



Technical resources

Lightweight vibrating ball mill

Model: ZM

<https://www.tencanballmills.com/en/products/grinding-series/vibration-ball-mill/lightweight-vibrating-ball-mill.html>

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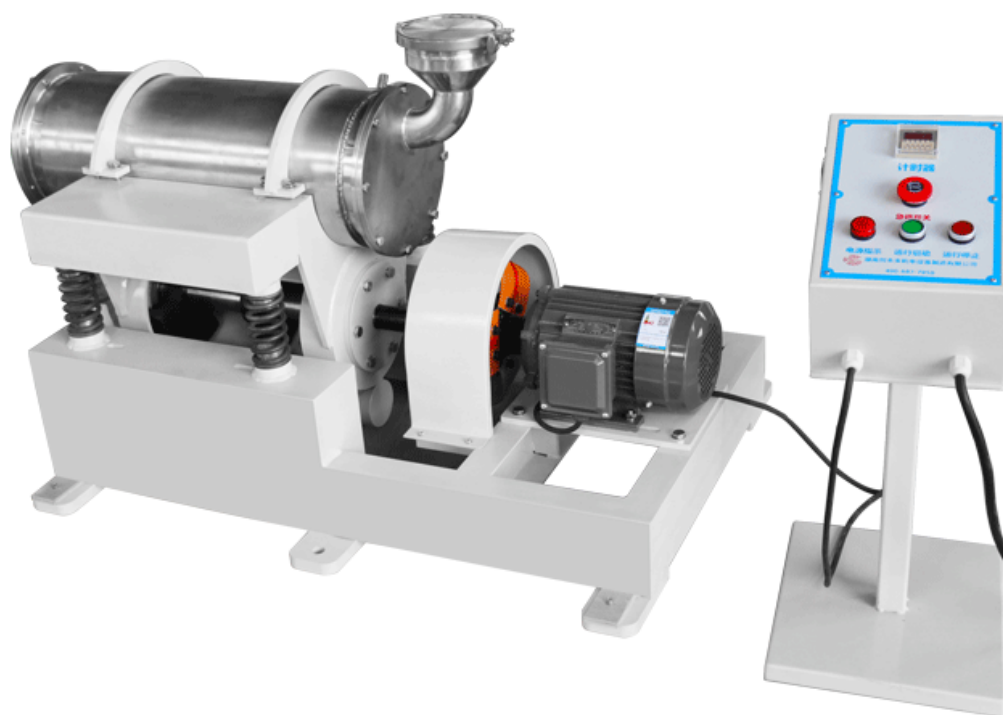
Model: ZM

High-efficiency lightweight vibrating ball mill for ultra-fine powder grinding. Available in single, double, and triple-tube configurations for various material processing needs.

Technical specifications

Loading capacity	25%
Feed particle size	≤5mm
Output particle size	200–2000 mesh

These specifications describe the series. Confirm the selected model, power supply and configuration before ordering.



Light vibration mill, also called vibration mill, is a new type of high-efficiency milling equipment. It has three structural types: single-cylinder, double-cylinder and three-cylinder.

The light vibration mill is simple and convenient to operate, reliable in operation, easy to clean, and has strong adaptability to working conditions. It can be used for dry and wet ball milling.



Light vibration mills are widely used in the fields of electronics, ceramics, chemicals, powder metals, tungsten, calcium carbide, rubber compounds, magnetic materials and radio industries, high-frequency porcelain materials and pharmaceuticals.

Technical parameters

model	Volume(L)	Loading capacity	Motor power(kw)	Feed particle size (mm)	Discharge particle size (mesh)	Grinding barrel material	Remark	Input power	
ZM-1L	1	25%	1.1	≤5	200-2000 (related to material characteristics)	Universal Regular Roller Tank	Experimental vibration	380V	
ZM-2L	2	25%	1.1						
ZM-3L	3	25%	1.1						
ZM-5L	5	25%	1.1						
ZM-10L	10	25%	1.5			Stainless steel, polyurethane, nylon, corundum, zirconia	light vibration		
ZM-15L	15	25%	1.5						
ZM-20L	20	25%	1.5						

The light vibration ball mill is mainly composed of a frame, a bottom frame, an exciter, a grinding barrel, a spring, a motor, etc. When the machine is started, the motor drives the exciter to generate an exciting force, causing the grinding barrel to continuously vibrate at high frequency and small amplitude. Due to the rotation and relative motion of the grinding medium, the materials are

frequently impacted and peeled, thereby achieving the purpose of uniformly crushing the materials.

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 performed.
7. Light weight, small size and high efficiency.
8. Special customization can be made according to requirements.

Special options: The tank lining can be lined with stainless steel, ceramic (alumina), zirconia, ceramic tile, nylon, polytetrafluoroethylene, food grade rubber or polyurethane.

Contact

Changsha Tianchuang Powder Technology Co., Ltd. / Changsha, Hunan, China

Email: lichang0516@gmail.com

Phone / WhatsApp: +86 731 84027560 / WhatsApp +86 19021571516

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Before operation, review the selected model's instructions and the material requirements.