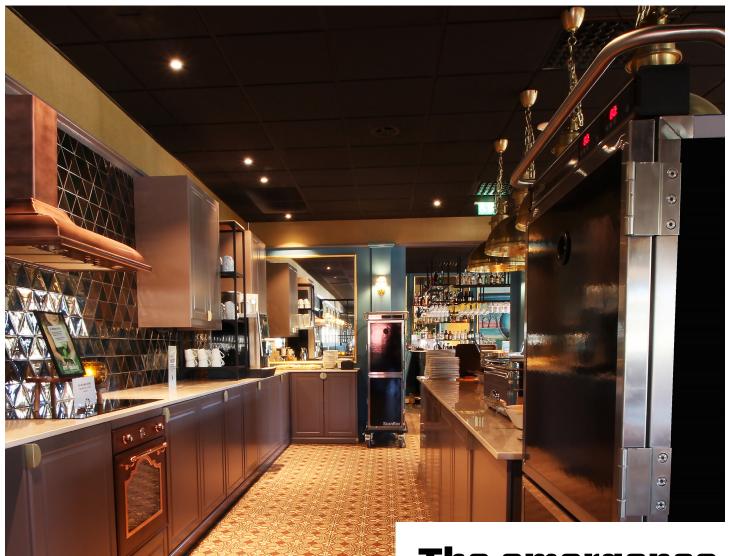
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FCSI WHITEPAPERS



The emergence and evolution of multifunctional equipment

The foodservice equipment market is growing fast and that growth is expected to continue in the years ahead. Data from Future Market Insights shows the global market is currently worth \$42bn, and is expected to reach \$61.6bn by 2029.

INTRODUCTION

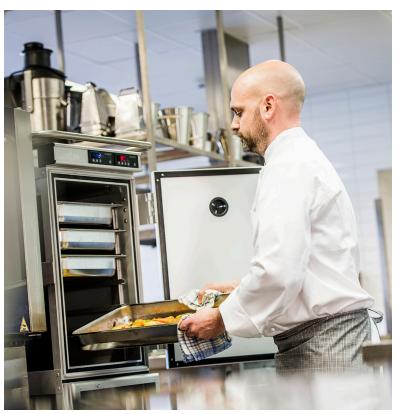
Driving a significant proportion of this growth is the increasing desire among foodservice operators to invest in compact and multifunctional equipment. The majority of restaurant owners are seeking smaller pieces of kitchen equipment in order to make the best use of limited space and to enable staff to perform multiple functions at the same time.

The emergence of equipment with multifunctional capabilities will, according to the data and current projections, heavily impact the market for conventional models in all areas of foodservice, and multifunction equipment will play a pivotal role in market growth.

Shrinking kitchens, a reduced labor pool and cost pressures from all sides are just a few of the factors that are contributing to the trend towards multifunctional equipment in foodservice. Operators have lower budgets to play with, while customer expectations are higher than ever. At the same time, operators have to meet those expectations with fewer skilled staff to operate complex machines. Efficiency and ease of use are the watch words in commercial foodservice today.

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This whitepaper, produced with the support of ScanBox, will outline the factors driving the trend for multifunctional equipment, taking in the views of FCSI consultants who will share their experiences of working with clients to incorporate versatile machines. It will also explore the developments in multifunctional equipment in recent years, looking at how manufacturers have built versatility into equipment of all kinds.



Compact and multifunctional equipment saves space and is more efficient

THE SPREAD OF MULTIFUNCTIONAL INNOVATION

In the world of multifunctional equipment, much of the focus has been on cooking equipment. Understandably, cooking units that can perform a range of functions are becoming essential for saving space in a busy kitchen.

"Every square meter is money," says Frank Wagner FCSI, manager at design consultancy KDrei in Berlin. "The most multifunctional part of any foodservice outlet is just the stove. It can braise, grill, whatever you like, and the combi oven is the most commonly used piece of multifunction equipment. Everybody has one these days."

"Personally, I was a big fan of pressure bratt pans, which were widely used in mass catering," he adds. "They are very nice pieces of multifunctional equipment but they were often not used to their full potential. Now that people have grown up with them they are being used more widely, but like a lot of multifunctional equipment they are more expensive. Also, they mean you have less equipment, which gains a lot of space but means you need to manage the workflow differently."

A typical multicooker is able to boil, simmer, bake, fry, deep fry, grill roast, stew, steam and brown food, making a clear winner in the battle to save space in the kitchen, which is where the biggest challenges arise for any foodservice operator.

"Inside the kitchen it is common to have this kind of equipment," says Johan Öberg Larsson FCSI of Swedish consultancy Storköksbyrån. "Rational has a heavy duty table for cooking and frying and that kind of thing is very common in Sweden because it does not take up so many square metres but it can perform many functions – broiling, boiling, roasting and frying can be done in the same area."

