

In touch with reality

THE LARGEST PRODUCER OF FROZEN BAKERY ITEMS IN EUROPE, NEUHAUSER S.A., IS LOCATED IN ALSACE, FRANCE



+ The market for frozen bakery products in Europe is growing very rapidly, and in some segments it is the one with the highest competition. In the baguette and small bakery items sector – in which more and more retail chains appear as aggressive customers – the prices per piece have fallen within the past three to four years by about 15 per cent.

The French company Neuhauser is not offering own brands and is instead investing approx 10m Euros annually in new and streamlined production technology. However, to keep product quality and independence in such a market without your own brand necessitates a distinct understanding of the market. A company must – according to a favorite Neuhauser saying – have “feet that are anchored securely on the ground”.

The company was founded 97 years ago in Alsatian Folschwiller as a supplier of bread to the miners working in this region. Now the company has 13 production sites; twelve of them are in France and the thirteenth is in Portugal. The plot of land in Spain for number 14 is already owned by the family. Neuhauser is still a family enterprise, even though almost 40% of the capital is held by flour mills, banks and insurance companies. Alfred Neuhauser (61), grandson of the founder and now head of the family pays the company a daily visit and examines each new development personally.

Last year’s sale volume was about 250m Euros; two-thirds of it generated by the frozen product range, the remaining third coming from the fresh bakery products which are supplied by each French production site within a radius of 200 km. Half of the sales volume is generated in France, the other half coming from export activities, one third of that is in Germany alone. The turnover reflects the prices ex manufacturing site, with the sales volumes of the different distribution companies having to be added to that: Portugal where the production company Pampor which makes specialty baked goods such as Pasta de Nata shows a sales volume of about 8m Euros; 12m euros in Norway, where Culinor is considered the largest food service distributor for bakery items; almost 20m Euros from bake-off companies in Spain and Portugal; Germany with 110 Le Cro Bag outlet stores and ten “Brot+Brötchen” discount outlets contributes almost 50m Euros in terms of final consumer prices. In Germany alone, this year 17 new locations should be opened.

The sales figures of the Alsatian company are constantly rising; in 2004, by 12%, with 23% in the export business. According to export manager Laurent Bour, England, South-Europe and even the US are highly successful markets.

The real success story started in the 70s with the “invention” of frozen baguettes. Since



++ figure 1



++ figure 2

then, the product range has constantly grown. At this moment in time it comprises about 500 different articles plus their variations in shape and weight. The products are subdivided into eight groups:

- + unproofed dough pieces, mainly baguettes sold exclusively to the fresh product section in France. However, these products will be gradually replaced by par-baked variations which find their way via the baking stations in the supermarkets to the consumer.
- + pre-proof dough pieces
- + par-baked frozen products which today make up more than 50%
- + stone-baked bread with artisan appearance
- + unproofed fine bakery wares, so-called “Viennoiserie”
- + hearty snacks, par-baked
- + tarts and cakes, ready-to-eat
- + retail packs – private brands for trade and catering services

In total currently 41 lines are operating at different production sites, 25 lines produce bread, baguettes, and small bakery items, 12 make Viennoiserie, 2 are for tarts and tartlets and two for hearty snacks. The central freezing storage for the international trade with more than 10,000 pallet places is located in

Folschwiller. Within France the different production sites distribute frozen goods together with their fresh products. Outside of France external transport companies take over.

Neuhauser’s success is due to the balance. The company supplies food retailers and wholesalers as well as the food service industry and regional wholesale traders without depending on individual customers. According to Export manager Laurent Bour, this balancing act is successful because of the family enterprise’s philosophy which is basically to be willing to supply what the customer wants, even if it means moving heaven and earth to go beyond their own bakery experience. It also includes quality and innovation, a human resources policy which strengthens the team spirit and a manager who himself, occasionally puts the finishing touches to a product and last but not least the continuous investment into new technology. The annual investment budget is on average 10m Euros. One example of that is the frozen products production in St. Avould, Alsace, with its seven production lines.

