

metos

cooking solutions



***Intelligent Solutions for
Mass Production***

Large batch production

There are many ways to make good food. We develop better processes for production kitchens. Cook-serve, cook-chill, hot fill, cold preparation, sous vide. With the help of our process expertise, you will get to know the special features of different production methods and get the best benefit for your kitchen from different production methods.

The choice of production method depends on the kitchen and its customers. When choosing a production method, the goal is to make the kitchen work as smoothly as possible and to use the acquired equipment efficiently. Most of the time, the operation is a combination of several production methods, and not purely one method.

The production kitchen may prepare up to thousands of meals a day for both its own unit and the distribution kitchens. For these needs, we have functional kitchen solutions that you can get from us pre-planned for your chosen production method. With the help of our long-term experience, we are able to design solutions that are flexible and expandable.



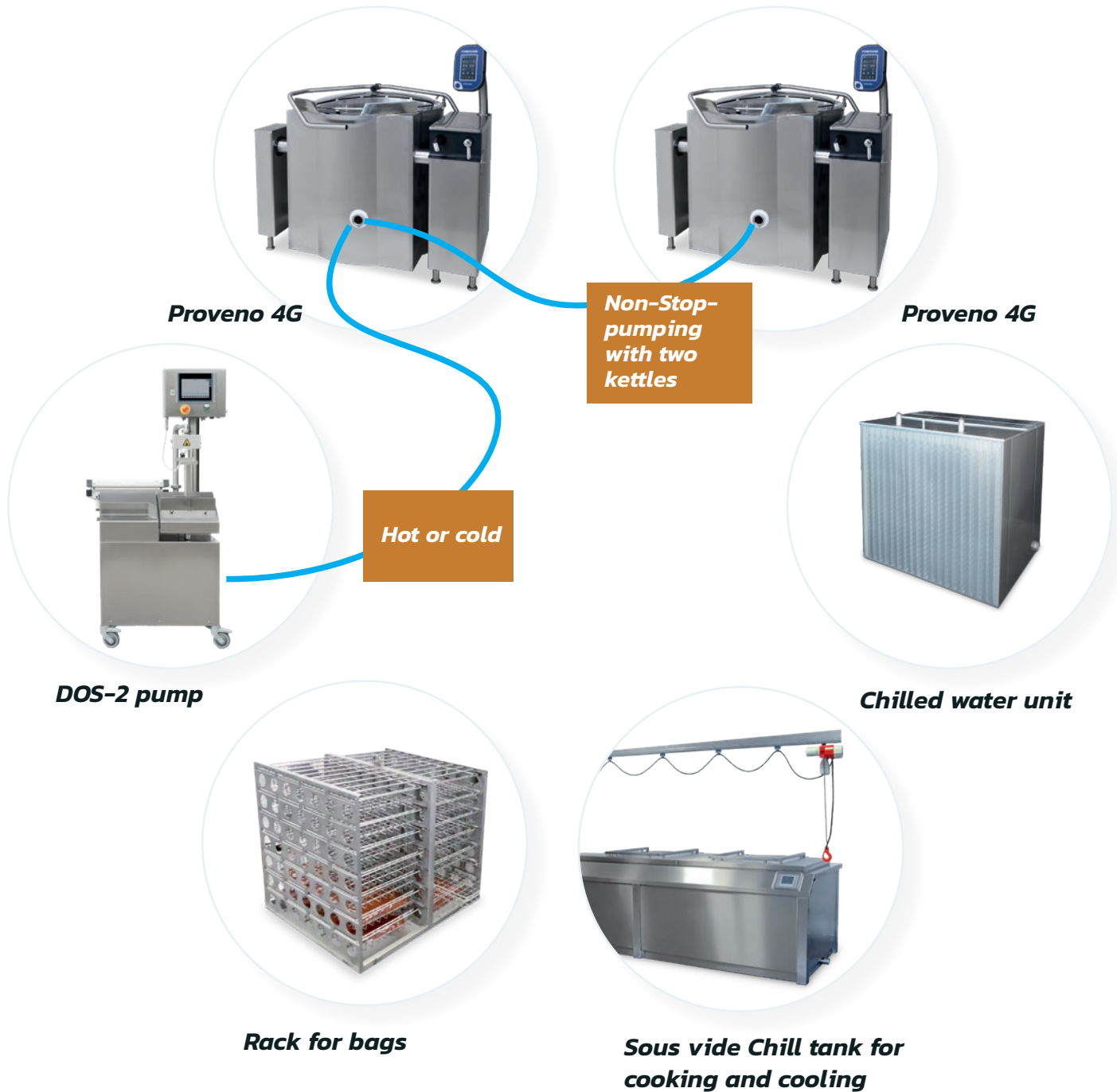


Large hot fill production kitchen

- Three 400 liter Proveno 4G kettles
- One DOS-2 pump
- 1000 liter cook-chill/sou-vide tank with racks and lift



