FDRS SERIES

FOOD FREEZE DRYER



Vikumer's FDRS freeze dryers are designed to perform food freeze drying, meet commercial small to medium production demand. Drying examples include fruits, vegetables, nutraceuticals, herbs, candy, health care products and so on.



Technical Parameters:

	FD-5RS	FD-10RS	FD-20RS	FD-30RS	FD-50RS
	10 303	15 1010	10 2010	10 3000	10 3010
Shelf Area	4.86m2	9.72m2	19.44m2	30.42m2	49.92m2
No. of Shelves	9+1	9+1	12+1	13+1	16+1
Shelf Size	600*900mm	900*1200mm	1200*1350mm	1200*1950mm	1200*2600mm
Shelf Spacing	50mm	50mm	50mm	50mm	50mm
Shelf Temp.	-35C ~ +100C				
Condenser Capacity	50Kgs/24Hrs	100Kgs/24Hrs	200Kgs/24Hrs	300Kgs/24Hrs	500Kgs/24Hrs
Condenser Temp.	-45C	-45C	-45C	-45C	-45C
Final Vacuum	<5Pa	<5Pa	<5Pa	<5Pa	<5Pa
Voltage	380V/50Hz/3P	380V/50Hz/3P	380V/50Hz/3P	380V/50Hz/3P	380V/50Hz/3P
Power	12Kwh	19Kwh	42Kwh	65Kwh	115Kwh
Size (W*L*H)	1400*3400*2300mm	1700*4000*2500mm	2100*5000*2650mm	2200*6500*2650mm	2300*8500*2850mm

Standard Features:

Structure	All-in-one design. All components are mounted on a steel skid.		
Drying Chamber	Cylindrical shape; S/S304 fabricated; Validation port; Viewing port.		
Door	Double hinged; S/S304 made; Lubricate-free silicone rubber gasket; DN100 viewing port.		
Shelves	S/S304 made; Heat transfer fluid based.		
Ice Condenser	Coils type cooled by refrigerant direct expansion; Sloped bottom towards to drain; Validation port; Viewing port.		
Refrigeration	Semi-hermetic compressor, water-cooled.		
Shelves Heat Transfer	Shelves are cooled and heated with the heat transfer fluid which is force-circulated by a centrifugal pump; Fluid heating by electric heater; Fluid chilling through a heat exchanger; PID control.		
Vacuum	2-stage oil sealed vacuum pump, roots pump for larger models; Chamber pressure regulate kit.		
Controller	PLC and user-friendly touch screen HMI based; FD-MEGA interface.		
Temperature Sensors	PT-100 for shelf, product, fluid and condenser.		
Pressure Sensors	Pirani vacuum gauge.		
Valves	Motorized valves for air and water isolate.		

Optional Features:

- Radiative heating method
- Aluminum alloy shelves and trays
- Internal ice condenser
- Scroll vacuum pump
- Eutectic point detector
- PC control



Vekuma Machinery Co.,Ltd