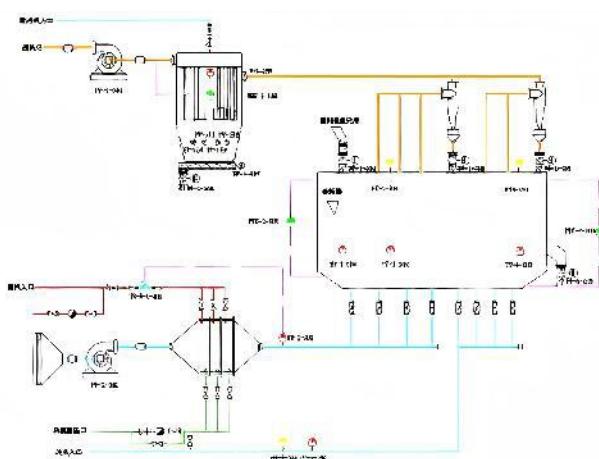


## Fluid Bed Dryer System



Hongmao boiling fluidized bed dryer takes air heated by heat exchanger to form hot air which is distributed into the main engine through valve plate, and the loose wet material is transferred into the dryer from feeder. Due to the effect of wind pressure, the material forms boiling state in the dryer and has extensive contact with hot air, thus drying the material in a relatively short time. It is suitable for drying bulk materials and crystal materials; After drying, the product has the characteristics of uniform moisture, good fluidity and not easy to agglomerate, which is widely used in amino acid, food industry and other materials drying.

### System optimization and energy saving scheme:

- 1) Our factory takes the patent technology to improve the structure of the air distribution system of the fluidized bed dryer, and improves the traditional vibrating fluidized bed into a fixed fluidized bed, which improves the temperature difference between hot air and the utilization ratio of hot air, and effectively reduces the energy consumption level of the system.
- 2) Adopt the fixed fluidized bed dryer effectively reduces the dust leakage in the soft connection part, improves the production environment, reduces the equipment failure rate, and reduces the civil construction investment.

- 3) Optimize the design of all the equipment and pipes of the ventilation system to reduce the resistance of each equipment and pipe to the wind, reduce the installed power of blower and induced draft fan, and save the electricity consumption.
- 4) According to the gravity principle and trapezoidal distribution, make full use of high and low gravity difference, reduce the power transmission equipment, reduce installed power, and save electricity consumption.
- 5) The finned heat exchanger is the self-designed and developed high efficiency energy saving heat exchanger, which can make maximum use of the heat of condensate water and flash steam generated.
- 6) Utilize the proprietary technology to realize the average distribution of materials as soon as possible, fully mix with the materials in the dryer, and adopt the patented technology of directional side blowing air plate to realize the first-in-first-out of materials; Effective prevention and control of product color difference.
- 7) For the phenomenon that the product is easy to absorb moisture and agglomerate after packaging due to high air humidity, add a cooling and dehydrating device in the cold air conveying pipe to dehumidify the air and cool the product with the drying cold air.
- 8) The directional side blowing air plate and no dead angle treatment of the internal components, can clean all the materials in the equipment when the machine is shut down, reduce the manual cleaning process, and prevent the risk of bacterial contamination and mildew of the remaining materials.

#### Technical parameter

Model	EV capacity kg/h	Steam consumption kg/h	Drying area (m <sup>2</sup> )	Power Kw	Installed dimension (mm)		
					L	W	H
HM-FBD1.0-P22	65-110	140-200	1	22	6000	3000	4200
HM-FBD2.0-P37	125-210	260-320	2	37	6500	3000	4400
HM-FBD3.0-P45	180-300	420-480	3	45	7000	3600	4500
HM-FBD4.0-P55	210-420	510-650	4	55	7500	3800	4500
HM-FBD5.0-P55	320-510	720-780	5	55	8200	4000	4800
HM-FBD6.0-P75	430-620	910-950	6	75	8600	4200	5200
HM-FBD7.0-P90	540-760	1100-1200	7	90	9000	4400	5500
HM-FBD8.0-P110	620-850	1350-1600	8	110	9500	4500	5500
HM-FBD10.0-P132	660-1100	1300-1800	10	132	10000	4800	5800

Hongmao relies on the professional design, the strict production management, the fine processing procedure, provides the high efficiency and energy saving equipment system for the customer. Manufacturing factory has passed the international ISO9001 quality system certification, and with the design and manufacturing capacity of pressure vessels. Customers can choose Chinese GB, International ISO, American standard AWS, EU EN and other standards for equipment design and production according to their needs.