

FRIGOSCANDIA

FLoFREEZE® - IQF Freezers

The only true IQF freezers



FLoFREEZE® freezers, when product
quality and yield matters

FREEZING



jbtc.com/foodtech

Fresher than fresh.

True fluidisation boosts your profit.

We invented IQF freezing with true fluidisation in 1962, creating a new way for consumers to enjoy fresh fruit and vegetables – many months after the harvest.

Today, increasing consumer spending power is balanced by growing consumer health awareness. The demand for appetising frozen food products grows like never before. And true IQF freezing is still the most cost-effective way to create premium fresher-than-fresh food products that offer maximum convenience – and sell for a premium price.

The FLoFREEZE® A and FLoFREEZE M IQF freezers are available in a range of sizes, so you can choose the right freezer to suit your products and throughput requirements (see page opposite for more detailed guidelines).

Thanks to our continuous technology advancements, you can now IQF freeze a much greater range of product, in much less space, at much lower cost. At JBT, we promise you IQF freezing capabilities that serve and stimulate your growth and profit in this rewarding market.



**Example on Product Capacity (kg/h, +15/-18°C
(in-/out feed temp) at -40°C evaporation temperature.**

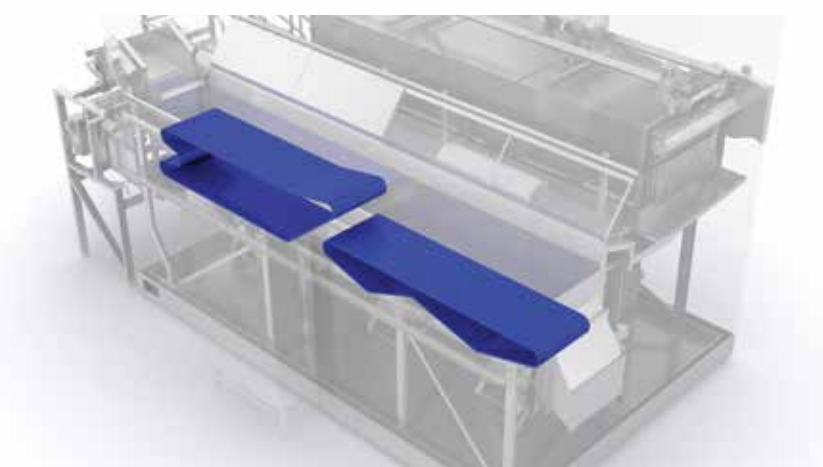
Guideline only, for more details contact JBT

FLoFREEZE Model	Sweet corn cut, Peas, Lingonberries, Shredded Mozzarella	Beans, Whole Brussels Sprouts (25-40mm), Potato & Carrot Diced/sliced, Blueberry (6% sugar), Currant	Whole Asparagus, Broccoli (cut 30mm), Cauliflower (florets 25-50mm), Leek (cut 25mm), Onion/Zucchini/Turnip/Papaya/Pear (diced 10mm), Rice, Sweet Pepper	Artichoke bottoms, Cabbage (cut 13mm), Pea Pod, Whole Potatoe (25mm), Mango/Peach (diced), Ham/Chicken (diced), Pasta (Farfalle, Gnocchi, Fusilli etc)	Corn (on the cob 150mm), Pasta (Spaghetti, Tagliatelle cut 50mm)
A10	1,000	850	700	550	400
A10e	1,200	1,020	840	660	480
A20	2,000	1,700	1,400	1,100	800
A20e	2,400	2,040	1,680	1,320	960
A30	3,000	2,550	2,100	1,650	1,200
A30e	3,600	3,060	2,520	1,980	1,440
A40	4,000	3,400	2,800	2,200	1,600
A40e	4,800	4,080	3,360	2,640	1,920
A50	5,000	4,250	3,500	2,750	2,000
A50e	6,000	5,100	4,200	3,300	2,400
M20	6,000	5,100	4,200	3,300	2,400
M25	7,000	5,950	4,900	3,850	2,800
M30	9,000	7,650	6,300	4,950	3,600
M40	11,500	9,775	8,050	6,325	4,600
M50	14,500	12,325	10,150	7,975	5,800
M60	17,500	14,875	12,250	9,625	7,000
M3SD	7,500	6,375	5,250	4,125	3,000
M4SD	10,000	8,500	7,000	5,500	4,000
M5SD	12,500	10,625	8,750	6,875	5,000
M6SD	15,000	12,750	10,500	8,250	6,000
M7SD	18,000	15,300	12,600	9,900	7,200



