



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.

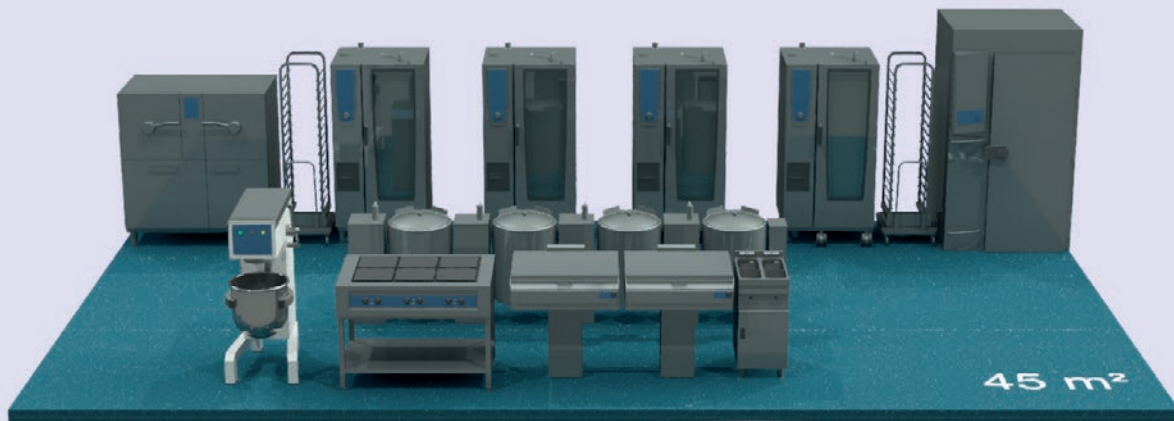
We have seen wide spread improvements in all areas of production equipment functions, logistic capabilities, distribution and regeneration systems that get the food to the client.

Advantages of Cook Chill

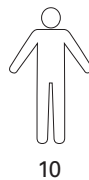
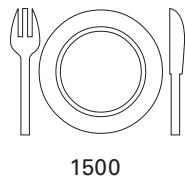
- State of the art hygiene control
- Chilled food banks allow better inventory flow of outgoing food
- Production times are greatly reduced, almost 50% in most cases
- Centralized production kitchens can feed many satellite sites
- Reduced foot print of kitchens due to high volume equipment
- Consistency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



Traditional central kitchen



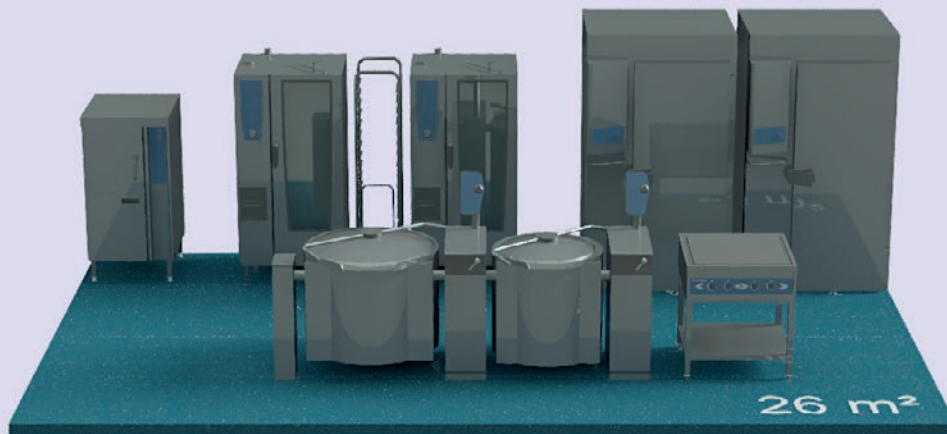
- More machines
- More space
- More people
- More time



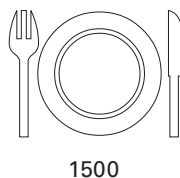
45 m²
Equipment space
requirement

***Increased production
efficiency for any
size of kitchen.***

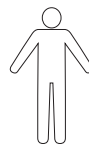
Innovative Metos Cook Chill kitchen saves space, time and human resources



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



1500



5



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.

