

Bakery Grünhoff, Norden-Norddeich

Ideal solution.

Master baker and pastry chef Lars Grünhoff swears by annular tube ovens. In spite of that, he is quick to utter the words “yes, but”. Today, he knows that there are other solutions which are as good baking in annular tube ovens, and even offer further advantages. His two annular tube ovens were supplemented with a MIWE ideal e+ with variobake. “An ideal solution,” says Grünhoff, both with regard to the energy consumption and, most importantly, with regard to the baking quality achieved.

We want to sample the baking quality for ourselves and take a bite of a Danish-style pastry. “It has to be just as moist in the afternoon as it is in the morning when it comes from the oven,” argues Grünhoff. And it does actually taste very good. It has a delicate, crisp crust, as well as a moist and light crumb. Grünhoff and his staff bake the pastries in the MIWE ideal e+ for a good reason – to achieve these results.

“We want the best baking atmosphere for every product,” is how Grünhoff explains his basic concept. His company has eight proprietary locations, and also supplies many large-scale customers like hotels and the regional catering sector. As the summer is the main season for these buyers, there are major fluctuations in the baking quantities. “We wanted to take that into consideration when investing in a new oven,” says Grünhoff, who pays close attention to the financial side as a craft businessman.

He adds that while annular tube ovens retain their heat well, they are very inflexible, and all ovens have to be heated at all times. A heating gas circulator like the MIWE ideal e+ is designed as a two-circuit oven. As a result, two oven groups can be controlled. “And if necessary, only one oven group is heated in winter,” is how Grünhoff explains his idea.

For him, the fact that MIWE ideal e+ is highly flexible while baking is particularly important. “With an annular tube oven, you have to give a lot of thought to what is baked at a given time, as the temperature drops very slowly.” →



Optimal baking results, flexible feeding and energy-efficiency – enough reasons for master baker and pastry chef Lars Grünhoff to rely on the MIWE ideal with variobake.



The best available oven technology is used for every product.

The high storage mass in annular tube ovens is certainly an advantage for specific products. That is why Grünhoff primarily bakes bread in both annular tube ovens. The two annular tube ovens and the MIWE ideal e+ are supplemented by a loader which is primarily used to feed bread loaves onto the stone plates.

By contrast, Lars Grünhoff has stopped using classic rack ovens and a wagon oven with annular tube technology. That latter had become too large, as it had a capacity of 24 trays. "We have smaller batches, but more of them." Grünhoff still has three rack ovens in operation. They bake split rolls and seed rolls. "However, on some days our double racks stay off, even in the season," explains Grünhoff. He says the reason for this is that more and more baking is done in the branch outlets.

The eight branch outlets now all use MIWE aero in-store ovens. Six types of rolls are baked there throughout the day. One advantage of having the same oven types in the stores is that all branch outlets produce the same quality. At the same time, assistants or temporary staff can operate all ovens.

The branch outlets bake dough pieces from GVA cabinets or dough pieces processed via GVA automatic proofing units, which are delivered to the outlets in refrigerated condition. For Lars Grünhoff, the advantage of this is that the outlets no longer have to determine the optimal proofing level. "That means that we can offer rolls fresh from the oven all day long," is Grünhoff's philosophy.



The draw-plate ovens make it easy to load and unload the ovens.

With other products, the company's own sour dough (salt-sour method) guarantees a high product quality. "Baking plays a key role here too," says Grünhoff and points out the interaction between crust formation and a moist crumb. That is why he chose annular tube technology years ago.

As he also knows the disadvantages of this technology, he found an ideal supplement to his oven systems in the new MIWE ideal e+ with variobake: "Now we can map baking curves which would not have been possible previously with a heating gas circulator, but also use the flexibility of the heating gas circulator."

The "modulating" burner in conjunction with the oven control system make this possible. While it was previously only possible to operate the burner on two performance levels at most, it can now be regulated with full output flexibility. This is only possible with gas burners, by the way. For example, it can prevent significant drops in baking temperature after the bread is loaded. The burner continues to run at low capacity, and this prevents scorching.

