



# Can taste be preserved?

Many bakers think that flash freezing is an emergency solution to save working time and preserve the baked products for later finishing. Far from it: with the right technology, a perfect product quality that does not have to hide behind fresh products can be obtained by cooling as quickly as possible. However, this requires more than "just" refrigerating capacity. Here, profound knowledge is required to understand the complex connections between cooling,

proofing and baking. In short: know-how that is possessed only by someone who, for many years now, has been making bakers' lives easier worldwide with innovative and reliable solutions.

### ► Flash freezer MIWE SF-V (-38°C to -20°C)

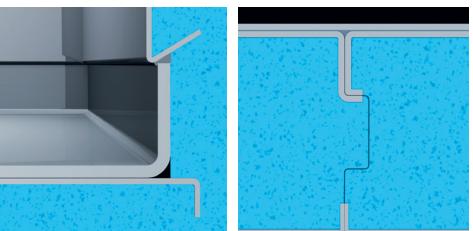
- Specially designed for non-proofed, pre-proofed and baked goods.
- ▶ A core temperature of at least -7°C is reached in no time at all.
- Immediate icing on the product surfaces moisture is sealed into the dough pieces/baked products.
- Individual tailor-made design and quantity standard (e.g. 12 trolleys/h): from the third trolley on as flow-through units; from the fifth trolley on, fully automatic loading is possible by means of the rack trolley conveying system.
- Very high, variable-speed fan capacity of the laterally-mounted stationary evaporators with integrated defrost heating for accelerating the defrosting process.
- Easy to maintain: easy access to the evaporators via own service door.
- Smaller defrosting cycles as individual plate spacing is adapted to product state (10 14mm).
- Energy-saving: the universal 120 mm (optional 150 mm) thick, continuous insulation prevents cold bridges and energy losses.
- ► Hygiene is the key: interior fittings with seamless floor and door front made of easy-to-clean stainless steel. Outside walls made of stainless steel at extra charge.
- ▶ Including innovative touchcontrol system MIWE TC.

## ► Flash freezer MIWE SF-D (-30°C to -15°C)

- System featuring uniform suctioning. Thanks to the considerably reduced risk of drying-out, the MIWE SF-D is the ideal partner for all types of retarded proofing methods. Perfect for special processes like MIWE smartproof<sup>™</sup>, which uses stackable boards with their logistic (double capacity) and cooling advantages.
- Including innovative touchscreen control MIWE TC.
- No defrosting device necessary.
- Up to 30% shorter cycle times and corresponding energy savings: New air guidance system where the stackable trays are positioned in front of the ventilator in such a way that the sucked-up air only flows through the area containing the trays.
- Core temperature sensor installed as standard.
- Foldable ventilators are easy to clean; 8 mm slat spacing.
- New door system without door handle; a magnet shutting device closes the space tightly and reliably.

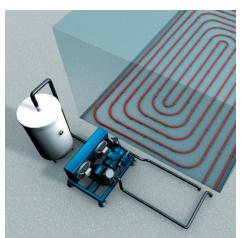


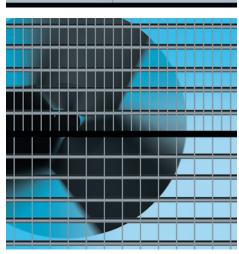
## MIWE bakery refrigeration in detail

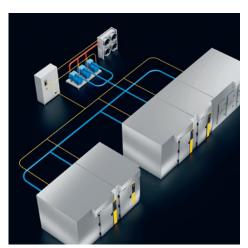


All these things make baking easier (from top left to bottom right):

The hygienic, easy-to-clean base pan with overhanging drip edge; the stainless steel covering stuck across the whole surface and with a joint offset to the base pan, preventing moisture from entering; individually optimised evaporator-plate spacings (important in 24-hr operation!) and, last but not least, the energy-saving operating mode as an intelligent, load-optimised combined cooling system.







MIWE's expertise covers the entire range of climate-controlled processes in bakeries and, thanks to this extensive experience, we are able to offer integrated solutions, which are more than only a total of individual parts. We know the many details that really matter.

Therefore, our refrigerating units, for example, are provided with floors well-suited for bakers,

Therefore, our refrigerating units, for example, are provided with floors well-suited for bakers, ram protection all the way around, and air guide systems made out of hygienic stainless steel elements, which can be removed by hand for cleaning.

