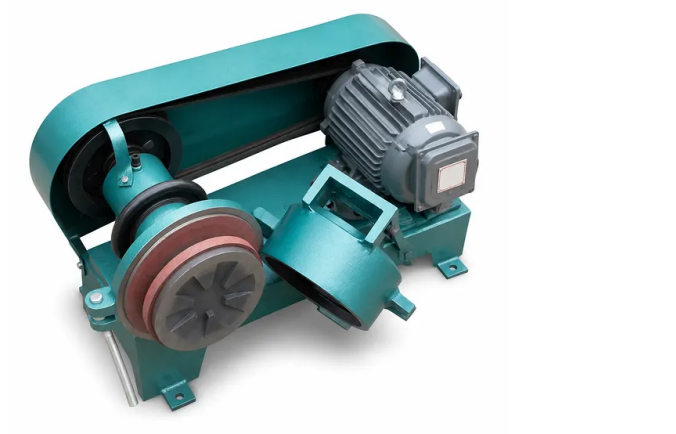


Laboratory Disc Pulverizer Disc Mill For Fine Sample Grinding

Item Number: KT-YP



Introduction

Discover high performance laboratory disc pulverizer systems engineered for precise batch and continuous fine grinding of brittle materials, featuring dual wheel gap adjustment, durable grinding discs, and consistent particle reduction across metallurgy, mining, geology, and advanced material testing applications.

[Learn More](#)

Application	Description	Key Benefit
Mining and Mineral Processing	Grinding extracted ore specimens, quartz veins, limestone, and tailing residues for compositional assay.	Delivers uniform analytical powder down to 0.15 mm, ensuring complete chemical digestion and accurate assay reads.
Metallurgy and Slag Analysis	Pulverizing hardened metallurgical slag, furnace clinker, sintered sinters, and ferroalloy chunks for X-ray fluorescence (XRF) preparation.	Withstands aggressive, abrasive wear while rapidly homogenizing heterogeneous materials into fine powder.
Geological Exploration	Processing bedrock cores, sediment samples, and mineral exploration specimens across remote and centralized assay labs.	High-throughput capacity of up to 25 kg/h accelerates exploration campaign geochemical screening.
Advanced Ceramics and Refractories	Fine grinding of raw technical ceramics, calcined alumina, bauxite, fireclay, and silicon carbide precursors.	High shearing efficiency produces steep particle size distribution curves essential for sintering research.
Construction Materials and Cement	Pulverization of portland cement clinker, gypsum, industrial concrete cubes, and raw aggregate samples.	Continuous gap adjustability enables precise compliance testing against international aggregate grading standards.
Soil and Environmental Science	Preparation of dried soil aggregates, sediment cores, and industrial solid waste samples for heavy metal trace analysis.	Eliminates cross-contamination between consecutive batches through fast, complete chamber clean-out.
Chemical and Catalyst Testing	Uniform reduction of solid catalysts, synthetic resins, mineral pigments, and crystalline salts for laboratory synthesis.	Enclosed design prevents chemical dusting, protecting technical personnel and laboratory air quality.

Specification Parameter	KT-YP (175 mm Disc Unit)
Product Item Number	KT-YP
Grinding Disc Diameter	175 mm
Operating Mode	Friction and Compressive Shearing (Dynamic & Stationary Discs)
Maximum Feed Particle Size	2 – 3 mm (Continuous); up to 20 mm (Bulk Fragile Feed)
Discharge Particle Size Range	1.0 – 0.15 mm (Continuously Adjustable)
Processing Throughput Capacity	Up to 25 kg/h (Material Dependent)
Main Spindle Rotation Speed	780 rpm
Drive Motor Type	Y909-4 Industrial Electric Motor
Motor Rated Power	1.1 kW
Motor Rated Speed	1400 rpm
Power Transmission System	Industrial V-Belt Pulley Reduction
Gap Adjustment Mechanism	Dual Handwheel Micro-Lead Screw with Axial Spindle Shift
Working Chamber Configuration	Integrated Cast Housing, Swing-Open End Cover, Upper Feed Hopper

Specification Parameter	KT-YP (175 mm Disc Unit)
Discharge Collection	Direct Gravity Drop to Under-Chamber Collection Hopper