

How to work with blast chilling and freezing....

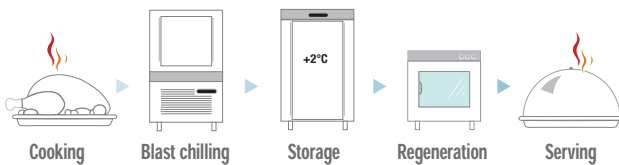
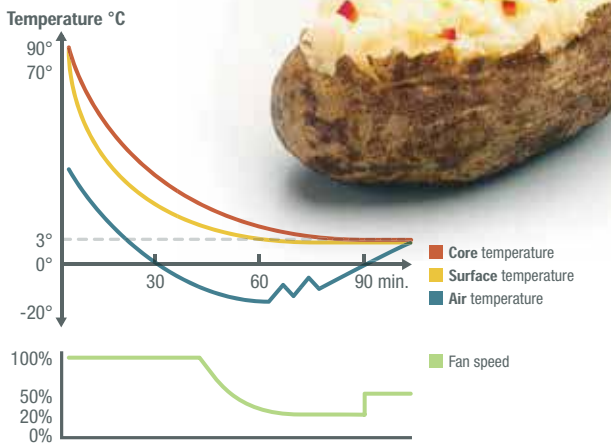
– and achieve results!

Blast chill +70°/+3°C

Only fast, controlled reduction of the core temperature of a cooked food item makes it possible to preserve both natural goodness and the prevention of the accelerated growth of harmful bacteria at temperatures between +70°C and +10°C.

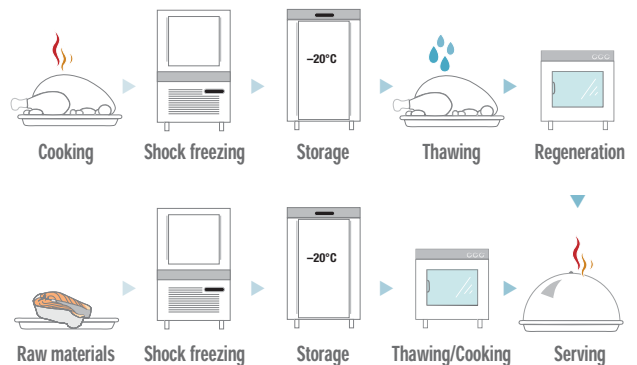
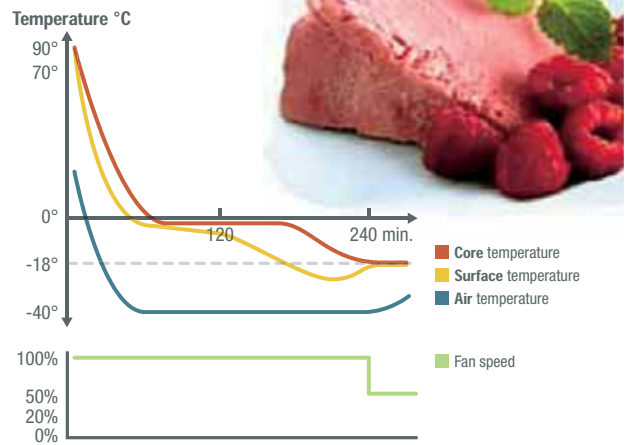
Gram blast chillers bring food items through this high risk temperature range as fast as possible. The core temperature will reach +3°C in 90 minutes, helping to preserve natural vitamins and maintain the appearance and taste of the food.

Temperature curves using IFR



Blast freezing +70°/-18°C

If the food item is to be stored for a longer period of time it must be shock frozen to a minimum of -18°C. As a direct result, water in the product is naturally converted into ice. Using commercial blast freezers a core temperature of -18°C is reached within HACCP requirements of 4 hours. During this timescale ice crystals that form will be small, known as micro crystals. These micro crystals are less damaging and do not adversely effect the quality of the food item. Product that is frozen over a longer period of time can be damaged by the formation of larger ice crystals. Thus reducing both the nutritional value and compromising the structure of the food. Unprocessed raw materials, semi-processed or cooked food can all be frozen to achieve the optimum product when defrosted or regenerated.



Blast chilling and freezing are integral parts of any Cook Chill operation or any chilled production of food

The principle of cook-chill/freezing production is to cook the food and then immediately chill or freeze it for safe storage. The food is then regenerated, after thawing - before being served.