



Metos Cook Chill Production for 3 to 5 Days

Cook Chill is not a new technology. It has been around for decades. Its one of the most efficient ways to produce large quantities of food. Because of its chilled state, and long shelf life, chilled food is handled and transported easier.

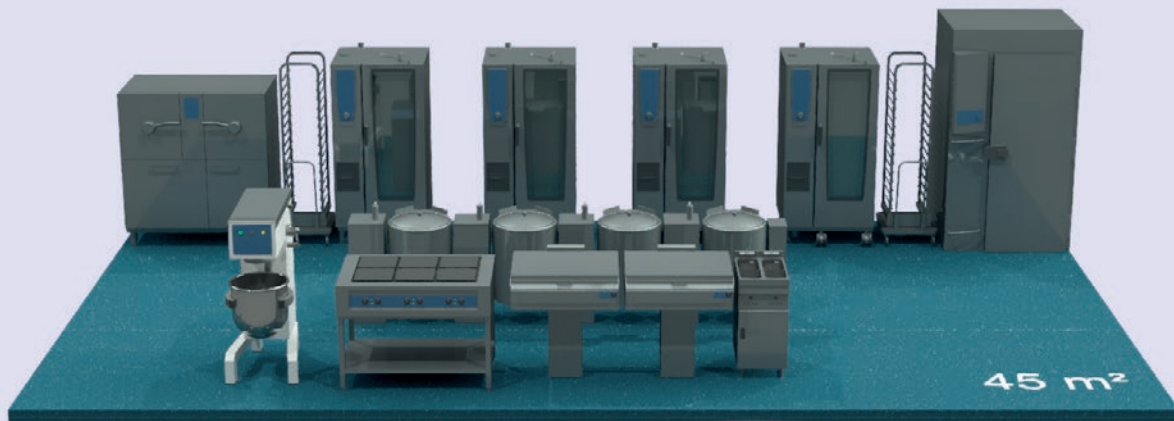
We have seen wide spread improvements in all areas of production equipment functions, logistic capabilities, distribution and regeneration systems that get the food to the client.

Advantages of Cook Chill

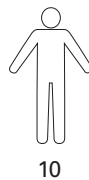
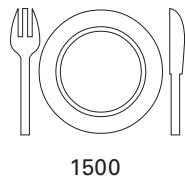
- State of the art hygiene control
- Chilled food banks allow better inventory flow of outgoing food
- Production times are greatly reduced, almost 50% in most cases
- Centralized production kitchens can feed many satellite sites
- Reduced foot print of kitchens due to high volume equipment
- Consistency and Quality increase to the end user



Traditional central kitchen

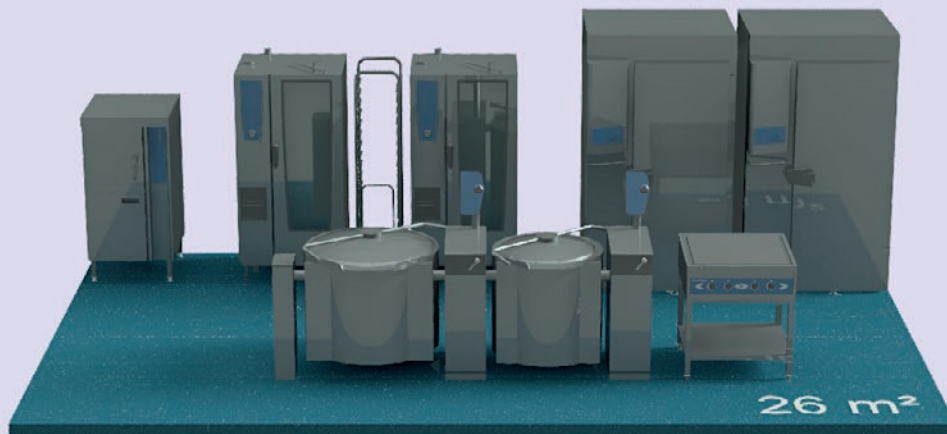


- More machines
- More space
- More people
- More time

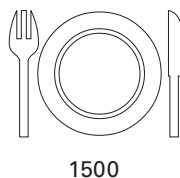


Increased production efficiency for any size of kitchen.

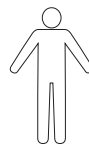
Innovative Metos Cook Chill kitchen saves space, time and human resources



- Fewer machines
- Less space
- Less time
- Reduced workload
- Increased production



1500



5

26 m²

Equipment space requirement

Metos Cook/Chill Kettles are ideal for kitchens of any size. The same basic setup can handle anything from a few hundred to several thousand meals a day.

