

Sous vide  
for the professional kitchen





Prepare high-quality aromatic meals  
several days in advance.





With sous vide cooking you can serve your guests with food, which has authentic inherent taste and natural texture. You are not only offering them the optimum taste experience but also food, which always meets the highest quality standards. And the best thing is: Cooking under vacuum makes your working processes easier to plan, and you can cook with less time pressure and without risk. And with sous vide you work more profitably.

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# Sous vide is so simple



## Preparing the product

Use only the freshest raw materials. Please ensure that these are prepared with the greatest care and hygiene. Herbs and spices give a more intensive aroma to the food than is usually the case.



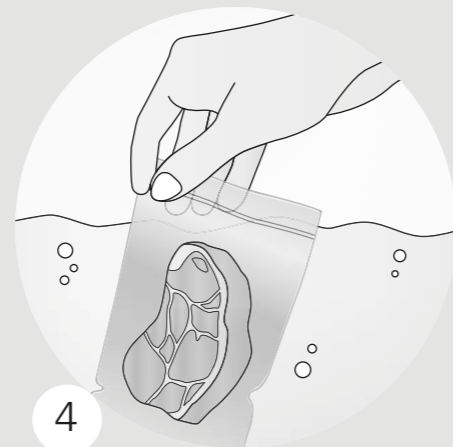
## Filling the pouches

Use only special pouches, which are suitable for sous vide.



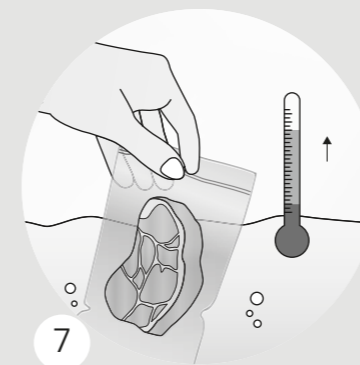
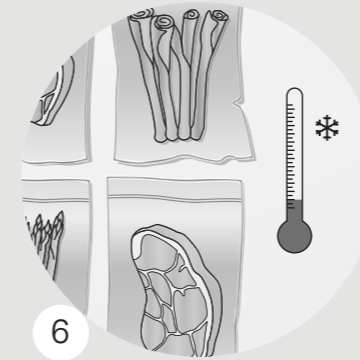
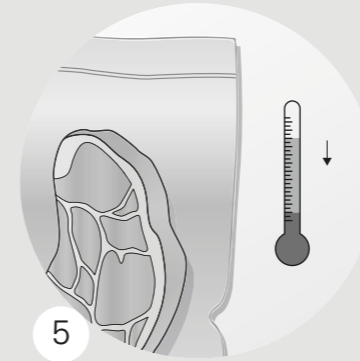
## Vacuum packing

Seal the pouches under vacuum in a MULTIVAC chamber machine.



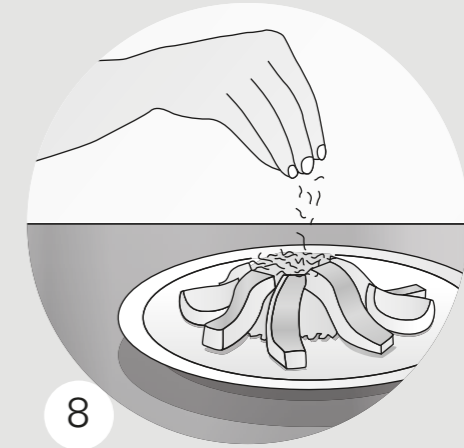
## Cooking

Cook gently at 55 to 95°C. You can then garnish the menu components as usual, or alternatively chill and store them.



## Chilling, storing and regenerating

If you want to store the food, it just has to be cooled quickly in the chiller or in ice-cold water! If the meal components are subsequently stored at a temperature between 0 and 3°C, they keep their quality for one to three weeks. Before serving you simply regenerate the meal components in the water bath, until the desired core temperature has been reached.

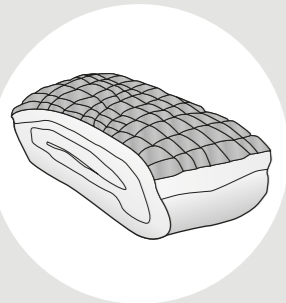


## Garnishing, serving

Meat is mostly browned briefly but very powerfully on both sides before serving, since the Maillard reaction contributes significantly to the taste. You can however serve all other food immediately.

