

CRYSTALLIZER, COOLER & HEATER

Patented Heat Transfer Technology For The Food Industry



WHY ICEGEN?

IceGen technology combines the efficiency of plate heat exchangers with the robustness of scraped surface heat exchangers. It is designed to meet the rigorous demands of the food industry.

IceGen is particularly suitable for prepared foods, fruit juices, beverages, and dairy applications, delivering unmatched heat transfer and product handling performance.

IceGen is capable of handling a wide variety of products, including delicate particulate products, thanks to its low-speed scraping arms that ensure gentle product treatment. This innovative technology redefines efficiency, performance, and space optimization in food processing.

APPLICATIONS

IceGen is designed to handle a wide range of food products, particularly where maintaining product quality and consistency is critical.



Viscous products:

sauces, dressings, hummus, and nut butter



Dairy:

cream, yogurt, ice cream, and cheese processing



Prepared foods:

soups, fillings, purges, and ready meals



Protein applications:

meat, pet food, and plant-based products



Bakery:

dough, batters, and fillings



Beverages:

Juice, concentrates, and liquid products



KEY BENEFITS



GENTLE PROCESSING

Protects product texture, structure, and overall quality, even for sensitive or particulate-containing products.



COMPACT DESIGN

Minimizes floor space requirements and simplifies installation.



PRECISE TEMPERATURE CONTROL

Manages heat transfer directly within the product to ensure consistent conditions throughout processing.



HANDLES DIFFICULT PRODUCTS

Designed to process viscous, sticky, and multi-phase products with ease.



FLEXIBLE OPERATION

Can heat, cool, or freeze within a single system, offering greater process flexibility.



HIGH EFFICIENCY

Maximizes heat transfer performance while reducing energy consumption.

The IceGen Crystallizer, Cooler and Heater is a high-efficiency solution designed to optimize production processes in demanding industrial environments. It delivers **reliable performance, improved process control, and consistent product quality.**

High Viscosity & Freezing Capability

Handles high-viscosity products and can freeze up to 50% solid content. Allows inline freezing and processing of semi-frozen flows, improving production efficiency.

Cost Savings & Space Efficiency

Replaces multiple traditional scraped surface heat exchangers, cutting capital costs and saving valuable floor space.

Minimal Maintenance & High Operational Efficiency

Requires minimal annual maintenance for maximum uptime. Fully automated with seamless integration into existing control systems for ease of use.

Flexible Refrigerant Compatibility

Compatible ammonia, freon and glycol feeds, offering operational flexibility to suit a wide range of facility requirements.

Heavy Duty & Compact Design

Built for continuous operation, its compact, thin-walled welded cassette construction enhances heat transfer while saving space.

Certifications & Compliance

Available with ASME and PED certifications, ensuring adherence to international standards. Meets 3A Certification for the highest hygiene standards, especially in dairy and food processing.

High Flow & Large Particulate Handling

Processes up to 200 GPM (45,000 liters/hr) and handles large particulates, making it ideal for products like meat or vegetable inclusions.

Clean-In-Place (CIP) Mode

Includes automatic cleaning integrated into control logic, ensuring sanitary operation with no downtime. (When supplied by IceGen).