You can base your production methods on a Cook & Chill or Cook & Serve a principle or a combination of the two. The Cook & Chill method often lets you reduce production days while keeping the serving days the same.

The flexibility of Metos Cook/Chill Kettle Systems allows you to easily serve liquid, liquid based or semi solid food in accordance with your preferences and requirements. And in Metos kitchens the same staff can handle even higher production volumes.

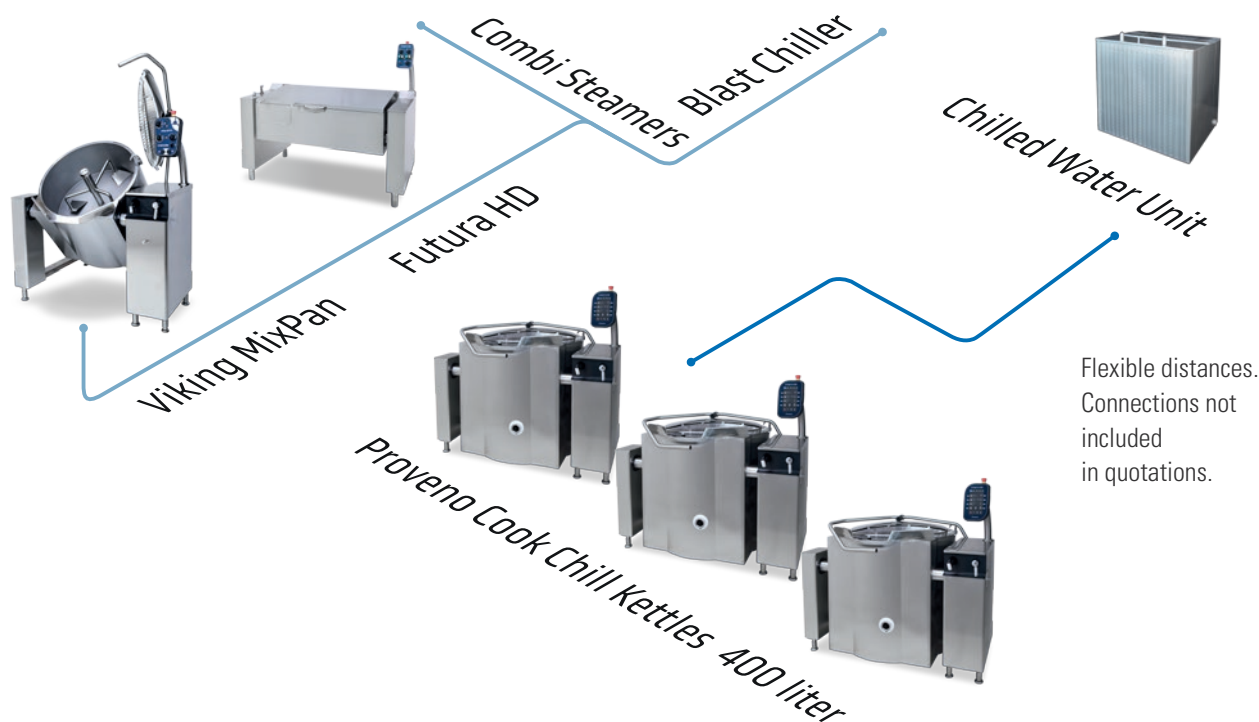
You'll benefit from less equipment, less space, less handling and less wasted time, resulting in improved food quality, production efficiency and satisfied customers every time.

Increased production efficiency for any size of kitchen with Metos Cook Chill Kettles.



Cook Chill Overview

Bratt Pan and Combi Steamer foods go into traditional blast chillers



Metos Proveno Kettles – Cook Mix and Chill most types of foods.



Proveno automatic cooling

Automatic cooling is just to set target food temperature and start. The steam jacket is drained automatically after cooling. Food temperature is continuously shown on the display. Cooling can be interrupted, stopped or target temperature changed any time during the cooling.

When the product is not cooled down further, kettle automatically stops the cooling. Cool & Hold function keeps the food at set temperature. Safety functions to avoid unintentional cooling. Cooling media can be tap water or ice water from separate ice bank.

