Images and specifications are for reference only. Actual products may vary.



YOUR GLOBAL PARTNER
IN PRECISION FREEZE DRYING

Gain Prestige by Quality · Win Trust with Integrity

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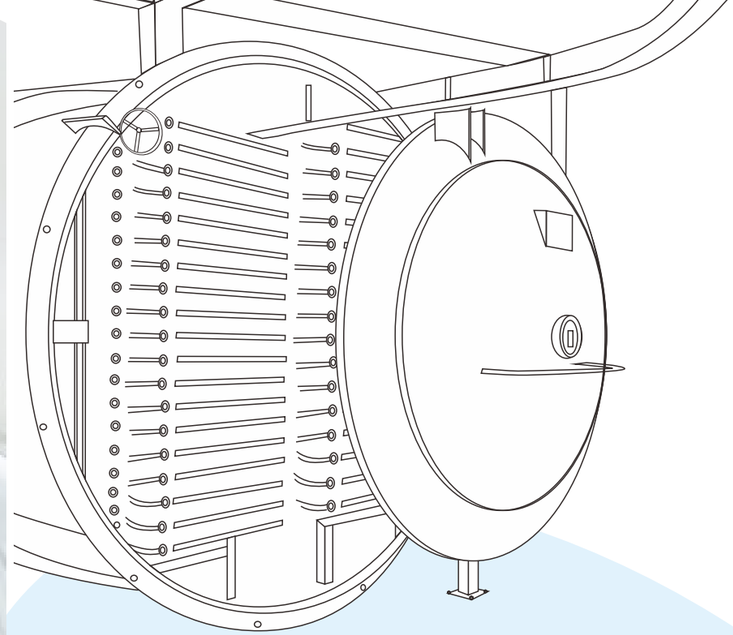
https://www.ikemachinery.com

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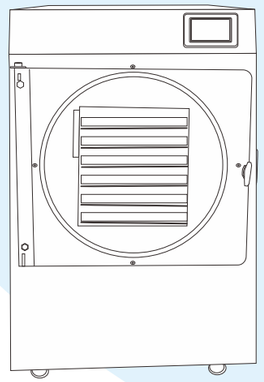
Meizhou Production Base:
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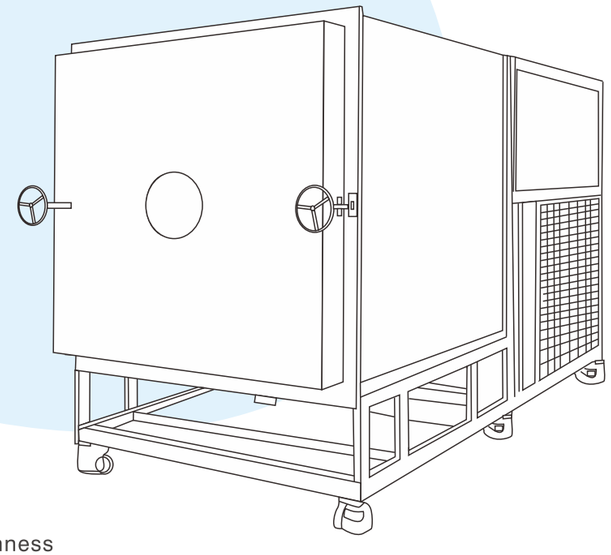


IKE
FOOD FREEZE DRYER

FOOD FREEZE DRYER MANUFACTURER

SINCE 1994





- -40°C locks in nutrients and preserves freshness
- 100% shape retention, natural color
- Only 3–5% moisture content, longer shelf life
- Rehydrates in 5–30 seconds and restores the original taste

