

Key Spare Parts of Vertical Mill

Vertical Roller Mill, also known as vertical mill, is a kind of grinding mining machinery equipment that integrates fine crushing, grinding, drying, powder selection and conveying. It is widely used in cement, decorative building materials, power engineering, metallurgical industry, chemical plants, mining enterprises and other industries. Nowadays, the main grinding materials of vertical mills on the sales market are: ironmaking blast furnace slag, fly ash, steel slag, manganese slag, nickel slag, limestone, cement raw material, cement clinker and other industrially produced solid materials.



The vertical mill has high production efficiency, energy-saving and environmental protection, strong material drying ability, and stable product quality. In order to ensure the normal operation of the equipment, the maintenance of key components is extremely important. This article mainly introduces the key parts of the vertical mill and its daily maintenance.

1. **Grinding Roller**

The grinding roller is the heart of the vertical mill. The grinding roller is designed with an inclined design, on the one hand, in order to increase the contact area with the material and improve the grinding rate; on the other hand, it can prevent large pieces of material from falling off the edge; As the use time increases, the grinding roller will gradually wear out. The vertical mill produced by Great Wall Machinery can turn the grinding roller over, which not only prolongs the service life but also saves costs. The grinding roller can also be turned out of the mill for easy maintenance; in daily maintenance, at least 1-2 inspections are arranged every year, with emphasis on testing the radial system of the mill, and timely replacement of worn or aging spare parts.





2. Hydraulic System

The hydraulic device is one of the important systems of the vertical mill system. The main purpose is to provide a huge grinding pressure when the grinding roller grinds the material, but it is also easy to occur problems. For the hydraulic system, firstly, ensure that the hydraulic oil is highly clean. In the process, check the oil quality at least every six months and replace the hydraulic oil in time; secondly, during the use process, a reasonable range of grinding pressure should be set according to the characteristics of the material;

3. Powder Separator

The function of the powder classifier is to select materials that meet the requirements of grinding accuracy in time, so as to avoid powder accumulation and improve the grinding efficiency; During use, the wear of the gear and blades of the powder classifier should be checked regularly to observe whether there is noise or vibration.

4. Reducer

The reducer is a driving device that drives the work of the vertical mill grinding table and is located at the lower part of the vertical mill. It is the heart of the mill drive, and the grinding work of the abrasive relies on it to drive the grinding table to realize the continuous rolling process. Before the equipment is operated, it is necessary to detect the gear meshing; after the equipment is used for a period of time, the operation and wear of the gears and bearings of the reducer should be observed at least every six months through an endoscope.



5. Rocker Arm

The rocker arm of the vertical mill is the key part of supporting the grinding roller and the movable part when turning the grinding roller. Due to the operating characteristics of the equipment, the rocker arm bearing seat and journal are subjected to greater local pressure during the working process. Therefore, it is necessary to regularly check the wear of the bolts at the bottom of the bearing seat and the inner diameter of the bearing, and perform maintenance or repair in time.



CHAENG Vertical Roller Mills can be divided into GRMR Vertical Raw mill, GRMS Slag Vertical Mill, GRMK Vertical Cement Mill, and GRMC Vertical Coal Mill according to the different grinding materials. If you have any needs or questions about vertical roller mill or spare parts, please consult online or just leave a message.

