



PILOT FREEZE DRYER



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Pilot Freeze Dryer

Pilot Freeze Dryer LPFD-A10 (Standard type)

Pilot scale Top press freeze dryers are designed for drying process of large scale production units with 6 kg per 24 hours condensing rate. The freezing and drying process for a product is done by shelf freezing with shelf accuracy temperature of $\pm 1^{\circ}\text{C}$. The transparent acrylic drum drying chamber helps user to observe the drying process. Equipped with graphic LCD display with a clear layout to show the drying curves. Pilot scale freeze dryer is configured using ISO & CE standards. They are designed to provide moisture removing solution to all microbiology, biotechnology, genetic engineering laboratories and research production units.

Features

- ❄ Freeze and drying process are completed on shelf
 - ❄ The shelf temperature accuracy is $\pm 1^{\circ}\text{C}$
 - ❄ Silicon oil fills hollow shelves, with most uniform shelf temperature, consistent and repeatable drying
 - ❄ Transparent acrylic drum drying chamber for user to observe the drying process
 - ❄ Graphic LCD display with a clear layout to show the drying curves
 - ❄ PLC control standard, with programmable function
 - ❄ Stainless steel construction of condenser, operation panel and shelves
 - ❄ 32 groups program can be stored, each program can be set up 36 segments
 - ❄ Internal surface of rectangular chamber, shelf, tray, condenser are constructed of stainless steel 304
 - ❄ With USB port, PC software is optional to achieve remote control
 - ❄ Features nitrogen valve and eutectic test device (optional)
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Applications

This machine is ideal for pharmaceutical and small scale industrial use for easily and efficiently lyophilizing the product to increase its shelf life

Pilot Freeze Dryer

Specifications

Model No	LPFD-A10
Condenser Capacity	6Kg/24h
Condenser Temperature	Min. $\leq -70^{\circ}\text{C}$
Vacuum Degree	$<10\text{Pa}$
Freeze-Drying Area	0.4m^2
Material Capacity	4kg
Bulk Capacity	4L, 10mm thickness
Dimension	300x340x15mm
Temperature of Shelf	$-50\sim+70^{\circ}\text{C}$
Temperature Error of Shelf	Less than or equal to 1°C
Shelves	4+1, 50mm spacing
Maximum Power Consumption	3500W
Voltage Supply	220V, 50Hz
Dimension of the base unit	735x800x1310mm
Cooling	air, ambient temperature $\leq 25^{\circ}\text{C}$
Heating	Silicon oil heating
Vials Capacity $\Phi 12\text{mm}$	2600 pcs
Vials Capacity $\Phi 16\text{mm}$	1440 pcs
Vials Capacity $\Phi 22\text{mm}$	728 pcs
Weight	300kg

Pilot Freeze Dryer

Pilot Top press type Freeze Dryer LPFD-A20

Pilot scale Top press freeze dryers are designed for drying process of large scale production units with 6 kg per 24 hours condensing rate. These freeze dryers are equipped with organic glass observation window to observe the whole process. The freezing and drying process for a product is done by shelf freezing with shelf accuracy temperature of $\pm 1^{\circ}\text{C}$. Equipped with graphic LCD display with a clear layout to show the drying curves. Pilot scale top press freeze dryer is configured using ISO & CE standards. They are designed to provide moisture removing solution to all microbiology, biotechnology, genetic engineering laboratories and research production units.

Features

- ❄ Top press type Freeze Dryer
 - ❄ Organic glass observation window to observe the whole process
 - ❄ Freeze and drying process are completed on shelf
 - ❄ The shelf temperature accuracy is $\pm 1^{\circ}\text{C}$
 - ❄ Silicon oil fills hollow shelves, with most uniform shelf temperature
 - ❄ Graphic LCD display with a clear layout to show the drying curves
 - ❄ Stainless steel construction of condenser, operation panel and shelves
 - ❄ Transparent Acrylic Drum drying chamber for user to observe the drying process
 - ❄ PLC control standard, with programmable function
 - ❄ USB port, 32 groups of program can be stored; each program can set up to 36 segments
 - ❄ Features nitrogen valve and eutectic test device (optional)
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Applications

Pilot scale top press freeze dryers has applications in bulk products for analysis of plant material, organic tissue, pharmaceutical and biological materials, for processing of serum bottles, diagnostic kits.

