Professional
Powder Equipment
Manufacturer

Powder Equipment
Milling Technology
Powder Materials

TENCAN

Product Brochure

VIBRATION BALL MILL SERIES

Heavy duty vibrating ball mill

ZM

Widely used for powder grinding in metallurgy, mining, building materials, refractory, chemical, glass, ceramics, graphite industries. Heavy duty vibrating ball mill for efficient grinding.

Product Overview

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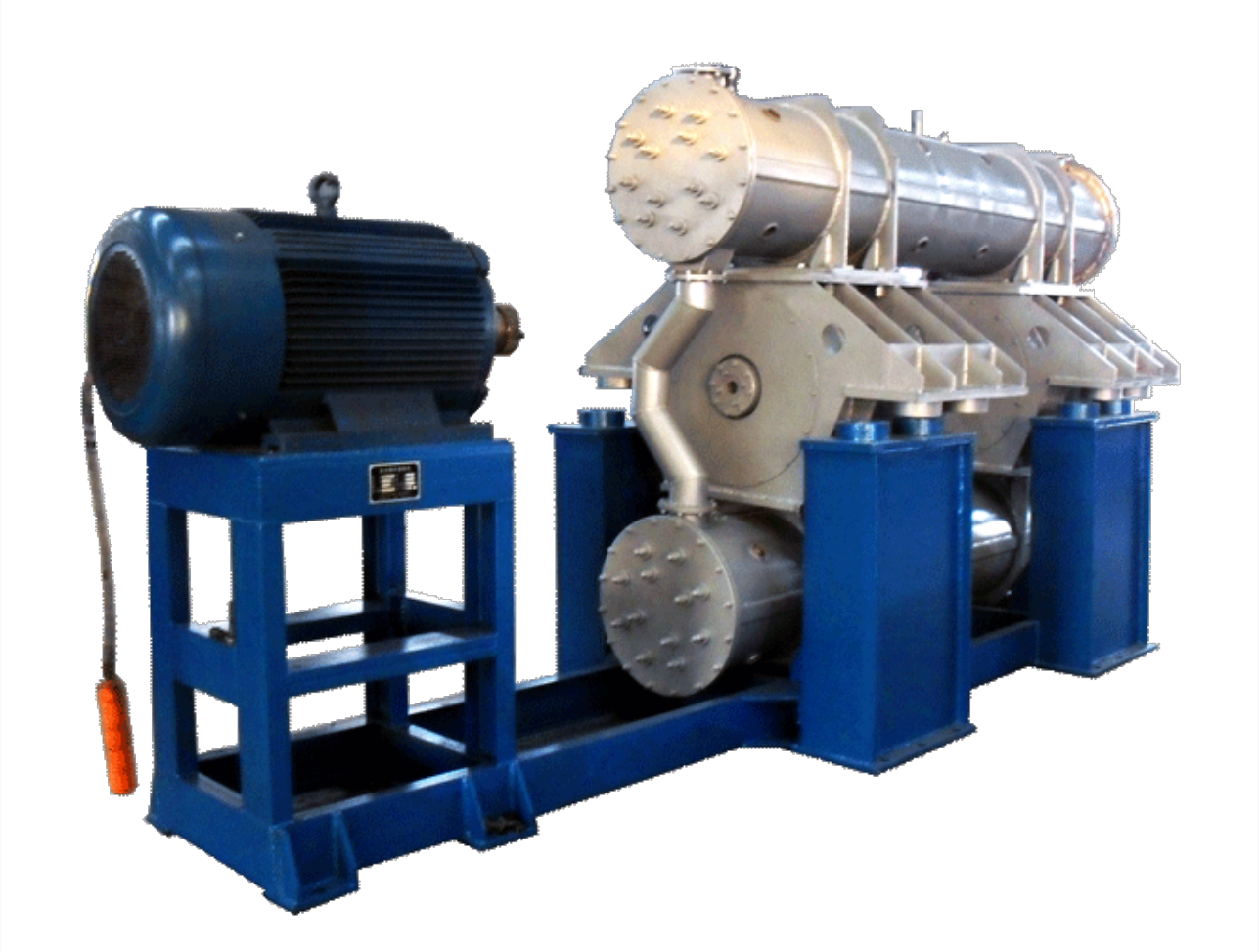

Product Introduction

Heavy-duty vibration mill is a new type of high-efficiency powder-making equipment. It has three structural types: single-cylinder type, double-cylinder type and three-cylinder type. Among them, the double-cylinder vibration mill has the widest application range. The vibration mill uses the high-frequency vibration of the cylinder. The steel ball or steel rod medium in the cylinder impacts the material by inertial force. The acceleration of the medium when impacting the material can reach 10g-15g. Therefore, it has the advantages of compact structure, small size, light weight, low energy consumption, high output, concentrated grinding particle size, simplified process, simple operation, convenient maintenance, and easy replacement of lining medium. It can be widely used for powder making in metallurgy, building materials, mining, refractory, chemical, glass, ceramics, graphite and other industries.

Technical parameters

model	Volume (L)	processing power (t/h)	amplitude (mm)	Motor power (kw)	Vibration frequency (times/minute)	overall weight (t)	Feed particle size (mm)	Discharge particle size (head)	Overall dimensions (mm)	Grinding method
2ZM-100	100	0.1-1.5	9-14	17-22	16.3	2.5	0-25	0.3-0.074	2612x1654x2054	dry method wet method open circuit closed circuit
2ZM-200	200	0.2-3	9-14	22-37	16.3	4			2900x1884x2378	
2ZM-400	400	0.5-5	8-11	45-55	16.3	6.6			3800x2350x2490	
2ZM-800	800	1-10	7-9	55-75	16.3	11.5			4843x2956x2510	
2ZM-1200	1200	1-16	7-9	75-90	16.3	14			-	

Working Principle

The heavy-duty vibration ball mill uses a motor to drive the shaft of the vibrator to rotate through a flexible coupling and a universal coupling. The shaft of the vibrator is equipped with an eccentric block. The rotation of the shaft with the eccentric block causes the double cylinders to vibrate in an approximate circle. The cylinder is filled with grinding media (steel balls or steel rods) and materials to be ground. The materials can enter from the feed port of the upper cylinder. The materials that have been ground in the upper cylinder flow into the lower cylinder to continue grinding, and then are discharged from the outlet of the lower cylinder, that is, single in and single out. ; Materials can also enter the upper and lower cylinders for grinding at the same time, and then be discharged at the same time, that is, double in and double out or double in and four out. When the cylinder vibrates in a circular motion, the medium and materials in the cylinder flip over and impact each other. This regular flipping, impact and rotation of the medium enable the material to be crushed in a short time and achieve the ideal crushing effect.

Product Features

1. The media filling amount in the grinding barrel is higher than that of a ball mill with the same capacity, up to 80%, so the processing capacity is large.
2. The structure is simple, and products of different particle sizes can be produced by adjusting the amplitude, frequency, medium, and ratio.
3. The vibration mill with jacketed grinding barrel can adjust the grinding temperature.
4. The vibrating mill with screen and collection device can carry out continuous production.
5. It is simple and convenient to operate, reliable in operation, easy to clean, and has strong adaptability to working conditions.
6. Dry and wet ball milling can be carried out.
7. Light weight, small size and high efficiency.
8. Special customization can be made according to requirements.

Accessories & Customization

Accessories
Grinding jars, heating elements, sample holders, control modules and other matching accessories can be selected according to the product configuration.

Customization
For voltage, capacity, chamber size, process temperature or application requirements, please contact TENCAN for a suitable configuration.