

Efficiency that grows with you

Only modern technology is used in the **new production facility at “Der Beck”**, including an **automated raw material supply system from Daxner**.

Stefan Schütter

The traditional bakery “Der Beck”, based in Erlangen, is one of the leading bakery companies in the Nuremberg-Fürth-Erlangen metropolitan region with around 150 branches. Since its foundation in 1895, the family-run company has continued to develop and today combines artisan baking with modern technology. In order to meet the increasing demands for quality, sustainability and automation, “Der Beck” invested in a new production site. Daxner Germany was responsible for the planning and implementation of the central area of raw material supply, which enables precise, flexible and resource-saving processes in the production of bread and rolls in large quantities.

Maximum capacity with high flexibility

The new production facility in Erlangen is characterized by its high capacity. Both light wheat flours and dark rye and smoked flours can be stored and supplied efficiently in six outdoor silos, each with a gross volume of 62 m³. In addition, the silo system is already designed for expansion with two additional silos. The raw material supply supplies two separate production lines: one for bread with a capacity of 16 dough batches of 250 kg per hour and one



1 The automatic medium component system is equipped with a weighing and conveying system. **2** Inline sieving machines with bag chutes and big bag emptying station are available for the efficient filling of the ingredient silos.

line for bread rolls with 20 dough batches of 170 to 250 kg per hour. In total, up to 9,000 kg of dough can be processed per hour. The company operates a two-shift system 365 days a year, which ensures maximum production capacity.

Precise dosing and efficient raw material management

Precise dosing of ingredients is a key success factor for reproducible high bakery quality. To this end, Daxner Germany installed a medium and small component system consisting of eleven medium component silos, each with a gross volume of 2,500 liters, and eleven small component silos, each with a gross volume of 500 liters. All silos are equipped with a double discharge to

supply both the bread and bread roll lines. Thanks to intelligent control systems, loss-free and precise raw material management is guaranteed. Expansion by three additional silos is possible without any problems.

Automation for maximum efficiency

The weighing stations for both production lines are equipped with state-of-the-art technology. In addition to several flour weighing systems with weighing containers, each with a capacity of 200 kg, and stainless steel water dosing devices for three types of water, floor scales weighing up to 800 kg are used for manual components as well as powerful flour dust extraction systems. The product is no is in the case. The pre- and sour-dough system is of particular impor-

tance. A continuous dough starter, the daxDou 3.1, enables combined use for rye and wheat doughs. With two sourdough tanks for rye, each with a capacity of 3,000 liters, and two pre-dough tanks for wheat for a total of 4,000 kg of sourdough per day, consistent fermentation results can be achieved. Pigging systems ensure almost loss-free dosing.

Higher product quality thanks to smart control

An RFID-based control system for the kneading bowls controls the dough resting times and enables precise monitoring of the bowl contents. This makes baked goods production even more transparent and reliable. The entire system is controlled via the tried-and-tested “Optidos Profi” solution from Bornträger. This ena-

bles intuitive operation, optimized raw material management and precise control of the fermentation processes. Ergonomic workflows for weighing and dosing also help to increase efficiency.

Sustainability as a central element

In addition to increasing productivity and quality, the project also focused on sustainable solutions. The use of pigging systems ensures that the pipelines are emptied completely to minimize raw material losses. The daxRec residual bread crusher also integrates unsold or faulty baked goods directly back into the production process, thereby helping to reduce food waste. An automated cleaning program for the fermentation tanks and pipelines of the sour-

dough system also ensures consistently high hygiene standards with minimal personnel requirements.

Flexibly expandable

The new production system was designed with scalability in mind from the outset. Additional fermentation tanks can be seamlessly integrated into the existing system. The digital visualization of the entire system also ensures a high level of transparency, rapid error detection and efficient control of all processes. With its new production facility, “Der Beck” is relying on sustainable and forward-looking technology that not only increases efficiency and product quality, but also saves resources and makes an important contribution to sustainable food production.