Castel MAC







BLAST CHILLERS







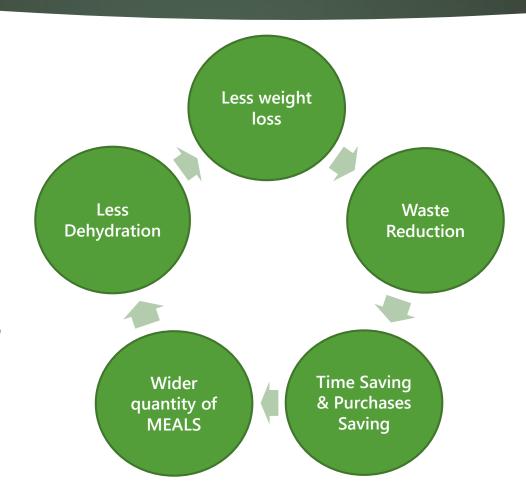
BLAST CHILLERS BENEFITS

► INCREASE THE PRODUCT SAFETY

The blast chilling and shock freezing processes allow to minimize the bacterial growth, that starts immediately after their cooking, and the macro-crystallization, that damages the food cells.

These are the reasons why the blast

chillers are essential elements for the food safety, in accordance with HACCP rules.



UNDERLINE THE FOOD QUALITY

A longer food shelf-life and less dehydration are the results achieved by the blast chiller use. This appliance allows to **preserve** all the best food qualities, to **maintain** its flavour and to offer a wide quantity of meals, by reducing the waste and gaining time and spaces.

Why TECNOMAC® Blast Chillers?

Advantages

- ♦ Saving—time
 Preparation of large food
 batches for the whole week
- Saving on purchases

Long shelf-life: purchase the seasonal ingredients when they are good and cheap

- ♦ Waste Reduction Long shelf-life: more time to use up the meals stock prepared in advance
- ♦ Less Dehydration
 Stop the food evaporation
 after cooking: this reduces
 the less of water

High cooling power and powerful



High transfer rate of chill to the food

Tecnomac

Indirect Air Flow

ventilation



Very low dehydration

Controlled cycles by electronics and core probe



Food chilled/frozen at the **right temperature** down to the core

Variable air temperature during chilling/freezing



Optimization of the process



CYCLES

BLAST CHILLING



+3°

The use of this cycle minimizes the bacterial growth, that takes place when the product is at a temperature range of +65°C and +10°C.

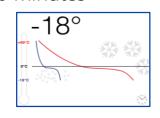
The blast chilling assures a safe and healthy result: the core product temperature reaches quickly +3°C in 90 minutes.



SHOCK FREEZING



The shock freezing stops the food cells macrocrystallization process: this guarantees the shelf life of food and to preserve all its best organoleptic qualities. The product core temperature reaches -18°C in 240 minutes





