

HCH Ultra-fine Grinding Mill

---The most Economic and Practical Ultra-fine Powder Processing Equipment, the Energy-saving and Reduce Consumption Equipment for ultra fine Powder Processing

Max feeding size: $\leq 10\text{mm}$

Capacity: 0.7-22t/h

Fineness: 0.04-0.005mm

HCH ultra-fine grinding mill is especially suitable for ultra fine grinding. With years' accumulation of experience in R&D, the HCH Ultra-fine Grinding Mill is a new ultra fine pulverizing equipment designed by Hongcheng. This mill is widely used to grind any non-metal minerals with Moh's hardness below 7 and moisture below 6%, such as talc, calcite, calcium carbonate, dolomite, bentonite, kaolin, graphite, carbon black, etc. HCH Ultra-fine Grinding Mill features in space-saving, completeness, wide usage, easy operation, smooth performance, high performance-cost ratio and high efficiency. HCH1395 Grinding Mill is the biggest ultra fine circle-roll grinding mill in China.

Introduction:

HCH Ultra- fine Grinding Mill

With years' accumulation of experience in R&D, the HCH ultra-fine grinding mill is new ultra fine pulverizing equipment designed by HongCheng. This mill is widely used to grind any non-metallic minerals with Moh's hardness below 7 and moisture below 6%, such as **talc**, **calcite**, calcium carbonate, dolomite, **bentonite**, kaolin, graphite, carbon black etc.. Product fineness can be adjusted within a range from 325 mesh to 2500mesh and its disposable fineness can reach $D_{97} \leq 5\mu\text{m}$. HCH ultra-fine grinding mill is especially suitable for ultra fine grinding. After a long period of market application practice and user authentication, the device HC1395 model was certified by the China Association of calcium carbonate for energy-saving equipment in China's calcium carbonate ultra-fine processing industry. HCH1395 is the biggest ultra fine circle-roll grinding mill in China.

This HCH ultra-fine grinding mill features in space-saving, completeness, wide use, easy operation, smooth performance, high performance-cost ratio and high efficiency.

Working Principle

Technological process: The pre-grinding raw ore material will be crushed into particles < 10mm and transport to the feeding hopper by the elevator, then feed into the grinding chamber by the feeder. The grinding rollers equip on the rotary table rotates around the centre shaft. There is flexible gap between the roller and ring. The rollers rotate outward by the centrifugal function to compress the fixed ring. The rollers also self- rotates around the roller pin. When material passed through the gap between the ring and roller, the material will be smashed by the rotating rollers. Four layers of rollers. Material will be grinded 1st time when passing the 1st layer of roller and ring. Then be grinded second, third and fourth time when loop through each layer rollers. Thus the materials were grinded sufficient and obtain much fine powder. The powder fallen down onto the bottom table by gravity will goes up to the classifier for separation by the airflow from blower. The qualified fineness passing from the classifier will be collected by the pulse bag collector as final product, while unqualified fallen down for regrinding till passing through. The powder goes with air flow into the pulse bag filter and collects by the discharging valve. The wind path is in circulation and the airflow is in negative pressure. There will be no dust escape, so the equipment can ensure a no dust operation in workshop.

Application Range

HCH Ultra-fine Grinding Mill is widely used to grind any non-metallic minerals with Moh's hardness below 7 and moisture below 6%, such as talc, calcite, calcium carbonate, dolomite, bentonite, kaolin, graphite, carbon black etc.. This kind of mill is especially suitable for ultra fine grinding. The fineness can be adjusted from 0.045mm(325 mesh) to 0.005mm(2500 mesh), whose range is much wider than that of traditional Raymond Mill.

Performance advantages:

1. Reliable Performance

Higher production capacity and lower power consumption: Non metallic mineral particles feed which feeding size is less than 10mm, can be one-time processed as < 10 m powder (97% passing). The particle size less than 3um accounted for about 40%,which contributes to a larger specific surface area. It has the advantages of low cost, high efficiency, and good product fineness.

2. Forced Turbine Classifying System (Patent no.: ZL201030143470.6)

Wide fineness and flexible adjustment: Turbine classifier (patent no.: ZL201030143470.6). The fineness can be adjusted flexibly from 0.04mm (400 mesh) to 0.005mm (2500 mesh). Products with various fineness can meet the market needs and improve your competitiveness.

3. Environment-friendly: Full Pulse Collecting System (Patent No. CN200920140944.3)

Environmental protection: The pulse collecting system will remove 99.9% of the dust, ensuring dust-free operation environment. The pulse dust collection system is Hongcheng special invent comply for the environment protection requirements.

Thorough Cleaning: The pulse dust collection system is adopted with pulse-jet type of cleaning. By utilize the compression air to shoot clean each filtering bag. High and complete dust cleaning. Prevent bags from powder stocking.

4. Lower Wear-resistance Rate

The wearing parts(roller and ring) made from special wear-resistant material which prolongs working life.

5. Absorb Vibration and Compact Structure, high safety and reliability

The mill base is inblock casting, which ensures the structural strength and alleviates vibration.



Safenet Certification Services Ltd.

204 Roselawn House, National Technology Park, Limerick, V94 6R68, Ireland

Tel: +353 61 633 604

e-mail: office@safenetcs.ie

Website: www.safenetcs.ie

EC Examination Certificate

This is to certify that

Guilin Hongcheng Mining Equipment Manufacture Co., Ltd.