"In my world, space and cost are the same," he adds. "Every square meter in a professional kitchen is expensive, so having a smaller kitchen with the same functions will reduce costs. Also, with multifunctional equipment there is no need to run around in the kitchen because the same work can be done in a more efficient way in a smaller area."

In any application – cooking, storage, food transport, refrigeration – multifunctional equipment can also have a positive impact on the foodservice industry's efforts to be more sustainable. Using less equipment to perform a range of functions means that fewer materials and resources are being used to manufacture equipment that can handle the same output. Furthermore, there is often a gain in terms of resource efficiency, particularly energy and water used.

"In terms of the environment and sustainability, multifunctional equipment is good for everyone," explains Larsson. "It is good to use less area and less material in the buildings and there is also the fact that it uses less energy. Energy is expensive here in Sweden, so we need to reduce costs."



"The most multifunctional part of any foodservice outlet is just the stove. It can braise, grill, whatever you like, and the combi oven is the most commonly used piece of multifunctional equipment" Frank Wagner FCSI

> Another advantage is that multifunctional equipment uses less energy

"The dramatic rise in energy costs means we are talking about using the kitchen during the night because they are more expensive to run during the day," he adds. "During the night the cost is lower and you need to plan the kitchen for that with multifunctional tables and combi ovens that can be used overnight for low-temperature cooking. It is good for the environment and good for cost-efficiency, which is why it is becoming more popular in Sweden."

Although much of the focus for the development of multifunctional equipment is inevitably on the cooking cycle, it is not only ovens and versatile cooking tables that are at the center of innovation.

"We are also seeing shock freezers being used as small ovens now," says Wagner. "They can freeze but they can also do low-temperature cooking. Here in Berlin, bakery shops cannot bake overnight, but products that are stored in the refrigerator overnight can be made ready with a warming process that starts in the morning and then speeds up to get them ready."

The concept of multifunctionality is actually pervading every part of the foodservice equipment market. The development of versatile, space-saving and cost-efficient equipment is happening across all aspects of food preparation, cooking, storage and transportation. Much of the development so far has been aimed at improving processes in the kitchen, but there is now growing emphasis on the role of multifunctional equipment that can link back-of-house processes to front-of-house areas.

LINKING BOH AND FOH

The importance of having versatile equipment that can bridge the gap between front-of-house operations and the cooking processes in commercial kitchens has long been understood in many settings – hospitals are a prime example – but changes in the way restaurants and other foodservice establishments operate is bringing this issue into the mainstream.

In many foodservice settings, insulated food transport carts are becoming an essential part of the food production process, and innovation is rife for both cold and hot holding.

"That kind of equipment has been used in hospitals for a long time, and in central kitchens in other settings," explains Wagner. "Food can cool down in a trolley and so they are heating it up while transporting it. These are sophisticated pieces of equipment, with induction capability and everything."

"Some restaurants are forced to put central kitchens in locations where it is cheaper to cook, so that the restaurant itself just has seats for guests," he adds. "The central



"The dramatic rise in energy costs means we are talking about using the kitchen during the night because they are more expensive to run during the day"

Johan Öberg Larsson

Ovens and cooking tables are not the only centers of kitchen innovation

kitchen is somewhere else and the food is brought in and finished, though not every product can be transported."

In food storage and transportation, the key factor is flexibility. Whether food needs to be kept hot or cold, maintaining quality is essential. This requires not only the inclusion of effective insulation materials, but also a consideration of many other key factors – precise temperature control, air circulation, compact and ergonomic design. Storage and transportation units need to be compact and streamline to fit in with the back-of-house operations and not clutter the kitchen area. At the same time, they need to have the capacity to hold and transport potentially large volumes of food without any loss of quality or deviation from the required temperature.

Carts that take the food from the kitchen to the serving area are much more than just boxes. They are becoming sophisticated pieces of multifunctional equipment that can suit a vast range of commercial foodservice operations.

"The multifunctional approach has really taken off, not only in cooking but also in the serving area," says Larsson. "We work a lot with combi-function plates, which can be hot or cold plates depending on the time for serving. They are good for hotel lunch areas or in an office restaurant, such as Google's main office in Sweden, as they can be used in different ways at different times."

"We are also using serving trolleys with different functions, such as those made by ScanBox, which are good for hospitals, for instance, if you are serving food in different areas, but also suit a growing number of restaurant operations."

The Swedish company ScanBox is a prime example of a manufacturer that has taken the needs of many types of foodservice operation into account when designing food transport carts. Its extensive range of products is designed to be elegant to fit in with front-of-house areas, yet sturdy for back-of-house.