TECNOMAC

A RANGE OF SOLUTIONS



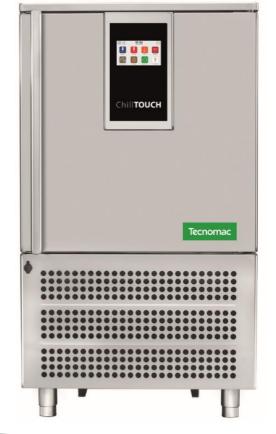
**** ChillTOUCH Series**



ChillTOUCH

Blast Chilling
Shock Freezing
Low temperature
Cooking

Retarder Prover
Ice Cream Function
Thawing
Conservation







MULTIFUNCTION BLAST CHILLER

More than a simple blast chiller: *Optimize life in the kitchen.*

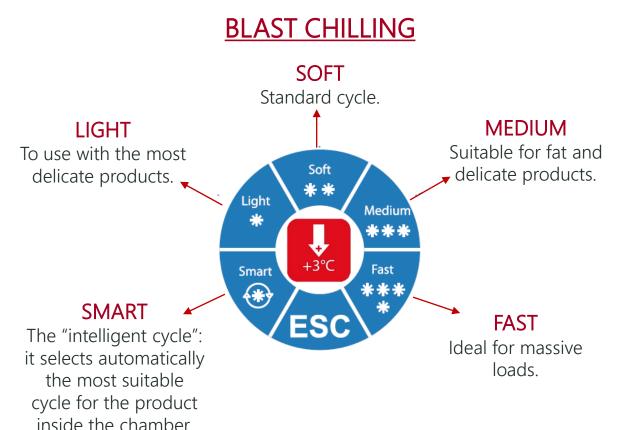
MULTIFUNCTION at your fingertips

Tecnomac

ONE MACHINE: MORE FUNCTIONS

THE CYCLES

manuals or by program



SHOCK FREEZING SOFT It's ideal for meat and fish. LIGHT HARD To use with massive Standard cycle, for loads. medium loads. Light Medium -18°C Smart **SMART RUN ESC** The "intelligent cycle": Freezing continuous it selects automatically cycle with a room the best freezing cycle temperature of -45°C -to for the product inside be manually stopped. the blast chiller.

A wide variety of **FUNCTIONS**:

Tecnomac

Optimal visualisation of all the cycle parameters on the new resistive Touch display.



Thawing

Thawing cycle, manual or by program, assures to preserve the food organoleptic properties.



Low temperature Cooking

Low temperature cooking cycle available manual or by program: the optimal cooking control for all kinds of food in every condition.



Retarder Prover

A retarder prover cycle, manual or by program with more phases, including the final conservation of the product.



Program Setting

Possibility to use pre-set programs for each function, by pressing this relevant icon on the display: up to 160 storable cycles.



Conservation

Manual conservation cycle useful to length the food shelf-life, preserving its best quality.



Ice Cream function

Ice cream specific cycle by time, that guarantees the proper hardening or softening of the ice cream surface: it makes the ice cream pans ready for their distribution or conservation

Some tests RESULTS and ADVICES:

Tecnomac

Chilling, freezing, cooking, proving by our famous Italian Chef



BLAST CHILLING											
Recipe	cipe Positive Cycle Weight Dimens		Dimensions	Time	Quantity	Room Temperature	Description				
Rice	LIGHT	500 gr	3 cm H	25 minutes	N°1 TRAY	25°C	Boiled Rice				
Baked Vegetables	SOFT	2 Kg	6 cm H	29 minutes	N°2 TRAYS	25°C	Baked Spinach				
Lasagne	MEDIUM	6,4 Kg	5 cm H	80 minutes	N°2 TRAYS	25°C	Lasagne				
Cooked Meats	FAST	3,2 Kg	8,5 cm H (Large size)	47 minutes	N°1 PIECE	25°C	Beef Tenderloin				









SHOCK FREEZING									
Recipe	Recipe Negative Cycle Weight		Dimensions	Dimensions Time		Description			
Pre-leavened products	LIGHT	50 gr	5,5 cm H	30 minutes	25°C	Croissant			
Cooked Fish	SOFT	3,5 Kg	7 cm H (Large Size)	90 minutes	25°C	Cod			
Raw Meats	HARD	6 Kg	16 cm H (Large Size)	95 minutes	25°C	Veal Rump			
Plum Cake	RUN	800 gr	7 cm H	45 minutes	25°C	Classic Version			





LOW TEMPERATURE COOKING									
Product	Ventilation	Weight	Cooking Time	Temperature	Humidity	Core Probe Temperature			
Swordfish	40%	4 Kg	7 H	68°C	50%	70°C			
Salmon	30%	3 Kg	6 H	75°C	50%	72°C			
Whole Chicken	50%	1 Kg	9 H	75°C	60%	72°C			
Beef Stew (sous-vide cooked)	50%	1 Kg	9 H	62°C	50%	85°C			
Beef Chuck	50%	2 Kg	13 H	80°C	50%	62°C			
Pork Shank	50%	600 gr	15 H	73°C	-	82°C			













UTILITIES and **TECHNICAL FEATURES**





Alarms List

Access to active and previous alarm list.