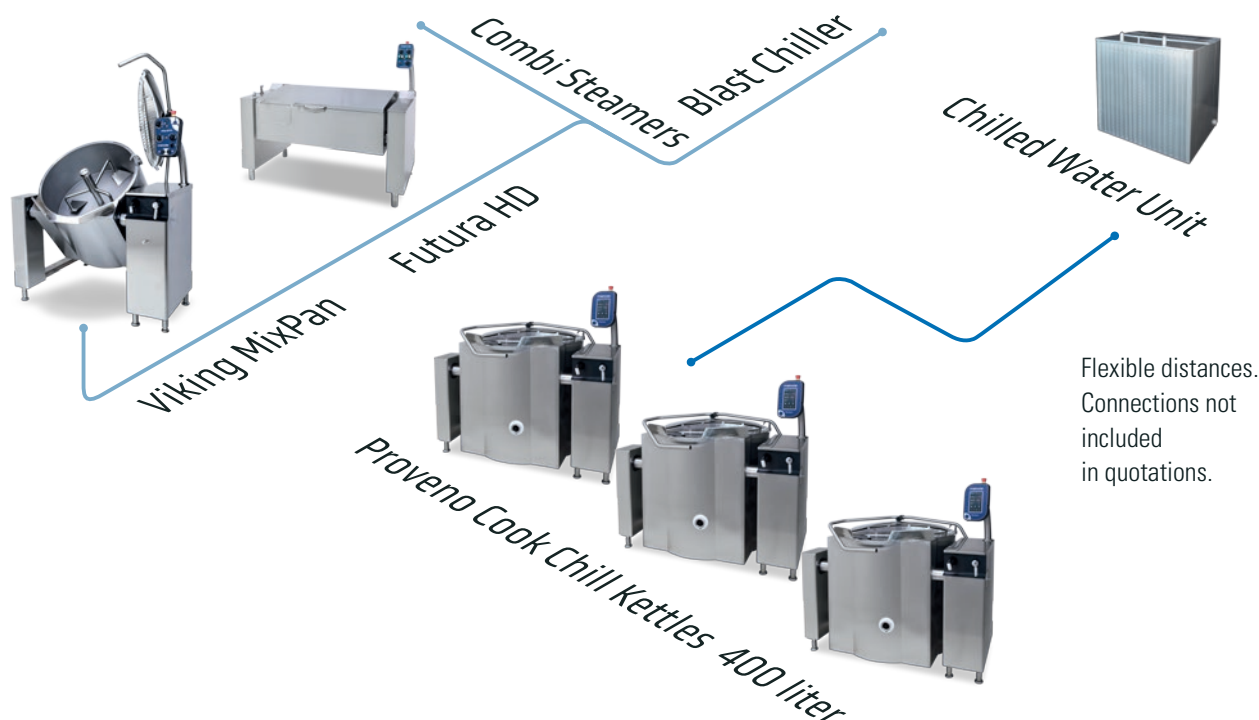
You'll benefit from less equipment, less space, less handling and less wasted time, resulting in improved food quality, production efficiency and satisfied customers every time.

