

IQF tropical fruit gaining popularity

Detail Introduction :

Tropical fruit processors from Southeast Asia to South America are invested in supplying superior, delicious, and affordable frozen products. Changes in eating habits in Europe have increased the consumption and, in turn, the demand for frozen tropical fruits. Research has forecast a 5.32% annual growth in the global frozen fruit market, and the number of growing tropical fruits is likely to be even higher.

As demand has increased, so needs to deliver quality products. How is premium IQF tropical fruit created? OctoFrost is a world-renowned company that creates processing equipment. OctoFrost fruit processing experts explain the mechanism and steps that ensure the quality of IQF tropical fruit. Before processing, the ripeness of the fruit and its Brix level must be controlled. Next, the best cutting and slicing equipment must be carefully selected. Then the heat treatment processes can be started, starting with the cooling stage and continuing with the IQF freezing stage.

Fast and efficient cooling

Before IQF freezing, it is necessary to lower the inlet temperature of tropical fruits. This ensures a higher production capacity in the IQF tunnel, increasing product separation and preventing the formation of tropical fruit lumps. This is achieved through the cooling process with the OctoFrost™ IF Chiller, which reduces the product's internal temperature to 5°C. This ensures rapid crust freezing during the first stage of IQF freezing. This is vital for product separation, especially with sticky fruits like mango, pineapple, and dragon fruit. The separation of the product during the freezing process allows the final product to have a more natural appearance and be free of lumps.

OctoFrost impact flash (IF) technology, combined with the rain shower system, allows fast and efficient cooling. Insulating layers of air naturally surround the product. The rain shower breaks these layers through the use of pinching. This enables rapid cooling by ensuring quick and thorough heat transfer to the product. Processors can produce high-quality IQF products through the use of these contemporary and efficient solutions.

No lump formation during IQF freezing

Some products have more difficult consistencies, such as diced mango, which is sticky, moist, and high proof. These products need to be frozen using more innovative IQF tunnels to overcome these difficulties and continue to produce quality frozen products. OctoFrost IQF technology has elements specifically designed to overcome these challenges and is a valuable machine for the fruit processing industry worldwide.

One of these features is the fully adjustable airflow inside the OctoFrost IQF tunnel. The fan speed can be adjusted to the needs of specific zones within the tunnel so that, for example, the quick crust freezing stage, which requires strong airflow in the first freezing zone, can achieve good separation of the product. The OctoFrost™ plates are interchangeable and create an asymmetric movement combined with optimal airflow to quickly and individually freeze the product. The separation of the product preserves the appearance, texture, and natural shape of the product. This technology also simplifies the cleaning process between product batches.