

LTDG-CX-Series Laboratory Freeze Dryer

Introduction

Freeze Dryer Is Widely Applied In Pharmaceutical Industry, Biotechnology Industry , Biological Science Industry, Materials Science Industry, Chemical Industry, Food And Agriculture Industry Etc. It Is Used To Produce Vaccines, Drugs And Permanently Store Biological Tissues/Organs. Freeze Dryer Is Specialized Designed For Small Batch Test In Laboratory.The Bench Top And Console Freeze Dryers Are With Advanced Design And Occupies Small Area.

Data

Model Name	LTDG-CX-10S	LTDG-CX-10T	LTDG-CX-10P	LTDG-CX-10PT
Final condenser temp (°C)	-55			
Vacuum Degree (Pa)	<10			
Condenser volume (L)	9			
Freeze drying area (m2)	0.12	0.09	0.12	0.09
Ice condenser capacity (Kg/24h)	3			
Qty of shelf	4	3	4	3
Material loading capacity/shelf	300			
Material loading capacity (ml)	1200	900	1200	900
Freeze drying time (h)	24			
Manifold	/	/	8 pieces	8 pieces
USB Interface	Y	Y	Y	Y
Drying Chamber(standard)	Transparent acrylic			
Vacuum Pump	Speed: 2L/S			
Control System	Microprocessor, touch screen			
Power supply (V/Hz)	220V/50Hz,60Hz			
Exterior dimension (WxDxH mm)	582×541×374/684			



Data

Model Name	LTDG-CX-20S	LTDG-CX-30T	LTDG-CX-50S	LTDG-CX-50T
Shelf temp (°C)	-50 to 70			
Final condenser temp (°C)	-80			
Vacuum Degree (Pa)	<10			
Freeze drying area (m2)	0.24	0.3	0.5	0.5
Condenser capacity (Kg/24h)	6.5	6.5	10	10
Qty of shelf	2+1	3+1	4+1	3
Shelf specification (L*W*H mm)	300×400×20		300×450×20	
Distance between shelves(mm)	145		90	
Liquid material loading capacity (L)	4.5	7	10	
Temperature uniformity (°C)	±1			
Cooling mode	Air cooling			
Electric heater defrost	Y			
Cap seal method	N	Hydraulic pressure	N	Hydraulic pressure
Power supply (V/Hz)	220V/50Hz,60Hz		220V,380V/50Hz,60Hz	
Exterior dimension (WxDxH mm)	1200×750×1250/1600		1200×850×1500/1850	



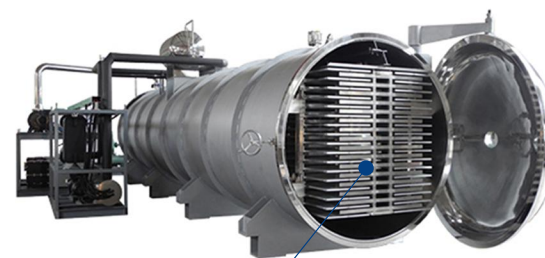
LTDG-Series Food Freeze Dryer

Introduction

Freeze Dried Which Will Put The Material Contained With Water To Freeze To Solid First, Then Make Among Them Of The Water Sublimate From Solid To Air Condition, Removing Water To Preserve Materials. Vacuum Freeze-Drying Method Is a Liquid → Solid → Gaseous Process. Products At Solution Stage Are Frozen Through Sublimation And Desorption, Then The Solvent Reduce To a Certain Extent, There by Preventing The Formation Of Micro-Organisms Or Chemical Reaction Between The Solute And Solvent That Products Can Be Preserved For a Long Time And Maintained Its Nature.

Data

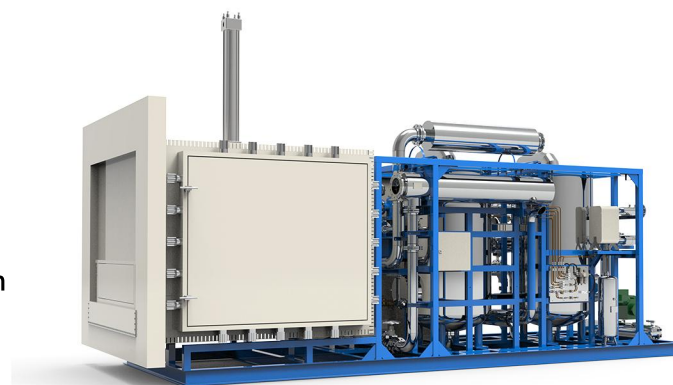
Parameters		Uhit	Model			
			LTDG-1Y	LTDG-50Y	LTDG-75Y	LTDG-100Y
Capacity	Shelf Usable Area	m3	1	50	75	100
	Condenserc Capacity	Kg/Batch	15	1000	1500	2000
Basic Parameter	Shelf Size	Width	540			
		Length	1630	3260	4890	6520
	Limit Vacuum Degree	Pa	5			
	Min Temperature At Cold	°C	50			
	Condeser Lowest	°C	≤-45			
Basic Supply	Heating Shelf Space		75			
	Cooling Water qty: ≤	m3/hr	0.9	30	48	68
	Total Power	kw	8	75	100	160
	Steam Consumption	L/hr	220(100)	450(200)	670(280)	900(340)
	Compressed air	L/hr	0.45			
Matching Cold	Water Consumption	kg/batch	5	10	10	15
	Nominal Area	m2	1	50	75	100
Matching Cold	Cooling Water qty: ≤	m3/hr	0.9	8	10	13
	Total Power	kw	8	12	19	23



LTDG-Series Pharmaceutical Freeze Dryer

Introduction

The Demand For Freeze Dryers In The Pharmaceutical Industry Is Mainly Concentrated In The Preparation Of Pharmaceutical Preparations And Biological Products. Freeze-Drying Technology Can Be Used To Prepare Drugs With Strong Stability, And Removing Water Can Prolong The Shelf Life Of Drugs And Maintain The Activity Of Drugs. In Addition, Freeze Dryers Are Also Used To Prepare Biological Products Such As Vaccines, Enzymes, Antibodies, Etc., Ensuring Their Quality, Purity And Potency.



Data

Freeze Drying machine	LTDG-6F	LTDG-10F	LTDG-13F	LTDG-15F
Power consumption	Around 33kw	55Kw	72Kw	78Kw
Cooling water qty	≥11m3/h(T≤30℃ /P=0.15-0.2Mpa)	≥18m ³ /h(T≤30℃ /P=0.15-0.2Mpa)	≥20m ³ /h(T≤30℃ /P=0.15-0.2Mpa)	≥20m ³ /h(T≤30℃ /P=0.15-0.2Mpa)
Compressed air	≥0.1m3/min （ P=0.5-0.8Mpa ）			
Clean water	≥100L/min （ T=80℃/P≥0.4-0.5Mpa ）			
Whole volume	5000 × 2000 × 3100m	5400*1900*3300	(According to	5800*2200*3700
Structure	Integral	Integral (Rectangular box dry +Rectangular cold trap)		
Total weight	5000kg	8600kg	≈10000kg	≈12000kg
Chamber design pressure	0.16 Mpa /-0.1Mpa			-0.1Mpa
Chamber design	130℃			90℃
Chamber Vacuum leak	5 × 10 ⁻³ Pa.m ³ /sec			
Total usable area of	5.67M ²	9.7M ²	12.96M ²	16.2M ²
Maximum water fishing	≥120Kg/batch	≥200Kg/batch	≥260Kg/batch	≥300Kg/batch
Minimum temperature of	≤-55℃			

