

# Cooking Sous-Vide Cooking Pasteurizing

## Hoegger<sup>®</sup> In-Package CookChill System

Continuous process for exceptional quality and product safety





# Process

- High quality cooking
- No damaged packages
- High degree of product safety
- Long shelf life
- Consistent quality
- Optimized production planning

## Uncompromising Food Safety

Our continuous in-package CookChill process ensures your required degree of product quality, a safe and long shelf life, as well as high economic efficiency.

Our CookChill Technology provides exceptional value and efficiency for pasteurization, cooking, sous-vide cooking, and chilling of products in a varied range of packaging options. Provisur offers a completely automated system solution, from the packaging machine to the pack-off.

## Heating

From the packaging machine, the product is fed continuously onto the CookChill system. Automatically loaded carrier trays move the product continuously through the heating zone, using our multi-layer horizontal counter flow method.

This method has the advantage that it heats the individual packages gradually, controlled, and consistently without shocking. As the product moves through, it is exposed to a continuous water shower as well as a controlled pool of water in the carrier.

## Chilling

While in the chilling zone, the trays carrying the product are moving counter flow, whereas the product travels hot to cold. Finishing the heating process, the product is rapidly chilled by an intense water shower of  $> 1^{\circ}\text{C}$  ( $33.8^{\circ}\text{F}$ ) and aided by a controlled pool of water in the product trays. At this stage, the product is chilled rapidly to  $<4^{\circ}\text{C}$  ( $39.2^{\circ}\text{F}$ ) core temperature.

With the counter flow, the coldest product comes in contact with the coldest water, which allows for gentle and effective chilling (e.g., no ice crystals). Once the chilling cycle is finished, the product is discharged onto a conveyor belt.

## Drying

After the heating and chilling process, the product is unloaded from the CookChill unit onto a conveying belt and air dried by going through an air blast station and is ready to be boxed for shipping.

The modular system can be adjusted to meet the requirements of product, packaging, and necessary throughput.

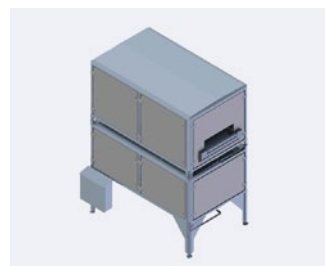
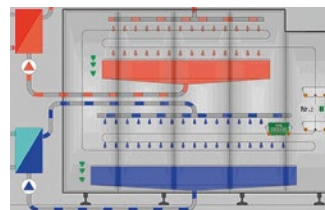
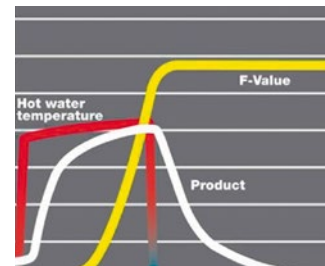
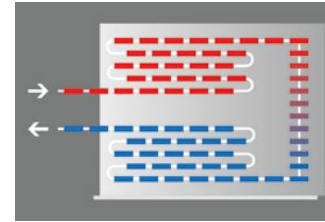
## Process Control

Our software automatically monitors every tray load of product during the entire process and only releases correctly treated products for pack-off.

The perfect, constant quality of the process is measured and recorded fully automatically in a continuous, real-time core temperature logging system.

A state of the art, fully integrated safety control system controls and regulates the process. The system receives the relevant parameters from the operator or from the higher-level control system.

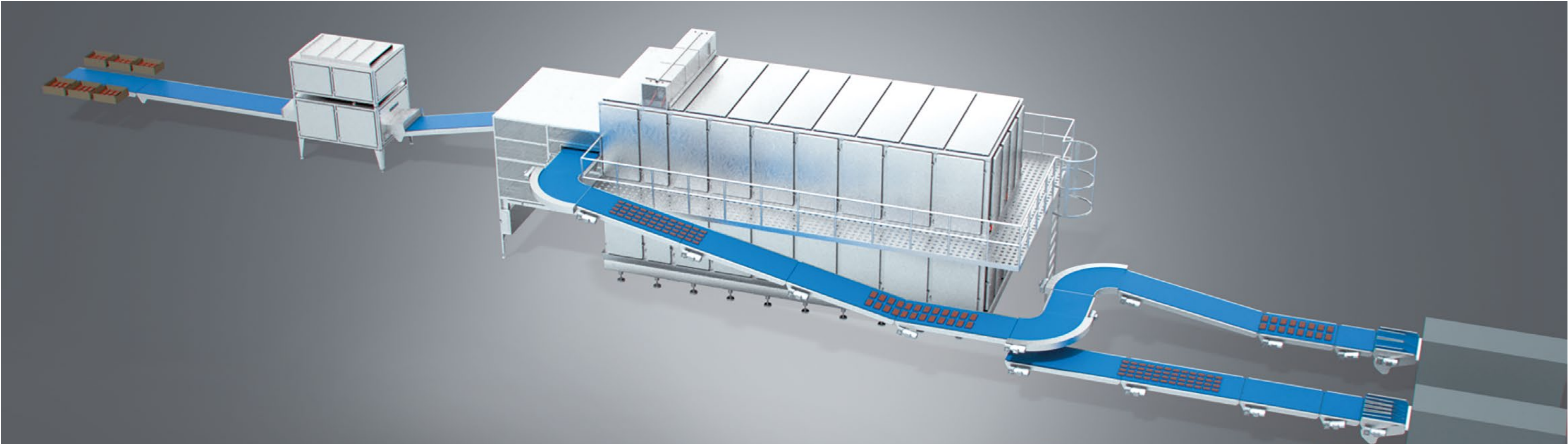
The automatic control of operation, maintenance and cleaning ensure maximum process reliability, availability and hygiene of the system. Process data, events and interventions are recorded and are available for quality audits.