Shelf-life of 3 to 5 days

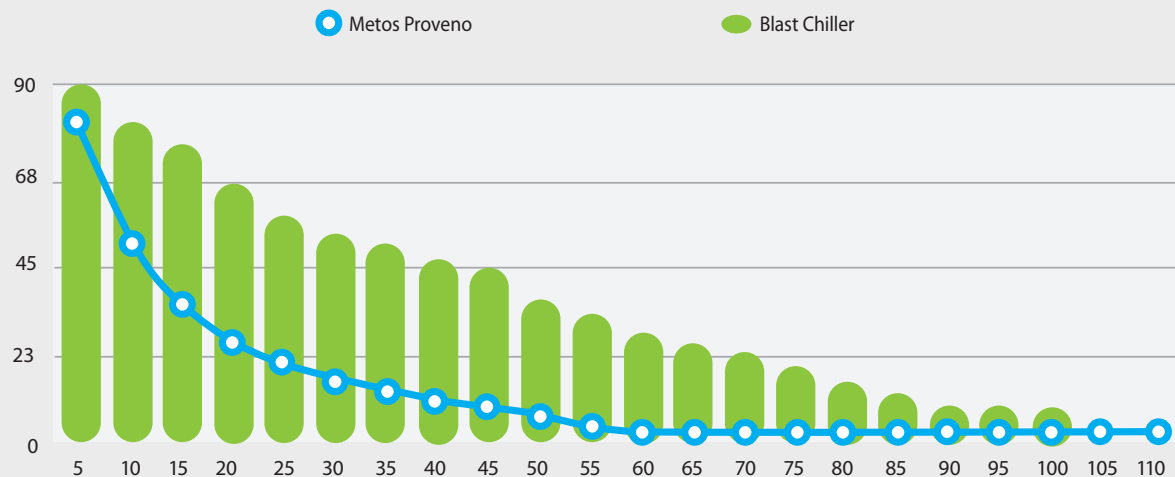
The Production process for liquid and semi liquid food products is very similar to that of a combi-steamer / blast chiller combination.

The important difference is the chilled water supply going into the kettle after the cooking process is complete. This is a closed, recycled water system powered by the Metos IceBank.

The food is cooked in the kettles, when cooking is finished, the icebank supplies chilled water to the kettles. The food is cooled to between 20°C and 3°C depending on type of product.

The kitchen team can then decant directly into containers, or use a food transfer pump into bags, for easier transport. (See Metos DOS-2 Pumps)

Cooling in Metos Proveno Kettle vs Roll in Blast Chiller



The chilled water needed by the kettles is made in chilled water units.



Cooling with chilled water

Automatic chilled water cooling C3i is with closed circulation. Chilled water circulates between the ice builder and the kettle's steam jacket. Drainage with pressurised air saves water in ice water circulation.

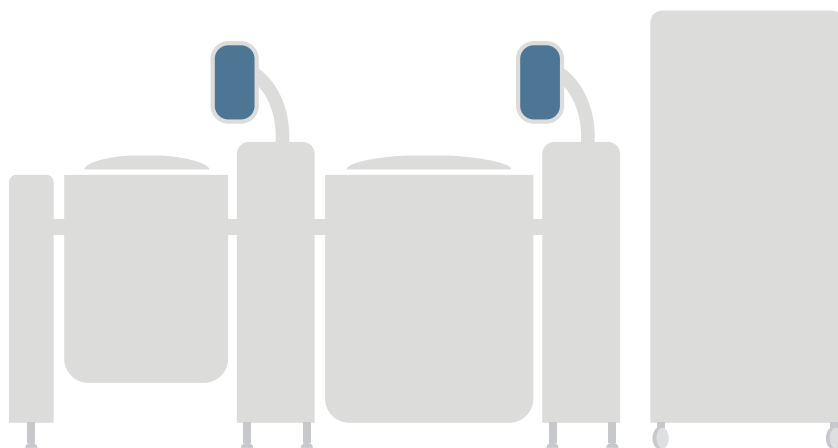
Also two phase cooling is available, then cooling starts with tap water, when temperature difference is big and switches over to chilled water cooling, when the difference has decreased. Chilled water circulates between the chilled water builder and the kettle's steam jacket.

The kettle itself does not make water colder for cooling purposes. To achieve colder than tap water temperature kettle must be connected to an ice bank.

Mobile Ice Bank Units dedicated for Metos Proveno kettles



Small outer dimensions allow installation almost anywhere. The width is only 800 mm.



Metos integrated chill water system

The unique ice water bank system is a cooling system precisely tailored to the Metos Proveno Kettles.

