# **Operation Manual**

**YK-160 Swing Granulator** 

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

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#### 1. Products introduction

This machine makes use of the rolling motion of rotating barrel, granulates the wet powder materials into granule by sieve, it also can be used to crush agglomerate materials into small granules directly.

In chemical medicine field, it can be used for granulating the mixed powder into granule, and compressed into tablet after being dried, it also can be used for granulating the coagulated material that is formed during storage or during chemical processing, In food industry, it can be used to deal with the candy and sugar mixture as well as barley milk products. In other industries, it can be used to granulate such as porcelain and plastic mixtures into forming granules.

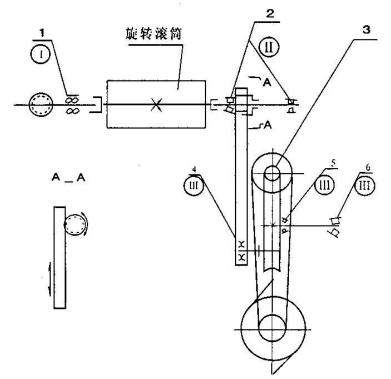
It is not suitable for solid, fluid medium, paste or pulverizing.

The mesh number of sieve should be prepared by users, according to the size of granule.

Model	YK-160	
Dia of Rotor(mm)	160	
Production capacity(kg/h)	200-300	
Rang of Wave	>360°	
Number of Times of Waving rolingly(time/min)	55	
Motor(Kw)	2.2	
Weight (Kg)	330	
Overall Size(mm)	970*560*1240	

### 2. Technical parameter

#### 3. Transmission Principle



#### 4. Structure Description

- 4.1. This machine is cuboid, it consists of bearing frame, reducer box and machine seat. The hopper is connected with bearing frame, and stretch out of the machine. The design of front-end is standing-out, so when you put the machine in the ground, it is stable. So you don not need to install the machine, it is free to be placed indoors.
- 4.2. Particle devices: The rotary roller lying device is installed below the hopper, there is bearing support before and after it. It transmits by rack, and do turn down movement. The front bearing is activities, when you assembly and disassembly it, you just need to unscrew three screws, the front bearing and rotary roller can turn out. The both sides of rotary roller apply symmetrical axis convex section, and it is easy to assemble and disassemble.
- 4.3. Sieve tube clip: Setting up on the both sides of rotary barrel, manufactured by steel pipe, there is a long slot in the middle, and the both sides of sieve are embedded into the slot, turn the hand wheel to make the sieve wrapped in the cylindrical rotary barrel. There is ratchet in the hand wheel, so you can adjust tightness.

- 4.4. Reducer Box: Apply worm gear driving, the speed ratio: 1:25.5, the box can store oil, ensuring good lubrication and no noise of the tooth rod, gear and worm gear. The outer end of worm gear, there is eccentric rod, which making the tooth bar does reciprocating movement, and the gear shaft do rotary movement.
- 4.5.Machine seat: Motor installation plate is connected with the seat, and the other side is connecting with the nut. When rotating the hand wheel to adjust the rotation of screw, and nut that is driven under the motor plate in order to transfer V-belt tightness.

#### 5. Mechanical Lubrication

Reducer box can store oil, worm splashes to lubricate various transmission parts, depending on the mirror surface lines engraved on the oil. There is oil plug in box rear for discharging oil. Open the cover, adding lubricants in middle and back bearing, adding lubricant grease in the within bearing seat. The use of lubricants and grease as following:

No.	Lubrication parts	How often	Lubricants and lubricants grease	
1	Front beating	Every shift	HJ-30 Lubricating oil	
2	Middle and back bearing	Every three months	ZG-2 Grease	
3	Reducer box bearing	Every three months	HJ-30 Lubricating oil	

#### 6. Installation

- 6.1. This machine is packed in the wooden case, when you disassembly the wooden case, just put the machine in the appropriate place and flat pad so that you can use it.
- 6.2. Electrical wiring devices is not restricted by the direction of rotation, the wiring is under the base, through the belt cover to connect with the switch, cable cards clamping.

#### 7. Introduction of uses

- 7.1. Usage: Operation the machine, pouring the mixing materials into the hopper, it makes use of the rolling motion of rotating barrel, granulates the powder materials into granule by sieve. Such as crushing blocks, you should gradually adding the blocks into the hopper, not to put too much in order to avoid excessive pressure, and cause the sieve become vulnerable.
- 7.2. Note: If the powder stops to put into the hopper, you can not use shove, so as to avoid injuring hands, you should use bamboo or stop the machine.

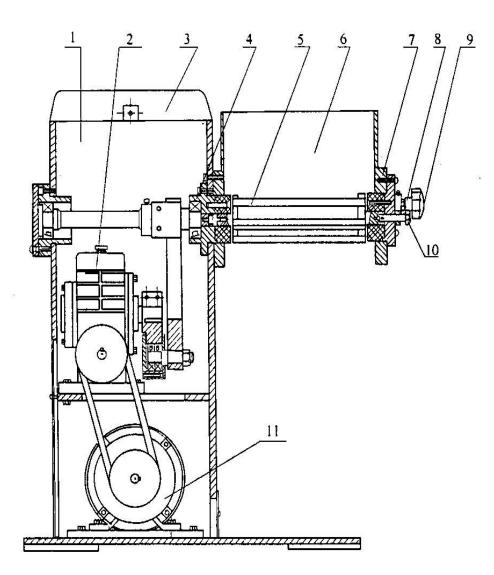
#### 8. Maintenance

- 8.1. Regularly inspect the machine, once every month. Check if there is flexible and wear of the worm gear, worm and bearing and other parts. If you discovery defects, you should timely repaired them, and stop to use.
- 8.2. This machine should be placed in dry and clean indoor, in the atmosphere must not contain acids and corrosive gases, which will damage the machine.
- 8.3. After you use the machine, you should remove the roller barrel for cleaning, and brush the remaining powder, and then set properly to prepare for the next time use.
- 8.4. If you will long time no to use this machine, you should wipe and clean the whole machine body, coated with anti-rust oil in the surface of machine, and cover with cloth.

No.	Parts	Quantity
1	Roller Barrel	1
2	Worm Gear	1
3	Worm	1
4	Gear Shaft	1
5	Tooth Bar	1
6	Sliding Guide Plate	1
7	Sliding Guide Plate	1

#### 9. Wearing Parts Table

## 10. Shape of Machine



- 1. Fuselage 2.Reducer Box
- 5.Roller 6.Plus hopper
- 9.Hand wheel
- 10.Knurling screwing
- 3. Cover
- 7. Front Bearing
- 4. Middle Bearing Caps
- 8.Ratchet Pawl
- 11.Motor

#### **11. Electric Schematic**

