## Goods flow under control

DE SPECIALITEITENBAKKERIJ (THE SPECIALTY BAKERY) B.V., TIEL, THE NETHERLANDS, SPECIALIZES IN PRODUCING APPLE PIES, AND PLANS TO GROW. THE INVESTMENT IN A NEW BUILDING SHOULD HELP TO INCREASE ANNUAL TURNOVER TO EUR 30M IN THE FUTURE



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In addition to the batch management system, Zeppelin also supplied the raw materials handling plants. These also include the two indoor silos each with a capacity of 35 t for sugar and flour

Director Karel de Jong has invested around EUR 15m in his new bakery in Tiel. The town is located in the center of the province of Gelderland in the most important fruit-growing area in the Netherlands, which is noted mainly for its apples. So in that situation it was obvious that de Jong and his specialty bakery specialized in the production of apple pies for Europe's food retail. This specialization already began in 1998 when the son of an independent master baker set up his own business with his first bakery. The customers at that time were, for example, hotels and restaurant chains. Karel de Jong explained that over the years and after three relocations and new buildings he again wanted to do "something big". He bought a 10,000 m<sup>2</sup> plot of land in Tiel's industrial area in 2010, and the building followed in 2011. The new production unit started up in January 2013, and today the capacity utilization of the two lines is around 60%. Working in two shifts, a total of 29 employees manufacture up to 50 different types of apple pies, of which 5% leave the works as fresh goods and 95 of the baked products are frozen. However the pies are not sold under an own brand, instead they are always manufactured to customer's specifications. Nowadays the purchasers include food retailers throughout



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Depending on size, the apple pies remain in one of the two Aasted gas-heated hot air tunnel ovens for 40–65 min. This gives the bakery a total baking area of 124  $\rm m^2$ 

the whole of Europe, together with 30% going to caterers. The proportion exported is around 15%. Director Karel de Jong explains "We also have enquiries from Japan and North America, but we still make the majority of our sales in the Netherlands." However, the aim is further growth, so the plan is for turnover to grow from around EUR 10m in 2011 to around EUR 12m this year. According to de Jong "In my opinion an annual turnover of EUR 25–30m is possible." The Director thinks there is still potential in bake-off apple pies, which are 90% baked. When required, the pie can go into the oven for a further 25 min and is baked off on the spot. These ready-to-bake apple pies can also be pre-sliced according to the customer's requirements, and can then be taken out of the pack individually.

## Production

40–50 t of apples, the majority from the region, come into the production unit every week, ready washed and cut. The fruit is taken by lift into the upper floor of the production unit, where the apples are mixed for example with cinnamon, sugar or raisins. In addition to the chilled warehouse for the apples, the upper floor also accommodates the small compo-



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The company sells 5% of the pies fresh. After baking, 95% of the baked products go into the Koma spiral freezer for around 2 h, then after packing they are stored in a high rack warehouse with 2,000 pallet storage bays

nents silo installation for salt and baking powder (a total of three silos each with a capacity of 300 kg) together with the liquid egg metering plant. For the new build it was important to Director Karel de Jong that plants should be networked with one another and production centrally controllable. For this purpose Reimelt Food Technology, part of Zeppelin Systems GmbH, Rödermark, Germany, designed and built the whole of the system to supply the production lines. In addition to the entire goods management system, this also includes the raw materials handling and the silos including the two indoor silos holding 35 t each for sugar and flour, together with the weighing and pneumatic conveyor plants, the sieving machines and the containers.

The Zeppelin Systems Prisma-WEB<sup>2</sup> batch management system ensures that every recipe change is recorded and all the incoming raw materials and outgoing batches delivered are traceable. The logistics and warehouse management functions are also available to the production manager and are integrated into the system. All the goods flows from delivered adhesive to dispatched end product, production data,

batch reports etc. are archived and can be called up at any time. A user administration system restricts access of authorized persons for defined functions to ensure that unauthorized persons cannot make any changes. According to Karel de Jong, "The modern control technology helps us to deliver consistent quality and to avoid errors. Production processes can also be planned in an optimum way."

For the Director it was important that customers did not notice from the end product that it originated from a new production facility. Karel de Jong says "We wanted and we want to maintain the high quality of the baked products even if in recent years we have been able to increase our turnover in some cases by 100%." So one could say: "Everything in the production unit is new, only the flavor of the apple pies has stayed the same." +++