Application-specific IQF freezing is our specialty

Food processors are our driving force, and our greatest ambition is to make your processing operations more successful and profitable. The FLoFREEZE® freezer sets a new standard for IQF productivity, delivering food-focused quality to build your reputation and profit to drive your growth. Providing true fluidisation, it will serve even the most difficult products, while simultaneously meeting the industry's toughest requirements for hygiene, energy usage, operating economy and user-friendliness. To achieve profitable food-focused freezing of your most valuable products, the FLoFREEZE IQF freezer just can't be beaten.



IQF Track – for delicate products

The FLoFREEZE IQF Track offers versatility, keeping sensitive or sticky products separated until they achieve a protective crust.



With the IQF Track, delicate parboiled fresh pasta crust-freezes first, minimising clumping and tangled or torn product.



Together with its IQF track, the FLoFREEZE freezer's modulation ensures gentle handling, increasing the value of your fresh berry products.



With fresher-than-fresh IQF freezing, you can command a premium price for your shrimp harvest.



Tickle consumer taste buds by IQF freezing delicate high-value fresh spices. With the FLoFREEZE freezer, it's a profitable business.



Thanks to the IQF Track, modulation, air bypass and pulsator, sticky cooked rice can be readily frozen in the FLoFREEZE freezer.



Thanks to our process know-how, diced tropical fruit retains its appearance and fresher-than-fresh flavour.



IQF tray – for high-hygiene or high-volume production

The stainless steel FLoFREEZE IQF Tray is perfect for products that demand extra hygiene precautions in your processing, as well as for classic high-volume products.



Protein products: capture the juicy goodness of shredded, diced or cubed chicken and diced topping meats – and minimise hygiene risk.



True fluidisation keeps sticky cheese toppings separated, while ensuring high throughput and long production runs.



For premium IQF freezing of the year's entire basic vegetable harvest, the FLoFREEZE IQF freezer delivers results from start to finish.

FLoFREEZE® IQF Freezers

The most effective IQF freezer ever made

Since the 1960s, when we first invented the individual quick freezing process, we have continuously enhanced the functionality of our IQF freezers. Our aim? To make it possible for you to apply true fluidization to a wider range of product, with longer uptime and greater throughput.

Food-Focused Freezing

True fluidization gives you premium IQF results, and thus the best return on your investment. But is not a one-size-fits-all process.

With nearly six decades of IQF experience, we have identified the factors that give the best results for each food product. We continuously improve our technology to successfully achieve those results. At the same time, we construct our freezers to give you continuous performance, operating economy and low energy consumption when you need it most.

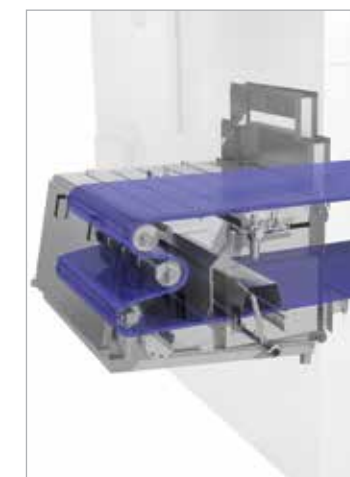
Thanks to the FLoFREEZE IQF freezer's flexible design, we can quickly and effectively configure each performance factor to precisely match the throughput requirements of your food product and process.

For your security, each freezer is pre-assembled before delivery. This also speeds up installation and commissioning, so you can quickly begin profitable processing, and achieve rapid return on your IQF investment.



