

BFD-100P-TP

Laboratory Freeze Dryer

Floor Model, Versatile, Economic

15L Ice Capacity, 1.04~1.15m2 Shelf Area



BFD-100P-TP freeze dryer is versatile, fits a wide range of freeze drying application, from small laboratory investigation to pilot production.

The freeze dryer combines many features of industrial larger systems, whether the excellent system performance or high advanced control system.

BFD-100P-TP Standard Specification:

Shelf Area	1.15m2
Shelf Type	Flexible, Bulk or Stoppering
Vials Capacity(φ22)	>2200
Shelves Temp.	-40C to +70C
Shelf Size	600*480mm
Shelves	4+1
Ice Capacity	10L/24hrs, 15L MAX.
Condenser Temp.	-55C or -80C
Condenser Location	External
Defrost	Electric
Vacuum Degree	<3Pa
Vacuum Pump Rate	32m3
Compressor	Single for -55C Cascade for -80C
Power Install	7.5kwh
Size	1640*1100*2000mm
Voltage	380V/50-60Hz/3P
Controller	PLC + Touch Screen

Technical Features:

CONTROL SYSTEM:

- PLC + Touch screen system, PC connectivity.
- Automatic and Manual operation selectable.
- System working status diagram display.
- Freeze Drying status & data display.
- Drying data auto storage, could download to U disk.

DRYING HOUSE:

- Acrylic see-through door.
- AISI304 finished drying house.
- 1.15m2 useable shelf area, 4 plates (size 480*600mm) with material loading capacity, 1 for extra radiant temperature.
- All plates have both freezing and heating function: -40C ~ +70C.

CONDENSER:

- External condenser for a better hygienic grade.
- 10 Liters/24hr condensing capacity, 15L in total.
- AISI304 material.

COMPRESSOR:

- Hermetic, oversized compressors.
- Single compressor for -55C System, Cascade for -80C System.
- Air cooling way.

System Performance:

Shelves Lowest Temp.	-50C
Shelves Temp. Range	-40C to +70C
Shelves Cooling Rate	+20C to -40C <60min
Shelves Heating Rate	>1C/min
Shelves Temp. Uniformity	Freezing: ±2C Heating: ±1C
Shelves & Wall Roughness	Ra<0.5
Shelves Flatness	<0.5mm/m
Condenser Lowest Temp.	-55C or -80C
Condenser Cooling Rate	+20C to -40C <30min
Condenser Coil Roughness	Ra<0.5
Vacuum Rate	Atm to 0.1mbar <30min
Vacuum Final	<3Pa
Vacuum Leakage	< 5x10-2mbarL/s

VACUUM PUMP:

- Two stage oil sealed vacuum pump.
- Vacuum adjustable.
- Final vacuum <3pa.

Optional:

- AISI316L Material.
- Dry pump.
- Lateral flask holding rack.
- Fit GMP Room Door.
- Condenser Isolation.
- Coated trays and wall

BFD-100P-TP could be fully customizable. Please feel free contact us.