



Application manual.

iHexagon®



The iHexagon is your specialist for the highest food quality in the shortest possible time. To do this, it intelligently coordinates steam, convection heat and microwave energy. On all six racks. This also creates an entirely new product category.

The advantages at a glance.

- › **Food quality**
Many can work fast. But only one can achieve high food quality. No matter the food. The iHexagon is familiar with all of them and adapts to the food.
- › **Time savings**
Speed – along with food quality – is everything. This keeps sales up and customer waiting times down.
- › **Productivity**
Produce more in the same or even less time. It's a breeze for the iHexagon, as it can get started on all six levels at the same time.
- › **Flexibility**
Large quantities, small quantities, different foods at the same time, fast replenishment, extended range of food. This is what the iHexagon means by flexibility.

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1 How is the microwave function visible in the operating modes?

Microwave activity is always visible in the status bar:



In the iHexagon, the activity of the microwave function is indicated as active or inactive by a rocket icon in the status bar. The display of the function status complies with safety specifications and registration requirements.

The microwave is perfectly integrated into the various iCookingSuite cooking modes, and is intelligent, energy-efficient and optimally controlled.

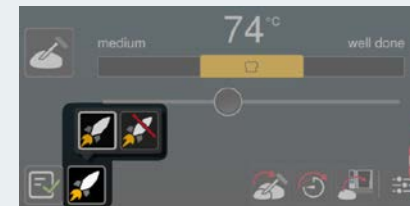
This can mean that even when the microwave is activated, for example when preheating the cooking system or during a cooking step in iCookingSuite, the microwave is inactive to ensure maximum energy efficiency or optimum product quality.



1.1 Integration of microwave in iCookingSuite

Microwave technology is intelligently integrated into iCookingSuite in addition to the usual combi-steamer technology to ensure outstanding food quality without loss of quality in the shortest possible time.

During the cooking process, the microwave intensity and key parameters such as temperature, humidity and time are regularly adjusted to achieve the desired cooking result.



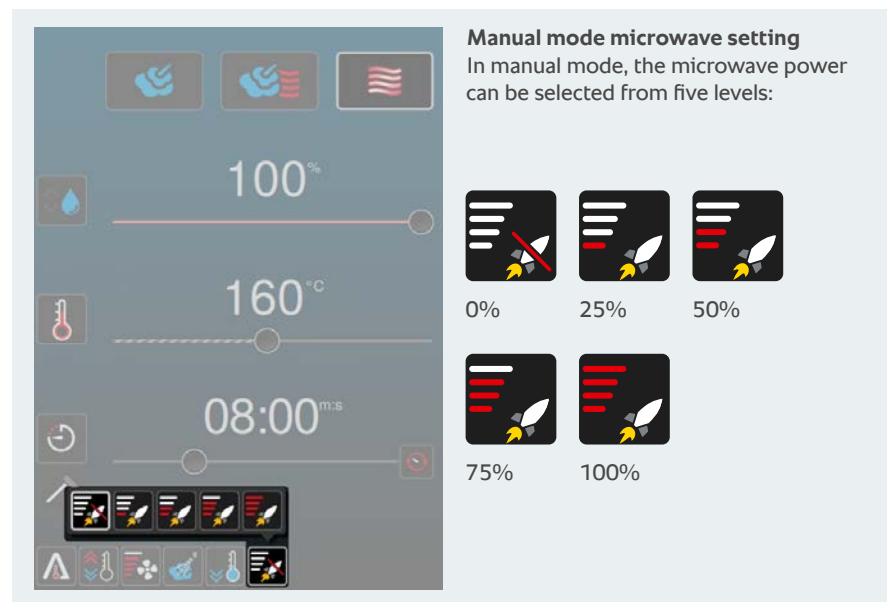
This selection button allows you to deactivate the microwave before loading if you want to cook the product without using the microwave.



If the microwave symbol is not visible or not present, the cooking path will be executed without using the microwave function. An overview and explanation of the non-microwave cooking paths can be found in Chapter 2.2.

1.2 Integration of microwave in manual cooking

In the manual mode of the iHexagon, you can choose to use the steam or hot air climates or a combination of the two. In addition to humidity, cooking cabinet temperature, time and core temperature settings, the iHexagon also offers the option of setting microwave power.



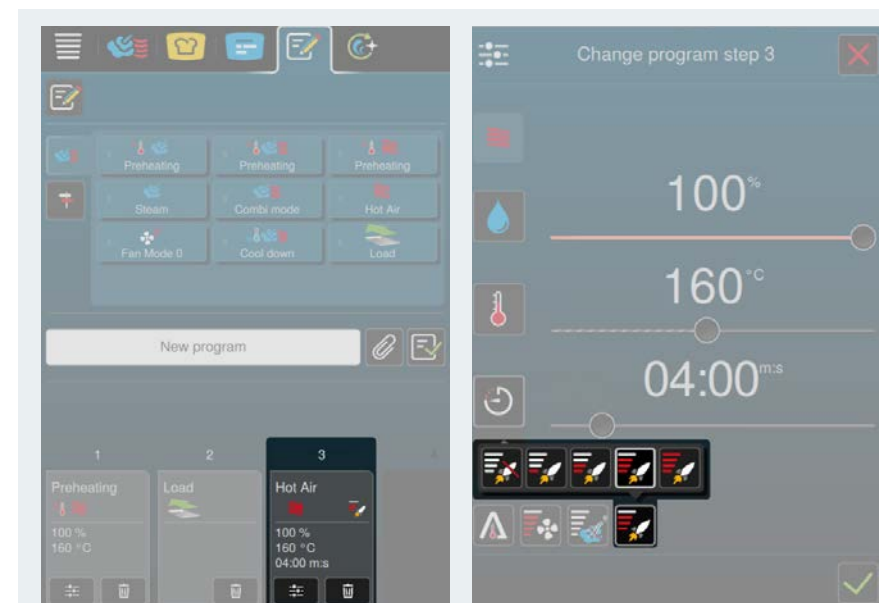
For safety reasons, it is not possible to work in **continuous operation** with the microwave switched on, as microwave operation without a load will damage the cooking system.



Please note that the microwave is available in manual cooking mode up to 260°C. At temperatures above 260°C, the microwave will not operate in manual mode.

1.3 Using the microwave in programming mode

Of course, the iHexagon also allows you to create manual programs and apply microwave power to them. You can then set and save these individually for your product.



As with manual cooking, the microwave can be switched on at any program step. There are 5 levels to choose from.

1.4 Microwave concept in iProductionManager

iProductionManager

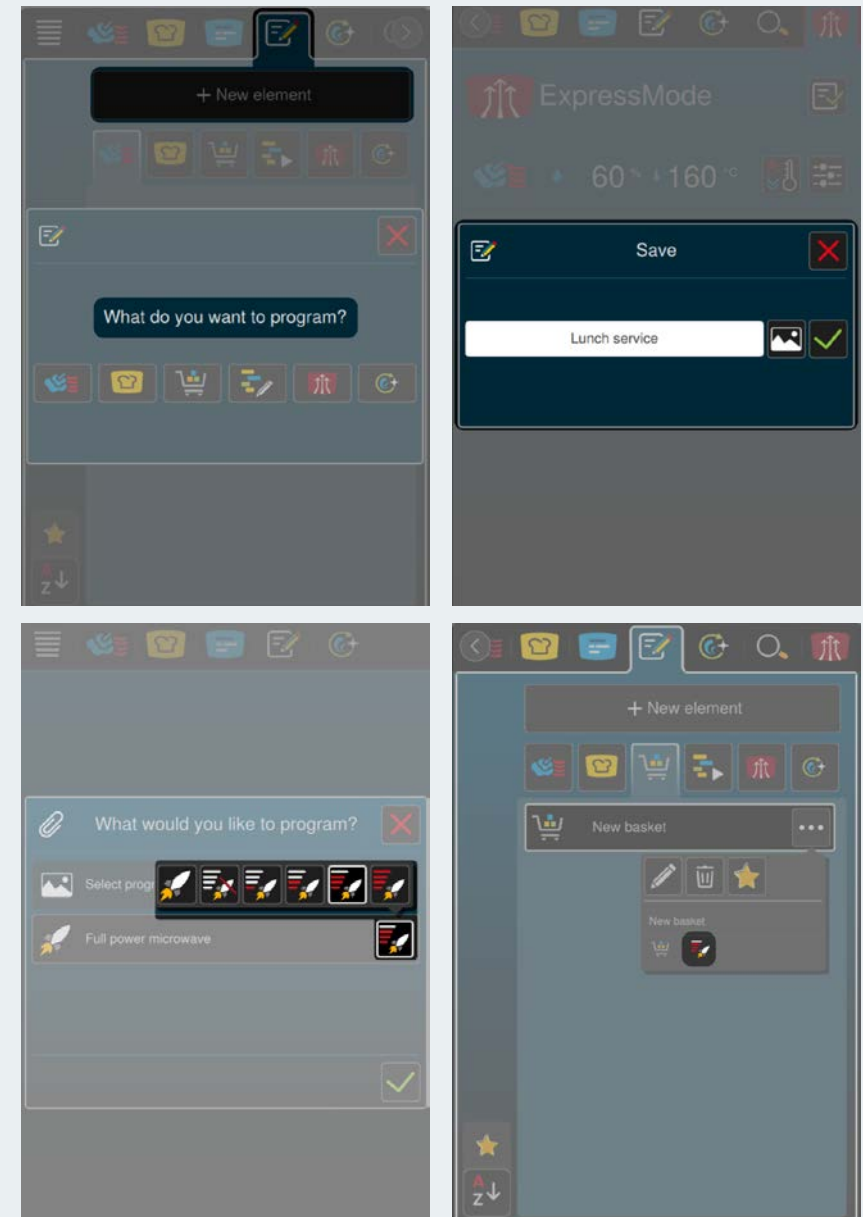
iProductionManager is designed to give you the flexibility to cook different dishes at the same time or one after the other, while maintaining the perfectly tuned microwave power of the iHexagon. You can save your favourite cooking paths from an iCookingSuite application, transfer them to a shopping basket and launch iProductionManager. This means that the optimum microwave power is always available during cooking.



iProductionManager with a defined microwave profile

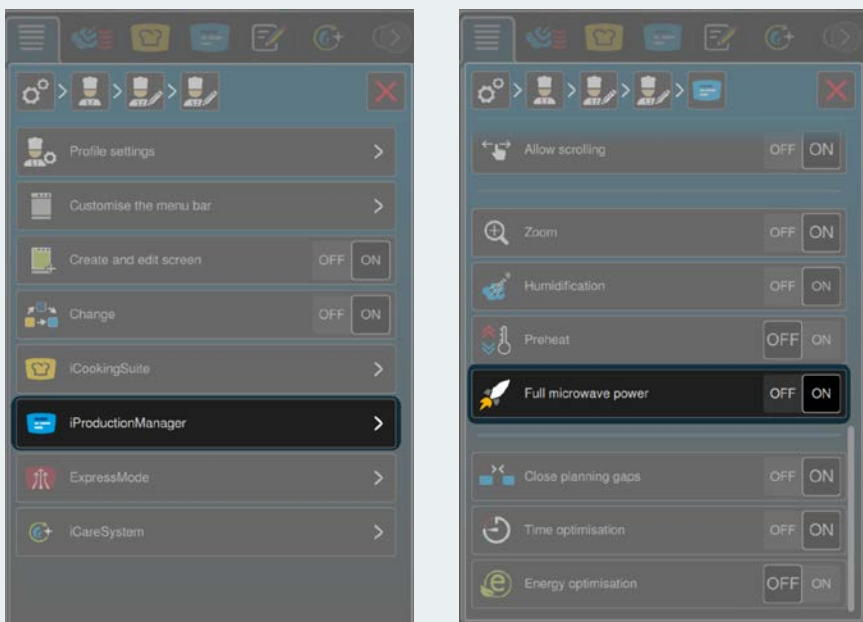
It is also possible to use iProductionManager with a defined microwave profile to cook smaller quantities of pre-produced food in the shortest possible time, e.g. ready to serve in less than three minutes. You can assign a defined microwave profile to the entire shopping basket at 0%, 25%, 50%, 75% and 100% power levels. Create tickets from iCookingSuite or manual mode for quick service in your restaurant or snack area.

