

PACKING HEAT

The oven is the beating heart of any bakery, so making the right choice is crucial – Alice Cooke takes a look at why you shouldn't put it on the back burner



WORDS
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We want more, we want it fresh and we want it now. Right now. And that's the challenge facing bakers – and their ovens – today. Ideally, the oven should be able to cook multiple products at once, not take too long to heat up or cool down, be energy-efficient, easy to clean, not too expensive to buy or maintain, or take up too much space, oh and not make the kitchen so hot you feel like you're in danger of losing a layer of skin or an eyebrow.

Sounds like a tall order? Perhaps. On the one hand, technological wizardry means advances are happening apace,

integrated smart systems, which have the ability to be linked to the internet using a hard-wired cable or a Wi-Fi link. This means that you can easily access the oven remotely from an office or anywhere else in the same building, allowing the user to update programmes, check data and monitor energy usage.

Being linked to the internet also means the ovens can share recipes, programmes and cooking settings between one appliance and another, which is ideal for multisite bakeries with similar product requirements.

connectivity as standard, meaning they can be connected to the internet straight out of the box without the need for purchasing additional equipment, according to product development chef Shaune Hall.

The folks over at Rational call their smart system ConnectedCooking. Simon Lohse, managing director of Rational UK, says: "The system ensures consistent baking results across the entire estate, but managers can also check on operational efficiency of multiple units, and maintenance engineers are able to constantly check a unit's status."

With the company's iLevelControl model, it's possible to bake different goods simultaneously in one combi oven. The baker puts different products on different racks, then the oven monitors each rack individually, to the second. It adjusts the baking times for each rack, allows for different quantities and can even allow for the number and duration of door openings.

To achieve a similar goal, the Polin Hybrid ovens from Brook Food Processing Equipment allow for up to three distinctive baking styles all within the one oven.

"They can be used as direct fired, cyclothermic or convection ovens, each of which add different elements to the profile of the bake," according to Brook's marketing director Ann Wells.

At Euro Catering, Darren Massey, in-house development chef, says their Debag specialist bakery ovens have a Smart-Cook bake option.

"Smart tech means finding out about issues before they become a problem"

and there are more ticks on that list than ever before, but on the other, consumer demands are changing all the time, and as such time, and temperature are no longer the only factors to consider when choosing an oven. Variables including moisture, heating type and airflow now bring opportunities for bakers to gain more control over even the smallest of details, allowing for more precise, efficient baking.

And in the interests of efficiency, more bakers than ever before are now looking to

WHAT'S ON THE MARKET?

Retigo's combi ovens are one such example.

"Not only do they use smart connectivity, making the baking process quicker and easier, they also have an advanced steam generation system, which means the heat exchanger uses the heat generated by the exhaust steam to reduce the amount of electricity required, making the whole process more cost-efficient too," says Radford Chancellor, Retigo's non-executive director.

Falcon Foodservice Equipment's version, the Lainox Naboo combi oven range, has the advantage of inbuilt Wi-Fi

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...15% is the initial purchase



Brook tunnel oven



Houno combi oven at a new Tesco store in Calne, Wiltshire

WHAT TO CONSIDER WHEN CHOOSING AN OVEN:

- Running costs
- Versatility
- Space
- Cost (running and initial outlay)
- Ease of use
- Energy efficiency
- Safety
- Ease of cleaning
- Reliability
- Longevity



Bread cooking in a Rational SelfCookingCenter

This uses sensor technology to automatically adjust the oven's power, depending on how many of five 400x600mm bakery trays are loaded – something it can automatically detect once programmed. Bakers can cook single or full loads at the touch of a button, with Smart-Cook working out the correct cooking parameters for a perfect bake. "This functionality makes life easier, but also helps cut down on energy and product waste," says Massey.

The baker can also go further, should they wish, and allow the oven to recognise the product loaded and automatically select the appropriate cook programme.

We can't decide if this is hugely exciting or slightly terrifyingly intelligent, (à la Wallace and Gromit, A Matter of Loaf and Death).

