Application manual.

iHexagon®

The iHexagon is your specialist for top quality at top speed. It intelligently coordinates steam, hot air, and microwave on all six racks. Which puts it in a whole new product category.

Advantages at a glance.

› **Food quality**
Fast appliances are easy to find. But only one offers great quality as well. Regardless of what you're preparing. iHexagon knows its way around every dish and adapts to each product.

› **Time savings**
Speed is top priority – along with quality. Keep turnover high without keeping customers waiting.

› **Productivity**
Producing more food in less time? No problem for the iHexagon, since it can work on all six levels at once.

› **Flexibility**
Batches of any size, different foods at the same time, quick post-production, additional menu options. That's what the iHexagon means by flexibility.

Contents

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

Microwave activity is visible at all times in the status bar:

The iHexagon indicates whether microwave function is active or inactive using a rocket pictogram in the status bar. The function status display complies with safety-relevant specifications and authorization requirements.

The microwave is integrated perfectly into the various iCookingSuite operating modes, optimally regulated in an intelligent, energy-efficient way.

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

1.1 Microwave integration in the iCookingSuite

Microwave technology is integrated intelligently into the iCookingSuite alongside the usual combi-steamer technology to ensure outstanding results in the shortest possible time without sacrificing quality.

During the cooking process, microwave power and other key parameters such as temperature, humidity, and time are adjusted regularly to ensure that the desired cooking results are achieved.

To cook without the microwave, use this button to deactivate the microwave before loading.

If the microwave symbol is not visible or not present, the microwave is not available for the cooking path. An overview and explanation of non-microwave cooking paths can be found in Section 2.2.

1.2 Microwave integration in manual cooking

In the iHexagon's manual mode, you can set the climate to steam, hot air, or a combination of the two. In addition to settings options for humidity, cooking cabinet temperature, time, core temperature, the iHexagon also offers an additional setting option for microwave power.

Manual mode microwave settings
Five levels of microwave power can be selected in manual mode:

0%   25%   50%

75%   100%
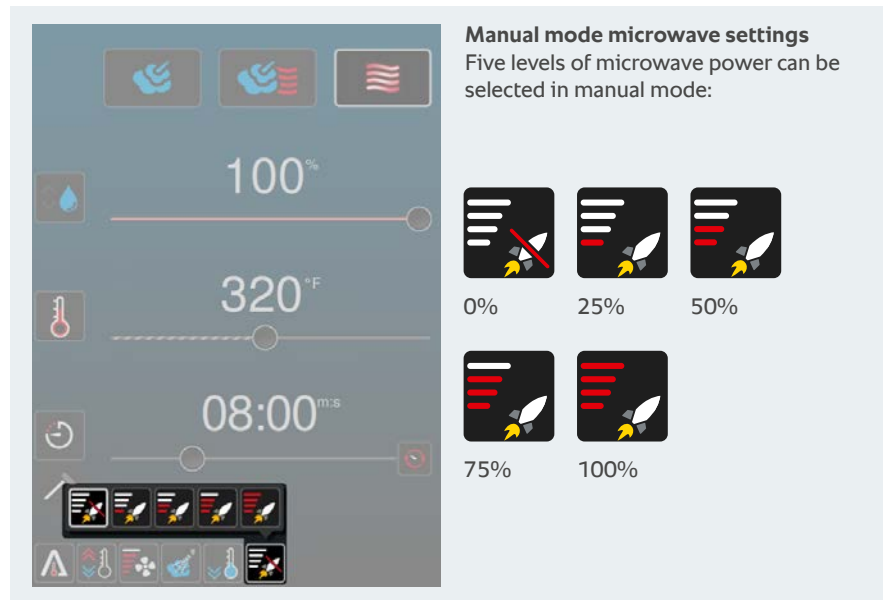
For safety reasons, **continuous operation** is not available when the microwave is switched on, since running the microwave without food loaded could damage the cooking system.

When manual mode is active in **continuous operation**, the microwave button will be deactivated and unavailable.

Please note that microwave power is available at temperatures of up to 500°F in manual operating mode. Microwaving in manual mode is unavailable at temperatures above 500°F.

1.3 Using the microwave in programming mode

Of course, the iHexagon also offers the option of creating manual programs yourself and adding microwave power to them. You can adjust it individually for your product and then save your settings.
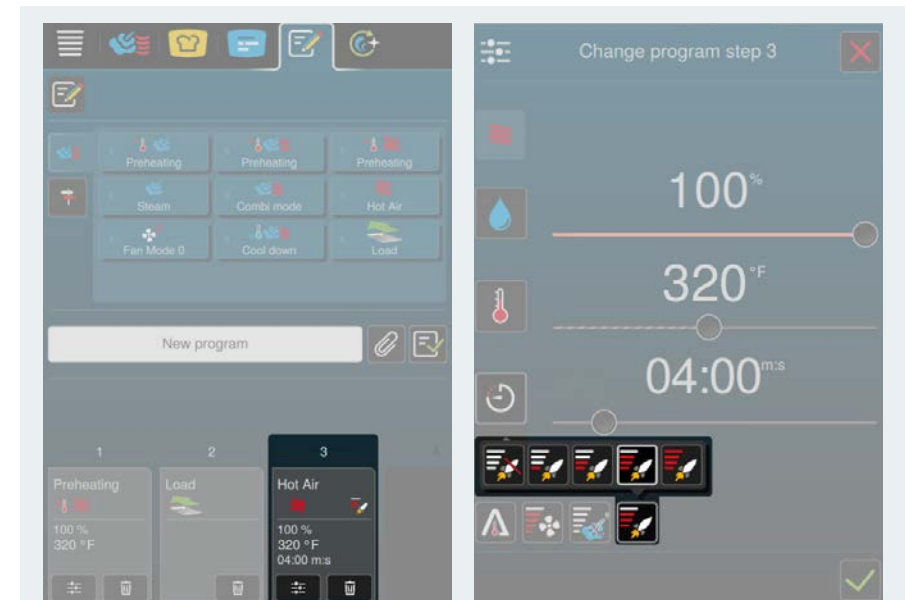
As with manual cooking, the microwave can be switched on as part of any programming step. There are five levels of power to choose from.

## 1.4 Microwave concept in the iProductionManager

iProductionManager
We developed the iProductionManager to allow you to prepare different dishes at the same time or in sequence, giving you greater flexibility while ensuring that you'll always be using just the right amount of the iHexagon's microwave power. You can save your preferred cooking paths from an iCookingSuite application, transfer them to a shopping cart, and start the iProductionManager. That way, you'll always have exactly the right level of microwave power available during cooking.

Microwave activity will be displayed in the status bar as usual.

iProductionManager with a defined microwave profile
You can also use the iProductionManager with a defined microwave profile to warm up smaller quantities of previously produced dishes as quickly as possible (e.g., ready-to-serve in three minutes or less). To do this, you can assign a fixed microwave profile (power levels 0%, 25%, 50%, 75%, 100%) to the entire shopping cart. Create tickets from the iCookingSuite or manual mode for quick service in your restaurant or snack area.

To set up the iProductionManager with a predefined microwave profile, open the programming mode and create a shopping cart with the desired products. You can use the paper clip icon to pin additional properties to your shopping cart. Then just specify your desired microwave power level for the shopping cart.
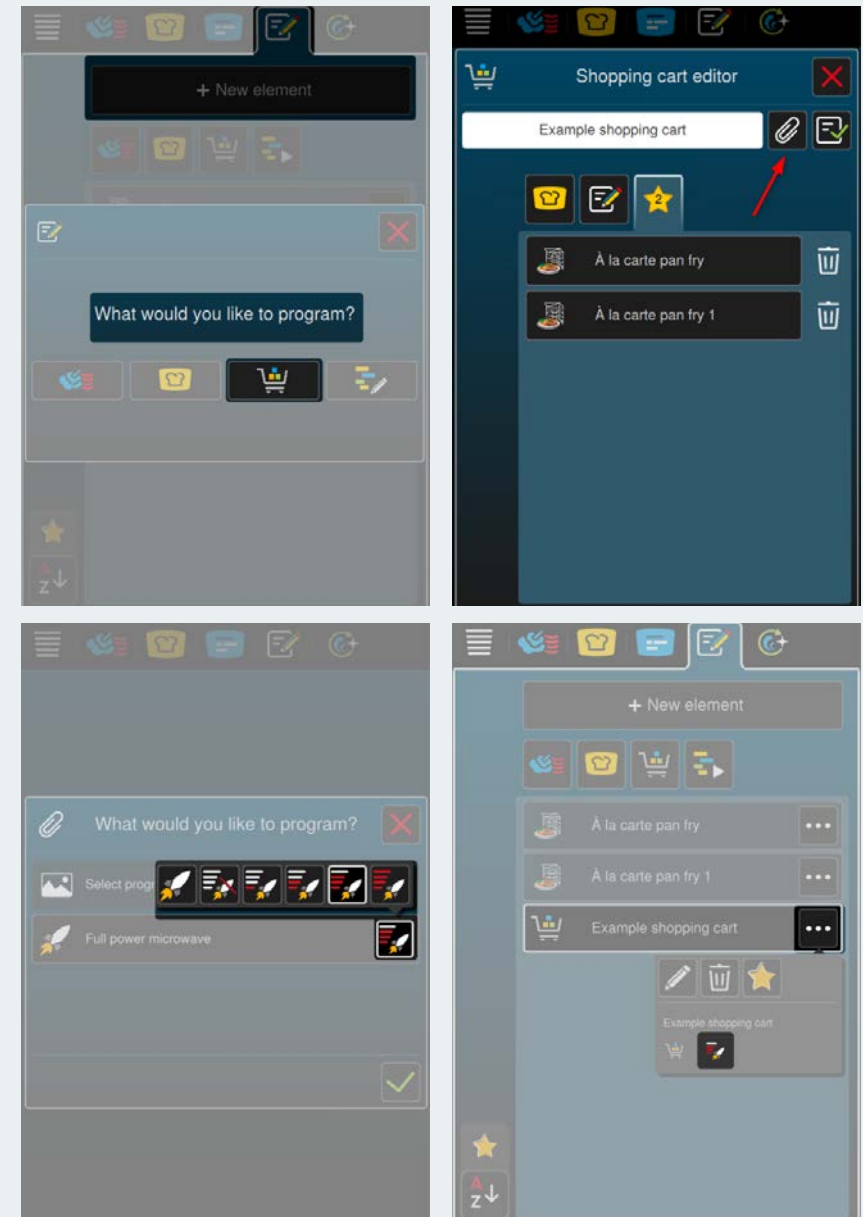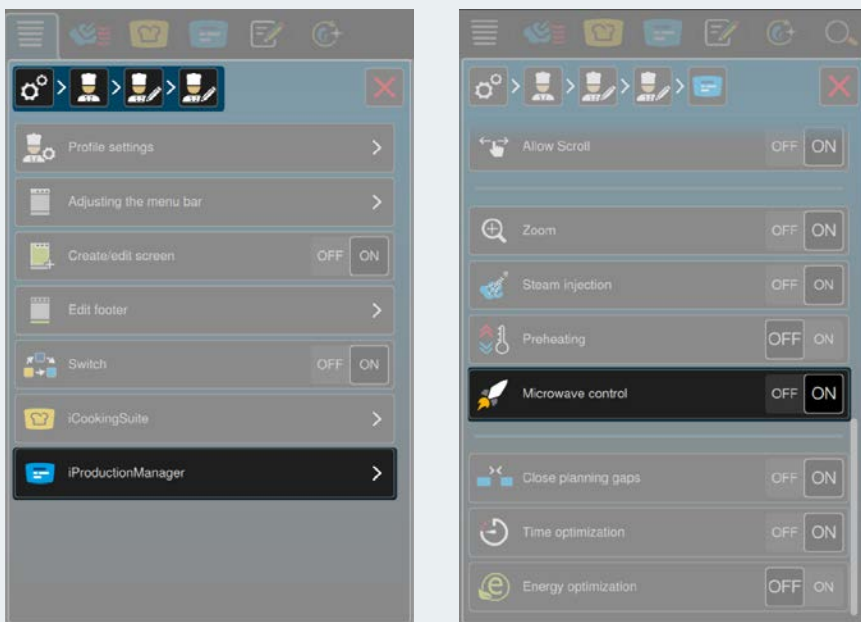

