**HGM Series Micro Powder Mill**

1. **Product Description**

**Applications of HGM Series Micro Powder Mill**

HGM Series Micro Powder Mill is designed to get fine and super fine powder. It is mainly used to process more than 200 kinds of non-inflammable, non-explosive and brittle materials with Moh’s hardness below 6 scale, such as calcite, chalk, limestone, dolomite, kaolin, bentonite, talc, mica, magnesite, illite, pyrophyllite, vermiculite, sepiolite, attapulgite, tablite, ceyssatite, barite, gypsum, alunite, black lead, fluorite, phosphate rock, potassium ore, floatstone etc.

**Advantages of HGM Series Micro Powder Mill**

1. Efficient

Compared with jet mill, mixing grinder and ball mill of same finished product size and motor power, HGM Micro-Powder Mill has double capacity and saves 30% energy.

2. High fineness and flexible adjustment

The product size can be adjusted between 325 mesh to 2500 mesh (47-5micron).

3. Long Life of Spare Parts

Forged by special material, the ring and roller can be used for about one year while grinding calcium carbonate.

4. Environmentally friendly

The application of pulse dust collector and muffler greatly reduce dust pollution and noise.

备用

High Pressure Medium Speed Grinder has high efficiency and low cost. Its capacity is raised by 40% compared with airflow mill and mix mill on the condition that the materials, the drive and the fineness of the final powder are the same. The life span of tear & wear parts is more than that of straight impact crusher and turbine mill under the circumstance of same materials and fineness of the final powder. Usually, its life span is more than one year. There is no rolling bearing and screw in the grinding cavity, so as to avoid the damage to the machine caused by tear & wear of bearing and seals and the looseness of screws. The fineness of powder can reach <5μm with d97.

**Working principle of HGM Series Micro Powder Mill**

HGM Series Micro Powder Mill the motor drives the main shaft and every turnplate through the reducer. The reducer drives dozens of rollers to rotate against race way of ring through pin. Small material crushed by hammer crusher is transported into hopper by elevator, and then vibrating feeder shall feed material to the central part of upper turnplate evenly. The material falls to circle under the centrifugal force and comes down to raceway of ring to be crushed into powder. After grinded in the first race way, the material goes to the second and third turnplate. The blower inhales the external air into the mill and carries the powder after third turnplate into powder-separator. Turbine in the separator makes the coarse powder drop down and regrinded and the fine powder shall go into cyclone powder collector together with air current and go down through discharge valve as final product.

**Specifications of HGM Series Micro Powder Mill**

Table 1

|  |  |  |  |
| --- | --- | --- | --- |
| Model | HGM80 | HGM100 | HGM125 |
| Roller number | 20/21 | 28 | 32 |
| Ring Diameter (mm) | 桅800 | 桅1000 | 桅1250 |
| Ring number | 3 | 3 | 4 |
| Main shaft speed (rpm) | 230-240 | 180-200 | 135-155 |
| Max. feeding size(mm) | 10 | 15 | 20 |
| Output fineness 渭m(mesh) | 150-2500 | 150-2500 | 150-2000 |
| Capacity (tph) | 0.4-4.5 | 0.9-6.5 | 0.700-10 |

Table 2

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Main mill (KW) | Classfier (KW) | Blower(KW) | Hammer crusher (KW) | Bucket elevator (KW) | Screw conveyor(KW) | Discharging valve(KW) | Air compressor(KW) |
| HGM80 | 55/75 | 18.5 | 45 | 11/18.5 | 3 | 3 | 0.75x2 | 11 |
| HGM100 | 132 | 30 | 75 | 18.5/45 | 4/5.5 | 4 | 1.1x2 | 22 |
| HGM125 | 185/200 | 37/15脳4 | 45x2/55x2 | 18.5/45 | 5.5 | 3x2 | 1.1x2 | 22x2 |

1. **Grinding project case**

**The grinding site of HGM Series Micro Powder Mill**

**Calcite HGM Series Micro Powder Mill in Myanmar**

**Raw Material:** Calcite  
**Output size:** 1200 mesh  
**Capacity:** 1.2 t/h  
**Application:** PVC

**Brief Introduction:**

It includes one big jaw crusher PEW400X600, one elevator and two sets of HGM80 Micro Powder Grinding Mill. First set of HGM80 Micro Powder Grinding Mill was running in May, 2014. The installation and commissioning was with the guidance of our engineer. While, the second set is installed and commissioned by the client themselves with the help of LIMING in May, 2015.