Due to the installed wheels at the bottom of the ice bank, it can be easily and quickly moved to almost any building and it fits through every 90 cm wide door. Owing to

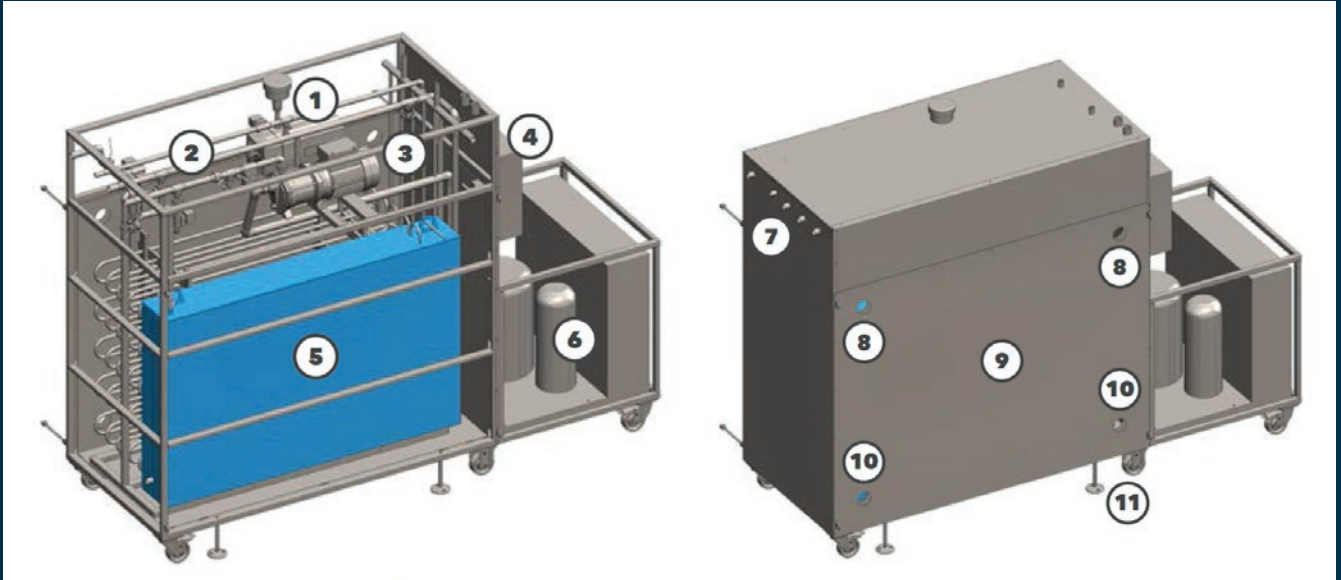
the docking system (plug & play option), it can be expanded and developed in any way. With the Plug & Play – option it's possible to drive simultaneously different cooling flow temperatures.

The flow temperatures can be easily and quickly programmed and changed.

***Drive on your own
wheels into the building.
Connect. Turn on.
Assembly ready. Cooling!***

Ice water banking system
as a compact system with
integrated refrigeration unit.

The units can also have
additional fresh ice water tanks
in separate units.



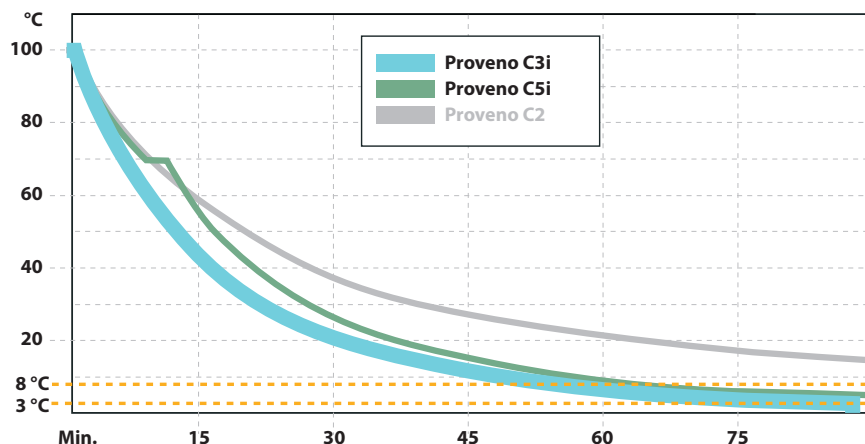
- Becker air compressor
- C5i system
- KSB centrifugal pump
- Control box
- Fresh ice water tank
- Integrated cooling unit (air and/or water cooled)
- Circuit points
- Overrun
- Isolated case
- Tank connection system
- Wheels and feet
- Air Cooled and Water Cooled units available

Several units can be connected to same system, if there is
plenty of kettles to be cooled.

Cook and Chill in Metos Proveno kettle

The Metos Proveno combi kettle is the combination of an intelligent cooking kettle, a powerful multi-functional mixer and a chilling unit.

Improved automatic cooling by Proveno is better and quicker than ever. It enables you to chill food (goulash soup, for example) from 100°C to 3°C in under 1 hour.