ABOUT IKE

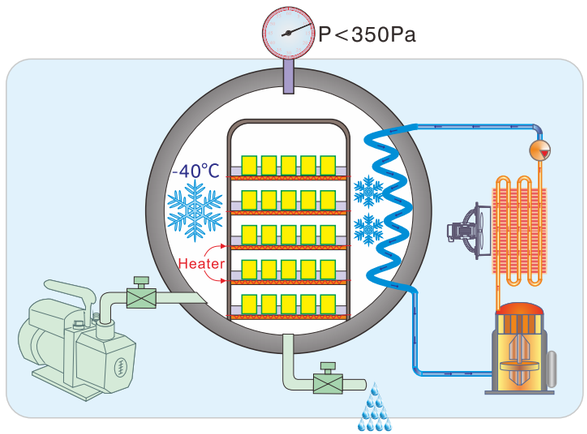


Since 1994

IKE focuses on developing and producing advanced drying equipment, including heat pump dryers and vacuum freeze dryers. We use innovative and energy-efficient drying technologies to lead the industry and meet the high-quality drying needs of various products.

With over 30 years of experience, IKE offers energy-saving, custom solutions for global customers. We are committed to achieving both efficient drying and green production.

How Freeze Drying Works



- Pre-freezing

The material is rapidly frozen at around -40°C, forming fine ice crystals and preserving its structure and nutrients.

- Primary drying (sublimation)

Under a vacuum (⩽10 Pa), ice crystals directly turn into vapor without melting. A condenser at -60°C captures the vapor, maintaining the porous texture of the material.

- Secondary drying (desorption)

The temperature is gently raised to 20–40°C to remove bound moisture, reducing residual water content to 3–5%.

What Makes IKE Freeze Dryer Stand Out

- **-40°C locks in nutrients, preserves freshness**

  At temperatures as low as -40°C, nutrients are effectively locked in, maintaining the original freshness of the material.



- **100% shape retention, natural color**

  The freeze-drying process ensures that the shape and natural color of the material are fully retained, preserving its original appearance.




Fresh strawberry

- **Only 3-5% moisture content,** Longer shelf life

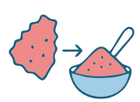
  With moisture levels reduced to just 3-5%, freeze-dried products have an extended shelf life, making them ideal for long-term storage.




Freeze-dried strawberry

- **Advantages of Powdering Freeze-Dried Products**

  Freeze-dried items are crisp and dry, which allows them to be effortlessly turned into powder form for versatile use.




Strawberry powder

Smarter Freeze Drying Starts Here!



All-in-One Process

No pre-freezing. No hassle. Just results.

IKE's All-in-One Process streamlines freeze-drying by integrating freezing and drying into a single, seamless step, eliminating the separate freezing step and additional manual handling.
The system offers precise control across all stages-from initial freezing to primary and secondary drying - to deliver faster, more consistent, and more efficient results.

AutoDry

No settings. No stress.

AutoDry Mode handles the entire freeze-drying process - from freezing to final drying - without requiring manual intervention. By intelligently monitoring temperature, pressure, and time, the system automatically adjusts parameters in real-time and detects cycle completion.





Easy Load

No strain. Just slide in and dry.

The front-opening design makes tray loading simple and convenient. Just slide the trays in and start.

Endless Possibilities

One Freeze Dryer, Endless Possibilities

The IKE freeze dryer isn't limited to a single application—it's engineered for diverse uses across industries and materials. From fruits, herbs, and dairy products to pet treats, biological samples, and cosmetics, IKE handles diverse freeze-drying needs with precision. Whether you're a small business, laboratory, or entrepreneur, this all-in-one solution gives you the flexibility to test, create, and scale with confidence.

















What Can You Freeze Dry with IKE?

Explore Endless Possibilities















FREEZE DRYER SERIES

From Compact Units to Industrial Systems

Whether you are developing new products, expanding production, or building a large-scale processing line, IKE provides reliable freeze-drying solutions for every stage of your growth.

