Inclined Screw Feeder

Instructions

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HZ-2A series

VIBRATING HOPPR INCLINED SCREW CONVEYOR

OPERATING INSTRUCTION

1. Brief description

HZ-2A series is an economical and convenient conveyor with rectangle,vibrating hopper. the characteristics of this screw conveyor is easy to install,operate and maintenance. Due to the special design, it is suitable for easy-flow and non-flow character material as milk powder, monosodium glutamate, dextrose, solid drink, white sugar, coffee powder, fodder, pharmaceutical, agriculture pesticide, additive, dyestuff and so on.

HZ-2A series screw conveyor is composed of Feeding motor, vibrator motor, hopper, tube, and screw. Standard model with 45^0 charging angle and 1.85 m charging height. The capacity have $2m^3/h$、$3\ m^3/h$、$5\ m^3/h$、$8\ m^3/h$ etc speed. Others can be customized

We make different types of screw conveyor to meet different packaging requirements, Such as inclined screw conveyor can make with square or round hopper, horizontal screw conveyor with hopper or without hopper etc. Our company can design special device to meet different product.

Read this covering letter detail before using the machine

2、Main specification

Model	HZ-2A2	HZ-2A3	HZ-2A5	HZ-2A8
Charging capacity	$2m^3/h$	$3m^3/h$	$5m^3/h$	$8m^3/h$
Total power	0.61KW	0.81KW	1.56KW	3.06KW
Diameter of pipe	Φ102mm	Φ114mm	Φ141mm	Φ168mm
Total weight	100kg	130kg	170kg	220kg
Hopper volume	100L	200L	200L	200L
Power supply	3P AC208-415V 50/60Hz			
Charging angle	Standard 45^0，$30\text{-}60^0$ are also available			
Charging height	Standard 1.85m，1-5m can be customized			
Notes	Other charging capacity can be designed and manufactured; the charging height and power will be different as well.			

3、Characteristics

- Easy to install and operate, convenient to clean and maintain.
- Special screw design can convey different powders and small granular easily.
- The hopper with vibrating motor,more easy to make the material flow into feed tube.
- Soft connection between the hopper and the tube,easy dismantle
- The screw can run with anticlockwise diretion to discharging the remaining material from the exit of tube .It is very easy for the whole screw to dismantle, clean and install without tools.
- According to different usage environment, material character, there are many models: single tube, connected tubes, adding pushing screw on the bottom of hopper, and etc.
- The screw conveyor can be used to equip with our auger filling machine for conveyor automatic working by level sensor,and can be also used individually with other requirements.

4、Main components and functions

1. Feeding Motor：power for material conveyor.It can action as clockwise and anticlockwise running. Clockwise running for conveying, Anticlockwise for discharging the remaining material from the bottom exit .
2. Vibrating motor :make material flow easily
3. Hopper : stock material for conveying
4.. Screw and tube: conveying material.

5. Installation (see Figure 1)

1. Assemble step: driver shaft→tube→screw→Bearing Cap→ hoops→Bracket.
2: Fix driver shaft: put the shaft through the feeding inlet and insert gear box use a spacer cover and fixed by Retaining screw.
3. Install theTube: Use 4 bolt to fix the tube with the gear box
4. Screw: Place the tube horizontally, put the screw into the tube and make the groove in the bottom of the screw fix with the shaft pin
5.: Bearing Cap : Cover the bearing cap.
6. Hoop: Fix the Bearing Cap with auger tube by metal hoop,
7. Bracket: Install bracket to hold the tube, and adjust the bottom screws to make the machine stand on the ground stably.
8: After installation: trial running after check each parts fixed
Notes:Soft connect use between feed inlet and hopper, outlet and auger filling machine/hopper entrance, and fixed by metal hoop (see figure 2),

