

## Bäcker Müller, Ernsthausen

**“The best way is to just try it out for yourself,” enthuses Heinz Georg Müller. The master baker and qualified electrical engineer is head of Bäcker Müller GmbH & Co. KG. The bakery currently uses 16 rack ovens, but they’re now old and need replacing. In August 2009 the bakery decided to try out a prototype of the new MIWE roll-in e+, which they were most impressed with, according to Müller.**

Since then, they’ve purchased another three such ovens to replace their old Winkler rack ovens. The procurement decision was not taken lightly. In fact, it was the result of considerable planning. “However we had a problem, because the old ovens use a lifting device,” points out acting Production Manager Dieter Müller. As a result, the bakery’s rack trolleys don’t fit inside every kind of rack oven. Luckily, the new MIWE roll-in e+ features a very large baking chamber, which was one of the reasons why they decided to try it out.

The previous ovens had been in use at Bäcker Müller since 1990. That was also the year they bought their new production facility. Back then, they’d been impressed by how easy the ovens were to load and by the rack trolley lifting device in the baking chamber. “Plus it was really easy to clean the baking chamber,” says baker Michael Fürstenberg, who operates the bakery’s rack ovens.

But Heinz Georg Müller and his employees were also familiar with MIWE. The bakery’s retail outlets use several in-store baking ovens made by the Arnstein oven manufacturer and cooling specialist. “We even went and visited their production facilities in Arnstein,” recalls Müller. The team from Ernsthausen was very impressed by the quality of production and the baking results demonstrated during their tour of the facilities. “We didn’t switch to MIWE on a whim. We thought long and hard about it.” →



Acting Production Manager Dieter Müller (left) and baker Michael Fürstenberg (right).



The four MIWE roll-in e+ ovens.

Müller wanted to know exactly what he was getting. “We only had the quality of the Bake-Off stations and other competing brands to compare with,” explains the head of the bakery, providing a glimpse into the company’s philosophy. The foundations for this lie in high-quality ingredients, their own special recipes and sourdough leavening processes as well as longer baking times.

Acting Production Manager Dieter Müller: “our proofing cabinets are set at just 28°C. So the dough has plenty of time to ripen.” The same idea comes into play in the retail outlets, where bread rolls are allowed to ripen gently during longer baking times.

Although many of their products are baked by the retailers, the production facility also features suitably high-quality oven technology. And it’s here where the baking result plays a decisive role for Heinz Georg Müller and his employees. When redeveloping the roll-in, MIWE took into account both the baking result as well as the oven’s energy efficiency. These two elements need not be mutually exclusive, as the new MIWE roll-in e+ has clearly demonstrated at Bäcker Müller.

Michael Fürstenberg can attest to this success. “We ran the same program with the new MIWE roll-in and one of the old rack ovens for a whole day.” The first thing he noticed

was the evenness of the MIWE baking result. “Even the very bottom tray was perfectly baked.”

This evenness owes much to the rack oven’s powerful heating. Unlike many other rack ovens, the hot air is fed directly into the baking chamber of the new MIWE roll-in e+, instead of being diverted via the steam device. The air flow can also be precisely controlled using the patented MIWE air-control, so that just the right amount of air can be supplied to suit every baking stage.

“We set its parameters with the help of a representative from MIWE,” remembers acting Production Manager Dieter Müller and praised the master baker’s expert knowledge. It provides nine different settings for controlling the amount of hot air supplied from the heat exchanger to the baking chamber, while the ventilation louvres stay more or less wide open. It’s a simple, effective and reliable system.

The redesigned steam device in the MIWE roll-in e+ also contributes to the oven’s unbeatably even baking result. It is now positioned behind the baking chamber and uses the flue gas exiting the heat exchanger to heat the water. So the flue gas is used twice. Dieter Müller: “Our installer was surprised by the low temperature of the flue gas coming out of the oven.” The gas cools down considerably as it’s used twice, which also significantly increases the oven’s efficiency.



The steam device is positioned away from the hot air entering the baking chamber, which is beneficial in more ways than one. The steam can be evenly applied to all trays, plus any potential limescale build up in the steam device will not affect the air conduction, so the oven can continue producing deliciously even baking results.

The water at Bäcker Müller is very hard and is therefore decalcified before use. But if a rack oven does develop any limescale build up, the steam device can be easily cleaned. The back wall of the oven can be removed and the individual steam casings can be taken out and cleaned or replaced, depending on the level of calcification.

And the MIWE roll-in e<sup>+</sup> is just as easy to operate. The four rack ovens from Arnstein are used primarily to bake Kaiser rolls, rolls and bread sticks covered in melted cheese, soft rolls and multi-grain wheat bread. The baking climate can be so precisely controlled that some of the products conventionally baked in deck ovens can now be baked in rack ovens. "It's very easy to operate," says Michael Fürstenberg, commenting on the benefits of rolling loading.

Baking programmes can be accessed via the MIWE TC control system. "It was easy to operate from day one," he says, recalling his initial experiences with the oven. Alongside the proven MIWE FP10 fixed program control, the Touch Control comes with a seven-inch colour display. Programmes can be accessed in Easy Mode and in Professional

Mode, authorised users can enter and change the baking parameters.

The controls of the four new MIWE roll-in e<sup>+</sup> ovens are connected to the office, from where they can be monitored and adjusted. "It's a bit tricky at the moment, as we are currently using four different control systems," points out Heinz Georg Müller. In the long term, they hope to use just one system.

The head of the bakery raises another important issue: "Apart from baking quality, we're also very concerned about energy consumption." After all, the purpose to test the oven was also to assess its energy efficiency. "If you're buying several ovens, opting for a more energy efficient model really pays off."

This brings us back to the topic of comparative baking. Müller and his bakers were equally impressed by the energy efficiency of the MIWE roll-in e<sup>+</sup>. "The heating time is extremely short." This is particularly helpful for back-to-back baking. Once a rack trolley has finished baking, the oven automatically reheats to the start temperature. Sufficient steam also needs to be made available.

"Compared to the old ovens, we gained a whole hour of operating time," reports Michael Fürstenberg. While the old ovens were still heating up, the new MIWE roll-in e<sup>+</sup> was ready to roll. Heinz Georg Müller: "That not only saves energy, it also means we can bake more products on the same amount of baking area." →



Baker Michael Fürstenberg working with the roll-in e<sup>+</sup>.



Baker Michael Fürstenberg operating the MIWE roll-in e<sup>+</sup> via the TC control system.



Products baked using the MIWE roll-in e<sup>+</sup>.



Heinz Georg Müller claims the new ovens use „1/6 less energy than other ovens“ – a figure which was calculated based on the amount of oil used during the compara-

tive baking. In other words, the bakery had plenty of good reasons to choose the MIWE roll-in e<sup>+</sup>.

## A brief overview of Bakery Müller GmbH & Co. KG

Proprietor: Heinz Georg Müller  
Rodaer Straße 2  
35099 Burgwald/ Ernsthausen

Branch outlets:	50
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### Employees

Production:	40, including 1 apprentice
Sales:	220, of which 5 are trainees
Distribution/logistics:	45
Management:	8

### Price examples:

Kaiser roll	0.28 EUR
Mixed rye bread 1,000 g	2.85 EUR
Sunflower seed bread 750 g	2.85 EUR
Danish-style pastry	1.10-1.15 EUR