Please note that when you select a defined microwave profile, you will always get the same microwave power, regardless of the number of racks in use or the load size.
If no ticket is selected, the microwave function is automatically deactivated.

You can also switch **full** microwave power on and off in the iProductionManager by default. This function is particularly useful for giving cooking system operators full control over the microwave power and responsibility for achieving the desired results.

Once you have made your choices under the Settings > User profile menu, the following icon will appear in the iProductionManager:
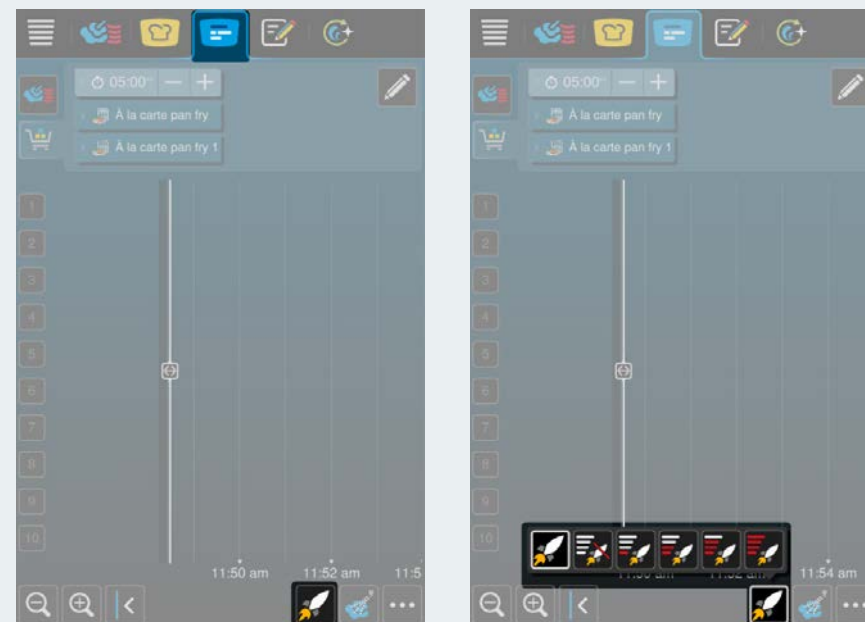

Please note that when you select a defined microwave profile, you will always get the same microwave power, regardless of the number of racks in use or the load size.

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

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

controlled microwave power and a fixed microwave profile (power levels 0%, 25%, 50%, 75%, 100%). Please note that you can only change the microwave power if **no** ticket has been placed.

Select the rocket icon without power levels will activate the intelligently controlled microwave feature, which adapts microwave power to fit the product and load size.

2 What impact does this technology have?

2.1 How does microwave technology influence the food?

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

Temperature distribution is affected by the food's composition, such as its fat and water content or its shape (e.g., poultry). In order to ensure even heat distribution inside the food, it is important not to set the microwave power in the cooking cabinet too high.

What do you get? Our expertise.
We've already integrated microwaving optimally into our intelligent cooking paths. All you need to do is start the cooking path of your choice in the iCookingSuite. The iHexagon will do the rest for you.

> **!** **Good to know:** Smaller quantities heat up faster than large ones. The larger the quantity, the longer the time.

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

> › Microwaving at the beginning of the cooking process will result in faster cooking.
> › Microwaving at the end of the cooking process dries the surface of the food and causes it to release moisture, which can make food crispier but less juicy.
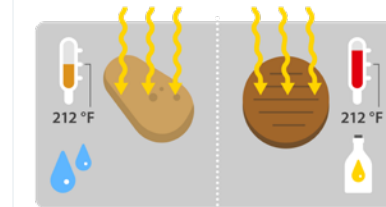> › Metallic surfaces block microwaves to a certain degree; this also applies to perforated containers.

To achieve optimal results with the iHexagon, it is important to consider the individual needs of specific foods.
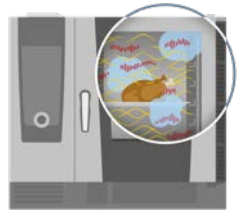
2.2 What determines how microwaving affects food?

The water and fat content of the food
› As long as there is enough water in the food, the temperature inside the food will not exceed the 212°F threshold. However, higher temperatures are possible with foods that are high in fat.
› A very high level of microwave power combined with a long cooking time can yield higher temperatures inside the food once the water evaporates. Please note that this can also cause products to burn on the inside.
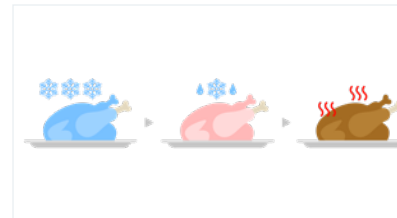
Overall food condition
› With frozen products, the microwave energy penetrates the outer layer of the food, where it is largely absorbed.
› The outer layer will continue to heat up and draw energy away from the still-frozen inside.

Salt content
› The salt in the food conducts microwave energy and thus shortens heating times.
› However, when the surface of the product is too high in salt, the energy will only penetrate half as far.

Cookware geometry

› As a rule, the thinner the food, the more effectively the microwave can speed up the cooking process. This applies in particular to casseroles and gratins.

   For example, 6.6 lb of lasagna in a 2.5" Gastronorm container takes significantly longer than 6.6 lb of lasagna in two 1.5" Gastronorm containers.


Geometry/structure of the food

› Microwave energy can heat the entire volume of food, but it does so by penetrating through the surface and into the food.
› The larger your product, the less effectively microwaving will heat it.
› Microwaves will penetrate more quickly into foods with a more porous texture.
› For particularly delicate applications and when preparing very large foods (product thickness > 2.5"), we recommend not using the microwave in manual cooking mode.
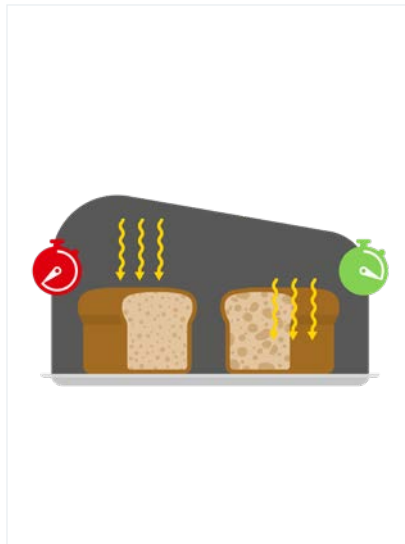

Cooking accessories/containers

› When microwaves hit metals such as steel, aluminum or copper, they reflect off the surface, not unlike visible light hitting a mirror. In practice, this means that microwaves cannot penetrate metal containers or aluminum foil. As such, food in closed metal containers cannot be microwaved.
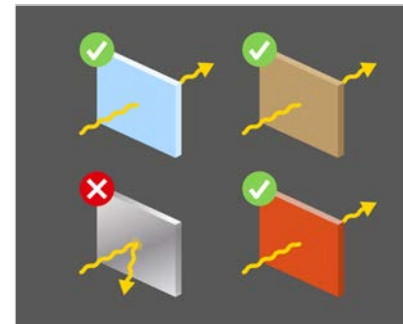