Pilot Freeze Dryer

Specifications

Model No	LPFD-A20
Condenser Capacity	6Kg/24h
Condenser Temperature	Min. $\leq -70^{\circ}\text{C}$
Vacuum Degree	$<10\text{Pa}$
Freeze-Drying Area	0.306m^2
Bulk Capacity	3L, 10mm thickness
Dimension	300x340x20 mm
Temperature of Shelf	$-50\text{--}+70^{\circ}\text{C}$
Temperature Error of Shelf	Less than or equal to 1°C
Shelves	3+1 layers, 70mm spacing
Maximum Power Consumption	4000W
Voltage Supply	380V, 50Hz
Press Style	Hydraulic
Dimensions of Base Unit	1280x900x1630mm
Cooling	air, ambient temperature $\leq 25^{\circ}\text{C}$
Heating	Silicon oil heating
Vials Capacity $\Phi 12\text{mm}$	1950
Vials Capacity $\Phi 16\text{mm}$	1080
Vials Capacity $\Phi 22\text{mm}$	546
Weight	400kg

Pilot Freeze Dryer

Pilot Top Press type Freeze Dryer LPFD-A3 Series

Pilot scale Top press freeze dryers are designed for drying process of large scale production units with 10 kg per 24 hours condensing rate. The freezing and drying process for a product is done by shelf freezing with uniform shelf temperature and $\pm 1^{\circ}\text{C}$ accuracy. These pilot freeze dryers with hydraulic press style has an off cycle defrosting technology. Pilot scale top press freeze dryers are suitable for pharmaceutical and small scale industrial use for easily and efficiently lyophilizing the product to increase its shelf life. Equipped with graphic LCD display with a clear layout to show the drying curves. Pilot scale freeze dryers are configured using ISO & CE standards.

Features

- ❄️ Hydraulic press style pilot freeze dryer
 - ❄️ Silicon oil fills hollow shelves, with most uniform shelf temperature, consistent and repeatable drying
 - ❄️ The shelf temperature accuracy is $\pm 1^{\circ}\text{C}$
 - ❄️ Freeze and drying process are completed on shelf
 - ❄️ 32 groups program can be stored; each program can be set up 36 segments
 - ❄️ Graphic LCD display with a clear layout showing the drying curves
 - ❄️ Stainless steel construction of condenser, operation panel and shelves
 - ❄️ Transparent Acrylic Drum drying chamber for user to observe the drying process
 - ❄️ Features nitrogen valve and eutectic test device (optional)
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Applications

Pilot type Press type freeze dryers are used in laboratory research and development and/or small production freeze drying, diagnostic kits, serum bottles and vials analysis.

Pilot Freeze Dryer

Specifications

Model No	LPFD-A30	LPFD-A31
Condenser Capacity	10Kg/24h	10Kg/24h
Condenser Temperature	Min. $\leq -70^{\circ}\text{C}$	Min. $\leq -70^{\circ}\text{C}$
Vacuum Degree	$<10\text{Pa}$	$<10\text{Pa}$
Freeze-Drying Area	0.7m^2	0.504m^2
Bulk Capacity	7	5L, 10mm thickness
Dimension	360x500x15mm	410x410x20mm
Temperature of Shelf	$-50\sim+70^{\circ}\text{C}$	
Temperature Error of Shelf	Less than or equal to 1°C	
Shelves	4+1 layers, 50mm spacing	3+1 layers, 100mm spacing
Maximum Power Consumption	1700W	5000W
Voltage Supply	380V, 50Hz	
Press Style	Hydraulic	Hydraulic
Dimension base unit	960x785x1450mm	1165x1310x1950mm
Cooling	air, ambient temperature $\leq 25^{\circ}\text{C}$	
Heating	Silicon oil heating	
Vials Capacity $\Phi 12\text{mm}$	4920 pcs	3690 pcs
Vials Capacity $\Phi 16\text{mm}$	2728 pcs	2046 pcs
Vials Capacity $\Phi 22\text{mm}$	1408 pcs	1056 pcs
Weight	380kg	850kg



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