OctoCore



OctoCore IF-Chill

For rapid, gentle cooling that preserves product quality.

The OctoCore IF-Chill rapidly cools food products below 5°C using a high volume of ice-cold water, commonly after blanching, cooking or other heat treatments. A rainshower system delivers the water gently from above, breaking the insulating layer of air around the product for fast heat transfer (impingement flash), while a plate heat exchanger maintains a steady supply of water at 1°C. This combination supports uniform, rapid cooling that helps preserve product quality, retain nutrients and improve yield ahead of downstream processes such as IQF freezing.

Product Applications

Suitable for tropical fruits, fruits, berries, vegetables, fish and seafood, pasta, rice and grains.









Key Benefits

Rapid, Uniform Cooling: A very high water flow of 80-160 m³/h at 1°C ensures rapid cooling, preserving the texture and colour of the food product. The cross-flow system distributes the water evenly, so the water temperature is the same throughout the chiller.

Preserved Product Quality: Rapid cooling together with the gentle rainshower system protects the product's natural shape, texture and appearance.

Energy Efficient: A low Delta T (maximum 2°C temperature increase after passing the product) means very little energy is needed to re-chill the water.

Easy Access: An open, accessible design simplifies maintenance and cleaning.

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Working Principle

Products travel through the chiller on a conveyor belt, where a rainshower system delivers ice-cold water directly onto the product using gravity alone. The falling water enables fast, even heat transfer by breaking the insulating layer of air around the product. This is known as impingement flash. A cross-flow water system distributes a high volume of filtered, recirculated water evenly across the full width and length of the chiller. The water then leaves the chiller and returns to a plate heat exchanger, which restores it to a steady 1°C.

Key Technical Data

Processing method	Cross-flow rainshower system
Cooling method	Plate heat exchanger, recirculated water
Water temperature	Recirculated water 1-1,5°C
Product exit temperature	< 5°C
Water filtration	Filtered and recirculated
Belt width	1 000-1 500 mm
Belt type	Stainless steel or plastic (modular)
Control panel	HMI and electrical cabinet on machine body
Recipe management	Up to 99 recipes
Controls	Siemens or Allen Bradley PLC, computer-based Windows HMI (touch screen)
Construction	Stainless steel AISI 304 (AISI 316 optional)
Brine chilling (optional)	For < 0°C temperature
UV-filter (optional)	Available
Hygenic design	In line with the EHEDG guidelines

Models and Configurations

The OctoCore IF-Chill is available in six models with different lengths and capacities, to match production needs.

Line Integration

The OctoCore IF-Chill can operate as a standalone machine or as part of a continuous processing line, with adapted infeed and outfeed conveyors supporting stable product transfer. It is commonly positioned directly after an OctoCore IF-Blanch, allowing products to move from hot blanching water to ice-cold chilling water in a single connected line. It is also often placed ahead of a freezer, ensuring a low core temperature when the product enters the freezer.

Fast Installation
Delivered as a complete unit for straightforward installation and commissioning. OctoCore provides supervision, operator training and application support to help ensure smooth start-up.

One Partner for the Processing Line
OctoCore can coordinate equipment interfaces, product transfers and line layout across multiple processing stages.

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