Container materials

› Microwave energy can penetrate electrically insulating materials such as porcelain, glass, ceramic, cardboard, and plastic. As a result, these materials do not heat up significantly in the microwave and are well suited for microwave use. However, microwaving them without food can cause them to heat up slightly. This indicates that materials like glass and porcelain do absorb a small amount of microwave energy.
› This means that you can use microwave-safe accessories if they meet the specific requirements for the food container, as well as the temperature and manufacturer specifications.
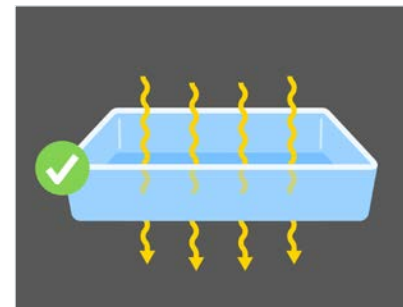
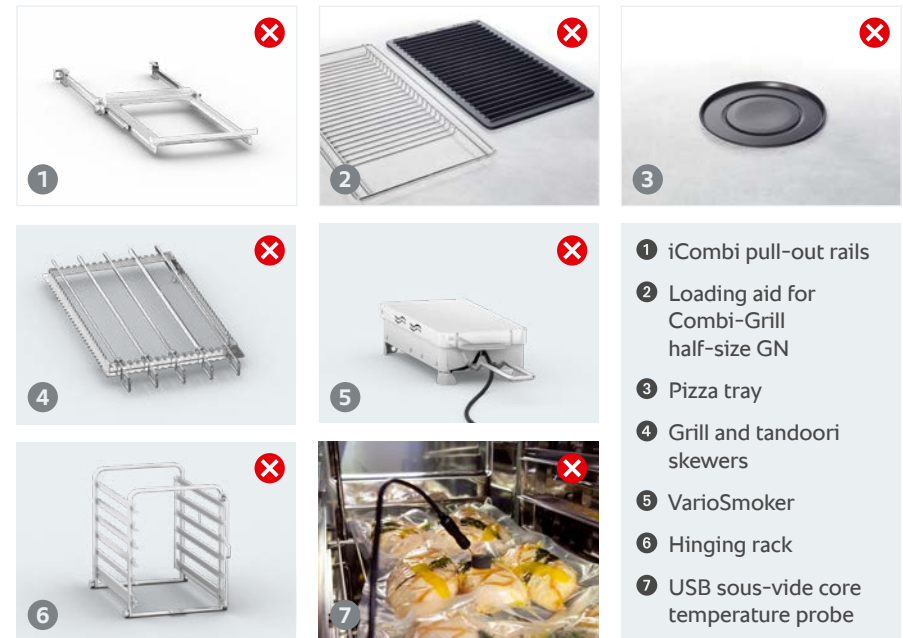## 2.3 What distinguishes the iHexagon from the iCombi Pro?

You can continue to rely on tried-and-true RATIONAL technology when using the iHexagon, for example by using the core temperature probe to cook. For regulatory and safety reasons, a slightly shorter core temperature probe is installed in the iHexagon so that it will not protrude from the cooking cabinet. Please note that the core temperature probe must be inserted into a product or returned to its designated parking position on the hinging rack during cooking.
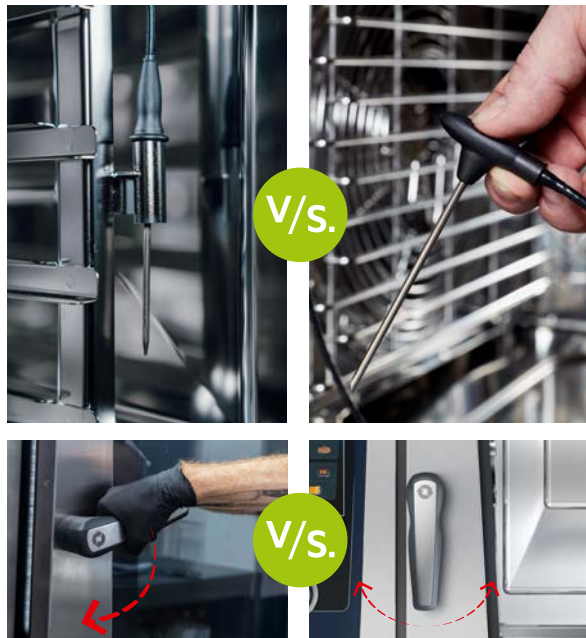
The iHexagon is also equipped with a special security door lock that locks the cooking cabinet door securely and reliably. It can be rotated 90° and engages into two safety locks.

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

These include, for example:

1. iCombi pull-out rails
2. Loading aid for Combi-Grill half-size GN
3. Pizza tray
4. Grill and tandoori skewers
5. VarioSmoker
6. Hinging rack
7. USB sous-vide core temperature probe

2.4 What is the most efficient way to load the iHexagon?

! For optimal results, make sure that products are evenly distributed in the cooking cabinet when loading. Avoid asymmetrical loads if possible.
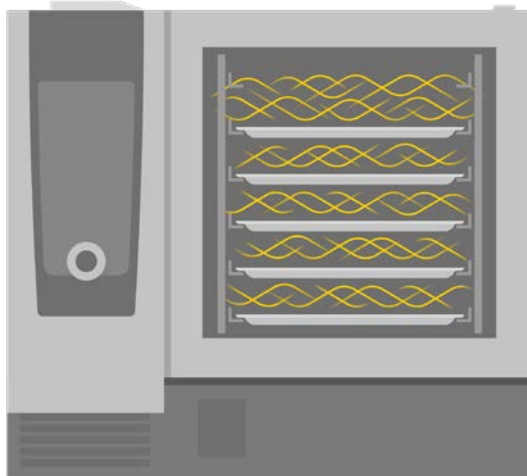
Maintaining sufficient distance between racks helps energy penetrate the food and allows moisture to escape more effectively for crisper results. Avoid positioning deep containers directly above flat accessories.

When using deeper containers, ensure that there is sufficient space between them. As with convection and steam heat, containers (especially metal ones) block microwave energy from reaching the food, so it does not heat as fast.

Maintaining larger and uniform distances between trays (> 3/4") will help food heat up more quickly.
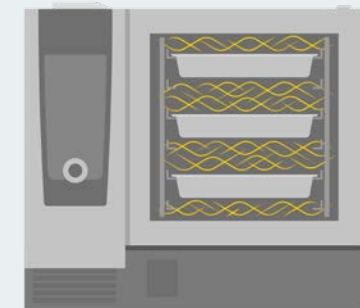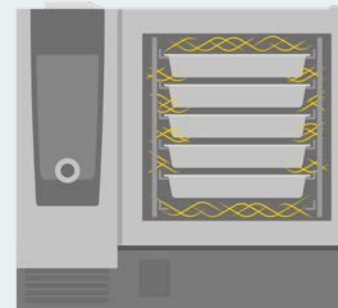
3 Cooking and operating modes

! The microwave cannot be operated without an additional operating mode, i.e. microwave-only operation is not possible.

Please note that the iHexagon must not be run empty when microwaving.

Before using the iHexagon, make sure that you have the right accessories for your combi-steamer. Use only accessories that we recommend and have approved for use with the iHexagon.

Basics of microwaving food

The iHexagon is suitable for cooking almost all types of food. Cooking methods such as boiling, roasting, grilling, steaming, stewing, and proofing are possible. Cooking times depend on the type and shape of the food (see also Section 2.2). When cooking delicate foods, especially vegetables, short cooking times can help conserve nutrients. With shorter cooking times, the cell walls are hardly damaged and juice remains in the food.

The microwave power to be selected and the required cooking time can vary greatly depending on the type of food, especially in manual operating mode. The additional microwave energy can create high temperatures, especially just under the surface of the food, and cause it to dry out.

With the help of the iCookingSuite, iHexagon handles this for you: it adjusts the cooking cabinet climate and microwave power perfectly for each food. Just tap your desired results and count on the iCookingSuite to do the rest.

Basics of microwaving food:

Foods with a homogeneous, liquid consistency, such as clear or slightly thickened soups, are usually no problem to heat. This is because liquids conduct heat well and microwave energy can penetrate the entire volume more easily. It can be beneficial to heat mix-ins like vegetables, tofu or chicken separately. Another advantage: you can use the same soup base for multiple dishes just by swapping out the other ingredients.

Foods that are high in water, such as sauces and stews, have little risk of drying out. However, temperature differences balance out more slowly due to their viscosity. As such, these dishes may need to be stirred during cooking or before serving.

Thanks to the integrated microwave, you can also heat sauces and stews in covered containers. What's the advantage? Less surface drying and even better food quality.

Low-moisture and solid foods such as meat, potatoes, and vegetables dry out more quickly when microwaved, especially on the surface. The optimum microwave power and cooking time can vary greatly from one food to the next, especially in manual mode. Whereas you will need to adjust these settings with care in manual mode, our cooking intelligence handles all of that for you when you use the iCookingSuite. Just choose your target parameters and the iCookingSuite will do the rest. Cooking cabinet climate and microwave power are adjusted optimally for each product. And best of all, iCookingSuite is simple and intuitive to operate.

Still unsure which cooking path would be best for your food? Just use our search function and find what you need in a matter of seconds.

The iHexagon is ideal for heating pre-cooked, plated dishes or meal trays. Combine pre-produced components with care to ensure uniform, sufficient heating.

Proper plating methods will ensure the best possible results in the iHexagon.

Here are some tips that can help you with cooking:
› To ensure optimal air circulation and thus better heating, it is advisable to place meat, fish, or poultry next to vegetables or side dishes. Thinner and lighter foods will heat more quickly than thicker, denser ones. Avoid packing the individual components together too tightly. For example, a plated pasta dish will heat up more quickly than generously filled, tightly rolled beef roulades.
› Another important factor is the fat content of the food. Components that are higher in fat tend to heat up more quickly than drier foods with a lower fat content.
› Foods in sauce, such as curries or goulash, are more efficient when it comes to balancing out temperature differences. The liquid in the sauce acts as a conductor and helps distribute energy, so the entire dish heats more evenly.

3.1 iCookingSuite

The iCookingSuite is the cooking intelligence in the iHexagon. You specify which type of food you want to prepare using which cooking method, and then you'll be taken to a list of cooking paths to choose from in order to get the results you want. You can also fine-tune those results by adjusting individual cooking parameters, for example to brown the food more intensely or cook steaks well-done instead of medium. The cooking system's search function also offers you a wide variety of international application examples.

While the cooking path is in progress, the system will regularly adjust key parameters such as cooking cabinet temperature, climate, microwave power, fan speed, and cooking time to ensure you get the cooking results you desire. If necessary, you can even intervene in the cooking process during cooking and change your target cooking results.

