



SF-5G



SF-10G



SF-20G

Specifications			
Model	SF-5G	SF-10G	SF-20G
Freezing capacity	Approx. 5kg/h*	Approx. 10kg/h*	Approx. 20kg/h*
Alcohol solution volume	60L	100L	140L
Power supply	3-phase, AC200 V, 50/60 Hz	3-phase, AC200 V, 50/60 Hz	3-phase, AC200 V, 50/60 Hz
Power consumption	1.8/2.0kW	2.9/3.5kW	3.1/3.7kW
External dimensions	W1,040×D770×H960mm (including adjusters)	W1,340×D815×H960mm (including adjusters)	W1,640×D815×H960mm (including adjusters)
Main unit weight	Approx. 162 kg (not including attachment)	Approx. 204kg (not including attachment)	Approx. 245kg (not including attachment)
Heat dissipation	4.5/5.1kW	7.4/8.7kW	8.8/10.1kW
Refrigerant used	R404A	R404A	R404A
GWP value	3920	3920	3920
Accessories	1 Metal Rack	2 Metal Rack	3 Metal Rack

\*Freezing capacity varies depending on the food and installation environment.



A structure is used that prevents frost from forming around the immersion freezing tank. It also has a filter to remove impurities from the coolant.

\*Racks with various numbers of tiers and shelf widths are available as options based on the foods to be frozen. Please contact us for details.

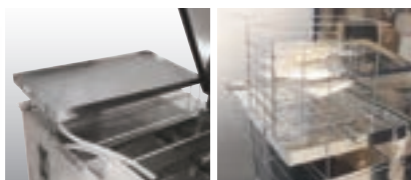
### Optional Accessories

#### Liquid Draining Stand

These are liquid draining trays exclusively for Rapid Freezer. When removing frozen foods from the immersion tank, they can be used to drain the alcohol from the exteriors of bags to return it to the tank. They not only improve workability but are also economical, as they reduce the amount of alcohol removed from the immersion tank. They can be attached without tools.



Liquid Draining Stand for Rapid Freezer (stainless steel)



Product name	Liquid Draining Stand for SF-5G	Liquid Draining Stand for SF-10G	Liquid Draining Stand for SF-20G
Product code	45271	45288	45289
External dimensions	W735×D384×H162mm	W779×D384×H162mm	W779×D434×H162mm

■ Please note that products may be modified to improve them without prior notice.  
 ■ Colors may differ slightly from those of actual products due to photo and printing finishes.  
 ■ For more information about the listed products, please contact your nearest SARAYA office or our company.  
 ■ The information included here is current as January 2023.

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# RAPID FREEZER

Preserve Taste and Quality in Seconds

**Preserve the freshly caught taste**  
**Expand business possibilities with the Rapid Freezer**



RAPID FREEZER SF-10G

# RAPID FREEZER

Preserve Taste and Quality in Seconds

Rapid Freezer freezes approximately 20 times faster than typical air blast freezers and allows food to be thawed with minimal effect on quality by immersing it in an alcohol solution at -30°C.

