



FBD-series Fluid Bed Processor



Theory of Operation

In Fluid Bed Drier, warm air is forced upward through a porous grid, fluidizing and partially suspending the granules in the warm air stream and reducing drying time to an hour or less. The Fluid Bed Drier also produces a granulation in which all portions of the granulation are equally dried, a situation which may not exist for oven-dried materials. Furthermore, in the fluid bed drier drug migration during drying is usually not a problem, owing to the continuous agitation of the granulation. Equipment is available to convert fluid bed driers to continuous granulators and driers. A spray-head is mounted in the fluid bed drier, and the drier is loaded with dry powder which is fluidized and sprayed with granulating agent to produce particle-particle agglomeration, after which the agglomerates are dried by the conventional fluid bed techniques.

Application:

- Pharmaceuticals
- Cosmetics
- Food
- Agricultural
- Chemical

Benefit:

- cGMP Compliance
- Uniform product shape
- Reproducibility of product quality
- Short Process Cycle Time
- Low Space Requirement
- Easy to operate, clean and maintenance

Technical Data:

	FBD 2 (Lab)	FBD 15	FBD 75	FBD 150	FBD 300
Capacity (KG)	2-3	20-25	75-100	150-200	200-300
Standard Container (L)	6	65	260	520	806
Motor Blower (KW)	2.2	11	30	40	45
Heating (KW)	3.0	27	120	200	300
Width (mm)	950	930	1,4	1,7	2,01
Length (mm)	1,2	1,425	1,6	1,92	2,3
Height (mm)	2,637	2,73	3,4	3,9	4,5

* *Note: denotes "Dual Speed" Motor (Optional)*

Standard:

- All contact parts made of stainless steel SUS 316
- Non-explosion proof motors and non-explosion proof control
- Electric control panel with timer, ammeter (except Lab model), start-stop push buttons, emergency stop push button, air seal pressure regulator, overload relay
- Manually operated Discharge

Option:

- Explosion-proof motors and Explosion-proof control
- Vacuum System
- Spray Granulation
- Integrated De-agglomerate
- Programmable Logic Controller (PLC)
- Torque control system
- Washing in Place (WIP) system
- Validation Document: Installation Qualification (IQ)/ Operational Qualification (OQ)