Features and benefits:

- Cook and Chill large volumes (up to 400 litres).
- Exact food temperature control.
- Immediate chilling without overcooking.
- Improved food quality.
- Less handling, transport and weight loss.
- Safer working environment by avoiding the handling of hot products.



Chilling in a cooking kettle improves food quality and hygiene.

Chilling in a kettle offers a fast means to chill large volumes of food.

The kettle has ready programs for basic foods and wash. All kettle functions can easily be added to programmes. Ready programmes can be timed.



Controlled Cooking
Rapid Chilling
Controlled Distribution

Consistent Food Quality with Key Processes and Equipment

- Better Food Quality
- Better Color
- Better Texture
- Better Nutritional Value

Up to 90% or more of any menu can be done with Cook Chill technology and equipment

- Core Issues
- Planning and Food Preparation
- Cooking - Packaging - Chilling
- Storage - Transport - Regeneration

Some of the many products our customers make in their Proveno kettles...

Chicken Stock
 Pork Stock
 Master Stock
 Fish Fond
 Lobster Stock
 Demi Glace
 Beef Stock
 Lamb Stock
 Mash Potato
 Goulash
 Ratatouille
 Chili Con Carne
 Aioli
 Chorizo oil
 Curried Choux Buns
 Jerusalem Artichoke
 Soup
 Bernaise Sauce
 Hollandaise Sauce
 Bechamel Sauce
 Tomato Sauce
 Veloute Sauce
 Mango Chutney
 Pineapple Jelly
 Pancake mix
 Muffin mix
 Mayonnaise
 Bulfi
 Corn Chowder
 Congee/Juuk
 Barbeque Sauce
 Bolognaise Sauce
 Chicken Curry
 Dahl
 Sobji
 Rassam

Choux Paste
 Meat Pie filling
 Shu Mai filling
 Har gao filling
 Spring Roll Filling
 Short Rib Marinate
 Char Su Sauce
 Pastry Cream
 Whipped Cream
 Meringue
 Brownie Mix
 Cookie Dough
 Linzer Paste
 Minestrone Soup
 Duchesse Potato
 Mutton Kadhai
 Chicken Biryani
 Red Cabbage
 Spatzle Dough
 Polenta Parmesean
 Pizza Sauce
 French Dressing
 Cheesecake
 Rice Pudding
 Quiche Mix
 Almond Pound Cake
 Semolina Pudding
 Berry Parfait
 Chocolate Sauce
 Ganache
 Oat Bread
 Gingerbread
 Spice Cake
 Chocolate Chip
 Cookies
 Berry Jam
 Orange Marmelade
 Banana Muffins

Penne Pasta
 Thai Chicken Curry
 Butter Chicken
 Granola Maple Yogurt
 Chocolate Mousse
 Chicken Tikka
 Banana Smoothie
 Curry D'agneau
 Lentils Menagere
 Blanquette de Dinde
 Cuisse de Cannel
 Beouf Forestiere
 Escalope Sauce
 Beouf Bourguignon
 Ragout Beouf
 XO Sauce
 Chilli Sauce
 Cooked Tripe
 Mushroom Sauce
 Soubise Sauce
 Candied Cherries
 Marzipan Filling
 Lemon Filling
 Hot & Sour Soup
 Egg Drop Soup
 Hot & Sour Soup
 Black Bean Sauce
 Sweet & Sour Sauce
 Red Bean Dessert
 Almond Jelly
 Garlic Tumeric Sauce
 Carrot Yogurt Soup
 White Bean Soup
 Beef Rendang
 Har Sauce
 Risotto
 Cippino Fish Stew
 Lentil Soup

Tapioca
 Tom Ka Gai
 Scrambled Eggs
 Samosa Filling
 Tomato Bean Salsa
 Oatmeal
 Pancake Batter
 Sweet Bean Sauce
 Plum Sauce
 Mustard Sauce
 Hoi-sin Sauce
 Peanut Sauce
 Egg Tart Mix
 Grass Jelly
 Lotus Seed Paste
 Siu Haau Sauce
 Chinese Chicken Curry
 Apple Pie Filling
 Consomme
 Pho
 Black Sesame Soup
 Sago Soup
 Baitang Soup
 Shitake Dashi
 Doenjang jjigae
 Bouillabaisse
 Gumbo
 Singapore Laksa Soup
 Boiled Rice
 Mango Chutney
 Koha
 Viniagrette
 Horseradish Sauce
 Boiled ChickPeas for
 Hummus
 Ponzu Sauce





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the spirit of excellence

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