

Operation Manual

YK-60 Swing Granulator

(As technology continues to update, we retain the right to change technology design.)

Catalogue

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1. Products introduction

This granulator is a machine dedicated to making wettish compound powder into grain by pressing powders across screen meshes with the rotary barrel repeating obverse and reverse rotations.

This machine is designed to be applied in pharmacy, chemical and food processing industries for making different size of granulated products which can be pressed into different forms after. It is also can be used to granulate any dry agglomerated mass.

2. Technical parameter

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|--|-------------|
| Model | YK-60 |
| Dia of Rotor(mm) | 60 |
| Production capacity(kg/h) | 20-30 |
| Rang of Wave | >360° |
| Number of Times of Waving rolingly(time/min) | 46 |
| Motor(Kw) | 0.55 |
| Weight (Kg) | 55 |
| Overall Size(mm) | 460*550*570 |

3. Working Principle and structural characteristics

3.1.Working Principle

Speed reducer, actuated by a motor through a v-belt pulley, shall drive, an elevating gear rack by the eccentric sheave in it, in the way the gear shaft shall make the pentagon hobbing cutter periodically alternating rotation while the material to be

processed is kept moving and extruded out to be grain products by the gaps between screen mesh and barrel. The granulator capacity shall vary with water content, sort and viscosity of the material to be processed and mesh number of the screen to be used. It is designed to make different size of grain products.

For granulating dry mass, the agglomerated dry mass shall be impacted on to be crushed in the rotary barrel consisting of the pentagon on hobbing cutter and forced across the screen mesh.

3.2. Structure Characteristics

3.2.1. The structures of the charging hopper and the granulating are designed on the principle of being convenient for installing, cleaning and operating. The parts in contact with the material to be processed are all made of stainless steel in order to keep the granulated products clear.

3.2.2. All the assembly parts of the granulating mechanism are fully sealed so as to prevent any lubricating oil from getting into raw mass.

3.2.3. First, the screen shall be adjusted by a hand wheel to proper tightness and then fastened up with a clamping collar so as to keep the screen close contact to the rotary barrel. Finally the clamping collar after well adjusted shall be locked up by the pawl of a click pulley.

3.2.4. The user can make any option of the screen corresponding to what he desires to produce to make different size of grain mass.

4. Installation and commissioning

4.1. The machine should be stably set up and well earthed after it is located.

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- 4.2. Open the gear box cover and fill some lubricant oil into the reducer casing.
 - 4.3. Keep an ear to any abnormal noise that may occur during the trial run so as to make a timely troubleshoot after shut-down if there is any.
 - 4.4. During install screen, the screen should be fit on close to the covers on both ends in order to keep any powder from leaking.
 - 4.5. Before operation, please carefully check whether the fastening pieces of each component of the machine are loosening.
 - 4.6. The machine must undergo a 3~5 minutes no-load running up to normal condition before brought into operation. It is inadvisable to charge much more processing material of which two-thirds of load in the barrel shall be better.

5. Maintenance and engineering safety

- 5.1. Regularly exchange the lubricating oil in the reducer casing and the grease lubricant in the rolling bearing.
- 5.2. Frequently clean up all the parts of the granulating mechanism to keep them clear.
- 5.3. To ensure worm-gear drive in the reducer casing for a good lubrication, the casing temperature rise $< 50^{\circ}\text{C}$ must be kept during operation.
- 5.4. All the machine must be safely earthed
- 5.5. Nobody is allowed to remove any electrical component without authorized consent.

6. Electric Schematic

