

Gellerstadt Backwaren GmbH

“Our refrigeration concept no longer makes us break out in a sweat,” Uwe Presch from the Gellerstadt Bäckerei bakery in Hainichen near Chemnitz rejoices. At present, 27 branch outlets are supplied by the new production site. The new installation was planned and implemented together with MIWE. A sufficient space for the manufacturing of baked goods, baking, and refrigeration is now available on a 2,100 square meter production area.

Uwe Presch and Rocco Grunwald are the managers of Gellerstadt Backwaren GmbH, a company that emerged from a former production collective (PGH). After the reunification, the production collective (PGH) was changed into a cooperative association. The business dealings are carried out by a GmbH (limited liability company), whose sole shareholder is the cooperative association.

The enterprise survived the reunification with flying colors and has adapted to the new market requirements. The production building had its problems and defects. Rocco Grunwald: “We worked on two stories. Every three meters, we had steel girders that caused us problems. We still used state-of-the-art technology in the bakehouse.” A MIWE refrigerating unit was not installed

until three years ago.

Both master bakers, however, started having sleepless nights on January 12, 2007. Due to a technical defect on the fryer cable, the company burned to the ground. All parties concerned quickly agreed on the continuance of the Gellerstadt Backwaren GmbH. Together with MIWE experts, they set to work on the concept and construction of the new bakery.

Production in the new production facility near Highway A 4 has been in progress since January 18, 2008. “We have had the best experiences with MIWE,” Uwe Presch says. “In the middle of the stolen production period, they installed a new refrigerating unit with an area of 120 square meters in the old bakery. That is what persuaded us to realize a new bakery together with MIWE.”

Thanks to the new installation, the company now has completely new planning and implementation possibilities. “The bakery was planned from the inside out,” Ralph Rüger of Backofenbau Rüger says, looking back. The company from Zittau represents MIWE in the region and is also the contact in the area of customer service for baking ovens and refrigeration.

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Manager Uwe Presch on the gallery. From here, the visitors can watch the operations.



Uwe Presch at the loading system for MIWE thermo-express.



A large part of the baked products in the bakehouse are conducted through the fully automatic proofing units or the proofing retarders by Gellertstadt Backwaren.

The empty rooms of the new installation have been already used for refrigeration. The cooling cells are located wherever they are needed. "We have a clear raw material and production flow," Rocco Grunwald rejoices. He is responsible for production, while Uwe Presch is in charge of the commercial part of the company. In the receiving warehouse, MIWE has already installed storage cells (normal cooling at +3°C to +10°C) for raw materials like cheese, curds, or fresh fruit, as well as frozen products (deep-freeze at -5°C to -25°C). These stored cells can be accessed from the warehouse and from the pastry shop.

The pastry shop has a cooling cell with +6°C and high air humidity for sensitive pastry products. The pastry shop rooms themselves are air-conditioned at +22°C by means of a MIWE ceiling cooling system. The remaining bakehouse is also equipped with a large air conditioning unit. "We have no skin formation, nevertheless," Rocco Grunwald says. A large ventilation unit guarantees an hourly tenfold air exchange in the baking hall.

Due to the dimensions, this area can definitely be called a baking hall. The visitors can view this area via a gallery set up for this purpose. There, you can also see two nine-oven thermal oil deck baking ovens of the type MIWE thermo-express. Almost everything can be baked inside these ovens. The MIWE athlet XXL loading unit and the draw-plate ovens in the lower part of the ovens see to that. They are supplemented by MIWE roll-in RI 1.0608 rack oven, in which grain rolls, showpieces, ham in bread dough, and plaited goods are baked. Before baking, however, the bread and the baked products pass through a proofing chamber provided with an air conditioning module, which can be accessed



The refrigeration surface is amply dimensioned at Gellertstadt Backwaren. From the storage cells, the doors (left) lead straight to the fully automatic proofing units or from the freezing cells directly to the storage cells.

from both the baking oven and the dough processing station.

While the pastry shop, the flour silos and the engineering rooms are located in one side section of the production hall, the opposite side section is completely reserved for refrigeration. The dough preservation unit for 70 rack trolleys occupies the biggest part of the 270 square meters; this unit runs within a temperature range from -5°C to -25°C. Before the dough pieces from production enter these rooms, they first have to pass through a flash freezer, which freezes the dough pieces at temperatures from -20°C to -42°C within the shortest possible time. Two rack trolleys can be simultaneously cooled down here.

A proofing retarder (GV) operates within a temperature range from -/+0°C to +15°C. This process facilitates the lowering of the storage temperature and consequently the extension of the proofing time. Yeast and enzyme activities are thus reduced to a minimum. This in turn leads to an increased natural flavor of the baked products at a comparatively lower expenditure of energy.