### Examples of cooking temperatures

68°C



Roast pork

55°C



Beef steak

85°C



Chanterelles

65°C



Prawns

80°C



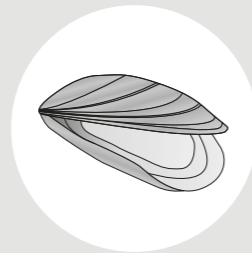
Leg of duck

84°C



Asparagus

60°C



Mussels

45°C



Salmon

## You have to watch out for these points

Gentle cooking takes place at a temperature, which is slightly (approx. 0.5°C) above the target temperature in the core of the product. This temperature depends on both the type of food and the desired cooking level.

Cooking temperatures under 55°C are not recommended for cooking over long periods. Exception to this: very fresh fish can be cooked at a temperature of 45°C, if it has been prepared accordingly.

When cooking in a water bath, ensure that the pouches are completely immersed in the water, and that they are not arranged too closely beside or above each other. If you use a covering grid, you will prevent the pouches getting to the surface of the water at higher temperatures.

The cooking times are longer than with traditional cooking methods, and they depend on the thickness of the product. Precise temperature control is very important with sous vide cooking. A high level of temperature consistency can be achieved in a water bath by means of a digital control unit.

Combi steamers can also be used for sous vide cooking. It is important in this case to set a reduced speed for the exhaust fan. This means that more steam condensate remains on the sous vide pouches, thus ensuring that there is optimum heat transfer. In order to establish when the food has reached the optimum core temperature, one should measure the temperature in a reference product by means of a needle temperature sensor.

The food is ready to eat after cooking. It can either be served immediately or processed further, or alternatively stored in a chilled state for 2 to 3 weeks after shock cooling.

# Components

## MULTIVAC sous vide products:

### ① Vacuum chamber machines

Reliable vacuum packing is the basis for excellent quality. MULTIVAC's high-performance chamber machines offer you perfect results over the long term.

### ② Water bath with thermostat

Cooking takes place at low temperatures, which do however have to be maintained constantly. MULTIVAC's sous vide thermostats guarantee a temperature consistency of  $\pm 0.03^{\circ}\text{C}$ .

### ③ Accessories

Practical accessories, such as a covering grids, anti-steam balls, bath clamps or holding devices, make your daily work easier.

## + You also require the following components:

### ④ Sous vide special pouches

The special pouches do not affect the taste or the appearance and they guarantee seal seam integrity up to  $100^{\circ}\text{C}$ . They also ensure that the shelf life is maintained during storage.

### Cooking equipment

A conventional water bath with precise temperature control is suitable for cooking and regenerating. A combi steamer can also be used.

### Chiller

If the food is to be stored, it must be quick-cooled in the chiller. Chilling to a maximum of  $3^{\circ}\text{C}$  within 90 minutes reduces the formation of bacteria.





# Benefit from the advantages

## Excellent quality

Thanks to the gentle cooking process, the authentic inherent taste and natural texture of the food are retained; the food is tender and succulent when presented at the table. Nothing becomes crusty or dries out. In many cases food, which is cooked under vacuum, is actually more wholesome and nutritious, because vitamins are retained. Recipes with constant cooking temperatures and times produce consistently high quality. The quality of meal components is also preserved during storage and regenerating in the vacuum pouch.

## Quick service and a wide range of food

You can pre-cook the most important meal components and then simply store them. You only need to regenerate, garnish – and if necessary briefly brown – the food before serving it. This means that fluctuating guest levels are not a problem for you. Even late in the evening you can serve your guests whatever they wish to eat. You can also easily produce a stock of those specialities, which are only requested infrequently. It is also possible to supply outside catering branches from your central kitchen – conveniently and cost-effectively but with the same excellent quality.

## Optimise your processes

Cooking under vacuum makes your working processes easier to plan, and you can cook with less time pressure and without risk. You can buy raw materials when the quality and price are right. Because with sous vide cooking you are producing for stock. Cooking loss is minimized, and with sous vide you work more profitably.





