



恒昌矿山机械
HengChang mining machinery

The operating instruction of ball mill



江西恒昌矿山机械设备制造有限公司

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I. Description

Ball mill is a key mineral processing machine for milling the materials into powders after they are crushed, it has wet and dry type. When the wet ball mill works, it needs add certain water and other liquid into materials to increase flow ability of materials. When the dry ball mill works, capacity is affected because material flow ability is reduced, so absorbing wind device is needed on the outlet of Ball Mill, and then negative pressure is formed in the ball mill to increase flow ability of material.

II. Application

It is widely applied to the production of cements, silicate products, building materials, fireproof materials, fertilizers, glass, ceramics as well as nonferrous and ferrous metal processing industries, such as gold, silver, lead, zinc, copper, molybdenum, iron, lead, manganese, tungsten, cement, ceramics, barite, bauxite, limestone, gypsum, calcium carbonate, coal, graphite, feldspar, potash feldspar, phosphorus ore, fluorite, clay and some other materials.

III. Working Principle

The main component of the ball mill is a cylinder with bigger diameter and smaller length which is revolved by transmitting machinery. Materials are put in cylinder through the feed opening and then thoroughly grinded. The falling course of iron balls and ores can produce huge falling impact and autogenously grinding. The continuous feeding of ores can create considerable pressure to make ores move from feed opening toward discharge opening. Finally, acceptable particles are discharged from the discharge opening. Hollow shaft with the anti-spiral blade returns the steel ball and the coarse ore block.

IV. Features

1. Large application range, simple structure and convenient maintenance.
2. Large capacity and continuous work are very obvious.
3. Liner and grinding media can apply various abrasive materials.
4. Installation and adjustment are very convenient and easy to be operated.

V. Technical Parameter

Model	Max. ball load (t)	Feeding size (mm)	Capacity (t/h)	Motor power (kw)	Dimension (LxWxH)mm	Weight (kg)
GM0718	0.8	20	0.4-1.1	7.5	4043×1450×1200	4350
GM0912	1.1	20	0.3-0.9	11	3843×1850×1400	4210
GM0918	1.5	20	0.5-1.3	15	4443×1850×1400	6078
GM0921	1.8	20	0.6-1.5	22	4743×1850×1400	6660
GM0930	2.7	20	0.9-2.3	30	5943×1850×1400	7770
GM1224	4	25	1.6-4.1	30	5540×2300×1850	10020

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GM1230	5.3	25	2.2-5.5	37	6340×2300×1850	11230
GM1245	7.3	25	3.0-7.5	55	7540×2300×1850	13210
GM1524	7	25	2.8-6.5	55	6830×2930×2060	15430
GM1530	9	25	3.5-8.0	80	7430×2930×2060	16843
GM1545	13.5	25	5.5-13.5	110	8930×2930×2060	20000
GM1557	17	25	7-15.5	130	10130×2930×2060	23597
GM1830	13	25	3.0-17.0	130	9525×3960×2250	29490
GM1845	19	25	5.2-26.0	155	10925×3960×2250	34210
GM1864	27	25	8.0-40.0	210	12925×3960×2250	42440
GM2130	20	25	4.0-30.0	180	8475×4060×3400	41965
GM2145	25	25	5.6-42.0	280	9975×4060×3400	49230
GM2430	26.5	25	6.5-82	280	9225×5005×3970	63684
GM2445	32.5	25	8-100	380	10570×5005×3970	72284
GM2730	34	25	15-115	420	10575×5610×4500	88400
GM2745	40	25	17.5-135	475	11175×5610×4500	90420
GM3230	44	25	50-90	500	11000×7200×5700	124000
GM3245	65	25	100-145	630	13000×7200×5700	145000

