

MAXI-COOL



Maxikool For Tuna

MECHANICAL CRYOGENIC

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Background

This is the most delicate thing, Tuna is deep ocean fish where end customer prefer utmost fresh test. The most expensive tuna must be flown from ocean to table with in 4-5 hr after cutting. Then to process tuna to keep same quality like fresh one, we need proper care and proper process. Many customer in Tuna business using Liquid Carbon Dioxide and Liquid Nitrogen to get the best product quality. But to find this kind of cryogenic gas in the island is not easy, So maxikool may be the best solution. Some criteria as following and Maxikool can serve you the best solution.

Requirement and Solution

1. Along of cutting Tuna process, we need to freeze tuna immediately. Normally we process cutting in to 2-3 shapes. Triangle (called Stake size 245 g and 390 g), Rectangle (called Saku size 245g and 550 g)

Maxikool serve: We offer you 2 belt tunnel freezer which can adjust the difference speed, since the process of tuna cutting will make immediately 2 shape Stake and Saku and each size need difference freezing time Stake will take 35 min from 3 °C to -35 °C and Saku take approx. 45min.



2. Freezing Temperature must be minus 35 °C

Conventional freezer which can make temperature only -40°C is difficult to freezer Tuna to be -35°C since the temperature gab is only 5 °C But Maxikool can operate at -70°C which has temperate gab 35°C



Ensure the best of product quality equal to freezing by Cryogenic technology


- Ensure weight loss is less than 1 %
- Ensure freezing time is equally to cryogenic system
- Ensure quality, texture and test after thawing is the same with fresh product

3. Fast freezing cause better quality product

Guarantee weight loss is less than 1 % and water crystal is very small cause tuna product after thawing keep same freshness to previous before freeze

Mechanical System.

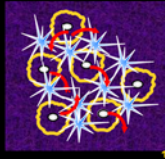
Cold vapor or Mechanical (conventional)



-40° C temperature by conventional system cause slow freeze, shrimp layer can not create the ice wall to protect water loss cause dehydrate

Dehydrate : water loss from shrimp normally 3-5 % cause product quality is not good enough

Slow freeze also create big ice crystal cause to damage the shrimp cell. (Tissue) after thaw shrimp quality is not good

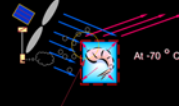


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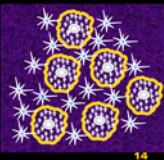
Cryogenic System & Maxikool system

Cryogenic



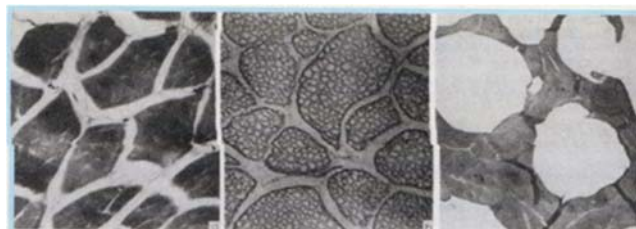
At -70 ° C air flow will create ice wall to protect water loss from Shrimp cell. The water loss (weight loss) is not more than 1 %, we call cryogenic

Fast freezing create small crystal and when thaw product, quality is same quality to before freeze



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Tuna Before Freeze

Tuna Freeze by Maxikool

Tuna Freeze by Slow freeze

4. Low freezing cost compare to Liquid Nitrogen or Liquid Carbon Dioxide.

Maxikool offer very low freeing cost only 300-400 VND/kg, Since we introduce our company as the saving energy machine, so every machine we produce we install KW Hour meter to measure all electrical consumption which include Compressor , pump, fan etc.



5. Safe space compare to conventional (-40°)

Because of better technology , Maxikool can offer 30% less space compare to conventional system.