# Chamber machines: the basis for sous vide

## There from the beginning

MULTIVAC has accompanied the sous vide cooking procedure since its beginnings in the 1970s. Our chamber machines, which form the basis for reliable cooking under vacuum, enjoyed an excellent reputation worldwide, even in those days, in the food industry and wherever it was a matter of reliable and hygienic packaging.

These decades of experience also benefit you now. Thanks to continual collaboration with the catering sector, MULTIVAC can today offer you a wide range of proven vacuum chamber machines, which make the sous vide procedure attractive to every size of kitchen.

## Benefit from our know-how

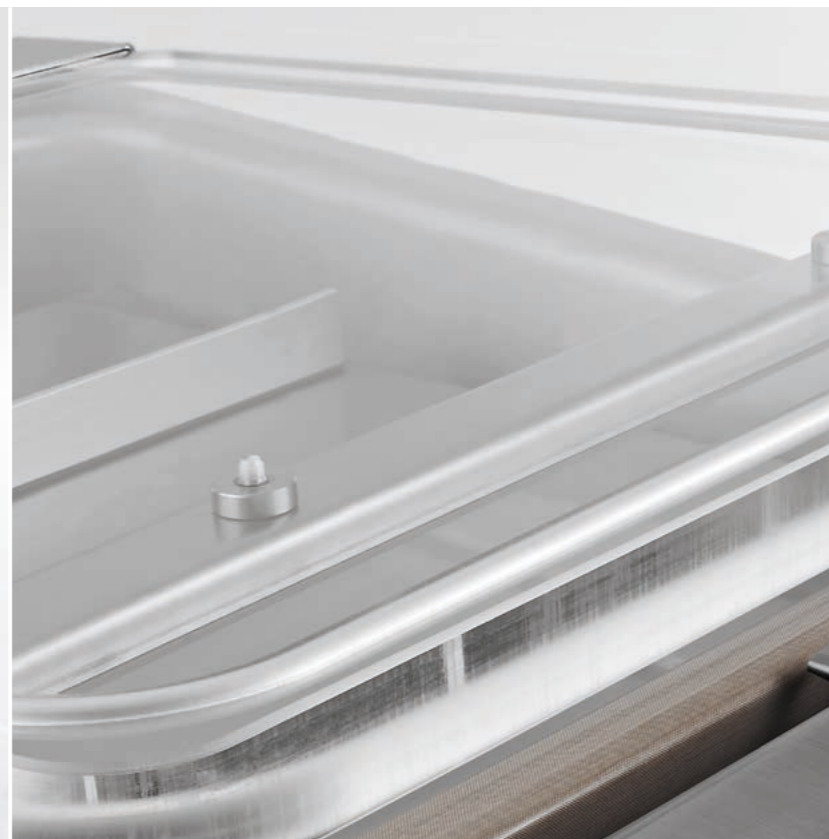
Packaging has been our profession since 1961. You will find MULTIVAC packaging machines wherever there is a need for reliable and absolutely hygienic packing – for example in the food industry or with medical products. More than 120,000 machines sold to date are clear proof of the trust placed in us by our customers in more than 140 countries worldwide.

Continual innovation is an important foundation for our sustained success: viewing windows, sloping inserts, double-seam sever sealing, program memory and ease of operation have all proved themselves in industrial-scale, high-output operation, and they will guarantee perfect functionality in your kitchen as well.

