

MIWE roll-in



From the Rotator to the roll-in: this oven has more than 35 years of practical experience behind it

Quickly loaded. Perfectly baked.

An all-round successful oven concept that cannot be improved upon – this is how the German Baker's Journal described the MIWE roll-in after testing the performance of twelve rack ovens from various manufacturers.

The Journal: "A very good, well balanced baking oven which is superbly suited for the entire baking program." We were extremely pleased with the test results – but not in the slightest

bit surprised. After all, bakers have been using the MIWE roll-in for over 35 years.

And, needless to say, we have been improving on this rack oven for the same length of time.

Currently, our fifth generation of rack ovens is baking in today's bakeries. These roll-ins feature numerous technical innovations – each of which is special in itself – the sum of which is highly effective.

Design

Bakeries prefer the MIWE roll-in rack oven in comparison to other models due to its unsurpassed even flow of heat, which results in perfectly-baked products every time.

The energy required in the baking process is fine-tuned by an energy-saving heating element, a well balanced circulator fan, and precision nozzles which distribute the exact amount of heat necessary into the baking chamber.

A maintenance-free motor with safety coupling drives the torsionally rigid rotary table.

All the generating units are located outside the baking chamber where they are easy to reach. The same applies, of course, for all

other important elements of the MIWE roll-in, which are positioned for easy maintenance access. The switchboard and switchbox are also installed in a neat arrangement where they are easy to check.

The MIWE roll-in is mounted on a sturdy base frame. Thus the roll-in can be delivered fully assembled and does not have to be dismantled if it ever needs to be moved around in the bakery.

On the other hand it is reassuring to know that we can also deliver the MIWE roll-in disassembled so that it fits nicely through a 90 cm wide door. Only the MIWE roll-in jumbo requires a bit more space for maneuvering.

The MIWE rack oven doesn't waste any space. Sides and rear can be completely built in, as there is no need for an additional access point. This makes the roll-in ideal for integrating in a battery of ovens.



A battery of rack ovens



Heating system

The MIWE roll-in features a generously sized heating unit with large heat-exchanger surfaces. Excellent thermal performance, great elasticity and fast reactions guarantee quick heating and continuous baking – batch after batch.

A special heating gas circuit in the MIWE roll-in jumbo RI-2/1 reduces the temperature of the exhaust gas further still. Part of this exhaust gas heat is recovered by the integrated heat exchanger. Since the exhaust gas temperature is only around 20 °C higher than the baking chamber temperature, the connected load values are lower and a notable amount of energy can be saved.

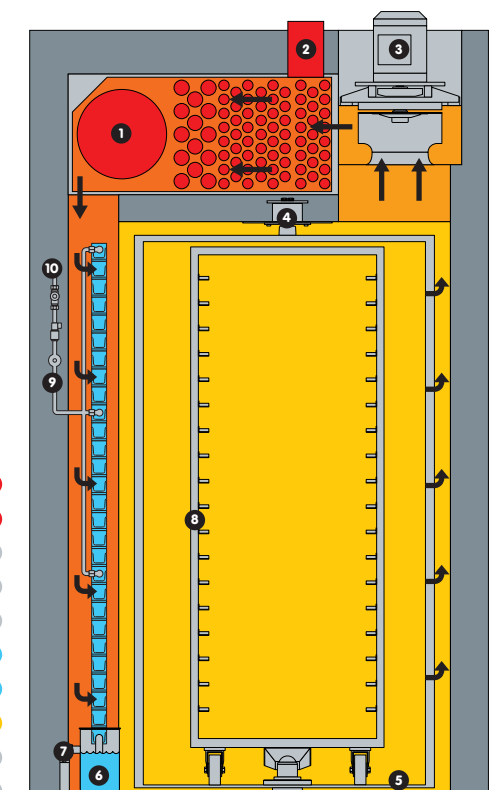
All MIWE rack oven models can be heated with oil, gas (natural gas and liquid gas) or electricity. The ovens can be converted at short notice from one form of heating to another.

A low-maintenance drive unit outside the heating area and adjustable door seals are just two of the thoughtful details that make the MIWE roll-in so practical.



