Bakery Treiber, Steinenbronn, Germany

Many paths to the same goal.
Bäckerei Treiber relies on craft work, as well as state-of-the-art oven technology. The optimal oven is used for every product – naturally MIWE ovens.

Emil is the secret of Bäckerei Treiber's success in Steinenbronn near Stuttgart. Emil is not an employee, he was the company's founder almost 100 years ago. Today, a long-process proofed wheat roll is named after the current owner's grandfather. Wolfgang Treiber wants to bake like in the olden days again: long dough proofing, regional ingredients and proprietary recipes are just a few of his tenets. In spite of this, his production facilities moved to a modern hall with optimal baking technology in 2013.

"Baking like in olden times does not mean ignoring modern technology," says Winfried Hartwig, the bakery's production manager. "We use everything the market offers us if it helps us improve our quality." The company relies on MIWE as a partner both for oven technology and the refrigeration plants. The technology from Arnstein helps produce Emil and many other specialist baked products in a "unique yet consistantly high quality".

While other baking companies have more and more problems on the market, Treiber can impress with its specialities, making it unique and particularly interesting to customers. "We will always come up short against industrial suppliers if we want to offer the same products they do," adds his colleague Florian Schlink. He is production manager in the fine baked goods and pastries area. There too, unique products and an ever-changing range at a first-class level are intended to attract customers' attention.

Industrial suppliers cannot emulate what Treiber offers in its bakery and pastry kitchen. When speaking of his area of responsibility, master baker Winfried Hartig refers to handcrafted items, or baked goods which are produced with a lot of manual steps. He mentions the spelt rolls, which are typical for the region. Just as in Emil Treiber's day, they are still broken from the dough by wet hands and placed on trays.

Four oven systems in use
The rolls are then baked in a MIWE thermal-oil tunnel oven. →

The bakery uses the best possible baking climate for every product.

MIWE ideal M heating gas circulators are located beside the existing thermal-oil tunnel oven. Both were fitted with loading systems.

Thermal-oil wagon ovens and rack ovens are available for rolling loading.

It was taken over from the old production facilities. "When baked for a short period, the rolls have a thin crust, are still moist inside and have a delicate crumb," is how Hartwig describes the baking result in the tunnel oven. He considers automation possible with an oven like this if the quality is not adversely affected. "We view ourselves as craft bakers, and want do show this in our products."

And that makes sense, as Treiber uses four different oven systems, each with its own specific baking properties. A MIWE ideal M deck oven and loading system is located beside the tunnel oven. The flue gas technology allows baking at high initial temperatures and low subsequent temperatures. Winfried Hartwig's opinion: "You can't implement this temperature curve with the sluggish thermal-oil oven." That is why specialities like the Franconian Original bread, house bread, quark bread or ciabatta are baked in the flue gas oven.

While craft baking is a priority when preparing bread, loading and removal from the deck oven are automated. That is essential, as two MIWE ideal M modules are located one above the other. That maximises the baking area on minimal floor space (8 ovens á 2 m x 2.4 m = 38.4 m²).

The ovens are loaded via the automatic loading system MIWE athlet, and an upstream feed table. The procedure is reversed to remove the baked products. The same proofed goods carriers and proofing wagon are used efficiently in the workflow for the new deck oven and the tunnel oven. Similar batch sizes are also possible.

The bakery uses a similar dual system for the wagon ovens. The total of seven rack ovens MIWE roll-in are primarily used to bake rolls. Together with an electrically-heated deck oven MIWE condo, there is also a rack oven in the pastry area to meet the requirements of the pastry chefs.

In the baking area, the rack ovens are used for regional "Filder" rolls. They are rectangular split rolls (but again hardly comparable with other split rolls), which are sent to the stores in a half-baked state. Croissants, braided buns and pastries are also baked in the MIWE roll-in. Some of them were moved from the old production facility and continue to work reliably years later.

"We are particularly impressed by the baking results in the MIWE thermo-static," say the two production managers in unison. They previously did not have wagon ovens with thermal-oil technology. "But today, we would not want to do without it," explains Florian Schlink. He points to Danish-style pastries fresh from one of the ovens. While other baked goods like pretzels or rolls are largely baked in the branch outlets, the Danish-style pastries are almost completely baked and finished in the production area.
In spite of this, they have to remain fresh for as long as possible. The baking technology in the MIWE thermo-static is ideal for this. As much moisture is to be retained in the baked goods as possible, while still preserving the delicate crisp crust. "While the pastries often became greasy with other oven systems, we can achieve this reliably in the thermo-static thanks to its powerful bottom heat," explains master pastry chef Schlink.

