Factors affecting the normal operation of the vertical mill

Founded in 1958，CHAENG is a well-known integrated supplier of grinding system at home and abroad. With more than 60 years of equipment manufacturing experience, has been committed to the development and production of vertical mill, tube mill, rotary kiln and cement equipment. The vertical mill developed by CHAENG can be divided into GRMR raw material vertical mill, GRMS slag vertical mill, GRMK cement vertical mill and GRMC coal vertical mill according to the different grinding materials，can meet the grinding needs of different materials.

Vertical mill is an equipment that grinds materials by the relative rolling of grinding rollers on the grinding table. The main factors affecting the normal operation of vertical mills are as follows：

(1) The material layer of the vertical mill. Proper material layer thickness and stable material layer are the basis for the stable operation of vertical mills. The material layer is too thick to reduce the grinding efficiency. When the pressure difference of the mill reaches the limit, the material will collapse, will have an impact on the main motor and the efflux system. If the material layer is too thin, the driving force of the mill will increase, which will damage the grinding roller, grinding table and hydraulic system.

(2) Vibration of the mill. Excessive vibration of the mill will not only directly cause mechanical damage, but also affect output and quality. The foundation of the mill, the grinding pressure, the thickness of the material layer, the air volume and air temperature, the pressure of the accumulator and the wear condition of the grinding roller surface or the grinding table can all cause vibration.

(3) Grinding pressure. Grinding pressure is the main factor affecting output and quality, it should be adjusted according to the feed amount of the mill, the material particle size and the grindability. In order to maintain a certain thickness of the material layer on the grinding table to reduce the vibration of the mill and ensure stable operation, the pressure of the grinding roller must be controlled. When the grinding pressure is increased, the

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grinding capacity of the mill is improved, but after reaching a certain critical point, it will not change. Therefore, maintaining a proper grinding pressure is a very critical operation.

(4) The gas temperature of the mill outlet. When the outlet gas temperature of the mill is too low, the fluidity of the material will become poor, and qualified finished products cannot be drawn out in time. When the pressure difference in the mill is too high, the material will collapse.

(5) System air volume. The air volume of the system must match the feed volume. The method of adjusting the air volume can generally be controlled by adjusting the power of the mill circulating fan.

(6) Wear of grinding roller and grinding table. When the mill has been running for a long time, due to the wear of the grinding roller and the grinding table, the grinding structure and grinding pressure of the grinding area have changed. At this time, it is advisable to adjust the surface of the roller shell or replace the new grinding roller sleeve and grinding table liner.

Therefore, during the use of the equipment, paying attention to the use of the equipment and mastering the correct way of use can increase the service life of the equipment, reduce power consumption, save costs, and improve production competitiveness. If you have any questions during the use of the equipment, you can seek advice to the CHAENG!

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