



- 40°C | - 20°C

# QUICK FREEZING

BLAST CHILLING, SHOCK FREEZING  
AND STORAGE ROOMS



**THERMOGEL**

# TRADITION AND INNOVATION

Professing chilling specialists since 1963

***Thermogel***

Product blast freezing and storage is one of the first technologies developed and used in modern bakeries and pastry production.



## 1963

For over 50 years, we have provided freezers and retarder proofers for the food industry, continuing to innovate our product, without ever betraying tradition.



## QUICK FREEZING, ALWAYS COLD

Utmost service, all day every day.

The professional QUICK FREEZING blast chilling and blast freezing rooms were designed to provide clients with the best possible help in the laboratory. Quick turnaround and maximum production are the keywords, without however overlooking the end quality of the product.



HIGH PERFORMANCE ROOMS FOR ANYONE  
CONSTANTLY SEEKING EXCELLENT WORK.

# SPECIFIC DESIGNS, WITH DIFFERENT FUNCTIONS

Each machine was designed to meet a specific need.

The QUICK FREEZING range includes various machines performing different functions based on clients' actual needs. This allows constant, optimal machine performance each day, 7 days a week.



QF

## BLAST CHILLING AND BLAST FREEZING

▼ -40°C | -20°C

Blast chiller and blast freezer designed to guarantee quick freezing of oven products. For 600x800 or 800x1000 trolleys

- Side evaporator.



QM

## BLAST CHILLING AND BLAST FREEZING

▼ -40°C | -20°C

QM is a blast chiller and quick freezer designed to take up as little space as possible, allowing entry of 600x400 trolleys. • Side evaporator.



QT

## BLAST FREEZING + NEGATIVE STORAGE

▼ -38°C | -20°C

QT is a professional temperature blast chiller and freezer.

The special ceiling evaporator allows storage at -20°C after a single blast chilling and maintains the product for the following days.

Particularly indicated for small-sized and delicate products.

- Ceiling evaporator.



QS

## NEGATIVE STORAGE

▼ -20°C

Large QS storage room which after blast freezing maintains the product for the following days.

# BLAST FREEZING, FOR REAL

Blast freezing without compromise,  
at maximum power.

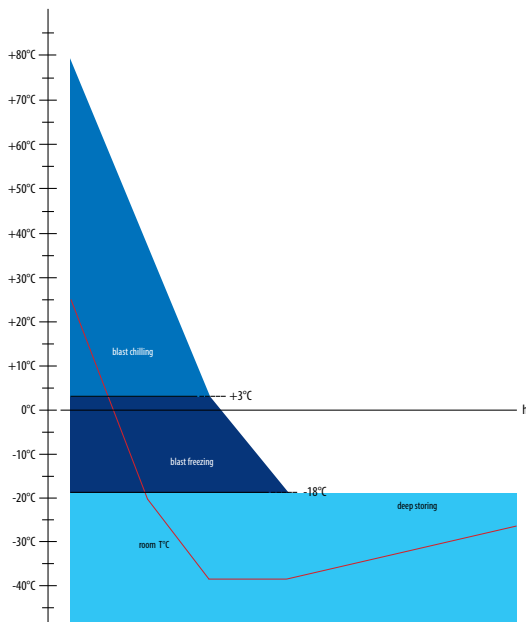
One could say development of a blast freezing system is easy, but how many times has performance been disappointing. It's simply not enough to reach a temperature, but it also needs to be maintained. We know that.