Large batch production concept



**Production based on
Proveno 4G kettles and
DOS-2 pump**

Pumping cold or hot

Configuration for pumping with one kettle

- Proveno 4G kettle
- bottom valve
- DOS-2 pump
- arc valve
- plug system

Configuration for Non-Stop pumping with two kettles

- 2x Proveno 4G kettle
- 2x bottom valve
- DOS-2 pump
- arc valve
- Non-Stop valve
- 2x plug system
- additional hose DOS-2



Suitable for production methods:

- Hot fill
- Cook-chill
- Cook-serve
- Cold preparation

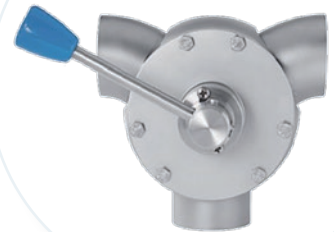
Proveno 4G – Large production accessories and options



***Proveno with
bottom valve***



Arc valve



Non-Stop valve



Foot pedal



Plug system

***A bottom valve is a necessity
for an easy pump kettle for
large production***

Programmable Proveno 4G for standardized food production

The cooking functions can be controlled according to the temperature of the food or the jacket, and precise cooking processes can be built. Automation and the easiness it brings has been taken to their peak in every function. All features can be selected in own programs. Ready-made mixing patterns for different types of mixing make it easier to create your own programs.

There are ready programs for basic dishes that have been proven and tested. Own favorite recipes can be saved on favorite pages. Help windows for recipes can be opened on the screen and, in addition, sound signals indicate when it is time for additional procedures.

What makes Proveno an actual food factory are its options and the equipment and supplies included in the concept, such as the automatic chilling, DOS pumping or packaging systems all the way to packed meals.

Proveno and the whole kitchen can be easily connected to the Metos SmartKitchen HACCP cloud service. Then all the valuable HACCP data of your kitchen is on your smartphone, ensuring food safety.





DOS-2 Automatic dosing into bags or containers and CIP washing

Quick dosing is suitable for many dishes

Food with a particle size of up to 38 mm can be pumped with uniform quality using our method.

Hot Fill DOS-2 ensures quick and precise dispensing of liquid food products. Soups, sauces, stews and mashed potatoes are filled into bags and containers effortlessly. The built-in scale ensures that weighing of the product happens in one and the same workflow saving time in the kitchen.

Changing the filling process from bags to containers only takes a few moments. Simply remove the bag holder, fit the roller track and the Hot Fill DOS-2 is ready.

The Hot Fill DOS-2 makes the work station safer. The machine ensures a proper working position, protecting the operator from straining shoulders and wrists. This reduces inconveniences and prevents injuries.

The Hot Fill DOS-2 is mounted on swivel wheels allowing for the workstation to be moved to the most convenient spot.

Dispensing food with Hot Fill DOS-2 minimizes the risk of scalding since the machine handles the food. Operating the machine is managed via a touch-screen display with a user-friendly interface.

Cleaning the Hot Fill DOS-2 is done by the built-in semi-automatic CIP system. All internal pipes, tubes and valves are cleaned. All loose parts are dishwasher safe.



DOS-3 Fully automated hot fill with automatic packing unit and CIP system.

Fully automated Hot Fill DOS-3 ensures the responsible and efficient dispensing of food products into bags. Dispensing hot food products is normally associated with a number of health and safety risks. These risks are minimized with a fully automated dispensing system. The controls make sure that the operator avoids any direct contact with the 90°C hot product. The automatic bag-packing unit seals the bags once they are filled.

***Automatic bag
packing***

Furthermore the need for lifting products over long distances is reduced since the ready packaged dishes are transported from the filling station to the operator via a small conveyer belt. This prevents inappropriate working positions.

Hot Fill DOS-3 ensures uniform portions. The quantity is controlled via the touch- screen display. The display also controls how quickly the product is to be dispensed allowing for flexibility in the workflow.

The fully automated Hot Fill DOS-3 sucks the product directly from the kettle and is fitted with a temperature alarm consistently ensuring the correct temperature of the product.

When the batch is completed the CIP system is fitted by mounting the CIP tube to the bag machine. The CIP system cleans all internal parts like tubes, pipes, valves and pump. The fully automated cleaning system applies detergent and disinfectant automatically.