Puff pastry

For two months now, a special line for puff pastry and croissants designed and installed by Rademaker B.V. Culemborg has been in ►

++ figure 1
Sheating line for puff pastry

++ figure 2
Rework station

Galette du Roi

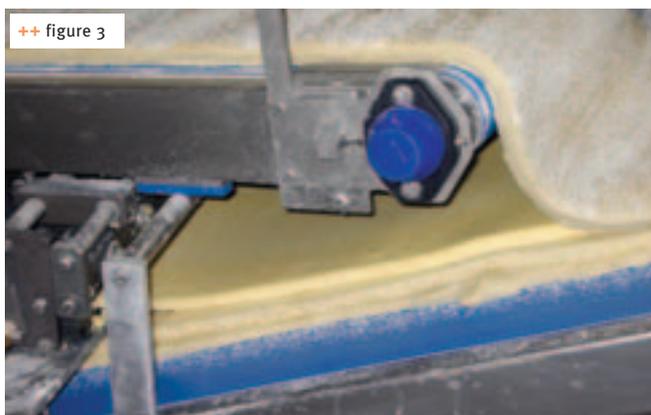
In France it is the tradition at Epiphany (January 6) to eat a fine pastry with the family or with friends. This pastry is called Galette du Roi. It is made of puff pastry with a rich almond filling and a hard bean or other solid piece (Neuhauser hides porcelain figures) hidden in the pastry. The pastry is shared among family and friends.

Anyone who gets the hard piece in his or her slice is crowned king or queen for a day and wears a paper crown.

Chinois pastry

What has the rolled up pastry in common with the Chinese? Simply, a matter of language. The grandfather of export manager Laurent Bour invented the name. In his bakery, part-time

workers often helped out in the summer but their command of the French language was erratic. One of them did not understand how to put the pastry in the pan and he asked in which “Chinese language” (French for mumbo-jumbo) the instruction was given. This is how the pastry got its name having nothing to do with real Chinese people. +++



++ figure 3
The different layers of the dough
– fresh dough, rework, butter,
fresh dough



++ figure 4
Galette du Roi

operation in St. Avould. When producing exclusively puff pastry products, the hourly capacity is up to 2.5 tons, for croissant doughs it increases to 3.5 tons. This line is standing alongside an older croissant line in a hall kept to about 9 °C and separate from the other production. All ingredients for the dough are automatically dosed into a continuous VMI mixer whose mixing capacity is adjusted to the dough handling capacity of the puff pastry plants minus rework used. The dough with a temperature of about 12 °C is transported automatically to the line via an extruder roller unit. Calibration rollers and satellite heads make sure the dough band has the required height and a cross roller ensures the proper width. After that, the dough sheet is divided in the center. The high amount of rework is intentionally re-added. After spreading the butter (butter temperature 9-10 °C), more than 20% of the dough sheet width is cut off on the right and left side after the first rolling and the rework transported back into the mixer or to an additional dough band sheeter. The rework is added to the mixer near the end of the mixing time. One third of the total cut-off amount is transported via an additional dough band former as a third dough sheet back to the line. In the recipe this dough is calculated as fat. So, prior to the rolling of the dough band filled with butter it has the following layers: fresh dough, butter, rework, fresh dough. The technological explanation for this practice is rather logical; the line should not provide highly flaking dough. The layer of rework virtually has the properties of a quick puff pastry dough.

The subsequent laminating process is similar to that commonly used in other puff pastry lines. Prior to the last rolling and the final calibration to the desired product height, the dough – already warmed up by the roller pressure – is transported into a cooling unit. After that the dough is punched, for example for

Galette due Roi into round pieces; half of the puff pastry circles are filled with an almond paste, typical for Galette du Roi. The paste has been externally prepared in a mixing bowl and is then applied via multiple spraying nozzles. After covering with a puff pastry layer which has previously been stamped with a pattern, a guillotine applies a cut through which water vapor can escape during the baking process. This cut also prevents the formation of large hollow spaces and bubbles in the product. Prior to the freezing process, the pies are egg washed for the typical shine. But when producing Galette du Roi, one thing still has to be done by hand: hiding the small king puppet in the pie.

