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Product Brochure



OTHER GRINDING EQUIPMENT

Laboratory Cone Ball Mill

XMQ

Lab cone ball mill with variable frequency drive for dry/wet grinding, sealed design, low noise, dust-free. Ideal for ore sample preparation in metallurgy, geology, coal industries.

<https://www.labballmill.com/products/grinding-series/other-grinding-equipment/laboratory-cone-ball-mill.html>

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Product Overview

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Product Introduction

This experimental grinding equipment can set the abrasive time arbitrarily, and can also be used for dry or wet grinding. It adopts frequency conversion technology, has a wide speed range, is convenient for abrasives, mixing and uniformity. The equipment installation does not require foundation treatment, has low noise, no dust pollution, convenient cleaning and good grinding and sealing performance.

Laboratory conical ball mill is a small, lightweight, multi-purpose new grinding equipment for laboratories. It can be used for metallurgy, geochemical engineering, building materials, and coal and other laboratories, research units and mineral processing plants to grind ore when conducting research on ore selectivity. This product has advanced performance, reasonable structure, high sample preparation efficiency and good sealing performance. It is suitable for crushing and processing of various metal and non-metallic ore raw material laboratory samples. It can be used by production units in the geology, mining, carbon metallurgy, coal, building materials and electric power sectors that require laboratory crushing processing. It can also be used for ultra-fine grinding processing in coatings, inks, fuels and food industry sectors. The ball mill is the key equipment for crushing the materials after they have been crushed. Ball mills are widely used in cement, silicate products, new building materials, refractory materials, fertilizers, ferrous and non-ferrous metal mineral processing, glass and ceramics and other production industries for dry or wet grinding of various ores and other grindable materials.

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Technical parameters

model	XMQΦ150×50	XMQΦ240×90	XMQΦ350×160
Ore supply	200g	500~1000g	4000g
Feeding particle size	5mm	5mm	5mm
Discharge particle size	0.074mm	0.074mm	0.074mm
electric motor	0.75kw	1.1kw	1.1kw
Overall dimensions	915*530*1160MM	1052*640*1160MM	700×575×1190mm
Machine weight	150kg	170kg	300kg

Working Principle

Laboratory conical ball mill It is a horizontal cylindrical rotating device, outer gear transmission, two chambers, and grid-type ball mill. The material enters the first chamber of the mill evenly and spirally from the feeding device through the feeding hollow shaft. There are stepped linings or corrugated linings in the chamber, which are filled with steel balls of different specifications. The centrifugal force generated by the rotation of the cylinder brings the steel balls to a certain height and then falls, which produces a heavy impact and grinding effect on the materials. After the materials reach coarse grinding in the first chamber, they enter the second chamber through the single-layer partition plate. This chamber is equipped with a flat lining plate and contains steel balls for further grinding the materials. The powdery material is discharged through the discharge grate plate to complete the grinding operation.

The laboratory conical ball mill is composed of the feeding part, the discharging part, the rotating part, the transmission part (reducer, small transmission gear, motor, electronic control) and other main parts. The hollow shaft is made of cast steel with a removable inner lining. The rotating gear is hobbing from castings. The cylinder is inlaid with a wear-resistant lining plate, which has good wear resistance. This machine runs smoothly and works reliably.

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.