

High-performance sensors enhanced by artificial intelligence: Bosch showcasing first oven that can predict when to finish baked goods according to individual recipes

September 2019
8860-0919

- ▶ Artificial intelligence makes new household consumer experiences possible
- ▶ Series 8 Accent Line built-in oven with Home Connect, PerfectBake sensor and PerfectRoast meat probe can now predict when to finish cooking time
- ▶ State-of-the-art sensor technology from Bosch delivers perfect results when baking and roasting
- ▶ Machine learning supplements sensor technology, adding greater independence and reliable planning capability

MUNICH, Germany – Artificial intelligence is becoming more and more capable. And for the first time, Bosch is bringing the added value of AI into the oven segment. In the autumn, Europe's number one household appliances manufacturer is releasing the first Series 8 sensor-supported oven. This will be able to predict when baked goods or roasts are fully done, while taking into account the food's individual preparation inside the oven. Bosch's patented sensor technology already ensures perfect results for baked goods and roasts with the PerfectBake sensor and the PerfectRoast meat probe. And now, with machine learning brought into the picture, a new dimension is emerging. The connected oven learns based on a growing volume of anonymised data from a large number of baking and roasting processes. As a result, it not only uses its high-performance sensor technology to deliver perfection – over time, it also gets smarter about when exactly to finish cooking the individual food item. As the number of households using AI-equipped ovens increases and the frequency of use grows, their oven at home will be able to make predictions about the individual food item with greater and greater accuracy. The key to this is a digital connection via Home Connect. By spring 2020, Bosch hopes to inject artificial intelligence into all Series 8 Accent Line ovens, which are already equipped with Home Connect and PerfectBake or PerfectRoast.

Simply perfect roasting and baking

In its sensor-supported ovens, Bosch has brought out a technology that leads to perfect results with no hassle, while offering unmissable added value to households. The PerfectBake sensor, for instance, constantly measures the moisture content inside the oven and automatically adjusts the baking process in line with the food's level of doneness. The cook only needs to select the appropriate baking setting, such as whether they are using a sheet or a mould, then the oven does the rest. The result? Bread, baked goods and quiches cooked to perfection. The PerfectRoast meat probe offers similar convenience. Thanks to its three measuring points, the probe can detect the core temperature of the roasted meat to within a degree Celsius, and guarantees perfect results every time in the oven, microwave or steamer.

Cooking flatbreads with a system that learns

When making a flatbread in the new Series 8 oven, for instance, the appropriate PerfectBake sensor programme selection ensures outstanding results. In addition, the oven harnesses the power of AI to let the user know when they can take out the flatbread and tuck in. As the food bakes, the readings taken by the PerfectBake sensor are continually sent via Home Connect to a cloud computing system. This is plugged into a forecasting model that was created using machine learning based on anonymised data from previous baking processes within the flatbread category. This forecasting model is applied every 30 seconds for the ongoing baking process so that the end point for the process can be sent to the oven. With the database constantly growing, the learning system ensures that the accuracy of its predictions increases quickly. For the future consumer, this will mean even more opportunities to tailor recipes to their own preferences and flexibly plan their time at home. They will even be able to receive a reliable prediction for when to finish baking their flatbread recipe compiled to suit their personal taste – for instance, with a higher moisture level based on the topping selected or a different dough consistency. The oven itself operates exclusively on the basis of its individual user's settings and the dish selected in each case. And it continues to be possible to use the PerfectBake and PerfectRoast sensors completely independent of all additional digital services.

AI ushers in new era for home appliances

Bosch is the first household appliances manufacturer on the German market to have integrated artificial intelligence – and the opportunities that come with it – into the sensor-controlled, built-in oven. A development that provides individual assistance to consumers in their

everyday lives, while making their lives even more convenient and straightforward. For managing director Harald Friedrich, the new appliances are a first step into a new era of customer-centred technologies: “At Bosch, we want to recognise and meet people’s genuine needs. The use of artificial intelligence can be highly useful for households. By augmenting our successful sensor technology with AI, we’ve reached a first milestone. We’re strategically working to accelerate this development and, in turn, advance the many opportunities that AI in home appliances presents for our customers.”

Press photos: 8860_01 to 8860_04

Press contact:

Anneli Guethoff

Major Domestic Home Appliances

+49 (0)89 4590 4261

anneli.guethoff@bshg.com

The name Bosch is known worldwide as a symbol of excellent quality and reliability. For over 85 years, its home appliances have also honoured this claim: Bosch is Europe’s leading household appliances manufacturer. Its products are based exclusively on the real requirements of modern households. Thanks to trendsetting technology and surprisingly simple solutions, they effortlessly achieve perfect results and simplify everyday life. In addition, high quality, precisely finished materials and a timeless, internationally acclaimed design ensure noticeable quality and sustainability. A recognised high service quality cements the trust of the user in the brand and underpins the Bosch guiding principle, “invented for life”.

For more information, visit www.bosch-home.com.