



Blast Chilling & Freezing the only way to ensure food safety and quality

Current food legislation requires that all food must be cooled as quickly as possible. This means that whenever food is chilled or frozen, it must be in the 'Danger Zone' between +8°C and +68°C, where bacteria multiply fastest, for as little time as possible. To achieve this, a specially designed Blast Chiller or Freezer is required- standard refrigeration equipment just isn't capable.

Why putting warm food in a refrigerator just won't suffice:

- Food quality is reduced by damage to surface texture, water loss and separation during a slow cool down
- Bacteria have time to multiply before a safe temperature is achieved
- Potential damaging condensation is created, which can contaminate other food
- The refrigerators' temperature is raised, bringing other food into the 'Danger Zone'

What is Blast Chilling?

Department of Health Guidelines state that to safely blast chill food its temperature must be reduced from +70°C to +3°C or below within 90 minutes. The Foster range exceeds this requirement and can safely blast chill food even from a starting temperature of +90°C.

What is Blast Freezing?

The Blast Freeze process requires that food be reduced from a temperature of +70°C to -18°C in no more than 240 minutes.

How the Foster range works

Using a high powered refrigeration system, cold air is blasted laterally over the product at high speed, extracting heat at an optimum rate, whilst maintaining food quality.

Once the cycle is complete, the equipment switches into 'hold mode' to keep the food at the required temperature (+3°C if chilled, -18°C if frozen). This saves energy and allows you to leave the food in the unit, or move on to another batch.

the benefits

Quality

Damaging bacteria is rendered dormant by the Blast Chill/Freeze process, minimising food spoilage.

Blast Chilling swiftly brings down temperature, locking in colour, texture, flavour, structure and nutritional value.

Delicate food surfaces such as pasta and fruit are protected, as rapid chilling stops an 'ice skin' forming which otherwise dehydrates and damages the product's appearance.

When freezing food, the quicker the freezing process, the smaller the ice crystals that form within the cells, thus retaining a better quality and structure when thawed.

Reduced Food Wastage

Kitchens with Blast Chillers or Freezers throw away less food. Servery leftovers, buffet dishes, salads and drinks can easily and safely be chilled with complete confidence, and product can then be reheated as required.

Kitchen Efficiency

Blast Chilling allows you to prepare larger batches, and then chill or freeze some for later use. This makes for fewer (larger) batches, more efficient use of ovens, more predictable working hours and optimum use of your chef's time. It can even help you to increase your menu options.

For more information and advice or to receive your copy of our Blue Paper on this subject please call 0500 691122, email marketing@foster-uk.com or download it free of charge at: www.fosterrefrigerator.co.uk/food_safety



The new Foster Blast Chilling range

making life easier

If you serve hot meals, then you will almost certainly benefit from using a Blast Chiller or Freezer. The Foster range offers a capacity to suit all volumes, from the small independent restaurant to a large-scale Cook-Chill operation



SURF NAVIGATION: Just Surf and Go

The new Foster Blast Chiller Range has been designed to make your life easy. The display panel lets you turn the dial to choose the programme you require, and just press to start. It's incredibly easy to use, even for the first time user. Simply Surf & Go - it couldn't be easier.



Food Surface Protection

Foster's Circulair™ air circulation system ensures that airflow is "sucked through" rather than blown onto food, and flows in a horizontal direction. This means that cold air flows over - rather than directly at - the food surface. In addition the airflow is automatically controlled and adjusted during both the blast chill and the hold phases. This prevents an 'ice skin' from forming on the product and also stops 'wind chill' damage and dehydration to the food surface - thereby maintaining the visual appeal and the taste of the product.

Exceed your quality expectations

Now capable of blast chilling from +90°C exceeding UK and European food safety requirements and ensuring no damage is caused by a slow start to the chill process.

Unbeatable performance and energy efficiency

- Energy Saving Modes
- Automatic Defrost AND Smart Defrost ensure maximum efficiency and performance
- Noise levels significantly reduced
- Robust and durable

Simple Programming Options

All models offer the following simple pre-set programmes:

- **Soft Chill** Soft Chill is ideal for the rapid but gentle chilling of any dish. This cycle brings the temperature of the food down to +3°C, whilst retaining a positive air temperature. This prevents large ice crystals forming which can damage the structure of delicate foods and high water contents such as vegetables, rice and pasta. Using this programme thereby maintains the texture, consistency and appearance of these foods with no dehydration or cell damage.
- **Hard Chill** general purpose chilling, ideal for standard chilling product such as cooked meat, pies, individually portioned meals etc. The new Foster range keeps the air temperature at -15°C for the first 70% of the cycle, to pull down temperature quickly. Air temperature is then increased for the last 30% of the cycle to stop surface damage and to ensure quality
- **Hard Chill Max** To be used for high density or high fat content such as meat joints, portioned meals, stew, sous vide etc
- **Shock Freeze** any product to be frozen can be shock frozen to -18°C within 240 minutes
- **Professional programmes** 3 programme options can be set up by the end user to suit their menu requirements- easy to set up for use whenever required.
- **Pre Chill** Ensures the correct temperature in the unit before chilling commences, to improve the cooling time
- **Probe & Timed Chill/Freeze:** All programmes can operate either on time or by use of an intelligent probe. The probe method is ideal when you don't know the precise chilling time required. (The temperature probe automatically ends the programme at your required temperature and records the time taken for future reference). Timed programmes are perfect for items with regular throughput- just turn the dial to the time required and press to start



● BCF 51



● BCF 21



Cabinet Blast Chillers, Freezers & Thaw

food safety first

The Foster tray loading cabinet range provides the ideal way to ensure quality and food safety is maximised in EVERY kitchen, large or small.

Choose from 3 cabinet models, one undercounter model and our new QC Economy model.



- Blast Chiller and Blast Chiller/Freezer models available
- Capacities to suit all needs: From 11kg (40 portions) to 51kg (200 portions)
- Timed and probe chill functions
- 304 stainless steel exterior and interior
- Soft Chill, Hard Chill, Hard Chill Max and Shock Freeze programmes to suit all types of food
- All models take Gastronorm 1/1 trays
- All models are integral (remote option available)
- All products are supplied on lockable castors
- Front loads for easy access, cleaning and servicing
- Automatic hold function on all models
- 98.3 % recyclable
- Minimal noise, maximum energy efficiency
- Durable and robust design throughout
- Removable thermal break gives easy access to door frame heater. Patent Applied No. 0019596.6 (UK) No. 01306449.8 (Europe) No. 30384 (US)
- Self closing door, 90° dwell for easy loading and 180° door opening



Surf Navigation control - the easiest to operate blast chiller available



temperature probe as standard on all models



heavy duty, easy grip handle



dual fan refrigeration system, more efficient and better performance



bottom mount refrigeration system ensures stability, reduces noise and improves performance



BC & BCF Blast Chillers & Freezers

- 4 capacities of Blast Chiller and Blast Chiller/Freezer ranging from 11kg to 51kg



- SURF NAVIGATION: Easy programme selection - menu driven dial lets the operator simply turn to select the programme required, and push to start. It couldn't be easier.



- Foster's Circularair™ air circulation system ensures uniform chilling whilst protecting the food surface
- Now capable of blast chilling from +90°C exceeding food safety requirements

- Automatic Defrost & Smart Defrost functions ensure maximum performance and minimum energy usage
- Info Update Screens show all you need to know
- HACCP software is available for data retrieval and management in both infra-red download and hard-wired dialogue system formats
- Coated coil - stops corrosion and prolongs refrigeration system life
- Increased energy efficiency
- Significantly reduced noise levels



● QC11



● BC51



QC Economy Blast Chiller

- Ideal for small or low volume kitchens where the need to maximise quality and meet food safety guidelines is recognised
- 11kg Blast Chill capacity
- Tough 304 grade stainless steel exterior and interior
- Designed for hygiene and easy cleaning- removable fittings and castors as standard and no dirt traps

Controlled Thaw

- Choice of 2 thaw models, 20kg (CT20) and 70kg (CT70) capacity
- Thaw food safely from -18/-21°C to +1/+4°C
- Thaw cycle takes approximately 7 hours based on maximum capacity and 25mm product thickness (thicker products will take longer)
- Overnight storage hold facility, so thawed food is ready for use when you want to use it
- Stainless steel dished base with drain facility for easy cleaning
- Thaw cabinets alternate between circulating gentle heat and refrigeration, via special air ducting and fans, ensuring an even, speedy and safe thaw



● CT70



Trolley Loading Cabinet Blast Chillers

designed for combi trolley compatibility

Our new range of Roll-In Blast Chillers accept all standard combi trolleys, meaning less handling between cooking and chilling. No need to transfer or de-tray, simply wheel the combi trolley straight into the Blast Chiller.

