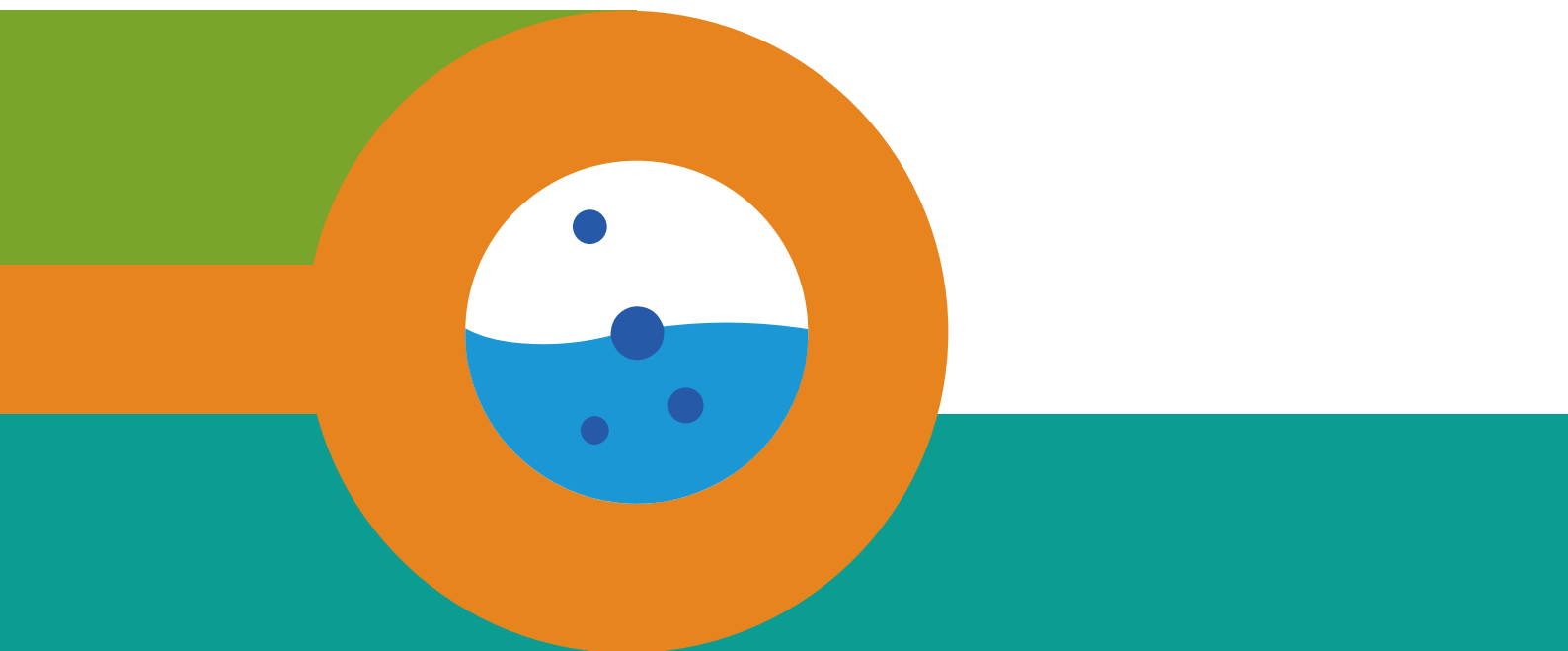


Professional
Laboratory
Solution Provider



LABOAO
www.laboao.com



| ABOUT US

Zhengzhou Laboao Instrument Equipment Co., Ltd (LABOAO) is a high-tech enterprise integrating R&D, production, sales, import and export, and is a leading laboratory equipment solution provider in China. LABOAO is headquartered in Zhengzhou, China. It has a group of excellent management and technical personnel who strive for excellence and constantly pursue progress and innovation. After fifteen years of hard work, it has achieved sustained and steady development, and its products are exported to Europe, America, Southeast Asia, the Middle East, South Africa, etc. 150 countries, we are working hard to establish a global regional service agency to provide better services and products for global customers.

The company has always adhered to the corporate tenet of "innovative technology, life first", focusing on laboratory research, life science, biomedical engineering and other fields, focusing on continuous innovation and development, improving the technical content of products, enriching product categories, realizing product upgrades, and gradually strengthening the enterprise. Core competitiveness, LABOAO regards product quality as the vitality of the enterprise, all our products have undergone strict testing and quality inspection, and have established a set of strict internal quality control system in accordance with international quality standards, and meet strict international standards. So far, the company has passed ISO9001 quality management system certification, EU CE, SGS, TUV, CNAS and other certifications.

LABOAO's main business involves laboratory instruments/consumables, life science instruments, chemical analysis instruments, optical instruments, medical equipment, drug inspection instruments, agricultural instruments, food inspection instruments and other industry-related instruments. Our products are widely used in laboratories, scientific research institutions, universities, chemical companies, hospitals, new energy, agriculture, food, metallurgy and mining, construction, petroleum and other industries.

