



## Dynavac Food Grade Industrial Freeze Dryers



Dynavac manufactures a range of freeze drying machines from pilot models to large capacity industrial freeze drying machines. Dynavac Food Freeze Dryers are designed according to GMP standard used for drying a variety of biological, pharmaceutical, nutritional and mass production of products in food industry.

### Features

- PLC control system
- Powder coated steel housing or stainless steel housing
- Stainless steel shelves filled with heat conductive oil with temperature uniformity  $<1^{\circ}\text{C}$
- Mirror polished stainless steel chamber with round corners and strengthening ribs
- Mirror-polished stainless steel cold trap with water vapor channel to ensure small molecule moving resistance and high water-capturing efficiency
- World-class compressor, safe and stable
- Side leakage of vacuum is tested with helium mass spectrometer to ensure high vacuum
- LCD display for working status, system running history and record, alarm and alarm history, parameter setting, saving and recall
- Self diagnostic system



# Specifications

NovaDryer Model	-FD5	-FD10	-FD20	-FD50	-FD100	-FD200	-FD300	-FD500
Freeze-drying Shelf Area (m <sup>2</sup> )	0.5	1	2.16	5	10	20	30	50
Housing Material	Powder coated steel (Optional: Stainless steel)		Stainless steel housing					
Shelf Temp. (°C)	-30~+80			-45~+80				
Shelf Temp. Uniformity	±1 °C (When balanced)							
Cold Trap Temp.	≤ -35°C			≤ -65°C				
Dewatering (Kg)	5	10	30	100	200	400	600	800
Ultimate Vacuum (Pa)	2.7 (No Load)							
Cooling Method	Air Cooled			Water Cooled				
Cooling Water Flow Volume (M <sup>3</sup> /Hr, ≤25°C)	/	/	2	11	18	37	42	50
Defrosting Method	Hot fluoride Defrost			Water spray or steam				
Compressor Power(HP)	3	4	7	12	50	70	95	105
Total Power (KW)	4	7	15	35	62	90	120	140
Shelf Size(LxW,mm)	360x480	360x480	500x900	900x950	900x1600	1100x2300	1400x2300	1300x2400
Shelf Qty (PCS)	3+1 Top shelf *	6+1 top shelf*	5+1 top shelf*	6+1 top shelf*	7+1 top shelf*	8+1 top shelf*	10+1 top shelf*	16+1 top shelf*
Shelf Space (mm)	65	65	65	65	65	65	65	65
*Dimensions(WxDxH,cm)	78x147x168	100x170x185	130x150x170	500x150x250	600x150x250	800x300x300	800x300x300	900x300x300
Packing Size(WxDxH,cm)	110x170x200	120x190x210	160x180x220	1x20' CNTR	1x20' CNTR	1x40' CNTR	1x40' CNTR	1x40' CNTR
Weight (Kg)	500	800	1800	5000	7500	12000	16000	22000
Power Supply	*220V/50Hz 1 Phase		380V/50Hz, 3 Phase (Optional: 220V/50-60Hz, 3 Phase)					
Installation Space(cm)	90x160x180	120x190x200	150x170x170	900x500x350	1000x500x350	1200x600x350	1200x600x350	1500x600x350

Notes:

\*1 Top shelf(1PC) can not be used as food tray. It can not be loaded with samples.

\* Packing size for NovaDryer-FD50/100/200/300/500: Available upon request.



NovaDryer-FD5



NovaDryer-FD10



NovaDryer-FD20



NovaDryer-FD50/100



NovaDryer-FD200/300



NovaDryer-FD500