H SERIES Compact Freeze Dryer — 4–12 kg/batch

C SERIES Commercial Freeze Dryer — 30–50 kg/batch

F SERIES Industrial Freeze Dryer — 100–300 kg/batch

R SERIES Rail-Type Freeze Dryer — 500–1000 kg/batch



Compact Design for R&D and Small Batches.

Stable Performance for Growing Production.

High-Capacity Solution for Industrial Production.

Engineered for Large-Scale Processing Plants.







Choose the right freeze dryer for your production scale.

H Series Compact Freeze Dryer

- **One-Touch Operation**: Intuitive interface for simple and easy freeze drying.
- **Fully Automatic Process**: Automated operation reduces manual intervention and saves time.
- **Integrated Pre-Freezing & Drying**: All-in-one design streamlines the entire freeze-drying process.
- **Built-in Safety Protection**: Automatic shutdown protection against over-temperature.

SPEC	FVD-H4
Power Supply	220V, 50/60Hz, 1ph
Rated Power	1.6 kW
Loading Capacity	4 kg
Heating Plate Temperature	-10 to 75°C
Number of Trays	4 pcs
Tray Size	500×202×20mm
Machine Size	710×580×840mm
Net Weight	77 kg





SPEC	FVD-H6
Power Supply	220V, 50/60Hz, 1ph
Rated Power	1.8 kW
Loading Capacity	6–8 kg
Heating Plate Temperature	-10 to 75°C
Number of Trays	5 pcs
Tray Size	500×250×20mm
Machine Size	780×625×970mm
Net Weight	85 kg

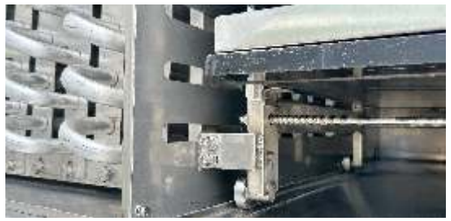
SPEC	FVD-H12
Power Supply	220V, 50/60Hz, 1ph
Rated Power	2.0 kW
Loading Capacity	12 kg
Heating Plate Temperature	-10 to 75°C
Number of Trays	6 pcs
Tray Size	700×270×20mm
Machine Size	865×720×950mm
Net Weight	188 kg



C Series Commercial Freeze Dryer

- **All-in-One Design**: No installation required; simply connect the power and start.
- **Efficient Condensation**: High-performance condenser ensures fast and effective freeze drying.
- **Optional Pre-Freezing**: Integrated pre-freezing function available for a more streamlined process.
- **Fully Automatic Operation**: Intuitive touchscreen interface with real-time status display.
- **Customizable Dimensions**: Machine dimensions can be customized to suit different production spaces and requirements.







SPEC	FVD-C30	FVD-C30D
Power Supply	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph
Rated Power	20 kW	20 kW
Loading Capacity	30 kg	30 kg
Heating Plate Temperature	0 to 100°C	-20 to 100°C
Number of Trays	9 pcs	9 pcs
Tray Size	685×490×30mm	685×490×30mm
Machine Size	2750×1480×1630mm	2750×1480×1630mm
Net Weight	2000 kg	2300 kg













SPEC	FVD-C50	FVD-C50D
Power Supply	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph
Rated Power	23 kW	23 kW
Loading Capacity	50 kg	50 kg
Heating Plate Temperature	Room temp. to 100°C	-20 to 100°C
Number of Trays	10 pcs	10 pcs
Tray Size	860×580×30mm	860×580×30mm
Machine Size	2750×1480×1630mm	2750×1480×1630mm
Net Weight	2000 kg	2500 kg











F Series Industrial Freeze Dryer

- **High-Capacity Production**: Designed for industrial-scale production with stable and efficient performance.
- **Automated Control**: Touchscreen interface with recipe management, data logging, and remote monitoring.
- **Customizable Dimensions**: Machine dimensions can be customized to suit different production layouts and capacity requirements.
- **Wide Application Range**: Suitable for food processing, pet food, herbal products, and other freeze-drying applications.







