Laboratory Coning And Quartering Cross Divider Pressing Plate

Item Number: KT-YB

Introduction

Engineered for precision laboratory sample preparation, this industrial cross divider pressing plate provides uniform coning and quartering across mining and geochemical facilities. Choose between vertical and horizontal configurations to guarantee unbiased representative division, structural rigidity, and dependable long-term operational performance.

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Application	Description	Key Benefit
Mining and Mineral Assay	Subsampling bulk crushed run-of-mine ores, core drillings, and mineral processing concentrates prior to analytical pulverizing.	Ensures unbiased distribution of high-density precious and base metal minerals without segregation bias.
Metallurgy and Smelting Slag Control	Preparing representative samples of metallurgical slags, fluxes, ferrosilicon, and sinter batches for XRF and wet chemical assay.	Withstands abrasive slag particles while preventing quadrant volume discrepancies.
Cement and Raw Meal Manufacturing	Splitting clinker, limestone, gypsum, and raw meal quarry samples across production quality control stations.	Delivers fast, reproducible volume reduction to match high-throughput plant sampling intervals.
Coal and Solid Biofuel Testing	Performing coning and quartering on crushed coal, coke, and biomass fuels for moisture, ash, and calorific value determination.	Conforms precisely to fuel sampling standards while mitigating moisture loss during handling.
Geological Surveying and Soil Testing	Dividing field soil samples, geochemical exploration sediments, and environmental silt cores for contaminant profiling.	Eliminates sample cross-contamination between high-yield and low-concentration field specimens.
Aggregate and Construction Materials	Homogenizing and quartering fine and coarse sand, crushed gravel, and road base materials on-site or in central testing facilities.	Provides structural rigidity against heavy mechanical loads from coarse angular particles.
Chemical and Fertilizer Production	Subdividing bulk granular fertilizers, synthetic catalysts, and industrial salts for chemical release testing.	Resists chemical corrosion while maintaining a mirror-smooth release surface that prevents caking.
Refractory and Ceramic Raw Materials	Quartering silica sand, bauxite, magnesite, and ceramic powder blends prior to batch formulation and sintering analysis.	Guarantees uniform particle size distribution across all divided sub-fractions.

Parameter	KT-YB-V (Vertical Configuration)	KT-YB-H (Horizontal Configuration)
Base Product Number	KT-YB	KT-YB
Configuration Type	Vertical Orientation (□□)	Horizontal Orientation (□□)
Plate Diameter	Φ600 mm	Φ600 mm
Structural Division Profile	Integrated 90° Cross Divider	Integrated 90° Cross Divider
Primary Material	Wear-Resistant Laboratory Stainless Steel	Wear-Resistant Laboratory Stainless Steel
Surface Treatment	Precision Machined & Passivated	Precision Machined & Passivated
Handle / Grip Arrangement	Dual Upright Ergonomic Vertical Handles	Low-Profile Horizontal Guide Brackets
Blade Perpendicularity	90° ± 0.2°	90° ± 0.2°
Planar Flatness Tolerance	≤ 0.25 mm across Φ600 mm surface	≤ 0.25 mm across Φ600 mm surface
Operating Temperature Range	-20°C to +120°C	-20°C to +120°C

Parameter	KT-YB-V (Vertical Configuration)	KT-YB-H (Horizontal Configuration)
Subsampling Ratio	1:2 (Half) or 1:4 (Quarter) per split	1:2 (Half) or 1:4 (Quarter) per split
Cleaning Compatibility	Dry brush, compressed air, ultrasonic, solvent wipe	Dry brush, compressed air, ultrasonic, solvent wipe