Baked goods like herb rings or pretzel sticks are now also baked in the MIWE thermo-static. "This system offers a whole new set of options," adds master baker Winfried Hartwig. When he says "options", he means changing the parameters of the baking curve. For example, to produce rolls with a rustic character, nothing happens in the first minute of the baking curve. Then steam is added and the turbo (the additional optional air circulation in the wagon oven) is started briefly. This turbo is used again at the end, to make the baked goods particularly crisp.

As all ovens are networked, the two production managers can track this precisely. Also, only the production managers can make settings or changes to the baking programs to ensure that a consistent quality is guaranteed at all times.

Precise dough maturity

This product quality is not only guaranteed by the baking process. The refrigeration management also plays a key role. "It creates the basis for flavour and freshness," emphasises master baker Hartwig clearly. That makes it easy to understand why the refrigeration area takes up so much space at Treiber.

Products like regional "Filder" rolls, pretzel rolls or white rolls are processed via fully automatic proofing units (MIWE GVA). "The precise proofing curve is what impressed us here," explains Winfried Hartwig. In general, the dough pieces are briefly flash frozen in one of the flash freezers to reach a uniform temperature. They are then processed to proofing maturity at lower temperatures. The temperature does not rise above 20°C. This is followed by a maturing period of up to 12 hours.

Bäckerei Treiber's new facility is a demonstration of its modern approach.

At Treiber, dough which is processed immediately or after a long resting period is manage via the MIWE KR climatic chamber. It is a classic proofing chamber, which also facilitates cooling. MIWE refers to this feature as "counter-cooling". "That has the advantage that we can allow the goods to mature at the same temperatures, even in the middle of summer," is how Winfried Hartwig explains the advantage of counter-cooling. This technology makes unwelcome skin formation a thing of the past.

Heat recovery was extremely important for Wolfgang Treiber and his employees. As a full-line provider, MIWE offers individual solutions both in the refrigeration and heating sector. The MIWE eco:nova heat recovery system is used for the ovens. Treiber installed the largest system possible, with a rated heat absorption of 960 kW.

This system feeds flue gas and steam separately to the heat exchangers from the various oven systems. The separation →

Yeast-baked products are intentionally baked in the thermal-oil wagon oven.

Pretzel rolls are another product baked exclusively in the wagon oven MIWE thermo-static.

allows MIWE eco:nova to utilise the full thermal energy of both material flows, giving it a very high overall efficiency. Even after the water-side heat exchange, this separation is maintained, which further increases the efficiency significantly. Overall, the untapped energy from steam and flue gas from all rack ovens and from the steam from the wagon ovens heated with thermal oil and the tunnel ovens is delivered to the MIWE eco:nova.
Three MIWE eco:box units are also installed. They are small, compact flue gas heat exchangers, which can also be retrofitted to existing ovens. At Bäckerei Treiber, the 250 kW versions are installed on the steam boiler and on the two central heating boilers of the thermal-oil ovens. "We hardly need to heat water, as we can use water from heat recovery," reports Winfried Hartwig based on one year of experience. In the building's technology room, large buffer storage tanks are installed to store heat and feed it to the rack dishwasher, for example, when required.

So modern technology and traditional craft baking are not mutually exclusive. Bäckerei Treiber is an impressive example of this with its future-proof new building, and demonstrates it on a daily basis with its unique baked goods.

A brief overview of Bakery Treiber	
Owners: Evelyn und Wolfgang Treiber, as well as Katharina Fischer, geb. Treiber Gottlieb-Daimler-Str.2, 71144 Steinenbronn	
Branch outlets:	29
Employees:	
Production:	85
Sales:	ca. 400
Shipping department/logistics:	18
Administration:	8
Sample prices:	
Regional „Filder" rolls	0,40 Euro
Spelt rolls	1,00 Euro
House bread 2,000 g	6,50 Euro
Special breads 750 g	between 3,00 and 4,00 Euro
Danish-style pastries	from 1,35 Euro

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