Model	Rotate Speed (r/min.)	Ball Load (t)	Feeding Size (mm)	Discharge Size (mesh)	Capacity (t/h)	Power (kw)	Weight (t)
900 x 3000	36	2.7	≤ 20	48 - 200	0.8 - 2.5	22	4.6 - 5.3
900 x 4500	32.1	2.4	≤ 25	48 - 200	0.8 - 1.6	30	8 - 5
1200 x 3000	31.38	3.5	≤ 25	48 - 200	1.6 - 3	45	12.1
1200 x 4500	31.8	6.5	≤ 25	48 - 200	1.83 - 3.9	55	13.1
1500 x 3000	29.2	9.7	≤ 25	48 - 200	2.8 - 9	95	14.8
1500 x 4500	29.58	13.5	≤ 25	48 - 200	4.8 - 11	110	19.9
1830 x 3000	26.3	14.4	≤ 25	48 - 200	4.5 - 10.5	130	26.6

Related Machinery

THE MALWIYA ENGINEERING WORKS
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Associates : Yash Engineering Corporation • Variety Industries • Kamdhenu Minerals & Metals

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- More Production
- Low Operation Cost
- Minimum Power Consumption

Ball Mill

The Malwiya Engineering Works

Manufacturer :
Plate Bending Machine • 3/4/5 Roller Grinding Mill
Ball Mill With Micronizin Plant • Micronizin Pulverize • Jaw Crushers
Disintegrator • Spears Part • Iron Fabrication Works

Page 1

The Malwiya Engineering Works Yashwant Kumar Malwiya, Proprietor

The Malwiya Engineering Works has its roots in manufacturing Engineering Oriented Products since 1959. it was founded by **Mr. SHREE LAL** Proprietor as job order based industry. With his pioneering leadership and excellent support from his work man, the company has risen to a pedestal of fame and glory and is known for its products quality, workmanship, performance and service, which has won the trust and confidence of the customers.

The Company's major is in manufacturing various machineries and components associated with the mineral industry. We manufacture Roller Mills which have revolutionized the mineral grinding by giving more production, low operating cost and leaser dependency on manual labour. Our products pertaining to Mineral Industry are:

(a) Ball Mill With Micronizin Plant
(b) Micronizin Pulverize 22", 32", 42"
(c) 3-12, 4-12 & 4-16 Roller Mills
(d) Jaw Crushers
(e) Disintegrator & their Spairs
(f) Over Head Crane
(g) Plate Bending Machine
(h) Iron Fabrication Works

Our Company is backed by a task force of highly skilled technical team of qualified and experienced workers and engineers. They are well equipped for designing and developing our products which are only aided by modern state-of-the-art techniques for ensuring a high degree of precision and accuracy of the

- More Production
- Low Operation Cost
- Minimum Power Consumption

Ball Mill : Introduction

The Malwiya make Ball Mill is an acknowledging leader in the field of producing powdered material, The Malwiya make Ball Mills are practically standard equipment in a great many fine and medium fine grinding operations throughout the world. They have usurpassed record of dependability and economy in maintenance.

Ball Mill

The Malwiya Ball Mill grinds material by rotating a cylinder with steel or ceramic grinding balls, causing the balls to fall back into the cylinder and onto the material to be ground. The Malwiya Ball Mills have been successful run at speeds between 60 and 90 percent of critical speed. However, most The Malwiya Ball Mill operate at speeds between 65 and 75 percent of critical speed. The larger the diameter, the slower the rotation. If the peripheral speed of the mill is too great, it begins to act like a centrifuge and the balls do not fall back, but stay on the perimeter of the mill.

Product Fineness:

The Malwiya Ball Mill is mormally used to produce finely sized products that range from 35 mesh to 10 microns. As a general rule, The Malwiya Ball Mill feed should not be coarser then 80% passing ¼" on hard ores and 80% passing 1" on soft ores (cement clinker). To achieve a reasonable efficiency with the The Malwiya Ball Mill, it must be operated in a closed system, with oversize material continuously being re-circulated back into the mill to be reduced. When used in conjunction with the MICRO-SIZER@air classifier, the grinding efficiency is greatly increased due to the extremely efficient removal of the particles. These fine particles will reduce your grinding ability and efficiency therefore, removal of these particles is necessary to increase production.

Raw Materials :

Limestone, Calcite, Coal Ash, Kaolin, Calcium Carbonate, Gangue, Gypsum, Grain Slag, Suoerfine Slag Powder, Coal Dust, Bentonite, Barite, Marble, Talc, Refractory Material

Application :

Cement, silicate product, new building materials, refractory material, chemical fertilizer, nonferrous and ferrous metal beneficiation and glass ceramic industries. Ball Mill could wet grind many kinds of minerals and grindable material, according to different ore discharge methods, there are grid type and overflow type Ball Mill.

Working Principle of Ball Mill

This machine is barrel horizontal type rotation device, outer gear transmission & flat belts. Raw material inlet through hollow shaft, there are stepped or wave type steal lining plate and corrugated plate inside the barrel and different size of EN-31 or managing steel ball is taken to a certain height by the force of centrifugal which is caused by barrel's rotation, material will be impacted and grinded. There are plane liner and steel ball to further grind the material. Powder material will be discharged from discharging grate plate and the grinding process is completed.

Outstanding Features

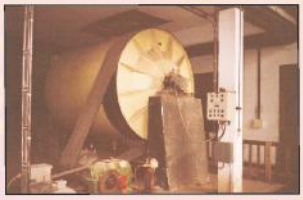
(a) Grinding size classification and convering-all combined in one economical and continuous operation.
(b) Combines ruggedness, dependability, high efficiency and automatic operation.
(c) Dust free, completely integrated system for grinding and Classifying.
(d) assures most economical operation with consistent uniform product.
(e) Operates at peak efficiency and highest tonnage over horsepower.
(f) Flexible control over product fineness during operation.
(g) Require minimum attention other than ordinary maintenance.

Technical detail for plant

A. Ball Mill (Steel Ball Mill)
1. Sizes : 6 'x15', 6'x10', 5'x15', 5'x10', 4'x15', 4'x10', 3'x15', 3'x10'
2. Plate thickness of shell : 12 to 25 mm
3. End plate thickness : 25 to 40mm thick MS Plate.
4. Bearing : Spherical roller bearing.
5. Bearing Pedestal : MS Fabricated.
6. Girth gear : Steel casting graded & fabricated 7. Pinion Assy. : Pinion from EN - 19 with hardened with shaft, bearing and pedestal.
8. Reduction gear box : Helical type High Quality standard make
9. Fluid coupling and gear coupling :
10. Base frame : MS Fabricated & RCC Foundation
11. Lining : Manganize Steel lining & others as per application of user.
12. Grinding media : EN 31 & manganese Balls
13. Hood : MS Fabricated.
14. Inlet feeder : MS Fabricated.
15. RPM of Ball Mill : 20 RPM to 35 in Difference sizes.

BALL MILL

Helical Type Reduction Gear



Belt Drivy