To set up iProductionManager with a pre-defined microwave profile, enter programming mode and create a shopping basket with the desired products. You can use the paperclip icon to pin additional settings to your shopping basket. Here you can define the desired microwave intensity for the shopping basket.



Please note that if you select a defined microwave profile, you will always get the same microwave power regardless of the number of racks and load quantity. If no ticket is selected, the microwave function is automatically deactivated.

Full microwave power can also be switched on and off by default in iProductionManager. This function is particularly useful when you want to give the user full control over the microwave power and leave them the responsibility for the cooking result.

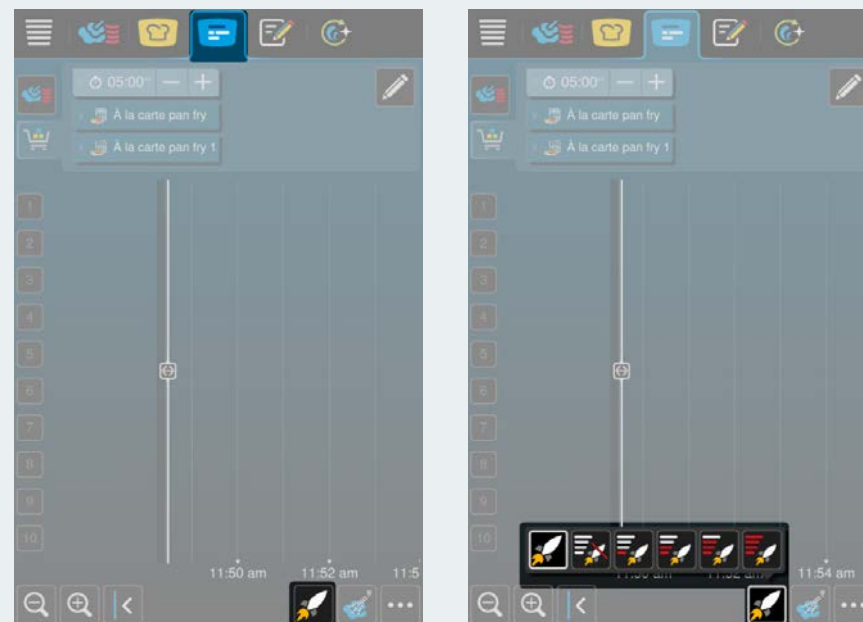


Please note that if you select a defined microwave profile, you will always get the same microwave power regardless of the number of racks and load quantity.

If no ticket is selected, the microwave function is automatically deactivated.



Once you have made this selection in the Settings > User Profile menu, the following icon will appear in iProductionManager:



After activating the additional microwave button in iProductionManager, you can select different microwave profiles. You can choose between the intelligently controlled microwave intensity and the

defined microwave profile at power levels of 0%, 25%, 50%, 75% and 100%. Please note that you can only change the microwave intensity if **no** ticket has been placed.



Selecting the rocket icon with no power levels activates the intelligent microwave operation, which adapts to the load and number of racks.

2 What is the impact of this technology?

2.1 What is the effect of microwave technology on the food?

Microwaves primarily stimulate the movement of the water molecules in the food. The friction energy heats the product.

The different composition of the food, such as fat and water content, or the shape, such as with poultry, affects the temperature distribution. In order to achieve an even temperature distribution in the food, it is important that the microwave power in the cooking cabinet is not set too high.

How do you benefit? Our know-how.

We have already optimally integrated the microwave into our intelligent cooking paths. All you need to do is start the desired cooking path in iCookingSuite. Your iHexagon will do the rest for you.



Good to know: Small quantities heat up more quickly than large quantities. The larger the quantity, the longer the time.

The following rules of thumb apply to cooking with microwave technology:



› Adding microwaves at the beginning of the cooking process increases the cooking speed.



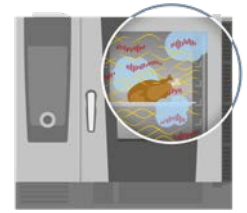
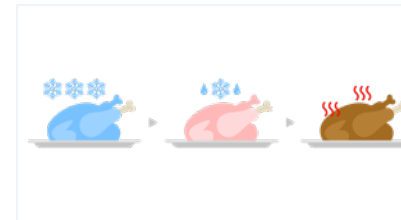
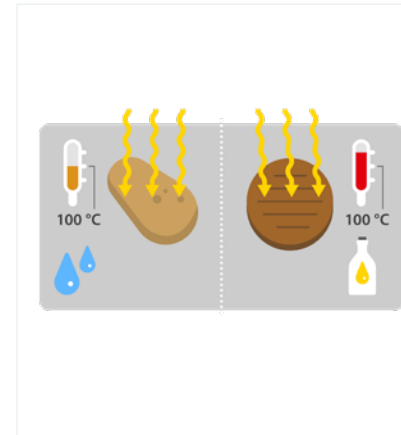
› The addition of microwaves at the end of the cooking process leads to increased surface drying and increased moisture loss from the product, which can be beneficial for crispiness and detrimental for juiciness.



› Metallic surfaces shield microwaves to some extent, as do perforated containers.

To achieve optimal results with the iHexagon, it is important to consider the different requirements of the food.

2.2 What is the effect of microwave on the food product?



The water and fat content of food

- › As long as there is enough water in the food, temperatures in the food will not exceed 100°C. However, higher temperatures are possible for food with a high fat content.
- › If the product is exposed to very high microwave power combined with a long cooking time, higher temperatures can be achieved after the water has evaporated. Please note that the products can also burn on the inside.

The physical state

- › In frozen products, the microwave penetrates the outer layer and is absorbed very strongly.
- › The outer layer continues to heat up, drawing energy from the rest of the frozen product.

Salt content of the product

- › The salt content in the food increases the absorption capacity of the microwave energy and thus shortens the heating time.
- › However, too high a concentration of salt on the product surface can halve the normal penetration depth.

Geometry of cookware

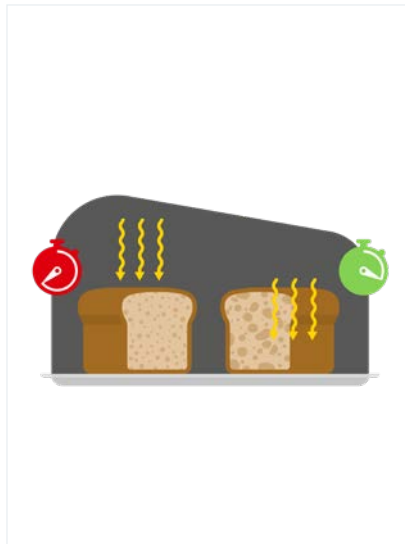
- › In general, the following rule applies:
The thinner the food, the more effectively the microwave can speed up the cooking process. This is especially true for bakes and gratins.

An example: 3 kg of lasagne in a 65 mm Gastronorm container takes considerably longer than 3 kg of lasagne in two 40 mm Gastronorm containers.



Geometry/structure of the food

- › The microwave heats the entire volume of the food, but it must also penetrate the surface of the food.
- › The larger the product, the less effective the microwave heating.
- › The larger the pores, the faster the microwave will penetrate the food.
- › For particularly gentle uses and for preparing very large foods (product thickness > 6 cm), we recommend that you do not use the microwave in manual operating mode.



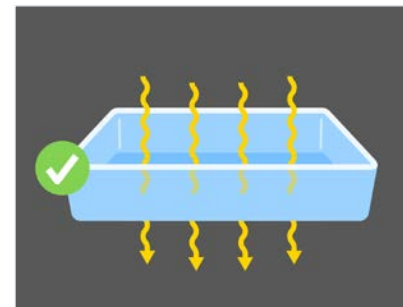
Food carriers/containers

- › When microwaves hit metals such as steel, aluminium or copper, they reflect off the surface in a similar way to how visible light reflects off mirrors. In practice, this means that microwaves cannot penetrate metal containers or aluminium foil. Food in sealed metal containers is therefore out of reach of microwaves.



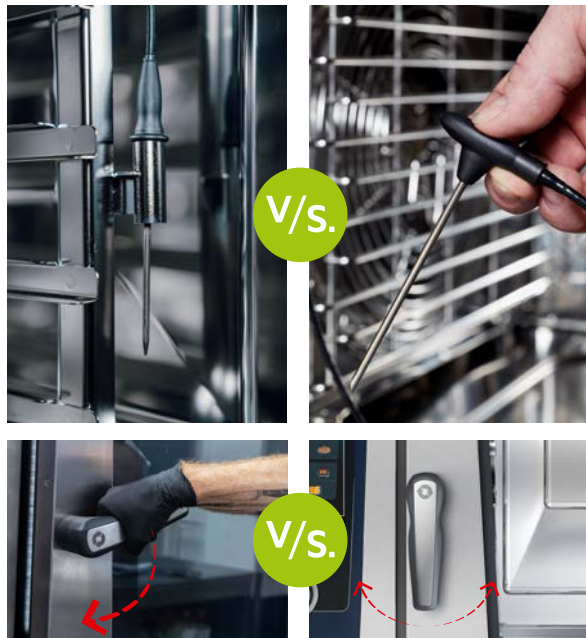
Materials of the food carrier

- › Electrically insulating materials such as porcelain, glass, ceramics, cardboard or plastic are permeable to microwaves. Therefore, these materials do not heat up significantly in the microwave and are well suited for use as crockery. However, if they are exposed to the microwave without food, a slight heating can be observed. This means that microwaves are minimally absorbed by materials such as glass and porcelain.
- › This means you can use microwave-safe accessories if they meet the specific requirements of the food container, as well as the temperature and manufacturer's specifications.