The company introduces world-class automated production equipment and production technology, and continuously expands production capacity to meet customer needs. The investment of advanced production equipment and software facilities makes the enterprise more international standardization and standardization. LABOAO actively carries out various cooperations such as OEM and ODM with world-renowned enterprises. In continuous practice and application, LABOAO will continue to provide high-quality products and services to global customers.



| Our Culture

LABOAO's vision: To become a professional international technology driven laboratory supplier

LABOAO's values: Focus, Quality, Innovation, Environmental Protection

LABOAO's mission: Adhere to "innovative technology" as the company's development purpose, promote the progress of global laboratory research, and serve the beautiful and healthy life of mankind.



16^{YRS}

Laboratory Solution



86^{PPL}

Research & Design



20000^{SQM}

Industrial Plant



7X24^{HRS}

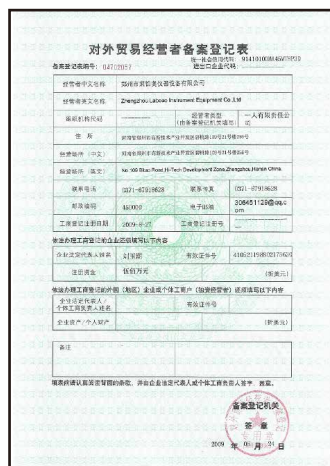
Technical Support



Qualification

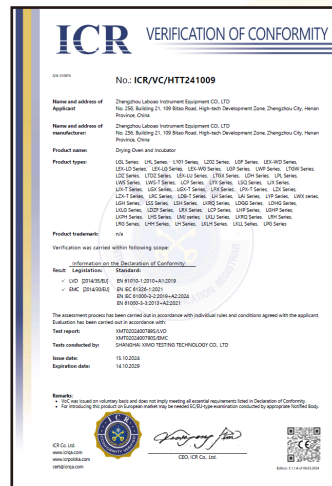
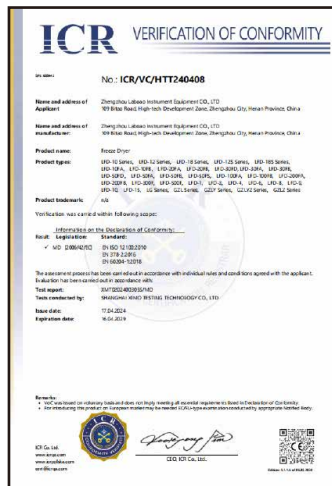
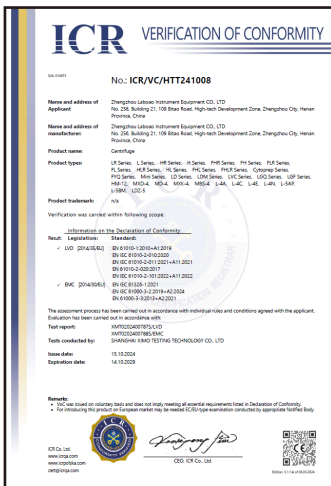
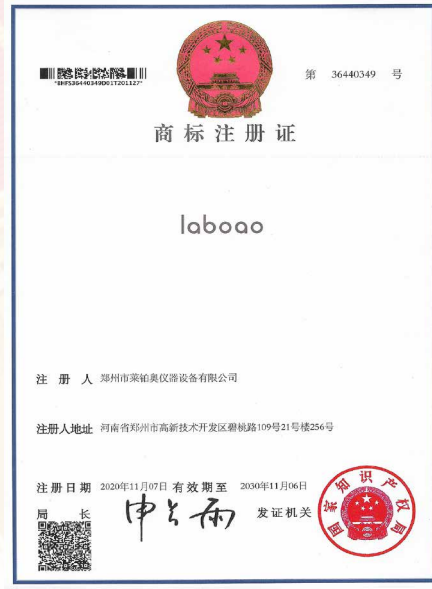
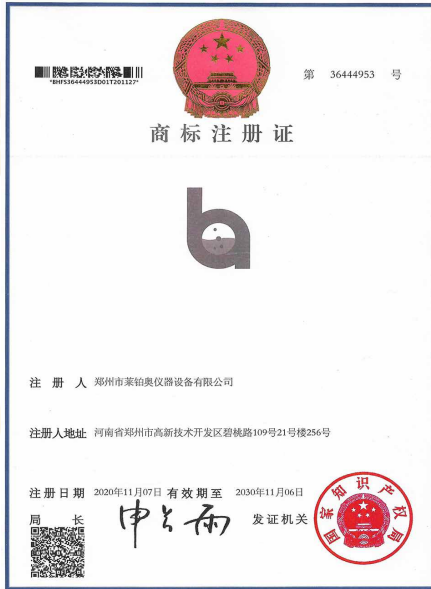
Since its establishment, LABOAO has always adhered to the "quality first" production philosophy. It is our tireless pursuit to provide customers with high-quality products. In the past few years, the company has obtained a variety of qualification certificates, which reflect our strict requirements for products and the The affirmation of our products.

In order to ensure that each product can operate normally and be delivered to customers in good condition, we have very strict internal quality control and factory testing. We have passed ISO, CE, SGS and other certificates successively for exporting to all parts of the world. A solid foundation has been laid for laboratories, enterprises, hospitals, research institutes, universities and other places.



Quality is Always Our First Principle

We strive to provide high quality products and sincere and professional services to customers around the world, has been highly recognized by customers in more than 200 countries and regions.



Our Workshop

We have a standard production workshop and a complete production team. They always produce a serious and responsible attitude to produce each product.