VI. Installation and Adjustment

1. The running requirements of the ball mill

- The use unit should develop the ball mill operating procedures according to the actual situation, to ensure the normal operation and safe production of the ball mill.
- Strictly check whether the liner inside the cylinder is intact before starting the machine, bolts should be tightened everywhere, the loading capacity of the grinding body should meet the specified requirements, and the lubricating device, electrical and auxiliary equipment must work normally.
- The grinding body should be replenished to the cylinder at regular intervals.
- In the movement, it should always pay attention to whether the discharge granularity meets the requirements.
- The gear oil used for lubrication should be clean, and often check if the oil level is in compliance with the regulations (see the oil mark), generally oil temperature should not be higher than 40 °C, and the maximum temperature must not exceed 75 °C.
- If the ball mill stops working for a long time, the remaining abrasive in the feeding part should be removed, and clean the cylinder and other parts of the accumulation.

2. The ball mill must be stopped in the following cases

- The transmission has an abnormal sound.
- Safety accident.
- Into the hole cover, crack or seal failure.
- Crack found in the cylinder.
- Loose connection bolt.

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- f. Failure of electrical auxiliary equipment or temperature of lubricating oil exceeds regulations.
- g. Insufficient supply of ground material.
- h. Liners fall off.
- i. Found that the foundation has cracks or sinks.

3. Maintenance of the ball mill

- a. When the ball mill running, it does not allow for maintenance and repair, transmission parts are not free to refuel.
- b. Check the liner bolts loose every week.
- c. Every two weeks to open manhole check liner wear.
- d. Make a minor repair every month, including temporary accident repairs, mainly small change, minor consumables, such as lining, spar spoon, repairing leaks everywhere.
- e. Performing an annual repair, make large cleaning and adjustment of various parts of the equipment, and replace a large number of wearing parts.
- f. Depending on the circumstances, complete medium and small repair tasks outside, focus on repairing and replacing major components.

VII Pictures



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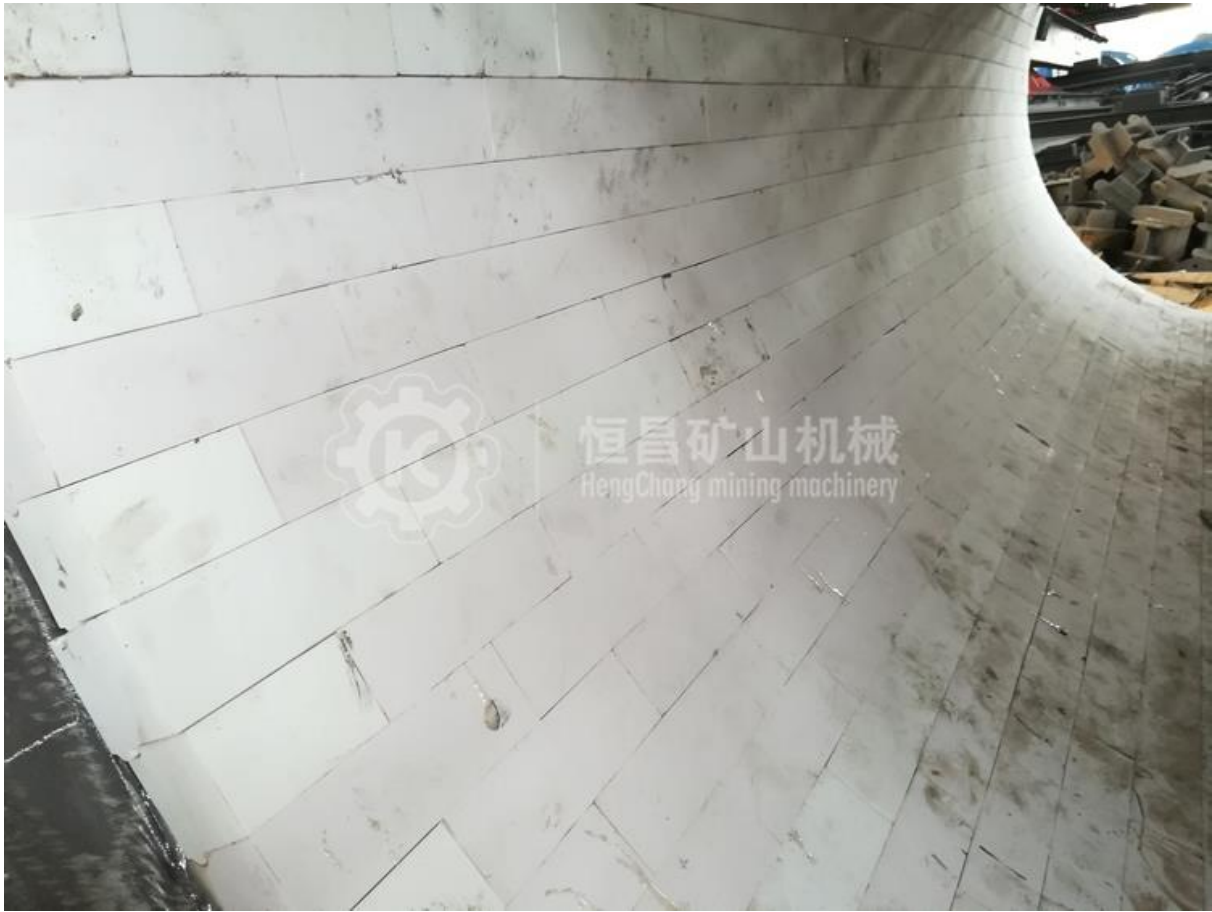
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IX About us