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

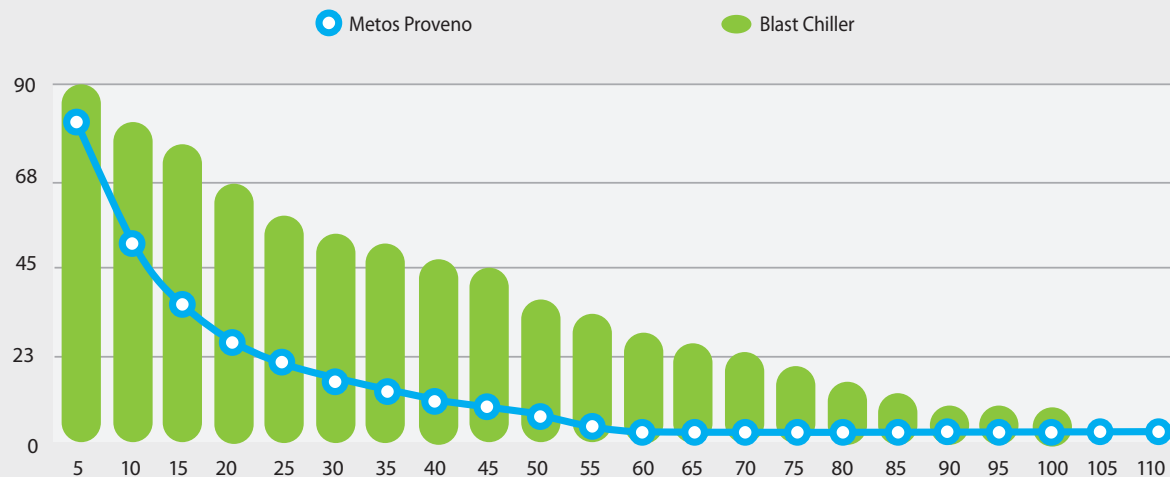
The Production process for liquid and semi liquid food products is very similar to that of a combi-steamer / blast chiller combination.

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.

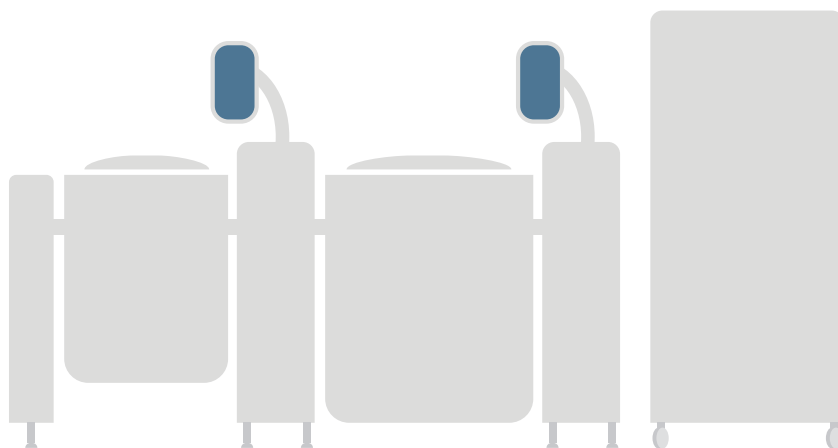
Also two phase cooling is available, then cooling starts with tap water, when temperature difference is big and switches over to chilled water cooling, when the difference has decreased. Chilled water circulates between the chilled water builder and the kettle's steam jacket.

