

Blast Chilling & Beyond K-12 Food

The benefits,
functionalities &
capabilities that
turned "Luxury" into
"Necessity"





Michael Marsh
Regional Director of Sales
Corporate Chef

IRINOX
The Freshness Company®



What we want...

Optimal
Labor Management

Better
Food Cost Control

Maximum
Product Quality

Streamlined
Utility Costs



France passes NF D 40-001,
requiring a cooling time of 2 hrs.
or less from cooking
temperature to 50°F or below

1974

USA passes FDA-Food Code,
requiring a 2-step process:
to below 70°F in 2hrs
then below 41°F in add. 4hrs

1993

1990

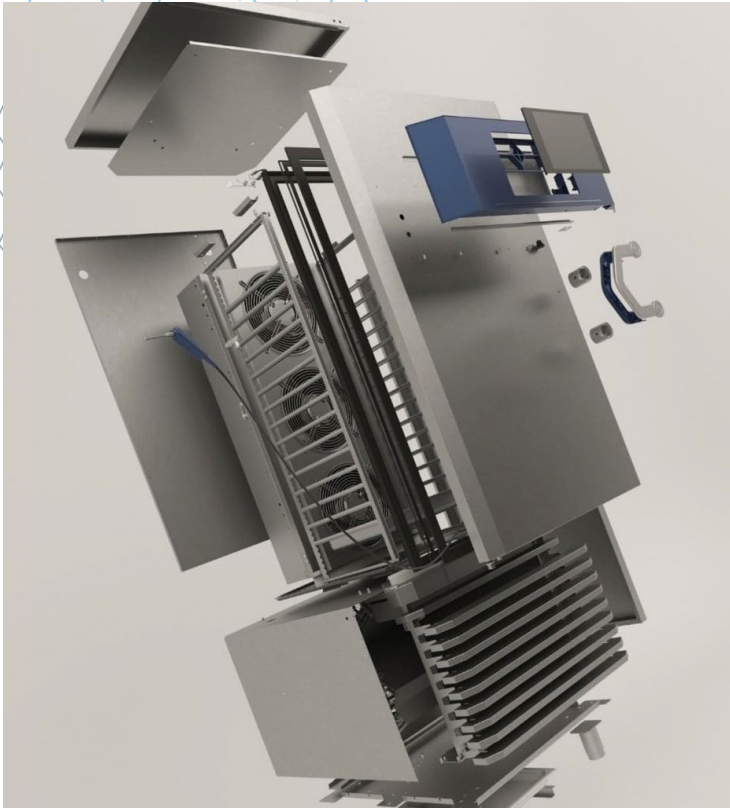
United Kingdom passes the
Food Safety Act, requiring
chilling 2" of product
to 37°F in 90mins or less
(European Standard)

A little history about chilling....

Interesting Situation...

The newly required processes could only be accomplished by specially designed machines.

Kitchens utilized ice baths, ice wands & other inefficient, and unsafe, methods for rapid chilling.



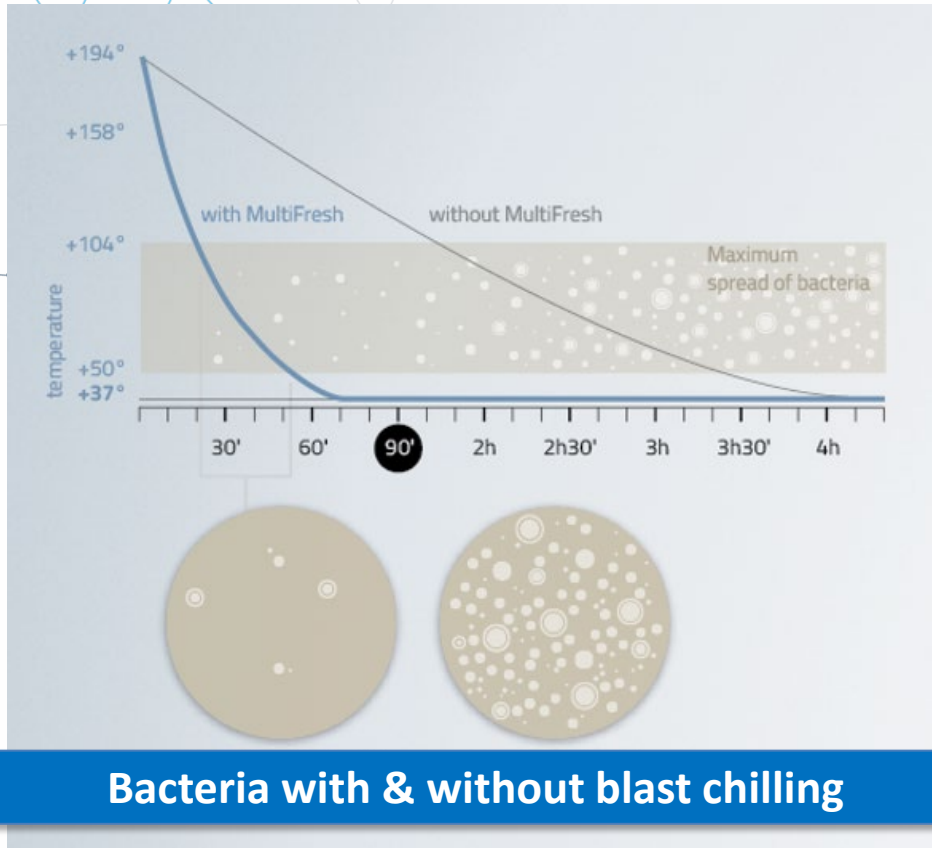
The Blast Chiller



What is Blast Chilling?