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- Heating unit 1
- Exhaust gas socket 2
- Circulating fan 3
- Rotary drive unit 4
- Rotary table 5
- Siphon 6
- Drain 7
- Rack trolley 8
- Solenoid valve 9
- Water meter 10



Steam generator

A high-capacity steam generator has been specially developed to guarantee an even flow of steam throughout the baking chamber of the MIWE roll-in. The generator is adjacent to the heating unit and is heated by the hot air before it enters the baking chamber.

The steam generator goes into operation as soon as the necessary baking chamber temperature is reached.

Because the baking chamber heats quickly, even steam-intensive bakery goods such as bread rolls can be baked batch after batch, time after time.

This steam generator has been constructed to supply saturated steam to over double the capacity of the total volume of the baking chamber. At the same time, the circulating air picks up the residual moisture on its way through the steam generator. You can rest assured, therefore, that once the moisture is deposited on the bakery goods it will remain there for the entire steam exposure period and will not be picked up by dry hot air.

Kind breaks and a shiny crust are the result. The electromotive steam slide valve can be regulated at will. Steaming intensity and the steam exposure period can be individually regulated to suit each bakery product.

This is an essential prerequisite to guaranteeing quality baked products with optimum breaks and a smooth glossy crust.



MIWE aircontrol.

Safe. Robust. Energy-efficient.

A convection oven in which the amount of circulated air can be controlled as well as the temperature is an oven in which a great many products can be baked a great deal better. Whereas recipes with high proportions of fat and protein can be baked far better with "gentle" heat, other bakery goods benefit from being exposed to a hot and powerful flow of air in certain phases of the baking process.

MIWE aircontrol regulates the air in the MIWE roll-in rack oven (upper level heating) – individually and with high precision.

The technology used is new: two dosing elements between the baking chamber and the heating unit. Being specially designed for tough continuous duty the dosing elements are more reliable than the solutions used up to now. And because they can be closed with practically no delay, valuable heating energy can be saved particularly during steaming and when the oven door is opened.

During steaming the heating unit is shut off from the baking chamber. The slide valves do not open to a freely definable value until after the selected exposure time has elapsed. In other words, the steam is not blown through the heating unit. Which means that the heating unit is subjected to less stress. Firstly, it does not have to put up with so many fluctuations of temperature and humidity. And secondly, there is no longer the usual sudden drop in temperature of up to 10 °C. Continuous reheating is therefore unnecessary, so that according to our calculations you can reckon with an energy saving of up to 10 % when you use the MIWE aircontrol.

For some products you can also shorten the baking time by increasing the quantity of circulated air. And because the steam only has to fill the baking chamber, you need far