Our R&D team is made up of multi-aspects professional engineers such as design engineer, technology specialist, qualified specialist and process control manager, etc.





Standardized Production Line

We have 5 main production lines, which are laboratory equipment, distillation and extraction equipment, biological treatment equipment, optical analysis equipment, and low-temperature storage equipment production lines.

Our qualified specialists strictly realize the process comprehensive supervision based on our quality process control system, which contains products design, research and development, test, production, quality inspection and packaging.

We guarantee the quality and functionality of our products and will continue to help you quickly and efficiently whenever something does not operate to your satisfaction.

Product Warehouse



Market Area

We strive to provide high quality products and sincere and professional services to customers around the world, has been highly recognized by customers in more than 120 countries and regions.

Up to now, we have provided more than 80,000 instruments and devices to more than 25,000 users worldwide.



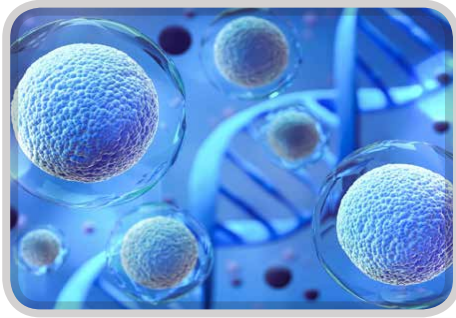
Packing & Shipping

Our supply chain management team will fulfill each order and ensure on-time delivery. Sales item by item, usually shipped within 1 to 3 weeks.

Our product packaging has been proven over the long term and we usually have plywood boxes or cartons with trays. In order to save you transportation costs, we usually use cardboard boxes (small goods) or wooden boxes (large or heavy goods). We will arrange the appropriate packaging according to the weight and size of the goods. Of course, you can also choose the packaging form.



Application



Biopharmaceuticals



Petrochemicals



Food Beverage



Plant Agriculture



Environmental Analysis



Medical Research



Industrial Electronics



New Materials New Energy

LABOAO Worry Free Service



Pre-sale Service

- 24 hours pre-sales consultant support.
- Professional technical consultation, providing support from technical solutions to installation and use.
- Product selection by customer demands.



Sale Service

- Track your order production progress and keep you informed.
- Timely production and on time delivery.
- Send package drawings and videos before shipment, product acceptance..
- Relevant guidance, installation, debugging, trial operation, etc.



After-sale Service

- One year warranty period and all life maintenance.
- Free replacement of accessories during the warranty period.
- Remote technical support, technical engineers can conduct overseas training.
- Regular return visits, immediate response to usage problems and repair notifications.



Quality Guarantee

- Each piece of equipment will be strictly tested before leaving the factory to ensure qualified.
- Standardized production line, high-standard quality management system, experienced production workers.



Transportation Guarantee

- Professional personnel packing, professional masters load the equipment on the vehicle to ensure that it will not be damaged during transportation.
- Scaled production, sufficient supply, to ensure timely delivery.
- debugging, trial operation, etc.



Technical Guarantee

- Technical support provided by a team of engineers with many years of industry experience.
- Professional after-sales team, 7*24 hours after-sales service to make customers more worry-free.

OEM Service

- Provide "private label" or "common brand" versions of LABOAO standard products. We can print your company's logo and stick it on the product.
- Provide product printed materials, such as catalogs and user manuals, with your company logo, name and other information you want to display.
- Based on our original products, we can customize products that meet your requirements according to your specific needs (such as size, color, function, accessories, etc.)

06

FREEZE DRYER

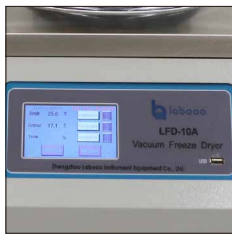
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|-----------------------------|----|
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| Industrial Freeze Dryer | 12 |

Benchtop Laboratory Freeze Dryer

Laboratory vacuum freeze dryer is widely used in medicine, pharmaceutical, biological research, chemical and food. The lyophilized articles are easy to store for a long time, and can be restored to the state before lyophilization and maintain the original biochemical characteristics after adding water. The LFD-10 freeze dryer is suitable for laboratory use and meets the requirements of routine lyophilization in most laboratories.

Features

- One-piece structure design, small size
- 7 Inch Touch Screen
- Stainless steel cold trap and operating table
- A large opening cold trap with pre-freezing function
- Cold Trap Electric Defrost
- Flexible switching of vacuum units (Pa, mBar, etc.)
- Vacuum pump protection function with set the vacuum pump to start the cold trap temperature



FREEZE DRYER

Specification



| Model | LFD-10A | LFD-10B | LFD-10C | LFD-10D |
|--|---|--------------------|--------------------|--------------------|
| Freeze-dried area | 0.12m ² | 0.08m ² | 0.12m ² | 0.08m ² |
| Panel material (material thickness 10mm) | 1.2L | 0.8L | 1.2L | 0.8L |
| Material tray | 200mm 4 layers | 180mm 3 layers | 200mm 4 layers | 180mm 3 layers |
| Material plate spacing | 70mm | | | |
| Cold trap temperature | ≤ -56°C (no load), optional ≤ -80°C (no load) | | | |
| Water catching capacity | 3-4kg/24h | | | |
| Ultimate vacuum | ≤ 5pa (no load) | | | |
| Power | 970 W | | | |
| Host weight | 41 KG | | | |
| Mainframe dimensions | 615×450×370mm | | | |

Vertical Laboratory Freeze Dryer

Laboratory vacuum freeze dryer is widely used in medicine, pharmaceutical, biological research, chemical and food. The lyophilized articles are easy to store for a long time, and can be restored to the state before lyophilization and maintain the original biochemical characteristics after adding water. The LFD-12 freeze dryer is suitable for laboratory use and meets the requirements of routine lyophilization in most laboratories.