Drying

Drying cycle with forced ventilation.



Hot gas Defrosting

Classic defrosting cycle.



Language

Possibility to select the language.



USB Drive

To upload/download the alarm list.



Ozone Sanitation

Ozone cycle to sanitize the internal chamber and the working tools. (Optional)



Evaporator:

with an indirect air flow and easy to inspect: anti – corrosion treatment.



Core Probe

with a conic shape. Second probe available as optional.



INTERFACE:

Simply user-friendly



Pressed internal floor for an optimal hygiene.

Cabinet Body in stainless steel AISI 304 construction, with walls thickness of 70 mm.



Completely customizable.



New patented algorithm,

that reduces the ice formation on the products surface, during the chilling cycle with small loads. It protects the food taste, by regulating the internal chamber temperature and it allows an important energy-saving.

UTILITIES and **TECHNICAL FEATURES**





Signal Si

DUAL-SUITABILITY internal racks

to operate with both the GN trays and the EU ones, pitch 68 mm.

CT P – the pastry version: only for pastry trays 60x40.

(Internal structure with variable pitch 10 mm available as optional.)

CASTORS KIT
Available as optional

SYNOPTIC Diagram icon available on the

Service utility: the continuous visualisation of all the parameters and the machine working status.

SERVICE
Easy access to
service utilities, for
the machine

REVERSIBLE DOOR

management.

on site: by changing the handle configuration.



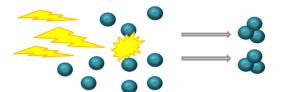
OZONE SANITATION

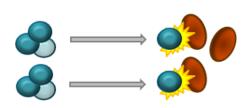


OPTIONAL Electrical Generator, integrated in the evaporator system.

FUNCTIONING

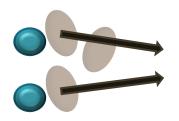
Oxygen molecules are electrically charged splitting some apart. The split atoms then attach to remaining oxygen molecules and form the OZONE.

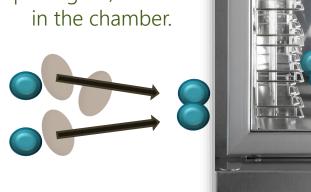




After then the pathogens cell walls are destroyed, the roque atoms re-attach themselves and revert back to OXYGENS.

An atom from the unstable OZONE then splits to attack and destroy the pathogens/bacteria





BENEFITS

The most useful cycle-option to disinfect the internal of the chamber:

- ♦ the OZONE sanitizes and reaches all the corners, allowing the correct cleaning of the whole cabinet.
 - ♠ it allows the disinfection of the **WORKING TOOLS**
 - ♦ the cycle requires no chemicalsynthetic additive, as for example a detergent.

Tecnomac

CT 10.35

CT 15.65

CT 15.2 / 70







Capacity	10 Trays GN 1/1	15 Trays GN 1/1	15 Trays GN 2/1		
Blast Chilling Yield 35 kg		65 kg	70 kg		
Shock Freezing Yield	25 kg	50 kg	55 kg		
Dimensions mm	840 x 871 x 1498	840 x 970 x 1952	840 x 1340 x 1952		
Voltage	400V / 3N / 50 Hz	400V / 3N / 50 Hz	400V / 3N / 50 Hz		



eVent

More POWERFUL, More EFFECTIVE, High PERFORMANCE.

A multitude of functions under a new interface.



Tecnomac



THE ADVANCED BLAST CHILLER

The innovative choice:

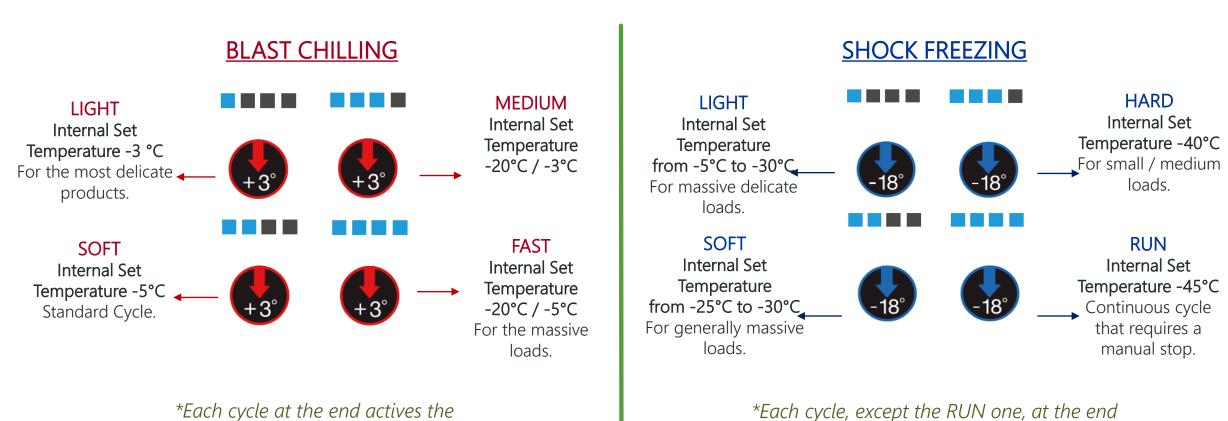
The best chilling and freezing solutions for the optimal product quality.

conversation mode at $+2^{\circ}$ C

A wider choice of CYCLES



Different modalities are available for each type of cycle: blast chilling and shock freezing



*Each cycle, except the RUN one, at the end actives the conversation mode at -25°C

Other FUNCTIONS:



Ice Cream

A time-cycle (manually settable with the internal cell temperature) allows the correct freezing of the ice cream pans.

Thawing

An useful Thawing cycle, that guarantees to save time and to maintain the organoleptic food qualities.

Drying

Drying cycle with forced ventilation: it works with ambient air and it can be selected before/after the cleaning of the machine.

Hot Gas Defrosting

Classic cycle of hot gas defrosting, quicker than the drying function (to use when a lot of ice is formed on the evaporator – it starts each 8 hours).















UTILITIES and **TECHNICAL FEATURES**





Set Programs:

Easy access to a pre-set programs list, where the user can stock its main recipes: up to 99 programs.



Language:

Possibility to select the language.



USB Drive:

To store all the data: alarms list and all the cycle details, as temperature, date and time (ultra detailed – cycle by cycle).



Ozone Sanitation:

to sanitize the internal chamber of the appliance after its cleaning and the working tools.

(Optional)



Evaporator:

with an indirect air flow and easy to inspect. Anti-corrosion treatment. **Dual – Suitability** internal racks for both GN and EU trays.



Core Probe with conic shape, can be easily removed after its use.



Condensation collecting pan, really easy to pull out and to empty.



Internal pressed floor for an optimal hygiene. Cabinet Body in stainless steel construction AISI 304 (70mm of walls thickness).

INTERFACE *user-friendly*





gas

R 452 A

V 5.20 «UP»

V 5.20



V 15.40



V 15.65



Tecnomac

V 15.2/70



Capacity	5 Trays GN 1/1	10 Trays GN 1/1	15 Trays GN 1/1	15 Trays GN1/1	15 Trays GN2/1
Blast Chilling Yield	20 kg	35 kg	40 kg	65 kg	70 kg
Shock Freezing Yield	12 kg	25 kg	30 kg	50 kg	55 kg
Dimensions mm	840 x 720 x 900	840 x 780 x 1498	840 x 880 x 1952	840 x 880 x 1952	840 x 1250 x 1952
Voltage	230V / 1 / 50 Hz	230V / 1 / 50 Hz or 400V / 3N / 50	400V / 3N / 50 Hz	400V / 3N / 50 Hz	400V / 3N / 50 Hz

BK+ Series

The model at the basis of chilling: Soft and Hard modalities & Freezing.

A new soft Touch Control Panel, for an easer use.