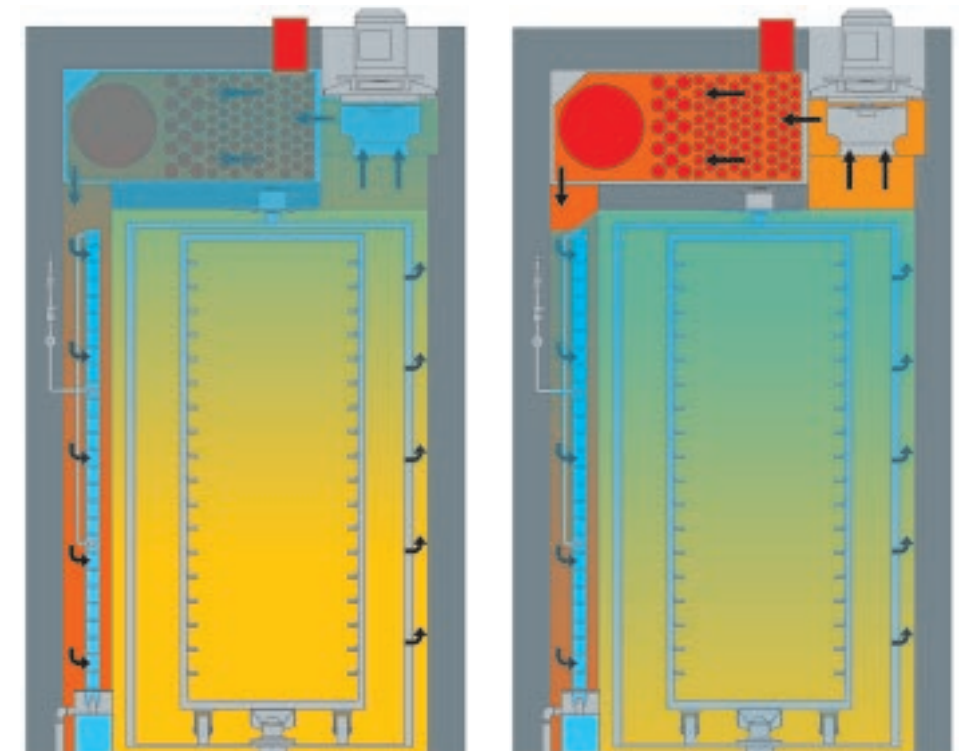


less steam to achieve the same results with the same product. In many cases, therefore, you will consume less water than in the past. The results are less lime deposits, lower maintenance costs, reduced water consumption, and of course a smaller energy bill because there is less water to be evaporated. Quality fluctuations are often caused by fluctuating climatic conditions in the bakery. With MIWE aircontrol you have a firm grip on these fluctuations. Through skilful selection of the air quantity it is possible, for example, to stabilize the crispness of your baked products throughout the year.

Of course, you still have full control of the air quantity at all times with our baking oven control systems. You can adjust both parameters

completely individually for each backing phase in each and every baking program. And, last but not least, MIWE control makes sure that you don't run out of air. In fact, it can supply you with up to a third more air than our conventional solutions – should you need it. Giving you more freedom for more quality.

Sectional view of the MIWE roll-in baking chamber with the MIWE aircontrol on the right: Better distribution of the steam (blue), with less stress on the heating unit and energy savings of up to 10 %.



Control systems. Simple and user-friendly.



By contrast, the **MIWE CS** fully automatic computer control system can store up to 100 individual baking programs. In this case the programs can be read in or out by laptop, handheld organizer (palm), modem or the user-friendly MIWE memobox. Menu-based, easy-to-follow prompts enable even unskilled workers to operate the oven without difficulty. There is also a program for baking frozen proved dough pieces that can be taken direct from the storage freezer to the MIWE roll-in. An additional function available with the MIWE CS is 'gradient baking' (patented). With this function the baking oven 'learns' how to use the same baking program to bake smaller batches without loss of quality.

Like all MIWE computer control systems, the MIWE CS can be integrated with the help of **MIWE winCAB** in a fully automatic bakery.

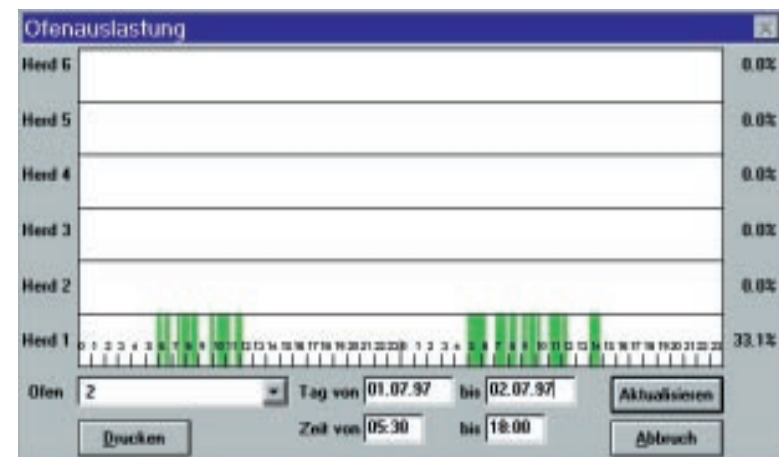
The MIWE roll-in comes with the MIWE AS analog controller as standard, but it is also available with the MIWE DS Digital Control System and the MIWE CS Computer Control System. (Please consult our product info brochures for further details.)

The MIWE roll-in can be digitally programmed with the **MIWE DS**. At the dust- and splash-

proof membrane keyboard you can select the setpoint and actual temperature, the baking time clock with residual baking time display, the automatic night start-up and steaming functions, and the multi-level steam exhaust of the vapor hood.