- 2 capacities available:

BCCF 1

Ideal for detachable combi rack trolleys. 75kg chilling capacity, occasional 15kg freezing capacity.

BCCF RI 1

Ideal for small trolleys such as Gastronorm 1/1 size. 75kg chilling capacity, occasional 15kg freezing capacity.



- **SURF NAVIGATION:**

Easy programme selection - menu driven dial lets the operator simply turn to select the programme required, and push to start. It couldn't be easier



- Foster's Circularair™ air circulation system ensures uniform chilling whilst protecting the food surface
- Now capable of blast chilling from +90°C exceeding food safety requirements

- Soft Chill, Hard Chill, Hard Chill Max and Shock Freeze functions
- Alarm sounds and unit switches to automatic hold at end of cycle to keep the operator informed and food safe until it is needed
- Timed and probe chill functions
- Automatic Defrost & Smart Defrost functions ensure maximum performance and minimum energy usage
- Info Update Screen shows all you need to know
- HACCP software is available as an option in 2 formats for data retrieval and management
- Coated coil - stops corrosion and prolongs refrigeration system life



● BCCF RI 1



supplied with robust food probe



Surf Navigation control - the easiest to operate blast chiller available

- Tough and hygienic 304 grade stainless steel exterior and interior
- Robust internal stainless steel bumper bars to prevent trolley damage
- Heavy duty magnetic gasket - easy to clean and replace when necessary
- Designed for remote condensing unit so keeping excessive noise and heat out of the kitchen

● BCCF 1

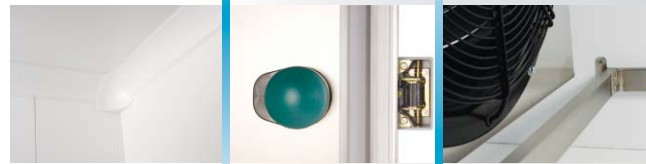


Modular Blast Chillers & Freezers

for volume catering and processing



Our Modular Blast Chill/Freeze range is designed to cope with the multi-purpose requirement of the foodservice industry, and enables you to take control of the Cook-Chill Process.



interior coving for easy cleaning

emergency internal door release is easily operated even when the door is locked

protective internal trolley bumper bars

- 4 Blast Chiller/Freezer Models to choose from:

MBC 75: 75 kg chilling and nominal freezing capacity.

MBC 100: 100 kg chilling and nominal freezing capacity

MBC 150: 150 kg chilling and nominal freezing capacity

MBC 250: 250 kg chilling and nominal freezing capacity

- 2 different door opening widths available (700mm and 900mm) to suit all trolley requirements including combi-trolleys

- 3 one-trolley models and 1 two-trolley model

- Floorless application for blast chilling, 25mm built in floor available for blast freezing application

- **SURF NAVIGATION:** Easy programme selection - menu driven dial lets the operator simply turn to select the programme required, and push to start. It couldn't be easier



- Foster's Circulair™ air circulation system ensures uniform chilling whilst protecting the food surface

- Now capable of blast chilling from +90° C exceeding food safety requirements

- Soft Chill, Hard Chill, Hard Chill Max and Shock Freeze programme options

- Temperature probe supplied as standard

- Alarm sounds and unit switches to automatic hold at end of cycle to keep the operator informed and food safe until it is needed

- Robust white laminate exterior as standard (304 grade stainless steel option)

- Improved, wall mounted refrigeration system leaves the floor clear for cleaning

- Robust internal stainless steel bumper bars to prevent trolley damage

- New control panel facilitates easier access for operation and servicing

- Operator-friendly fans cut-out whenever door is opened

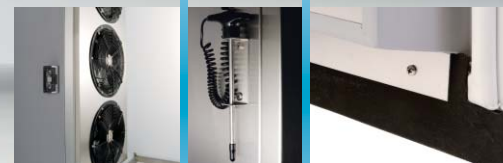
- Modular panel construction makes installation easy with minimum disruption

- Suitable for siting in to a cold-room as a roll-through, giving complete temperature control

- 75mm modular panels for maximum efficiency and performance

- MBCF models supplied with built in pressure release for added safety

- HACCP software is available as an option in 3 formats for data retrieval and management



hinged panel allows access to fans for ease of cleaning and servicing

supplied with robust food probe

door/floor seal for increased refrigeration efficiency

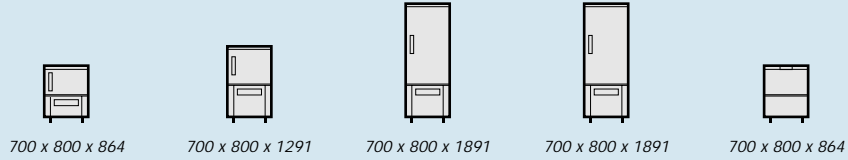


Cabinet Blast Chillers & Freezers

BCF <i>Blast Chiller/Freezer range abbreviation</i>	11 <i>Capacity (kgs)</i>
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temperatures & capacities

