



## Hammer Crusher

The PCB [Hammer Crusher](#) is used to crushing ordinary fragile ores of the compressive strength no more than 200Mpa, such as limestone, gypsum, coal, marl, sandshale etc. These series hammer crusher has features of high crushing ratio, even product graininess, simple construction, reliable operation, easily maintenance, economical running cost etc., so are widely used in cement industry.



### Application Of Hammer Crusher

The [Hammer Crusher](#) is applicable to crush various kinds of fragile minerals such as coal, gypsum, alum and tiles as well as limestone, whose compressive strength is no more than 100MPa and moisture content no higher than 5%.



## Feature Of Hammer Crusher

- 1) High reliability
- 2) Flexible capacity
- 3) Over-loading protection
- 4) High efficiency

## **Structure Of the Hammer Crusher**

The hammer crusher is assembled by several parts and components, including frame, rotor, screen and hammer. Motor drives the rotor through triangle belt on the belt pulley. As the rotor rotates, the hammer impacts against on the materials and materials impact against each other. As a result of it, materials are crushed.

The frame consists of two parts, the cover and the lower seat. Protective lining board is set at inner wall of the frame to prevent from abrasion. Four small doors are set on the frame. Two small doors located at upper frame are used to regulate the small door at back wall of the crushing board to clean out materials which are uneasy to be crushed. The other two small doors at front and back wall of the lower seat are prepared to check and clean the screen.

The rotor consists of rotor shaft, triangle plate, round plate, hammer shaft and hammer. Triangle plate and round plate are installed on rotor shaft and are separated by shaft sleeve. Hammer shaft is set on the plates; the hammer is hung on the hammer shaft. When rotor shaft rotates, the hammer follows to rotate.

Screen strips are set in long screen strip slots on both sides of the inner wall of the lower seat. Eccentric wheels are set under the screen strip slots to adjust the gap between the screen strip and the hammer.



## Operation Of Hammer Crusher

- 1) Preparation before starting this machine
  - A. Check whether there is appropriate amount of lubricating oil in the bearing or not;
  - B. Check all fasteners to see whether they are fastened or not;
  - C. Check the gap between the screen and the hammer to see whether it is appropriate or not;
  - D. Rotate the rotor with hand to see whether it is in normal condition, whether rotation direction is correct, whether the hammer impacts against other parts or not.
- 2) The starting of the crusher
  - A. Check to make sure the machine and transmission part are in normal condition and then start up the crusher.
  - B. When unusual circumstance occurs after the starting of the machine, stop it immediately. It is a must to check the machine and eliminate abnormal conditions before re-starting of the machine.
- 3) Maintenance and use
  - A. It is allowed to feed materials after the crusher begins its normal operation.
  - B. It is a must to feed materials evenly and spread materials on the whole working length of the rotor to prevent from load increase of the motor.
  - C. Check the screen strips regularly, and clean away unwanted materials when screen strips are jammed.
  - D. Under normal condition, temperature rise of bearing should be within 35°C, the maximum temperature should no higher than 70°C. If the maximum temperature exceeds 70°C, stop the



machine immediately, find out causes and eliminate this abnormal circumstance.

- E. Stop feeding before stopping the machine. Wait until all materials in the crushing cavity are crushed completely, and then stop the motor.
- F. Replace the elastic sleeve on the shaft coupling in time with a new one when it is found damaged.
- G. Size of product granules can be adjusted by the following two ways:
  - i. Change the type of the screen strips, or insert filling blocks in both ends of the screen strip slots to change the gap of the screen strips.
  - ii. Rotate eccentric wheel axle to adjust the gap between the hammer and the screen strips.
- H. When the vibration value increases suddenly, stop the machine immediately, find out causes and eliminate this abnormal circumstance.
- I. When assemble or replace the hammer, it is a must to keep the balance of the rotor. Total weight of six hammers on one hammer shaft should be equivalent to total weight of hammers on the opposite hammer shaft; weight deviation should be no larger than 100g.

## **Installation instruction of hammer crusher**

The [hammer crusher](#) is assembled at manufacturing factory and is sold as a whole one. The user is requested to check it upon receipt of it to eliminate abnormal conditions occurred during transportation.

- 1) The foundation drawing offered by the manufacturer indicates only the



locations of crusher and motor. The user shall combine this foundation drawing with actual conditions to design the installation drawing of this machine.

- 2) The hammer crusher is set on the concrete foundation. It is necessary to consider the location of discharged materials when the foundation is designed.
- 3) A hard wood board or other vibration reduction material shall be underlaid between this machine and the concrete foundation to reduce vibration to avoid bad effects to the buildings.
- 4) When install this machine, center of the motor and center of rotor shaft should be kept on one straight line to avoid too early breakage of the elastic sleeve on the shaft coupling and heating of the bearing.

The transmission part shall be set on the right of the machine. However, specific location of transmission part shall be adjusted according to actual conditions.

## **Contact Us**

Add: Gucun Industrial Park, Shanghai, China

Zip: 201907

Tel: 0086-21-36040745

FAX: 0086-21-33854292

**E-mail: [shyhlq@crusher-mill.com](mailto:shyhlq@crusher-mill.com)**

**Website: <http://www.crusher-mill.com>**