2.3 What distinguishes the iHexagon from the iCombi Pro?

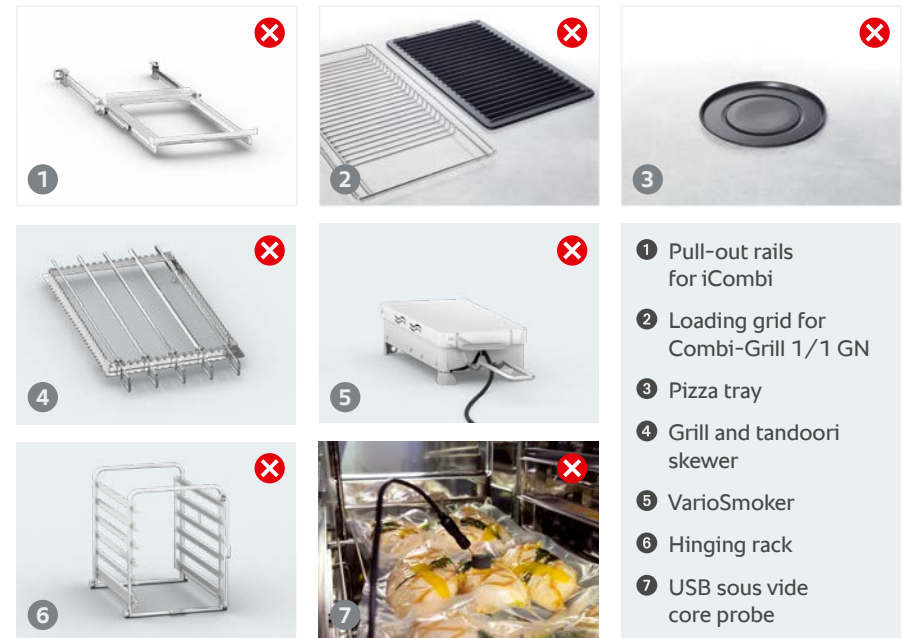
You can also rely on the familiar RATIONAL technology in the iHexagon and cook products with core probes. For regulatory and safety reasons, a slightly shorter core probe is installed in the iHexagon so that it does not protrude from the cooking cabinet. Please note that the core probe must be in a product or firmly in the designated park position on the hinging rack during cooking.



The iHexagon is also equipped with a special security door lock that locks the cooking cabinet door securely and reliably. It can be rotated 90° and engages in two safety locks.

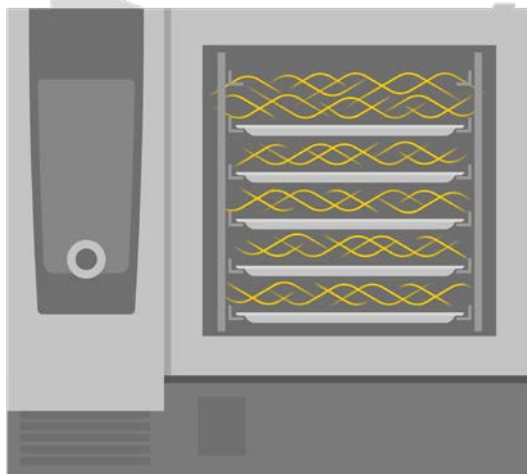
For safety reasons, some special accessories available for the iCombi Pro are not approved for the iHexagon.

These include, for example:



2.4 How is the iHexagon loaded most efficiently?

! For best results, ensure that the products are evenly distributed in the cooking cabinet when loading. Avoid asymmetric loads wherever possible.

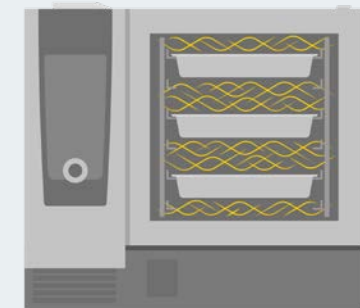
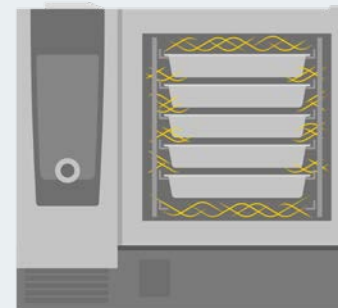


Adequate spacing between the racks ensures that the energy can penetrate the food better and that the product's moisture can drain away more easily when crisping. Avoid placing deep containers directly over shallow accessories.



If deeper containers are used, ensure that there is sufficient space between the containers. Particularly in metal containers, the microwave is blocked in a similar way to hot air or steam and cannot penetrate sufficiently into the product. This results in delayed heating of the products.

Keeping large, even spaces between the plates (> 2 cm) allows the food to heat up more quickly.



3 Boiling & cooking modes



The microwave cannot be used without an additional cooking mode, i.e. it cannot be used as a pure microwave oven.

Please note that the iHexagon must not be run empty during microwave operation.

Before using the iHexagon, make sure you have the correct accessories for your combi-steamer. Use only accessories approved for use with the iHexagon and recommended by us.

Basics of cooking food with microwave

The iHexagon is suitable for cooking almost all types of food. Cooking methods such as boiling, roasting, grilling, steaming, stewing and proving are possible. The cooking time depends on the type and shape of the food (see also Chapter 2.2). When cooking delicate foods, especially vegetables, a short cooking time is beneficial in terms of preserving vitamins. There is very little damage to the cell walls and the juice is retained in the food.

The microwave power and cooking time required can vary greatly depending on the type of food, especially when using the manual cooking mode. Especially just below the surface of the food, the additional microwave energy can cause high temperatures and lead to drying.

With the help of iCookingSuite, iHexagon does the job for you, optimally regulating the cooking cabinet climate and microwave intensity for each product. At the touch of a button, select the result you want and let iCookingSuite do the rest.

Basics of heating food with microwave:

Foods with a liquid and homogeneous consistency, such as clear or slightly bound soups, can usually be heated without problems. This is because liquids conduct heat well and microwaves can penetrate the entire volume more easily. Separate heating of garnishes such as vegetables, tofu or chicken can be beneficial. The added benefit for you? A basic soup that can be served in a variety of ways thanks to the garnish.





Food with a high water content, such as sauces and stews, hardly dehydrates. However, temperature differences compensate more slowly due to its viscous consistency. Therefore, these foods should be stirred during cooking or, if necessary, before eating.

Thanks to the integrated microwave, sauces and stews can also be heated in covered containers. The benefit for you? Less surface drying and even better food quality.

Foods with low moisture content or solid products such as meat, vegetables and potatoes dehydrate faster when heated at high microwave power, especially on the surface. The microwave power setting and cooking time required can vary greatly depending on the type of food, especially when using the manual cooking mode.

While in manual mode you have to make these settings yourself, our cooking intelligence in iCookingSuite does it for you. Simply select the parameters you want and iCookingSuite will do the rest. The cooking cabinet climate and microwave power are optimally adjusted for each product. And the best part? It is very easy and intuitive to use.

If you are still not sure which cooking path is best for your product, simply use our search function. With just a few keystrokes, you can quickly achieve the result you want.



The iHexagon is the ideal solution for heating pre-prepared plated meals or meal trays. To ensure even and sufficient heating of the products, it is important that the pre-produced components are matched to each other.

The best possible plating method leads to the highest possible product quality in the iHexagon.

Here are some tips for cooking:

- › To ensure optimum air circulation and thus better heating, it is advisable to place portions of meat, fish or poultry next to vegetables or side dishes. Components of low height and loose consistency can be heated more quickly. Ensure that such elements are not placed too close together. For example, a pasta dish on a plate will heat up faster than a generously filled but compactly wrapped beef roulade.
- › Another important factor is the fat content of the food. Components with a higher fat content tend to heat up faster than dry, low-fat products.
- › Temperature differences are effectively equalised in dishes with sauces such as curry or casseroles. These liquid elements act as mediators and promote a more even heat distribution. This means that the entire dish is heated more evenly.



Healthy microwave boiling: Gentle cooking with the iHexagon

Food cooked in a microwave is just as healthy as food cooked in a conventional combi-steamer. As a result, there is no risk of harmful effects from microwaves or electromagnetic waves.

Microwaves primarily stimulate the movement of water molecules in a food, which heats the food.



As with convection, combination and steam cooking, it is important to choose the microwave intensity carefully. Excessive microwave power or an incorrectly set cooking cabinet climate can affect the final result. It is therefore advisable to use the microwave carefully to achieve the best results and to avoid burning or drying out the surface.

3.1 iCookingSuite

iCookingSuite is the cooking intelligence in the iHexagon. You can select which food is to be cooked with which cooking method. With this selection, a wide range of cooking processes will be offered so you can achieve the optimum cooking result. If required, you can use cooking parameters to adjust the result to your requirements, for example intensifying browning or changing the cooking level from 'medium' to 'well done'. You can also use our cooking system search function to find a wide range of international usage examples.

During the cooking process, all important settings such as cooking cabinet temperature, climate, microwave intensity, fan speed and cooking time are regularly adjusted to achieve the desired cooking result. If required, you can intervene in the cooking path even during cooking and change the desired cooking result.

What does that mean for you? Easy operation, no need to check, no monitoring. This saves you time, food and energy, and ensures excellent, consistent food quality at all times.



The microwave is integrated into most of our iCooking Suite cooking paths. In some cases, however, this has been omitted for cooking and technological reasons.

No microwave for cooking reasons:



Products that require long cooking times and are prepared using the low temperature frying or boiling cooking paths do not need to be microwaved due to the long cooking time. As soon as the microwave affects the desired cooking result of a product, e.g. a grey rim on a roast beef or unwanted cooking from the inside, as with crème brûlée or poached eggs, for example.

No microwave for technical reasons:



Semi-preserves or other cooking applications in sealed containers would result in overpressure in the container.

Cooking paths without microwave include:

	Blanch/simmer Boiling Cochinita pibil Kebab Lomo saltado Meatloaf Nikomi Roast at low temperature Semi-preserves
	Octopus
	Boiling Cantonese duck Chinese Crispy Chicken Low-temperature roasting Peking Duck Roasted Turkey
	Biryani Dim sum Double-boiled soup CHN Lentils and pulses Macaroni bake Pasta in sauce Preserve Sauté Sushi rice Wok Fry Yoghurt
	Boiled Eggs Egg custard/flan Onsen tamago Poached Eggs
	Chinese soft bread Cream puffs/éclairs European soft bread Macau-style egg tart Meringue Moon Cake Cantonese style New York cheesecake Panettone/Colomba Pão de queijo Proving Soft rolls
	Crisp Hold

All in all, the iHexagon's built-in cooking intelligence, iCookingSuite, gives you all the support you need to cook your food to perfection.

3.2 Manual operating mode

In manual mode, you can set the desired climate and choose whether you want to cook with steam, hot air or a combination of steam and hot air. You can set the cooking cabinet temperature, cooking cabinet humidity, fan speed and cooking time yourself and make all the necessary decisions. Microwave technology is also available in the manual mode of the iHexagon.



What do the power levels of the microwave mean?

Unlike a conventional oven or hob, where you regulate the heat, with a microwave you set the power level – the higher the power level, the more the water molecules are moved and your food is heated. However, higher output does not necessarily mean that the products to be cooked are finished faster. Therefore, the microwave power should be carefully selected to prevent the edges of the product from drying out significantly while the product is not yet cooked or heated on the inside. Similarly, too high a power level can cause porous or thin products to overcook or burn on the inside before achieving an optimum result on the outside. Important nutrients are also lost.



Unlike iCookingSuite, the microwave is not intelligently controlled in manual mode, so it will only support your climate at the microwave power you select.

Full microwave power  does not always produce the best results. Perfect heat and steam settings and the optimum use of microwave technology tailored to the product are the key to perfect results.

In manual mode, we recommend that you try to find the optimum power level for your product step by step.



If you are cooking manually, start at power level 2 (50%) or 3 (75%) to get a feel for the power. This allows you to vary the microwave power in both directions to suit your food.