Sous vide and chill tanks for cooking and cooling



The lift of the sous vide tank minimizes heavy work

Sous vide systems offer many advantages:

- Timesaving
- Flexible
- Minimizes staff requirements
- Easy workflow
- More hygienic

With sous vide the taste is the winner:

- Ensures tender meat
- Retains the aroma and overall quality of the food
- Preserves food longer
- Minimizes shrinkage

Sous vide cooking has many advantages in the commercial kitchen. We specialise in the production of customised sous vide equipment. The sous vide cooking method cooks food under vacuum which contributes to the preservation of the product. We have extensive experience in the production of sous vide equipment which is produced in brushed stainless steel for easy cleaning. The user-friendly touch-screen display serves all the functions of the machine.

In commercial kitchens the sous vide is essential in achieving unique operational profits. Thanks to the sous vide cooking method allowing for bulk production, it is a staff reducing production method. The products' prolonged shelf life provides an opportunity to separate in time the preparation and serving, offering great flexibility in production planning. Thanks to the airtight packaging no contamination will occur when handling the products.

The cooked food is chilled in same tank or in really big production you have separate cook tank and chill tank and you move the racks after cooking to chill tanks. This saves water and time what it takes to change tank temperatures.

The tanks can also be ordered as chilling only, which means they only produce cold water all the time. The tanks are connected to ice bank or fluid chiller unit producing the ice water for chilling.

Emptying large liquid tanks with a pump

Empty with your pump

You can use DOS dosing pumps for other purposes in the kitchen than emptying just the kettle. Large milk, cream, curd, etc. tanks with up to several hundred liters can be quickly emptied into, for example, the kettle.

Unpacking and emptying small milk containers – for example 10 liters – into the kettle takes a lot of time. With the DOS pump, you conveniently empty large containers of hundreds of liters in minutes. In addition, the amount of packaging material is significantly reduced if you order big containers.

You can also do the same for cream and curd packages.

Push the suction tube into the package or connect the suction hose with the adapter to the emptying valve of the package. Then start the DOS pump and the pack is empty in minutes.



20x 10 liters by hand



vs 200 liters with a pump in few minutes



Kettle accessories for emptying small liquid containers



Pouring platform, works in two positions: for emptying the liquid pack and for emptying the kettle



Pouring support for small boxes

Mixing large batches with Proveno DiagoMix



The Proveno DiagoMix method

Mixing when tilting is standard in all 2G, 3G and 4G in Proveno kettles.

- Without DiagoMix equipment, the filling rate is 30%
- With the DiagoMix equipment, the filling level of the kettle is 60-70%
- Cold preparation ingredients are mixed in 30-210 sec
- Slow rotations – delicate products remain intact
- First the liquid and then the other ingredients
- There is no need to add the ingredients in layers



Cold preparation



Salad mixing



Quicker cooking



Large masses mix quickly



Quicker chilling



Dosing directly from kettle with pump

Tilting is an effective aid in the preparation of many dishes

DiagoMix saves time and money

***Gentle and quick
mixing by tilting***

The Metos DiagoMix equipment means the accessory package for the Metos Proveno kettle, which allows you to make better use of the capacity of your kettle when mixing during tilting.

The DiagoMix lid is a half-moon-shaped lid that tightly covers more than half of the kettle's mouth and allows you to mix almost a full kettle at an angle. The DiagoMix scraper mixes right up to the edges and large masses get mixed up easily and quickly. The DiagoMix lid leaves a filling hole at the top, from which it is easy to add ingredients. You can usually fill your kettle about 70%, depending on the product.

The advantages of DiagoMix are especially beneficial in cold preparation, where the masses contain cooked, fragile components. The kettle can be cooled so that it is already cold. When cold ingredients are put into the kettle and mixed, the ingredients stay cold. Heavy manual mixing is eliminated.

Cooked, cold and firm products – like cubed potatoes, pasta, rice – are easy to fluff up and then add the other ingredients of the recipe. A minute and the mixture is ready. The cooked sous vide products can also be really stiff. Loosen e.g. minced meat, chicken cubes, meat strips in the kettle – this way you save working time and many steps.



Suitable for production methods:

- Hot fill
- Cook-chill
- Cook-serve
- Cold preparation

Processing of large batches using blender top kit

Make purees easy

The innovative blender top kit makes preparing pureed soups and smooth sauces in kettle quick and easy. In addition, work ergonomics and work safety are improved, because the hand mixer no longer has to be moved by hand in an unergonomic position above the hot food in the kettle.

