

Eco Friendly Sealed Double Layer Small Rod Mill

Item Number: KT-BMB



Introduction

Discover our eco friendly sealed double layer small rod mill engineered for dust free automated laboratory sample preparation delivering uniform eighty to two hundred mesh grinding across multi barrel configurations with intelligent timing and heavy duty vulcanized rubber drive rollers.

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Application	Description	Key Benefit
Mining Ore Grade Assay	Pulverizing core drillings, run-of-mine ores, and flotation tailings to fine powders for XRF and fire assay prep	Achieves 80 to 200 mesh particle distribution without cross-batch sample contamination
Geological Exploration	Processing geochemical exploration stream sediments and lithological samples across multi-barrel arrays	Delivers rapid parallel preparation of multiple field samples with uniform analytical reproducibility
Metallurgical Slag & Sinter Quality Control	Grinding high-hardness ironmaking slags, blast furnace sinters, and ferroalloys prior to chemical titration	Withstands severe abrasive wear while ensuring completely homogeneous composite test charges
Industrial Minerals & Refractories	Size reduction of bauxite, magnesite, silica sand, and abrasive clays to target liberation sizes	Eliminates toxic respirable silica dust release through a sealed, negative-pressure hood design
Cement & Clinker Analysis	Grinding raw meal, Portland cement clinker, and gypsum additives under standardized pulverizing durations	Eliminates separate post-grind sieving steps by performing in-situ sample homogenization
Advanced Technical Ceramics	Commuting oxide and non-oxide ceramic precursors into consistent sub-sieve particles prior to pressing	Maintains tight particle size distribution curves without thermal degradation of sensitive batches
Coal & Coke Laboratory Testing	Preparing coal drill cores, vitrinite samples, and coke specimens for proximate and ultimate analytical methods	Sealed barrels prevent volatile constituent loss while ensuring representative moisture retention
Environmental Soil & Heavy Metal Screening	Milling contaminated soil cores, sediments, and solid industrial wastes for trace metal acid digestion	Simultaneous self-mixing homogenizes heterogeneous soil matrices for dependable analytical results

Parameter	Specification
Product Item Number	KT-BMB
Grinding Mechanism	Line-contact rod shear, impact, and planetary barrel tumbling
Feed Particle Size	< 2 mm
Final Discharge Fineness	80-200 mesh (180 µm to 75 µm)
Roller Outer Diameter	100 mm
Roller Surface Material	Industrial vulcanized wear-resistant rubber
Drive Motor Rated Power	2.2 kW
Rated Operating Voltage	380 V (3-phase, 50/60 Hz)
Operational Layout	Two-tier double-deck roller arrangement
Environmental Safety Enclosure	Transparent polycarbonate hinged hood with noise-reduction ventilation
Control System	Digital micro-timer with power-loss memory retention and auto-stop

Parameter	Specification
Overload Protection	Integrated overcurrent trip relay with automatic fault shutoff
Grinding Vessel & Rod Material	Quenched and tempered wear-resistant alloy tool steel
Vessel Dimensions	Standard laboratory sizes and custom capacities available upon request

Model Identifier	Tier Configuration	Barrel Capacity	Operating Power	Target Throughput / Application Scale
KT-BMB-04	Double-Layer (2 × 2)	4 Barrels	2.2 kW	Benchtop R&D and specialized exploratory sample batches
KT-BMB-08	Double-Layer (4 × 2)	8 Barrels	2.2 kW	Intermediate exploration and metallurgical pilot laboratories
KT-BMB-12	Double-Layer (6 × 2)	12 Barrels	2.2 kW	Standard commercial mining test centers and quality control labs
KT-BMB-16	Double-Layer (8 × 2)	16 Barrels	2.2 kW	Medium-to-high capacity metallurgical testing facilities
KT-BMB-24	Double-Layer (12 × 2)	24 Barrels	2.2 kW	High-throughput industrial processing and routine geological assays
KT-BMB-50	Double-Layer (25 × 2)	50 Barrels	2.2 kW	Central assay laboratories with continuous multi-batch preparation