THE FUTURE IS... SMART

If that wasn't new-fangled enough, there are now also ovens that tell bakers when the goods on each individual rack are ready – the lights on a particular rack will flash when it's ready to be loaded or unloaded. It's now also possible to adjust the humidity, temperature, air speed and the baking time to suit the specific dough you are preparing, and bakers can even opt for light or dark colouration. Wizardry.

Why is smart tech the latest thing to hit the bakery? Glenn Roberts, chair of the Catering Equipment Suppliers Association (CESA), says connecting ovens to the internet has the potential to deliver huge benefits.

"For service and maintenance, it means finding out about issues before they become a problem – it should mean 100% first time fix rates, as engineers will know what's wrong before they

LEAN AND GREEN

Analysis by The Carbon Trust shows 82% of a catering appliance's lifecycle cost is down to the energy used in its operation, 3% is maintenance and only 15% is the initial purchase, according to Glenn Roberts, chair of CESA. He says: "Investing in more energy-efficient equipment is not only right for the environment, it's right for the budget, too. The extra capital cost is often paid back in months rather than years."

Steve Morris, sales director at Jestic, says Sveba-Dahlen has invested heavily in making its range more efficient and sustainable for the operator: "Combining extra thick insulation to the sides and rear of the appliance, the new eco+ models also feature a fully insulated floor and a thicker door with a smaller window to significantly reduce heat loss. Innovative technology in the SD-Touch Panel also allows them to detect when they're not in use, automatically reducing energy consumption [by up to 35%] when baked goods are removed."

“Time and temperature are no longer the only factors to consider when choosing an oven”

visit, and be able to bring appropriate spares and tools,” he explains. “Connectivity also gives the power to remotely adjust programmes and menus, so that combis across a chain’s whole estate can be updated simultaneously.”

The main barrier in the way of the smart revolution, he says, is “creating a standard so that all equipment can be monitored using the same app or portal – CESA is chairing the European-wide working party currently investigating this issue”.

Elsewhere on the market, Jestic recently launched IBS (increased baking surface) technology. Alternating rotation on a predefined programme, it provides a quicker, more even and energy-efficient bake. And because the rotation direction alternates, more delicate products such as pastries and light cakes rise straight rather than tilting or collapsing to one side, reducing wastage and resulting in a more consistent finish throughout.

But speed isn’t always of the essence, and Jestic also offers the ‘Slow Start’ function through Sveba-Dahlen. Designed specifically for sensitive bakery products such as quiches, the system allows the product to gently set before commencing rotation,

ensuring a more even consistency and better finish.

Over at Foodservice Equipment Marketing (FEM), they’re addressing the issue of space with their Vector multi-cook oven, manufactured by Alto Shaam. Offering up to four separate oven chambers in one compact unit, it also includes a special new airflow technology that delivers faster, more even cooking, while its ventless operation, and the fact that it needs no water connection, means it can be placed anywhere.

“The oven’s speed is down to the Structured Air Technology feature,” says Mark Hogan, commercial director of FEM. “This innovative design delivers a high velocity, vertical airflow from the bottom and top of each chamber. It produces completely even temperature control, throughout each chamber, and faster cooking results. The vertical airflow has the added benefit that when the door is opened, very little heat escapes.”

That neatly solves the burnt eyebrow issue, proving that these days, like an annoying sibling, ovens really do have an answer for everything.

Consumers are bringing new challenges to the table all the time, but the bakery industry is more than capable of moving with the times.

WATER PALAVER

Kevin Johnson, managing director at Monarch Water, says limescale is responsible for 70% of equipment failure, “so it’s vital bakeries prolong the life of their equipment by ensuring they have quality water. Suffering the negative impact of hard water can have a serious impact on bakeries’ business in terms of efficiency of equipment, bake results and cleaning.”

He adds water softeners are a modest outlay for something that can potentially save bakeries the costs associated with hard water issues: “With a very short payback, reduced call outs due to breakdowns and increased efficiency of service bakers need to consider the value of these units to their business when weighing up the initial purchase price. Water treatment equipment should be viewed as an insurance to help maintain a successful and efficient operation, therefore making it an essential investment.”



Control at the touch of a button



High volume cooking from Jestic