FREUNDL BAKERY

Ebersberg just outside of Munich. A rural idyll within sight of the Alps. Craft quality is a tradition here. The Freundl Bakery has been using the best ingredients from local suppliers for 60 years to bake high-quality products according to traditional family recipes. The bakery also recognises the importance of the latest refrigerating technology. Company owner Martin Freundl made an investment for the future two years ago and installed an integral refrigerating concept from Wachtel-Stamm to replace the old refrigerating system which had been used in production for almost 20 years. This sophisticated system made it possible to increase the refrigerating area substantially without taking up any more space. High-performance evaporators from Kelvion Refrigeration have been used. The long-serving old technology no longer satisfied today’s energy demands and had also reached the limit of its capacity.

The area available for refrigeration was simply no longer large enough to be able to ensure the bakery’s own requirements for quality and freshness in the long term while simultaneously satisfying the growing demand.

Cool Rising frees up space: the Freundl Bakery installed a new chilling concept from Wachtel Stamm. Kelvion evaporators are at the heart of the system.
“Something had to be done. It quickly became apparent that investing in a new system made more sense economically than the “upgrading of the old”, Freundl said.

**Controlled cooling without shrinkage**
The Cool Rising technology from Wachtel Stamm offered the most convincing system. The integrated computer-aided system controls the cooling and fermenting of the dough pieces with minimal temperature difference at the coldest point in the system: the evaporator. The controlled cooling makes it possible to maintain the required humidity and results in the desired fermentation process – without any shrinkage.

**Standing evaporators manufactured especially for Wachtel Stamm**
After blast freezing, the dough pieces are transferred on the tray racks into the -18°C cold bakery or pastry/confectionery store depending on the type and use of the dough or pastry. Dough pieces which are only intended for processing the next day can also be temporarily stored in the cool rising room.

All three cold rooms are equipped with Wachtel Stamm’s own “DE System”, which provides optimised air management. In this system, the open dough pieces do not immediately come into contact with the air flow during the storage phase. Skin formation on the chilled good is thereby prevented and the product quality is sustainably increased. Wachtel Stamm first introduced the DE System 25 years ago. Although many have tried to copy Wachtel Stamm’s state of the art system, the original forever remains the superior method of storing dough pieces.

The bakery freezer store has a capacity of at least 72 tray racks. The main transport routes remain free at this capacity. “We even have a small buffer at peak times”. Four Küba DEBE unit coolers operated in two separate chilling circuits provide a dependable cold temperature. Freundl deliberately chose the dual-circuit refrigeration system to be on the safe side. Even if a cooling circuit fails or if a summer heat wave drives up temperatures, a combination of Kelvion evaporators is enough to keep the deep freeze temperature constant.

The confectionary store can accept a maximum of 24 tray racks. Two Kelvion evaporators are installed as ceiling units and provide the required refrigeration capacity with a rating of 11.5 KW.

### Satisfied customers of the Freundl Bakery confirm that with Wachtel Stamm’s system installed:
- Pastry quality is much higher
- Pastries have more flavour and crispness
- Pastries stay fresh significantly longer
- There is a more constant availability of a wider range of products
- Logistical effort is minimized, allowing for greater productivity
- Several production processes have now been eliminated, also increasing productivity
- Bakery space is being better utilized: Fermentation and chilling processes have been reduced to a single room

### THE FACTS:

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<th>Unit</th>
<th>Application</th>
<th>Reason Why</th>
<th>Variants</th>
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<tr>
<td>DE professional</td>
<td>Cold rooms for dough pieces storage @ -18°C</td>
<td>Cold rooms with DE-System and indirect air flow: Skin formation on the chilled good is prevented and the product quality is sustainably increased.</td>
<td>Custom</td>
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<td>comfort DP</td>
<td>Anteroom</td>
<td>Long term storage of dough or pretzels @ +8 ºC</td>
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