

Open Riffle Splitter Laboratory Dry Sample Divider

Item Number: KT-CK



Introduction

Engineered for accurate representative sample reduction in analytical laboratories, this open riffle splitter features precision alternating chutes for granular bulk solids. Available in stainless or galvanized steel, it ensures fast, unbiased sample division across standard and fine particle sizes.

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Application	Description	Key Benefit
Coal & Coke Quality Assaying	Splitting raw coal, pulverized fuel, and metallurgical coke before proximate, ultimate, and calorific value testing.	Strictly complies with coal chemistry test standards, preserving moisture and ash distribution across sub-samples.
Mineral Ore & Geochemical Exploration	Sub-sampling crushed core samples, crushed drill cuttings, and flotation concentrates prior to XRF or ICP-OES assay.	Minimizes segregation of dense metallic minerals from lighter matrix rock, avoiding analytical sampling bias.
Aggregates & Construction Materials	Dividing sand, crushed gravel, cement clinker, and fine asphalt fillers for sieve grading and material compliance testing.	Resists high-abrasion wear while preventing jamming of irregular crushed stone particles.
Metallurgical Slag & Pellet Testing	Handling iron ore pellets, sinter mixes, and smelting slag during blast furnace and electric arc furnace QA/QC procedures.	Delivers durable handling of hard, abrasive fragments without chute channel deformation.
Chemical Granules & Fertilizer Testing	Splitting prilled fertilizers, synthetic resins, industrial salts, and catalyst pellets into representative testing fractions.	Stainless steel option avoids chemical attack and eliminates iron contamination in sensitive analytical workflows.
Agricultural Grain & Seed Sampling	Dividing bulk cereal grains, oilseeds, and processed feedstocks for moisture, protein, and contaminant determination.	Non-destructive gravity feed preserves grain integrity and prevents premature cracking or dust generation.
Soil & Environmental Sediment Analysis	Sub-sampling dried soils, environmental silt, and riverbed sediments for toxic heavy metal and organic pollutant screening.	Eliminates cross-contamination between successive field batches due to rapid and complete chute cleanability.

Model Identifier	Specification Grade	Material Construction	Maximum Feed Particle Size (mm)	Chute Slot Width (mm)	Number of Chute Slots
KT-CK-1A-L	Large (100)	Galvanized Steel	≤ 13	20.7	16
KT-CK-1A-M	Medium (50)	Galvanized Steel	≤ 6	8.0	24
KT-CK-1A-S	Small (25)	Galvanized Steel	≤ 3	5.0	32
KT-CK-2B-L	Large (100)	Stainless Steel	≤ 13	20.7	16
KT-CK-2B-M	Medium (50)	Stainless Steel	≤ 6	8.0	24
KT-CK-2B-S	Small (25)	Stainless Steel	≤ 3	5.0	32

Model Identifier	Standard Designation	Material Construction	Maximum Feed Particle Size (mm)	Chute Slot Width (mm)	Number of Chute Slots
KT-CK-1A-4#	4# Standard	Galvanized Steel	≤ 13	32.0	12
KT-CK-1A-3#	3# Standard	Galvanized Steel	≤ 6	15.0	16
KT-CK-1A-2#	2# Standard	Galvanized Steel	≤ 3	8.0	24
KT-CK-1A-1#	1# Standard	Galvanized Steel	≤ 1	5.0	32

Model Identifier	Standard Designation	Material Construction	Maximum Feed Particle Size (mm)	Chute Slot Width (mm)	Number of Chute Slots
KT-CK-2B-4#	4# Standard	Stainless Steel	≤ 13	32.0	12
KT-CK-2B-3#	3# Standard	Galvanized Steel / SS	≤ 6	15.0	16
KT-CK-2B-2#	2# Standard	Stainless Steel	≤ 3	8.0	24
KT-CK-2B-1#	1# Standard	Stainless Steel	≤ 1	5.0	32

Parameter	Technical Detail
Item Series	KT-CK Series
Enclosure Format	Open Frame Architecture (□□□ □)
Alternative Enclosure Availability	Compatible sealed execution available upon request (KT-CK-1AM / KT-CK-2BM)
Splitting Ratio	Strict 1:2 Binary Reduction (50% / 50% split per cycle)
Chute Incline Angle	Standard gravity-feed discharge angle to facilitate smooth descent
Included Accessories	3 Matching Receiving/Feed Material Pans
Corrosion Resistance	Moderate (Galvanized Grade); Superior / Chemical Resistant (Stainless Steel Grade)
Cleanability	Direct brush access, compressed air purge, or solvent wash (Stainless models)