



SINCOLD
PERFORMANCE INSIDE

USER GUIDE

FOR BLAST CHILLERS
DEEP FREEZERS





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PERFORMANCE INSIDE

SINCOLD HIGH QUALITY BLAST CHILLERS - DEEP FREEZERS

OUR MISSION is not to become the biggest global manufacturer of blast chillers, but **TO PRODUCE THE BEST REFRIGERATION EQUIPMENT** to serve the needs of your professional business. We aim to be seen by anyone who works as the best partner they can have at their side.



WHY IS IT IMPORTANT TO CHILL QUICKLY?

Sanitary authorities demand that cooked food must be immediately served or **KEPT WARM**.

In alternative it has to be **BLAST CHILLED** or **DEEP FROZEN**.

IF STORED at +65°C = Dehydration and quick spoilage

**BLAST CHILLING / DEEP FREEZING WITH SINCOLD =
Maintaining the original characteristics**

The cooling phase between **+65°C e +10°C** represents a **serious danger** because the natural characteristics of the product change (humidity, consistency, smell, colour) and it is subjected to bacterial proliferation.

BLAST CHILLING **+3°C**

Take down the temperature to **+3°C within a maximum time of 90 minutes***

DEEP FREEZING **-18°C**

Take down the temperature to **-18°C within a maximum time of 240 minutes***

*Temperature reached at the core of the product. Check the average cooling time of food on page 13.

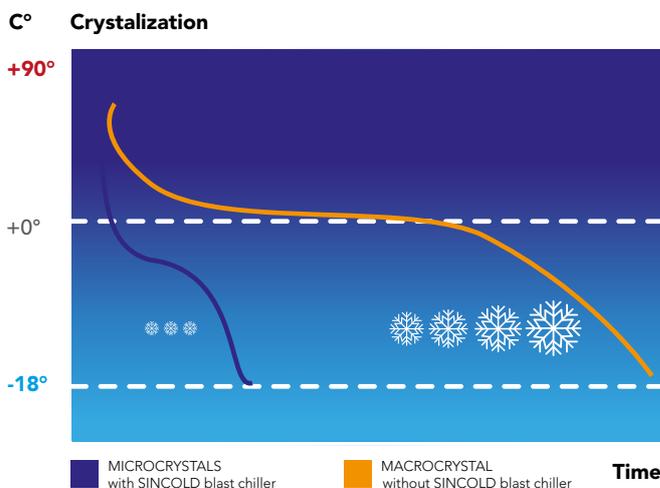
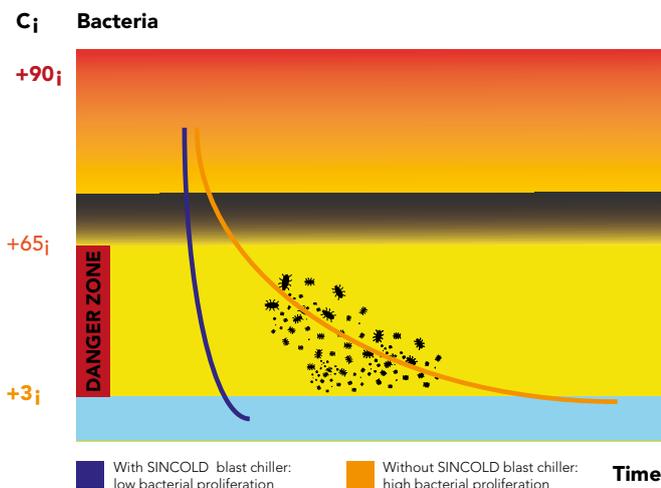
BLAST CHILLING VS ROOM TEMPERATURE COOLING



ROOM TEMPERATURE COOLING

BLAST CHILLING AND DEEP FREEZING

Bacterial contamination	Food safety
Evaporation and dehydration	Original texture and moisture are preserved
Loss of weight	More product to sell
Loss of smell and original taste, change of colour	Food maintains freshness overtime
Quick food spoilage	Food is the same as just cooked



MACROCRYSTALS
food structure
DAMAGED



MICROCRYSTALS
no damage of food
structure
NO DAMAGE



WHAT DO SINCOLD BLAST CHILLERS DO?

EXTEND THE SHELF LIFE OF FOOD AND MAINTAIN ITS ORIGINAL ORGANOLEPTIC CHARACTERISTICS

ALLOW TO SAVE TIME AND MONEY

SINCOLD blast chillers EXTRACT the HEAT from food thanks to the performance of the compressor, the power of the ventilation and the low temperature reached inside the refrigerating room.

SINCOLD blast chillers, furthermore, grant food safety in full compliance with the **H.A.C.C.P. regulations (Hazard Analysis and Critical Control Points)**.