Features

- Warning System when operating
- 7 Inch Touch Screen
- Stainless steel cold trap and operating table
- A large opening cold trap with pre-freezing function
- Cold Trap Electric Defrost
- Flexible switching of vacuum units (Pa, mBar, etc.)
- Vacuum pump protection function with set the vacuum pump to start the cold trap temperature.



Specification



| Model | LFD-12A | LFD-12B | LFD-12C | LFD-12D |
|--|---|--------------------|--------------------|--------------------|
| Freeze-dried area | 0.12m ² | 0.08m ² | 0.12m ² | 0.08m ² |
| Panel material (material thickness 10mm) | 1.2L | 0.8L | 1.2L | 0.8L |
| Material tray | 200mm 4 layers | 180mm 3 layers | 200mm 4 layers | 180mm 3 layers |
| Material plate spacing | 70mm | | | |
| Cold trap temperature | ≤ -56°C (no load), optional ≤ -80°C (no load) | | | |
| Water catching capacity | 3-4kg/24h | | | |
| Ultimate vacuum | ≤ 5pa (no load) | | | |
| Power | 970 W | | | |
| Host weight | 62 KG | | | |
| Mainframe dimensions | 580×500×720mm | | | |

Vertical Laboratory Freeze Dryer

Laboratory vacuum freeze dryer is widely used in medicine, pharmaceutical, biological research, chemical and food. The lyophilized articles are easy to store for a long time, and can be restored to the state before lyophilization and maintain the original biochemical characteristics after adding water. The LFD-18 freeze dryer is suitable for laboratory use and meets the requirements of routine lyophilization in most laboratories.

Features

- vWarning System when operating
- 7 Inch Touch Screen
- Stainless steel cold trap and operating table
- A large opening cold trap with pre-freezing function
- Cold Trap Electric Defrost
- Flexible switching of vacuum units (Pa, mBar, etc.)
- Vacuum pump protection function with set the vacuum pump to start the cold trap temperature.



Specification

| Model | LFD-18A | LFD-18B | LFD-18C | LFD-18D |
|--|---|--------------------|--|--------------------|
| Freeze-dried area | 0.18m ² /0.27m ² | 0.09m ² | 0.18m ² /0.27m ² | 0.09m ² |
| Panel material (material thickness 10mm) | 1.8L/2.7L | 0.9L | 1.8L/2.7L | 0.9L |
| Material tray | 240mm 4/6 layers | 200mm 3 layers | 240mm 4/6 layers | 200mm 3 layers |
| Material plate spacing | 70mm/50mm | 70mm | 70mm/50mm | 70mm |
| Cold trap temperature | ≤ -56°C (no load), optional ≤ -80°C (no load) | | | |
| Water catching capacity | 6 kg/24h | | | |
| Ultimate vacuum | ≤ 5pa (no load) | | | |
| Power | 1400 W | | | |
| Host weight | 105 KG | | | |
| Mainframe dimensions | 630×580×970mm | | | |

Vertical Electric Heating Laboratory Freeze Dryer

Laboratory vacuum freeze dryer is widely used in medicine, pharmaceutical, biological research, chemical and food. The lyophilized articles are easy to store for a long time, and can be restored to the state before lyophilization and maintain the original biochemical characteristics after adding water. The LFD-18S freeze dryer is suitable for laboratory use and meets the requirements of routine lyophilization in most laboratories.

Features

- Setting freeze-drying process
- Controlling the heat rate with shelf electric heating
- 7 Inch Touch Screen
- Stainless steel cold trap and operating table
- A large opening cold trap with pre-freezing function
- Cold Trap Electric Defrost
- Flexible switching of vacuum units (Pa, mBar, etc.)
- Vacuum pump protection function with set the vacuum pump to start the cold trap temperature.



Specification

| Model | LFD-18SA | LFD-18SB | LFD-18SC | LFD-18SD |
|--|--|--------------------|--|--------------------|
| Freeze-dried area | 0.18m ² /0.27m ² | 0.09m ² | 0.18m ² /0.27m ² | 0.09m ² |
| Panel material (material thickness 10mm) | 1.8L/2.7L | 0.9L | 1.8L/2.7L | 0.9L |
| Material tray | 240mm 4/6 layers | 200mm 3 layers | 240mm 4/6 layers | 200mm 3 layers |
| Material plate spacing | 70mm/50mm | 70mm | 70mm/50mm | 70mm |
| Shelf temperature range | -40 ~ +60°C | | | |
| Cold trap temperature | ≤ 60 ° C (no load), optional ≤ -80 ° C (no load) | | | |
| Water catching capacity | 6 kg/24h | | | |
| Ultimate vacuum | ≤ 5pa (no load) | | | |
| Power | 1800w | | | |
| Host weight | 105 KG | | | |
| Mainframe dimensions | 630×580×970mm | | | |

Electric Heating Pilot Freeze Dryer

Pilot freeze dryer is in situ freeze dryer, it is microprocessor-controlled, pre-cooling and freeze-drying are completed in one process, which is the best choice for scientific research, development and small batch production.