Simply consider the flexibility our concept gives you. You are not bound to any modular dimensions, but can obtain any unit with any dimensions. This way you can make the best use of the available space. Or just take a look at the bottom: the MIWE seamless floor, which is very easy to clean, is a standard feature for many versions and, of course, optionally available for all the others too. A special double-bent floor joint with a stainless steel covering stuck across the whole surface provides not only better hygienic features in our refrigerating units but also offers much more protection against penetrating moisture.

Generally, MIWE does not only glue the walls and floors together, but rather it connects them with a tongue-and-groove joint construction by means of a cam-type closure, resulting in better endurance, fewer thermal bridges, and lower operating costs. We not only pay attention to sufficient evaporation surface, but also to optimum space between the evaporator's plates. Since this allows us to prevent unnecessary defrosting phases, five different spaces are used – depending on the climate zone. Good for your product. Good for your budget. Good for you.

The MIWE TC touchscreen control system offers state-of-the-art ease of use in refrigeration technology: A big clear touchscreen display with graphic representation of the setpoint/actual curves, variable programming of up to 99 programmes with up to eight phases each, and powerful networking via different standard interfaces. Far more importantly, however, is the enormous boost in the quality of your products and the surprisingly high degree of flexibility in the dough process, which is made possible by this innovative control system with extremely convenient operation.

In the MIWE TC, the individual phases in the air conditioning processes ("programmes") are not preset fixed processes in a predefined order. Any combination is possible (with the exception of proofing interruption) and they can be carried out more than once within one and the same programme if necessary. You need no longer follow a preset temperature-humidity curve, but you can save any combinations you wish to ensure dough processing and procedures tailormade to suit your requirements. A combination of traditional, conventional processes and modern methods such as "soft chilling" is therefore always possible.

### **Control system**

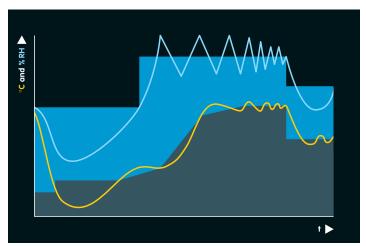


The main display:

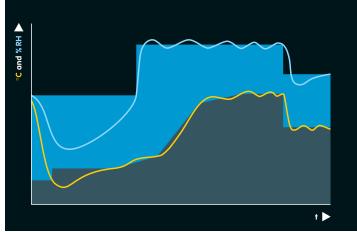
Efficient and with a clear layout, it displays all parameters in graphic or alphanumeric form. The black blocks stand for the individual phases with the respective setpoint settling; the yellow graph shows how the MIWE SF converts the setpoint values into actual temperatures in real time, whereas the blue graph shows the humidity.

You will find other screen shots on the last page of this product information.

Conventional control system:
Clear deflections of the actual curve for humidity (blue) and temperature (yellow).
The surfaces are the respective target settings.



MIWE TC:
Considerable improvement due to target/actual curve approximation.



Cooling surface m<sup>2</sup>

Plate spacing mm

Slip-resistance class

Insulation mm

Control system

Creation and modification of programmes: it has never been as easy and clear as it is with the MIWE TC

Selection of stored programmes

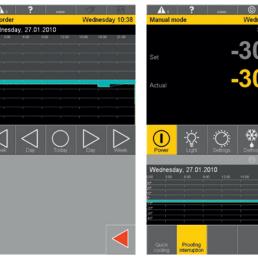
You can easily view finished and pending programmes in the weekly plan – the programme currently running is displayed with a temperature curve

The recorder meticulously documents all processes and archives them for up to one year

Only MIWE TC offers you the whole functional range and the overview in manual mode

Individual timer / storing position management









Roll (16:20:30)

-8

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Technical data	MIWE SF-V	MIWE SF-D	
Temperature range °C	-38 to -20	-30 to -15	
Product quality	unproofed (pre)proofed baked	unproofed	
Trolley type	Rack trolley	Rack trolley/boards	
Number of trolleys	1-4*	1–2	
Baking tray size	60/80 or 60/100	60/40 or 60/80 or 60/100	

89

8

120

R12 TC

Larger	versions	are	available	on	request	

80 - 360

10 - 14

120 PUR

R12

TC