Use of SINCOLD blast chillers

- On RAW and COOKED food, even STRAIGHT FROM THE OVEN;
- On WHOLE or PORTIONED food;
- On single INGREDIENTS;
- To STORE FOOD for a longer time;
- To enjoy always FRESH FOOD, even several DAYS AFTER THE COOKING;
- To STOCK FOOD for peak demands;
- For food PRE-COOKING.

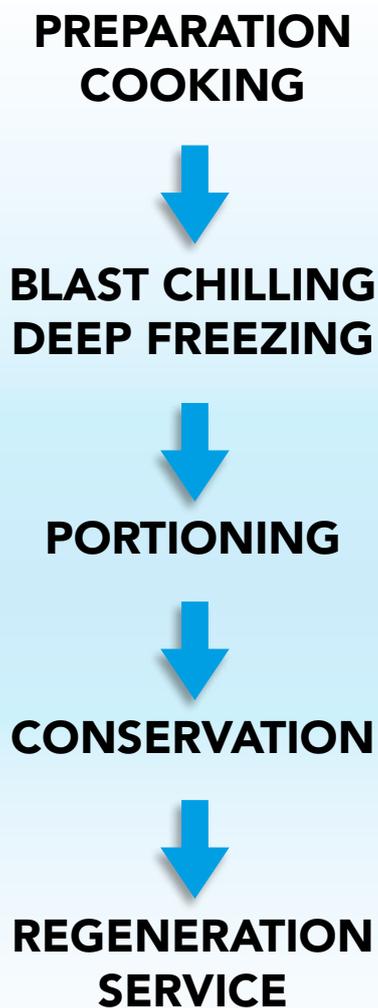
COOK & CHILL

PREPARE IN ADVANCE

=

FOOD COST CONTROL

The use of a SINCOLD blast chiller, if associated with modern combi-steam ovens and sous-vide technologies, allows to transform and IMPROVE YOUR FOOD MANAGEMENT



ADVANTAGES WITH SINCOLD

TIME SAVINGS

MONEY SAVINGS

+ QUALITY + SAFETY

MORE GAINS



QUALITY

Product: always fresh, preserved taste, structure and original appealing.

Wider offer: more extensive menu. Products and ingredients immediately available.

CLEARLY QUANTIFIED SAVINGS and RETURN ON INVESTMENTS



Less waste: only ordered portions are served.

No risk of incorrect forecasts: for both purchases and preparations which are measured to the number of guests and meals ordered.

More production: thanks to the block of the product evaporation. More product to sell means more gains.

Save on purchases: get the best from special offers or buy in bulks.



FOOD SAFETY

No food deterioration and no risks. / Improve the service.

BETTER ORGANIZATION



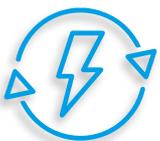
Program the production: staff and equipment can be used at less busy periods and this means to save time and money.

Example 1: program the food production in the beginning of the week and reduce the workload during weekends.

Example 2: no need of extra chef's assistants during festivities = cost saving.

Improve service: more time to focus on the service when customers turnout is bigger.

Pre-cook and chill: speed up the preparation time for sophisticated dishes or recipes with long prep.



USE COOKING EQUIPEMENT TO FULL CAPACITY

One full-load cooking session instead many smaller ones = less energy consumption and more efficient use of the time.



EASE OF USE

SINCOLD blast chillers-deep freezers are suitable for both expert chefs and young cook's assistants.

HOW MUCH CAN YOU SAVE WITH SINCOLD BLAST CHILLERS?

The purchase of a blast chiller is payed back within one year!

For example, a small restaurant with 40 seats can get an immediate saving of €5.000!

Here's how:

100% Freshness and quality

-3% Unsold portions reduction
€ 1.500

+4% Weight loss reduction
€ 2.000

-5% Working hours reduction
€ 1.600

Total € 5.100*

QUALITY IMPROVEMENT IS OFFERED BY SINCOLD!

*Examples are calculated on a basis of € 50,000 purchasing of raw materials per year; 280 working days per year (40 weeks). WASTE REDUCTION for unsold product: 3% = symbolic value: the reduction can reach more than 10% of raw materials. The calculation does not consider the reduction of waste due to food cold-working and spoilage of stored food due to incorrect purchase planning. REDUCTION OF LABOUR COSTS due to the planning of preparation for finished and semi-finished products, and due to the concentration of the production / and due fully loaded cooking = n. 02 h / week, cost € 20.00 / hour. 4% WEIGHT LOSS REDUCTION = average value: the reduction of the weight loss due to the evaporation block goes from 2% to 8% depending on the product.

HOW TO ACHIEVE BEST PRACTICE WITH SINCOLD - EVERYDAY USE



The blast chilling helps to **preserve colour, texture and structure** of the most delicate products and grants the maximum freshness.