Yangtang Shanshui Industrial Park, Xicheng Economic Development Zone, Guilin City, Guangxi Zhuang Autonomous Region, China

Has had a range of Ultrafine Grinding Mills examined to the Machinery Directive 2006/42/EC, as amended and the Low Voltage Directive 2014/35/EU.

With reference to model **HCH1395**

Manufactured by:

Guilin Hongcheng Mining Equipment Manufacture Co., Ltd.

Yangtang Shanshui Industrial Park, Xicheng Economic Development Zone, Guilin City, Guangxi Zhuang Autonomous Region, China

1. The technical file contains all the relevant information.
2. Having verified that the appropriate tests have been conducted.
 - 2.1. The standards and transposed standards have been applied correctly.
 - 2.2. The example representing series production of the item, complies with the essential health and safety requirements of the Directive 2006/42/EC, as amended.
 - 2.3. The technical file contains all the information to include the following models in the certification HCH780, HCH980, HCH1395 and HCH2395.
 - 2.4. Compliance with EN 60204-1:2018 gives compliance with the Low Voltage Directive 2014/35/EU.

Certificate Number: 1089090719

Date: 12/07/2019

Signed for Safenet Certification Services Ltd.



Peter McNicol
Technical Manager

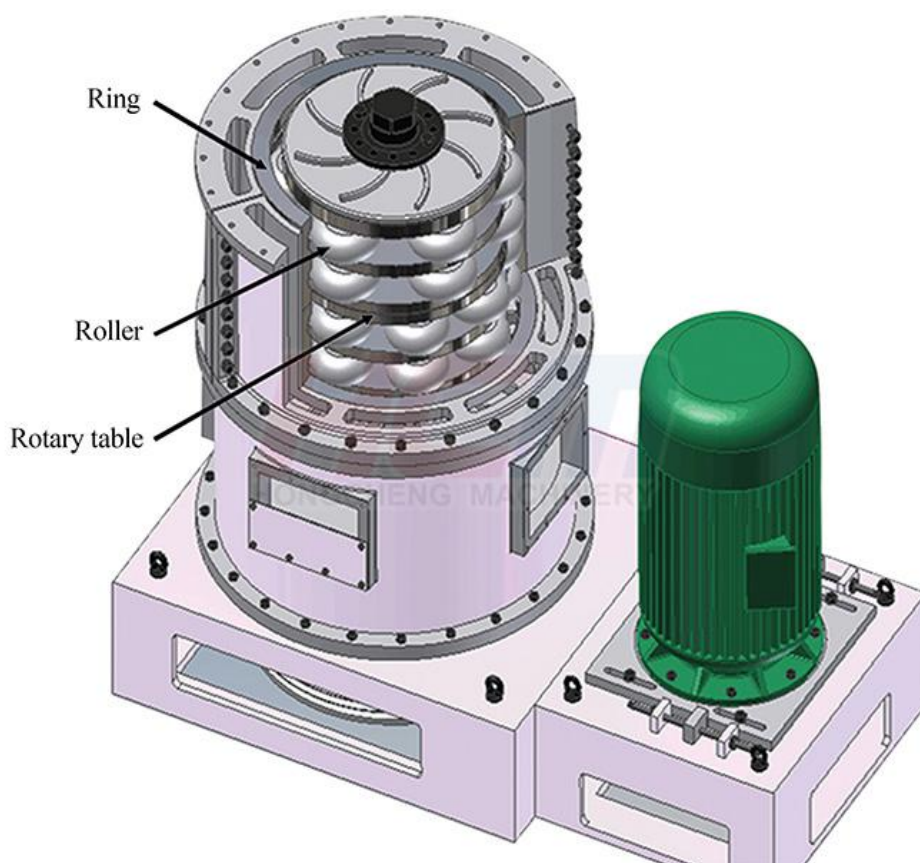
This Document remains the property of Safenet Certification Services Ltd. and will be returned to them if so requested. The client is required to request a review to ensure continued compliance of the machinery on a 5 yearly basis to check for changes in the state of the art and validity of the certificate.



Mill Structure:

HCH Ultra-fine Grinding Mill consists of main mill, classifier, blower, belt feeder, storage hopper, pipe system, pulse dust collector, gearing system and electric control cabinet.

Structure of the main mill



Dynamic balance test is carrying out to the rotor of the Classifier



Main technical data:

Model	Max Feeding Size (mm)	Fineness(mm)	Capacity (t/h)	Weight (t)	Total Power (kw)
HCH780	≤10	0.04-0.005	0.7-3.8	17.5	144
HCH980	≤10	0.04-0.005	1.3-6.8	20	237
HCH1395	≤10	0.04-0.005	2.6-11	44	395
HCH2395	≤10	0.04-0.005	5-22	70	680

Fineness(mesh) Capacity(kg/h)	400	600	800	1250	1500	2500
HCH780	3200-3800	2200-2800	1800-2200	1200-1800	1000-1200	700-900
HCH980	6000-6800	4500-5000	3900-4500	2500-3000	2100-2500	1300-1600
HCH1395	10000-11000	8000-8500	6200-7800	4200-4800	3600-4200	2600-3100
HCH2395	20000-22000	16000-17000	12400-15600	8400-9600	7200-8400	5200-6200

Note: The capacity is for calcite powder(Feeding Size≤10), and specification is just a reference. The actual production depends on these materials being processed.