In manual mode, we recommend the following:

- › By using a single rack, you can reduce the cooking time you would set in a conventional combi-steamer by 15% to 30%. For example, you can set the lasagne to cook for 60 minutes instead of the usual 75.
- › The fuller the iHexagon is loaded, the less effect the microwave will have. At full load, you can work at power level 4 (100%). If necessary, vary the cooking time (90% of the normal cooking time is a good rule of thumb). Conversely, this means that with the same microwave power, e.g. power level 2 (50%) and one rack, you will get a different result than with the same power level and full load.
- › If your food is too dry after cooking, the microwave power may have been too high. Reduce the microwave power at the same time setting.
- › If your product is too pale or not crispy enough after cooking, increase the temperature. You also have the option of increasing the fan speed.
- › If the corners and edges of your product are too brown, reduce the fan speed and/or adjust the cooking cabinet temperature. If the edges are still too brown or dry, reduce the microwave power.
- › If the internal cooking level of your food has not yet been reached, you can increase the microwave power if you have not yet reached the power limit. If this is still not enough, increase the cooking time.

If manual mode does not produce the desired result, we recommend using iCookingSuite.

It helps you to achieve the perfect cooking result at the touch of a button with the ideal ratio of cooking climate and microwave.
(See Chapter 3.1. iCooking Suite)



Good to know: Low power settings should be used to gradually compensate for temperature differences. Smaller food portions promote more even temperatures in the food. This eliminates local overheating ("hot spots") and the risk of "cold spots" (insufficient heating in lower layers of food).



iProductionManager

3.3 iProductionManager in standard mode

Do you want to produce quickly and flexibly and cook several dishes at the same time?

Do you offer your guests individual food prepared to order or served as a buffet?

Do you prepare your food in batches and produce on a rolling basis before or after service?

Do your guests have a limited time to eat, e.g. at lunchtime?

Do you offer your guests seating that invites them to enjoy their order on the spot?

Is the focus on fresh production and post-order finishing of fresh and partially prepared dishes?

Do you prioritise quality and high guest satisfaction?

Do you have more than three minutes to prepare your meal?

Then iProductionManager is just the thing for you!

iProductionManager is designed to give you the following options:

- › Cook different products simultaneously
- › Time-saving production with maximum performance
- › Organise an efficient service while focusing on key tasks
- › Provide perfectly adjusted microwave intensity at all levels

And all this without any loss of quality in the results.

iProductionManager monitors each rack and shows you what can be cooked at any one time. Simply drag the ticket to the desired rack and iProductionManager will make sure everything is cooked optimally. It takes into consideration the load size and even door openings, and adjusts the cooking times intelligently. So you can focus on what's important.

The iHexagon opens up possibilities not available with a conventional combi-steamer. With integrated microwave technology, you can shift production to quieter times, reduce the amount of hot food on the counter and prepare additional dishes as quickly as possible after an order is placed. Surprise your guests with better quality and a wider range of products in less time.

Take advantage of the combined technology and rethink your service processes.

The iHexagon enables you to:

- › Optimised service processes by separating production and service.
- › Reduced loss of quality due to shorter downtimes and à la minute service
- › Significant reduction in food waste through optimised product shelf-life and reduced product warming.

iProductionManager can also be used to plan the entire cooking process. The planning function allows you to organise food production according to your needs. You can choose between time or energy optimised production, efficient meal sequences or predefined production times.

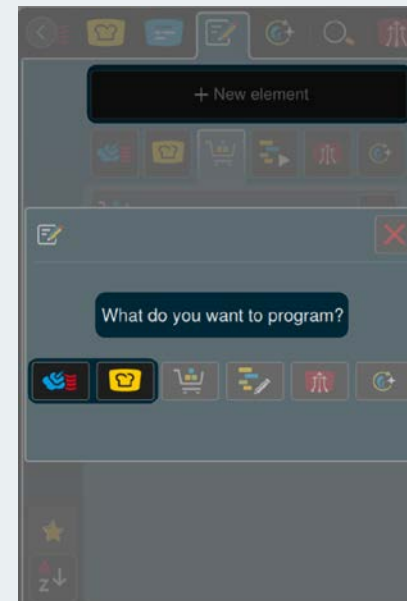


The iHexagon's iProductionManager offers a range of features to help you get the most out of your application by giving you the best tools for the job.

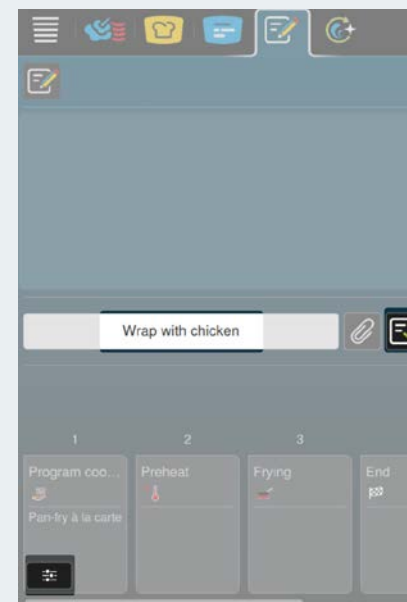
To work efficiently with your products in iProductionManager, simply save your favourite recipes from iCookingSuite, transfer them to a shopping basket and launch iProductionManager.

Wondering how to make these settings?

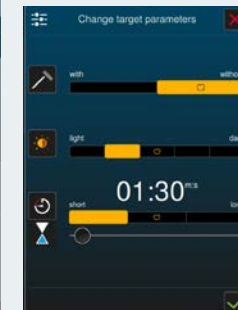
Here is how you can save your individual tickets:



Switch to programming mode  and select whether you want to save a manual program or a cooking path from iCookingSuite.

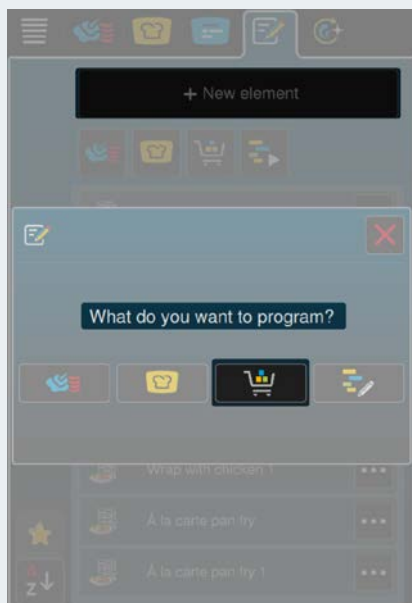


If you have chosen a cooking path from iCookingSuite, you can now create your own name and enter your parameters via Settings .

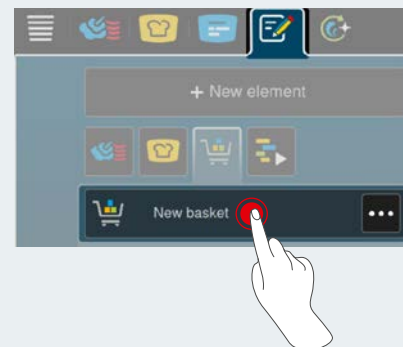
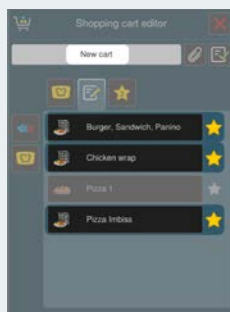


Press the green tick to  confirm your entry and then save .

You can also make your manual settings using this example. Once you have done this for the products you want, you can combine several of these tickets into one shopping basket.



Finally, create it in the same menu as your tickets  in programming mode under the shopping basket  icon, give it a name and assign your previously saved tickets to it.

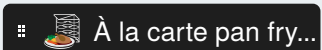


In programming mode, the saved shopping basket can be started at the touch of a button.

Each ticket is intelligently set to the ideal microwave intensity, so your food is always served perfectly and as quickly as possible.

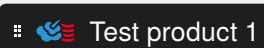
The dishes on offer can either be cooked from scratch or pre-prepared. The iHexagon allows you to deliver during service hours and to meet peak service times with cooking times between three and eight minutes, while maintaining the highest quality. This means you can prepare without stress during breaks and finish food on the go during service.

We have summarised the first tips & tricks for getting the most out of iProductionManager below:



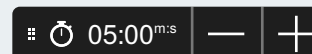
Tickets from iCookingSuite:

The microwave intensity and cooking cabinet climate are intelligently adjusted according to the load quantity and number of racks. In addition, iHexagon constantly monitors climate changes, such as door openings or energy requirements, and adjusts the time for the perfect result. For you, this means an optimal result every time.



Tickets from manual cooking mode:

Stored manual programs with the selected microwave always receive the same microwave intensity. This is evenly distributed over the number of defined rack levels. If you place a ticket on all 6 racks in iProductionManager, each ticket will receive 1/6 of the microwave power. If you place 3 tickets in iProductionManager, you will get 3/6 or 50% of the microwave power.



Timer tickets:

Timer tickets in iProductionManager do not affect the climate or microwave function. They only work as timers or countdown timers.



Good to know: Optimum and repeatable results of consistent quality are achieved by always placing the same amount of product on each accessory or tray.

To ensure that your products are a success in iHexagon, we have summarised several examples in the main categories on the following application pages.

These suggestions are designed to help you find the settings for your products, save them, and create a shopping basket. Depending on the nature of your products, you may want to test them in advance in iProductionManager.

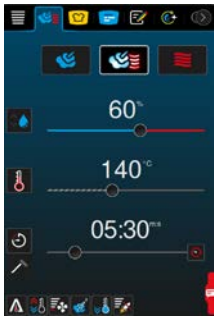
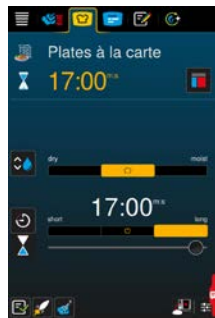
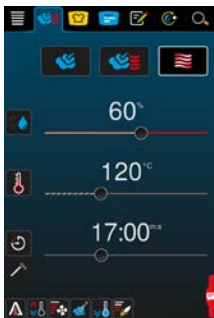


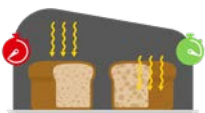
Wok dishes, noodle/pasta dishes, rice dishes

For noodle/pasta and rice dishes, whether Asian, Italian or home-cooked, that need to be heated in large quantities, we recommend the following preparation methods:

- › The heating of the entire container is always dependent on a number of factors, such as the physical state, the salt, water and fat content of the product, the material properties, the structure and the food carrier itself. You can find more information on this in the chapter "What is the effect of microwave on the food product?".
- › Loose pasta dishes can be heated very quickly.
- › Ready-to-eat temperatures of 65-75°C are often sufficient, while preserving the colour and consistency of the food.
- › CNS containers up to a depth of 65 mm can be used (see chapter "What is the effect of microwave on the food product?").
- › Heat-resistant plastic containers can also be used, subject to the manufacturer's instructions and maximum temperature limits.

Below are examples of products with our recommended settings. These are designed to inspire you to create your own dishes and save them as tickets in your shopping basket. You can find instructions on this in the chapter "Boiling & cooking modes/ iProductionManager".