## BLAST CHILLING AND BLAST FREEZING

▼ -40°C | -35°C

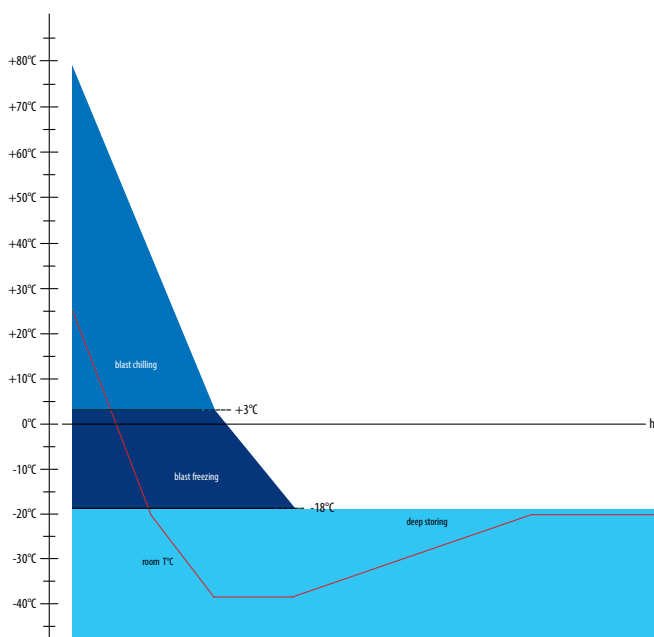
The quantity in kg of blast chilled or blast frozen product is calculated with a time span of 1 hour and not per cycle. The product is brought to the desired temperature also in extreme situations and with continuous door opening. Then, following the blast chilling cycle, you can set the machine in storage.



## BLAST CHILLING AND BLAST FREEZING + STORAGE

▼ -38°C | -20°C

The heat is removed from the product through a constant flow of indirect air which allows, following the blast chilling and blast freezing cycle, product storage at -20°C for the following days.





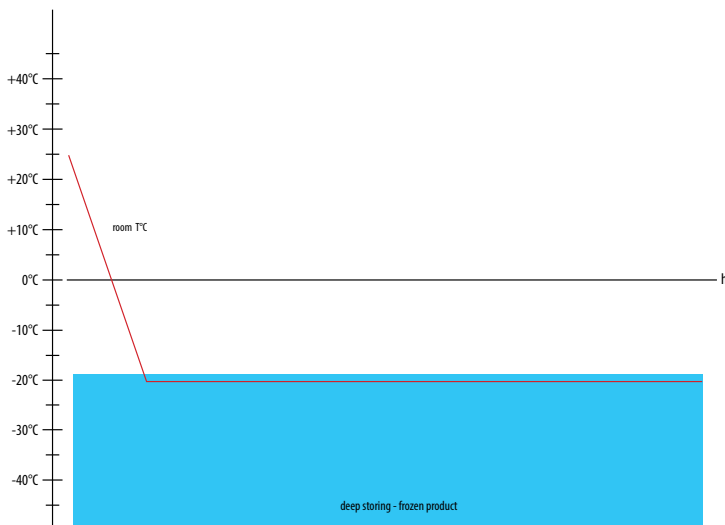
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## NEGATIVE STORAGE

### ▼ -20°C

Low temperature storage is one of the most delicate phases. Temperature precision, recovery each time the door is opened and respect for humidity are fundamental for the end result.

Our rooms allow the best organisation of production and stock, maintaining the quality unchanged.



Thanks to the constant management of relative humidity, the natural humidity is maintained of each product. Particularly indicated for cream and chocolate products and all products sensitive to a minimum change in temperature and humidity.



POWER SYSTEMS TO GUARANTEE  
CONSTANT, HIGH PERFORMANCE.