Dimensions (w x d x h) mm

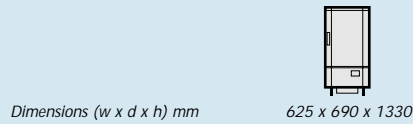


Blast Chillers	BC 11	BC 21	BC 36	BC 51	QC11
no. of shelves (GN 1/1)	3	6	10	14	3
load capacity (kgs) chill	11	21	36	51	11

Blast Chillers/Freezers	BCF 11	BCF 21	BCF 36	BCF 51
no. of shelves (GN 1/1)	3	6	10	14
load capacity (kgs) chill/freeze*	11	21	36	51

* For blast freezing application, these models are designed for occasional freezing; capacities stated are nominal and will be dependent upon product, type and density, loading etc.

features and options



Dimensions (w x d x h) mm

625 x 690 x 1330

Controlled Thaw (20kg)	CT 20
thawing capacity (kgs)	20
extraction rate (watts @ -8°C)	330
electrical supply (fuse rating per phase)	13
No. of shelves (GN 1/1)	6



Dimensions (w x d x h) mm

680 x 815 x 2080

Controlled Thaw (70kg)	CT 70
thawing capacity (kgs)	70
extraction rate (watts @ -8°C)	520
electrical supply (fuse rating per phase)	13
No. of shelves (GN 2/1)	10

NB: Frozen raw food and frozen cooked food must be thawed separately

● Standard
○ Optional

		FINISH	DOORS	REFRIGERATION	ELECTRICS	ACCESSORIES	HACCP
		304 stainless steel exterior/interior	304 stainless steel back & mesh unit cover	full solid door	left hand hinged door		
				R404a	RT34a	remote option (legs supplied as standard)	
					hold facility		
					230V/1/50Hz 13A		
					230V/1/50Hz 16A		
					400V/3/50Hz		
					60Hz	temperature probe	
						80mm castors (75mm for CT20 & CT70)	
						60mm castors	
						legs	
						dished base with drain	
						additional GN1/1 nylon coated shelf	
						additional GN2/1 nylon coated shelf	
						infra red download	
						hardwired dialogue system	
11	BC 11	●	●	●	●	○	○
	BCF 11	○	○	○	○	○	○
21	BC 21	●	●	●	●	○	○
	BCF 21	○	○	○	○	○	○
36	BC 36*	●	●	●	●	○	○
	BCF 36	○	○	○	○	○	○
51	BC 51	●	●	●	●	○	○
	BCF 51	○	○	○	○	○	○
	QC 11	●	●	●	●	○	○
	CT20	○	○	○	○	○	○
	CT70	○	○	○	○	○	○

* BC36 on 230V/1/50/13A option - chilling capacity reduces to 30kg

Factors to consider when determining Blast Chill/Freeze time

Density, water content, and fat content all affect the time required to achieve temperature. Delicacy of the foods' structure and surface must be taken into account when selecting the programme required. Weight loadings and the thickness of product should not be exceeded. Foster recommends a maximum loading of 3.75kg per Gastronorm 1/1 container. Product that is hotter than the recommended starting temperature (90°C for Foster models) will obviously take longer to chill. It is recommended that foods are not covered or lidded, as this will extend the time required. Use of deep containers will also extend the chilling time. It is essential that good airflow passes over the product to facilitate even and consistent chilling. Foil should not be used to cover food. Pre-chilling the cabinet before use will improve the chill time.

Roll-In Cabinet & Modular Blast Chillers & Freezers

temperatures & capacities



816 x 981 x 2271



863 x 1133 x 2250

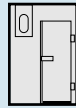
Dimensions (w x d x h) mm

Roll-In Cabinet Blast Chillers	BCCF1	BCCF RI 1
chilling capacity (kgs)	75	75
freezing capacity (kgs)*	15	15
trolley type (option)	Rack only	Trolley
maximum trolley dimensions	600 x 550 x 1590	680 x 640 x 1825
clear door opening (w x h)**	696 x 1601	743 x 1835
approx depth door open	1750	1950
extraction rate (watts @ -15°C)	5600	5600
electrical supply	230/1/50/20A	230/1/50/20A

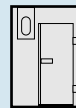
* For blast freezing application, these models are designed for occasional freezing; capacities stated are nominal and will be dependent upon product, type and density, loading etc.