Tecnomac



THE BLAST CHILLER

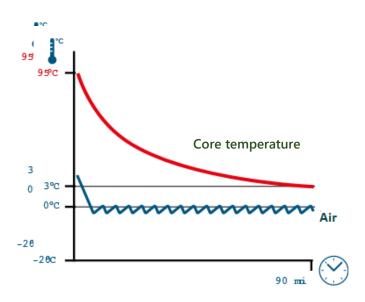
« The daily simplicity for every occasion. »

BK+ Series



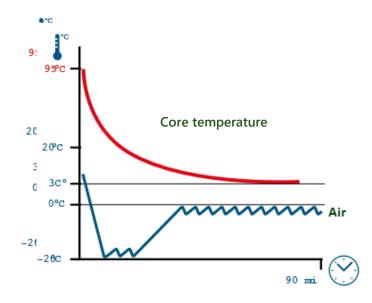


Blast Chilling SOFT



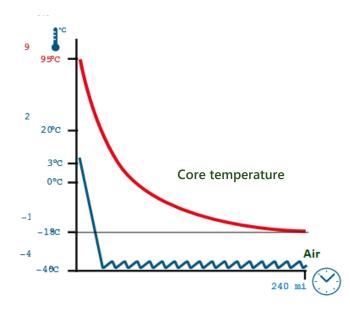
Suitable for delicate products as rice, vegetables and fried.

Blast Chilling HARD



Suitable for fat and dense products and for the massive loads.

Shock Freezing



Ideal for each kind of foodstuff.

BK+ Series

Tecnomac

TECHNICAL FEATURES







Ozone Sanitation (Optional)



Anti-corrosion resin fan blades.



USB Drive: to store all the data, in compliance with the HACCP normative (Optional)



Castors Kit (Optional)



Temperature Core Probe



Structure with variable pitch: an internal structure with 10 mm adjustable pitch



AISI 304 construction and dual-suitability internal racks

gas R 452 A

BK+ Series

Tecnomac

BK+ 15

BK+ 10

BK 3 2/3

BK 3 1/1

BK+ 5





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Capacity	pacity 3 Trays GN 2/3 3 1		3 Trays GN 1/1 5 Trays GN 1/1		15 Trays GN 1/1
Trays pitch	70 mm	70 mm	68 mm	68 mm	68 mm
Blast Chilling Yield	7 kg	7 kg	18 kg	32 kg	40 kg
Shock Freezing Yield	5 kg	5 kg	10 kg	22 kg	28 kg
Dimensions mm	600 x 605 x 400	600 x 805 x 400	800 x 700 x 900	800 x 700 x 1544	800 x 800 x 1950

E – T Series

Blast Chilling and Shock Freezing: accordingly controlled by core probe or time.

Simple control panel for an easy management of the cycles.



Tecnomac



ROLL-IN BLAST CHILLERS

« The solution is on the trolleys wheels. »

E - T Series



CONTROL PANEL

Tecnomac

A clear and simple management - Stainless steel AISI 304 construction.

- Programs Setting
- Hot Gas Defrosting
- Cycle control by core probe or time
- Cycles

Ice cream cycle

USB Drive (Optional)

Ozone Sanitation (Optional)

HACCP memory visualisation

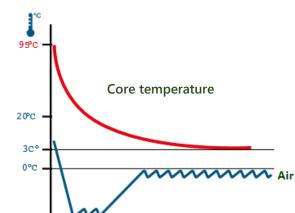
CYCLES

and

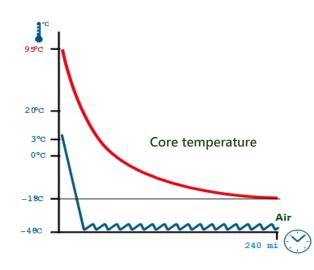
90 mai.

Blast CHILLING SOFT & HARD

Core temperature



Shock FREEZING



E - T Series

T 20-C+





Oven matches?

The best blast chiller to match with the oven: dedicated models to the **Rational** or **Convotherm** trolleys.

T 40-C+

Tecnomac

Version without condensing unit available as optional.