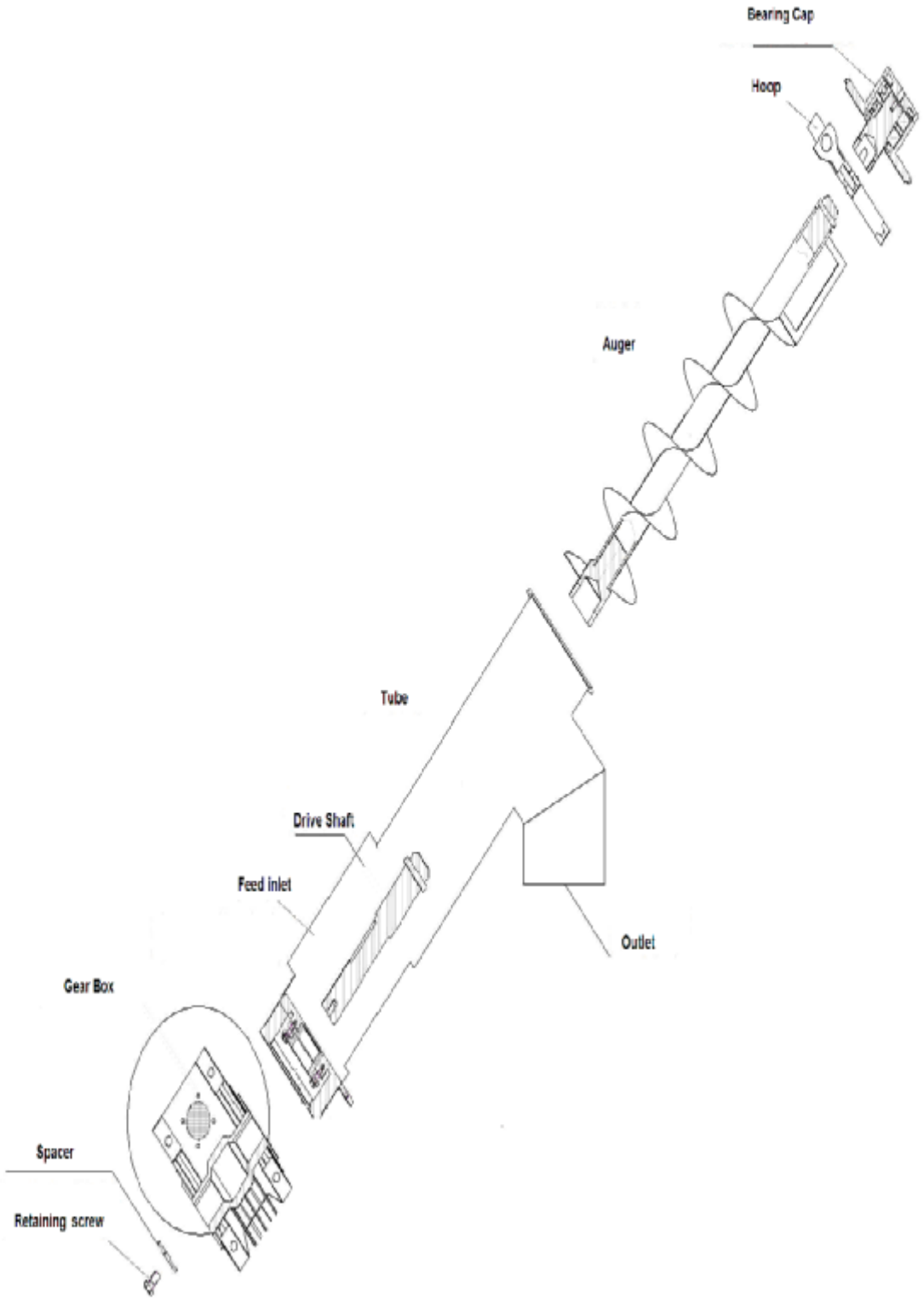
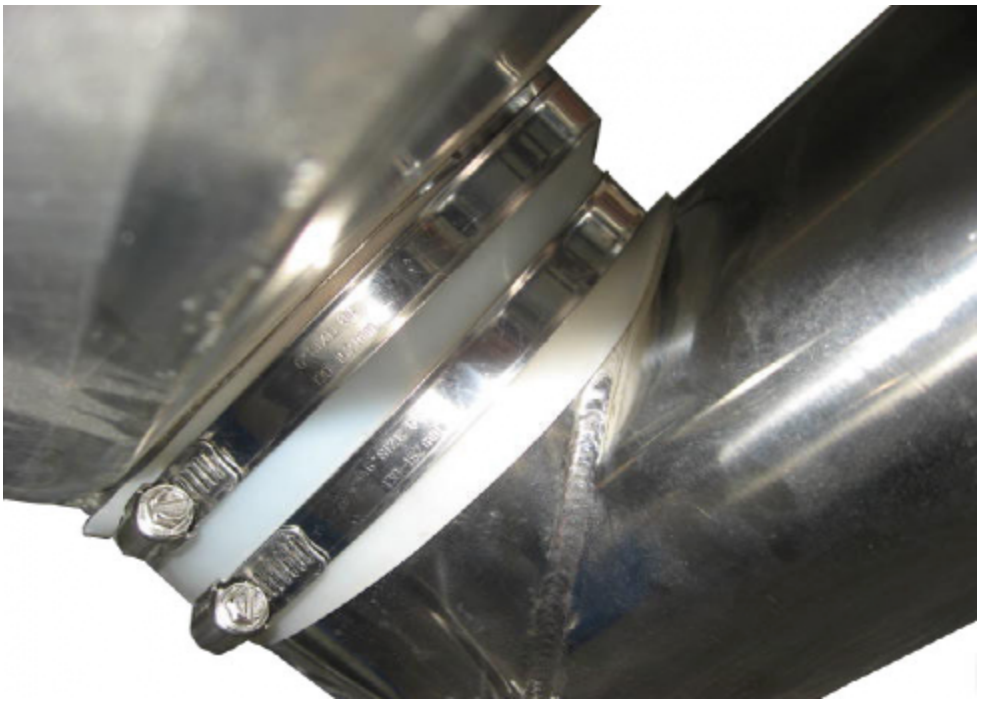


