

B&W introduces OptiBake, raising bar in wafer production

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B&W Group is launching OptiBake, the world's first inductively heated wafer oven, marking a breakthrough in industrial baking. Engineered to boost quality, operational flexibility, and efficiency, OptiBake reduces energy consumption by 50 per cent compared to conventional gas-fired wafer baking ovens. The solution sets a new standard for the global wafer industry, supporting customers in achieving operational excellence and sustainability in production.

"With OptiBake, we set out to deliver more than just a new wafer oven. We challenged ourselves to combine exceptional wafer quality with unprecedented flexibility, while enabling customers to contribute to sustainability," says Sandra Lutz, Head of Business Unit Wafer at B&W Group. "Our electric induction heating technology responds to the global demand for higher quality and efficiency, reduced operational costs, and a significantly lower carbon footprint."

For more than a decade, B&W's wafer segment has focused on developing technologies that support customer growth while reducing the environmental footprint of production. OptiBake offers a range of unique advantages that set it apart from conventional gas-fired or electric wafer ovens. While conventional electric heating has been used for decades, inductive heating offers greater energy efficiency and new possibilities for precise control.

OptiBake's induction heating system uses electromagnetic fields to generate heat directly within the baking plates, dispensing with open flames and combustion. The result is a process that produces no direct emissions of carbon dioxide (CO₂), carbon monoxide (CO), or nitrogen oxides (NO_x). Energy consumption can fall to 50 per cent, when compared to gas-fired or electrical wafer ovens, reducing the environmental impact. These emission reductions can also lead to tax and licensing advantages, along with increased subsidy opportunities.

The environmental benefits of the oven are even greater when powered by a low-carbon electricity mix. In such settings, it can significantly reduce CO₂ emissions and support broader sustainability goals. By eliminating reliance on natural gas, the system also contributes to energy security and supply resilience.