# Fully automated CookChill Process



Provisur has continuously adjusted its Hoegger® CookChill model series to meet the requirements of the ever-evolving products and packaging developments. Each model is available for a wide range of applications and will be fine-tuned to meet your specifications. Our application engineers will be happy to assist you in selecting the model that suits your production needs best.

Product examples	Application/Process	Package Style	Packaging Temp.	Machine Type
Sausage single layer	Core Pasteurization	Vacuum packed	Warm or cold	CC74
Sausage 2 or 3 layer		Vacuum packed	Warm or cold	CC98
Menu componetns		Vacuum packed	Cold	CC74, CC98
Fresh Pasta, Dumplings		Pouches	Cold	CC98, CC130
Sauces, Soups		Pouches	Hot	CC130, CC162
Cheese		Vacuum packed	cold	CC74
Ham, Turkey	Surface Pasteurization	Vaccuum packed	Cold	CC162, CC208
Egg, Tofu, Tempeh, etc.	Cooking - Sous vide	Vacuum packed	Warm or cold	CC98, CC130
Menu components		Pouches	Warm or cold	CC98, CC130, CC162
Sauces and soups		Pouches	Hot	CC130, CC162
Meat pate		Cups	Warm or cold	CC74, CC98



# From Thermoformer to End Packaging Solutions from One Supplier

## In-packaging Cooking / Pasteurization



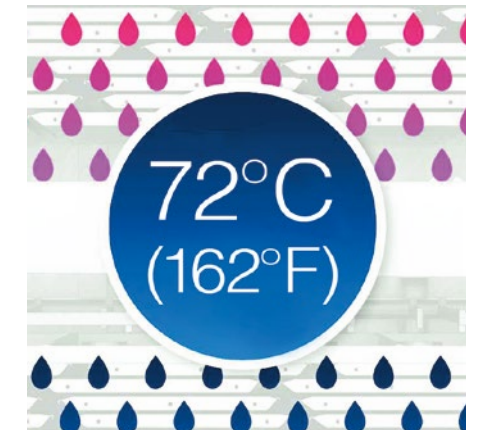
## Features



- Integrated quality control for the individual package
- Maximum product safety
- Optimized product planning, less change over



- Organized product formation throughout the process
- Cook in pack, saving weight loss and energy



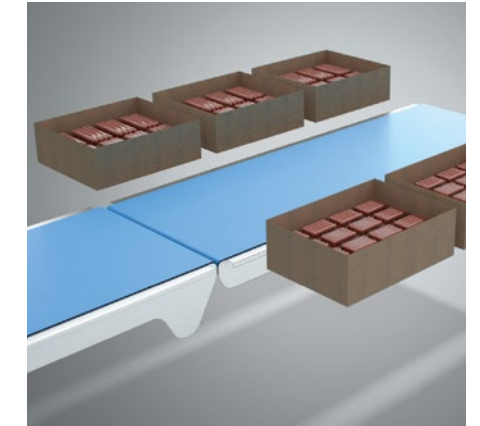
- Minimal variation of core temperature +/- 1°
- High degree of cooking accuracy
- Extended shelf life, the natural way, without preserving agents



- Optimal and efficient cooling to <4°C (39.2°F)
- Consistent product quality



- Dry packages



- Yields > 99.5%
- No damaged packages
- Optimized product planning, less change over
- Continuous operation minimizes production peaks and operating costs





### Customer Service

Our Customer Service is happy to help at any time.  
From application advisory to revisions – our focus is always  
on the best possible efficiency of the line.

**Provisur Technologies GmbH**  
Magdenauerstrasse 34  
9230 Flawil  
Switzerland

Phone: +41 71 394 15 60  
[info@provisur.com](mailto:info@provisur.com)

**Corporate Headquarters**  
222 North LaSalle Street, Suite 720  
Chicago, IL 60601  
United States

Phone: +1 708 479 3500  
[info@provisur.com](mailto:info@provisur.com)