What does that mean for you? No checking, no monitoring. Piece of cake. You'll save time, reduce your energy and raw product use, and enjoy uniformly excellent results every single time.

Microwaving has been integrated into most of our iCookingSuite cooking paths. In isolated cases, however, it was omitted for culinary or technological reasons.

Microwave omission for culinary reasons:

Products that are cooked for a long time (for example with the low-temperature roasting or boiling cooking paths) do not need microwaving. Microwaving has been omitted on dishes for which it would have a negative impact on results, for example a gray ring on roast beef or undesirable cooking from the inside out (e.g., onsen eggs).

Microwave omission for technological reasons:

Microwave use with semi-preserves and other cooking applications in sealed containers would cause excessive pressure inside the container.

Healthy microwave cooking:

Gentle preparation with the iHexagon

Dishes prepared with microwave energy are just as healthy as those cooked in a standard combi-steamer. In other words, there is no risk of microwaves or electromagnetic energy having a harmful effect.

Microwaves primarily heat food by stimulating the water molecules within it.

! Just as when cooking with hot air, steam, or a combination, it is important to choose power levels with care when microwaving. Excessive microwave power or an incorrectly set cooking cabinet climate can have a negative effect on the end result. Use microwaving judiciously to ensure ideal results and prevent the surface of the food from burning or drying out.

Cooking paths without microwave include:

Grilling	Grilling	Roast turkey	Pasta in sauce	Boiled eggs	Eclairs
Large roasts	Octopus	Low-temperature roasting	Beans/legumes/dal	Egg flan	Proofing
Low-temperature roasting	Japanese-style grilling	Boiling	Dim sum	Poached eggs	Puff pastry
Semi-preserves	Braising		Double boiled soup	Onsen eggs	Egg tart Macau style
Meatloaf			Macaroni casserole		Rolls
Roast beef, dry			Preserves		Danish
Cochinita pibil					
Lomo saltado stir fry					
Nikomi					

All in all, the iHexagon and its built-in cooking intelligence, the iCookingSuite, support you every step of the way to help you achieve optimum results.

3.2 Manual mode

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

What do the microwave power levels mean?
Unlike a standard stove or oven, where you regulate the heat, microwaving involves setting a power level. The higher the power level, the more intensely the water molecules will move, which is what cooks the food. However, increasing the power level does not necessarily mean that food will be ready faster. Choose microwave power levels with care to prevent the edges of the food from drying out before the inside of the product has even finished heating up. Likewise, using too much power when preparing thin or porous foods can cause them to overcook or burn inside before the outside is ready. Important nutrients will be lost as well.

Unlike with the iCookingSuite, the microwave is not intelligently controlled in manual mode, i.e., it only contributes whichever power level you have selected.

Microwaving at full power 🔲 will not always yield optimal results. Optimal results require optimized heat and steam settings as well as optimum use of the microwave technology for the specific food in question.

In manual mode, we recommend that you use a step-by-step approach to determine the optimum power level for your food.

When cooking manually, start with power level 2 (50%) or 3 (75%) to get a feel for the power. After that, you can adjust the microwave power in either direction depending on what works best for your food.

Here are a few of our recommendations when using manual mode:

› When using one rack, you can reduce the cooking time you would set on a conventional combi-steamer by 15% to 30%. For example, when preparing lasagna that normally takes 75 minutes, set your cooking system to 60 minutes.
› The more fully the iHexagon is loaded, the less powerful the microwave's effects. When preparing a full load, you can use power level 4 (100%). If necessary, adjust the cooking time (90% of your usual cooking time is a good guideline). Conversely, the same power level (e.g., power level 2, 50%) will give you different results on a single rack than it will with a full load.
› If you find that your food comes out too dry, it may mean that the microwave was set too high. Try reducing the microwave power while keeping the time settings the same.

› 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 browning or drying out too much, reduce the microwave power.
› If the food is not yet properly done on the inside, you can increase the microwave power if you have not yet reached the maximum power limit. If this is still not enough, you will need to extend the cooking time.

If you do not achieve your target results in manual mode, we recommend using the iCookingSuite.

It creates the ideal balance of cooking climate and microwave power, ensuring perfect results at the touch of a button. (See Section 3.1. iCookingSuite)

! **Good to know:** Err on the side of lower power settings to allow temperature differences to balance out gradually. Dividing food into smaller portions will help it heat more uniformly, preventing "hot spots" and "cold spots" (e.g., areas on thicker foods that fail to heat up sufficiently).

iProductionManager ☰

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

3.3 iProductionManager in standard mode

Do you want to produce food quickly and flexibly, cooking multiple dishes at the same time?

Do you offer your guests individual dishes that are prepared to order or served buffet-style?

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

Do your guests have a limited dining window, e.g., a lunch break?

Do you offer your guests seating options for enjoying their food directly on site?

Do you focus on producing food fresh and Finishing fresh or partially prepared dishes to order?

Do you prioritize quality and extremely satisfied customers?

Then the iProductionManager is just the thing for you!

We have developed the iProductionManager to offer you the following options:
› Prepare different products simultaneously
› Produce with maximum efficiency and performance
› Organize service efficiently while focusing on key tasks
› Ensure perfectly-tailored microwave power on all levels

And all without sacrificing quality.

The iProductionManager monitors each rack and shows you which dishes can be cooked at the same time. Just drag the ticket to the rack of your choice, and iProductionManager will make sure that everything comes out perfectly. It adjusts for load sizes and even intelligently adapts cooking times when you open the door. So you can concentrate on more important matters.

The iHexagon opens up possibilities that a conventional combi-steamer does not offer. Thanks to the integrated microwave technology, you can postpone production processes to less-busy periods, reduce how much food you have parked hot in the counter, and prepare more dishes quickly to order. Surprise your guests with even better quality and a wider range of products, all in less time.

Take advantage of combination technology and re-imagine your service processes.
The iHexagon enables you to:
› Optimize your service processes by separating production and service.
› Improve quality thanks to shorter holding times and service to order
› Significantly reduce food waste by optimizing product shelf life and reduced use of warm-and-hold.

With the iProductionManager, you can also plan the entire cooking process precisely. The planning function, lets you organize your food production process however you need. You can optimize production for time or energy efficiency, produce dishes in the most efficient order, or have everything ready at a specified time.

We want the iHexagon to be the ideal tool for whatever job you need done, and the iProductionManager has a variety of functions to help you get the most out of your cooking system.

To work efficiently with your menu options in the iProductionManager, just save your favorite cooking paths from the iCookingSuite, transfer them into a shopping cart, and start the iProductionManager.

But how, you ask?

Read on to learn how to save individual tickets:
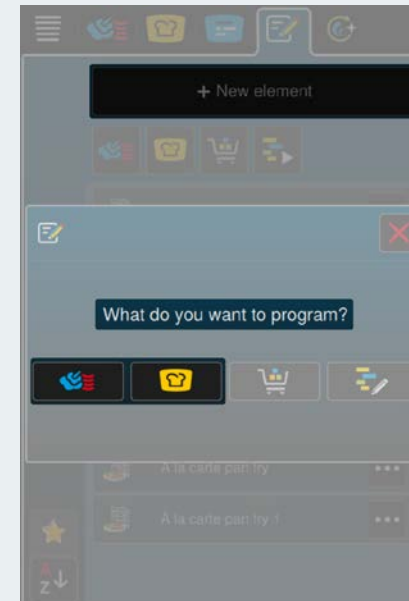
Switch to programming mode ▨ and select whether you want to save a manual program or a cooking path from the iCookingSuite.
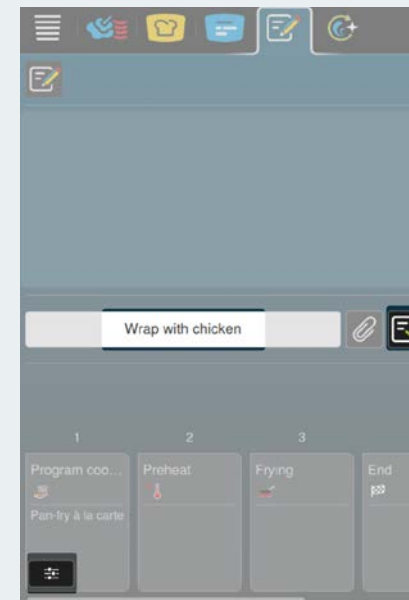
If you have chosen a cooking path from the iCookingSuite, give it the name of your choice and then use the settings ▤ to define the parameters you want.
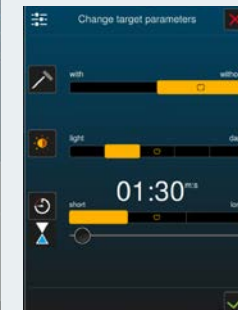
Tap the green check mark ☑ to confirm your choices and then save. 🖉

You can proceed in the same way for manual settings. Once you have finished setting up your tickets like this, you can group several of them into a shopping cart.
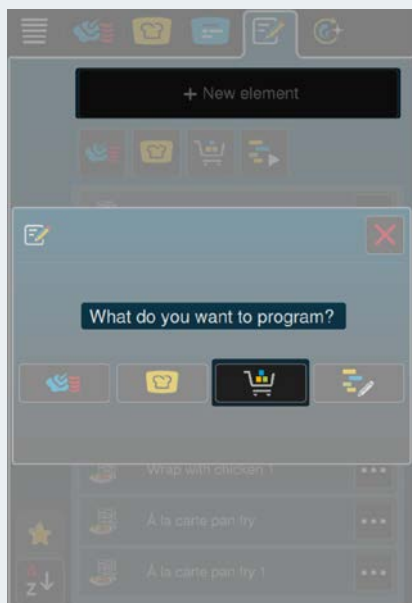
In the same menu you used for your tickets, 🖉 go into programming mode and select the shopping cart 🛒 icon. Name your shopping cart and assign the tickets you just saved to it.
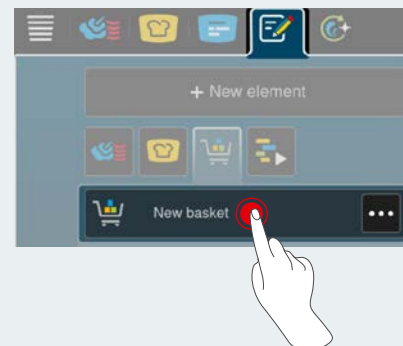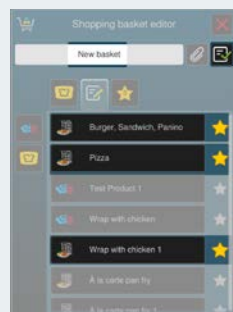
In programming mode, you can start the shopping cart with just a press of a button.