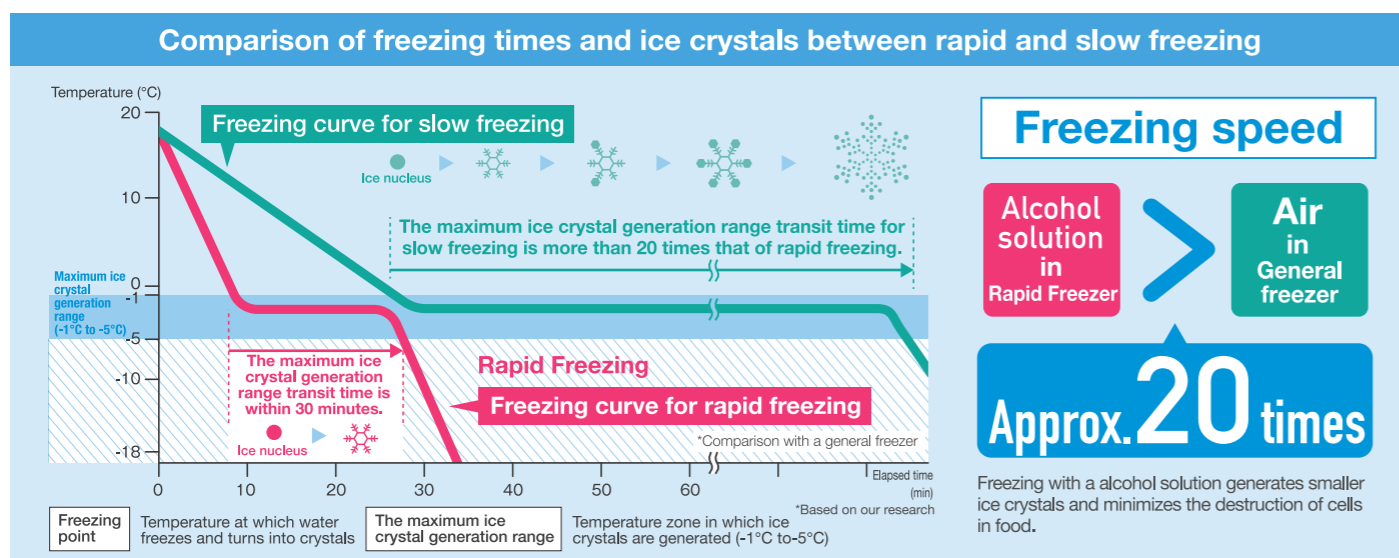
point 1

## High quality freezing creates additional value Freezing speed is decisive factor in quality

### Shortened freezing time

Rapid Freezer prevents water in food from creating big ice crystals, allowing the food quality of thawed food to keep to its original and fresh version.

\* Water contained in food generally starts freezing below 0°C. The temperature zone between -1°C to -5°C is called the maximum ice crystal generation range. Passing through this zone within 30 minutes is called "fast freezing" and staying there for more than 30 minutes is called "slow freezing".



**Rapid Freezer**  
The ice crystals stay small because the water contained in food passes through the maximum ice crystal generation range in a short time. The Rapid Freezer has minimal effect on a food's cells and keeps much of the same freshness, taste and appearance after thawing.



**General air blast freezer**  
The ice crystals get large because the water contained in food cells takes a longer time to freeze while passing through the maximum ice crystal generation range. Typical freezers cause ice crystals that destroy the cell walls, which leads to the purge after they thaw.

### Reducing purge to not to lose deliciousness

With high-quality freezing that does not damage the cells of foods, even foods that would deteriorate in general slow freezing retain the same freshness, taste, and appearance as before freezing.

#### Beef freezing experiment



### Freezing with a fine texture to improve work efficiency

Rapid freezing keeps down the pressure on a food's cells with ice crystals that are small. It makes food easier to cut even when frozen.

#### Konjac jelly freezing experiment



point 2

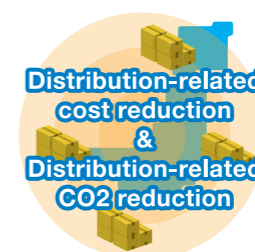
## High-quality freezing technology Innovation for new business in the food industry

### Distributing seasonal foods all year round

Customers can enjoy seasonal foods all year by using the Rapid Freezer to safely and quickly freeze products at harvest.



**Reduce food waste**  
Utilizing high quality freezing technology to preserve the quality of foods over long periods of time and reduce food waste.



**Frozen for improved logistics**  
Freezing allows products to be shipped and stored much longer without an impact on quality. Frozen products are also more compact and allow more to be shipped at once.

### Precooking to resolve labor shortage

Prepare food when you have time and rapidly freeze it to preserve its quality! By preparing food in the low season, you can provide the same quality as freshly prepared food in the peak season without hassles or making customers wait.

### Example of the freezing process with the Rapid Freezer



### Significantly reduced processing time

Using Rapid Freezer significantly reduces the processing time. It not only provides benefits in terms of quality but also reduces the hours of work required for human resources.

