

# STALWART

## Floor Standing Freeze Dryer STFD-25 Series



STFD-25B



STFD-25BH



STFD-25S

## Introduction

STFD-25 series floor-standing freeze dryers are designed for lyophilizing moderate loads, either in flasks, vials, ampoules or bulk. The compact design is ideal for labs with limited floor space. STFD-25 realizes maximum capacities of condensation (6 kg/24 h) in the minimum possible space.

STFD-25 use a touch screen controller, continuous monitors freeze-drying process. It also provides fully automatic functioning, with the possibility of manual actuation.

STFD-25 series offers -60°C models & -85°C models, to fulfill freeze-drying of different materials.

Bluk shelf models are for freeze-drying of bulk and raw materials. Stoppering shelf models are for vials and serum.

Flask shelf is optional accessory upon request.

STFD-25 series can be supplied with or without electric heating function. Users can choose according to product freeze drying requirements

## Features

- Full color, 5 inch touch screen controller equipped with STFD operation system:
  1. Real time display of collector temperature & vacuum level
  2. Automatic control of freeze-drying process, program can be set by users
  3. Can be switched to manual operation mode at any time needed, to realize entire control of freeze-drying process.
  4. Record vacuum rate, cold trap temperature, material temperature, shelf temperature, USB port for data download.
  5. Alarms for temperature and vacuum level, guarantee the safety and stability of operation.
  6. Digital password protection
- The cold trap cavity and material shelf are made of 304L stainless steel, corrosion-resistant and easy to clean.
- Material pre-freezing function.
- Automatic defrost for easy use.
- The cold trap drying chamber is made in aviation-class plexiglass transparent material, which can observe material status clearly.
- World-class compressor, optimized cooling efficiency, fast cooling, lower power consumption & environment friendly.
- Two temperature ranges available. -60° C models for aqueous samples, and -85° C models for low eutectic temperatures materials.
- Various drying accessories to process flasks, vials, ampoules or bulk.

## Specification

Item	Model	STFD 25B	STFD 25BH	STFD 25S
Feature	Drying Chamber type	Standard type	Manifold type	Stoppering type
	Ice Condenser capacity	6Kg/24h		
	Final condenser temperature	≤-60°C		
	Effective shelf area	0.25m <sup>2</sup>	12x250ml flasks	0.19m <sup>2</sup>
Shelf	Shelf layers	4	/	3
	Shelf tray dimension	Diameter Φ300mm 70mm		
	Height between shelves	Optional	/	70mm
	Shelf heater	Optional	/	Optional
Refrigerant system	Refrigerant gas	Mixed CFC free, HCFC-free		
	Number of compressors	1		
	Cold trap cooling rate	20°C to -40°C ≤30min (no load)		
Control	Controller	5 Inch colour touch screen controller with operation system		
	Freeze-drying Process	User Programable optional	/	User Programable optional
	Data Storage	Yes		
	USB port	Yes		
	RS232 port	Yes		
	Auto defrost	Yes		
Power	Voltage	220v50hz,220v60hz,110v60hz		
	Current	Main unit 5A		
	Total power	2150W	2300W	2150W

## Specification

Vacuum pump	Vacuum pump	Yes
	Vacuum degree	$\leq 5\text{Pa}$ (no load)
	Vacuum pumping rate	from standard atmospheric pressure to $10\text{Pa} \leq 10\text{min}$ (no load)
	Vacuum rate	2L/s
Main unit	Vacuum leakage	$3 \times 10^{-4}$
	Material	304
	Condenser trap material	SUS304
	Sensor type	PT100
	Material sensor	$\pm 4$
	External dimensions (L×W×H)	640*540*845mm
	Weight	127kg