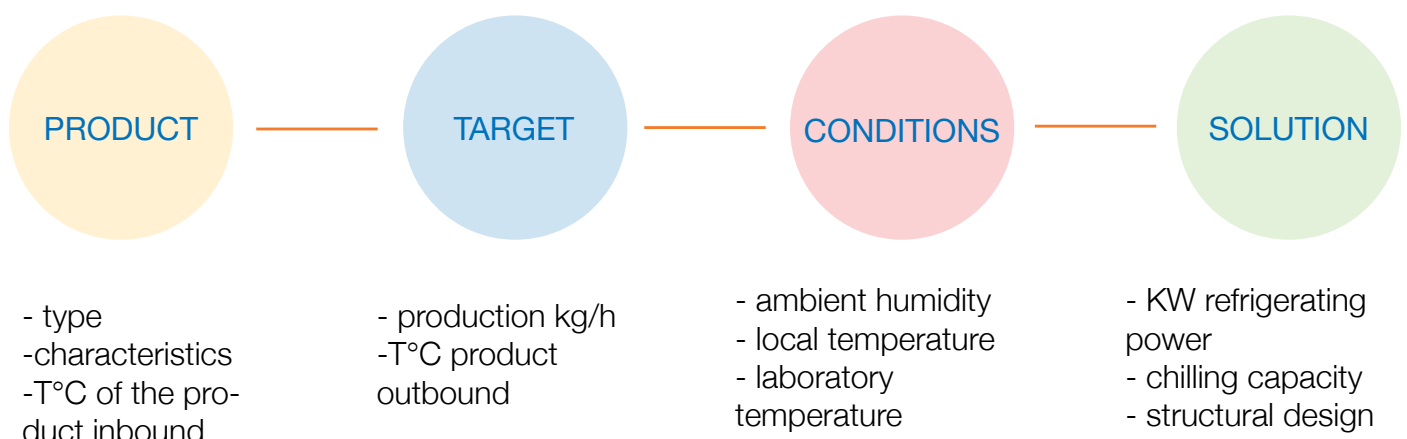
## MADE-TO-MEASURE DESIGN

No standard exists in terms of freezing. One begins with a certain element, the product.

The vast experience of pastry chefs and bakers has contributed to creating designs based on real, consolidated production needs.

Each request and design is developed while considering various factors, such as: the type of product, the quantity and the client's organisation.

Our technical office researches different designs, in every circumstance guaranteeing the target required, in total compliance with the quality of the end product. We also consider the logistical and climatic situation in which the machines will work.





## PRODUCT



Each product involves different quality characteristics and issues. For this reason, we conduct a detailed analysis with the client.

- Type of product
- Size
- quantity % of water / air
- T°C of the product inbound

## TARGET

The objectives must be clearly defined that you want to achieve.

- Hourly production
- Trolleys rotation
- Outbound T°C required



## CONDITIONS



It is extremely important to know the ambient conditions of the laboratory.

- Average % humidity
- Average laboratory T°C
- Logistics

## SOLUTION

Having defined all the variables, structural design begins by creating a room that adapts to the specific client.

- Dimensions
- Power and refrigeration capacity





## EXPAND YOUR BUSINESS...

### Optimise the production processes and expand your production.

In a modern laboratory, blast freezing is a necessary process to expand your business and save time.

Quick Freezing, thanks to the various advantages listed, allows maximum process optimisation and increased production.



#### 1. HIGH PERFORMANCE

Continuous work for the entire day maintaining the same performance in every condition and at maximum production.

#### 2. LESS DEFROSTING

Less defrosting phases (every 8 hours) and defrosting times equal to 15-10 min.

#### 3. TIME SAVING

High performance and less defrosting allow you to gain lots of production time.

#### 4. INCREASED PRODUCTIVITY

High performance and less defrosting allow you to gain lots of production time.

#### 5. LESS CONSUMPTION

Balancing the various technical elements, balancing the power in Kw and ventilation reduces electricity use by up to 20%.

#### 6. MORE COMPACT

Often, the space in laboratories prevents good organisation. Our machines are designed to minimise the space necessary, without sacrificing performance.

#### 7. HIGHER QUALITY

More advantages due to guaranteed maintained product original quality.



#### ADVANTAGES

Each improvement made to your work allows you to increase profits and have more resources to invest in your business.



...WITH THE BEST POSSIBLE RESULT



# BUILT TO WORK

Made for hard work, 24 hours a day.

Our rooms were designed to support intense work sessions 24/7, without ever stopping, making them an essential element in every laboratory.

## STRUCTURAL DETAILS



- Modular structure with 100mm thick hook panel
- Internal structure in aisi 304 stainless steel
- 120 mm thick panelled door with airtight seal.
- Mechanical components resistant to heavy stress.
- 120mm thick insulated floor reinforced with aisi 304, 3mm thick steel slabs.
- Door opening sensor.
- Door frames in aluminium with resistance. • Internal led light.