Preparing ingredients and sauces in advance increases the availability during the service and helps **offering varied menu**.



The quick cooling of delicate and expensive ingredients allows to **reduce food waste and keep food cost under control**, maintaining the original appearance of food.



Pre-prepare in advance and in large quantities composite products, then blast chill or deep freeze them to serve only meals ordered and **avoid waste**.



Blast chilling and deep-freezing **block evaporation and oxidation**, allow a bigger production and maintain the **appealing characteristics of just made food**.



Chilling and freezing allow to **take advantage of special offers** and reduce input costs.



The blast chiller makes it possible to offer even the most delicate products in **complete safety and in compliance with the sanitary regulations.**



Dishes with a long preparation time will be immediately available **preserving the original nutritional and organoleptic properties.**



Using cooking or baking appliance to full capacity or producing in large quantities allows to **optimized the time** and save energy.



Pre-cooking and chilling allow to serve products with long cooking times very quickly, offering the **same quality of a fresh cooked product.**



The use of the blast chiller helps to **preserve the volume, colour and consistency of the ice cream increasing its conservation and display time.**

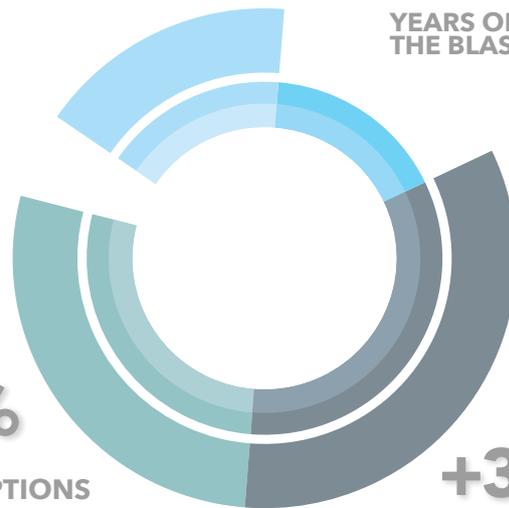


Chilling and freezing allow to have available **fresh seasonal products for weeks** when otherwise they would only be available for a few days.

A LOW-QUALITY BLAST CHILLER GIVES MEDIOCRE RESULTS

+10

YEARS OF LIFE FOR THE BLAST CHILLER



Perfect balance between cooling power and chamber volume
= reduced consumption and high performance.

Unbalanced cell size-power ratio
= high consumption and long cooling times, increased noise, ice formation on the evaporator.



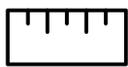
Evaporators with anticorrosion treatment in cataphoresis
= long life.

Traditional evaporators
= gas leaks, frequent repairs and additional costs.



MADE IN ITALY refrigeration units
= reliability and high performance

Poor quality or undersized refrigerating units
= low performance, cooling cycles may end over time, loss of product freshness; frequent breakdowns.



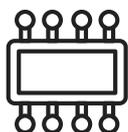
Appropriate insulation thicknesses to guarantee high efficiency
= energy savings and cooling speed.

Limited insulation thickness
= excessive energy consumption, thermal dispersion.



Fans with special execution for low temperatures with speed regulation
= cooling speed, low noise level, energy saving.

Standard fans
= low efficiency and inadequate airflow, increased cooling time and humidity in the room which causes the deterioration of the product; ice on the evaporator = machine stop, high noise level, increase of electrical consumption.



Large condenser to guarantee reliability
= high performance in conditions of high temperature and high humidity.

Insufficient condenser
= stop the appliance in extreme environmental conditions, breakdowns, dehydration of the product.