With the help of the blender top kit, for example, 50 liters of carrot puree soup is automatically pureed completely evenly in only a fifth of the time it would take if you had to move the stick blender by hand. In addition to everything, when doing it by hand, the end result is not always even and smooth. The whole puree soup preparation process as a whole is also significantly speeded up. For example, carrots do not need to be chopped, but can be poured directly into the kettle. This also avoids all the cleaning of the tools needed for chopping.

Blender top kit can also be retrofitted to Metos kettles. The selection includes models for 40-100 liter kettles.



No chopping

Blender top kit for Metos kettles

- Special lid (can be retrofitted)
- Special mixing tool for the kettle
- Blender



Recommended configurations

Cook-serve

- kettle
- cooling C2
- strainer plate
- whipping grid
- hand shower
- cleaning tool
- SmartKitchen HACCP sensor
- blender tool kit 40-100 L
- DiagoMix equipment
- foot pedal

Cook-chill

- kettle
- ccooling C3i + pressurised air drainage
- chilled water unit
- strainer plate
- whipping grid
- hand shower
- cleaning tool
- SmartKitchen HACCP sensor
- blender tool kit 40-100 L
- DiagoMix equipment
- foot pedal

Hot fill

- kettle
- bottom valve D2AUS
- arc valve + plugging system
- cooling C2
- strainer plate
- whipping grid
- hand shower
- cleaning tool
- SmartKitchen HACCP sensor
- accessory trolley AT-77
- blender tool kit 40-100 L
- DiagoMix equipment
- foot pedal

Cold preparation

- kettle
- bottom valve D2AUS
- arc valve + plugging system
- cooling C3i + pressurised air drainage
- chilled water unit
- chilled food water
- strainer plate
- whipping grid
- hand shower
- cleaning tool
- SmartKitchen HACCP sensor
- accessory trolley AT-77
- blender tool kit 40-100 L
- DiagoMix equipment
- foot pedal

Automatic dosing

- kettle
- bottom valve D2AUS
- arc valve
- plugging system
- dosing pump DOS-1-2 or 3
- accessory trolley AT-77

Non-Stop pumping with two kettles

- bottom valve D2AUS in both kettles
- arc valve
- Non-Stop valve
- 2x plugging system
- dosing pump DOS-2 or 3
- additional hose DOS

Sous vide Chill tanks

The system includes everything you need, just choose:

- size
- cooking or
- cooking and cooling
- stackable baskets or a basket rack with pull-out baskets

New: Metos Proveno Sous Vide Kettle

an Ali Group Company



the spirit of excellence

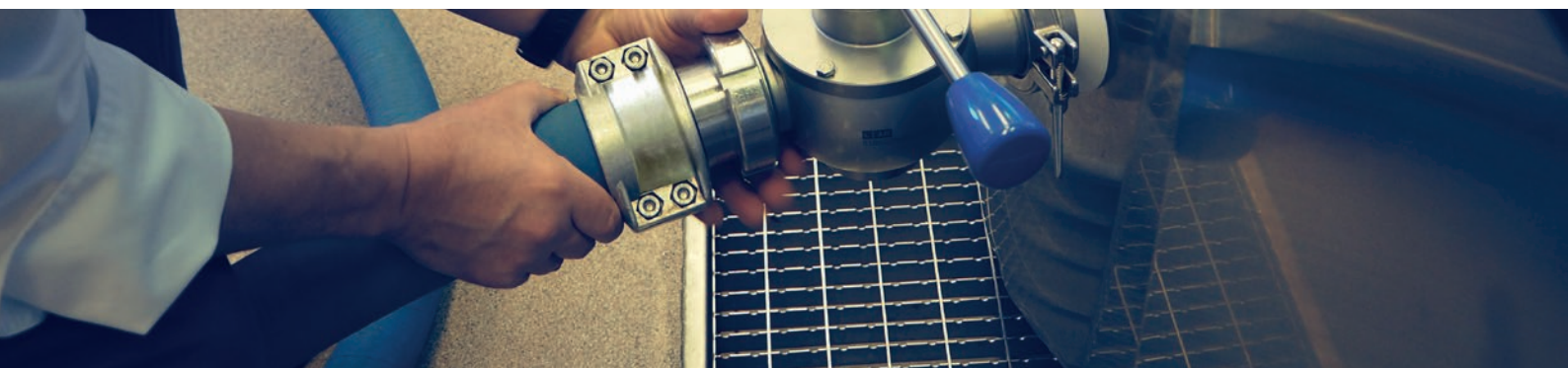
Metos Cooking Solutions

Ahjonkaarre, 04220 Kerava, Finland

tel. +358 204 3913

mcs@metos.com

mcs.metos.com



metos
kitchen intelligence®