## SYSTEM DETAILS

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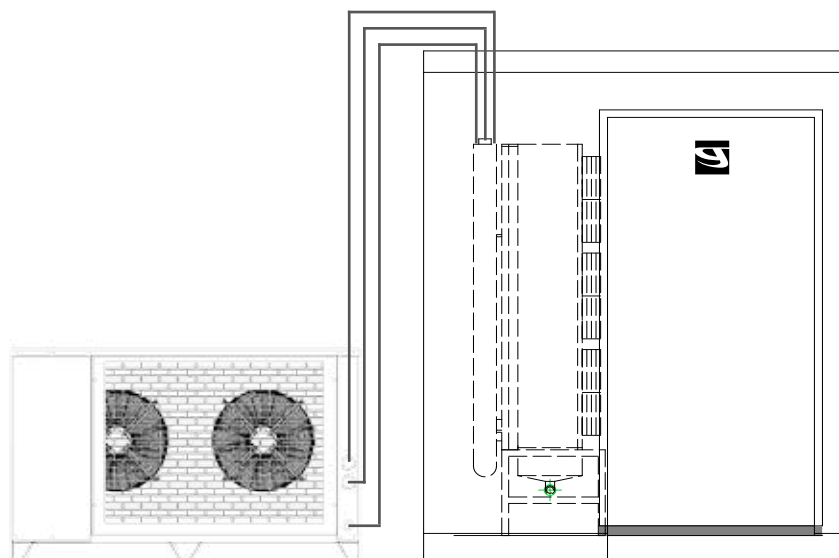
- Large surface evaporator
- Vertical wall evaporator (QF-QM)
- Ceiling evaporator (QT-QS)
- Larger fin spacing for reduced defrosting
- Hot gas defrosting



Constant, maximum performance for 24h, non-stop working day.



- BITZER semi-hermetic motor compressor
- Ultra-tropicalised condenser to also work in ambient temperatures up to 45°C
- Ventilation control with pressure sensor
- Electric box easily accessible and equipped with every safety device according to CE standards.
- Temperature, defrost and needle probes.



## PERFECTLY BALANCED

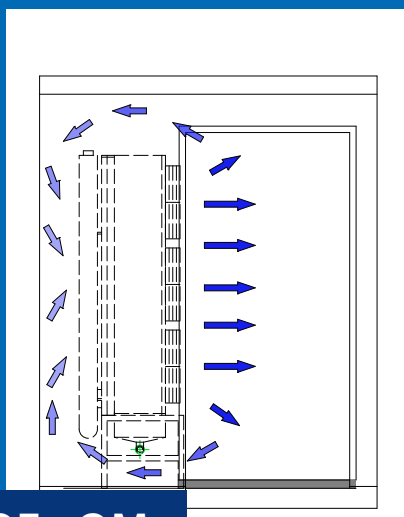
Every element is balanced.



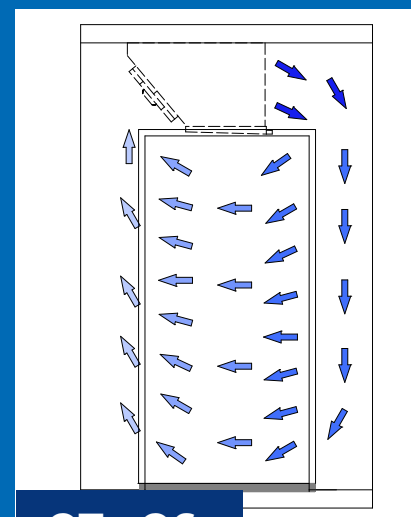
Each system is manufactured according to a balancing principle among the various elements composing it: the evaporator, condenser and motor work together to reduce electrical consumption and increase performance.

### SISTEMA DI VENTILAZIONE

The volume and speed of the air in the QUICK FREEZING rooms are balanced to reach the desired temperature at the heart of the product in the shortest time possible, without being harsh on the product.



