Cement Vertical mill

Application: Cement Plant, Clinker Grinding Unit, Thermal Power Plant, Steel Mill, Mining, Quicklime Plant

Capacity: 50-250 t/h

Motor Power: 1000-5000kw

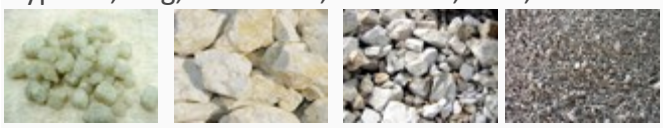
Fineness: 3300-3800cm²/g

Introduction:

Cement Vertical roller mill (VRM) is mainly used to grind cement clinker into fine powder during cement production, which can also be used to grind various materials such as calcite, marble, limestone, coarse whiting, talc, barite and dolomite etc.

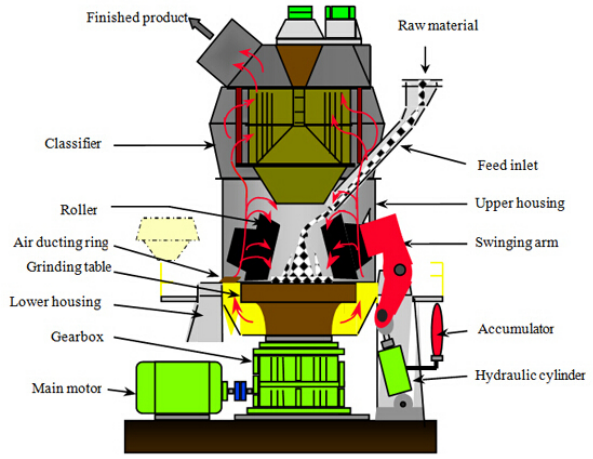
Applied material:

Gypsum, slag, limestone, dolomite, rock, ect.



1. **Technique and technology is mature and stable**

Great Wall Company's GRMK series Vertical cement mill in the production of cement specific surface area up to 3800 cm²/ g with stable and reliable quality, it already have been the ability completely to replace tube mill.

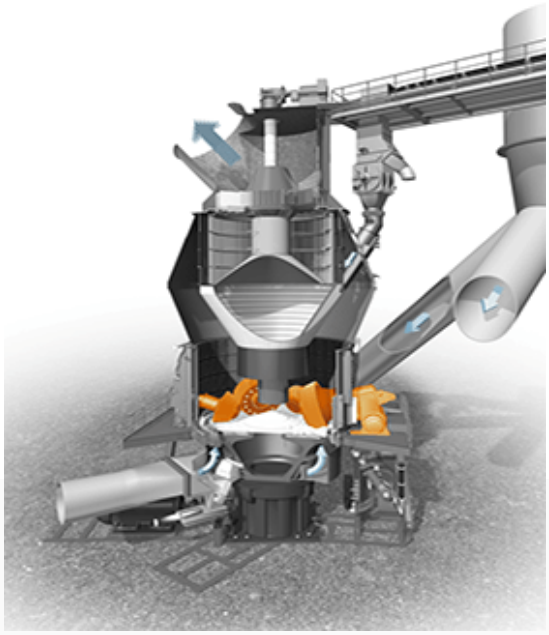


2. **Reducing the power consumption of cement clinker preparation effectively**

According to the display of pulverized coal measured data, it can be saving electricity above 30% use of vertical roller mill production per ton cement clinker than traditional tube mill, and the power saving effect is very remarkable.

3. **Stable, high-efficiency and environmental protection**

There is a low vibration and noise in overall system, and equipment with whole sealing, system working under negative pressure with no dust overflow, clean environment. Therefore, cement vertical roller mill meets the national environmental protection requirements. With working mechanism changing, cement vertical roller mill can be reduced friction and improved service life.



Working principle

This cement mill is widely used in the grinding of cement raw meal, slag(GGBS plant), cement clinker, raw coal and other raw materials. It gathers grinding, drying and powder selecting as a whole, with high grinding efficiency and high drying capacity (the maximum handling material moisture is up to 20%). The vertical mill adopts dynamic powder selecting device, which comes with high powder-selecting efficiency and convenient adjustment of fineness.

After crushed by crusher, the large materials become small ones and are sent to storage hopper by elevator, and then evenly sent to the upper distribution plate of the turn plate by vibrating feeder and sloping feeding pipe.The grinding disc is driving by motor through reducer.

The material falls to grinding disc from the feed opening. The materials are driven to the edge of disc by the centrifugal force and crushed into fine powders by rollers. Then, the hot air from the nozzle take the fine powder to high effiency classsifer.

The qualified powder are taken by the air to the powder collector to be collected, while the unqualified powder are sent back for regrinding.

Features

1. High grinding efficiency and lower energy consumption
2. Lower metal consumption per unit of product
3. Grinding on the material layer bed, minimal sound emission
4. Operation under negative pressure and minimal dust pollution
5. Simple process flow with the combination of grinding, drying and classifying in a single unit
6. Less land occupation, tight layout, light weight, lower civil works cost

Specifications

Model	Grinding Table Diameter (mm)	Roller Diameter (mm)	Roller Number (n)	Motor (kw)	Output (t/h)
GRMK30.31	3,000	1,600	3	1250	55~60

GRMK32.31	3,200	1,700	3	1600	65~80
GRMK35.41	3,500	1,800	4	1800	85~100
GRMK40.41	4,000	1,900	4	2500	115~125
GRMK43.41	4,300	2,120	4	3000	135~145
GRMK46.41	4,600	2,240	4	3350	150~160
GRMK48.41	4,800	2,240	4	3550	170~180
GRMK50.41	5,000	2,360	4	3900	190~200
GRMK53.41	5,300	2,500	4	4600	210~230
GRMK56.61	5,600	2,500	6	5300	235~250