Dish	Output temperature and special features	iCookingSuite	Manual setting
Mie noodles, mie goreng, soba noodles (pre-cooked noodles, pre-cooked ingredients of your choice, cold-mixed in a CNS container), approx. 2-2.5 kg	› Refrigerator: 3-6 °C › Cold, pre-cooked pasta › Mixed with the appropriate sauce › Add pre-cooked and seasoned vegetable ingredients		
Lasagne (pre-cooked lasagne, chilled in a porcelain cocotte), about 400 grams	› Refrigerator: 3-6 °C › Cold, pre-cooked lasagne › Portioned in a heat-resistant porcelain cocotte		

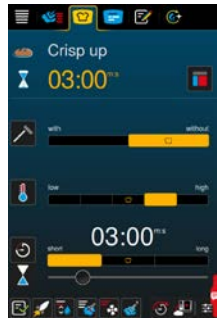
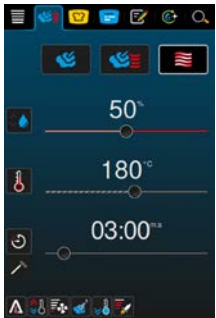
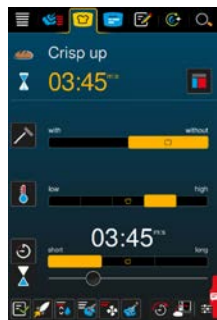
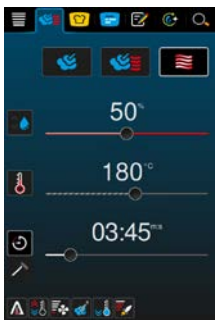
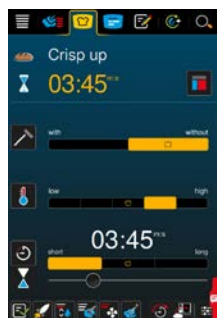
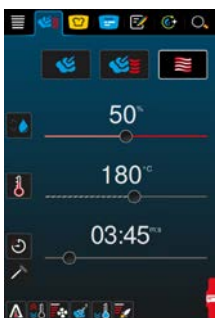


Baked goods, sweet baked goods and pastries

Microwave efficiency is relatively high for baked goods. These are generally relatively easy to heat due to their texture and porosity. (see also chapter "What is the effect of microwave on the food product?")

For more useful information on using the microwave for baked goods, see the following section:

- › Enormous time savings can be made, especially when baking fatty frozen foods.
- › When baking pre-baked frozen baked goods, lower core temperatures of 15–20°C are often sufficient.
- › Pre-baked baked goods do not necessarily need to be heated inside as they lose moisture, e.g. wholewheat bread or baguettes.
- › After baking, baked goods require a short rest period in order to equalise the temperature in the core.
- › A perforated roasting and baking tray (1/1 GN #6015.1103) is recommended for good cooking results.

Dish	Output temperature and special features	iCookingSuite	Manual setting
Baguette, pre-baked, frozen, approx. 380-450 g	› Frozen: -18 °C › Load frozen onto perforated roasting and baking tray › Approx. 3 pieces per sheet		
Bagel, pre-baked, frozen, approx. 85-95 g	› Frozen: -18 °C › Load frozen onto perforated roasting and baking tray		
Muffins, pre-baked, frozen, approx. 100 g	› Frozen: -18 °C › Load frozen onto perforated roasting and baking tray		



⌚ It takes less than three minutes to prepare the food.

In addition to the intelligent and fully automatic control of microwave power in iProductionManager, the iHexagon allows the microwave intensity for an entire shopping basket to be set at five power levels (0%, 25%, 50%, 75% and 100%).

You can find this setting in the shopping basket settings under the "Microwave control" section:

3.4 iProductionManager with defined microwave intensity

You have already been introduced to iProductionManager in the previous chapter. In the iHexagon, however, we have extended this to help you with your fast delivery situation.

Do you want to be able to respond quickly and flexibly to your customers' wishes and cook their food as soon as they order it?

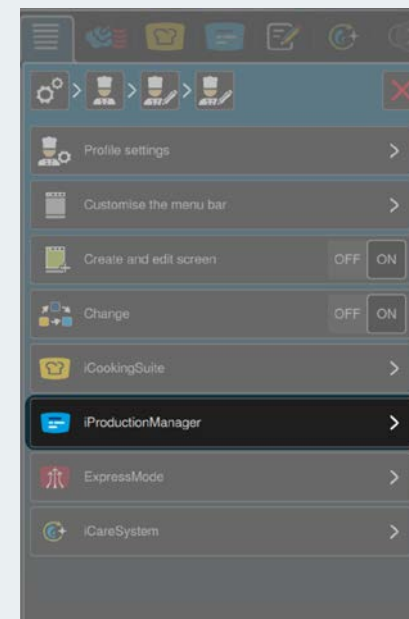
Do you want to cook small quantities or individual portions in the shortest possible time with the highest quality?

Do your customers want to take their food with them and enjoy it quickly after ordering? Do you offer Grab&Go?

To avoid queues and waiting times at the counter, is speed a priority?

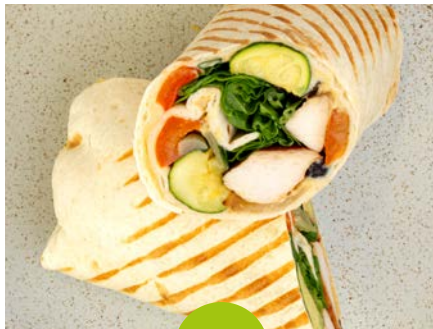
Prepared cold and beautifully presented, do you want to take them straight from the display, heat them up and eat them within minutes?

If you recognise yourself in these questions, then iProductionManager with defined microwave power is exactly what you need.



Please note that not all foods can withstand full microwave power. For some products, a setting of 75% or 100% microwave power is suitable for a fast dispensing situation, but not for filling or pre-production of a display.

iProductionManager with defined microwave power is relevant for fast service. Orders are processed and cooked immediately. The focus is on speed of preparation and service. Food cooked using this function in iProductionManager is usually ready to serve in less than three minutes and must be customised and tested in advance to meet the specific requirements of the food on offer.

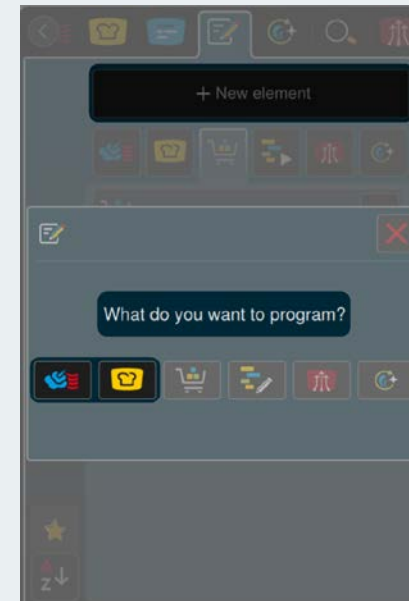


V/s.

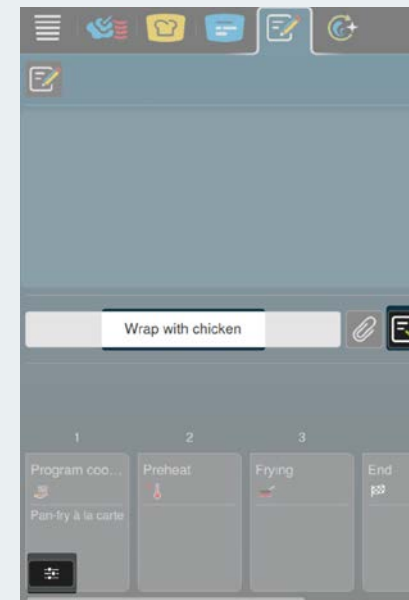


Individual small meals to go, such as wraps or burritos, are particularly suitable for the microwave and are ready to eat very quickly. It is also important to know whether you are just going to heat the wrap, as it is filled with salad and raw vegetables, or whether you are going to heat a burrito very hot. Try it out and find your perfect cooking time.

You can create the tickets for your shopping basket as follows:

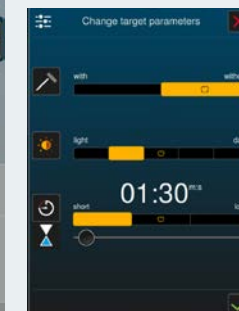


Switch to programming mode . Select whether you want to save a manual program or a cooking path from iCookingSuite.

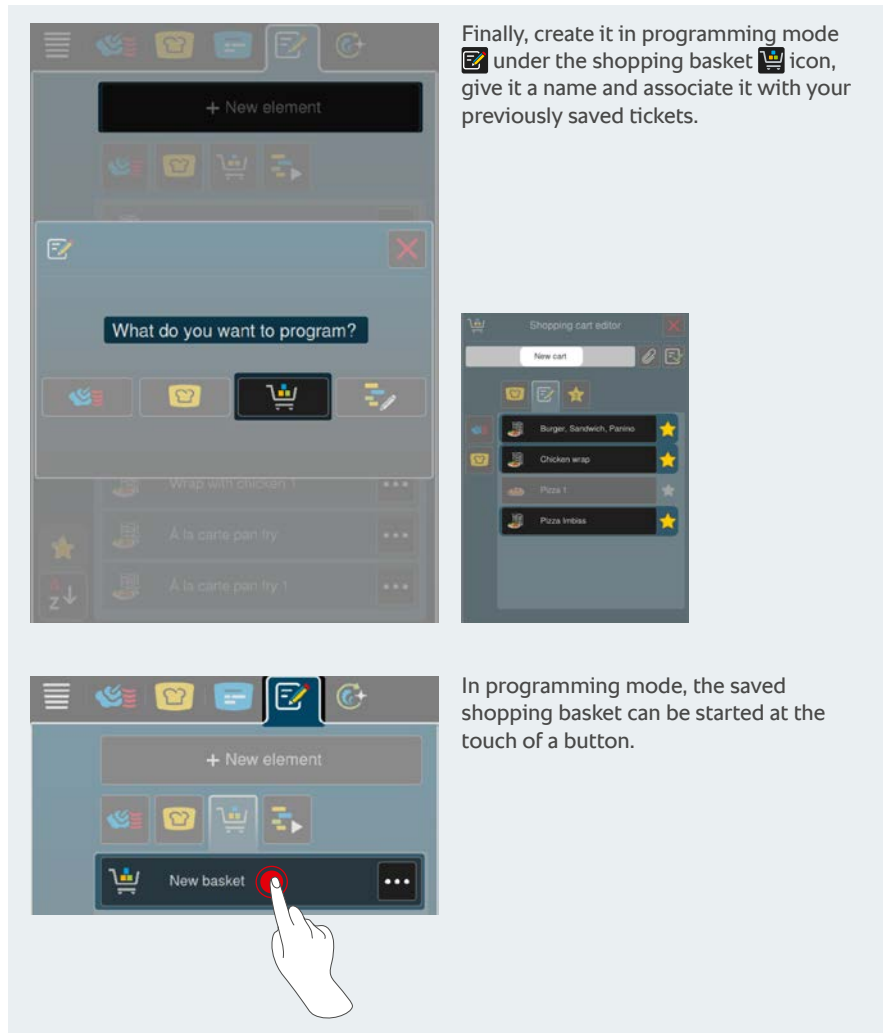


If you have chosen a cooking path from iCookingSuite, you can now create your own name and enter your parameters via Settings .

Confirm your entry by pressing the green tick  and then save .

