

Combined Crushing And Division Sample Preparation Unit

Automated Coal And Mineral Milling Reduction System

Item Number: KT-LH



Introduction

This high-capacity combined crushing and sample division system delivers automated two-stage size reduction and precision sampling for coal, minerals, and metallurgy under GB standards, featuring dust-sealed operation, adjustable division ratios, and robust high-manganese steel crushing components.

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Application	Description	Key Benefit
Coal Quality & Calorific Analysis	Continuous reduction and division of run-of-mine coal samples for proximate analysis and calorific value determination.	Complies with GB/T19494 sampling standards without moisture loss.
Metallurgical Ore Processing	Dual-stage crushing of hard iron ore, sinter, and slag samples prior to X-ray fluorescence (XRF) and wet chemistry testing.	Rapid size reduction from 150 mm feed to sub-3 mm analytical fractions.
Geological Exploration	Processing of core samples, rock fragments, and bulk mineral deposits across remote or central assay laboratories.	High-throughput processing up to 2500 kg/h with uniform particle sizing.
Power Generation Fuel Lab	Automated sampling of incoming thermal coal shipments at power station receiving stations.	Eliminates manual labor errors and ensures impartial, representative samples.
Carbon & Graphite Production	Crushing and precise splitting of petroleum coke, anode material, and synthetic graphite feedstocks.	Sealed housing prevents fine carbon dust escape and workplace contamination.
Chemical & Mineral Manufacturing	Size reduction and sample preparation for industrial minerals, raw lime, clinker, and bulk chemicals.	Adjustable division ratios ensure exact sample volumes required for lab testing.

Parameter	KT-LH-1800A	KT-LH-1800B	KT-LH-1800C	KT-LH-JR800	KT-LH-2500C
System Type	Hammer + Double Roller (Manual Feed)	Hammer + Double Roller (Belt Feed)	Hammer + Double Roller (Belt Feed & Reject Conveyor)	Jaw + Double Roller Integrated Unit	Heavy-Duty Hammer + Double Roller
Max Feed Size	≤ 150 mm	≤ 150 mm	≤ 150 mm	< 100 mm	< 150 mm
Primary Discharge Size	13-6 mm	13-6 mm	13-6 mm (Adjustable)	N/A (Jaw Stage)	N/A
Secondary Discharge Size	3-1 mm	3-1 mm	3-1 mm (Adjustable)	0.1-3 mm (Adjustable)	< 3 mm
Moisture Tolerance	≤ 15%	≤ 15%	≤ 15%	Standard Dry/Brittle	Standard Dry/Brittle
Primary Division Ratio	1/2 - 1/8 (Adjustable)	1/2 - 1/8 (Adjustable)	1/2 - 1/8 (Adjustable)	N/A	Slotted Divider (Adjustable)
Secondary Division Ratio	1:2	1:2	1:2	N/A	1/4 Division Splitter
Total Division Ratio	1/2 - 1/32 (Adjustable)	1/2 - 1/32 (Adjustable)	1/2 - 1/32 (Adjustable)	Continuous Output	1/64
Production Capacity	1200-1800 kg/h	1200-1800 kg/h	1000-2000 kg/h	200-800 kg/h (0.2-0.8 T/h)	2500 kg/h

Parameter	KT-LH-1800A	KT-LH-1800B	KT-LH-1800C	KT-LH-JR800	KT-LH-2500C
Primary Rotor / Jaw Spec	High-Manganese Hammer	High-Manganese Hammer	High-Manganese Hammer	Dual Wear-Resistant Jaw Plates	Hammer Rotor Ø400 × 600 mm
Secondary Roller Spec	Double Roller	Double Roller	Double Roller	Roller Crusher Chamber	Double Roller Ø200 × 300 mm
Belt Speed	N/A	Standard Belt	Standard Belt	N/A	0.3–0.5 m/s
Main Shaft / Drive Speed	Standard	Standard	Standard	480 r/min	Heavy-Duty Drive
Operating Voltage	380V 50Hz	380V 50Hz	380V 50Hz	380V 50Hz	380V 50Hz
Total Power Consumption	7.87 kW	8.25 kW	9.0 kW	7.5 kW	18.0 kW
Feeding & Waste Handling	Manual Vibration Feed	Automatic Belt Feed	Automatic Belt Feed & Reject Conveyor	Manual Top Feed	Automatic Belt Feed & Reject Conveyor
Compliant Standards	GB/T19494, GB474	GB/T19494, GB474	GB/T19494, GB474	Standard Industry Lab Standards	GB474-1996, GB/T25651-2010