OctoCore



OctoCore IQF Freeze

For individual quick freezing with natural product appearance, high food safety and energy efficiency.

The OctoCore IQF Freeze rapidly freezes individual pieces of food using controlled, adjustable airflow. Products are carried through the freezer on fluidized bedplates, which move the product gently to prevent clumping and preserve its natural shape, colour and texture. Adjustable freezing zones, each with independently controllable fan speed, allow the airflow to be tailored to the specific product being processed, supporting consistent freezing quality, high yield and low energy consumption.

Product Applications

Suitable for berries, fruits, vegetables, meat and poultry, seafood, cheese, pasta, rice and grains, plant-based products and pet food.









Key Benefits

Natural Product Appearance: Rapid crust freezing seals the surface of each piece, while gentle bedplate handling prevents clumping and surface damage.

Compact Design: Up to 50% smaller than traditional site-built belt freezers with the same capacity, saving valuable floor space.

High Yield, Low Dehydration: Precise airflow and freezing time control keep product dehydration below 0.3%, helping retain more product weight after freezing.

Energy Efficiency: Optimal aerodynamics, high-performance fans and a high-capacity coil keep energy use low. The elevated housing also removes the need for floor heating.

Easy to Clean: Interchangeable bedplates can be removed and cleaned outside the freezer, reducing the risk of cross-contamination and minimising downtime.

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Working Principle

Products enter the freezer and are carried through several freezing zones on fluidized bedplates. The bedplates gently moves the product through the different freezing zones. Frequencly controlled fans direct cold air upward through the bedplates, fluidizing the product so it moves gently without sticking or clumping. Fan speed is adjustable in each zone. This tailors the airflow to each stage, from crust freezing to core freezing. The result is a natural product appearance and minimal dehydration.

Key Technical Data

Processing method	IQF with adjustable air fluidization
Freezing Zones	Up to 5, each with adjustable fan speed
Fan type	Frequency controlled axial vane fans
Fan speed range	Approximately 30–85%, depending on product
Bedplates	Interchangeable, perforated, puzzle-connected, in food-grade plastic
Fluidization types	Circulating, bubbling and fixed bed
Enhancing functions (optional)	Bedplate vibrator, waveplate or bedplate pulsator
Crust freezing belt (optional)	For sticky products i.e. tropical fruits
Coil cleaning	Snow Removal System (SRS) extends the time between defrost cycles
Control panel	Touchscreen HMI
Recipe management	Up to 99 recipes
Controls	Siemens or Allen Bradley PLC,
Cleaning option	Foaming system and spray balls
Lateral door	Fully opening. Motor driven (optional)
Construction	Housing in fibre glass, epoxy or stainless steel, elevated on own feet

Models and Configurations

The OctoCore IQF Freeze is available in 16 models, with capacities ranging from 1,350 kg/h to 15,000 kg/h (2,970 lbs/h to 33,069 lbs/h). Model size is selected according to required capacity, product characteristics and available factory space.

Line Integration

The OctoCore IQF Freeze can operate as a standalone machine or as part of a continuous processing line, with adapted infeed and outfeed conveyors supporting stable product transfer.

Fast installation
The OctoCore IQF Freeze is delivered pre-assembled and ready for operation within 2 to 3 days of arrival, with no need for a concrete foundation or other fixed installations. Delivered as a complete unit for straightforward installation and commissioning, OctoCore provides supervision, operator training and application support to help ensure a smooth start-up.

One Partner for the Processing Line
OctoCore can coordinate equipment interfaces, product transfers and line layout across multiple processing stages, and can deliver complete processing lines, including grilling, frying, blanching, cooking and chilling equipment ahead of the freezing step.

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