

Blast Chiller/Shock Freezers



*Fresh Solutions, Fit for You*

# Blast Chilling / Freezing



Blast chilling/shock freezing are the best methods to extend the shelf life of food. Delfield Blast Chillers are designed to improve the quality and organization of the work in restaurants, confectioneries, bakeries and ice-cream shops.

Thousands of operators all over the world are already successfully using Delfield blast chillers/freezers, due to their reliability and standard features, thus improving their work, leaving more time for creativity.

## Shock Freezing

We all know what frozen food is, but perhaps we don't all know that the food's natural qualities are maintained only if the freezing is done quickly (shock freezing). During the process of freezing, all the water molecules turn into crystals, the faster the freezing, the smaller the crystals: it is only with a micro-crystallization of the water that the food molecules are not destroyed.

Thanks to an air temperature of  $-40^{\circ}\text{F}$ , the Delfield blast freezer lowers the temperature at the core of the food to  $0^{\circ}\text{F}$  in approximately 240 minutes, a sufficient time to obtain micro-crystallization, keeping all the qualities of the food whole. After defrosting, there will be no loss of liquid, firmness or flavor.

## Blast Chilling

All food cooked and left to cool slowly, to be served later on, loses its finest qualities. The main reason is the extremely high bacterial growth that takes place while the food is at temperatures between  $+150^{\circ}\text{F}$  and  $+50^{\circ}\text{F}$ .

The Delfield blast chiller makes it possible to lower the temperature at the core of foods that have just been cooked, down to  $+38^{\circ}\text{F}$  in approximately 90 minutes, reducing bacterial proliferation and dehydration of the food. The final result is the preservation of the quality, color and aroma of the food, extending its shelf life. All this enables the chef to work with a better organization and more calmly, leaving more time for creativity.



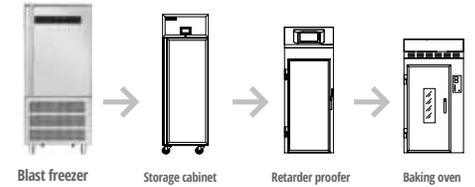
# Applications



## Bakery

During recent years the bakery field has undergone transformations due to the increased use of the refrigeration technology. The need of reducing night-shifts, manpower, overtime hours and most of all, offering end users a wider choice of products, are among the main reasons why blast freezers have become an essential tool in all modern bakeries.

Besides the blast freezing of raw, pre-cooked and cooked products, the power and quality of Delfield blast freezers allow freezing pre-leavened products ready to be put in the oven (special breads, pizzas, focaccia bread, etc.), thus taking advantage of the refrigeration techniques.



## Confectionery

A modern confectionery shop should not avoid taking advantage of blast freezing techniques. Not only shock freezing at 0 °F, but also blast chilling at +38 °F, enables them to work more efficiently, reduce preparation times, diminish storage space and increase food quality and safety.

Thanks to the excellent performance of Delfield blast chillers/freezers, chilling cycles are quick but gentle, and guarantee perfect results for every confectionery product, raw or cooked, finished or semi-finished.



## Foodservice

Blast chillers are indispensable tools for chefs, since they give restaurateurs the opportunity of planning and organizing their activity in advance, offering customers a full and varied menu, fast and efficient service, with focus on the aroma and freshness of food.

The main advantage, besides the increased food safety (HACCP), is the reorganization of kitchen work by eliminating work peaks and the useless everyday repetition of the same preparations, for a more efficient and effective working environment.