Many of the items in its range are half the weight of comparable competing products, though they are designed for use in heavy duty areas. All are very easy to move and operate, even those models with the highest capacity. The idea of maneuvreability and heavy-duty stem from the company's long experience in supplying equipment to schools and senior care centers in Scandinavia.

All products are made out of a well composed and flexible sandwhich with carefully selected materia – fiberglass reinforced plastic (GRP), 30mm Polyurethane foam insulation and anodized aluminum on the inside. These materials and composition creates a barrier that holds temperature over extended periods of time, robust and lightweigth for transportation. Especially with the 160mm easy-rolling castors as standard.



"The multifunctional approach has really taken off, not only in cooking but also in the serving area"

Johan Öberg Larsson

ScanBox equipment is designed to be elegant and versatile yet also robust

To handle potential collisions, the stainless steel chassi on the cart is protected with rubber cladding, while the stainless steel top rail not only protects the box, but also serves as a tow handle and facilitates loading on top of the unit.

The push/pull handles on the back of the cart have been ergonomically designed to ensure that the operator is in the correct working position while handling the carts. Furthermore, a digital display shows the temperature setting in each of the boxes, and can indicate when the desired temperature is reached. This display is at eye level to help operators use the carts with minimal strain.

Maintenance and cleaning are also fundamental considerations in the design process, which is why Scanbox carts feature replaceable seals and detachable racks on the inside. The design also allows air to circulate freely between runners, thus ensuring that a uniform temperature can be maintained throughout the cavity.

The Ergo Line from ScanBox is designed to meet the needs of kitchens with limited space or frequent transports. Its Banquet Line is made to optimize space and capacity for operations that require sustained food quality, high capacity and style. The Banquet Master is intended for large-scale catering and banqueting and enables chefs to cook food in a combi oven and then roll the whole rack straight into the trolley, which reduces the risk of spillages and burns, and optimizes food quality.

Furthermore, there is an undercounter line that suits lounges and smaller serving areas, and can operate either as a stationary unit or a mobile external catering box. The Food2Go range is a mobile serving platform for cook-serve applications, making it an ideal choice for catering firms, hospitals and schools. There is also a specialist Bakery Line designed to keep baked goods hot or cold, and a highly versatile Stackable range of insulated food boxes suitable for small-scale catering operations.

CONCLUSION

The extensive range of equipment from manufacturers such as ScanBox shows that the vital link between the kitchen and the serving area is well served by multifunctional equipment, which is no longer found only in commercial kitchens.

"We specify multifunctional equipment every day and we talk about it in every project," says Larsson. "There are occasions where the customer needs to talk about these things to get the best solution for the long term, which is always to have multifunctional equipment that takes up a small area but offers high levels of flexibility."

No doubt innovation will continue, as designers of multifunctional equipment work closely with their customers to define the next step in the evolution of versatile and flexible equipment. As the market data shows, growth in the foodservice equipment market will be largely driven by multifunctional products, but the versatility they offer is already at the fingertips of commercial foodservice operators.

VIEW FROM THE SPONSOR

In a world where technology is setting the pace, demands change fast and operations need to adjust quickly. Add post-pandemic struggles with staff shortages, limited supply, and increased costs and you'll see why this is a tough time for the foodservice industry. Unfortunately, there are more layers such as war, political instability, and environmental threats. Nevertheless, we all need to eat, and the foodservice industry usually finds a way to handle adversity. To survive and thrive, we need to work together, reduce waste, and use technology in a smart way.

Manufacturers, distributors, and designers, alike, need to help operators with solutions that are multifunctional. This means products and services that can be used for many purposes, are versatile and can adapt with the ever-changing demands of their customers. Multifunctionality is key to reduce costs, investment, and floor space. We need to help operators solve staffing issues and energy costs. Smart and innovative solutions will reduce the need for staff by solving bottlenecks and increase the workflow.

Multifunctional food logistics equipment that seamlessly facilitates back-of-house and front-of-house reduces staff, and cost has a key role. Imagine a product that creates smooth handovers in the kitchen, transports easily over any surface, and has a nice-looking design fitting in next to the serving station. These products exist, and the solution-oriented manufacturer is ScanBox.

ScanBox products are made of carefully selected materials, and are built to last for +10 years of heavy-duty transportation indoor and outdoor – over thresholds, on trucks, and out at sea. The black exterior with stainless steel details fits into most serving areas and staff can work close to the buffet line for easy refills. It can strengthen any operation's brand by custom design exteriors – fit in to the environment, become a billboard on wheels, or realize your concept. Let you imagination set the pace for the future. That is multifunctionality that matters!

Jens Borgqvist, marketing manager, Scanbox

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