The right infeed equipment gives you the best start

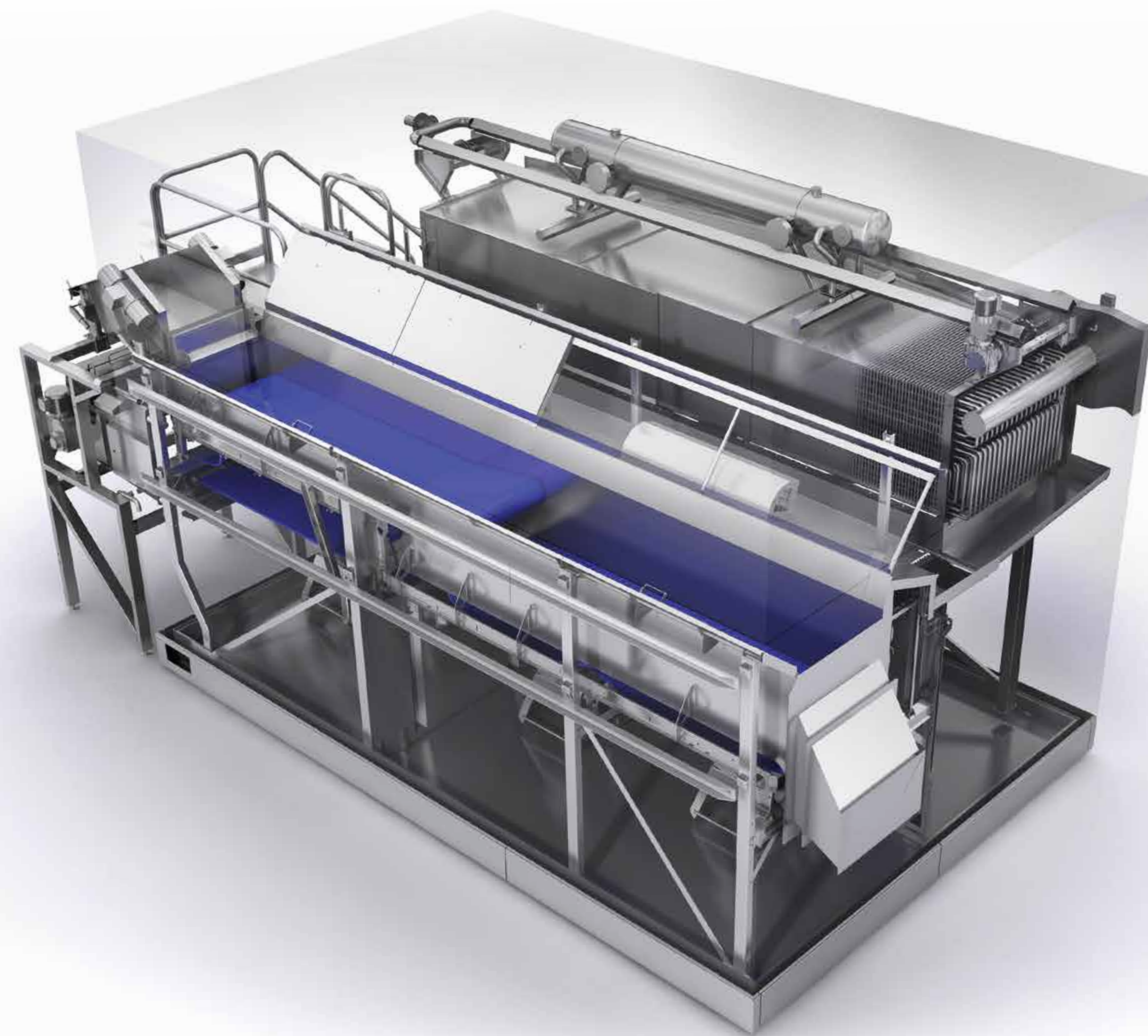
Three infeed alternatives are available: a conveyor that gently handles ripe berries, a vibratory conveyor that ensures even distribution, or a vibratory conveyor that also supplements your own de-watering capabilities.



Extended Track Rinser
The optional Extended Track Rinser quickly and efficiently cleans the first belt without raising freezer temperature. This enables you to extend your production run and still uphold the toughest hygiene requirements.