Figure 1: Structure chart



2-1: **Connection between the hopper and tube**

2-2: Outlet Connection

Figure 2 Inlet/ Outlet Connection

6、Operation

1．Turn on the power switch, it is a universal switch. --
“0”- off, “1” clockwise running (Forward direction), ，“2”- anticlockwise running (Reverse direction).
2. Check the auger rotating direction. It should shut off the power and change the wire connect (change phase) when the rotating reverse direction.
3. Drop material into the hopper
4. When screw feeder working, be sure to keep enough material into the hopper.

7、Maintenance

1.when screw conveyor working, be sure not to keep the filled hopper too full. . when screw feeder working, be sure not to keep the filled hopper too full. Otherwise it will block the outlet and result the damage of screw shaft,even feeding motor.
2. If screw conveyor doesn’t convey material smoothly or block, stop working at once. Open discharge exit, reversely rotating the auger to discharge the material from the exit and clean the tube.
3.If abnormal noise appears when working, It should shut off the power and stop working immedately. Place the tube horizontally to pull out screw carefully, check if the screw is out of shape or offcenter, then repair.
4. It is prohibited for the screw conveyor running reversely when the discharge exit is closed, Otherwise it will damage the screw flight , even motor.
5. If the users packaging equipments not buy from dahe, the screw conveyor should assemble overcurrent protection to avoid the motor damaged .
6. Cleaning:
a. Open discharge Exit, make screw running reversely to discharge remnant material into the tube. Then place tube horizontally, unscrew the hoop and take away the bearing cap then pull out shaft carefully.
b. Watering the screw shaft and clean the inner wall of tube and hopper.Be sure not to spill water on motor and switch so as to avoid the accident to burn out motor and creepage accident.
c. Assemble according to the reverse direction of a.
7.Make a all-around inspection each 3 months, check if there parts abrasioned and loose.
8. If the machine will not be used for quite a long time, it should cut off the power before the machine cleaning up. Recheck the electric parts before power connect when next using.

