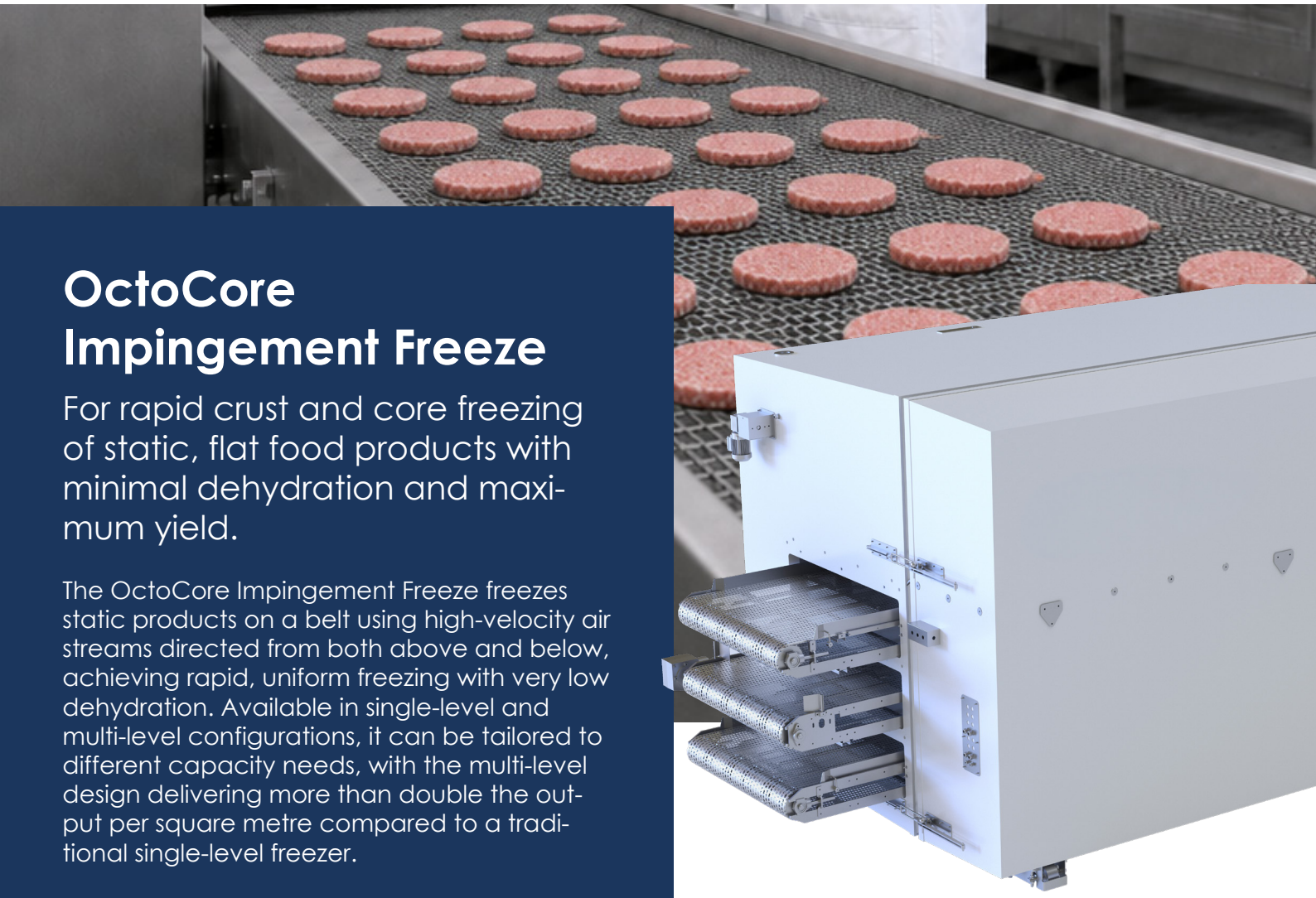
OctoCore



OctoCore Impingement Freeze

For rapid crust and core freezing of static, flat food products with minimal dehydration and maximum yield.

The OctoCore Impingement Freeze freezes static products on a belt using high-velocity air streams directed from both above and below, achieving rapid, uniform freezing with very low dehydration. Available in single-level and multi-level configurations, it can be tailored to different capacity needs, with the multi-level design delivering more than double the output per square metre compared to a traditional single-level freezer.

Product Applications

Suitable for static, flat or formed products, including thin protein products, coated products, pastries and shrimp and seafood with glazing.









Key Benefits

High Capacity, Small Footprint: A small footprint that makes efficient use of factory floor space, without compromising on freezing capacity.

Low Dehydration, High Yield: Rapid crust and core freezing preserves product weight, texture and natural appearance, especially valuable for meat and seafood products.

Flexible Processing: Each belt level can run at a different speed, and up to three different products can be frozen simultaneously, one per level.

Fast Installation: Delivered pre-assembled and ready for operation within days, with no concrete foundation or on-site construction required.

Precise Airflow Control: High-speed air jets, over 40 m/s, directed from both above and below ensure rapid, uniform freezing across the full product surface.

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Working Principle

Products travel through the freezer on one or more straight belts, each enclosed in a dedicated air chamber. High-speed air jets, directed from both above and below, strike the product surface directly, breaking down the insulating air layer and rapidly freezing a firm outer crust. In multi-level configurations, each belt runs independently, with adjustable speed and airflow per level, allowing different products or freezing requirements to be handled simultaneously.

Key Technical Data

Processing methods	Crust freezing and core freezing
Freezing method	High-velocity air impingement, from above and below
Air jet speed	Over 40 m/s
Belt configuration	Single-level or multi-level (up to 3 levels)
Belt speed	Independently adjustable per level
Glazing capability	Up to 35% glazing with a single glaze hardener
Construction	Stainless steel, elevated housing
Cleaning	Open, accessible for easy cleaning
Controls	Touchscreen interface with recipe management

Models and Configurations

Single-Level: Ideal for in-line crust freezing, static IQF freezing, or fast chilling. Unlike multi-belt configurations, where products are flipped between tiers, the single-layer design maintains product orientation throughout the freezing zone, making it ideal for delicate or shape-sensitive products. The belt can be fitted with side flights or separators to create multiple product flows on the same belt, offering a highly efficient width-to-capacity ratio.

Multi-Level: Designed for static freezing across up to three levels, with product flipping capability between levels and true impingement freezing via dedicated air chambers on each level. Each level can run at a different speed, and the freezer can process up to three different products simultaneously, one per level.

The 3-Level Impingement Freezer is available in six sizes, with total power ranging from 63 kW (2M) to 213 kW (7M), depending on required capacity.

Glazing Configuration: A three-belt setup with glazing units installed on both sides of the freezer, enabling up to 35% glazing with a single glaze hardener, a space-saving solution for seafood processors seeking both rapid freezing and precise glazing in one system.

Line Integration

The OctoCore Impingement 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. Its open, low-profile design requires no concrete foundation or heating cables, unlike traditional spiral freezers, and fits easily into factories with limited ceiling height.

Fast installation
Delivered pre-assembled and ready for operation within days of arrival, compared to the several weeks typically required for on-site assembly of spiral freezers. 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 blanching, cooking and chilling equipment ahead of the freezing step.

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