Two fully automatic proofing units (GVA) operate within a temperature range from -20°C to +45°C and at an air humidity of 98 percent. "At night, we remove the first batch," Rocco Grunwald says, pinpointing the production sequence. Both fully automatic proofing units contain 12 or 24 rack trolleys.

Currently, a lot is being baked at the production site. A certain kind of bread, for example, is half-baked, packed in foil after cooling down, and then baked to completion in

the branch outlets if needed. "The market wants it this way," Uwe Presch argues. The sales volumes and thus the returns are volatile, but thanks to the in-store baking oven, the company can do something about it. Here, MIWE technology is a great help thanks to its different types of in-store baking ovens. MIWE technology also helps in the area of hard rolls. In this case, however, Gellertstadt Backwaren uses another method than for bread. Uwe Presch: "We were not satisfied with half-baked products." Nevertheless, they wanted and had to bake in the branch outlets. "Raw dough pieces, however, take longer than someone at a branch outlet can react."

The solution for this is MIWE smartproof™. No deep-frozen or pre-baked dough pieces are delivered to the branch outlets. Only cooled-down dough pieces that are baked there directly are provided. The designed technology by MIWE combines several advantages. The logistics and baking are simple, and, at the same time, the constant proofing process at approx. +5°C positively affects the pastry quality. More natural taste and flavor and natural pastry color distinguish the Saxon and other special hard rolls from the in-store baking oven of Gellertstadt Bäckerei.

Gellertstadt bakery still bakes 80 per cent of its hard rolls range on the production site, however, the MIWE smartproof™ process increases the part of the in-store baking. "This help us against competition," Uwe Presch admits. The bakery is especially active in the advance market payment sector and wants to provide baked goods fresh from the oven all day long.



In contrast to the storage on trays or on normal boards, more dough pieces can be stored in the same room thanks to the special boards.

Thanks to MIWE smartproof™, this is relatively simple to accomplish. The dough production and dough processing are carried out for the hard rolls in the usual manner. 9 – 12 Saxon hard rolls or 12 – 15 special hard rolls each are placed on special boards by the team of Rocco Grunwald. "They require small cuts on the sides," MIWE specialist Ralph Rürger points out.

Why they require these cuts will be shown in the next procedure. Immediately after preparation, the whole stack of boards is moved into a suctioning shock freezer. In contrast to other systems, the cold air is not blown onto the dough pieces, in this case, but the warm air is suctioned off instead. "As a result, the dough pieces are in fact not only cooled down, but they also have no skin formation," Rocco Grunwald says, pointing out one of the advantages. The internal temperature of the dough pieces is measured by means of an internal temperature sensor. The system continues to operate until the desired internal temperature is obtained. According to experience, Gellertstadt Backwaren has determined that the board trolley is cooled down to +5°C in about 20 minutes.

At this temperature, the dough pieces can be stored up to 36 hours before being directly baked. Uwe Presch: "Thanks to the good board insulation, we can deliver the goods to the branch outlets without vehicle cooling. Moreover, it is hygienic to deliver the goods using the boards." The bakers put two empty boards on the top to improve the insulation again. The shops of Gellertstadt Bäckerei are located within an area of up to 70 kilometers. →



Twelve hard rolls are stored on a board and then baked on a 60 x 40 cm tray in the in-store baking oven.



The dough pieces cooled down using smartproof can be stored in the refrigerating chamber until transport.



Thanks to the good board insulation, the dough pieces can be delivered to the branch outlets without vehicle cooling.

Products that have to be supplied cooled or deep-frozen are packed in thermal boxes. Similar to the delivery, extra cooling and deep-freeze cells are provided for these products during dispatch. They are accessed through the cooling cells in the bakehouse or directly from the loading

rack. The entire operation is well conceived and planned by MIWE. Uwe Presch and Ricco Grunwald no longer break out in a sweat as quickly. They know that they can rely on the technology of MIWE.

Short profile of Gellertstadt Backwaren GmbH

Proprietors: Uwe Presch and Rocco Grunwald
Kastanienring 22
09661 Hainichen

Branch outlets: 27

Employees

Production: 18
Sales: 66, of which 4 are apprentices
Shipping department/logistics: 7
Administration: 6

Turnover distribution:

Bread/hard rolls: 67%
Fine baker's wares: 20%
Pastry shop: 10%
Snack/café: 3%

Price examples:

Double hard rolls 0,31 EUR
Special bread 750 g 2,10 - 2,40 EUR
Rye bread 1,000 g 2,00 EUR
Cake (5 x 9 cm) 0,50 - 1,00 EUR
PGH cake slice 1,00 EUR