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Product Brochure



MIXING BALL MILL SERIES

Electric lifting stirred ball mill

JM

Electric lifting stirred ball mill for fine grinding of zirconia, alumina, ceramics, paint, graphite, and pharmaceuticals. Widely used in non-metallic minerals, new materials, and chemical industries.

<https://www.planetaryballmills.com/products/grinding-series/stirring-ball-mill/electric-lifting-stirred-ball-mill.html>

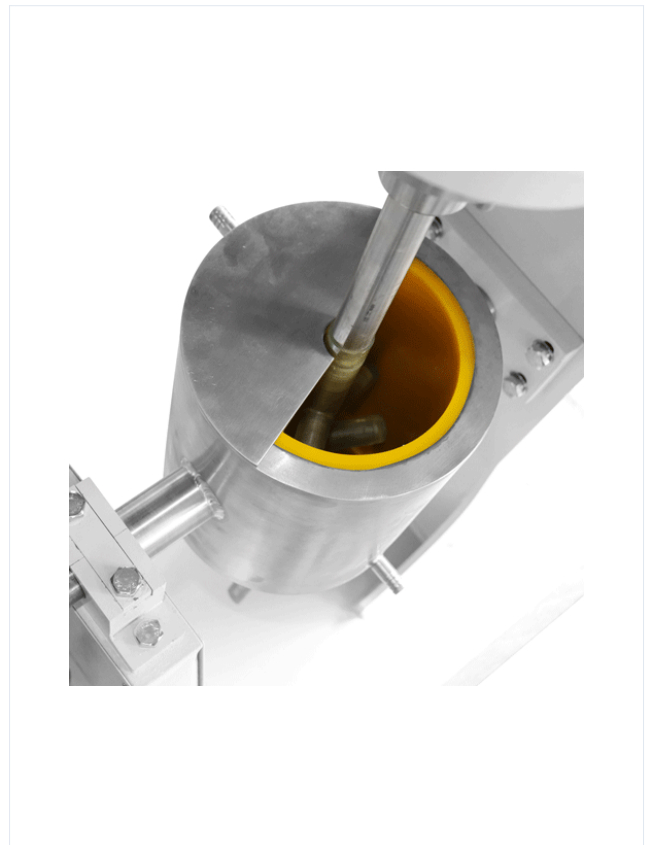


TENCAN POWDER

Product Overview

Electric lifting stirred ball mill for fine grinding of zirconia, alumina, ceramics, paint, graphite, and pharmaceuticals. Widely used in non-metallic minerals, new materials, and chemical industries.





Product Introduction

The electric lifting stirring ball mill is mainly composed of a stationary grinding barrel filled with small-diameter grinding media, a stirring device and other auxiliary devices (such as

circulation device, cooling device, timing, speed control, etc.). It has high grinding efficiency and small grinding particle size. It can well achieve various process parameter requirements and simulate various indicators in production. At the same time, due to its advantages of small batch, low power consumption and low price, it is an optional equipment for schools, research units and companies to conduct research on grinding technology, new materials and coatings.



It is widely used in the production of various finely ground powders such as zirconium silicate, zirconium oxide, alumina, ceramics, chemicals, electronic materials, magnetic materials, papermaking, coatings, non-metallic minerals, new materials, paints, graphite, calcium carbonate, pharmaceuticals, etc.

Technical parameters

model	Overall dimensions (mm)	Frequency conversion speed (r/min)	Equipment weight (KG)	Loading capacity (L)	Motor power (KW)	Grinding barrel material (material thickness)	Grinding barrel size (without water jacket)	Grinding barrel size (with water jacket)	Feed particle size (mm)
JM-5L electric lift	850X450X980	0~560	106	1.75	0.75	Stainless steel, carbon steel (about 5mm)	Φ178*230	Φ219*230	≤5
						Zirconia, corundum (about 8mm)	To be determined	Φ219*230	≤5
						PTFE, nylon (about 10mm)	To be determined	To be determined	≤5
						Polyurethane (approx. 7mm)	Φ192*230	Φ217*230	≤5
JM-10L electric lift	850X450X980	0~560	106	3.5	1.5	Stainless steel, carbon steel (about 5mm)	Φ217*310	Φ245*310	≤5
						Zirconia, corundum (about 8mm)	To be determined	Φ273*280	≤5
						PTFE, nylon (about 8mm)	To be determined	Φ273*280	≤5
						Polyurethane (approx. 7mm)	Φ243*280	Φ273*280	≤5
JM-15L electric lift	1020X480X1220	0~380	195	5.25	2.2	Stainless steel, carbon steel (about 6mm)	Φ243*385	Φ325*355	≤10
						Zirconia, corundum (about 10mm)	Φ273*345	Φ325*340	≤10
						PTFE, nylon (about 10mm)	To be determined	To be determined	≤10
						Polyurethane (about 10mm)	Φ273*340	Φ325*340	≤10
JM-20L electric lift	1020X480X1220	0~380	195	7	2.2	Stainless steel, carbon steel (about 7mm)	To be determined	Φ325*385	≤10
						Zirconia, corundum (about 10mm)	Φ273*440	Φ325*432	≤10
						PTFE, nylon (about 10mm)	To be determined	To be determined	≤10
						Polyurethane (about 10mm)	Φ273*410	Φ325*410	≤10
JM-30L electric lift	1180X510X1370	0~345	245	10.5	3	Stainless steel, carbon steel (about 5.5mm)	Φ323*420	Φ372*420	≤10
						Zirconia, corundum (about 10mm)	Φ325*440	Φ372*440	≤10
						PTFE, nylon (about 6mm)	Φ323*420	Φ372*420	≤10
						Polyurethane (about 10mm)	Φ323*440	Φ372*440	≤10

* JM-5L/10L does not have a discharge valve, JM-15L/20L/30L is equipped with a 6-point discharge valve;

* JM-5L/10L does not have a delivery pump, while JM-15L/20L/30L can be equipped with an optional delivery pump (feeding particle size ≤1mm).

Working Principle

The spindle drives the mixer to rotate at high speed, causing the grinding medium to move irregularly. This chaotic and disordered movement will cause collision, extrusion, friction and shearing of the grinding medium, thereby crushing and finely grinding the material.

In addition, the size, shape and proportion of the grinding media are different, and the grinding effects obtained are also different. Generally speaking, the larger the size of the grinding media, the coarser the material will be crushed. On the contrary, the smaller the grinding media, the finer the material is ground. The appropriate ratio of different specifications of grinding media, coupled with the appropriate adjustment of the speed, will result in better grinding effects.

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.