Automatic Hydraulic Sample Grinder Vibrating Disc Mill Laboratory Pulverizer

Item Number: KT-ZM

Introduction

This high-performance automatic hydraulic sample grinder delivers rapid dust-free pulverization for laboratory testing. Featuring high-frequency impact grinding, versatile bowl materials, and automatic hydraulic clamping, it ensures high-throughput, repeatable sample preparation across demanding quality control and analytical research applications.

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Application	Description	Key Benefit
Geological & Mining Exploration	Pulverizing core samples, rock fragments, and mineral ores (granite, quartz, iron ore) for assaying and XRF/XRD analysis.	Ultra-hard tungsten carbide or agate media eliminate contamination while reducing hard minerals to sub-200 mesh rapidly.
Metallurgical Quality Control	Grinding steel slag, ferroalloys, sinter, and raw ores in quality control laboratories during smelting operations.	Fast hydraulic clamping enables rapid sample throughput to support real-time process adjustments on the production floor.
Cement & Building Materials	Sample preparation of cement clinker, limestone, gypsum, clay, and glass batches for X-ray fluorescence spectrometry.	Uniform particle size reduction guarantees high pressability and analytical accuracy for XRF pellet preparation.
Coal & Power Generation	Crushing and pulverizing coal, coke, fly ash, and petroleum coke for calorific value, sulfur content, and ash analysis.	Sealed grinding sets contain fine dust and volatile matter, preserving volatile sample components during high-energy milling.
Ceramics & Refractory Research	Fine grinding of raw ceramic powders, alumina, zirconia, and refractory bricks prior to sintering or chemical extraction.	Extremely high wear resistance of specialized alloy grinding sets prevents unwanted metallic iron contamination.
Environmental Soil & Waste Testing	Pulverizing soil cores, dried sludge, incinerator ash, and solid industrial waste for heavy metal detection.	Multi-bowl options enable simultaneous preparation of duplicate field samples under standardized grinding parameters.

Model Identifier	Feed Grain Size (mm)	Output Grain Size (mesh)	Production Capacity (g/cycle)	Power Rating (kW)	Clamping Mechanism
KT-ZM-1Y	≤ 13	80 - 200	100	1.1 / 1.5	Automatic Hydraulic
KT-ZM-2DY	≤ 20	80 - 200	200	1.1 / 1.5	Automatic Hydraulic
KT-ZM-2Y	≤ 13	80 - 200	100 × 2	1.1 / 1.5	Automatic Hydraulic
KT-ZM-3Y	≤ 13	80 - 200	100 × 3	1.5 / 1.5	Automatic Hydraulic
KT-ZM-3DY	≤ 25	80 - 200	300	1.5 / 1.5	Automatic Hydraulic
KT-ZM-4Y	≤ 13	80 - 200	100 × 4	1.5 / 1.5	Automatic Hydraulic
KT-ZM-6Y	≤ 13	80 - 200	100 × 6	1.5 / 1.5	Automatic Hydraulic
KT-ZM-1000Y	≤ 26	80 - 200	1000	1.5 / 1.5	Automatic Hydraulic