The ideal level of microwave power is intelligently delivered on each ticket placed, so your food will always turn out hot and delicious as quickly as possible.

You can prepare both raw and pre-produced dishes in this manner. The iHexagon helps smooth over peak traffic periods by shortening cooking times to between three and eight minutes, so you can deliver great-tasting results throughout your service hours. You can get everything ready outside of service hours and then finish food on a rolling basis to serve.

We've summarized our first batch of "tips and tricks" for optimum use of the iProductionManager here:

 v/s.

 📇 À la carte pan-fry...

 🌊 Test product 1

 ⏱ 05:00ᵐ:ˢ — +

Microwave and non-microwave tickets:
You can combine tickets with and without microwave in the iProductionManager. The iHexagon automatically adjusts cooking times so that you'll end up with perfectly cooked food. We recommend our à la carte cooking paths to ensure that your tickets can be easily combined.
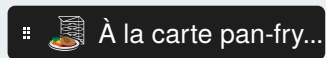
Tickets from the iCookingSuite:
The microwave power and the cooking cabinet climate are intelligently adjusted to the load quantity and number of loaded racks. In addition, iHexagon always keeps an eye on climate changes such as door openings or the need for more energy and adjusts times accordingly, so you'll get ideal results every time.
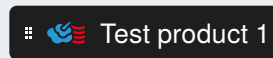
Tickets from manual operating mode:
Saved manual programs that include microwaving will apply the same amount of microwave energy every time.
This energy will be distributed evenly among the specified number of racks. If you place a ticket on all six levels in iProductionManager, each ticket will receive 1/6 of the microwave power. If you place 3 tickets in the iProductionManager, they will get 3/6 (or 50%) of the microwave power.
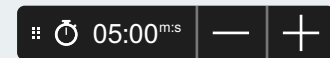
Timer tickets:
Timer tickets in the iProductionManager have no influence on the climate or the microwave function. They only serve as egg timers or countdown timers.

! **Good to know:** To ensure consistently excellent results, make sure to load the same quantities of food on each accessory/tray/rack every time.

To help you make the most of your iHexagon, we've compiled a few examples for you under different umbrella categories.

These suggestions are intended to help you determine the right settings for your own products and then save them to create a shopping cart. We recommend testing your settings in advance with iProductionManager if possible.

Wok dishes, pasta dishes, rice dishes

Here are a few preparation tips when heating large quantities rice, noodles, or pasta, whether you're using an Asian recipe, an Italian recipe, or one of your own creation:

› The way heat distributes throughout a full container always depends on multiple factors, such as: the overall condition of the food; its salt, water, and fat content; its consistency and structure; and the specific container or tray in use. You can find more information in the section entitled "What determines how microwaving affects food?"
› Loose pasta dishes can be heated very quickly.
› Serving temperatures between 150-165°F are often sufficient and also conserve the food's color and texture.
› CNS containers up to 2.5" deep can be used (see section "What determines how microwaving affects food?").
› Heat-resistant plastic containers can also be used in compliance with the manufacturer's instructions for use and the specified maximum temperatures.

We've listed a few example dishes below along with our recommended settings. They're intended to offer inspiration and give you a starting point when creating your own dishes and saving them as tickets to your shopping cart. See the "Cooking and operating modes/iProductionManager" section for more specific instructions.

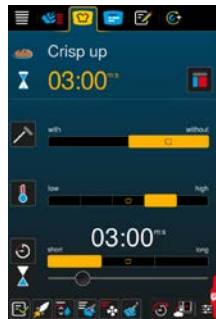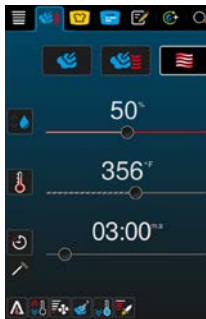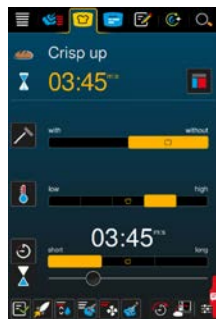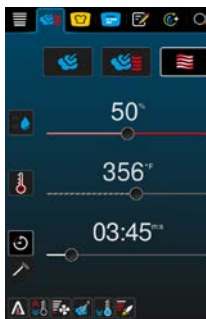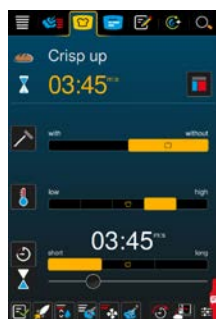| Dish	Serving temperature and special features	iCookingSuite	Manual settings
Mie noodles, mie goreng, soba noodles (precooked noodles, precooked ingredients of your choice, mixed cold in CNS container), approx. 4-5 lb	› Refrigerator: 37-42°F › Cold, precooked noodles › Mixed with sauce › Stir in precooked, seasoned vegetable components		
Lasagna (pre-cooked lasagna, chilled in porcelain cocotte), approx. 14 oz.	› Refrigerator: 37-42°F › Cold, precooked lasagna › Divided among portion-sized, heat-resistant porcelain cocottes		
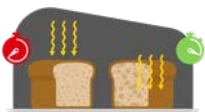
Baked goods, pastries, fried dough

Microwave energy is relatively efficient on baked goods. Their light, porous texture makes them relatively easy to warm up. (see also Section "What determines how microwaving affects food?")

Read on for a few more helpful hints on using the microwave on baked goods:

› Microwaving allows enormous time savings when preparing frozen prebaked products that are high in fat.
› When baking pre-baked/frozen baked goods, lower core temperatures of between 60 and 70°F are often sufficient.
› Pre-baked products (e.g., bread loaves, baguettes) do not necessarily need to be heated all the way through, as this could make them dry out inside.
› After baking, allow baked goods to rest briefly so that the heat can distribute evenly inside.
› A perforated roasting and baking tray (half-size GN #6015.1103) is recommended for good results.

Dish	Serving temperature and special features	iCookingSuite	Manual settings
Baguettes, pre-baked, frozen, approx. 14–16 oz.	› Frozen: –1°F › Load frozen on perforated roasting and baking tray › Approx. 3 pieces per sheet	Crisp up 03:00 / 03:00	50° / 356°F / 03:00
Bagels, pre-baked, frozen, approx. 3–3.5 oz.	› Frozen: –1°F › Load frozen on perforated roasting and baking tray	Crisp up 03:45 / 03:45	50° / 356°F / 03:45
Muffins, pre-baked/frozen, approx. 3.5 oz	› Frozen: –1°F › Load frozen on perforated roasting and baking tray	Crisp up 03:45 / 03:45	50° / 356°F / 03:45

Preparing food takes less than three minutes.

In addition to the iProductionManager's intelligent, fully automatic microwave power controls, the iHexagon also lets you select one of five microwave power levels (0%, 25%, 50%, 75%, 100%) for an entire shopping cart.

You can find this setting in the shopping cart settings under "Microwave controls":

3.4 iProductionManager with defined microwave power

You learned about the iProductionManager in the previous chapter. For the iHexagon, we have expanded this feature to assist you with quick service situations.

Do you want to respond quickly, yet flexibly to orders and prepare them as soon as they come in?

Do you want to produce individual servings or small quantities as fast as possible while maintaining excellent quality?

Do your customers want to take your food to go and enjoy it as soon as possible after ordering? Do you offer grab-and-go options?

Is speed your number-one priority in order to prevent long lines and wait times at the counter?

Do you intend to prepare, plate, and chill dishes in advance and then heat them up just a few minutes before serving?

If this sounds like you, then the iProductionManager with defined microwave power is exactly what you and your operations need.
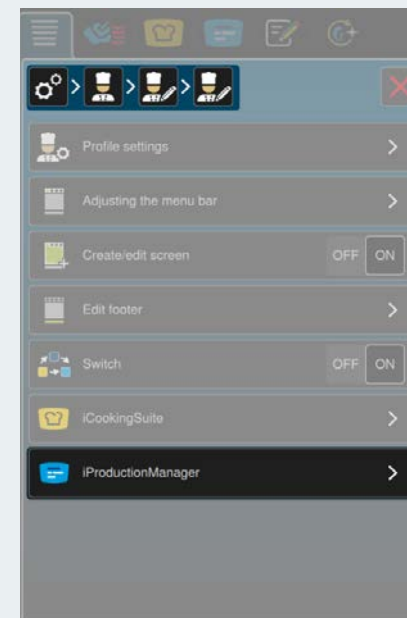
⚠️ Please note that not all foods can handle full microwave power. A 75% or 100% microwave power setting will be appropriate in high-speed service situations for some products, but not to fill a hot counter or produce food in advance.

The iProductionManager with defined microwave power is suitable for quick service situations in which orders are processed and cooked immediately. The focus is on speed in preparation and service. Food that is cooked with this function in the iProductionManager is usually ready to be served in less than three minutes. Parameters will need to be tested in advance to ensure that they fit the needs of the specific dishes in question.


Small individual to-go dishes, such as wraps or burritos, are especially suitable for microwaving and can be ready in no time. It is important to clarify whether you want to heat the dish all the way through (as with a burrito) or just warm it gently (as with a wrap sandwich containing raw ingredients). Do a trial run to determine your ideal cooking time.

