



# HGM SERIES MICRO POWDER MILL

TOP 1 BRAND OF CHINA'S CRUSHING  
AND GRINDING INDUSTRY









## PRODUCT PRESENTATION

HGM Micro Powder Mill (Full name is HGM series three-ring & medium-speed micro-powder mill) is designed basing on our 30 years' manufacturing experience, absorbing the Swedish advanced machine manufacturing techniques. It is a new type of mill for making super fine powder through more than 20 times of test and improvement. It is the latest type of product of micro-powder mill that leads the world tide.

### Three major features of product

- 1、Low investment, High efficiency
- 2、Low wastage, Nice fineness
- 3、Safe reliable, Environmental friendly

### Purpose and scope of application:

HGM series of three-ring medium speed micro powder mill is a kind of fine powder and ultra-fine powder processing equipment. It is mainly suitable for medium, low hardness, mohs hardness less than or equal to 6 of flammable and explosive of brittle materials, such as calcite, dolomite, gypsum, mica, talcum, graphite, etc. more than 100 kinds of materials. Finished product fineness, within the range 800-2500 mesh is suitable for all kinds of metal materials and hardness is not more than 9 grinding, the general single production in 0.5~5 tons per hour.

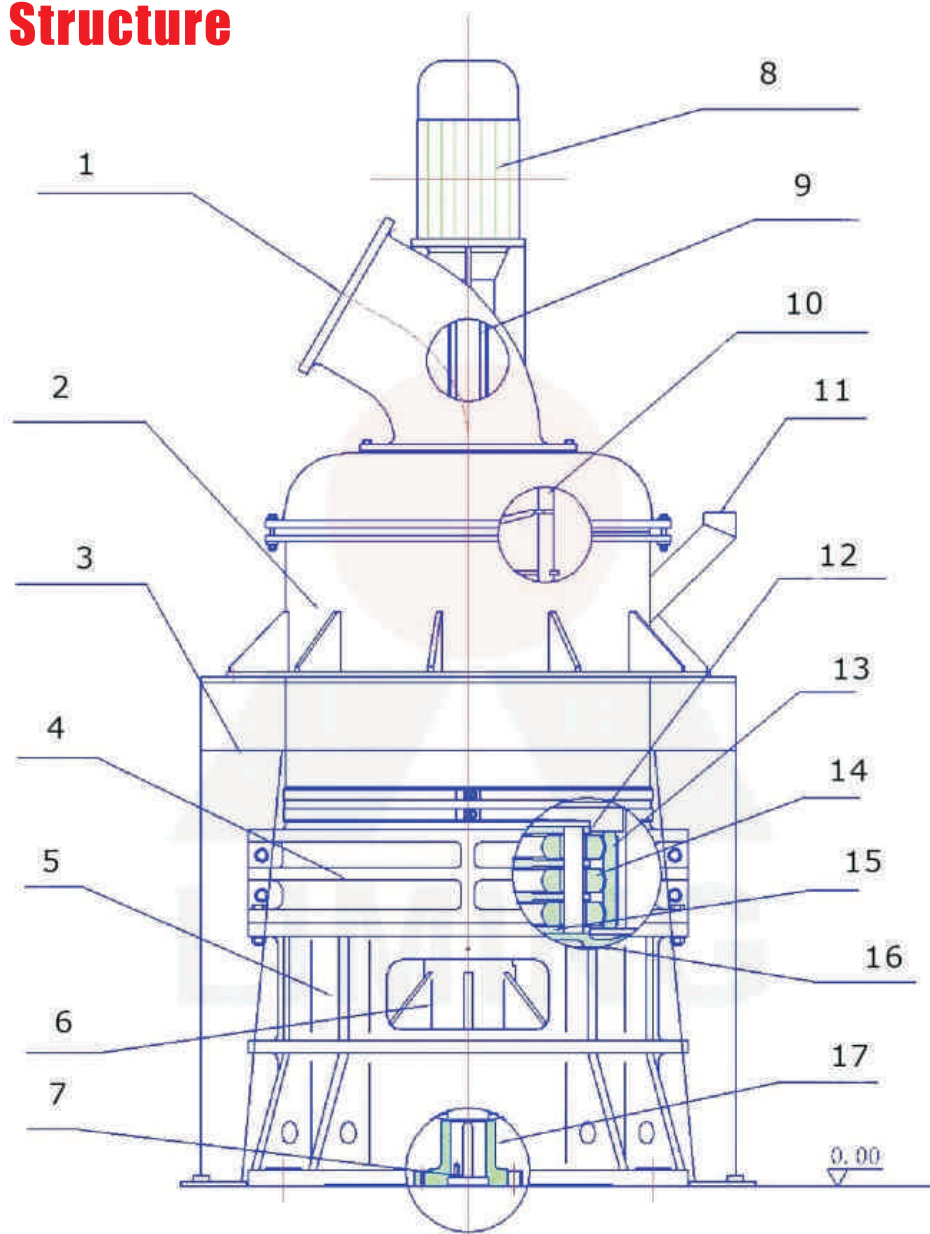


## HGM medium-speed micro powder mill **working principle**

The motor drives the main shaft and every turn plate 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 turn plate 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 turn plate. The blower