Features

- In Situ Freeze Dryer, Easy to Operate and Good Drying Effect
- Small shelf temperature difference, High temperature control precision and uniform drying effect
- 7 inch Color Touch Screen, USB interface
- Powerful sensor calibration to ensure accurate measurement of long-term use
- Preserve hundreds of process recipes, each of which contains 36 temperature control sections
- Flexible manual mode and automatic control mode
- Real-time alarm display and historical alarm query function
- The user level and password can be set, and decentralized operation management



Specification

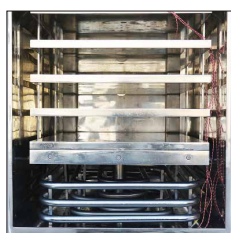
| Model | LFD-10FA | LFD-10FB | LFD-30FD | LFD-50FD |
|--|---|--------------------|--------------------|--------------------|
| Freeze-dried area | 0.2m ² | 0.1m ² | 0.4m ² | 0.6m ² |
| Panel material (material thickness 10mm) | 2L | 1L | 4L | 6L |
| Material tray | 395 × 265mm 2 layers | 395×265mm 1 layers | 295×335mm 4 layers | 295×335mm 6 layers |
| Material plate spacing | 70mm | | | 50mm |
| Shelf temperature range | -50°C~+70°C | | | |
| Cold trap temperature | ≤ -60°C (no load), optional ≤ -80°C (no load) | | | |
| Water catching capacity | ≥6KG/24h | | ≥8KG/24h | ≥10KG/24h |
| Ultimate vacuum | ≤ 5pa (no load) | | | |
| Power | 2000w | | 2700W | 4500w |
| Host weight | 210kg | | 280kg | 450kg |
| Mainframe dimensions | 655×640×1200mm | 655×640×1200mm | 890×660×1210 mm | 890×670×1470mm |

Silicone Oil Heating Pilot Freeze Dryer

Pilot freeze dryer is in situ freeze dryer, it is microprocessor-controlled, pre-cooling and freeze-drying are completed in one process, which is the best choice for scientific research, development and small batch production.

Features

- In Situ Freeze Dryer, Easy to Operate and Good Drying Effect
- Small shelf temperature difference, High temperature control precision and uniform drying effect
- 7 inch Color Touch Screen, USB interface
- Powerful sensor calibration to ensure accurate measurement of long-term use
- Preserve hundreds of process recipes, each of which contains 36 temperature control sections
- Flexible manual mode and automatic control mode
- Real-time alarm display and historical alarm query function
- The user level and password can be set, and decentralized operation management.



Specification

| Model | LFD-20FA | LFD-30FA | LFD-50FA | LFD-100FA | LFD-200FA |
|--|---------------------|--------------------|--------------------|--------------------|---------------------|
| Freeze-dried area | 0.3m ² | 0.4m ² | 0.7m ² | 1.04m ² | 2.25m ² |
| Panel material (material thickness 10mm) | 3L | 4L | 7L | 10L | 22L |
| Material tray | 395×265mm 3 layers | 295×335mm 4 layers | 475×355mm 4 layers | 475×355mm 6 layers | 500×900mm 10 layers |
| Material plate spacing | 70mm | 50 mm | 50mm | 70mm | 80mm |
| Shelf temperature range | -50°C~+70°C | | | | |
| Cold trap temperature | ≤-75°C (no loading) | | | | |
| Water catching capacity | ≥6KG/24h | ≥8KG/24h | ≥10KG/24h | ≥15KG/24h | ≥30KG/24h |
| Ultimate vacuum | ≤5pa | | | | |
| Power | 3000w | 4500w | 5500w | 6500w | 13.5kw |
| Host weight | 300kg | 400kg | 600kg | 700kg | 1200kg |
| Mainframe dimensions | 840×750×1580mm | 900×850×1350mm | 1000×85×1420mm | 1170×830×1665mm | 1200×2100×1700mm |

Silicone Oil Heating Pilot Freeze Dryer with Top Press

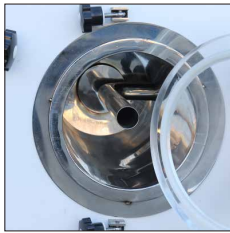
Pilot freeze dryer is in situ freeze dryer, it is microprocessor-controlled, pre-cooling and freeze-drying are completed in one process, which is the best choice for scientific research, development and small batch production

Features

- In Situ Freeze Dryer, Easy to Operate and Good Drying Effect
- Small shelf temperature difference, High temperature control precision and uniform drying effect
- 7 inch Color Touch Screen, USB interface
- Powerful sensor calibration to ensure accurate measurement of long-term use
- Preserve hundreds of process recipes, each of which contains 36 temperature control sections
- Flexible manual mode and automatic control mode
- Real-time alarm display and historical alarm query function
- The user level and password can be set, and decentralized operation management.