COOLING TIME SUGGESTIONS

Temperature blast chilling (+3) SOFT with core probe	Suitable for delicate food of lesser thickness
Temperature blast chilling (+3) HARD with core probe	Suitable for fat products and large pieces
Temperature deep freezing (-18) HARD with core probe	Suitable for fat products and large pieces
Temperature deep freezing (-18) SOFT with core probe	Suitable for delicate food or with a thick surface that blocks the cold.
Time blast chilling (+3) SOFT duration 30 min.	Cold rice (pilaf), grilled vegetables, roasted (baked) potatoes, boiled fish
Time blast chilling (+3) SOFT duration 40 min.	Baked/roasted fish, boiled vegetables, strudel, sponge cake
Time blast chilling (+3) SOFT duration 60 min.	Custard, baked tarts, bavarian cake, puffs/éclairs
Time blast chilling (+3) HARD duration 40 min.	Pre-cooked pasta, pre-cooked rice
Time blast chilling (+3) HARD duration 50 min.	Lasagna bolognese, stuffed pasta tubes, flan, quiches
Time blast chilling (+3) HARD duration 60 min.	Vegetables soup, roasted chicken, grilled chicken, roasts (beef, calf), hamburgers, tomato sauce
Time blast chilling (+3) HARD duration 70 min.	Soups, bouillon (meat/vegetables stocks), roast-beef, grilled meat, béchamel
Time blast chilling (+3) HARD duration 80 min.	Cooked meats, meat loaf, beans, potatoes salad
Time blast chilling (+3) HARD duration 90 min.	Ragout, roast meat, pot roast, braised meat, beef stew
Time deep freezing (-18) HARD duration 40 min.	Fresh pasta, bread, pizza, danish pastry, puff pastry, croissants, biscuits
Time deep freezing (-18) HARD duration 60 min.	Flan, pies, potatoes dumpling, spatzle, bread (big size)
Time deep freezing (-18) HARD duration 100 min.	Lasagna bolognese, tiramisu, ice cream dessert
Time deep freezing (-18) HARD duration 200 min.	Raw fish, tomato sauce, beans
Time deep freezing (-18) HARD duration 240 min.	Ragout (french stew), grilled meat
Time deep freezing (-18) HARD duration ∞ (non stop)	Gelato (ice cream)
Time deep freezing (-18) SOFT duration 60 min.	Fresh pasta, bread, pizza, danish pastry, puff pastry, croissants, biscuits, raw shortcrust pastry
Time deep freezing (-18) SOFT duration 90 min.	Flan, pies, bread, puffs, éclairs
Time deep freezing (-18) SOFT duration 140 min.	Lasagna bolognese, ice cream dessert, tiramisu
Time deep freezing (-18) SOFT duration 210 min.	Meatloaf, bavarian cake, cooked cream
Time deep freezing (-18) SOFT duration 280 min.	Raw fish, tomato sauce, sauces
Time deep freezing (-18) SOFT duration 340 min.	Meatballs, baked/roasted fish, béchamel

Suggested cooling times above represent a generic guideline. The cooling time of each food depends on the following factors: type of the container used and loading method (tray height; type, e.g. carapina; basins, GN containers; free product / vacuum-packed product), thickness and size of the product, fats and liquids content, inlet food temperature at the beginning of the cycle, environmental conditions (temperature and humidity) and other. Suggestions refer to the chilling of food laying on trays or grills, non-covered and non-contained in vacuum bags, maximum thickness 4 cm. The manufacturer is not liable for eventual mistakes occurred due to an incorrect use of the appliance.

DICONO DI NOI



Maestro Luigi Cappelletto

Owner of PASTICCERIA CAPPELLETTO LUIGI - Camposampiero (PD)

"What excites me is the ability to trust the blast chiller to complete and therefore perfect a productive cycle. I am convinced that the client can sense love, knowledge, dedication and desire when tasting food and they expect us to offer a certain coherence and continuity in our refinement; qualities that are family traditions in my patisserie. I have chosen SINCOLD because efficiency, reliability and longevity are extremely important qualities in the life of my business. A state-of-the-art and pleasantly designed blast chiller reinforces the quality image that I wish to project to my clients when they visit my work space".

Maestro Gianpaolo Cianuri

Ice-cream parlour owner - IL GELATO DI MASTRO CIANURI - Perugia (PG)

"I have always loved ice cream in all of its variations. I am convinced that the recipes must be alive and in continuous evolution. A professional approach and coherence in quality have always been at the base of our success and represent the traits which have lead us to choose SINCOLD".



Massimo Zanin

Manager of LA GASTRONOMICA - Padua (PD)

"Decades of experience in the world of large-scale distribution has always gone hand in hand with research and innovation, to always ensure our products are of the highest quality. SINCOLD allows us to maintain and speed-up the standards we have achieved, helping us to increase quality and reduce the delivery times to our clients".

Chef Fabbri Marcello

HOTEL ELEPHANT, WEIMAR - Germany (D)

"In my work, I use the SINCOLD blast chiller for patisserie, for slow vacuum-cooked meat and of course for blast chilling fresh fish. I had already used SINCOLD blast chillers in the past and they proved to be long-lasting, quality products that never give any problems. Furthermore, their performance is quite incredible from +20 to -40°C in just a few minutes".



Chef Marco Pavin

RISTORANTE AL SOLE - Castello di Godego (TV)

"The qualities that I appreciate in SINCOLD blast chillers are their versatility and blast-chill speed but most of all, their silent operation as they are one of the devices always in use in our kitchen. We have more than one SINCOLD blast chiller (given our workload) and we use them daily for all kinds of dishes: from pasta to vegetables and from meat to fish. I believe their other important characteristics are reliability, longevity and the ease with which they are cleaned".



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Fidesign

**RELIABILITY
IS FOREVER**



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