Conversely, that means that the MIWE ideal e+ with variobake can be used to bake exactly like an annular tube oven or even a thermal-oil oven. "In the ideal, many things are getting even better," adds Grünhoff. That is definitely because the temperature control is very precise. It allows the baking curve to be customised precisely for every product. MIWE had a good reason to call its system variobake.

Lars Grünhoff and his staff quickly found out which products can be baked best in the MIWE ideal e+. "We can actually

bake everything in it," says an employee at the oven. But the other rack ovens also have to be operated, as they are needed for capacity reasons.

That is why only a carefully selected range is baked in the heating gas circulator with variobake. It includes Danish-style pastries, croissants and cakes. "We notice that they rise differently, have a better gloss and still have the required moistness even hours after baking," explains Grünhoff.

Certain types of bread, like pure rye bread, are also baked exclusively in the MIWE ideal e+. The bread is then baked directly on both draw-plate ovens. While other bread loaves are loaded via scrapers with an Ahlborn loader this saves a step and reduces the strain on the sensitive dough loaves. In the MIWE ideal, all baking is done on stone plates, which also has a positive effect on the baking result.

"In the annular tube oven, the rye breads become wider instead of rising. In the MIWE ideal, they rise better," is Grünhoff's explanation of his experience. The master baker and pastry chef attributes this improved rising in particular to the saturated steam. Although the ideal is one of MIWE's classic ovens, the MIWE designers continuously work on improving the oven even further.

It's not for nothing that the MIWE ideal bears the e+ label. In addition to an even more powerful steam unit, the oven's energy consumption was improved in particular. "We have already noticed that we consume less gas," is

Lars Grünhoff's initial résumé. MIWE speaks of a 15 percent higher energy yield.

At the same time, the connected load was reduced by 20 percent compared with the preceding model. And that is in spite of the fact that the steam output was improved significantly, as Lars Grünhoff notes again and again. The precise baking curves also have a positive effect on the energy consumption. "It's actually logical," says Grünhoff, "as only the energy that is actually needed is fed."

Lars Grünhoff created the baking program himself after initial assistance by a MIWE master baker: "That was very simple and clear with the TC control system." The colour touch screen made it easy to enter the required baking parameters. It allows up to eight baking steps with parameters like steam, draught and temperature to be defined and stored.

Master baker and pastry chef Grünhoff even stored a baking program for pumpernickel, which is baked for seven hours. In the first three hours, the temperature drops from 240 to 140° Celsius. "That would not be possible in an annular tube oven. The bread would be scorched." The bread then bakes for a further four hours.

One of the two draw-plate ovens holds 52 pumpernickel loaves weighing seven kilograms each. "And at the latest that is when we notice the oven construction quality," grins Lars Grünhoff. Together, the pumpernickel loaves and baking tins weigh roughly 400 kilograms. That is no prob→



Even in the afternoon, the Danish-style pastries still taste "first class": Moist inside and nice and crisp on the outside.



Like everything else, the company produces its own croissants. They are baked in the MIWE ideal, as they "rise better" in it, as Lars Grünhoff says.

lem for the draw-plate ovens in the MIWE ideal e+. In spite of the high load quantities, the oven's temperature curve does not drop. "On the control system display, you can see that the burner is running," explains Grünhoff. However, it only runs at a very low power and maintains the baking curve set precisely. "That is ideal," says Grünhoff, with possibly something of a double meaning!



Lars Grünhoff considers that supplementing his annular tube ovens with a heating gas circulator is an "ideal solution".

A brief overview of Grünhoffs Backstuvv

Owner: Lars Grünhoff
Tunnelstraße 1
26506 Norden-Norddeich

Branch outlets: 8 + comprehensive delivery range

Employees:

Production: 24, of which 4 are apprentices

Sales: 80, of which 7 are apprentices

Shipping department/logistics: 8

Administration: 2

Sample prices:

Split rolls 0.33 Euro

Mixed flour bread 1,000 g 3.10 Euro

Special bread, 1,000 g 3.25 Euro

Danish-style pastry 1.50 - 1.70 Euro

Croissant 0.95 Euro

Cake 1.70 - 2.65 Euro