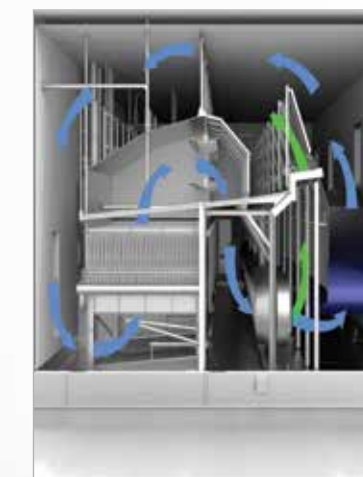


Hygiene by Design™
The FLoFREEZE freezer's open design is very easy to keep clean, in keeping with our Hygiene-by-Design™ philosophy. All key interior metal parts are stainless steel. All surfaces, including the floor, are smooth and self-draining, to ensure efficient, complete removal of food debris during cleaning.



Continuous operation, with ADF

By systematically and continuously removing snow build-up, the PLC-controlled automated ADF gives you a minimum of 22 hours non-stop freezing. Reliable and easy to clean, it helps minimise refrigerant load and ensures you maximum utilisation of your freezing capacity.



Extended continuous operation

For production that demands operating several days in a row, with up to a week between defrosts, the FLoFREEZE M Sequential Defrost offers secure and reliable technology. The freezer is based on the same fully fluidising system as the other freezers in the FLoFREEZE freezer family, and the PLC-automated system can be adapted to any production needs.



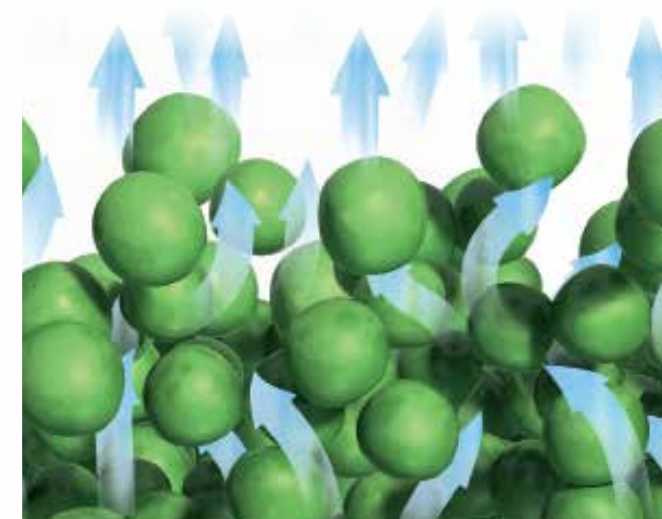
Low volume refrigeration means high profit

The optional Frigoscandia® LVS Refrigeration system is a winning investment. It delivers very low temperatures (down to -50°C) as well as increased evaporator efficiency. It requires a much smaller refrigerant charge than traditional systems, and the refrigeration pack can be placed anywhere in your plant, with almost no pressure drop.

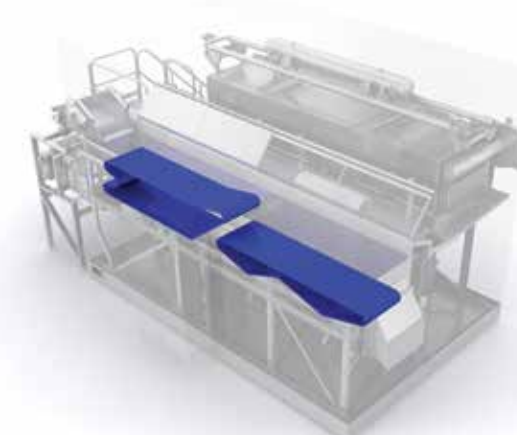
True fluidization

The secret of successful IQF processing is the carefully controlled freezing sequence. It protects product quality and maximizes yield while ensuring true IQF results and long production runs.

JBT's patented true fluidization technology is the best way to achieve premium prices for your IQF food products.

