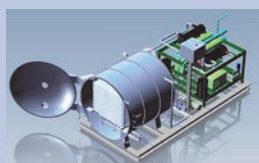




FD8

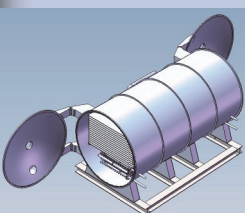
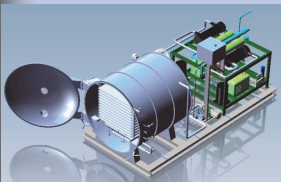
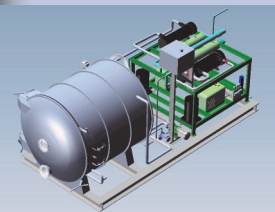
Lab. Freeze Dryer

[Www.siamfreezedry.com](http://www.siamfreezedry.com)
Hot line: 081-899-0952



Epsilon Co., Ltd.

[Www.siamfreezedry.com](http://www.siamfreezedry.com) e-mail: pokinb@gmail.com

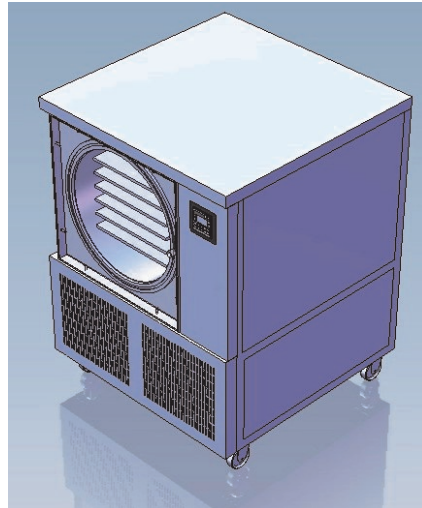


General

The Chamber is mounted within an enclosed stainless steel SUS304 (SUS316 is an option) frame with 4 casters wheel (2 for lock) to easy to move. All equipments such as Vacuum pump, refrigeration unit, control system are mounted within the frame. All machines are tested from factory before delivery

Chamber and door

The round shape chamber has product loading unloading door. The door has smooth and easy lock system with correct alignment and sealing against chamber. The door made from clear acrylic to allow visual monitor both product and vapor condenser. The chamber made from stainless steel SUS304 with diameter 500mm and 550mm depth.



Shelves

Shelves made from stainless steel flat both side complied to hygienic standard consist of 5 shelves(4 useable).

Product tray made from SUS304 provide 2 set per machine

Vapor Condenser

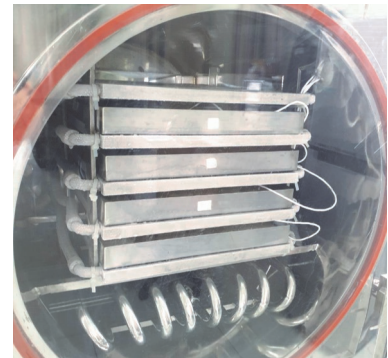
Condenser is wrapped type with coil around the chamber. Refrigeration of the coil is by direct expansion valve via thermostatic valve.

Defrosting

Defrosting ice from the vapor condenser after a product cycle is hot gas defrosting (hot water is an option and recommendation).

Refrigeration

The FD8 lab.Freeze dryer has 2 hermetic compressor, air cooled condensing unit with non-cfc refrigerant (normally are R404a)



Vacuum System

The vacuum pump system has capacity approximately 8 cubic meter per hour. Vacuum pump type are Edwards 2 stages rotary with ultimate pressure 4×10^{-3} mbar. Vacuum pump connected to the chamber isolated by electric vacuum solenoid valve. The pump features an automatic isolating valve to hold the chamber pressure in the event of power failure or vacuum value not reach as set point.

Heating System

The heating fluid is silicone oil and is circulated by in magnetic drive pump, allow heated or cooled fluid to be circulated through the plates. A cooling heat exchanger is provided in the circuit.

Instrumentation

All instruments used complied national safety standard.

Vacuum pump and vacuum gauge: Edwards, Compressor: Tecumche, PLC: Omron or equivalent.



Product testing

A wide range of product to be tested by FD8 laboratory freeze dryer such as dietary supplementary, fruit, foods, vegetable.

Smart Program

User friendly and easy to access step by step for user guide.
Easy to storage data by flash drive through PLC



Capacities and cycle time

FD8 laboratory freeze dryer has a quality acceptance by factory testing are 8 kg per batch and capable to continuous operated on demand per batch as the standard of freeze dryer process.

The capable of vapor condenser capacity of ice within 24 hours equates 8 kg. of ice.

Overall Specifications

Overall Dimensions:	1100mm wide x 1000 mm depth x 1300 mm height
Number of shelves:	5
Shelves capacity :	0.6 sq.m.
Refrigeration:	1.5 kW Compressor x 2
Refrigerant:	R404a
Shelves temperature:	-30C to +60C
Heating and cooling medium:	Silicone oil
Ice Condenser:	sus coil with direct expansion valve
Ice condenser capacity:	8kg per 24hours
Ice condenser temperature:	-50C* (*ambient 25 degree C)
Vacuum pump:	Edwards 2 stages rotary vane pump
Power requirement :	4kW 1phase 220V
Weight :	Approx. 600KG

Specifications subject to change without prior notice



Epsilon Company Limited.

54 Moo13,
Buengkhamproi sub district,
Lamlukka District
Pathumthani. Thailand



Tel: 0-2150-2148 Fax: 0-2150-2149 Mobile: 081-899-0952
<http://www.siamfreezedry.com> e-mail: info@siamfreezedry.com
Line id: [siamfreezedry](#)