

Scope of application :

→ Hot or fresh products :
100°C à -18°C

→ Solid, pasty and liquid products :
sauces, fruit juices, purees, ice creams.

→ IQF Products :
meat cuts, lardons, whole fish or fish filets,
entire or diced vegetables, entire or diced
fruit, bread and bread dough, pastries,
omelettes and egg products,
butters and cheeses.

→ Prepared meals :
bourguignon, lasagnes, paellas, pizzas.

→ Single or stacked products :
in tray format, packaged
(with or without protective covering).



Our experience : **Over 250 tunnels installed since 1994**

→ In France
Amural, Armoric-Meralliance, Bernard, Bourgoin, Cecab, Celvia, Dessaint Traiteur, Doux,
Findus-Nestlé, Gelagri, ITM Intermarché (SVA, Gatine Viandes), IMEF Halios, Labeyrie,
LDC Groupe, PAM, Routhiau, Sovivo (Leader Price), Sicard, Varachaux.

→ In Europe
Belgium, Netherlands, Luxembourg, Denmark,
Spain, Greece, Hungary, Iceland, Italy, Poland,
United Kingdom, Scandinavia, Slovakia : Baarsen,
Bakki, Bel, Danish Crown, Farne, Inalca, LDC
Drosed, Pinguin, Saga Foods, Sagit-Unilerver,
Surgital.

→ America
USA, Latin America
(Argentina, Chile, Brazil) :
Faendora, Frangosul,
Tyson Food.

CIMS
Surgelation

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**multifreezer**[®]
FREEZING AND CHILLING TUNNEL



Deep-freezing



Stiffening

Chilling

CIMS
Surgelation

The quality of cryogenics at price of mechanicals cooling.

Multifreezer® -F

with conveyer film for unpacked, sensitive or IQF products.

The product is chilled or frozen using a combination of two methods :

- Conduction by contact with a refrigerated base,
- Cold air impeechments convection using patented impact slot technology.

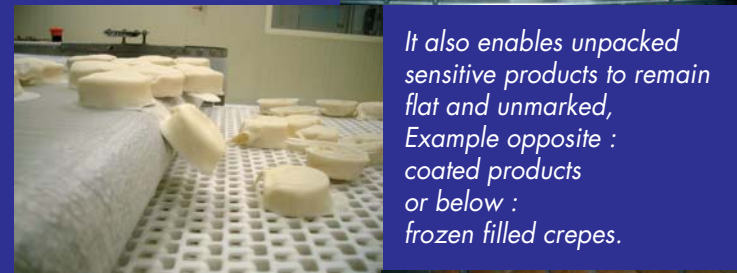
The tunnel has a favourable surface exchange coefficient thanks to excellent control of temperature and air speed.



Products remain flat on the belt, which improves slicing
Example opposite : salmon.



IQF product packaging is facilitated.
Example opposite: poultry.



It also enables unpacked sensitive products to remain flat and unmarked,
Example opposite : coated products or below : frozen filled crepes.



Liquid and pasty products can also be chilled, portioned and then frozen.
With this model, the film forms a small edge due to the action of the side guides.
Example opposite : sauces and purees.



multifreezer®

FREEZING AND CHILLING TUNNEL



The advantages of Multifreezer® :

• Perfectly controlled hygiene.

A single-use conveyer film provides a continuous supply of products to be frozen.

An isolated chamber completely encloses the entire system and complies with maintenance requirements, facilitated by its access corridor and interior lighting. Easy access to the various elements allows unproblematic cleaning.

• A high-quality frozen product :

Very little water loss due to evaporation (<1%), no sticking or marking from the transfer process, the Multifreezer® preserves the tastiness and nutritional values of the food processed.



• A multi-purpose method

The Multifreezer® can be used for all types of chilled product processes (deep-freezing, chilling, crusting...).

The Multifreezer® can be used for virtually all products to be chilled.

• An inexpensive solution offering greater efficiency

Running costs are relatively low (under 0,05€/kg of product) and the transfer speed is considerably higher than other existing processes.

Technical specifications

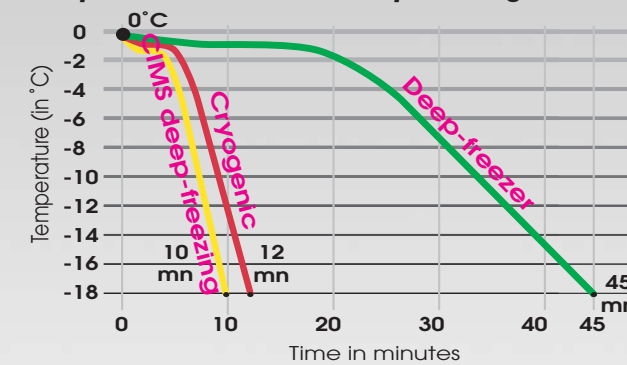
Specifications of tunnels already installed :

Length : 4 m - 30 m
Film width : 1 m - 2.1 m
Modular belt width : 0.5 m - 1.6 m
Weight capacity : 100 - 4,000 kg/h

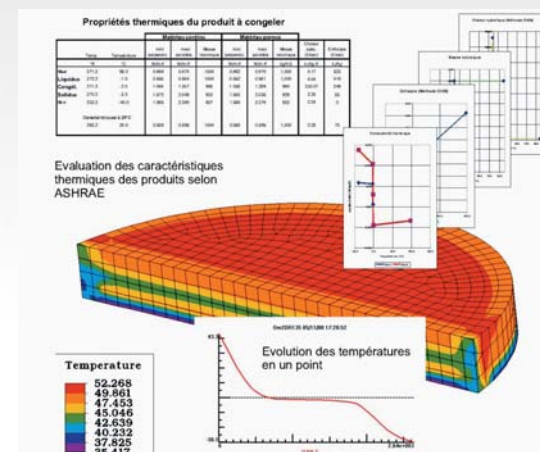
General Specifications :

Liquids used with a pump supply : ammoniac, glycol water, freon, alkali, Tyfoxit, CO2 (-50°C)
Temperature : -30 °C or -40 °C
Total height : 2,500 mm maximum
Loading height : 800 - 900 mm
Product Temperature : 100 °C to -18 °C
Film used : high density PE from 10 to 30 µ, foodstuff certified (>0.01€/m²)
Film conveyer speed : variable
Cleaning : < 500 litres of water
Minimum time without defrosting : 20 hours
Electrical installation : 380 V 3-phase, plus earth / 50 Hz

Comparison with various deep-freezing methods :



Reading and measurements based on technological studies :



Multifreezer® -T

with modular Acetal open-link mesh belt (for sturdy or already packaged products) or stainless steel mesh (for heavy products).

Chilling by convection with the new, patented CIMS air reflection system.



This model is also used for products requiring a very short passage and a very rapid conveyor time such as crepes (30 seconds).



Opposite : pork loin or ready-to-slice ham loaves.
It takes under four minutes to form a 10 mm crust on a 9 kg pork loin.

Multifreezer® Test Center



CIMS offers its customers the use of its small test tunnel and measuring centre to test new products or simply check the appropriateness of its technology for various applications.