FREEZE DRYER



Specification

| Model | LFD-20FB | LFD-30FB | LFD-50FB | LFD-50FS | LFD-100FB |
|--|---------------------|--------------------|--------------------|--------------------|--------------------|
| Freeze-dried area | 0.2m ² | 0.3m ² | 0.5m ² | 0.5m ² | 1.15m ² |
| Panel material (material thickness 10mm) | 2L | 3L | 5L | 5L | 11L |
| Material tray | 395×265mm 2 layers | 295×335mm 3 layers | 405×405mm 3 layers | 405×405mm 3 layers | 475×595mm 4 layers |
| Material plate spacing | 70mm | | | | 100mm |
| Shelf temperature range | -50°C~+70°C | | | | |
| Cold trap temperature | ≤-75°C (no loading) | | | | |
| Water catching capacity | ≥6KG/24h | | ≥10KG/24h | ≥10KG/24h | ≥15KG/24h |
| Ultimate vacuum | ≤5pa (no loading) | | | | |
| Power | 3000w | 5500w | 6500w | 6500w | 7500w |
| Host weight | 300kg | 400kg | 800kg | 800kg | 1000kg |
| Mainframe dimensions | 840×750×1580mm | 1280×980×1550mm | 1490×850×1620mm | 1490×850×1620mm | 1640×1100×1630mm |

1-10m² Pharmaceutical Vacuum Freeze Dryer

Pharmaceutical vacuum top press freeze dryer. It is widely used in medical field, such as blood products, vaccines, biological products, and chemical medicines, especially western medicine field. This series models are used in many large scale pharmaceutical factories. In terms of injections, drug quality can be improved and storage time can be delayed through freeze drying.

Features

- Shelf with high pressure resistance, high flatness and good temperature uniformity
- Controlling cooling rate, sample heating rate and vacuum rate
- Preserve multiple process recipes and process can be adjusted during drying
- Flexible manual mode and automatic control mode
- CIP and SIP function is optional
- Recording and preserving operation date, curves and alarm records for up to ten years
- Unique mobile + fixed double-channel door sealing device, double-channel sealing technology
- The user level and password can be set, and decentralized operation management.



Specification

| Model | GZLY-1 | GZLY-2 | GZLY-3 | GZLY-5 | GZLY-10 |
|--|---------------------|--------------------|--------------------|--------------------|--------------------|
| Freeze-dried area | 1.15m ² | 2.16m ² | 3.24m ² | 5.2m ² | 10.5m ² |
| Panel material (material thickness 10mm) | 10L | 4L | 7L | 10L | 22L |
| Material tray size | 600×480mm (5 pcs) | 600×900mm (5 pcs) | 600×900mm (7 pcs) | 750×1000mm (8 pcs) | 900×1520mm (8 pcs) |
| Material plate spacing | 80mm | | | | |
| Shelf temperature range | -50°C~+70°C | | | | |
| Cold trap temperature | ≤-75°C (no loading) | | | | |
| Vials Φ22 (pcs) | 2468 | 4608 | 6912 | 11648 | 22932 |
| Vials Φ16 (pcs) | 4788 | 8960 | 13440 | 22540 | 42966 |
| Ultimate vacuum | ≤1pa | | | | |
| Power | 18KW | 21KW | 24KW | 25KW | 58KW |
| Host weight | 1500KG | 2600KG | 2800KG | 5000KG | 7000KG |
| Mainframe dimensions | 2500×1100×2000mm | 2500×1300×2000mm | 2800×1200×2500mm | 4000×1500×2500mm | 6700×1800×3500mm |

15-50m² Pharmaceutical Vacuum Freeze Dryer

Pharmaceutical vacuum top press freeze dryer. It is widely used in medical field, such as blood products, vaccines, biological products, and chemical medicines, especially western medicine field. This series models are used in many large scale pharmaceutical factories. In terms of injections, drug quality can be improved and storage time can be delayed through freeze drying.

Features

- Shelf with high pressure resistance, high flatness and good temperature uniformity
- Controlling cooling rate, sample heating rate and vacuum rate
- Preserve multiple process recipes and process can be adjusted during drying
- Flexible manual mode and automatic control mode
- CIP and SIP function is optional
- Recording and preserving operation date, curves and alarm records for up to ten years
- Unique mobile + fixed double-channel door sealing device, double-channel sealing technology
- The user level and password can be set, and decentralized operation management.



Specification

| Model | GZLY-15 | GZLY-20 | GZLY-30 | GZLY-50 |
|--|---------------------|----------------------|----------------------|----------------------|
| Freeze-dried area | 15m ² | 20.2m ² | 29.7m ² | 51.3m ² |
| Panel material (material thickness 10mm) | 150L | 200L | 300L | 500L |
| Material tray size | 990×1520mm (11 pcs) | 1210×1520mm (12 pcs) | 1500×1800mm (12 pcs) | 1500×1800mm (20 pcs) |
| Material plate spacing | 80mm | | | |
| Shelf temperature range | -50°C~+70°C | | | |
| Cold trap temperature | ≤-75°C (no loading) | | | |
| Vials Φ22 (pcs) | 34398 | 45045 | 64449 | 111321 |
| Vials Φ16 (pcs) | 64449 | 84843 | 129789 | 224181 |
| Ultimate vacuum | ≤1pa | | | |
| Power | 80KW | 96KW | 120KW | 150KW |
| Host weight | 8000KG | 11000KG | 15000KG | 26000KG |
| Mainframe dimensions | 2500×1100×2000mm | 2500×1300×2000mm | 2800×1200×2500mm | 4000×1500×2500mm |

Household Food Freeze Dryer

Household-type freeze dryer, home freeze dryer, is a small vacuum freeze dryer. Apply to the family, online shop a small amount of freeze-dried use, widely adapted to fruits, meat, vegetables, Chinese herbal medicines, health products, etc. freeze-drying.

