

# High speed dry mixer granulator equipment HG



### **Product Description**

### 1. Machine Description

Dry granulator can make the powder raw material directly to granular products to meet user requirements without any intermediates and additives. After granulating Product granularity uniformity and bulk density increased significantly which not only control the pollution but also reduce the production cost and improve the appearance and liquidity material to facilitate drug next operation process and storage. Also can control the solubility, porosity, specific surface area and many other advantages. Because particles compression time is short, long time no heating process, so that the active ingredients of drugs is not easy to be destroyed, especially suitable for wet and heat sensitive drugs.

### 2. Working process

Put dry powder material to hopper by hand or automatic feeder (pneumatic or motor), then transport them to pressure chamber by screw. Push back the material into high density slice by two high pressure extrusion wheels and make the particles based on customer requirement then granulating finished.

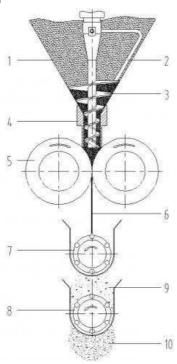
HG series dry granulator has the following parts: feeding system, extruding system, front cover, water cooling system, Granulation system, hydraulic system, the body composite on, cover plate, rotating screen system etc.

The whole machine is divided into machine body and operation panel, all drive parts and the affiliated facilities in the body, the work of contact with the material in operation panel, multiple sealing isolation between them, work under the completely sealed state and all parts contacting with materials are convenient disassembly cleaning, effectively prevent leakage of dust, reduced

the possibility of pollution, reduced the purification area, completely accords with the GMP requirements of pharmaceutical production. We can offer FAT, SAT, IQ, OQ and PQ documents.

## 3. Working principle

The granulation process of the machine is to press powder material to blocky shapes by a pair of press rollers that moves in opposite directions so as to improve its proportion. And then it is shattered through the secondary granulating mechanism to finally become the qualified material. Besides, it guarantees that the material is clean and it produces no pollution in the granulating process. The diagram of working principles:



- 1. Hopper
- 2. Mixing materials rod
- 3. Screw conveyor
- 4. Feeding part
- 5. Roller
- 6. Flakiness
- 7. Level 1 granulating
- 8. Level 2 granulating
- 9. Coarse particles
- 10. Fine particles

Model	HG-100	HG-200
Granularity	0.4~2.5mm	0.4~2.5mm
Production	≤100kg/h	≤200kg/h
	based on material	based on material
Forming pressure	40~120KN	50~280KN
Feeding rotating speed	20~86rpm	20~140rpm
Roller rotating speed	7.4~23rpm	7.4~23rpm
Granulating rotating speed	40~186rpm	50~200rpm
Feeding rotating motor power	1.5KW	2.0KW
Roller motor power	4KW	7.5KW
Granulating motor power	0.75KW	1.5KW
Hydraulic motor power	1.1KW	1.5KW
Overall dimension L*W*H	1400*1150*2050mm	1400*1150*2250mm
Weight	1200kg	1800kg