

## Bäckerei Miedl, Bad Endorf

### Staying cool.

**Manfred Miedl can easily go ballistic, literally. The Bad Endorf airfield is just a stone's throw from his bakery. However, when it comes to his refrigeration technology, he can keep cool, and doesn't have to go ballistic even if something goes wrong. "They have everything under control," says the master baker and pastry chef. In this case, "they" are MIWE and the MIWE remote service products.**

Today, anyone who doesn't know what remote service means, goes online and googles it. They soon see that it is a process in which technical services are provided via an Internet connection. Just like a television remote control. You could think that MIWE remote involves nothing but remote monitoring of refrigeration systems.

"Not even close," interjects Werner Degen from MIWE rapidly. "We've known remote monitoring for a long time. MIWE remote is a new dimension." And then he warms up and describes all the functions, and the advantages remote

offers companies like Bäckerei Miedl. Google will tell you that remote service has been used in medical technology for many years. This technology focuses on proactive services and multimedia communication. This involves monitoring, detecting and rectifying errors, as well as process optimisation.

"Of course that is highly interesting for us," reflects Manfred Miedl. Today, he can no longer imagine his company without refrigeration technology. 13 years ago, he moved into the "Handwerkerpark" industrial estate in Bad Endorf. Two years ago, the facility was expanded again, and the pastry bakery was moved to an air-conditioned extension. Further space was created for refrigeration too.

In the bakery area, everything is processed via refrigeration. Only rye and mixed breads are baked directly after production with pot-matured natural sour dough. "Rolls without refrigeration processing would have a completely different character. Customers would notice it immediately," is how Miedl explains the need for refrigerating systems.

Conversely, this means that the refrigeration systems must be available at all times. One flash freezer could →



Producing baked goods in Bad Endorf's Handwerkerpark since 2001. Modern technology and traditional recipes and manufacturing processes harmonise perfectly here.



Baked goods like pastries are produced in economical batches and deep-frozen until they are to be baked.

fail without too serious consequences, as the company has two. "However, if a fully automatic proofing unit fails for an extended period, then we have a problem," Manfred Miedl admits openly. The rolls mature up to 20 hours in the fully automatic proofing unit. The temperature rises to no more than +17° Celsius. "The rolls have an entirely different quality and freshness."

In spite of this, the bakery also needs a deep freeze unit. Besides Danish-style pastries and small baked products, Kaiser rolls are also only produced every two days, but in large quantities. Manfred Miedl considers this a more rational approach, and better for product quality: "It allows us to concentrate much better on the product in question."

Unproofed dough pieces are then used both to load the fully automatic proofing units and to supply the branches. All branches bake in-house. Besides rolls, they mainly bake pretzels, baguettes, special rolls and pastries. "Now roughly 25 percent of the baked goods are baked in the branches," explains Miedl. In addition to the MIWE aero, multiple MIWE condo deck ovens are now used.

The refrigeration technology in the preceding production phases has an important role to achieve consistently good results for in-store baking in particular. "For energy reasons, and to reduce the workload of the system technology, we use combined systems," points out Miedl again. That means that multiple cells are connected to a single refrigeration circuit. However, a fault in this refrigeration circuit can also mean that multiple cells are affected.



Miedl has earned a good reputation in the region with pastry products in particular. They are stored in the praline cold room with dry refrigeration until they are delivered.

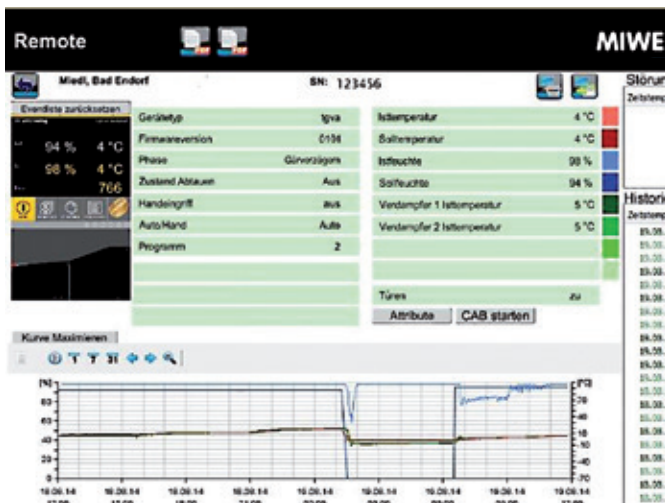
But it doesn't have to go that far. "We often notice long beforehand that a problem is pending," says Werner Degen pointing to a curve on his monitor. For example, there can be temperature-related problems e.g. in hot summers. However, ice formation on the system or pressure faults can be seen in the curves. Werner Degen and his colleagues can access the system online and adapt the parameters accordingly.