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

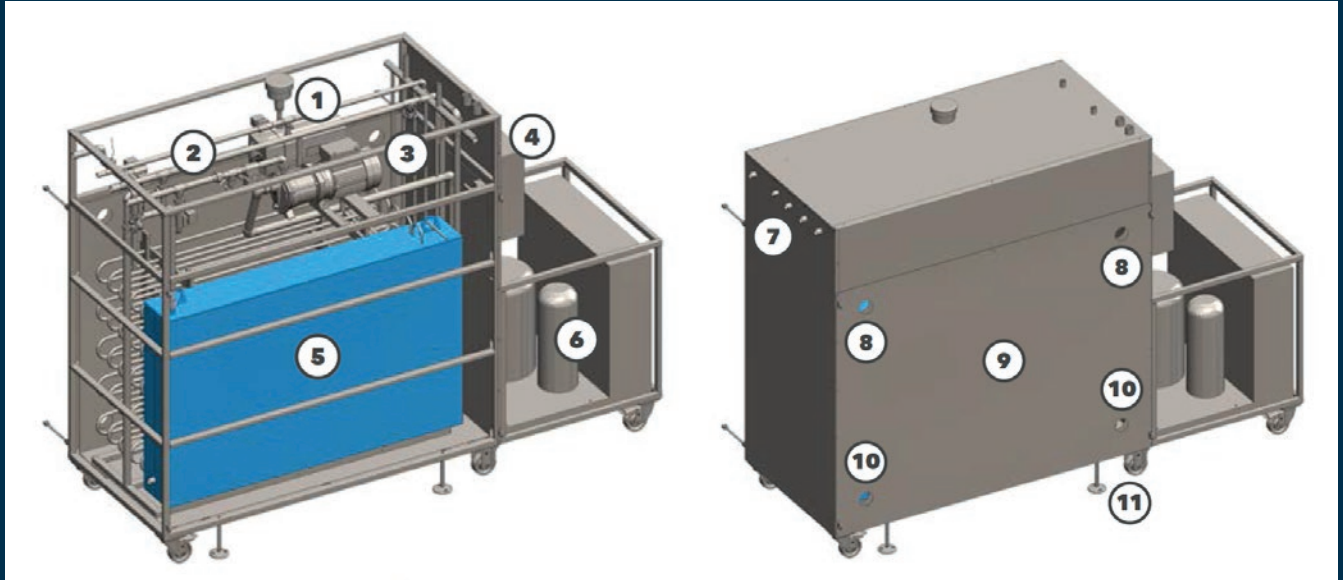
the docking system (plug & play option), it can be expanded and developed in any way. With the Plug & Play – option it's possible to drive simultaneously different cooling flow temperatures.

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.



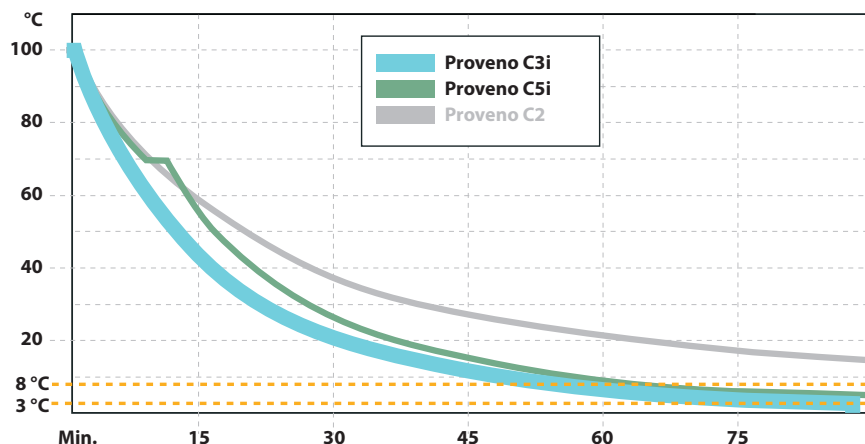
- Becker air compressor
- C5i system
- KSB centrifugal pump
- Control box
- Fresh ice water tank
- Integrated cooling unit (air and/or water cooled)
- Circuit points
- Overrun
- Isolated case
- Tank connection system
- Wheels and feet
- Air Cooled and Water Cooled units available

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

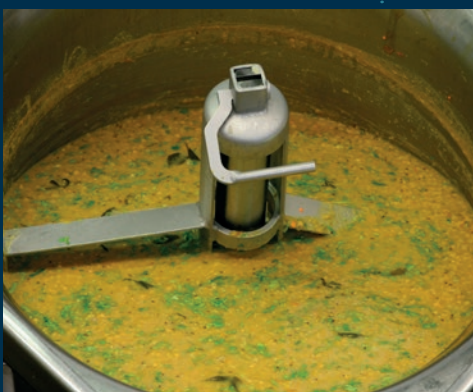
Some of the many products our customers make in their Proveno kettles...

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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