Features

- Perfect appearance, compact size;
- Touch screen operation, one key to start, and automatic freeze drying process, easy and convenient;
- Key components with imported brands, small noise, large capacity, high quality and high performance;
- Advanced system, with low operating current and low energy consumption;
- 304 stainless steel food tray and inside liner, safety and easy clean;
- Transparent organic glass door, the direct observation of food processing.



Specification

| Model | LFD-1 | LFD-4 | LFD-6 | LFD-8 | LFD-10 | LFD-15 | LFD-20 | LFD-25 | LFD-30 | LFD-50 |
|-----------------------|--|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Freeze-dried Area | 0.10m ² | 0.40m ² | 0.60m ² | 0.80m ² | 0.92m ² | 1.45m ² | 2.16m ² | 2.52m ² | 3.00m ² | 5.00m ² |
| Handling Capacity | 1~2kg | 4~6kg | 6~8kg | 8~ 10kg | 10~12kg | 10~20kg | 26~28kg | 32~35kg | 40~50kg | 75kg |
| Cold Trap Temperature | <-35°C(No-load) -50°C and -80°C is optional | | | | | | | | | |
| Layer Spacing | 45mm | 45mm | 50mm | 45mm | 38mm | 42mm | 53mm | 45mm | 45mm | 47mm |
| Tray Size | 140*278mm | 200* 420mm | 315* 430mm | 265* 430mm | 315* 430mm | 265* 785mm | 400*900mm | 400*900mm | 425*900mm | 500*1000mm |
| No. of tray | 3pcs | 4pcs | 4pcs | 6pcs | 8pcs | 7pcs | 6pcs | 7pcs | 9pcs | 10pcs |
| Ultimate Vacuum | ≤1.5pa(No load) | | | | | | | | | |
| Power | 1100W | 1550W | 2000W | 2300W | 2500W | 2800W | 3800W | 4100W | 4500W | 9500W |
| Dimension W*D*H | 400mm 550mm 700mm | 500mm 640mm 900mm | 640mm 680mm 1180mm | 640mm 680mm 1180mm | 640mm 680mm 1180mm | 680mm 990mm 1180mm | 1400mm 910mm 1550mm | 820mm 1170mm 1600mm | 827mm 1100mm 1350mm | 1000mm 2010mm 150mm |
| Packing list | Freeze Dryer Host, Vacuum pump, Sample Trays, Manual | | | | | | | | | |

1-10m² Food Freeze Dryer

Food vacuum freeze dryer, which is widely used in medicine, pharmacy, biology research, chemical industry and food production, etc. After the freeze-drying process, a long term preservation for products is much easier. They can be restored to the original state and maintain their chemical and biological characteristics after being watered.

Features

- Separately pre-freeze and drying structure, improving freeze-drying efficiency and shorting freeze-drying time
- Aerospace grade aluminum alloy separator material, double-sided radiant heating, radiation rate above 90%, good temperature uniformity
- Controlling heating rate and vacuum value during drying stage
- Flexible manual + automatic control mode,
- User level and password can be set, decentralized operation management
- Precise sensor calibration function.



FREEZE DRYER

Specification

| Model | LG-1 | LG-5 | LG-10 |
|--|-------------------------|-----------------------|------------------------|
| Freeze-dried area | 1m ² | 5m ² | 10m ² |
| Panel material (material thickness 10mm) | 10 L | 50 L | 100 L |
| Material tray | 400×625mm 4+1 layers | 620×1650mm 5+1 layers | 615×1650mm 10+1 layers |
| Material plate spacing | 60mm | 80mm | 70mm |
| Temperature range | room temperature~+100°C | -30 ~ +90°C | -40 ~ +90°C |
| Cold trap temperature | ≤-50°C | | |
| Ultimate vacuum | ≤10pa | | |
| Power | 9KW | 22.5KW | 45KW |
| Host weight | 900kg | 2500kg | 6000kg |
| Mainframe dimensions | 1900×1200×1700mm | 2000×3500×2100mm | 3200×1800×240mm |

15-200m² Food Freeze Dryer

Food vacuum freeze dryer, which is widely used in medicine, pharmacy, biology research, chemical industry and food production, etc. After the freeze-drying process, a long term preservation for products is much easier. They can be restored to the original state and maintain their chemical and biological characteristics after being watered.

Features

- Separately pre-freeze and drying structure, improving freeze-drying efficiency and shorting freeze-drying time
- Aerospace grade aluminum alloy separator material, double-sided radiant heating, radiation rate above 90%, good temperature uniformity
- Controlling heating rate and vacuum value during drying stage
- Flexible manual + automatic control mode,
- User level and password can be set, decentralized operation management
- Precise sensor calibration function.