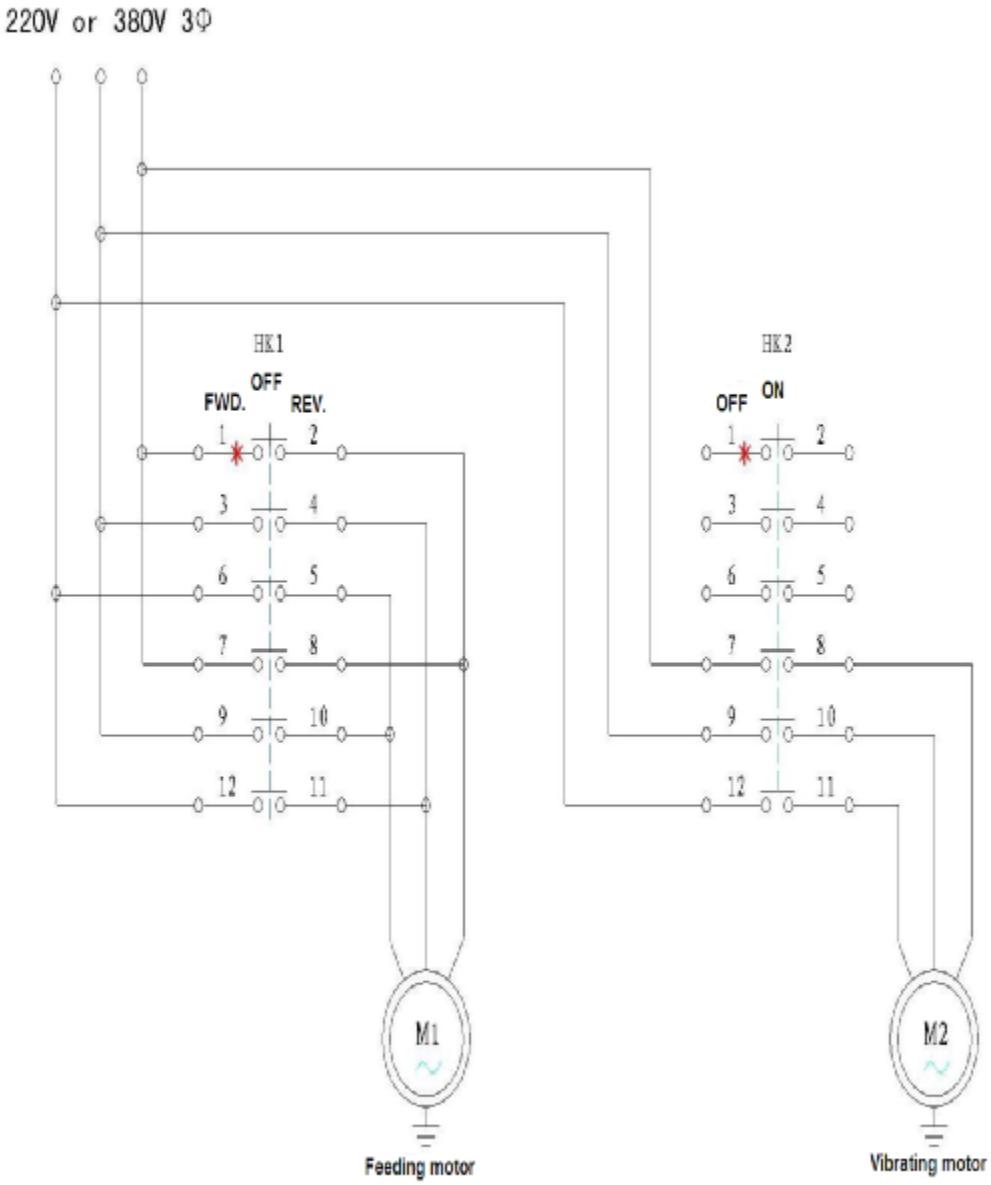


Figure 3 : Circuit Diagram