Croissants

The croissant line, an older model by Rademaker, receives its dough from a continuously operating double mixer. “We can operate this line at full or half capacity,” explains Laurent Bour. This line is for producing either croissants with a 4x4 layer or chocolate rolls with a 6x4 layer. The proportion of reworked dough is comparably low, only 5% of the entire dough, but here again, excess dough is automatically returned to the dough extruder. The line is fully automatic, so the employees assume control tasks only. The croissant plant has no cross rollers and no multi-rollers (satellite rollers). Large pairs of rollers with a diameter of about 400 mm each sheet the dough. The dough band has a width of about 1,300 mm. The line can be used with its entire width for croissant making, but it is also possible to divide the dough band into two, with 2 600 mm wide parts which can then be used separately for croissants and chocolate rolls.

Baguettes

Baguettes are products that are made in almost any industrial bakery in France, and ►

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HORSTMANNGROUP

++ figure 5
Brioche Tranchée



++ figure 6
Pain au lait



Neuhauser, is no exception. However, compared to the total production of the company, baguettes made on the obligatory Mecatherm lines make up only a small quantity. In this context the mixers, which produce the dough for both baguette lines, are quite remarkable. They are two double “Wendel” mixers by Mecatherm, which according to Laurent Bour, are the only ones of their kind up to now installed in a production facility. The hourly capacity of the baguette line is 5,000 pieces. After make-up the baguettes are proofed, cut and par-baked.

Brioche and more

For some years now, brioche, pain au chocolat and pain au lait with a host of variations are the winners in the food retail in France. Neuhauser serves all three market segments: Brioche tranchée (cut brioche), rolls made from brioche dough with chocolate chips (pain au chocolat) and so-called pain au lait, brioche-type rolls with high milk content. The dough for all products is comparably soft.

The dough for pain au chocolat is rounded on a Kemper line, relaxed in an intermediate proofer and placed automatically in twelve rows in strapped pans with an hourly capacity of 24,000 pieces. The milk content is 20% (referred to flour) which makes the final product very soft. The chocolate content is 13% of the total recipe. After proofing, the rolls are baked in a directly heated tunnel oven by Gouet SA, Eu, France. After the baking process and before removing from the pans, alcohol is injected into the rolls to improve shelf-life. The products leave the production as ready-to-eat, individually wrapped rolls combined in a bag.

Two neighboring lines produce pain au lait – rolls highly favored by children. Each line has

an hourly capacity of 22,000 pieces, and in theory could produce 24,000. “We prefer to operate this line just below maximum capacity to achieve a more uniform quality,” explains Laurent Bour. To produce the very fine pore formation of this specialty product, the dough is made in a VMI vacuum mixer and make-up is done with Kemper equipment. The dough pieces are cut with water, egg-washed and baked in a Gouet oven. Ten of these products with a weight of 40 g each are packed into a bag – for hygienic reasons this packing process takes place in a clean room.

Chinese rolls

The product range in Folschwiller is rounded off by a “Chinois” line. Here filled yeast dough slices that have been rolled up and then cut are manually placed into pans. The yeast dough is sheeted on a fine bakery wares line by Doge, Schio, Italy, filled with vanilla crème, turned into a roll and cut by a guillotine. One specialty is the automatic cream mixing unit designed by VMI. In a continuous process, similar to a continuous kneading system, crème powder and water are mixed and constantly fed via pumps to the dosing stations of the Doge line. Crème preparation and dosing are linked via control. If the line stops, crème preparation also stops. The crème powder is automatically fed into the crème mixer from Big Bags. After the baking, an automatic dosing and tempering unit applies fondant spots onto the still warm Chinois pies.

All lines in this factory operate 6.5 days a week around the clock. One half day is reserved for cleaning, inspection and maintenance of each line. Several cleaning teams are also present during production to keep accessible equipment parts as well as floors, walls and transport paths clean. +++