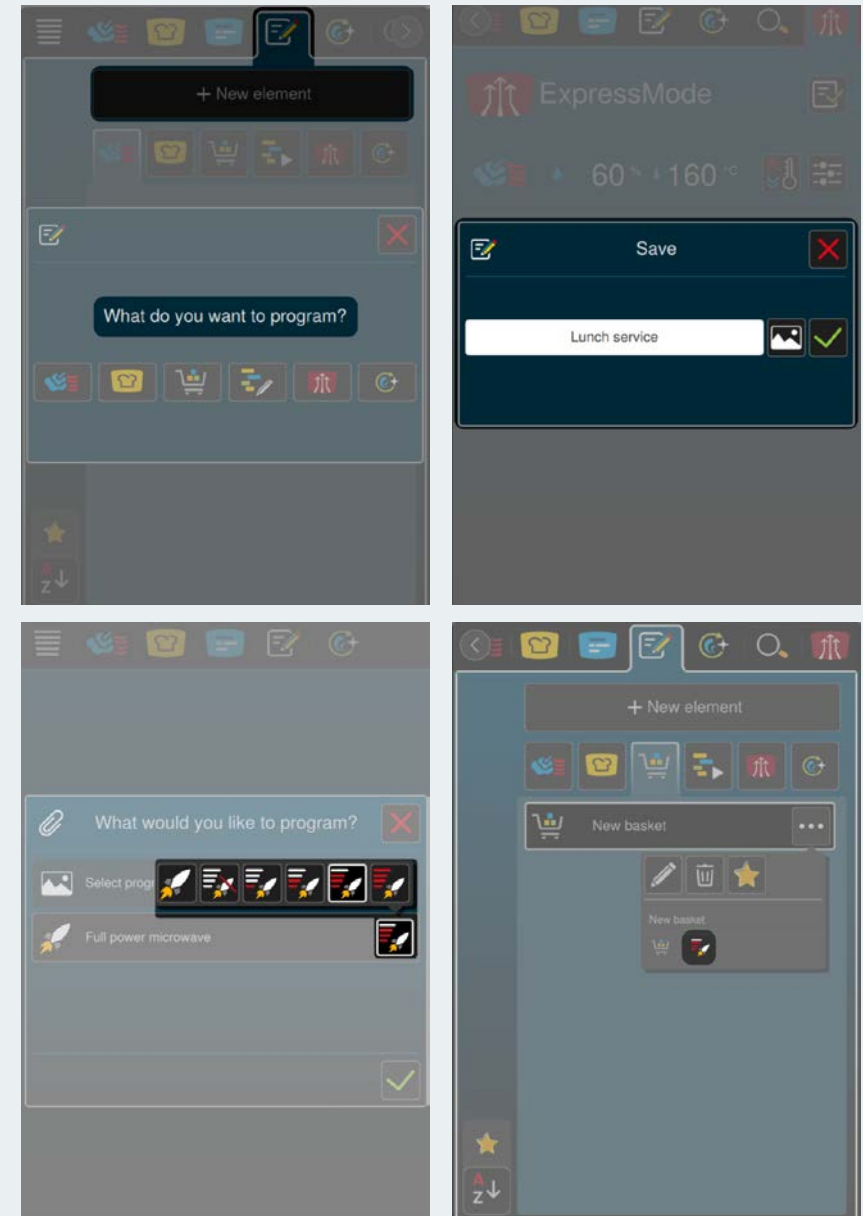


You can also make manual settings in the same way. Once you have done this for your desired products, you can combine several of these tickets in one shopping basket.



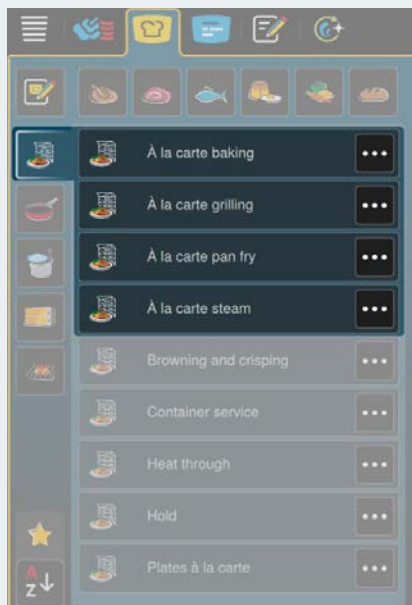
As this is a fast service scenario, you have the option of applying a defined microwave intensity to the entire shopping basket. You can add 100%, 75%, 50% or 25% microwave to all tickets.

Adjust the setting as follows:



Usage examples for iProductionManager with defined microwave intensity

We have already shown you how to set up a ticket or shopping basket. Now, with the following sample products, we would like to help you estimate the climate and time parameters and start your first service with the help of our inspiration.

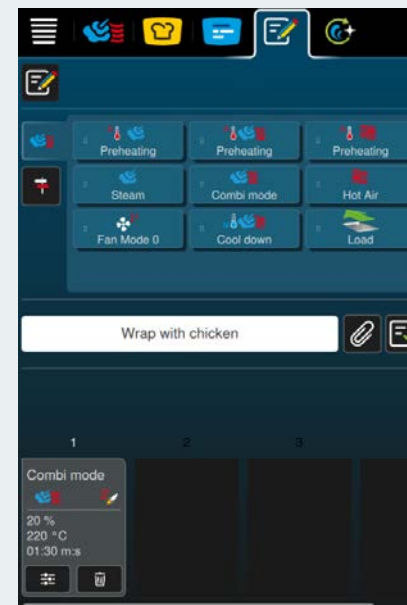


Shopping basket with tickets from iCookingSuite:

iCookingSuite's à la carte cooking paths are particularly suitable as a basis for quick applications using the specified microwave intensity.



By selecting the Save button, you can directly save previously tested settings and call them up as a ticket in the iProductionManager shopping basket.



Shopping basket with tickets from manual mode:

You can also work with your manual settings and save them as tickets.



In order to achieve the best quality and the highest possible speed, it is important to optimise and standardise the preparation of food and snacks. That is why we have put together some important tips and tricks for you.



Wraps, burritos, tacos

For products to be rolled in pastry and heated, we recommend the following preparation steps:

- › The product does not necessarily need to be heated to 90-100°C in the core. Lower temperatures, such as 55-65°C, are often sufficient to protect the food and maintain its colour and consistency. A consumption temperature range within this range is recommended. The ingredients of a wrap should be chosen according to the service temperature. What does that mean? It is important to consider whether, for example, a raw vegetable wrap should only be heated slightly. A burrito should be served at a temperature of 55-65°C. The service temperature affects the cooking time in the iHexagon and the way the filling is prepared. Note that the ingredients in the outer layer (about 1-2 cm) heat up faster than the core.
- › The outer layer contains ingredients that should be kept warm or hot, such as grilled vegetables, pre-cooked pieces of meat or dips and sauces.
- › Ingredients that only need to be slightly heated can be placed in the centre, such as salad. It's also worth considering using baby spinach instead of lettuce. There are no limits to your creativity.
- › The best way to get grill marks is to use a grilling and roasting tray (1/1 GN #60.71.617). This has a grill side for a traditional grill pattern and a frying side with a surrounding edge for pan fried food. The grilling and roasting tray is the ideal addition to your food service.



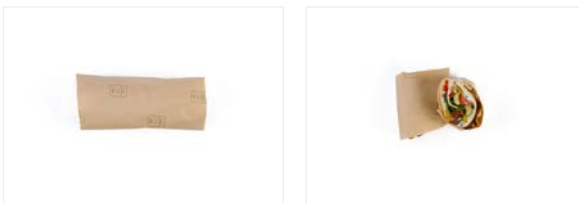
1. Brush the wrap or tortilla with the sauce, then place the pre-cooked meat or vegetarian filling on top as the first layer.



To ensure that the lettuce remains in the centre of the wrap and does not overcook, it should be placed as the last layer. Then fold the outer sides inwards.



2. Roll up the wrap with light pressure and cook on the overlapping side on a grill and pizza tray or a roasting and baking tray.



3. Alternatively, the finished wrap can also be rolled into a piece of paper and cooked directly in the heat-resistant paper for service.

Dish	Output temperature and special features	iCookingSuite	Manual setting
Wrap to be sold hot, e.g. chicken wrap, approx. 350 grams, approx. 6-8 cm diameter, approx. 65-75 °C service temperature	- Refrigerator: 3-6 °C - Cold, precooked meat component - outer layer of sour cream, guacamole, mayonnaise or hummus - Vegetables may already be pre-grilled and seasoned - wrapped in wrapping paper + 15 seconds		
Wrap to be sold hot, e.g. vegetable wrap, approx. 350 grams, approx. 6-8 cm diameter, approx. 65-75 °C service temperature	- Refrigerator: 3-6 °C - Vegetables may already be pre-grilled and seasoned - outer layer of sour cream, guacamole, mayonnaise or hummus - wrapped in wrapping paper + 15 seconds		
Wrap to be sold slightly warmed, e.g. raw vegetable wrap, approx. 350 grams, approx. 6-8 cm diameter, approx. 35-45 °C service temperature	- Refrigerator: 3-6 °C - Vegetables, raw and seasoned - outer layer of sour cream, guacamole, mayonnaise or hummus - wrapped in wrapping paper + 15 seconds		



Burgers, sandwiches, flatbread, panini

For ready-to-sell prepared burgers or panini, sandwiches or filled flatbreads, we recommend the following preparation steps:

- › Heat the products to 55-65°C for optimum colour and consistency.
- › Do you want your burger to be ready to eat in 2-3 minutes? For example, cook the burger in two halves and wait until it has warmed up before adding the more delicate ingredients, such as lettuce or raw onion rings. Also consider whether you can save yourself a step. Maybe instead of onion rings, you could use an onion chutney, or instead of gherkin, a cucumber relish that can also be warmed? So you can cook everything together.
- › Fatty sauces facilitate heating. Use sauces that can also be eaten warm. A homemade tomato salsa or a cocktail sauce.

- › For grill strips, we recommend using a grill and roasting tray (1/1 GN #60.71.617), which has a grill side for a traditional grill pattern and a frying side with a surrounding edge for pan fried food. The ideal addition for your food service.
- › Alternatively, a roasting and baking tray (1/1 GN #6013.1103) offers similar preparation options. For easier handling, it may be useful to use a 2/3 roasting and baking tray (2/3 GN # 60.73.671)?

It use using a burger as an example:

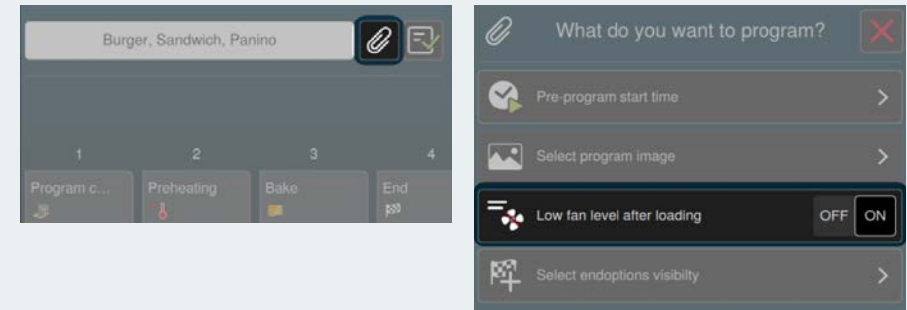


- › If you want to cook the burger with the garnishes, make sure you protect the lettuce and other delicate ingredients with the patty or cheese. Alternatively, add the salad, tomatoes and gherkin after cooking.
- › Burgers can also be prepared in their individual components, such as buns or patties, to give your customers more choice.
- › With the iHexagon, it is possible to offer pre-filled, cold burgers. The customer can choose a burger from the counter and then have it served hot. The burgers offered are cooked as separate components. With a height of 2-4 cm, they can be heated particularly quickly.



