

Sealed Laboratory Sample Preparation Grinding Mill Assay Specimen Pulverizer

Item Number: PS2B



Introduction

This high performance sealed laboratory sample preparation grinding mill rapidly reduces hard brittle materials into uniform 80 to 300 mesh powders within 1 to 3 minutes. Featuring interchangeable wear resistant grinding bowls, it delivers rapid contamination free sample preparation.

[Learn More](#)

Application	Description	Key Benefit
Geological & Mining Assay Preparation	Pulverizing rock core samples, mineral ores, and drill cuttings for XRF and ICP spectroscopic testing.	Rapid 1-3 minute cycle time accelerates assay throughput while preventing sample cross-contamination.
Metallurgical Quality Control	Grinding raw iron ore, slag, ferroalloys, and sinter products into micro-powders prior to chemical assaying.	High-manganese and high-chromium steel bowl options provide extreme durability against abrasive mineral feeds.
Coal & Energy Resource Testing	Processing coal, coke, and combustion ash specimens down to 80-300 mesh for proximate analysis and sulfur determination.	Hermetically sealed bowls maintain volatile and moisture integrity during preparation while keeping lab air clean.
Cement & Silicate Raw Material Analysis	Crushing raw meal, clinker, limestone, and gypsum samples for fused-bead X-ray fluorescence analysis.	Precise 80-300 mesh adjustable fineness ensures excellent specimen homogeneity and analytical precision.
Technical Ceramics & Refractories	Reducing tough ceramic powders, silica sand, and firebrick fragments using ultra-hard grinding tools.	Tungsten carbide bowl options eliminate metallic iron contamination during ultra-hard specimen processing.
Environmental & Chemical Solids Testing	Grinding solid wastes, soil matrix samples, fertilizers, and crystalline chemical compounds for digestion protocols.	Fully contained grinding prevents environmental dust exposure and guarantees full sample recovery.

Parameter	PS2B	PS2B-200	PS2B-2X200	PS2B-2X300	PS2B-2X400
Feed Granularity (mm)	≤ 13	≤ 20	≤ 20	≤ 22	≤ 26
Discharge Granularity (mesh)	80-300 (Adjustable)	80-300 (Adjustable)	80-300 (Adjustable)	80-300 (Adjustable)	80-300 (Adjustable)
Processing Capacity (g/batch)	2 × 100	200 × 1	2 × 200	2 × 300	2 × 400
Motor Power (kW)	1.5	1.5	1.5	2.2	2.2
Processing Time	1-3 minutes / batch	1-3 minutes / batch	1-3 minutes / batch	1-3 minutes / batch	1-3 minutes / batch
Working Principle	Eccentric impact & ring grinding	Eccentric impact & ring grinding	Eccentric impact & ring grinding	Eccentric impact & ring grinding	Eccentric impact & ring grinding
Standard Bowl Material	High Manganese Steel	High Manganese Steel	High Manganese Steel	High Manganese Steel	High Manganese Steel
Optional Bowl Materials	Ordinary Steel, Alloy Steel, High Chromium Steel, Tungsten Carbide	Ordinary Steel, Alloy Steel, High Chromium Steel, Tungsten Carbide	Ordinary Steel, Alloy Steel, High Chromium Steel, Tungsten Carbide	Ordinary Steel, Alloy Steel, High Chromium Steel, Tungsten Carbide	Ordinary Steel, Alloy Steel, High Chromium Steel, Tungsten Carbide