

Cross Sample Divider Quartering Splitter For Laboratory And Field Sampling

Item Number: KT-FY



Introduction

Optimize sample reduction with our precision cross sample divider. Engineered for accurate coning and quartering of bulk minerals, aggregates, and powders, this durable tool ensures representative division, minimal bias, and exceptional operational longevity across all testing environments.

[Learn More](#)

Application	Description	Key Benefit
Mining and Ore Assay Preparation	Reduction of primary crushed drill cores, run-of-mine ores, and metallurgical concentrates prior to fine pulverization and chemical assaying.	Prevents segregation of high-density precious metal fractions, ensuring truly representative sub-samples for commercial valuation.
Civil Engineering and Aggregate Testing	Manual splitting of large-volume coarse aggregates, gravels, sands, and crushed stone used in highway construction and structural concrete formulation.	Accommodates bulky particle diameters up to specified sieve thresholds without jamming or particle crushing during division.
Cement and Clinker Quality Control	Routine bench-scale quartering of cement raw meal, rotary kiln clinker, and finished pulverized binder batches.	High wall clearance prevents fine powder splashing and maintains strict mass balance throughout the reduction sequence.
Environmental Soil and Sediment Sampling	Division of composite environmental soil cores, river dredging sediments, and agricultural soils for hazardous constituent screening.	Easy-clean surface profile eliminates carryover contamination of trace heavy metals, organic pollutants, and micro-nutrients.
Coal and Coke Fuel Testing	Representative quartering of raw coal, washed middlings, and metallurgical coke lots destined for calorific and proximate laboratory analysis.	Maintains uniform distribution of moisture and volatile ash components across all divided quadrants without selective loss.
Recycling and Metallurgy Slag Recovery	Fractionation of processed industrial by-products, furnace slag, electronic scrap shredding residues, and recycled foundry materials.	Robust edge design easily slices through heterogeneous blends of metallic particles and friable matrix phases without warping.

Specification Parameter	KT-FY-S (Small)	KT-FY-M (Medium)	KT-FY-L (Large)
Base Product Identifier	KT-FY	KT-FY	KT-FY
Variant Designation	Small Size (11")	Medium Size (14")	Large Size (18")
Outer Diameter (Φ)	400 mm	600 mm	800 mm
Blade Height	160 mm	200 mm	220 mm
Structural Configuration	Fixed Orthogonal 90° Cross	Fixed Orthogonal 90° Cross	Fixed Orthogonal 90° Cross
Primary Division Ratio	1:4 (Four Equivalent Quadrants)	1:4 (Four Equivalent Quadrants)	1:4 (Four Equivalent Quadrants)
Typical Sample Batch Suitability	Bench-scale powders, fine soils, concentrates	Pilot batches, medium crushed ores, sands	Bulk quarry aggregates, coarse ores, run-of-mine
Division Methodology	Manual Coning and Quartering	Manual Coning and Quartering	Manual Coning and Quartering
Cleaning Compatibility	Dry brush, compressed air, solvent wipe	Dry brush, compressed air, solvent wipe	Dry brush, compressed air, solvent wipe