

# Fluid Bed Dryer



It is ideal for heat sensitive and non heat sensitive products in Pharmaceuticals, Chemicals and Biochemical, Food and Dairy Industries.

**Dumra's** Fluid Bed Dryer Process involves fast drying and cooling. The Fluid Bed Dryer have a bed of solid particles which are fluidized by passing flow of air upward through a specially designed double woven screen. The upward velocity of air is so maintained so as to slightly lift the solid particles and set them in motion. This motion can be utilized to bring forward movement of the solids particles. The air is heated and the process hot air evaporates the fluid and dries the solids. The uniform drying is achieved by exposing the full surface of every particles of the solid mass to the incoming high velocity hot air.



## Salient Features:

- cGMP model with all contact parts AISI 316 & non contact parts AISI 304.
- Pneumatic Sealing of filter Bag and product container by inflatable silicon gasket.
- Inlet AHU with pre Air filter and heat exchanger steam or electric.
- Auto pneumatic filter bag shacking system.

## Optional Features :

- Additional Product container.
- Advance PLC controls with touch screen
- Exhaust AHU with Silencer and scrubber.
- HEPA Filter with Differential Pressure gauge
- Flame proof electricals
- Solid flow detection System.



## Safety Features:

- Safe earthing system for static current.
- Product Bowl interlocking mechanism.
- Explosion flap ensure at retarding chamber.

## Technical Specification:

Model	DFBD30	DFBD60	DFBD120	DFBD200	DFBD250	DFBD350	DFBD500
Capacity in Kgs	30	60	120	200	250	350	500
Vol. of Product container in Ltrs.	90	180	360	600	750	1050	1500
Blower Motor HP/kW	5.0/3.7	10.0/7.5	15.0/11.0	25.0/18.6	30.0/22.3	40.0/29.8	50.0/37.3
Steam Kg./Hr.	76	138	194	264	322	410	520
Heat Load Kcal/Hr.	39000	72000	99000	135000	165000	210000	267000
Electric Heaters kW	18	33	54	90	120	N.A.	N.A.
Min. Steam Pressure	4 Kgs./Cm <sup>2</sup>						
Compressed Air Pressure	6 Kgs./Cm <sup>2</sup>						
CFM	1300	2300	3300	4500	5500	7000	8900

Note:- Temp. 20°C - 80°C

## Dumra MACHINES

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