inhales the external air into the mill and carries the powder after third turn plate into powder-separator. Turbine in the separator makes the coarse powder drop down and regrind and the fine powder shall go into cyclone powder collector together with air current and go down through discharge valve as final product; at the same time, air current with a little dust goes out through blower and muffler after purified by filter.



## Product Structure



1. classifier powder outlet
2. classifier body
3. classifier stand
4. shell
5. seat
6. bearing bush
7. main shaft
8. classifier motor

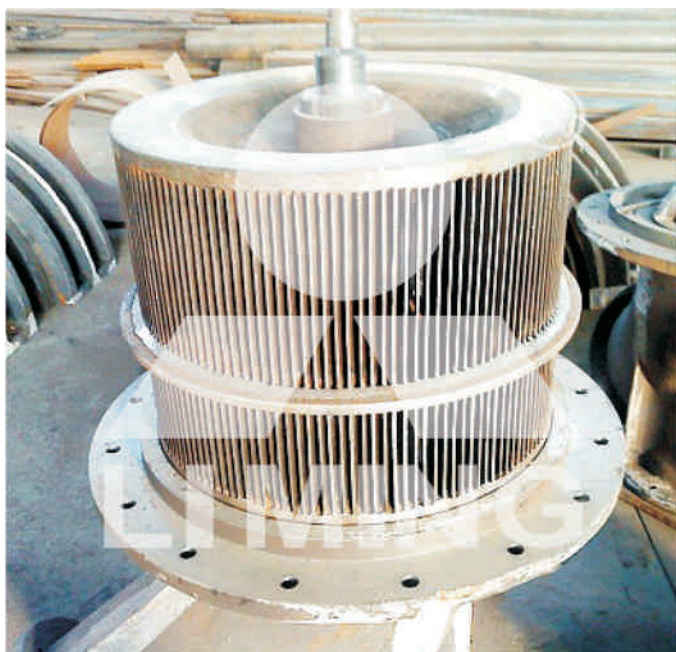
9. classifier shaft
10. classifier impeller
11. inlet mouth
12. upper distributing plate
13. ring
14. roller
15. turn plate
16. lower distributing plate
17. coupling to connect gearbox





## PERFORMANCE **ADVANTAGES**

**1. Adopt cage classifier, the powder-selecting efficiency is more higher**



**2. Open circuit fan system, higher capacity**

HGM medium speed mill is working on suction for gas flow, while other grinders are blast, so the third ring road is open circuit grinding system. Comparing with ordinary mill, the closed-circuit system has more ventilation, which leads a higher yield



## PERFORMANCE **ADVANTAGES**

### 3. More grinding rings, easier to adjust for higher fineness

On the three-ring grinding mill, there are three grinding rings, main shaft on a disk, 7/9pcs in each layer of the disk, 21/27 totally. The final fineness can reach  $D_{90} \leq 75$  microns one-time, and it is convenient to adjust.



