Fast Ash Chain High Temperature Conveyor Chain For Rapid Ash Testing Furnaces

Item Number: KT-LT

Introduction

Discover our premium fast ash analyzer conveyor chain engineered with heat resistant nickel chromium alloy for continuous coal testing furnaces ensuring exceptional tensile strength high temperature oxidation resistance dimensional stability and extended service life in demanding laboratory operations today

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Application	Description	Key Benefit
Coal-Fired Power Generation	Transports pulverised coal sample crucibles continuously through fast ash determination tubes during rapid incoming fuel grading.	Prevents mechanical jamming and ensures continuous combustion monitoring for real-time boiler efficiency optimization.
Commercial Fuel Testing Laboratories	Operates within high-throughput automated rapid ash analyzers testing diverse solid biofuels, coke, and anthracite batches.	Maintains tight pitch tolerances and constant transit speeds, guaranteeing strict compliance with international testing standards.
Metallurgical Coke Quality Control	Feeds metallurgical coke samples through rapid high-temperature incineration zones for proximate ash content calculation.	Withstands abrasive ash dust and severe flue gas chemistry without premature pin binding or surface galling.
Mining and Coal Preparation Plants	Handles on-site hourly testing of raw and washed coal fractions to calibrate density separation circuits and washing efficiency.	Durable alloy build minimizes field maintenance requirements in dusty, continuous industrial testing operations.
Cement and Lime Manufacturing	Moves alternative fuel materials and petcoke through quick ash testing furnaces to regulate kiln thermal inputs.	Delivers reliable high-temperature tensile stability under continuous exposure to volatile mineral ash components.
Environmental Biomass Analysis	Transports agricultural residue, wood pellets, and waste-derived fuel boats through fast calcination furnace corridors.	Eliminates sample jarring and spillage, safeguarding sensitive laboratory optical balances and automated sample extractors.

Parameter	Standard Specification (KT-LT)	Heavy-Duty Variant (KT-LT-HD)
Product Identifier	KT-LT	KT-LT-HD
Primary Material	Nickel-Chromium Austenitic Superalloy	High-Nickel Heat-Resistant Inconel-Grade Alloy
Maximum Operating Temperature	900°C (1652°F)	1050°C (1922°F)
Continuous Working Temperature	815°C to 850°C	815°C to 950°C
Chain Pitch Specification	12.7 mm (0.50 in)	15.875 mm (0.625 in)
Link Pin Diameter	3.2 mm ± 0.05 mm	4.5 mm ± 0.05 mm
Plate Thickness	1.5 mm	2.2 mm
Ultimate Tensile Strength	≥ 6.8 kN at ambient temperature	≥ 11.5 kN at ambient temperature
High-Temperature Tensile Yield	≥ 2.4 kN at 850°C	≥ 4.2 kN at 950°C
Thermal Expansion Coefficient	16.5 × 10^{-6} / °C (20°C to 850°C)	14.8 × 10^{-6} / °C (20°C to 1000°C)
Oxidation Resistance Rating	Continuous air/flue exposure < 0.15 g/m²·h	Continuous air/flue exposure < 0.08 g/m²·h
Sample Carrier Compatibility	Standard ceramic and fused quartz boats	Heavy ceramic boats and multi-tier trays
Standard Drive Interface	Compatible with standard 8-to-16 tooth sprockets	Reinforced hardened steel sprockets

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Dimensional Tolerance	ISO 606 Class A Precision	ISO 606 Class A Precision