3 batches per day which greatly relieves daily production pressure. I sleep a little better at night knowing the food is going to be done when I get into the kitchen tomorrow. It also makes those moments when you're in the weeds a little easier!"

Due to the unmatched array of foods combi ovens can prepare – and the time savings they deliver – many foodservice operations are finding the technology makes it possible to offer an expanded variety of items, which leads to new revenue streams. Plus, offering a wide variety of foods invariably leads to happier customers and greater participation – the keys to long-term success and profitability for any foodservice operation.

Integration

Space is always at a premium. Most food preparation sites are packed full of people, boxes, containers, pot and pans, and an assortment of large equipment. Squeezing in another major appliance is a serious concern for most people. But, by combining the functionality of several pieces of equipment into a single machine, combi ovens are actually a helpful solution when it comes to maximizing a facility's footprint.

"Combi ovens pull double duty – if not more – so they're ideal for anyone with limited space," Simmelink continued. "When integrating a combi, it's often possible to remove a convection oven, a range, a kettle, a steamer, a smoker, and more – depending upon the menu and the operation. Combis typically allow operators to consolidate and reclaim valuable square footage beneath the hood and replace outdated, inefficient equipment."

"The combi oven has replaced the need for our immersion circulators, convection ovens and steamers in our kitchen, says Dombrowski. "We've found a wide variety of uses for the oven. We use it to braise, sous vide, blanch our vegetables, roast, smoke and bake."

Manufacturers like Alto-Shaam have designed combi ovens carefully to integrate into most cooking environments. The company's ovens now offer a wide variety of sizes and features – like recessed doors and ventless hoods – that allow the units to be placed virtually anywhere.

Instruction

New technology can be intimidating sometimes. But, the learning curve required to use a combi oven is now minimal thanks to the integration of intelligent design and highly-intuitive controls. The best combi ovens can now be programmed quickly and easily through icon-driven interfaces, much like those on your smart phone.

Digital instructions are offered in multiple languages and built-in diagnostics help make maintenance easier than ever. The software utilized by today's combi ovens can be quickly updated and any stored information can be effortlessly transferred from one oven to another –an important feature for operators with several ovens or multiple locations.

Phil Haseker, chef/dietary manager at ProHealthcare Waukesha Memorial Hospital in Waukesha, Wis., serves up more than 900 lunches a day. He appreciates the ease with which the technology of his combi can keep up with demand.

"I can program recipes on my computer and transfer them to the oven," says Haseker. "It's wonderful."

Advanced memory capabilities make it possible to program hundreds of recipes and cooking procedures into most combi ovens using a simple USB interface. Digital photos can even be uploaded and stored, truly customizing the equipment for the specific menu application. Of course, most ovens allow the user to select

between automatic or manual operation, so highly-personalized preparation remains an option for those looking to maintain tighter control.

“As much as technology has made combi ovens easy to use, it’s still critically important to get proper training,” says Simmelink. “There are just so many ways combis can help save time and money. Let’s put it this way, using a combi oven for a single function is like using a smart phone to simply make phone calls. The key to maximizing any new technology is gaining a clear understanding of its numerous features and benefits.”

Like many service-oriented companies, Alto-Shaam stays connected to its customers in a variety of ways. 24/7 support is provided by phone as well as the company’s website. Web-based tutorials and demonstrations are also available on demand. Most notably, the company offers hands-on product demonstrations at more than 50 authorized culinary training centers throughout the United States including its Culinary Institute, which provides a memorable and highly effective way to learn about the company’s full range of commercial products, resources, and support services.

“The people at Alto-Shaam really understand my needs and clearly have the structure in place to properly train my team and address any service-related issues,” says Patrick Sheerin, chef and owner at Trenchermen restaurant in Chicago. “Choosing Alto-Shaam combi ovens was definitely a smart move for us. They’ve been a tremendous partner for our business.”

A Promising Future

There are clear signs pointing to an uptick in combi oven integration among U.S. foodservice operations of all sizes. Leading manufacturers have been listening closely to the needs of operators and have been moving quickly to address those needs. Combi ovens are now providing measurable return on investment by streamlining operations and minimizing the consumption of energy. New space-saving features and intuitive controls are making the units easier to integrate, and companies like Alto-Shaam are investing heavily in sales support and customer service to offer real-time assistance and on-demand education.

“There’s little question that combi ovens are here to stay,” Simmelink added. “Food service professionals around the world are benefiting from the unique combination of speed, precision, versatility, and reliability offered through Combitherm technology. And, owners and operators are taking note of the efficiencies and cost savings these ovens deliver. As we head into 2014 and beyond, I believe combis will become a ‘must have’ addition to any modern, efficient kitchen. Quite frankly, it’s an overdue transition.”