impingement freezer
WHO WE ARE

About FPS

We are a global manufacturer of industrial food processing freezers including spiral, IQF, impingement & CF/VRM freezers. Based right outside of Vancouver, British Columbia, Canada, we have over 140,000 ft² of manufacturing space integrating the latest fabrication technologies.

OUR VISION

Revolutionize Hygienic Standards

We use the most leading edge technology & innovation to move our industry forward. Our focus on hygiene is the foundation for safe food production. Our purpose is to revolutionize food processing & ensure the cleanest & safest global food production for everyone.

OUR MISSION

To Set a New Standard

We invest in our people & partners & believe strong collaboration always leads to the best results. We aim to raise the bar in our culture, in client relationships, in the level of service offered & global hygienic standards. We believe that together, we will set a new standard.
Impingement Freezers

Our impingement tunnels have been developed for a range of cooling and freezing requirements—from precooling and crust freezing products for further processing to complete freezing. Our impingement tunnels incorporate a hygienic ducting system to deliver high velocity air to quickly cool and freeze products. Implementing air slot impingement design, product with varying geometries can be effectively cooled and frozen with minimal changes in the freezer.

With multiple belt arrangements, belt widths and belting options, our impingement tunnels are carefully designed to match your processing need to optimize efficiency and product yield.
EXTERIOR

Our focus on hygienic design pushed us to think outside the box – literally. We believe in minimizing the number of components inside the freezer by either eliminating extraneous elements or mounting them outside. With a specialized design welded enclosure allowing for embedded support structure, all electrical motors can be externally located for longer durability of electrical components and reduction of internal components to clean. Our Clean-in-Place (CIP) system complements the freezer with an integrated pasteurization cycle to ensure a food safe environment before every start-up. Each of these details reduces the total cost of ownership in the form of maintenance labor costs, replacement parts and operating energy savings.
Our definition of hygienic design lies beyond design of construction. We believe our equipment must be approachable and easy to use; that all details and design elements are accessible and cleanability with minimal ongoing costs. With these ideals in mind, the interiors of our freezers will ensure your products are frozen and cooled in a safe environment.

**INTERIOR**

**Stainless Steel Welded Enclosure**

Our robust stainless steel welded enclosure is manufactured with heavy gauge stainless steel and high-density polyurethane insulation eliminating the need of constant caulking of joints and harborage points for bacteria and mold. Our flexible bellow joints are TIG welded to ensure smooth food safe surfaces and tolerance for expansion and contraction during the rapid temperature cycles.

**Conveyor belting**

Offering a range of conveyor belting from stainless steel to plastic, we carefully evaluate the application and food products to ensure the best solution is provided.
Impingement Ducts

The air slot ducts function as air knives directing high velocity jets of cold air onto the product from above and below through the conveyor belt. The air knives blast away the boundary layer of air that holds heat around the product, resulting in a quick freezing process. This reduces ice crystal formation, dehydration, and drip loss during thawing.

Fully Welded Stainless Steel Floor

Our floor system is filled with polyurethane insulation foam and is designed with compound slopes to ensure effective drainage. There is a non-slip surface for safe accessibility inside the freezer. The floor is integrally designed with the internal structures with elevated solid support points.

Externally Mounted Fan Motors

With external directly coupled fan motors, we eliminate the constant maintenance and hygienic concerns of internal electrical components. We use centrifugal plug fans to generate high static pressure for effective impingement freezing.

IntelliSolutions Control Panel

Our PLC-based touch screen controls are easily navigated with customizable access levels and recipe programming. With various diagnostic tools and trend logging, problems can be easily addressed which can be furthered with our remote monitoring and troubleshooting services.

Hygienic Design

With meticulous focus on details we ensure all welds are continuous and components are installed with spacer offsets. All surfaces are designed with sloped surfaces for proper egress. Unnecessary structures and components are eliminated from inside the equipment or are integrated into the enclosure.

Internal Support Structure

Support structure is minimized by embedding components inside the enclosure or integrating supports into the CIP system. Our sanitary conveyor supports eliminate difficult to clean wear caps with solid support rails.
We Believe That Through Collaboration We Create Value.

We believe that through collaboration and partnership, we create value. When you enter into a relationship with us, you join our family. Together, we promise to set a new standard.