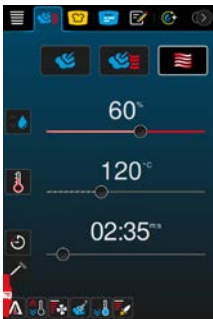
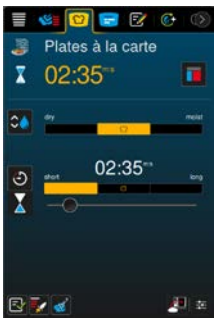
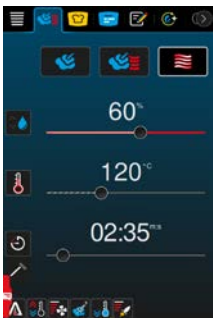
- › When the burgers are open, you can reduce the fan speed to prevent cheese slices, onions and bacon from flying around. Would you like to customise this setting for your product?

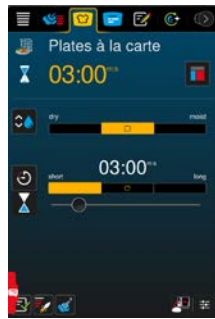
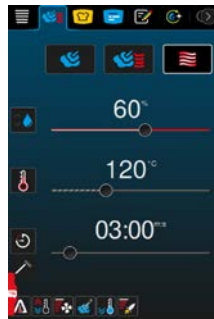
You can find out how to select this here:



Burgers, panini or sandwiches can be warmed up in take-away containers. This packaging must be approved for the set temperatures. When reheating in approved heat-resistant packaging, add approximately 30 to 45 seconds to the cooking time due to the additional packaging.



Dish	Output temperature and special features	iCookingSuite	Manual setting
Burger with minced meat patty (e.g. burger bun, burger sauce, lettuce, gherkin, tomato, cheddar, patty), approx. 250-300 g. Total, approx. 12-14 cm diameter, approx. 65-75°C service temperature	› Refrigerator: 3-6 °C › Cold, precooked patty, about 1-3 cm thick › Pre-toasted bun › Sauces act as a “link” between the layers and distribute heat throughout the product › Vegetables may already be pre-grilled and seasoned › Protect sensitive ingredients with meat or vegetable toppings		
Crispy chicken burger (e.g. burger bun, breaded chicken breast, sauce, lettuce, gherkin, tomato), approx. 250-300 g. Total, approx. 12-14 cm diameter, approx. 65-75°C service temperature	› Refrigerator: 3-6 °C › Cold, pre-cooked, breaded chicken breast, about 1-3 cm thick › Pre-toasted bun › Sauces serve as a “link” between the layers › Vegetables may already be pre-grilled and seasoned › Protect sensitive ingredients with meat or vegetable toppings		

Dish	Output temperature and special features	iCookingSuite	Manual setting
Sandwiches or panini (e.g. pulled pork/beef/grilled vegetable filling, sauce, lettuce, onions), approx. 200-250 g. Total, approx. 3-5 cm high, approx. 65-75°C service temperature	› Refrigerator: 3-6 °C › Cold, pre-cooked, meat or vegetable component approx. 1-2 cm high › Vegetables may already be pre-grilled and seasoned › Place on a preheated grill plate		

Pizza, pinsa, filled baguette, fresh and frozen

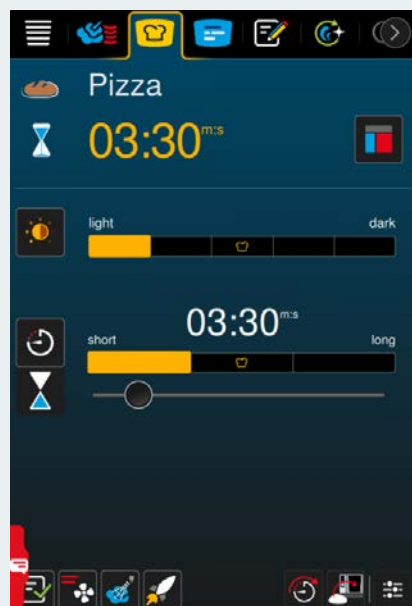
For ready-to-sell, prepared filled dough bases such as pizza, pinsa or tarte flambée, we generally recommend the following preparation steps:

- › The pizza can be baked in the combi-steamer or oven like a normal pizza, i.e. all the delicate ingredients such as rocket, basil, etc. can be topped as usual after baking.
- › With the iHexagon, your flexibility comes first. Hot garnishes are a thing of the past. No drying out, no loss of quality, no food waste. Simply pre-bake your dough, with or without sauce, during production time, cool the half-baked blank with a blast chiller and use it as a base product. Now you can customise your toppings with every order or create pizzas on demand.



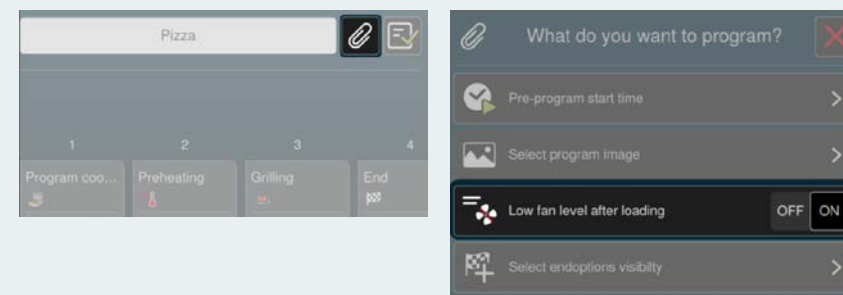


We recommend the following settings for pre-baking these pizzas or pinsa:



- › For a crispy base, it is best to use a grill and pizza tray (1/1 GN #60.70.943)
- › A perforated roasting and baking tray (1/1 GN #6015.1103) is suitable for good preparation and easy handling during service. Due to their composition and the special Trilax coating, the accessories do not need to be greased or preheated.
- › For ingredients such as cheese, salami or light components, we recommend a reduced fan speed after loading. This prevents the toppings from flying away.
- › Depending on the degree of convenience of the pizza, a simple CNS grid is often sufficient.

This setting is made in programming mode by pressing the paperclip icon:



Dish	Output temperature and special features	iCookingSuite	Manual setting
Pizza with pre-baked dough base (e.g. pizza base, tomato sauce, meat or vegetable topping, onion, cheese, rocket), approx. 250-300 g Total, approx. 28-30 cm diameter, approx. 65-75°C service temperature	› Refrigerator: 3-6 °C › Cold, pre-cooked dough base, about 1-1.5 cm thick › Raw topping, e.g. salami, ham, etc. › Vegetables may already be pre-grilled and seasoned › Add delicate ingredients such as rocket or basil after cooking		
Pizza with pre-baked dough base, frozen (e.g. pizza base, tomato sauce, meat or vegetable topping, onion, cheese), approx. 250-300 g Total, approx. 28-30 cm diameter, approx. 65-75°C service temperature	› Frozen: -18 °C › Frozen pizza › Raw topping, e.g. salami, ham, etc. › Add delicate ingredients such as rocket or basil after cooking		

Dish	Output temperature and special features	iCookingSuite	Manual setting
Pinsa with pre-baked dough base (e.g. pinsa base, tomato sauce, meat or vegetable topping, onion, cheese, rocket), approx. 250-300 g. Total, approx. 28-30 cm diameter, approx. 65-75°C service temperature	› Refrigerator: 3-6 °C › Cold, pre-cooked dough base, about 1-1.5 cm thick › Raw topping, e.g. salami, ham, etc. › Vegetables may already be pre-grilled and seasoned › Add delicate ingredients such as rocket or basil after cooking		



Side dishes, potato products

For precooked potato products, we generally recommend the following preparation steps:

- › For potato products such as chips, steakhouse fries or croquettes, we recommend the CombiFry (1/1 GN #6019.1150) for optimal cooking results. It enables the production of large quantities of pre-fried potato products without the need for added fat. The optimised corrugated base minimises food contact and prevents products from sticking together. The free air flow ensures optimum, even browning and crispiness.
- › Pre-cooked potato products such as hash browns or wedges are best cooked on an unperforated roasting and baking tray (1/1 GN #6013.1103) or on a granite-enamelled tray (1/1 GN #6014.1102).

Dish	Output temperature and special features	iCookingSuite	Manual setting
French fries, approx. 7x7 mm, e.g. quick oven fries	› Frozen: -18 °C › Approx. 7x7 mm thick › French fries for quick cooking applications such as quick oven fries or turbo fries		



Packaged meals (Grab & Go)

For ready-to-serve take-away or Grab & Go products, we generally recommend the following preparation steps:

- › Pre-packaged and pre-cooked meals that can be mixed before or after heating offer maximum flexibility and customisation. Wondering how you can use this? For example, consider using a base ingredient such as mie or rice noodles and vary your toppings. This means that you use different sauces or different types of meat and vegetables. Depending on the customer order, you can put them together and cook them individually.

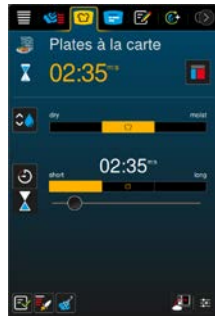
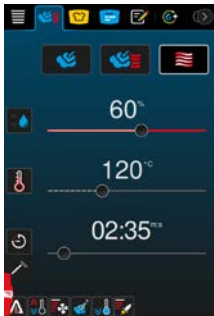
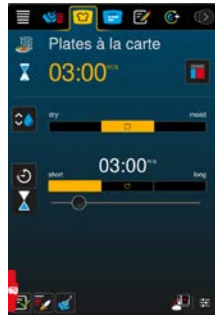
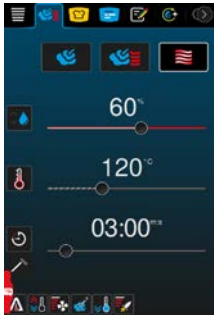
- › Start by filling your dish with pre-cooked, seasoned side dishes, such as noodles, and add your toppings.



- › The container remains open in the cooking cabinet during cooking and is only closed afterwards.
- › It can also be used for two-component dishes, such as a noodle and vegetable dish that is topped with a soup. What are the advantages of using several individual components? You can prepare your liquids during the production shift to ensure they are durable and clean, then remove, heat and dispense as required. This means you can respond quickly and easily to your guests' requests.



- › Liquid products in the cooking bag should be heated on a CNS tray. This prevents leaking of defective bags.

Dish	Output temperature and special features	iCookingSuite	Manual setting
Food in heat-resistant cup or container, container capacity approx. 550-650 ml, e.g. stir-fry noodles in the Noodle Box	› Refrigerator: 3-6 °C › Pre-cooked and chilled products with a loose consistency › Less compact mass		
Food in heat-resistant cup or container, container capacity approx. 350-450 ml, e.g. curry coconut soup with udon in the Noodle Box	› Refrigerator: 3-6 °C › Pre-cooked soup in a boilproof bag, approx. 200-250 ml, max. 2-4 cm high › 20 mm in a closed CNS container › Noodles separately in the Asia Noodle Box (cooking time approx. 1 minute)		

4 The iHexagon ExpressMode



ExpressMode combines simplicity, speed and the highest possible quality for heating individual dishes in busy environments. It has been specially developed for concepts involving the direct ordering and service of food and beverages using Cook & Chill products. It optimises workflow and increases customer satisfaction.

What is ExpressMode?

ExpressMode is a special operating mode that allows individual dishes or components to be heated quickly and easily.

It creates a uniform climate in the cooking cabinet that is ideal for a wide range of products.

The focus is on achieving the best possible result in the fewest steps, making it ideal for a quick daily service.

What are the potential applications of ExpressMode?

