

NSW-275 Bench- top Freeze Dryer



APPLICATION: NSW-275 Freeze drying is an easy and affordable way to preserve delicate materials and stabilise live things. This device is ideal for your small-scale freeze drying needs since it has adjustable tray spacing and vacuum freeze drying technology. used in waste products, laboratories, research, proteins, organic tissues, plants, polymers, pharmaceuticals, nutraceuticals, and plants. Also referred to as Top Press with Manifold Freeze Dryer, Benchtop Freeze Dryer, Tabletop Lyophilizer, Laboratory Benchtop Freeze Dryer, Laboratory Tabletop Lyophilizer, and Laboratory Benchtop Lyophilizer.

MAIN FEATURES

- Condenser, control panel, shelves and trays are made of stainless steel
- Upright stainless steel (PTFE- coated is desirable) condenser/collector coil
- Low noise compressor with a long shelf life
- The drying chamber is equipped with organic glass for safety and visibility
- Condenser features pre-freezing function
- Vacuum control valve and vacuum break valve
- Features vacuum freeze drying technology
- Drying curves are displayed on LCD screen
- With shelves provide pneumatic stoppering with a diaphragm, eliminating the need for compressed gas
- Color LCD touch screen ,English control panel,display freeze drying curve, save data
- CFC-free refrigerant, low noise compressor, good efficiency,long service life
- Condenser ,trays, drying shelf are all stainless steel 304
- With Hot gas defrost with stainless steel drain pan, silicone drain hose and auto shut off at +60° C shall be present
- Acrylic drying Chamber safe and visible

CONSTRUCTION

Lyophilizer is Double walled construction and stainless steel 304 grade steel. Made of high-quality, hygienic, easy-to-clean stainless steel machine with advance technology.

NSW-275 THE INNER COLD TRAP CHAMBER Lyophilizer is made of heavy gauge stainless steel sheet of SS-304 grade. Condenser coils and condenser chamber constructed from SS 304 qly.

PRE FREEZE CHAMBER- Bell Type made transparent Plexi Glass Cylindrical with corrosion resistant steel Trays to view in process lyophilizing.

OUTER BODY of our Lyophilizer constructed out of Textures Stainless Steel Casing with powder coating.

CASTER WHEEL- Lyophilizer the unit is mounted on a sturdy steel frame and provided with castor wheels for easy movement inside the laboratory.

STEEL SHELVES:

It shall have a tall cylindrical shelf, fitted inside the drying chamber, for the bulk drying of soil samples. Dimensions of Processing shelf shall be compatible with the equipment and capable of freeze drying 400 vials of 2 ml capacity in single run. Spacing between shelf and top of chamber accommodates containers with stoppers up to 140-150 mm maximum height

INSULATION- The gap between the walls is filled high-grade PUF, which ensures maximum thermal efficiency in our Lyophilizer with insulation of 75 mm.

CONTROLSYSTEMOPERATION- NSW-275 control system uses a 5 " graphic LCD touch screen or TFT display shall be provided to show key process parameters such as condenser temperature, process time, segment time, and vacuum level. The device is easy to operate, running status can be also clearly observed on display TFT.

- A real time display of collector temperature and vacuum level, shown on a 5" full color, capacitive touchscreen with an operating software.
- Ability to create and store 30 programs with 16 segments each, including the option to set number of steps, ramp rate, shelf temperature, hold time and vacuum level
- Automatic and manual start- up modes for the operation
- It shall have run mode and hold mode.
- Vacuum set point, alerts, diagnostic tests, user manual, and defrost control
- Feature of Data storage available & data displayed in table or graph format, which may be exported via USB or Ethernet whenever required
- Alerts, diagnostic tests, user manual and defrost control shall be displayed.
- Alerts shall be emailed to user-entered address via ethernet connection.
- Vacuum pump maintenance alert shall be displayed.
- Security lock-out shall be displayed.
- Operational language: English
- Temperature display: °C
- Vacuum display: m Bar



NARANG SCIENTIFIC WORKS PVT. LTD.

E-mail: gemsalesnsw@gmail.com

Phone: 9818868239

Web: www.nsw-india.com

- Security lockout
- The system shall include an automated defrost facility

OVER TEMPERATURE PROTECTION

- Adjustable Electronic Over temperature monitor and mechanical temperature
- Easy-to-clean interior, made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on all sides.
- Shelf temperature range: -55°C to +50 °C and a maximum of -75°C during pre-freezing.
- One probe for monitoring sample temperature in the chamber.
- Temperature ramp and hold programming from -55°C to +50°C and -75°C during pre-freezing. Controls temperature to +1°C of set point.

VACUUM PUMP

Vacuum pump with oil mist filters with displacement of 98 L/minute, 0.002 mBar ultimate pressure and fitting for 3/4" ID vacuum hose

Bar ultimate pressure

Vacuum Degree : < 10

In-built on/off switch

Noise level: below 50 dB

DRYING CHAMBERS

Freeze dryer area 0.8 m²

Door clear and acrylic 1" thick, with silicon gasket and latch

It shall have tall cylindrical

Bench top Freeze Dryer equipped with stoppering control knob, vacuum release control knob and 1/8" OD User supplied sterile/inert gas backfill port.

With manifold ports outside the equipment for flask adapters

3/4" OD vacuum connection and 36" long compatible vacuum hose with two clamps

MAKE	NSW INDIA
Model	NSW-275
Design	Benchtop
Collector coil	Upright and made of stainless steel
Volume of the condenser/collector:	Capable of holding 2.5L of ice before defrosting.
Water removing capacity	2liter of water in 24 hour

NARANG SCIENTIFIC WORKS PVT. LTD.

E-mail: gemsalesnsw@gmail.com

Phone: 9818868239

Web: www.nsw-india.com



Ice condensation temperature	-80 °C to -90 °C
Shelf temperature range	-55°C to +50 °C and a maximum of -75°C during pre-freezing
Temperature ramp and hold programming	-55°C to +50°C and -75°C during pre-freezing. Controls temperature to +1°C of set point
Temperature sensor	PT-100
Stabilizer	5 KVA
UPS	5 KVA with 30 minutes of battery backup
Compressor	The collector cooled to -85°C by two 1/3 hp HCFC/CFC-free refrigeration compressors that work together with a 1000-watt heater to cool and heat fluid medium circulating through channels in the shelf.
Accessories	Serum bottles with stoppers of 2ml capacity.
Power supply	230 V,50 hz single phase.