### 4. Adopt pulse dust collector, more efficient and environmental protection

Pulse dust collector is better than that of cloth bag filter, not only guarantee the 24 hours of continuous operation, but also equipped with a silencer after the high pressure fan, greatly reducing the noise pollution.

### 5. Low investment, high efficiency

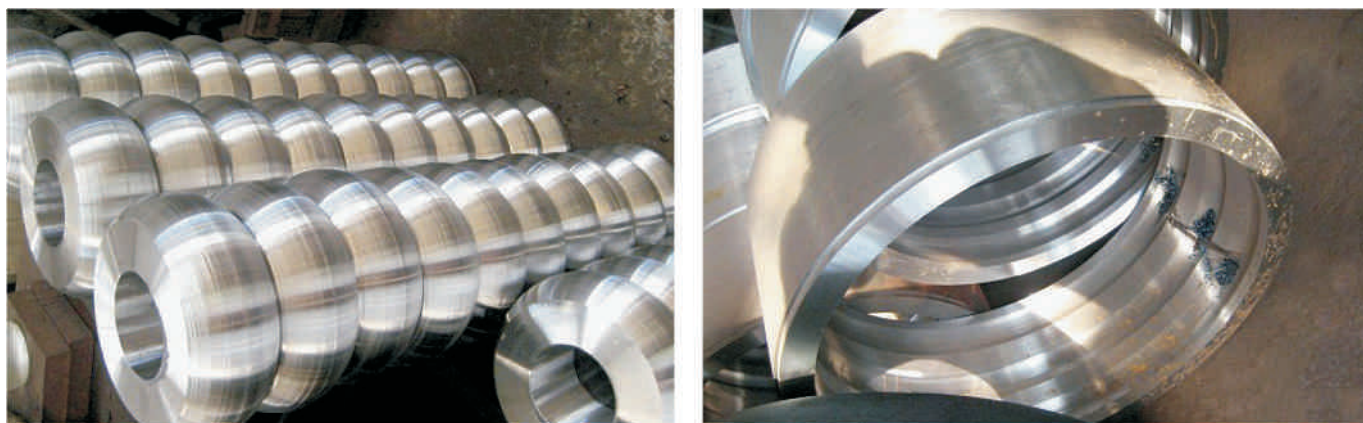
Under the same product fineness and power consumption, the investment cost is lower, the recovery period is shorter, comparing with jet mil, but the output is 45% higher.



## PERFORMANCE **ADVANTAGES**

### 6. Low lost of wear-resisting material

Adopt wear-resisting material with high quality on the spare parts, over one year lift time mostly.



### 7. Reasonable internal structure, safe and reliable

No rolling bearing and screw in grinding cavity, to avoid the bearing damage, and avoid the equipment from the damage of screw loosening problems, to ensure the products with long service life.





## TECHNICAL PARAMETERS

Specification Model Items	HGM80	HGM100	HGM100A	HGM125
Ring diameter (mm)	800	1000	1000	1250
Quantity of ring layer	21	27	36	44
Quantity of roller	3	3	4	4
Main shaft speed (rpm)	230-240	180-200	180-200	135-155
Maximum feed size(mm)	≤10	≤10	≤10	≤15
Output fineness μm(mesh)	5-47(325-2500)			
Capacity (kgph)	4500-400	5500-500	6500-500	10000-700

KW	HGM80	HGM100	HGM100A	HGM125
Main mill (KW)	75	110	132	160
Classifier (KW)	18.5	37	37	45
Blower(KW)	45	75	75	2*55
Hammer crusher (KW)	11	18.5	18.5	45
Bucket elevator (KW)	3	3	3	4
Screw conveyor(KW)	3	3	3	2*3
Discharging valve(KW)	2*0.75	2*0.75	2*1.1	4*1.1
Air compressor(KW)	7.5	15	15	2*15

**Note:**Any change of technical data shall not be advised additionally.

In order to enhance your experience of our equipment during the operation, we strongly recommend spare parts originally manufactured by LIMING Heavy Industry. These high quality spare parts are manufactured using advanced metallurgy techniques, precise machining, and perfect compatibility, ensuring the lowest malfunction operation and creating higher value for our customer.