**QF - QM**



**QT - QS**

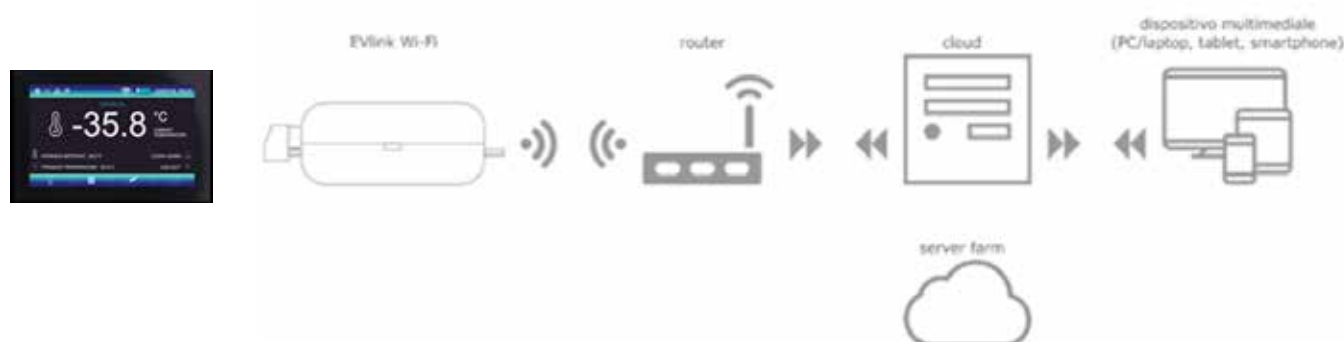




## TECHNOLOGICALLY ADVANCED

TRC, an entirely new technology.  
Also monitors the work from remote.

TRC - Thermogel Remote Control is a remote management and monitoring system based on the Cloud platform. A wireless Internet connection system suffices on site so that the controller can connect to the cloud system, allowing remote management of the machines via PC, tablet or smartphone.



TRC provides the possibility of one or more users enabled to operate the unit to configure the parameters, display HACCP data (also in graphic format) and download records.

Functionalities include alarm notifications, which the system automatically sends to the selected e-mail addresses.



## SIMPLE AND MODERN

Cards with an intuitive, simple, clear and user friendly interface.

### BLAST CHILLING AND BLAST FREEZING

The DIGITH SUR card manages automatic blast chilling and blast freezing programs that are divided into 4 phases, sub-divided as follows:

- phase 1. BLAST CHILLING
- phase 2. REFRIGERATION
- phase 3. BLAST FREEZING
- phase 4. STORAGE

The board also allows downloading work data in two ways: remote access via web (TRC) or via USB port.

### NEGATIVE STORAGE

DIGITH COLD is an innovative touch control specifically for professional storage.

Thanks to its multiple functionalities and tools, every aspect can be managed of the machine, allowing continuous operational management and perfect management of relative humidity.

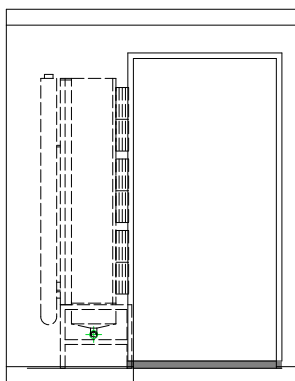
- Graphic diagram with temperatures display
- Remote web access (TRC)
- Downloading data via USB port

