Vibrating Feeder

Application Of Vibrating Feeder

This zenith vibrating feeder is manufactured on the theory of vibration, which is widely used in mining, construction materials, silicate and chemical industry.The vibrating feeder can provide ores and rocks within 500mm for the next working procedure.

Model and Specification Of Vibrating Feeder

ZSW: vibrating feeder
380: the length of the machine's funnel
96: the width of the machine's funnel

Technical Parameters Of Vibrating Feeder

Size of the funnel(L×W)	3800×960mm	Max feeding size		500mm
Rotate speed of eccentric shaft	500-714r/min	Feeding capacity		90-100t/h
			Model	Y180L-8

			Power	11KW
			Rotate speed	750r/min
Weight (motor excluded)	3980kg	Overall dimension (L×W×H)		3885×2230×2130mm

Operation Principles & Structure Characteristics Of Vibrating Feeder

ZSW-380×96 vibrating feeder consists of vibrating frame, spring, vibrator, motor vibrating device and motor. The vibrator is made of two fixed eccentric shafts whose gears are jogged. When installation, the two gears must be jogged according to the sign. Through drive of the motor, the two eccentric shafts start rotating to produce a linear huge power which forces the feeder to vibrate. Through the vibration, the materials will slip and sling on the funnel, moving forward, when the materials pass the screening part, smaller parts will fall down, and avoiding the further crushing, so screening purpose can be reached.

Installation & Debugging Of Vibrating Feeder

The machine can be offered after assembled and trial operation by our factory. The customers should check the machine after receiving it so as to make sure whether some problems appear during the transportation. When installation, debugging and trial operation, please pay attention:

1. Since the vibration of the feeder is heavy, it's better to install the machine on concrete base. The height, depth and size of the base should be calculated according to the earth conditions. The weight of the base should be 1.5 times that of the machine. The installation size refers to the diagram. The height of the base and the discharging form can adopt steel structure or concrete platform according to the earth conditions to meet the need of the next working procedure. (according to customers' requirement)
2. The discharging glide groove of the feeder belongs to addictive fixed device of the machine. It should be kept 90mm away from the feeder in vertical direction, and 30mm in horizontal direction.
3. When installing the motor and supporting frame, the central line and horizontal line of the wheel of the motor and the vibrator should form a degree of 45. The supporting plate and the supporting base of the motor should form a degree of 15-20. And the rotating direction of the vibrator should also be considered.
4. Clean the anti-dust oil in the vibrator and add lubrication oil. The type of the oil refers to 1(1) in No.7. the level of the oil is higher than the height of the mark.
5. after installation and debugging, try the trial operation. During the no-loading trial operation, pay attention: (1) lasting for 2 hours without stop; (2) all the firmware is fastened well; (3) there is no abrasion, crump, rubbing and abnormal noise; (4) the vibration is stable.
6. there are other requirement besides the above: (1) when putting the raw materials

into the feeder, do not impact the funnel, do not put materials in one side or over put raw materials to avoid damaging the machine, supporting spring and affecting the vibration of he machine; (2) the max feeding size should be up to standard.

Operation Rules Of Vibrating Feeder

▲ Preparation before starting:

1. check the note on duty and deal with problems last time.
2. make sure that there are no other objects between the machine and glide groove as well as spring and supporting base.
3. make sure all the firmware is fastened well.
4. make sure the level of the oil is higher than the sign.
5. make sure the belt conveyor is in good condition; if there is damage, change it in time. If there is dirt, make it clean.
6. make sure the protection device is installed well. If any abnormal phenomenon, solve it in time.

▲ Starting

1. after checking, if the machine and the transmission device are in good condition, the machine can be started.
2. the machine can be allowed only in no-loading condition.
3. after starting, if there is any abnormal phenomenon, stop the machine. After solving the trouble, restart it.

▲ Operation:

1. after the machine is stable, it can be run with materials;
2. the material quantity should accord with the loading trial operation requirement.
3. stop the machine in required sequence according to regulations. The machine cannot be stopped with materials or continue to feed materials after stopping the machine.

Maintenance and Safety Technology Of Vibrating Feeder

Maintain and examine the machine frequently to prolong the service life of the machine, which is an important way to assure normal operation. The customers must notice this.

▲ As to the lubrication, the following points should be pay attention to:

1. Oil applied in this machine should be wartery. The lubricating oil should adapt to the local environment and temperature. Usually 20# is adopted.
2. make sure the level of the oil in the vibrator is higher than the sign. Change the oil every 3-6 months. Clean the oil tank, bearing track and gear surface with gasoline or coal oil before changing.

▲ safe technology:

1. the operator must be trained about safety technology;
2. during operation, no person is allowed stand by the machine. No hand touching, adjusting and checking.

3. the machine should touch the earth. The wire must be reliably insulate and wrapped in snakeskin bags. Check frequently whether the wire is abraded or creepage.

Quick-wear Parts Of Vibrating Feeder

Name	Diagram No.	material	Number
Spring	K41-1 exit	60Si2Mn	9
Bottom backplate	K4103.1-1A	16Mn	4
Side backplate	K4113.1-1A	16Mn	6
Screen strip	K4103.1-3A	ZGMn13	6
Spring (motor bracket)	C53368-2	60SiM2Mn	1