Compared with other remote monitoring systems, MIWE remote collects the system data constantly, continuously monitoring the system. "I get every error message on my mobile phone," explains Manfred Miedl. However, he admits that this "can be annoying at times".

Along with the MIWE command centre, he receives every fault on his mobile phone. Open doors are reported, as are interruptions of the power supply or the Internet connection, which can happen for seconds at Miedl. However, "real faults" like pressure drops in the refrigerant due to leaks are also reported to him and MIWE.

"For me, it is a great feeling, because I know that MIWE always takes care of it," says master baker and pastry chef Miedl. For example, if the refrigeration performance drops in a deep freeze cell, MIWE can deactivate the cell completely via remote. "Then it does not thaw, which means that no heat enters the cell," explains MIWE expert Degen. That makes the whole thing less time-critical. "And that saves money."





System status of a MIWE GVA and the graph of its temperature curve.

Even if there is a MIWE installer on-site, he can receive support from MIWE remote. The fitter can log into the system and analyse data. He can also communicate with a colleague from remote service and find a solution together. The data history available from the systems allows the troubleshooting process to be restricted. In addition, the installer can also bring the replacement part required with them in their vehicle, which also saves costs.

Manfred Miedl also makes the most of MIWE's expertise when it comes to the quality of his baked goods. "We can make a whole range of settings on the fully automatic proofing units to configure any maturity and proofing curve required." For example, if the dough pieces are found to form skins, the parameters have to be adjusted.



The refrigeration cells with flash freezers, normal refrigeration and fully automatic proofing units are attached to the side of the production hall.



Manfred Miedl receives every error message from the refrigeration systems on his mobile phone, but also knows that MIWE will take care of it.

"We can do that on the system control unit (MIWE TC) or from the PC," explains Miedl, but also frequently consults the MIWE experts, who can adjust the settings to his requirements via remote. Besides the temperature and humidity, air circulation is the most commonly made setting.

MIWE itself also views the system in terms of the energy optimisation potential. "Every additional degree of condensation requires four percent more energy," explains Werner Degen. Reasons for this can include defective fans or condensers in need of cleaning. "Of course, we pass that on to customers immediately."

And recently, when an error message was sent to Manfred Miedl's mobile phone on a Sunday morning, he knew that →



"Process management via refrigeration gives products like rolls an entirely different character," says Manfred Miedl.



The air-conditioned pastry production facility has been moved out of the production hall. Among other things, the praline cold room is located here.



The deep freeze storage area (right) and proofing retarder (left) can also be accessed from the pastry production area.

MIWE is responsible and will look into the error. Otherwise, refrigerant loss in a combined system would not have been noticed immediately. Of all days, the production facility is virtually empty on Sunday mornings, and no one would have seen the problem. "MIWE took care of everything right

away," recalls Manfred Miedl. He knows how important both the refrigeration technology and MIWE remote are for his company!

## A brief overview of Bäckerei – Konditorei – Café Miedl

Proprietor: Manfred Miedl  
Handwerkerpark 1  
83093 Bad Endorf

Branch outlets: 22

### Employees

Production: 45

Sales: 80

Shipping department/logistics: 15

Administration: 8

### Sample prices

Roll 0,35 Euro

Special roll 0,58 - 0,65 Euro

Mixed flour bread 1,000 g 3,05 Euro

Special breads 1,000 g 3,95 Euro

Danish-style pastries 1,45 Euro