Blast Chilling

- Rapid removal of heat from a food product to reach 40°F or below
- Accelerated drop through the temperature danger zone minimizes bacterial growth



Blast Chillers preserve the natural goodness of the product by quickly dropping below steaming temperatures.

Evaporation

STRAIGHT FROM COOKING

80% of evaporation occurs before the products temperature reaches 158F



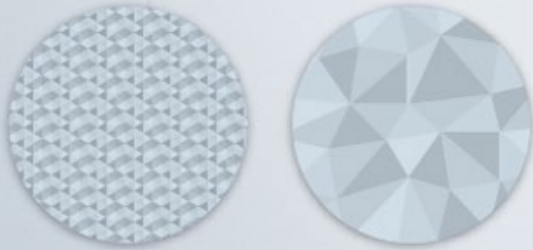
LOOSING THE NATURAL GOODNESS:

- WEIGHT
- FLAVOR
- COLOR
- NUTRITION
- TEXTURE
- QUALITY

What is Shock Freezing?

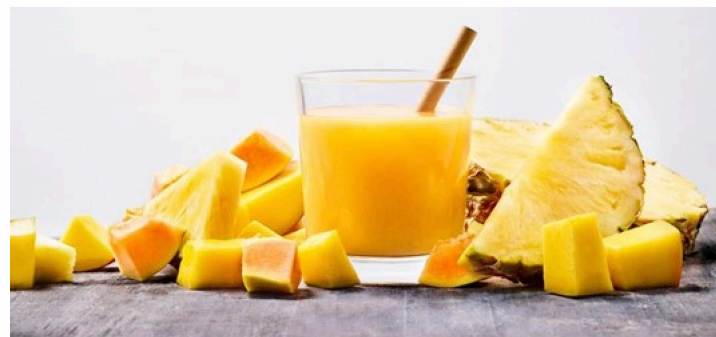
Shock Freezing IQF

- Rapid freezing of food product to 0°F at the core, building microcrystals
- Microcrystals minimize the impact on flavor, texture & moisture of the food item when thawed properly



Micro and Macro Crystals

Shock Freezing without the loss of quality enables you to buy in valleys and use in peaks.



Helping your process

Taming the Chaos of Creativity

Culinary Math Yield & Costing

Fresh Fruit & Vegetables program

Mastering Meal Patterns



Optimal Labor Management

Shelf Life

The best Blast Chiller will extend shelf life by 2 to 3 times. This is determined by how rapidly the chilling process occurs.

Labor Cost

Extended shelf life allows the operator to produce larger batches less frequently, resulting in labor savings & improved labor utilization.




Better Food Cost Control

Weight loss & product
shrinkage

Blast Chillers can help increase product yields & reduce the amount of food that goes into the trash. Not all maintain moisture equally well.

Is freezer burn & ice crystals
preservation issue

Rapid Shock Freezing will create microcrystals & provide unparalleled quality for products that are properly thawed. True long-term storage.



Maximum Product Quality

Is moisture retention
important to you?

Natural moisture retention is critical to product quality & shelf life of cooked foods.
Simply blowing cold air onto the product
isn't the solution

Is carryover cooking a
constant problem?

Blast Chillers can reduce carryover cooking by up 95%. A good unit can help you
preserve freshness, capturing the exact
moment of doneness desired.



Streamlined Utility Costs



Is refrigerator
maintenance a constant
expense?

Blast Chillers & Shock Freezers are designed
to blast chill & shock freeze, allowing the
refrigerators and freezers to only hold &
store

Are utility expenses a
concern?

Some Blast Chillers & Shock Freezers let you
choose between top performance or
maximum savings. Ice baths are a thing of
the past, lowering water usage

Taking full advantage of available programs



Utilize DOD funds and freeze products for use in non-peak season. Expanding the menu mix through long-term storage.



Reduce costs and handle **USDA** raw commodity products safely, less often. Properly cooked and chilled proteins will be safer and have a longer shelf life allowing limited exposure to raw products

Other Programs ?

Considerations

What factors should you reflect on when choosing a Blast Chiller & Shock Freezer for your next project?

Capacity

Load capacities can vary, not only by size. Compressor size is important, compare horse-power to load capacity.

Portfolio

Can you choose from a wide variety of Reach-In & Roll-In models, allowing you to both efficiently utilize space & meet client demands?

Support

Are you given ample pre-service & after-service support to ensure all your questions are answered?

Training

Is there a Chef to train the kitchen staff periodically, to consult when sizing up your needs or showcase the technology in a demo kitchen live?



Deciding Factors...

What sets one Blast Chiller apart from others, which manufacturers push the technology to new heights?



Is the manufacturer setting the bar in this field, or are they focused on standard refrigeration?



Does the Blast Chiller have extended capabilities, like low temperature cooking, thawing, proofing or re-thermalization



Is Shock freezing available with my blast chiller



Can the Chiller be used in off hours



Other Deciding Factors...

What sets one Blast Chiller apart from others,

- Noise level of the unit in operation
- High volume multi rack capabilities



- HACCP reporting
- Other complimentary equipment
- Type of Refrigerant Gas ???



Installing

Things to know prior to install



Foot Print



Electrical availability



Loading Dock & door
openings



Drainage



Door Swing



Casters or legs

Q & A



BOOTH 61



THANK YOU! :

Contact us to get more info



mmarsh@irinoxnorthamerica.com

howard@culinaryequipmentgroup.com



Culinary Equipment Group
Addison, IL



312-504-7940



<https://www.irinoxprofessional.com/usa/>