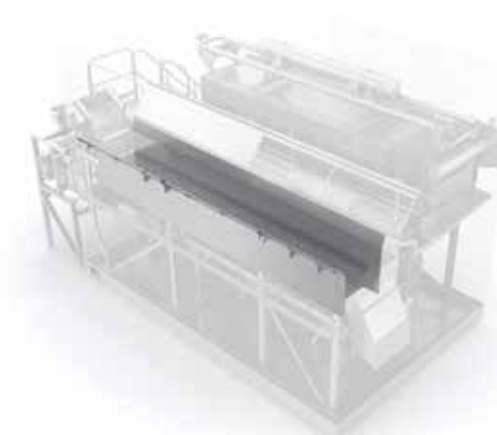


IQF Track



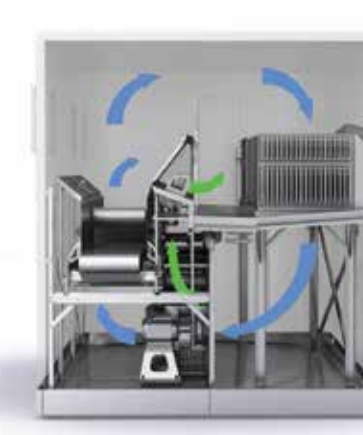
The IQF Track offers stable, dual zone fluidization, with two independent tracks and two separate pressure chambers. Crust-freezing for stable IQF, appearance and yield, and then fresher-than-fresh core freezing, it can be run in either agitation or conveyor mode, ensuring optimum IQF for both delicate and hard-to-handle products.

IQF Tray



Delivering multi-zone freezing capability, the stainless steel IQF Tray is perfect for products that require extra hygiene precautions in your processing, as well as high-volume 'classic' products like peas and corn kernels.

Pulsation



By modulating only air pressure and frequency over the product bed, our unique pulsator gently separates delicate products at the crust freezing stage. Excellent for soft, juicy products, it gives you maximum freezing flexibility.

Agitation



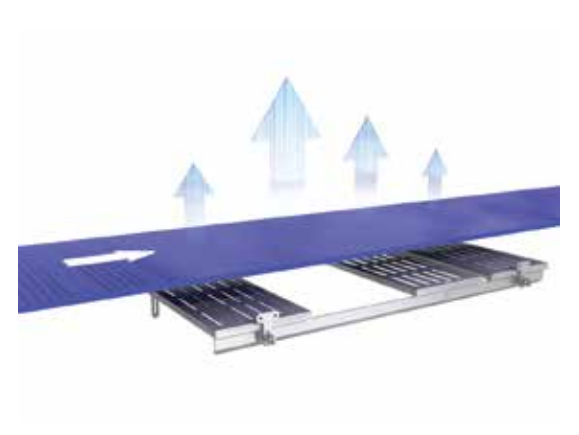
To ensure proper IQF at the critical crust-freezing stage, back-and-forth agitation on the first track or on your tray separates long or sticky products like sliced bell peppers, pasta, onion rings and rice. Stepless speed adjustment on both conveyors also helps increase your throughput of staple IQF products like peas, beans and cauliflower.

Air bypass



By fine-tuning airflow through the product bed, the air bypass ensures gentle, optimized fluidization regardless of product shape, size and weight. It also helps to maximize heat exchange over the evaporator, and minimize over-blow of light products.

Modulator



By modulating airflow on the first IQF Track, you can fine-tune initial crust freezing to the exact requirements of each product and eliminate product 'clumping'.

You know it's not goodbye, it's a good buy

In every aspect in the development of a solution from JBT you can rest assured that great considerations have been taken in regards of sustainability and ethics.

When you buy your machinery from JBT you know that it has been developed and manufactured in a responsible way. And you know that you get a piece of equipment that utilises the latest scientific advances in technology to minimise your environmental footprint.

But it doesn't end there. Our solutions and processes come with a commitment to constantly improve their impacts in the areas of CSR. Whether it is by developing more energy efficient drive lines, decreasing consumption of water and chemicals or offering training and support to create more sustainable workflows.

Our focus on minimising the environmental footprint of our business does not end with a closed deal on a piece of equipment. We are committed to long-term partnerships with our customers.



WE ARE YOUR SINGLE SOURCE FOR PROFITABLE PROCESSING SOLUTIONS

JBT is a leading provider of integrated food processing solutions. From single machines to complete processing lines, we enhance value and capture quality, nutrition and taste in food products. With a local presence on six continents, JBT can quickly provide our customers and partners in food processing industry with the know-how, service, and support needed to succeed in today's competitive marketplace.

FRIGOSCANDIA

STEIN

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SCHRÖDER
THE SAME SIDE OF FOOD

XVISION

FTN ON



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We're with you, right down the line.™

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