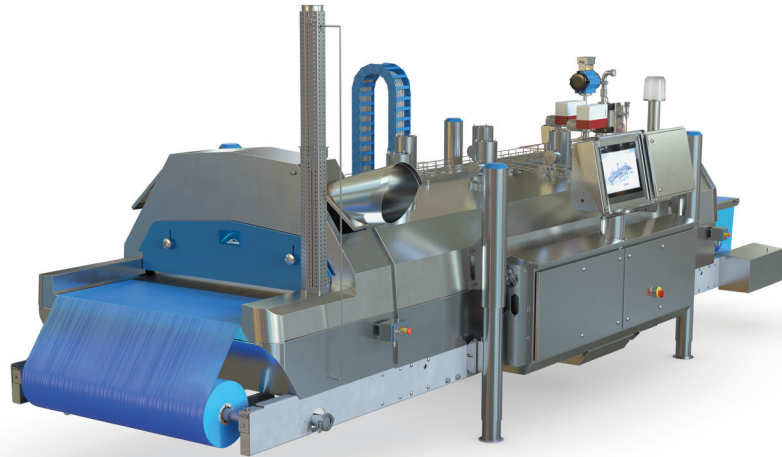




CRYOLINE® SC. Super Contact Freezer.





Concept It is becoming increasingly challenging for food producers to meet consumer demand for more appealing food choices that meet safety requirements. Chilling and freezing are the preferred preservation methods to increase shelf life and maintain food quality. However, there are several products that are either too delicate or that do not maintain their shape well when processed in traditional mechanical freezers.

The CRYOLINE® SC cryogenic freezer from Linde is designed to process delicate, sticky and hard-to-handle products in an efficient and hygienic way. It uses a disposable plastic film which acts as the conveyor belt travelling through the freezing tunnel over cryogenically refrigerated plates. These plates operate at -196°C , rapidly and effectively freezing the contact surface of the product, while the tunnel environment is cryogenically cooled by liquid nitrogen to reduce the entire product temperature. The consolidated features of this freezer technology deliver products free from belt marks and wrinkles so they can be easily handled for further processing. Due to the nature of the belt, soft, wet or sticky products can be managed without product deformation or adhesion – even liquids can be frozen with ease. As the belt is disposable, the freezer can be quickly and efficiently cleaned at the end of production, ready for the next day's use, and product changes do not require expensive delays.

Features and benefits

- Handles soft, sticky or marinated products with ease, reducing handling and spoilage
- Leaves no belt marks or deformation due to the plastic film belt, giving better appearance and quality
- Easy to clean, as all parts are accessible, reducing cleaning time and improving hygiene
- Due to the single-use film, different products can be processed without cleaning steps
- The gas control system makes optimum use of liquid nitrogen, ensuring high efficiency
- High capacity on a small footprint, making optimum use of the available space
- Low capital investment required
- Newly updated to state-of-the-art controls
- Easy-to-use, multi-language touch-panel interface
- Production events and trends downloadable for full traceability



Model range

The CRYOLINE  cryogenic freezers come in two standard widths (600 mm and 1250mm), with the basic model having a usable length of 5 meters. It is also modular, with the possibility of adding 3-meter tunnel sections to boost capacity, where required. Each freezer is based on the shell of the highly successful CRYOLIN , which offers great accessibility combined with tried-and-tested reliability. The required freezer size depends on the throughput of products, their temperature and bulk density. The method of feeding the product into the freezer also has to be taken into account.

Operation

The CRYOLINE® SC is a contact freezer which removes heat from the product by means of contact with the cold plates. The gas generated by the vaporization of the liquid nitrogen is then vented to the atmosphere. As the temperature of the exhaust is controlled, the amount of cold extracted from the nitrogen can be optimized according to the production demands. High-speed fans circulate the cold gas atmosphere inside the tunnel and help to freeze the upper surface of the product.

Technical data

	Overall length	Overall width	Height opened	Height closed	Retention time	Modules
CRYOLIN  1250						
1250-5	5000	2225	2650	2100	0.5-18	0
1250-8	8000	2225	2650	2100	1.0-30	1
1250-11	11000	2225	2650	2100	1.5-45	2
1250-14	14000	2225	2650	2100	2.0-60	3
CRYOLIN  600						
600-5	5000	1600	2650	2100	0.5-18	0
600-8	8000	1600	2650	2100	1.0-30	1
600-11	11000	1600	2650	2100	1.5-45	2
600-14	14000	1600	2650	2100	2.0-60	3

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