▼ The program memory notes your vacuum settings



▼ Viewing windows make inspection of the process easier



▼ The robust design ensures durability



▼ MULTIVAC Hygienic Design™ for easy cleaning



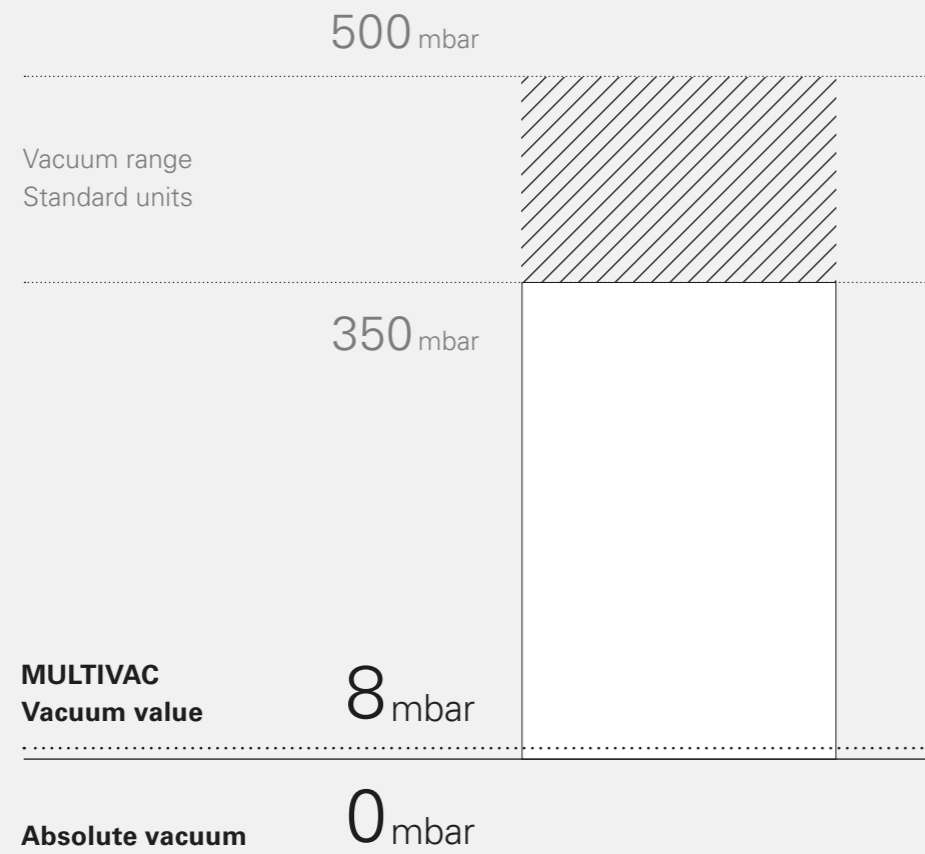


## High vacuum for optimum results

In order to ensure reliable operation with sous vide technology, a vacuum value of maximum eight millibar is required to extend the shelf life of a product.

MULTIVAC's table-top and free-standing vacuum chamber machines enable the vacuum value, which is required for sous vide applications, to be achieved reliably and reproducibly. They also have a very high level of seal quality. The pouches remain sealed during cooking, storage and regenerating.

Products with liquids can also be vacuum packed without problems in MULTIVAC chamber machines. Sloping inserts, which can be placed in the chamber, ensure that a clean and dry seal area is maintained.





## Simple cleaning – reliable hygiene

Hygiene is the most important aspect in the kitchen. This is particularly so, if meat and fish are being cooked at low temperatures, as is the case with sous vide.

Thanks to their special design, MULTIVAC's chamber machines are ideally suited to the sous vide procedure. The MULTIVAC Hygienic Design™ also enables them to be used in production environments, which have the highest hygiene requirements.

### **MULTIVAC Hygienic Design™**

- Smooth, angled surfaces inside and outside without recesses prevent micro-organisms and residue of product or cleansers from being deposited.
- All materials are designed for cleaning and disinfection with fluids
- Removable sealing bars make it easier to clean the vacuum chamber





With sous vide you completely  
redefine enjoyment and taste.







## BETTER PACKAGING

Our goal is for MULTIVAC packaging solutions to fulfil your requirements reliably and efficiently. This is why a MULTIVAC team of experts offers you a wide range of technical support and services, from the initial consultation to the supply of all spare parts for at least ten years after your machine was put into service.

### **Comprehensive advice**

A qualified and experienced project team will be at your side from the initial idea to the first test run.

### **Training**

We offer comprehensive training courses for you to become familiar with the operation, servicing and care of your machine. In this way you can fully realize the potential of your MULTIVAC chamber machine.

### **Service**

Worldwide there are over 1100 MULTIVAC experts in the field: around 450 sales advisors to develop the most efficient solutions with our customers, as well as more than 670 service technicians to assist with service support, retrofit equipment and training.