## Ice Cream

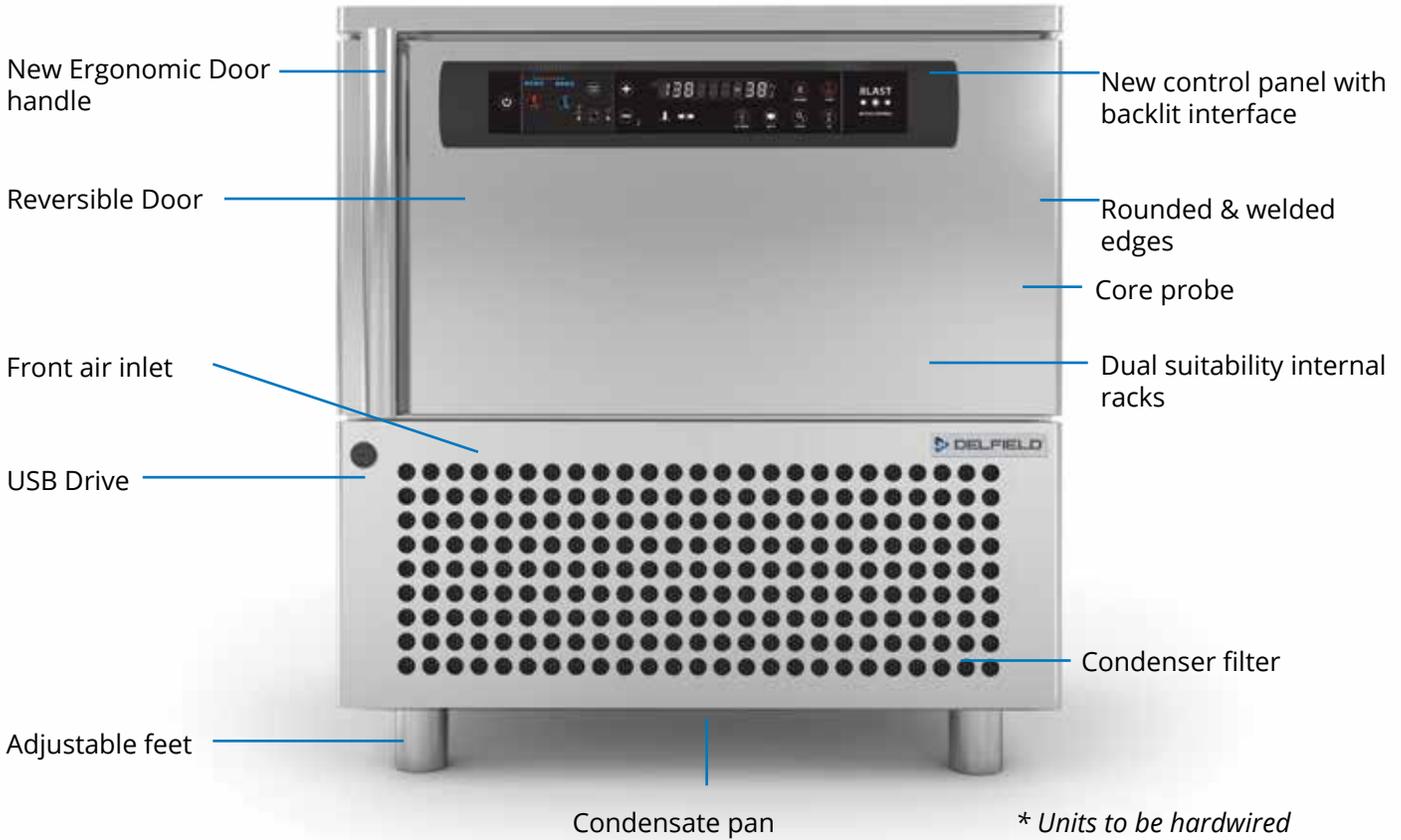
The creaminess of ice cream mainly depends on the presence of micro air-bubbles and micro ice-crystals. In order to maintain these special features, ice cream must be shock frozen as soon as it leaves the machine.

This operation, besides contributing to the formation of micro ice-crystals, permits the formation of a thin surface barrier that prevents both product "flattening" and air emission.

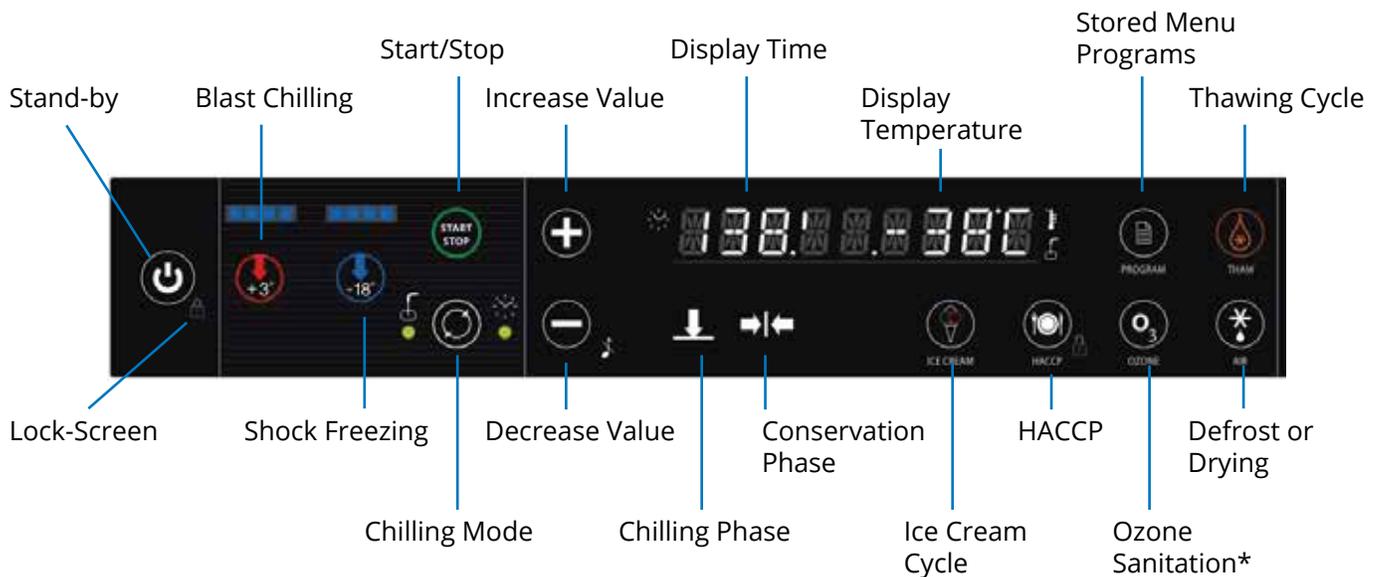
The outcome is a creamy, soft ice cream, ready to be served or stored. Delfield blast freezers have a special shock freezing function for ice cream on the control panel for ease of use.