To create tickets for your service shopping cart:
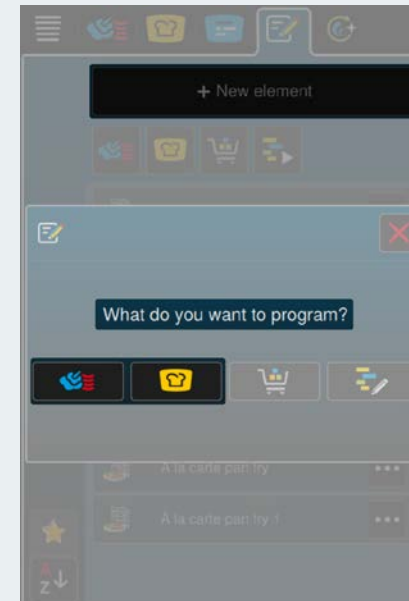
Switch to programming mode. Select whether you want to save a manual program or a cooking path from the iCookingSuite.
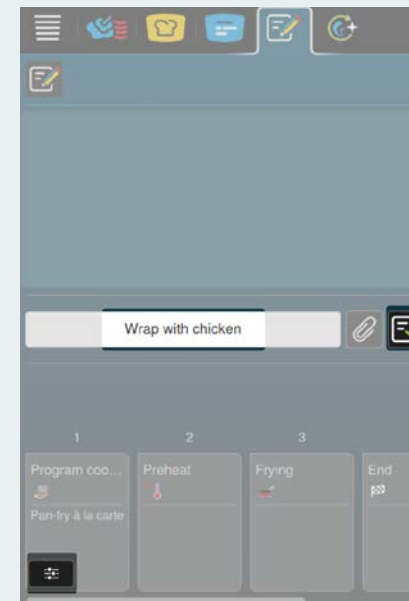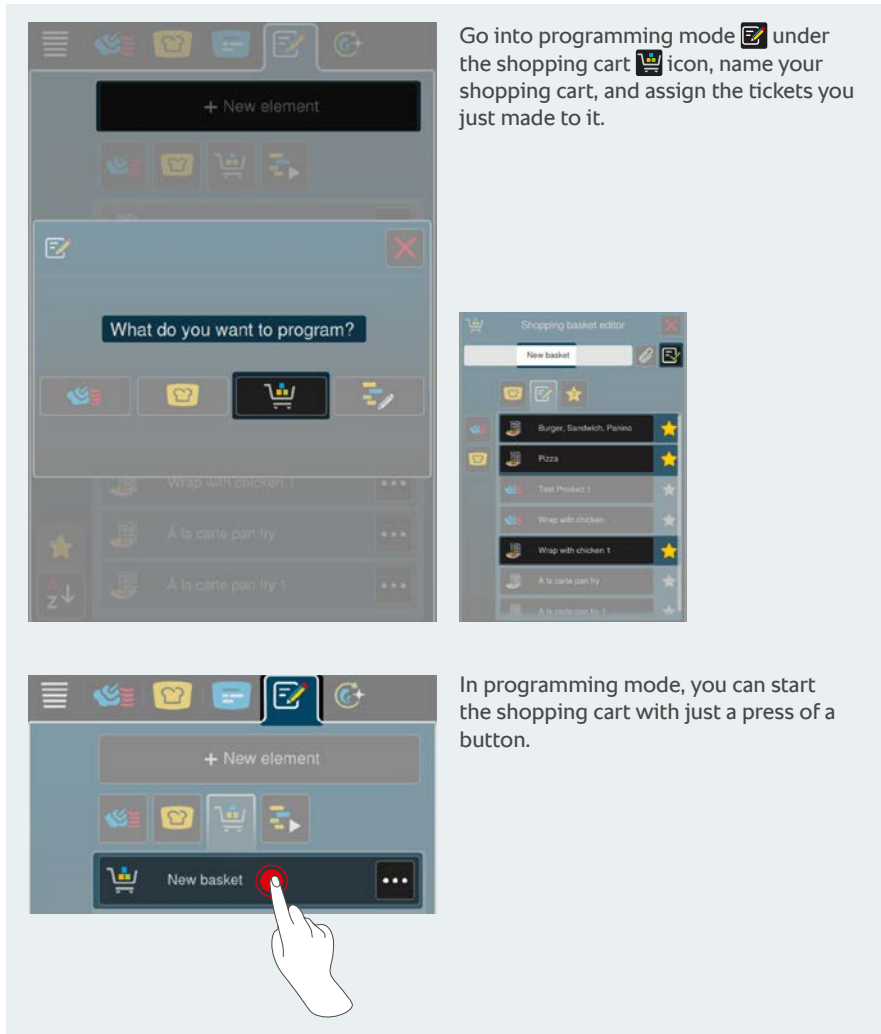

If you have chosen a cooking path from the iCookingSuite, give it the name of your choice and then use the settings to define the parameters you want.

Confirm your choices by pressing the green check mark and then save.
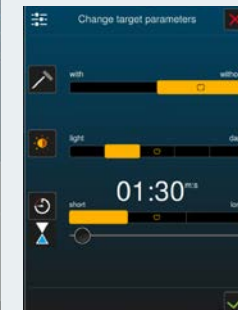
Do the same for any manual settings adjustments you want to make. Once you are finished setting up your products, you can group these tickets into a single shopping cart.


Go into programming mode 📝 under the shopping cart 🛒 icon, name your shopping cart, and assign the tickets you just made to it.

In programming mode, you can start the shopping cart with just a press of a button.

Since this is a quick-service setting, you have the option of adding a defined microwave power to the entire shopping cart. You can add 100%, 75%, 50%, or 25% microwave power to any ticket.

To do this, proceed as follows:
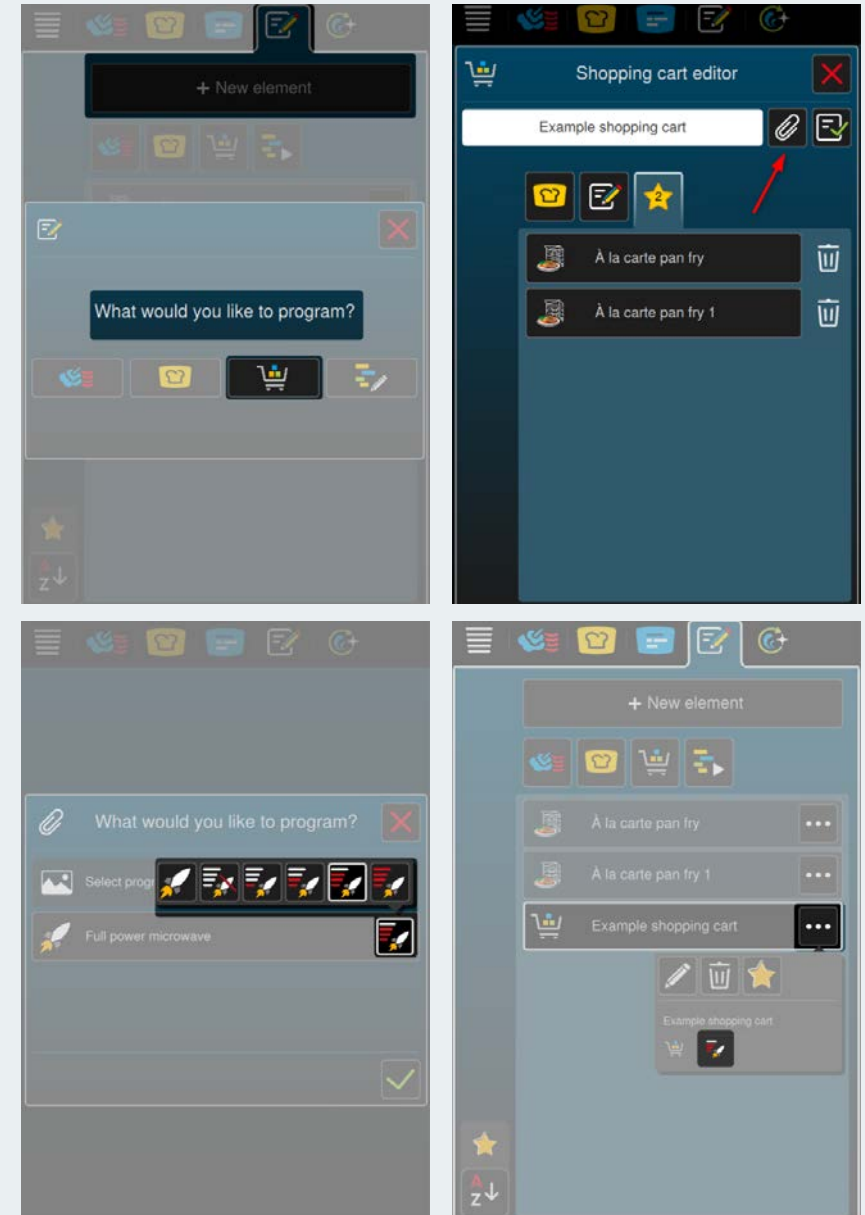
Application examples for the iProductionManager with defined microwave power

We have already shown you how to adjust settings for a ticket or a shopping cart. Now we'll give you a few example dishes to help you estimate the time and climate parameters you'll need to get started with your own service shopping cart.
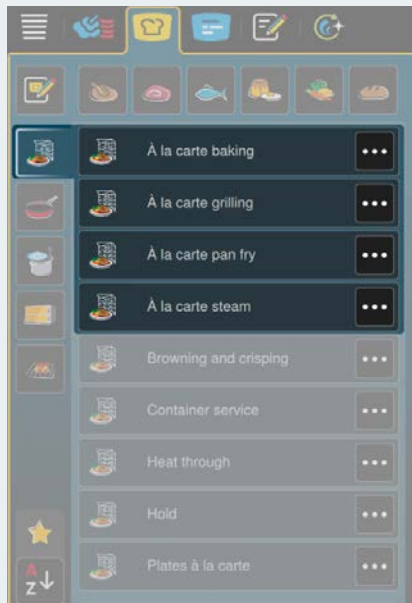
Shopping cart with tickets from the iCookingSuite:
the iCookingSuite's à la carte cooking paths make a particularly good starting point for quick-service applications using defined microwave power.
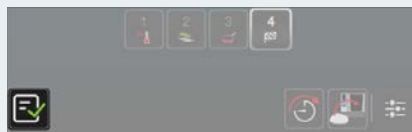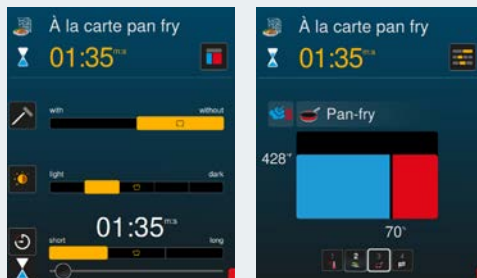
Tap the Save button to save the settings you have just tested so that you can add them to a shopping cart in iProductionManager as a ticket.
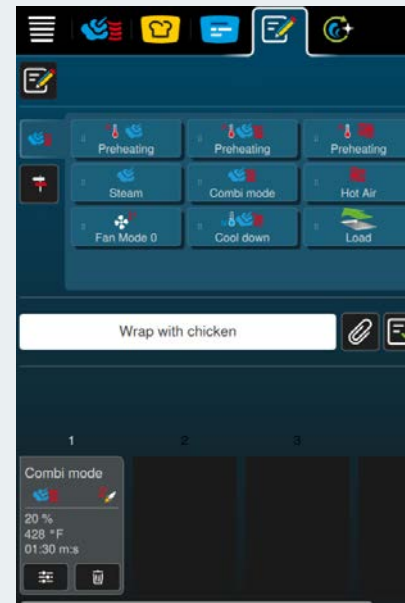
Shopping cart with tickets from manual mode:
You can also work with your manual settings and save them as tickets.

