

PROCESS & PRODUCT SPECIFICATION

IQF Quick-Frozen Sweet Corn

Whole kernel · cob section · mini-cob — frozen at 35 to 40 °C, held at 18 °C



Frozen sweet corn earned its bad reputation honestly. Most of it is frozen slowly, and slow freezing does measurable structural damage to the kernel before it ever reaches a freezer aisle.

Slow freezing breaks cells

When corn freezes slowly below 0°C, water inside the kernel migrates and gathers into a small number of large ice crystals. Those crystals grow against the cell walls and tear them. The damage is invisible while the product stays frozen — and becomes obvious on thawing, when the ruptured cells leak their contents. The kernel goes soft, releases water into the dish, and loses colour and flavour along with it.

Fast freezing changes the physics

Dropping the temperature to 35 to 40°C in moving air freezes the water almost instantly, as countless tiny ice nuclei — each under 100 microns — formed evenly throughout the tissue rather than as a few large crystals in a few places. Nothing grows large enough to rupture a cell wall. Thaw the kernel and it keeps its shape, its juice, its colour and its snap.

Speed from the field, not just at the freezer

Freezing technology only preserves what arrives. Sugar in sweet corn begins converting as soon as the ear is cut, so a fast freezer at the end of a slow collection chain locks in corn that has already faded. Corn destined for IQF here is harvested and flash-frozen within hours of picking, which is only practical because the field and the process belong to the same operation.

From field to freezer

01 Harvest at peak	Ears are picked at the green-ear stage, when sugar and tenderness are highest.
02 Clean and prepare	Husked, washed, graded and cut — kernels off the cob, or cobs cut to length.
03 Flash-freeze	Product passes through moving air at 35 to 40°C and freezes in moments rather than hours.
04 Pack and hold	Free-flowing pieces are packed and held at 18°C through an unbroken cold chain.

IQF Whole Kernel Sweet Corn

Source variety	Pearl White super-sweet fruit corn
Cut	Whole kernel
Freezing method	IQF — individually quick-frozen
Freezing temperature	35 to 40°C in moving air
Ice crystal size	Under 100 microns
Time from harvest	Flash-frozen within hours of picking
Storage	18°C unbroken cold chain
Frozen shelf life	Up to 12 months
Packing	Bulk cartons and retail bags · OEM / private label
MOQ & pack sizes	To buyer specification — ask us

Pack weights, bag formats and labelling are set per order; ask for the current specification sheet.

IQF Sweet Corn Cob Sections

Source variety	Pearl White super-sweet fruit corn
Cut	Round cob section, cut to length
Freezing method	IQF — individually quick-frozen
Freezing temperature	35 to 40°C
Ice crystal size	Under 100 microns
Kernel / cob colour	Pearl white kernels on a white cob
Storage	18°C unbroken cold chain
Frozen shelf life	Up to 12 months
Packing	Bulk cartons and retail packs · OEM / private label
Section length & MOQ	To buyer specification — ask us

Section length, count per pack and carton weight are set per order.

IQF Mini Sweet Corn Cobs

Source variety	Pearl White super-sweet fruit corn
Cut	Mini-cob, short cut to length
Freezing method	IQF — individually quick-frozen
Freezing temperature	35 to 40°C
Ice crystal size	Under 100 microns
Storage	18°C unbroken cold chain
Frozen shelf life	Up to 12 months
Packing	Retail bags and bulk cartons · OEM / private label
Piece length & count	To buyer specification — ask us

Piece length and count per pack are set per order and confirmed on the order specification.

Figures describe typical performance of the Shengtian Baizhu variety and may vary with season and growing conditions. MOQ, pack sizes, carton weights and labelling are set to buyer specification. Certificates and documentation are confirmed per order and destination market before shipment.