## Crushing Plant



Sine Liner



Spring



Toggle Plate



Guard Liner Plate



Impact Block



Wearproof Plate



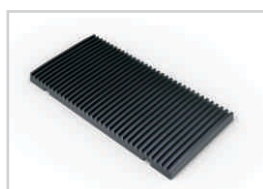
Impact Plate



Tension Rod



Feed Eye Ring



Movable Jaw Plate

## Grinding Plant



Ring



Roller



Shovel Base



Shovel



Gland Arove Roller Sleeve



Roller Sleeve



Roller Shaft



Classifier Impeller



Lining Plate



Air Way Guard Plate



## PRODUCT LIST

### Production Line

Stone Crushing Line

Sand Making Line

Industrial Grinding Line

### Grinding Plant

LM Vertical Mill

MTW European Trapezium Mill

LUM Vertical Roller Mill

TGM Trapezium Mill

T130X Superfine Grinding Mill

YGM Series Suspension Mill

HGM Series Micro Powder Mill

Coarse Powder Mill

Raymond Mill

### Crushing Plant

HJ Series Jaw Crusher

European Type Jaw Crusher

European Type Impact Crusher

Impact Crusher

Jaw Crusher

HPT Hydraulic Cone Crusher

HST Hydraulic Cone Crusher

CS Series Cone Crusher

Spring Cone Crusher

### Sand Making& Screening Plant

VSI5X Vertical Shaft Impact Crusher

VSI Vertical Shaft Impact Crusher

PCL Vertical Shaft Impact Crusher

YKN series vibrating screen

Vibrating Screen

Sand Washing Machine

Belt Conveyer

Vibrating Feeder

### Mobile Crushing Plant

Crawler Mobile Crushing Plant

Mobile Primary Jaw Crusher

Mobile Impact Crusher

Secondary Cone Crusher

Multi-Combination Mobile Crusher

Mobile VSI Crusher

Mobile Vibrating Screen

# QUALIFICATION

## GOST Certificate



Grinding Plant



Crushing Plant



Mobile Crushing Plant

## CE Certificate



Grinding Plant



Crushing Plant



Sand Making Plant



ISO9001:2008  
Quality Management  
System Certification



Environmental management  
system certificate





## **Service** – With me, enjoy your pleasant journey.

Liming has the most experienced team of engineers with professional knowledge and spirit of dedication. To serve the clients more conveniently, they scattered all over the world to work all year round. From the site planning to the drawing design, from the technical training to the installation and debugging, from the whole working line that values millions to the small pinion that looks insignificant, they fully understand the influence factors of actual situation on customer business, and create successful solution to improve the production efficiency and the environmental quality for customer operating agency.



## WORKSHOP





## **ENTERPRISE PROFILE**



Henan Liming Heavy Industry Science & Technology Co., Ltd. , established in 1987, is the leading enterprise of mining machinery in China.

Liming Heavy Industry is chronically committed to the research and develop of manufacturing of large infrastructure projects, such as construction, energy, transportation, etc. and provides various technical solutions and auxiliary products. "Made in Liming" is highly praised by our cooperative partners from more than 130 countries and regions overseas, such as Russia, Kazakhstan, Azerbaijan, Turkey, Kuwait, South Africa, Egypt, Vietnam, Malaysia, India, Australia, Korea, Canada and the European Union,etc. Liming is deserved to be one of the most excellent enterprises with the most industry customers and the most widely sales level service network.

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