Jiangxi Hengchang Mining Machinery Manufacturing Co., Ltd. is one of the leading company in mining gravity separator machine designing & manufacturing in China. Up to now, we have developed four major product lines; they are mining milling machine, mining classifying separator, mining flotation machine and the mining gravity separator.

We have three senior engineers and two junior engineers on equipment designing and mining process designing. At the same time, we kept good relationship with some mining research institute and university, such as Jiangxi University of Science and Technology, Ganzhou Nonferrous Metallurgy Research Institute, Hunan Research Institute of Nonferrous Metals, and etc., to improve our designing and production, and also provide technology support for the mining project.

With more than 30 years in mining business, we have accumulated enough experience in gold mining plant, tungsten mining plant, wolfram mining plant, tin mining plant, cassiterite mining plant, coltan mining plant, columbite mining plant, and iron ore mining plant, black/beach sand mining plant designing, manufacturing, installing, commissioning and training. We could provide the customized complete mining solution to our customer.

Our major overseas market is Africa and Southeast Asia, and our products covers 43 global countries, as more and more customers are aware of our quality products and good service, this number is growing fast.

Focus areas:

Mining equipment, vibrating feeder, vibrating screen, crusher, ball mill, classifying separator, leaching tank, flotation machine, gravity separator, shaking table, spiral chute, jig machine, centrifugal concentrator and other mining equipment.

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About Us

Jiangxi Hengchang Mining Machinery Manufacturing Co., Ltd

Jiangxi Hengchang Mining Machinery Manufacturing Co., Ltd was established in 1985 with the registered capital of 500,000 USD. We covers an area of more than 30,000 square meters, owning more than 30 types of heavy processing equipments and with an annual sales Of more than 8 millions. We have a professional international level engineer team and a strong R&D department, having been cooperated with domestic and oversea Scientific Research Institutes for many years. As a professional mining machinery manufacturer, we take perfectness as our goal and are willing to make our continuous efforts.



Customers Visiting Us



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Why Choose Us ?

OEM / custom make as per customers' requests.

International level engineers team

MORE

Experienced and Advanced mineral processing technology!

MORE

Over 30 years mining machinery manufacturing

MORE

HENGCHANG ONE-STOP SERVICE:

1. Providing test of your raw ore
2. Complete processing flowchart design
3. Supplying complete line of mining equipments
4. Engineers come to mining site for installation, commissioning and workers training.



Exhibition Show



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