Optimizing your meal and snack preparation processes is the key to getting the best quality results as quickly as possible. That's why we've put together some important tips and tricks for you.

Wraps, burritos, tacos

Here are a few recommendations for optimum results when heating dishes that use a tortilla wrap:

› The product does not necessarily have to reach a core temperature of 195-212°F. Often, lower temperatures such as 130-150°F are sufficient and also conserve the food's color and texture well. We recommend aiming for a serving temperature in that range. Choose wrap ingredients accordingly for that temperature. What exactly does that mean? It is important to consider, for example, whether a salad wrap would taste better only slightly warmed. Burritos should be served at a temperature of 130-150°F. The target serving temperature influences the cooking time in the iHexagon and the way the filling is prepared. Note that the ingredients in the outer layer (approx. 1/2-3/4") will heat up faster than the core.

› Components that are supposed to be warm or hot (e.g., grilled vegetables, pre-cooked meat, dips or sauces) belong in the outer layer.
› Ingredients that are not meant to be warmed more than slightly (e.g., lettuce) can go in the middle. It's also worth considering using baby spinach instead of lettuce. There are no limitations on your creativity in this regard.
› For grill marks, it is best to use a grilling and roasting tray (half-size GN #60.71.617). It has a grilling side for creating conventional grill marks and a roasting side with a circumferential lip for pan-frying. The grilling and roasting tray is the ideal addition to your food service operations.

1. First brush the wrap dough or tortilla with sauce, and then layer the precooked meat or vegetarian component on top.

Place the lettuce as the last layer to keep it centered in the wrap and prevent it from overcooking. Then tap the outer sides inward.

2. Use light pressure when rolling the wrap; place it on a grill and pizza tray or a roasting and backing tray to cook, overlapping side down.
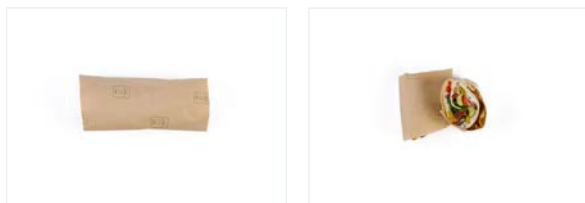
3. Alternatively, the finished wrap can also be rolled in heat-resistant paper and cooked directly in that before service.

Dish	Serving temperature and special features	iCookingSuite	Manual settings
Hot wrap sandwiches, e.g. chicken wraps, approx. 12 oz, approx. 2–3" diameter, approx. 150–165°F serving temperature	› Refrigerator: 37–42°F › Cold, precooked meat components › Outer layer of sour cream, guacamole, mayonnaise, or hummus › Vegetables (poss. pre-grilled and seasoned) › Wrapped in paper + 15 seconds		
Hot wrap sandwiches, e.g. vegetable wrap, approx. 12 oz, approx. 2–3" diameter, approx. 150–165°F serving temperature	› Refrigerator: 37–42°F › Vegetables (poss. pre-grilled and seasoned) › Outer layer of sour cream, guacamole, mayonnaise, or hummus › Wrapped in paper + 15 seconds		
Wraps served gently warmed, e.g. salad wrap, approx. 12 oz, approx. 2–3" diameter, approx. 95–115°F serving temperature	› Refrigerator: 37–42°F › Raw vegetables, seasoned › Outer layer of sour cream, guacamole, mayonnaise, or hummus › Wrapped in paper + 15 seconds		

Burgers, sandwiches, flatbreads, panini

We recommend preparing ready-to-sell burgers, panini, sandwiches, or topped flatbreads as follows:

› Heat the food to 130-150°F for optimal color and consistency.
› Do you want your burgers ready to eat in 2-3 minutes? Consider heating the burger as two halves and then adding the raw toppings (e.g., lettuce, onion). Also, consider whether you can save yourself a step by replacing raw onion with an onion chutney or swapping in pickle relish for the pickle. That way, you won't need to save any toppings for after heating.
› Sauces that are high in fat facilitate heating. Use condiments that will also taste good warm, such as homemade salsa or cocktail sauce.

› For grill marks, we recommend using a grilling and roasting tray (half-size GN #60.71.617). It has a grilling side for creating conventional grill marks and a roasting side with a circumferential lip for pan-frying. The perfect addition to your service operations.
› Roasting and baking trays (1/1 GN #6013.1103) can also be used in multiple ways. For easier handling, it may make sense to use a 2/3 GN-size roasting and baking tray (2/3 GN # 60.73.671)?

Example application for burgers:

or

› If you want to cook the burger with the side dishes, make sure to protect the lettuce and other delicate ingredients with the patty or cheese. Alternatively, add the lettuce, tomato, and pickle after cooking.
› You can also prepare the components (e.g., buns, patties) individually in order to give your customers a wider selection.
› The iHexagon gives you the option of assembling burgers cold and arranging them in the counter display for customers to choose from. When an order is placed, the burger is folded open for heating. The 3/4" - 1 1/2" height allows for particularly quick heating.
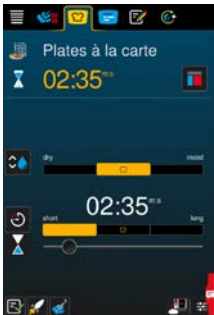

› When heating burgers open-face, you can reduce the fan speed to prevent cheese slices, onions, and bacon from flying around. Would you like to customize this setting for your products?
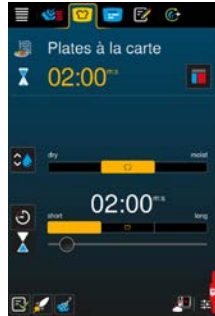
Here's how:
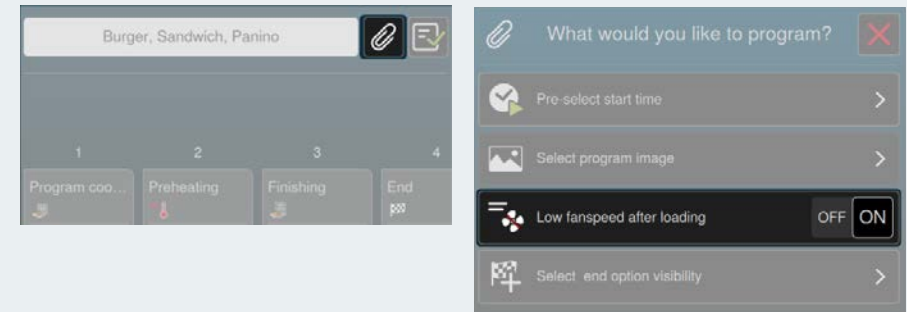
Burgers, panini, and sandwiches can be warmed up in take-away containers. Make sure to use packaging approved for your temperature settings. When heating in approved, heat-resistant packaging, add 30-45 seconds to the cooking time to account for the additional barrier.

Dish	Serving temperature and special features	iCookingSuite	Manual settings
Burgers with ground beef patties (e.g. burger bun, burger sauce, lettuce, pickle, tomato, cheddar, patty), approx. 9–11 oz Total, approx. 4.75–5.5" diameter, approx. 150–165°F serving temperature	› Refrigerator: 37–42°F › Cold, precooked patty, around 1/2"–1" thick › Pre-toasted bun › Condiments help "connect" the layers and distribute heat throughout the food › Vegetables (poss. pre-grilled and seasoned) › Cover delicate ingredients with meat or vegetables to shield them		
Crispy chicken burgers (e.g. burger bun, breaded chicken breast, condiments, lettuce, pickles, tomato), approx. 9–11 oz. Total, approx. 4.75–5.5" diameter, approx. 150–165°F serving temperature	› Refrigerator: 37–42°F › Cold, precooked, breaded chicken breast, about 1/2"–1" thick › Pre-toasted bun › Condiments serve to "connect" the layers › Vegetables (poss. pre-grilled and seasoned) › Cover delicate ingredients with meat or vegetables to shield them		

| Dish	Serving temperature and special features	iCookingSuite	Manual settings
Sandwiches or panini (e.g. pulled pork/beef/grilled vegetable filling, condiments, lettuce, onions), approx. 7–9 oz. Total, approx. 1–2" high, approx. 150–165°F serving temperature	› Refrigerator: 37–42°F › Cold, precooked, meat or vegetable component approx. 1/2–3/4" layer › Vegetables (poss. pre-grilled and seasoned) › Place on a preheated griddle		

Pizza, pinsa, filled baguettes, fresh or frozen

Here are a few pointers when preparing ready-to-eat products involving a dough base and toppings, such as pizza, pinsa, or tarte flambee:

› You can bake pizzas the same way you would in a regular or combi-oven, i.e., delicate toppings like arugula, basil, etc. can go on after baking.
› With the iHexagon, your flexibility comes first. Hot counters are a thing of the past. No drying out, no loss of quality, no food waste. During production time, simply pre-bake the crust with or without sauce and then blast-chill it to use as your base product. Then you can top your pizzas to order or prepare them as needed.
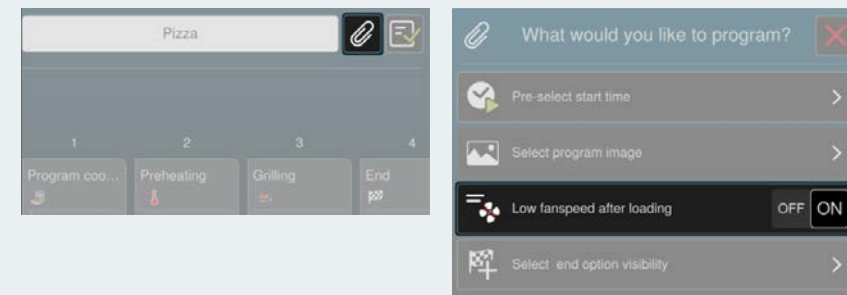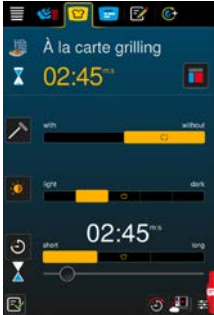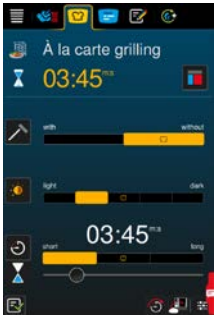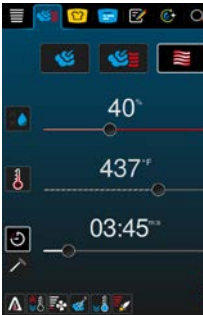
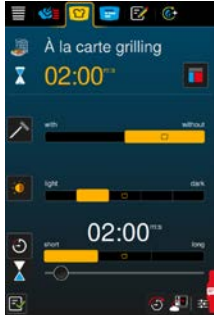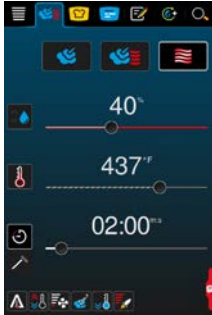We recommend the following setting for pre-baking pizzas or pinsas:
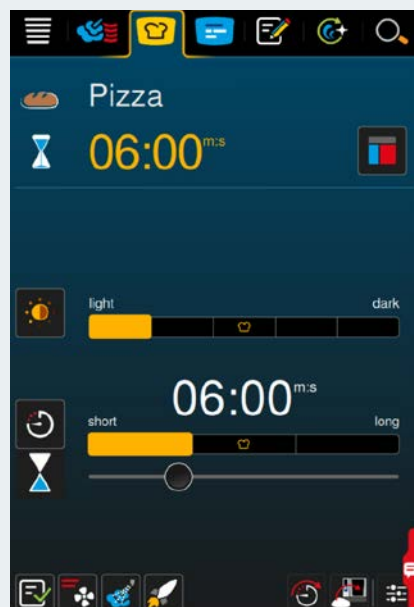
› The grill and pizza tray (1/1 GN #60.70.943) is ideal if you want a crisp crust.
› Perforated roasting and baking trays (1/1 GN #6015.1103) offer easy handling during service and yield good-quality results. Thanks to their design and their special Trilax coating, these accessories require neither greasing nor preheating.
› We recommend using a lower fan speed on lightweight components like cheese and salami, as it will keep them from flying off.

You can adjust this setting in programming mode under the paper clip:

Dish	Serving temperature and special features	iCookingSuite	Manual settings
Pizza with pre-baked crust (e.g. crust, tomato sauce, meat or vegetable topping, onions, cheese, arugula), approx. 9-11 oz. Total, approx. 11-12" diameter, approx. 150-165°F serving temperature	› Refrigerator: 37-42°F › Cold, precooked crust, about 1/3"-2/3" thick › Uncooked toppings, e.g. pepperoni, ham, etc. › Vegetables (poss. pre-grilled and seasoned) › Add delicate toppings like arugula or basil after cooking		
Pizza with pre-baked crust, frozen (e.g. crust, tomato sauce, meat or vegetable topping, onions, cheese), approx. 9-11 oz. Total, approx. 11-12" diameter, approx. 150-165°F serving temperature	› Frozen: -1°F › Frozen pizza › Uncooked toppings, e.g. pepperoni, ham, etc. › Add delicate toppings like arugula or basil after cooking		

Dish	Serving temperature and special features	iCookingSuite	Manual settings
Pinsa with pre-baked crust (e.g. pinsa crust, tomato sauce, meat or vegetable topping, onion, cheese, arugula), approx. 9-11 oz. Total, approx. 11-12" diameter, approx. 150-165°F serving temperature	› Refrigerator: 37-42°F › Cold, precooked crust, about 1/3"-2/3" thick › Uncooked toppings, e.g. pepperoni, ham, etc. › Vegetables (poss. pre-grilled and seasoned) › Add delicate toppings like arugula or basil after cooking		

Side dishes, potato products

Here are some general recommendations for potato products:

› For potato products such as French fries, steakhouse fries, or croquettes, we recommend the CombiFry (1/1 GN #6019.1150) for optimal cooking results. It allows you to prepare large quantities of pre-fried potato products without additional fat. The optimized corrugated base minimizes contact between products and prevents them from sticking together. Free air flow around the products ensures uniform browning and maximum crispness.
› Pre-cooked potato products like hash browns or wedges are best prepared on a non-perforated roasting and baking tray (half-size GN #6013.1103) or a granite-enameled tray (half-size GN #6014.1102).

| Dish	Serving temperature and special features	iCookingSuite	Manual settings
French fries, approx. 1/4" thick, e.g. Quick oven fries	› Frozen: –1°F › Approx. 1/4" thick › French fries for quick applications such as quick oven fries or turbo fries		

Packaged meals (grab and go)

A few general recommendations when preparing ready-to-serve takeout or grab-and-go meals:

› Pre-packaged and pre-cooked foods that are mixed before or after heating offer the highest degree of flexibility and individualization. So how do you take advantage of that? Consider choosing a base ingredient like Mie noodles or rice noodles and then creating variety through toppings, for example with different sauces, meats, and vegetables. Then just combine the ingredients to order and heat.
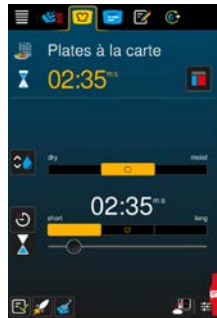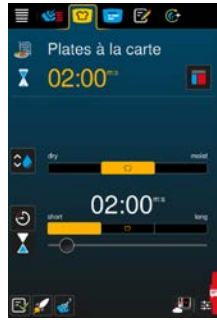
› Fill the takeout container with pre-cooked, seasoned sides (e.g., noodles), followed by the toppings.
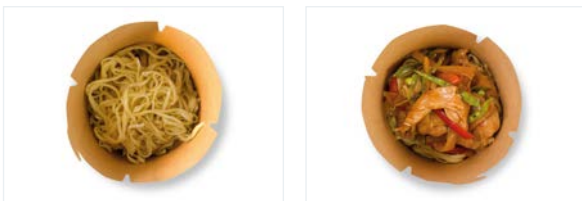
› Leave the container open in the cooking cabinet and close it afterward.
› This method is also useful for other two-component dishes, for example a pasta-vegetable mixture that you pour a soup base over. What are the advantages of using multiple individual components? You can prepare your liquids during your production shift and store them hygienically, then take them out to heat and serve as needed. This allows you to respond to orders quickly and easily.

› Liquids in cooking pouches should be heated on a stainless steel tray. This will prevent bags from leaking into the cooking cabinet.

Dish	Serving temperature and special features	iCookingSuite	Manual settings
Dishes in heat-resistant cups or containers, container capacity approx. 2-3 cups, e.g. stir-fry noodles in takeout boxes	› Refrigerator: 37-42°F › Light/loose-consistency products, previously cooked and chilled › Few compact masses		
Dishes in heat-resistant cups or containers, capacity approx. 1.5-2 cups, e.g. curry coconut udon noodle soup in takeout boxes	› Refrigerator: 37-42°F › Precooked soup in a boil-proof bag, approx. 6-8 oz, max. 3/4-1 1/2" deep › In closed 3/4" stainless steel container › Noodles separate in a takeout container (cooking time approx. 1 minute)		

4 Tips and tricks

Vegetables and side dishes

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

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

We have already integrated the microwave function perfectly into our intelligent cooking paths. All you need to do is start the cooking path of your choice in the iCookingSuite. The iHexagon will do the rest for you.

This effect is especially noticeable on vegetables that are high in water - they cook much faster while their nutrients remain intact.

Meat and seafood

We have deliberately omitted microwave options from the iCookingSuite "grill meat" cooking paths for beef, pork, and game dishes typically served rare to medium, since microwave energy primarily affects the internal degree of doneness. Though simultaneous convection and microwave energy will give you a nicely browned exterior on game, beef, and pork dishes, it will also accelerate internal cooking and possibly lead to overcooking.

Poultry, ground meat, and seafood, on the other hand, are not a problem since they need to reach a specific core temperature. Always divide these products into equally sized pieces to ensure that every serving cooks all the way through.

When cooking meat using microwave power, salt the food after cooking if possible. Salt draws moisture out of the meat, so you run the risk of it drying out.

RATIONAL Canada Inc.
6950 Creditview Rd.
Unit 1
L5N 0A6 Mississauga
Canada

Tel. +1 877 728 4662
Fax +1 905 567 2977

info@rational-online.ca
rationalcanada.com

RATIONAL USA Inc.
1701 Golf Road
Suite C-120, Commercium
Rolling Meadows, IL 60008
United States

Tel. 888-320-7274 (Toll Free)
Fax 847-755-9583

info@rational-online.us
rationalusa.com