CLUM Ultra-fine Vertical Mill

VS

HGM Ring Roller Mill

Comparison Item	CLUM Ultra-fine Vertical Mill	HGM Ring Roller Mill
Energy Consumption	Lower power consumption: Depending on the abrasiveness of the raw material and the size of the product, compared with the ring roller mill, the power cost can be reduced by 20-30%	Compared with the ultra-fine vertical mill, the power consumption of the same fineness is 20-30% higher than that of the ultra-fine vertical mill
Drying Capacity	High drying capacity: the new roller mill can introduce a large air flow, and can process raw materials with high water content	Because the temperature in the grinding chamber is lower than that of the ultra-fine vertical mill, the drying capacity of the material in the grinding chamber is limited, so the material with high moisture content usually needs to be equipped with additional drying equipment before the ring roller mill
Product Fineness	The content of 2u fine powder is high, and the average particle size D50 is small. The price of the product is higher than that of the ring roller mill. The product adapts to a wider range	The content of 2u fine powder is lower, and the average particle size D50 is larger. The price of the product is relatively lower than that of the ultra-fine vertical mill. The scope of product adaptation is relatively lower than that of ultra-fine vertical mills
Contamination of Abrasive Materials	Because the grinding roller and the grinding shoe are not in direct contact, and are made of highly wear-resistant material, iron pollution is small during the grinding process	Higher iron contamination during grinding compared to ultra-fine vertical mills

Grinding Efficiency	Grinding materials with high-pressure rollers, low wear and high grinding efficiency	The grinding efficiency is relatively lower than that of the ultra-fine vertical mill
Initial Investment Cost	The initial investment cost is higher than that of ring roller mill	The initial investment is low, about half of that of the ultrafine vertical mill
Operating Costs	Low running cost. Due to the long service life of grinding rollers and grinding tiles and less wearing parts, the service life of grinding rollers and grinding tiles is more than 5 years for normal quality calcium carbonate grinding production lines	The operating cost is higher than that of ultra-fine vertical mill. Under normal circumstances, the wearing parts of the ring roller mill need to be replaced once a year, which takes about 3 days, and the machine needs to be shut down for 3 days for the replacement
Host Noise	The noise of the main engine is small, and the workshop noise generated is far lower than that of the ring roller mill	Noisy, usually need to add soundproof room
Production Environment	The main machine of the ultra-fine vertical mill has a feeding device, and the production environment is very clean	The main machine of the ring roller mill has no feeding device, and the cleanliness of the production environment is slightly worse than that of the ultra-fine vertical mill
Product Whiteness	Due to the high content of fine powder and low iron pollution, the whiteness of the finished product is high	Due to the low content of fine powder and relatively high iron content, the whiteness of the finished product is relatively lower than that of ultra-fine vertical mills
Product Particle Shape	The sphericity of the finished powder is better than that of the ring roller mill	The sphericity of the finished powder is relatively poorer than that of the ultra-fine vertical mill
Process Complexity	The process is more complicated than the ring roller mill	The process is relatively simple compared to the ultra-fine vertical mill