

Float Sink Spin Dryer And Centrifugal Float Sink Dehydrator

Item Number: KT-TS



Introduction

Engineered for coal laboratory analysis, this float-sink spin dryer and centrifugal float-sink dehydrator rapidly separates heavy medium and moisture from samples in compliance with GB/T 478, delivering safe, smooth, and complete liquid drainage within two to five minutes per cycle.

[Learn More](#)

Application	Description	Key Benefit
Coal Washability Analysis (GB/T 478)	Rapid removal of heavy separating liquids from stratified coal density fractions during standard washability curve determination.	Eliminates manual liquid draining bottlenecks, ensuring consistent residual moisture levels across density fractions.
Heavy Liquid Medium Recovery	Separation and collection of expensive dense liquids, such as zinc chloride or bromoform solutions, from post-immersion sample cakes.	Drastically reduces chemical replenishment costs by maximizing liquid medium recycling yield without sample cross-contamination.
Coking Coal Beneficiation Evaluation	High-throughput preparation of clean coal, middlings, and refuse fractions for proximate analysis and ash fusion benchmarking.	Accelerates production quality feedback loops for metallurgical coal washing and automated blending operations.
Geological Exploration Core Testing	Dewatering drill core coal samples and sedimentary rock fragments following heavy-fluid density separation protocols.	Preserves original particle grain distribution and petrographic integrity through controlled centrifugal acceleration.
Thermal Power Plant Fuel Ingestion Screening	Rapid verification of density distributions and washing characteristics for incoming steam coal shipments.	Supports rapid verification of coal quality to optimize boiler combustion efficiency and ash handling parameters.
Mineral Processing Tailings Dewatering	Centrifugal separation of fine mineral particulates and gangue fractions during mineral liberation and sink-float feasibility studies.	Delivers consistent, low-moisture particulate cakes ready for rapid secondary drying, gravimetric weighing, or chemical assay.

Specification Parameter	Technical Value / Detail
Product Identifier	KT-TS
Primary Functionality	Float-Sink Centrifugal Dehydration & Dense Liquid Recovery
Applicable Standards	Compliant with GB/T 478 Float and Sink Analysis of Coal
Rotational Basket Speed	1300 r/min
Operating Cycle Time	2 - 5 minutes (adjustable timer controlled)
Inner Basket Diameter	200 mm
Inner Basket Height	250 mm
Inner Basket Material	Corrosion-resistant perforated stainless steel sheet
Drive Transmission Type	Triangular V-belt drive with soft-start pulley mechanism
Drive Motor Power	135 W
Input Electrical Supply	220 V AC, 50 Hz Single Phase
Overall Equipment Dimensions (W x D x H)	510 mm x 390 mm x 670 mm
Net Equipment Weight	Approximately 40 kg
Discharge Configuration	Bottom-directed liquid collection port with splash-proof housing

Specification Parameter	Technical Value / Detail
Standard Auxiliary Tooling & Accessories	Float-sink hydrometer, collection plates/trays, stainless steel float-sink scoop, mesh-bottom bucket, heavy liquid storage bucket