THE LINDE GROUP

CRYOLINE® CW. Multi-purpose freezer.

Concept

The patented CRYOLINE® CW is a unique multi-purpose freezer which combines the high-quality IQF freezing characteristics of the CRYOWAVE system with the high efficiency of the CRYOLINE® MT tunnel. To switch from the IQF mode for small, free-rolling items, such as shrimp, pizza toppings, fruit and prepared foods, to the standard tunnel mode for traditional products, such as patties and pizzas, takes just a few moments, making this a flexible and versatile freezer. In addition, the CRYOLINE® CW provides free-flowing product characteristics with a very high belt loading, saving space and giving lower running costs compared to conventional systems.

The CRYOWAVE controllable vibration technology rapidly freezes the product, sealing in moisture as it is conveyed through the freezing zone. This retains weight and produces high yield and quality.

Refrigerant

As cryogenic medium, either liquid nitrogen or carbon dioxide can be used, which further enhances the flexibility and versatility of the freezer.

Operation

The CRYOLINE® CW freezers employs a mechanism that impacts a vibratory motion to the conveyor belt, creating a "wave-like" motion along the length of the conveyor. As food product travels through the freezer, the agitation dislodges the product piece from the surface of the belt and from surrounding products, while it is sprayed with cryogen.

The combination of agitation and simultaneous injection of cryogen ensures rapid cooling of the product, forming an outer crust that locks in the moisture. Thus, the product yield and quality critical for value-added, IQF seafood and poultry products is maintained.

The CRYOLINE® CW freezer can be operated as a standard tunnel freezer by disengaging the vibration motion in the front zone of the freezer.

Recipes can be simply loaded into the tunnel by accessing the recipe screen in the touch panel, allowing the storage and recall of the operational parameters of all product types.

CRYOLINE® is a registered trademark of The Linde Group.

Hygiene

The simplicity of the design enables the customer to maximise productivity by reducing cleaning and maintenance downtime. CRYOLINE® freezers are designed for hygiene and ease of cleaning, starting with the freezer's sloping floors and centre trough drainage. All internal components are stainless steel or polyethylene construction. Modules are fully welded, ground and finished. The freezer top lifts vertically via an electric screw jack, providing full access into the tunnel for cleaning. A control panel allows data storage of operating parameters for quality assurance tracking and traceability.

Standard configuration

- → The fully assembled and pre-tested freezer is delivered with the following features:
- → Multi-language touch-screen control panel
- → Retention time control
- → Variable speed exhaust fans to maximise efficient use of the refrigerant
- → Variable speed circulation fans with automatic defrost
- → Fully welded stainless steel construction
- → Stainless steel mash belt
- → Height adjustable feet

Model range

The CRYOLINE® CW freezer is available in 1060 mm belt width. The CRYOLINE CW freezer is available in 1060 mm belt width and length from 5 to 14 meters.

Options

Linde offers a belt washer for the CRYOLINE® CW freezer, which is connected to the freezer at the product infeed.

Technical data

CRYOLINE® CW

	CRYOLINE® CW 1000-5	CRYOLINE® CW 1000-8	CRYOLINE® CW 1000-11	CRYOLINE® CW 1000-14
Overall length	5320 mm/17.4 ft	8320 mm/27.3 ft	11320 mm/37.1 ft	14320 mm/46.9 ft
Overall width	2167 mm/7.1 ft	2167 mm/7.1 ft	2167 mm/7.1 ft	2167 mm/7.1 ft
Overall height (closed)	2203 mm/7.22 ft	2203 mm/7.22 ft	2203 mm/7.22 ft	2203 mm/7.22 ft
Overall height (open)	2752 mm/9 ft	2752 mm/9 ft	2752 mm/9 ft	2752 mm/9 ft
Infeed height	904 ± 100 mm/ 35.6 ± 3.9 in	904 ± 100 mm/ 35.6 ± 3.9 in	904 ± 100 mm/ 35.6 ± 3.9 in	904 ± 100 mm/ 35.6 ± 3.9 in
Maximum product height (IQF products)	50 mm/2 in	50 mm/2 in	50 mm/2 in	50 mm/2 in
Maximum product height (standard tunnel)	100 mm/4 in	100 mm/4 in	100 mm/4 in	100 mm/4 in
Usable belt width	1060 mm/42 in	1060 mm/42 in	1060 mm/42 in	1060 mm/42 in
Voltage, 3 phase 3N/PE	380/500 32 A	380/500 32 A	380/500 32 A	380/500 63 A

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1009 – 1.1 L&P Subject to change.