# The Features



# The Features



*\*Optional*

# The Benefits



## TIME SAVINGS UP TO 30%

Thanks to the longer shelf life of blast chilled food, it is possible to plan production better and prepare larger quantities of dishes and semi-processed foods in advance, without having to repeat the process every day. All this while always keeping the quality of the food.



## SAVINGS ON PURCHASES

Thanks to the long shelf life of shock frozen foods, keeping their original qualities unchanged, it is possible to purchase seasonal ingredients when they are less expensive and better quality.

## WASTE REDUCTION

Blast chilling/freezing increases shelf life of food, reducing waste.



## LESS DEHYDRATION

Blast chilling immediately stops the moisture in food from evaporating, thereby preventing dehydration. The aroma and flavor of foods is often linked to the right amount of moisture contained in the food.

## WIDER MENU

The longer shelf life of blast chilled foods and semi-finished items makes possible to increase the number of courses offered, without complicating production organization.



## LESS WEIGHT LOSS

After cooking, food releases moisture by evaporation. Blast chilling immediately after cooking stops evaporation, thereby reducing the loss of water and therefore weight.

If the product is sold by weight, revenue can be increased by up to 7%.

# The Lineup



## CV5E

### CAPACITY

44lbs. - Blast Chill- 5 12"x20"x2.5" pans  
27lbs. - Shock Freeze

### DIMENSIONS

33"W X 28.3"D X 37"H

### ELECTRICAL SPECS

Voltage	Comp. HP	Max. Amp.	Max Fuse Size	Av. Heat Rejected (W)
208-240V/1/60Hz	1.25	10.3	15	2692

SELF-CONTAINED CONDENSING UNIT

REVERSIBLE DOOR



## CV10E

### CAPACITY

77lbs. - Blast Chill- 10 12"x20"x2.5" pans  
55lbs. - Shock Freeze

### DIMENSIONS

33"W X 30.7"D X 58.9"H

### ELECTRICAL SPECS

Voltage	Comp. HP	Max. Amp.	Max Fuse Size	Av. Heat Rejected (W)
208-240V/3/60Hz	2.5	10.6	15	6534

SELF-CONTAINED CONDENSING UNIT

REVERSIBLE DOOR



## CV15E

### CAPACITY

143lbs. - Blast Chill- 15 12"x20"x2.5" pans  
110lbs. - Shock Freeze

### DIMENSIONS

33"W X 36.6"D X 76.9"H

### ELECTRICAL SPECS

Voltage	Comp. HP	Max. Amp.	Max Fuse Size	Av. Heat Rejected (W)
208-240V/3/60Hz	3.6	23	60	8460

SELF-CONTAINED CONDENSING UNIT

REVERSIBLE DOOR



## CV15E-2

### CAPACITY

154lbs. - Blast Chill- 30 12"x20"x2.5" pans  
121lbs. - Shock Freeze

### DIMENSIONS

33"W X 49.2"D X 76.9"H

### ELECTRICAL SPECS

Voltage	Comp. HP	Max. Amp.	Max Fuse Size	Av. Heat Rejected (W)
208-240V/3/60Hz	3.6	23	60	8460

SELF-CONTAINED CONDENSING UNIT

REVERSIBLE DOOR