SPEC	FVD-F100	FVD-F100D
Power Supply	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph
Rated Power	23 kW	23 kW
Loading Capacity	100 kg	100 kg
Heating Plate Temperature	Room temp. to 100°C	-20 to 100°C
Number of Trays	13 pcs	13 pcs
Tray Size	1290×580×30mm	1290×580×30mm
Machine Size	3850×1450×1900mm	3850×1450×1900mm
Net Weight	2585 kg	3050 kg













SPEC	FVD-F200	FVD-F200D
Power Supply	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph
Rated Power	52.5 kW	52.5 kW
Loading Capacity	200 kg	200 kg
Heating Plate Temperature	Room temp. to 100°C	-20 to 100°C
Number of Trays	26 pcs	26 pcs
Tray Size	1290×580×30mm	1290×580×30mm
Machine Size	5700×1920×1900mm	5700×1920×1900mm
Net Weight	4500 kg	4950 kg

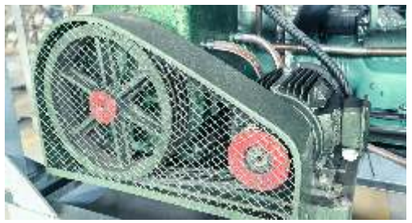














SPEC	FVD-F300	FVD-F300D
Power Supply	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph
Rated Power	92 kW	92 kW
Loading Capacity	300 kg	300 kg
Heating Plate Temperature	Room temp. to 100°C	-20 to 100°C
Tray Size	590×490×35mm	590×490×35mm
Number of Trays	104 pcs	104 pcs
Machine Size	7200×2100×2200mm	7200×2100×2200mm
Net Weight	7300 kg	7900 kg









Industrial Cylindrical Freeze Dryer

- **Cylindrical Chamber Design:** Smooth inner surfaces with fewer corners for easier cleaning and maintenance.
- **Separate Chamber & Cold Trap:** Independent drying and condensation sections help simplify cleaning and vapor handling.
- **Stable Vacuum Performance:** The cylindrical chamber provides uniform structural strength for reliable operation under vacuum.







SPEC	FVD-FG100	FVD-FG200	FVD-FG300
Power Supply	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph
Rated Power	23 kW	52.5 kW	92 kW
Loading Capacity	100 kg	200 kg	300 kg
Heating Plate Temperature	Room temp. to 100°C	Room temp. to 100°C	Room temp. to 100°C
Number of Trays	13 pcs	26 pcs	104 pcs
Tray Size	1290×580×30mm	1290×580×30mm	590×490×35mm
Space Required	As Designed	As Designed	As Designed





Rail-Type Industrial Freeze Drying System

Designed for large-scale production, this rail-type system allows pre-frozen material racks to be transferred directly into the drying chamber. Separate pre-freezing and drying stages help streamline workflow and improve production efficiency.





- **High Throughput Capacity**: Trolley-based loading supports large-scale batch production and efficient material handling.
- **Seamless Workflow**: Guided rails allow pre-frozen material racks to be transferred efficiently between pre-freezing and drying stages.
- **Modular & Customizable Design**: Pre-freezing room, drying chamber, rail system, and overall layout can be customized to suit different production requirements.
- **Durable & Hygienic Construction**: High-grade stainless steel construction supports easy cleaning and long-term operation.
- **Stable & Precise Control**: Fully automatic PLC control with data logging, multi-stage temperature and vacuum control, and safety interlocks.







SPEC	FVD-R500	FVD-R1000
Power Supply	380V, 50/60Hz, 3ph	380V, 50/60Hz, 3ph
Rated Power	130 kW	260 kW
Loading Capacity	500 kg	1000 kg
Number of Trays	144 pcs	256 pcs
Tray Size	600×580×35mm	600×580×35mm
Machine Size	6500×ϕ2300mm	13000×ϕ2300mm
Space Required	As Designed	As Designed