The MIWE DS can save up to 30 different baking programs.

MIWE winCAB is not only easy to operate, it is also a reliable way to collect all important business management data.



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1. Start		1:00	4:30	4:30	4:30	4:30	4:30	4:30
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Prog		0	0	0	0	0	0	0

Wochenprogramm extern		So	Mo	Di	Mi	Do	Fr	Sa
1. Start		24:00	4:30	4:30	4:30	4:30	4:30	4:30
2. Start		24:00	24:00	24:00	24:00	24:00	24:00	24:00

Materials

The careful selection of materials determines the life of an oven, and with the MIWE roll-in you can look forward to years and years of faithful service. This is guaranteed by the special high-temperature and heat-resisting steels which we use in manufacturing our burner chambers and heating channels. And the same applies to our baking chambers, which are made completely of corrosion-proof stainless steel, and our oven casings. Moreover, all MIWE roll-in rack ovens comply with DIN standards and the regulations issued by VDI and VDE.

Safety and service

The technical safety features of a baking oven are one thing. The reassurance of being able to reach one of our specialists in an emergency is another. This is what our 24-hour service stands for: Help from one of our equipment specialists whenever you need it.

And by the way: The telephone numbers applicable for your region can be found on stickers fastened to the oven where they are easy to see.

We recommend bakers to sign a service contract to cover this service. The contract, which covers the regular maintenance and servicing of your baking oven as well as any visits made by our service fitters, has a positive impact on



your costs – by turning the incalculable expenses of maintenance and servicing jobs into a fixed-cost item.



A battery of rack ovens with the MIWE gäromat proofing unit installed in between

MIWE rack ovens: quite a family.

The MIWE roll-in is available in a wide array of variations and models with baking areas ranging from 4m² to 24 m²:

Our newest and fastest selling rack oven is the **MIWE roll-in RI FO** with upper level heating.

The 60 x 80 cm oven with a floor space of just 2.18 m² provides a baking area of practically 9.6 m². This works out at a space utilization factor (ratio of baking area to standing area) of 4.4. The MIWE roll-in RI FO is also available for 60 x 40 cm, 58 x 58 cm, 58 x 78 cm,

58 x 98 cm and 67 x 108 cm (catering standard) baking trays. The **MIWE roll-in RI-2/1 jumbo** offers double the capacity. The advantages are clear-cut: relatively low investment costs, exceptionally low energy consumption, and an even better space utilization factor: A standing area of just 4.4 or 5.9 m² (with upper level heating or side heating respectively) provides a baking area of up to 24 m².

Need an additional oven in your bakery or a baking oven in your store? In both cases

the perfect answer is the **MIWE roll-in RI-1M medio** medium-sized rack oven, with 15 baking trays measuring 58 x 78 cm, 58 x 58 cm or 60 x 40 cm.



Special version of the MIWE roll-in jumbo two-in-one rack oven with upper level heating



The MIWE roll-in medio is ideal if you need an additional oven or have little space



Accessories: Vapor hood

A large stainless steel vapor hood prevents steam from escaping into the bakery when the oven door is opened. The high-performance, infinitely variable exhaust fan evacuates steam from the premises.

Rack trolley

MIWE rack trolleys are known for their high stability and long life. They come with fully welded joints (not spot-welded), strong rails for supporting the baking trays, and a sturdy rectangular tube frame.

Temperature regulation

To round off the rack oven we can supply the MIWE MGT or MIWE modul for the proofing area, and the MIWE bäckerkälte for the refrigeration area. Please consult our product info brochures for further details.

**MIWE makes baking simple:**

With a range of classical baking ovens that includes not only efficient in-store ovens and reliable oven solutions for smaller bakers, but also fully automatic large-scale baking units.

With a complete range of bakery refrigeration equipment that simplifies and ensures the quality of your baking preparations.

With loading systems that make hard physical work a thing of the past. With a wide selection of control options – from “single-button-operation” for unskilled workers to sophisticated monitoring and documentation systems.

And ... with customer support that you can always rely on.