Reading Bakery Systems Reinvents Biscuit & Cracker Baking for the 21st Century

The new Emithermic XE Oven offers a superior replacement for traditional DGF ovens.

For well over a hundred years, snack food manufacturers have been baking biscuits and crackers in direct gas-fired (DGF) tunnel ovens. But like many century-old technologies, these oven designs cannot meet today's market demands for increased efficiency, sustainability and productivity.

Traditional DGF cracker ovens are more difficult and costly to operate and maintain, and often produce an unevenly baked product. Operators must adjust and maintain a large number of ribbon burners to make sure the product is baked properly. To help today's bakeries move away from this inefficient, labor-intensive process, Reading Bakery Systems has developed a superior cracker-baking replacement for traditional DGF ovens – the Emithermic XE Oven.

Game-changing oven technology

To replicate the baking of a DGF oven without any ribbon burners, the new Emithermic XE oven design uses a centralized penthouse to deliver heat to Thermatec® panels and convection nozzles to deliver balanced heat to the product. Electric radiant heaters are also used to deliver the high radiant component required to develop the flavor and texture of the crackers.

The new oven also cuts energy consumption and emissions, improves process control and baking performance, and simplifies cleaning and maintenance.

Hands-off, recipe-driven control

Traditional DGF ovens can have 30 control points in each zone, but the Emithermic XE Oven has just 6. Like all RBS ovens, the Emithermic XE features RBSConnect, our Industry 4.0-aligned control system that eliminates operator guesswork.

Developed to simplify operations, RBSConnect automatically executes pre-set, recipe-driven controls. Bakers can easily configure and store recipe settings to ensure product and process consistency. Operator requirements are minimal, allowing them to become experts quickly and giving them time to devote to other tasks.

EMITHERMIC XE OVEN:

- Eliminates all ribbon burners.
- Improves product consistency.
- Increases baking efficiency.
- Automated, intuitive operator controls.
- Simplifies cleaning and maintenance.
- Humidity-controlled product zone.
- Gas ovens easily convert to electric in the future.

READING BAKERY SYSTEMS

SCHEDULE YOUR TRIAL RUN

Bake your product using the Emithermic XE oven at the RBS Innovation Center.

An Emithermic XE Oven at the RBS Science & Innovation Center provides an opportunity for bakers to test their products on this new technology.

RBSConnect also monitors production in real-time and manages a Closed Loop Oven Control System that captures data on product flow rates, temperatures, energy efficiency trends, and other Key Process Indicators. Ultimately, the system helps ensure a higher percentage of in-spec product and less waste on the line.

Easier cleaning and maintenance

At lengths of up to 350 feet and with up to 290 burners, DGF tunnel ovens are notoriously time-consuming to clean and maintain. Individual burners that need tuning or replacement result in costly unplanned downtime and lost productivity.

Cleaning and maintaining the Emithermic XE Oven is far simpler and easier. Operators have easy access to the baking chamber through large doors spaced every three meters apart on both sides of the oven.

RBSConnect further supports more cost-effective maintenance. Along with monitoring the product during baking, the control system also monitors the performance of oven blowers and motors, recording motor amps, speeds, runtimes, and more. With RBSConnect, operators are alerted to replace failing parts long before they result in costly line disruptions.

Proven, future-proof technology

RBS developed the Emithermic XE Oven with sustainability in mind. After all, manufacturers installing the new oven will be using it for the next 20-40 years. Accordingly, the Emithermic XE Oven is available with a penthouse that can be powered by natural gas or electricity. Manufacturers that opt for the gas-heated version today can easily convert the oven to all-electric in the future.

Visit RBS to see for yourself

While our new Emithermic XE Oven represents a groundbreaking advance in cracker baking, RBS knows that snack food manufacturers using traditional DGF ovens may be skeptical. To help allay their concerns and demonstrate the effectiveness of this new technology, an Emithermic XE Oven has been installed in the RBS Science & Innovation Center for trial runs to prove that we can bake their cracker product on an Emithermic XE Oven.

We want everyone in the industry to see (and taste) the power and potential of this new technology.

LEARN MORE

To learn more about the new Emithermic XE Oven, visit readingbakery.com or call +01 610-693-5816.