



LB Centrifugal Granulation and Coating Machine



LB centrifugal granulating & coating machine, which is not only used in pharmaceutical industry, but also widely applied in chemical industry, health products, food, cosmetics and other industries. It can directly turn raw powder into pellets, and also complete pellet shaping (rolling) by working together with spinning granulator, extrusion granulator and oscillating granulator.

Under the functions of rotary centrifugal force, friction and annular gas buoyancy, the powdered material mixed and glued with appropriate atomized slurry that sprayed in to complete the process of granulating (pelleting), shaping (spheronizing), coating etc.. This centrifugal coater not only has the functions of granulating (pelleting) and coating, but also combined with spinning granulator, extruding granulator and swing granulator to complete the shaping (spheronizing) of pellets by replacing the gear turntable. And its granulating, spheronizing and coating processes are shown below.

Advanced Granulating and Coating Technology

Centrifugal Granulating (Pelleting) Coater combines rotary fluidized bed technology with tangential spray technology, with functions of making core granule, granulating (pelleting), amplification, spheronizing, coating and so on. It is one of the necessary equipment in the production process of solid pharmaceuticals.

High-Quality Construction and Efficient Control

The equipment is made of high-quality austenitic stainless steel, the inner and outer surfaces are highly polished, all corners are arc transition, no dead corner, no residue, with well-shaped appearance. Adopts PLC control, which can set parameters as user required to granulating (pelleting), coating and spheronizing, continuously optimize the production process, improve production efficiency, and meet GMP requirements.

Parameters

| | | LB320 |
|--|--------------------------------|----------------------|
| Raw materials charging quantity (Kg/ time) Density 0.5Kg/L | | 0.2-0.5 |
| Pelleting output quantity (Kg/ time) Density 0.7 Kg/L | | 1-3.5 |
| Spheronizing output quantity (Kg/ time) Density 0.7 Kg/L | | 0.2-1 |
| Pellet diameter (mm) | | 0.25-2.5 |
| Pelleting magnification times (K=D/d) | | ≤2.7 |
| Pelleting time (min/time) | | 30-90 |
| Spheronizing time (min/ time) | | 3-8 |
| Pelleting turntable max. Speed (variable frequency control) (rpm) | | 600 |
| Spheronizing turntable max. Speed (variable frequency control) (rpm) | | 1350 |
| Turntable motor power (Kw) | | 1.1 |
| Air supply fan | Power (Kw) | 0.55 |
| | Air volume (m ³ /h) | 100 |
| | Air pressure (kpa) | 12 |
| Dust removal fan | Power (Kw) | 0.4 |
| | Air volume (m ³ /h) | 83 |
| | Air pressure (kpa) | 13 |
| Powder supply mode | | Screw feeding |
| Powder supply motor power (Kw) | | 0.18 |
| Powder supply rotary speed (rpm) | | 173 |
| Liquid supply motor power (Kw) | | 0.09 |
| Liquid supply rotary speed (rpm) | | 86 |
| Electric heating power (Kw) | | 1.5 |
| Inlet air temperature (°C) | | Room temperature~100 |
| Compressed air pressure (Mpa) | | 0.4~0.6 |
| Compressed air consumption (m ³ /min) | | 0.2 |
| Spray gun quantity (Pair) | | 1 |
| Weight (Kg) | | 500 |