Specification

| Model | LG-15 | LG-20 | LG-30 | LG-50 | LG-100 |
|--|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|
| Freeze-dried area | 16.2m ² | 20.6m ² | 31.68m ² | 52.92m ² | 105.84m ² |
| Panel material (material thickness 10mm) | 150 KG | 200 KG | 300 KG | 500 KG | 1000 KG |
| Material tray | 1200×1500×15mm 9+1 layers | 1200×1500×15mm 8+1 layers | 1200×1500×15mm 8+1 layers | 4900×1200×15mm 9+1 layers | 4900×1200×15mm 18+1 layers |
| Material plate spacing | 80mm | | | | |
| Cart numbers | 1 set | 2 set | 2 set | 3 set | 3 set |
| Temperature range | room temperature~+120°C | | | | |
| Cold trap temperature | ≤-60°C (no loading) | | | ≤-50°C (no loading) | |
| Ultimate vacuum | ≤5pa (no loading) | | | ≤10pa (no loading) | |
| Power | 50KW | 96KW | 120KW | 150KW | 230KW |
| Host weight | 6 t | 10 t | 16 t | 29 t | 46 t |
| Mainframe dimensions | 5200×1800×3200mm | 6200×2300×3200mm | 7500×2300×3200mm | 7000×8500×3200mm | 7000×11000×3500mm |

1-15m² Industrial Freeze Dryer

Industrial freeze dryer is suitable for drying high-end raw materials, Chinese herbal medicine, biological, wild vegetables, dehydrated vegetables, food, fruits, chemicals, pharmaceutical intermediates and other materials.

Features

- Shelf with high pressure resistance, good flatness and good temperature uniformity
- High heat exchange efficiency with lower freezing point and higher boiling point
- Controlling heating rate and vacuum value during drying
- Industrial-grade embedded touch screen
- Flexible manual and automatic control mode
- User level and password can be set, decentralized operation management
- Recording and saving operation data, curves and alarm records for up to 10 years



FREEZE DRYER



Specification

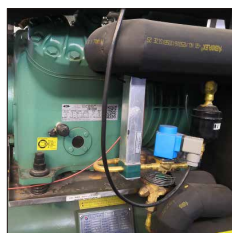
| Model | GZL-1 | GZL-2 | GZL-3 | GZL-5 | GZL-10 | GZL-15 |
|--|-------------------------|-------------------------|-------------------------|--------------------------|--------------------------|---------------------------|
| Freeze-dried area | 1.15m ² | 2.16m ² | 3.24m ² | 5.2m ² | 10.5m ² | 15m ² |
| Panel material (material thickness 10mm) | 10 L | 20 L | 30 L | 50 L | 100 L | 150 L |
| Material tray | 480×600mm 4+1 layers | 600×900mm 4+1 layers | 600×900mm 6+1 layers | 750×1000mm 7+1 layers | 990×1520mm 7+1 layers | 1520×990mm 10+1 layers |
| Material plate spacing | 80mm | | | | | |
| Temperature range | -50°C~ +80°C | | | | | |
| Cold trap temperature | ≤-75°C (no loading) | | | | | |
| Ultimate vacuum | ≤5pa (no loading) | | | | | |
| Power | 15KW | 18KW | 21KW | 23.5KW | 50KW | 75KW |
| Host weight | 1200 kg | 2000 kg | 2800 kg | 3500 kg | 6500 kg | 8000 kg |
| Mainframe dimensions | 2500×1100×2000mm | 2500×1300×2000mm | 2800×1200×2500mm | 4000×1500×2500mm | 5000×2100×3600mm | 6500×2300×3600mm |

20-60m² Industrial Freeze Dryer

Industrial freeze dryer is suitable for drying high-end raw materials, Chinese herbal medicine, biological, wild vegetables, dehydrated vegetables, food, fruits, chemicals, pharmaceutical intermediates and other materials.

Features

- Shelf with high pressure resistance, good flatness and good temperature uniformity
- High heat exchange efficiency with lower freezing point and higher boiling point
- Controlling heating rate and vacuum value during drying
- Industrial-grade embedded touch screen
- Flexible manual and automatic control mode
- User level and password can be set, decentralized operation management
- Recording and saving operation data, curves and alarm records for up to 10 years.



Specification

| Model | GZL-20 | GZL-30 | GZL-40 | GZL-50 | GZL-60 |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Freeze-dried area | 20.2m ² | 29.7m ² | 40.5m ² | 51m ² | 60m ² |
| Panel material (material thickness 10mm) | 200 L | 300 L | 400 L | 500 L | 600 L |
| Material tray | 1210×1520mm 11+1 layers | 1500×1800mm 11+1 layers | 1500×1800mm 15+1 layers | 1500×2000mm 17+1 layers | 1500×2000mm 20+1 layers |
| Material plate spacing | 80mm | | | | |
| Temperature range | -50°C~ +80°C | | | | |
| Cold trap temperature | ≤-75°C (no loading) | | | | |
| Ultimate vacuum | ≤5pa (no loading) | | | | |
| Power | 93KW | 130KW | 185KW | 210KW | 210KW |
| Host weight | 9500 kg | 15000 kg | 20000 kg | 30000 kg | 30000 kg |
| Mainframe dimensions | 7400×2300×3800mm | 9200×2400×4000mm | 9400×2400×4500mm | 9000×2400×4500mm | 9000×2400×4500mm |



Professional Laboratory Solution Provider

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