

Hardgrove Grindability Index Tester Coal Grindability Determination Instrument

Item Number: KT-TE57



Introduction

Determine coal grindability with high precision using this professional Hardgrove grindability index tester. Featuring an automated sixty-revolution digital microcomputer cutoff, ergonomic mechanical bowl positioning, and calibrated grinding pressure, this unit provides reproducible data for pulverizer operation, combustion efficiency, and metallurgy.

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Application	Description	Key Benefit
Thermal Power Generation	Evaluation of pulverized coal feedstocks to determine grindability trends across varying source seams and blended fuels prior to boiler firing.	Optimizes coal mill throughput, reduces auxiliary power consumption in pulverizers, and prevents unburned carbon losses.
Metallurgical Coking & PCI	Characterization of metallurgical coals and pulverized coal injection (PCI) grades utilized directly in blast furnace ironmaking processes.	Ensures uniform injection particle sizing, improves furnace permeability, and lowers coke replacement ratios.
Coal Mining & Fuel Preparation	Production-level quality control testing at coal preparation plants to classify mined seams according to commercial trade specifications.	Verifies contractual fuel grade compliance and commands premium pricing through certified Hardgrove Grindability Index documentation.
Cement Kiln Firing Systems	Testing of solid fuels utilized in cement calcination preheaters and rotary kilns to calibrate ball mills and vertical roller mills.	Maximizes clinker production efficiency while extending the operational wear life of grinding rollers and mill liners.
Coal Gasification & Chemical Synthesis	Feedstock suitability testing for entrained-flow and fluidized-bed coal gasifiers producing synthetic chemicals or hydrogen.	Ensures consistent slurry or pneumatic feed preparation, minimizing downstream blockage risks and pressure fluctuations.
Commercial Testing Laboratories	High-throughput standardized testing for third-party commercial inspection agencies and institutional energy research laboratories.	Delivers audit-ready, repeatable testing metrics conforming directly to national standards with minimal operator intervention.

Specification Parameter	Technical Detail
Equipment Identification	KT-TE57
Spindle Rotational Speed	20 rpm
Preset Working Revolutions	60 revolutions (automatic shutoff)
Standard Vertical Load	284 N $\pm$ 2 N
Drive Motor Power	90 W
Rated Operating Voltage	Three-phase 380 V, 50 Hz
Speed Reducer Specification	Model WTC-40VI
Total Reduction Ratio	1:72
Equipment Net Weight	66 kg
Overall External Dimensions (L x W x H)	365 mm x 425 mm x 460 mm
Primary Analytical Sieve Suite	Φ200 mm frame; apertures: 0.071 mm, 0.63 mm, 1.25 mm (1 each)
Protective Oversize Sieve	Φ200 mm frame; aperture: Φ16 mm (1 unit)

Specification Parameter	Technical Detail
Sieve Pan & Top Cover Assembly	Complete nested $\Phi 200$ mm collection receiver and dust lid (1 set)
Governing Standard	GB/T 2565 (Hardgrove Method for Coal Grindability Determination)