ExpressMode is particularly suitable for direct ordering and fast service environments. Food and snacks are served warm or hot, and interaction with customers ideally takes less than three minutes. ExpressMode was developed specifically for concepts where products are only heated when ordered. This enables efficient process design and ensures consistently high food quality.

Typical applications:

- › "Grab, heat & go" - select product, heat, take away.
- › "Order, pay, take" - place order, pay, receive product.

Products that are typically heated with ExpressMode include pizza slices, sandwiches, burgers, panini, wraps, muffins, croissants and much more.

4.1 ExpressMode - Design and operating concept

ExpressMode is designed to support the demands of a fast-paced everyday service environment. It is divided into two clearly structured sections: Expert View and User View.

Initial startup

From software version 18.0.20, ExpressMode is located in the menu bar to the right of the SearchAssistant magnifying glass. The arrow in the upper right corner takes you directly to ExpressMode.

When the ExpressMode  button is selected, it immediately starts with the configuration screen, ExpertView.

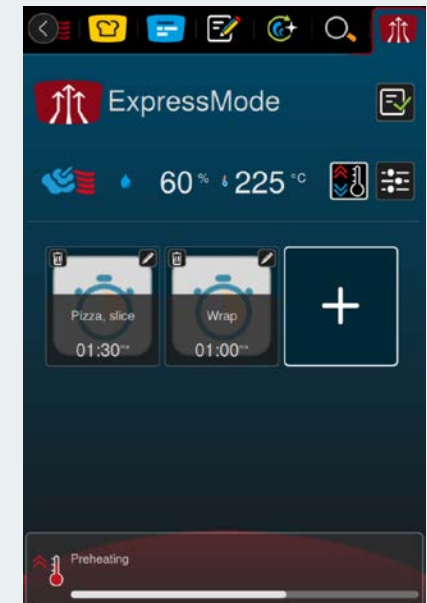


4.2 ExpertView - for professionals with responsibility

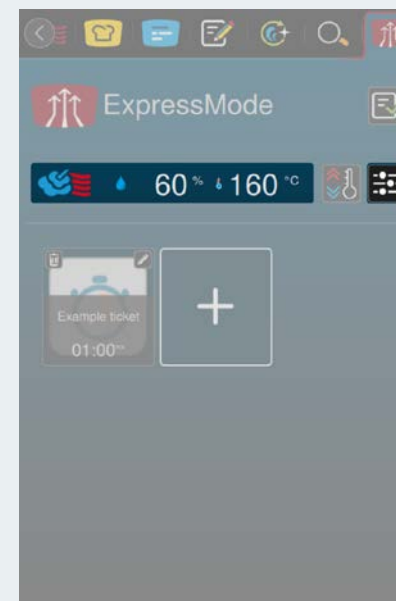
ExpertView is intended for authorised users, including RATIONAL application consultants, branch managers, and individuals responsible for the shop concept. Advanced functions are available to allow users to adapt ExpressMode individually to their respective requirements.

- › Setting the cooking cabinet climate: Cooking mode (convection, combination, steam), temperature and humidity can be defined centrally for all products.
- › Create custom programs: Microwave intensity, fan speeds, time and humidity can be flexibly configured in several program steps.
- › Optimisation through adjustments: Programs can be given names and images for quick and easy selection.
- › Seamless integration: ExpressMode is seamlessly integrated into the MyDisplay system in terms of both visual design and functionality, utilising proven features from manual cooking and the iProductionManager.

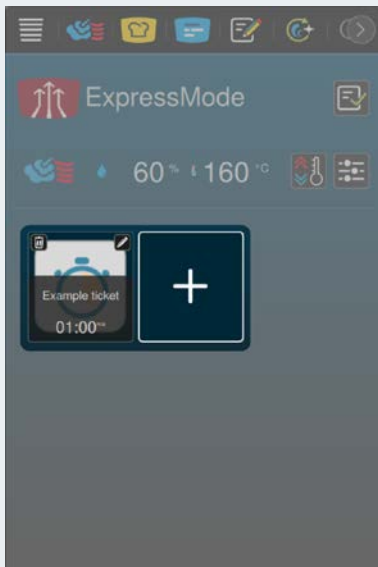
After selecting ExpressMode for the first time, ExpertView is launched to allow you to create an initial setting easily and without complication:



Selecting the settings  button allows the user to set the **basic climate**. This is done using the standard manual settings procedure and applies to all set tickets.

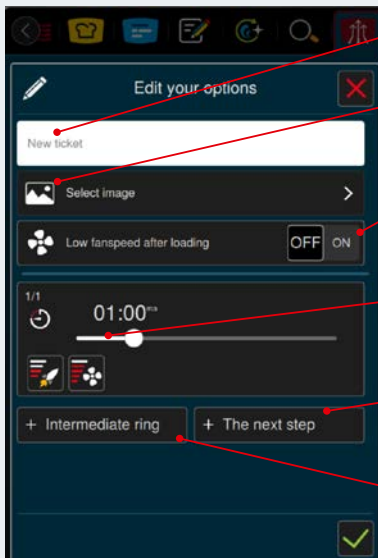


The preheating cycle for the basic climate starts after confirmation.



You can easily create a ticket for your product in ExpertView by selecting the "+" symbol.

You can set the cooking parameters quickly and intuitively.



Enter the name of your product here.

Adding a product image will help your employees select the right ticket more quickly.

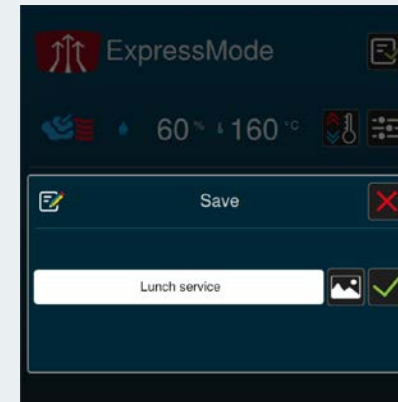
It prevents light or small ingredients (e.g. cheese on pizza) from being swirled around directly after loading.

Setting the duration, microwave intensity and fan wheel speed of the cooking step.

Add another step, e.g. for an interaction such as turning or adding an ingredient.

Acoustic signal for a follow-up step or interaction.

You can rearrange the tickets using drag and drop, as you are accustomed to.

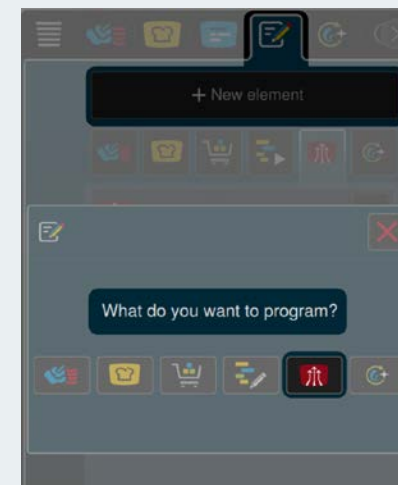


With ExpressMode, you can customise your product range to suit your specific output requirements and time constraints. Save your programs to suit your concept, whether it's meals for the quick lunch service or snacks for the afternoon shift.

As with all RATIONAL applications, saving is straightforward. Simply select the Save button  to save your settings permanently.



The saved programs can be found clearly in the program list under the ExpressMode tab. This gives your employees quick access to the right ExpressMode shopping baskets, so they won't have to spend time on long searches or reconfiguration. These are started in the UserView. (see next section)

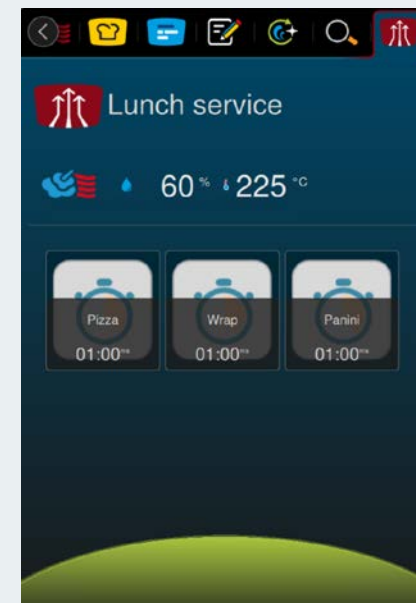
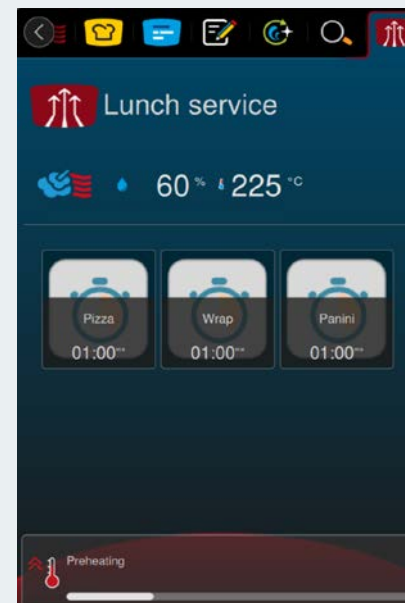


Of course, you can also create your new ExpressMode shopping baskets in this area.



4.3 UserView – for fast and secure everyday use

In UserView, staff can operate the system with a single click, allowing them to remain productive even when the workload is high – without the need for extensive training, complex settings or distracting elements. The clear interface supports full concentration on service. UserView is specifically designed for branch employees, focusing on simple and secure operation to ensure the application can be used intuitively and directly.



A red arch on the display indicates that preheating is taking place. When the iHexagon is ready, a green arch appears at the bottom of the screen.

Areas of application and advantages of ExpressMode

ExpressMode is ideal for companies where employees perform multiple tasks simultaneously, such as in sales, customer service and preparation roles. Operating the cooking system should be as simple and time-saving as possible, as the employees do not focus on operating the combi oven.

ExpressMode is ideal for fast service environments such as self-service counters or Grab&Go concepts. Where previously a combi oven would be used alongside a separate speed oven, ExpressMode offers an efficient alternative in the iHexagon

The advantages at a glance:

- › **Fast and high-quality heating:**
Individual settings for microwave intensity, fan speed and time ensure optimal food quality.
- › **Intuitive operation:**
The user interface is clear and designed for 1-click operation – ideal for busy working environments.
- › **Seamless integration:**
ExpressMode gives you a simple and easy-to-understand user interface.
- › **Ideal for standardised products:**
Particularly suitable for concepts with standardised products that need to be heated quickly and reliably on order.



4 Tips & tricks

Vegetables and side dishes

Vegetables can be cooked very quickly in the iHexagon. The perfect combination of combi-steamer technology and microwave can dramatically improve the cooking process.

Microwaves primarily stimulate the movement of the water molecules in the food. The friction energy heats the product.

We have already optimally integrated the microwave into our intelligent cooking paths. All you need to do is start the desired cooking path in iCookingSuite. Your iHexagon will do the rest for you.

In particular, vegetables with a high water content cook faster and retain their nutrients.

Fish and meat

For the preparation of game, beef and pork products where the cooking level should be between "rare" and "medium", we have deliberately included a selectable microwave function in the iCookingSuite 'Grill meat' cooking path. Cooking and microwaving at the same time will give you a crispy exterior but will also speed up the internal cooking process, so a game, beef or pork dish will cook faster on the inside and may overcook.

Poultry, minced meat and fish, on the other hand, are not a problem because they need to be cooked to a certain core temperature. To do this, always divide your products into equal pieces to ensure that all pieces are fully cooked.

When cooking meat in the microwave, do not salt the dish until after cooking. Salt removes moisture from the meat and you run the risk of drying it out.

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