# TECHNICAL TABLE

QF

BLAST CHILLING AND  
BLAST FREEZING

▼ -40°C | -35°C



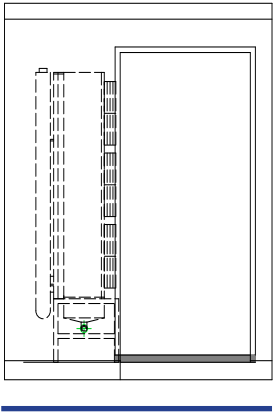
Code	Trolley		(WxDxH) External	Door	HP	Kg/h	Volts/Kw
QF1411	1- 450x600		1460x1100x2400	1 - 600x1950	3	30	400/3,5
QF1613	1- 670x800		1660x1300x2400	1 - 800x1950	5	50/60	400/4,5
QF1813	1- 800x1000		1850x1300x2400	1 - 900x1950	7,5	60/80	400/7
	Trolleys 670x800	Trolleys 800x1000	(WxDxH) External 1850 W	Door 900x1950			
QF1822	2	-	1850x2200x2400	2	10	100/120	400/9
					15	120/160	400/13
QF1824	3	2	1850x2400x2400	2	15	120/160	400/13
					20	220/240	400/17
QF1833	4	3	1850x3300x2400	2	20	220/240	400/17
					25	320/380	400/25
QF1845	6	4	1850x4500x2400	2	25	320/380	400/25
					30	380/420	400/33,5
QF1868	8	6	1850x6800x2400	2	40	420/480	400/42
					2x25	520/580	400/55
QF1888	10	8	1850x8800x2400	2	2x30	630/690	400/62
					2x40	730/790	400/85
			(WXDXH) External 2100 W				
QF21XX	-		2100x XXXX x XXXX	1 - 1100x1950	-	-	-

# TECHNICAL TABLE

## QM

BLAST CHILLING AND  
BLAST FREEZING

▼ -40°C | -35°C

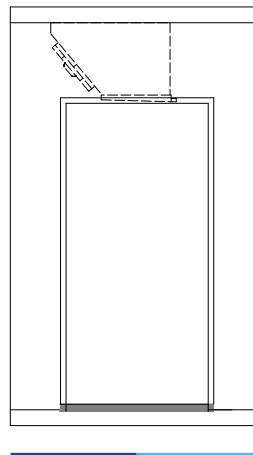


Code	Trolleys 600x450	(WxDxH) External	Door 600x1950	HP	Kg/h	Volts/Kw
QM1515	2	1500x1500x2400	1	5	50/60	400/4,5
QM1522	3	1500x2200x2400	2	7	60/80	400/7
QM1527	4	1500x2700x2400	2	10	100/120	400/9

QT

## BLAST FREEZING + NEGATIVE STORAGE

▼ -38°C | -20°C



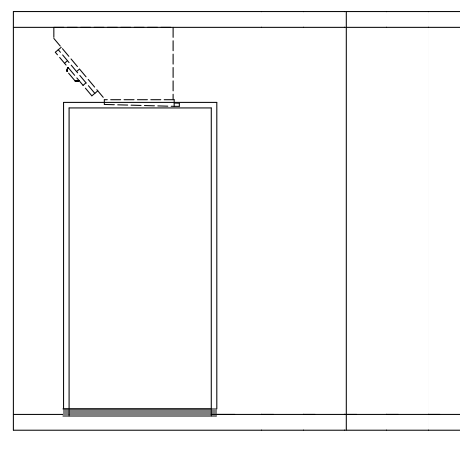
Code	Trolley		(WxDxH) External 2300 H	Door	HP	Kg/h	Volts/Kw
QT1011	1 - 450x600		1000x1100x2300	1 - 600x1900	4	30	400/3,5
QT1212	1 - 670x800		1200x1200x2300	1 - 800x1900	5	50	400/4,5
	Trolleys 670x800	Trolleys 800x1000	(WxDxH) External 2600H	Door 900x1950			
QT1624	3	2	1600x2400x2600	2	10	100/120	400/9
					15	120/160	400/13
QT1633	4	3	1600x3300x2600	2	15	160/180	400/13
					20	180/220	400/17
QT1645	6	4	1600x4500x2600	2	25	220/260	400/25
					30	280/360	400/33,5
QT1668	8	6	1600x6800x2600	2	30	280/360	400/33,5
					40	360/440	400/42

QS

## NEGATIVE STORAGE

▼ -20°C

In this case, there is no technical table because this design would be completely made-to-measure.



50 YEARS  
OF EXPERIENCE  
■ ■ *made in Italy*



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