

Well organized distribution

THE BAKERY PIEKARNIA FAMILIJNA SP.J., KROSNICE, POLAND, IS ONE OF THE LARGEST BAKERIES IN THE REGION. SINCE 2003, THE BAKERY HAS RELIED ON A SYSTEM FROM THE TOOLBOX SOFTWARE GMBH COMPANY IN ESCHWEILER, GERMANY, FOR GOODS DISTRIBUTION



++ figure 1
The distribution clerk selects the goods and customer or tour via an industrial touch-panel PC



++ figure 2
Each distribution employee has his own screen colour for goods distribution

+ The success story of the bakery Piekarnia Familijna Sp.J. in Krosnice, Poland, began on 14th November 1991. The proprietors, husband and wife Elzbieta and Witold Kowalczyk, founded a bakery as a career change. For the start-up, the entrepreneurial couple had only a bread and bread roll plant from the Werner and Pfleiderer Lebensmitteltechnik GmbH Company, Dinkelsbühl, together with an oven. Five employees produced the first bread and baked goods in a production hall measuring 300 m². However, after four months Witold Kowalczyk discovered that although there was a demand for baked goods, the quality of his products was inadequate. A German technologist stepped in and helped. He revised the recipes and trained the employees to handle the equipment. The quality of the baked goods improved and the business grew. A new building was needed. Proprietor Kowalczyk explains, "Today the employees have access to a production area of 6,000 m² on a site that can be developed with a total area of 22,000 m²." This means the founder of the business operates one of Lower Silesia's biggest bakeries and regards himself as the market leader in the technology and processes area.

Production

Flour enters the production process through five silos holding 25 t each. The bakery employs a total workforce of 300 employees manufacturing around 200 different kinds of baked goods in three shifts. The machinery to do this originates mainly from Germany. The rack ovens and proofing plant were supplied by the MIWE Michael Wenz GmbH Company, Arnstein. The range of bread and roll products is rounded off with bread roll plants from Werner and Pfleiderer and from the Austrian König Maschinen Gesellschaft m.b.H., Graz. To manufacture deep-fried products the bakery relies on a continuous plant from the CANOL S.r.l. Company, Santorso, Italy. The employees produce doughnuts with two different weights on the line. Witold Kowalczyk explains, "The smaller deep-fried goods are subsequently sold by weight, and the larger ones by number of items."

However, the product with the highest sales is a multi-grain wheat bread (70/30) with an initial dough weight of 500 g. As far as possible, the production process uses only natural ingredients and the company's own wheat and rye sourdough. The bakery largely avoids

convenience products. According to Kowalczyk, “We want to be unmistakable in the eyes of our customers.” The firm’s proprietor gives a figure of 470 t as the monthly flour consumption. The plant capacity utilisation is about 90%.

Well thought-out logistics

The bakery supplies a total of about 1,000 customers. In addition to 40 HGVs of their own, freight companies deliver to the customers. The latter includes smaller food retail businesses as well as major supermarket chains. The bakery also operates ten branches of its own. All the sales outlets have a café area; a further expansion of the sales outlets network is planned. Przemysław Wilczura, Head of the Finished Goods Department, relies on the dispoTool System from the ToolBox Software GmbH Company, Eschweiler, to manage the shipping of the baked goods. Wilczura confirms that, “The system has run faultlessly since it was installed.” The paperless goods distribution system has allowed the bakery to increase productivity. It was also possible to reduce the error rate and stock shrinkage. The baked goods are distributed via light signals. The distribution clerk selects the goods and customer or tour via an industrial touch-panel PC. Each distribution employee has his own screen colour. This colour is indicated to the member of staff on a multi-colour, multi-line display above the storage bays. The displays in this set-up can be installed flexibly on a rail system. When the employee has distributed the baked goods, he confirms the amount distributed on the computer. This provides clear documentation and

enables an unbroken traceability trail. During a capacity expansion at Piekarnia Familijna in 2009, the four-line displays were replaced by displays with six numerical displays for distribution and one information display (MATRIX 7 System). According to Wilczura, “We have already replaced around 200 displays with no problems.” The newer, more modern MATRIX-7 displays allow even faster and more efficient distribution. The displays are also brighter but still use less electricity. The re-equipping in the baked goods dispatch area enabled a further optimisation in the logistics. An additional industrial touch-panel PC is also being planned.

Opportunities for growth

Apart from his own sales outlets, business owner Kowalczyk also sees opportunities of supplying to discount store chains. The proprietor expects the Polish market to develop in a similar way to the German one. For example, consumers are demanding rye bread with no additives or colorants. The general trend in Poland is premium baked products versus discount store goods. Kowalczyk thinks that medium-sized and large baking businesses in Poland have grown in the past ten years, but the smaller ones are tending to die off. The entrepreneur says the main reason is that, “In the past raw materials prices were high and personnel costs small. Today it’s the other way round.” This favours businesses with large rationalised production plants and an efficient delivery system. That’s why one of the entrepreneur’s next aims is also to expand the despatch system and enlarge the production capacity. +++

++ figure 3

After an increase in capacity at Piekarnia Familijna in 2009, the four-line displays were replaced by displays with six numerical displays for distribution and one information display (MATRIX 7 System)

++ figure 4

Company founder Witold Kowalczyk (left) and ToolBox Sales Director Bernd Koletzko



++ figure 3



++ figure 4