•	T 20-C+/80	T 20-C+/110	T 20-R/80	T 20-R/110	
Capacity	1 Trolley Conv combi-stea		1 Trolley Rational 201 combi-steamer SCC		
Blast Chilling Yield	80 kg	110 kg	80 kg	110 kg	
Shock Freezing Yield	65 kg	95 kg	65 kg	95 kg	
Dimensions mm	1040 x 102	20 x 2275	1040 x 1020 x 2275		

T 40-C+/150	T 40-C+/200	T 40-R/150	T 40-R/200		
1 Trolley Convotherm 20.20 combi-steamer plus 3			ational 202 eamer SCC	Capacity	
150 kg	200 kg	150 kg	200 kg	Blast Chilling Yield	
135 kg	175 kg	135 Kg	175 kg	Shock Freezing Yield	
1550 x 13	70 x 2470	1040 x 10	20 x 2275	Dimensions mm	



E –**T** Series

Tecnomac

Remote condensing unit for all the models (except for T20.80)

Version without condensing unit available as optional

E20.80 E20.80RE

E20.110 RE

T30.110 T30.140

T40.150 T40.200













Capacity	1 Trolley 60 x 80	1 Trolley 60 x 80	1 Trolley 60 x 80		1 Trolley 80 x 100		2 Trolleys 60 x 80	
Internal useful Dimensions mm	680 x 870 x 1850	680 x 870 x 1850	860 x 920 x 2000		930 x 1080 x 2000		940 x 1430 x 2000	
Blast Chilling Yield	80 kg	110 kg	110 kg	140 kg	150 kg	200 kg	270 kg	390 kg
Shock Freezing Yield	65 kg	95 kg	95 kg	125 kg	135 kg	175 kg	250 kg	360 kg
Dimensions mm	890 x 1371 x 2410	890 x 1371 x 2410	1370 x 1210 x 2274		1550 x 1370 x 2470		1780 x 1790 x 2330	
Voltage	400V / 3N / 50 Hz	400V / 3N / 50 Hz	400V / 3I	N / 50 Hz	400V / 3N / 50 Hz		400V / 3N / 50 Hz	

MT Series

The biggest Blast Chillers, for the largest quantities.

Panels thickness of 100 mm: the best insulation. Entry and exit on opposite: optimisation of processes.



Tecnomac



MT TUNNELS
BLAST CHILLERS

« The giants of cold. »

MT Series

START STOP

Tecnomac*

PROGRAM

CONTROL PANEL

Simple and Intuitive

Possibility to choose the control panel configuration: vertical or horizontal



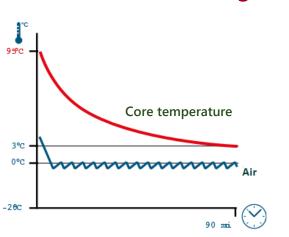
Temperature & Time Display
USB Drive (Optional)
Ozone Sanitation (Optional)
HACCP memory visualisation

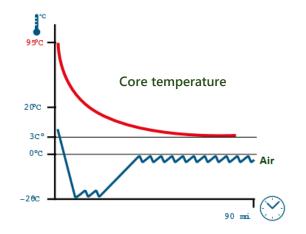


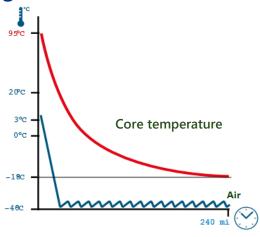




Blast Chilling SOFT and HARD & Shock Freezing







TECHNICAL FEATURES



- A) Large inspection door: easy cleaning and maintenance
- B) Entry and exit at opposite sides: to optimise the process flow
- C) Thickness:

 100 mm panels-effective insulation
 for a significant reduction in energy
 losses



- D) Control:

 Computerized control of all functions
- E) Semi-hermetic condensing unit



* Possibility to choose between the connection to a refrigeration central unit or to one of our condensing unit

High speed air, homogeneously distributed in all the chamber by modular batteries of evaporators.

MT Series