** Inside door opening.

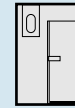
temperatures & capacities



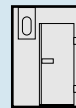
1350 x 1300 x 2350



1550 x 1300 x 2350



1350 x 1300 x 2350



1550 x 1300 x 2350

Dimensions (w x d x h) mm

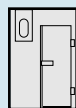
Modular Blast Chillers	MBC 75 (700mm Door Opening)	MBC 75 (900mm Door Opening)	MBC 100 (700mm Door Opening)	MBC 100 (900mm Door Opening)
chilling capacity (kgs)	75	75	100	100
freezing capacity (kgs)*	75	75	100	100
maximum trolley dimensions	690 x 1040 x 1890	890 x 1040 x 1890	690 x 1040 x 1890	890 x 1040 x 1890
clear door opening (w x h)**	695 x 1898	895 x 1898	695 x 1898	895 x 1898
approx depth door open	2072	2272	2072	2272
extraction rate (watts @ -15°C)	7000	7000	8500	8500
electrical supply	230/1/50/20A	230/1/50/20A	230/1/50/20A	230/1/50/20A

* For blast freezing application, these models are designed for occasional freezing; capacities stated are nominal and will be dependent upon product, type and density, loading etc.

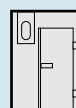
For freezing application, the optional 25mm floor must be specified.

** Inside door opening.

temperatures & capacities



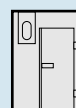
1350 x 1300 x 2350



1550 x 1300 x 2350



1350 x 2300 x 2350



1550 x 2300 x 2350

Dimensions (w x d x h) mm

Modular Blast Chillers	MBC 150 (700mm Door Opening)	MBC 150 (900mm Door Opening)	MBC 250 (700mm Door Opening)	MBC 250 (900mm Door Opening)
chilling capacity (kgs)	150	150	250	250
freezing capacity (kgs)*	150	150	250	250
maximum trolley dimensions	690 x 1040 x 1890	890 x 1040 x 1890	690 x 2040 x 1890	890 x 2040 x 1890
clear door opening (w x h)**	695 x 1898	895 x 1898	695 x 1898	895 x 1898
approx depth door open	2072	2272	3072	3272
extraction rate (watts @ -15°C)	11500	11500	21000	21000
electrical supply (fuse rating per phase)	230/1/50/20A	230/1/50/20A	400/3/50/16A	400/3/50/16A

* For blast freezing application, these models are designed for occasional freezing; capacities stated are nominal and will be dependent upon product, type and density, loading etc.

For freezing application, the optional 25mm floor must be specified.

** Inside door opening.

Modular Blast Chillers & Freezers

features and options

- Standard
- Optional

	FINISH	DOORS	BUILD OPTIONS	REFRIGERATION	ELECTRIC	HACCP
	white laminate exterior/interior	white laminate exterior/interior	304 stainless steel door, white control panel			
	304 stainless steel exterior/interior	304 stainless steel exterior/interior	304 stainless steel control panel			
	white laminate door	304 stainless steel door	left hand door hinging			
	roll through					
	304 stainless steel floor with ramp*					
	floorless (for blast chilling application only)					
	support blocks to suit Hobart rack					
	control panel fitted with thermostat controlled anti-condensate heater**					
	evaporating temperature - blast chilling					
	evaporating temperature - blast freezing					
	R404a					
	22mm drain connection					
	condensing unit ***					
	230/1/50Hz 20A (fans and defrost)					
	400/3/50Hz 16A (fans and defrost)					
	400/3/50Hz (condensing unit-separate supply required)					
	infra red download					
	hard-wired dialogue system					
	panel printer					
	3 probe option					
BCCF 1		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
BCCF RI 1		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC75 700mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC75 900mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC100 700mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC100 900mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC150 700mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC150 900mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC250 700mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
MBC250 900mm door opening	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>

* Floor required for blast freezing application and non-ground floor sites.
 ** Recommended where the MBC/MBCF is installed in an ambient environment below 15°C e.g. prep room.
 *** Foster Dealer to supply and install condensing unit.
 For glycol cooling option and alternative voltage availability, contact Foster.
 Please check maximum trolley dimensions to ensure trolley compatibility with individual models.