

Lithium Carbonate Rotary Kiln for Battery Production

This rotary kiln is designed for the production of lithium carbonate used in lithium batteries. Its robust cylindrical structure ensures efficient thermal processing and optimized reaction conditions.



ADDITIONAL IMAGES



Product Overview

Industrial Lithium Carbonate Processing

This industrial rotary kiln is engineered for high-efficiency lithium carbonate production, specializing in conversion roasting of spodumene concentrate. The system utilizes advanced thermal processing at 1200°C to achieve a 98% conversion rate from μ -type to α -type spodumene. It supports a comprehensive workflow including acidification, leaching, purification, and evaporative deposition to yield battery-grade final products.

Technical Specifications

Calcination Temperature	1200 °C
Conversion Rate	98 %
Acidification Temperature	250 - 300 °C
Acidification Duration	30 - 60 min

Process Parameters

Leaching Solution Solid Ratio	2.5
Li ₂ SO ₄ Concentration in Leachate	100 g/L
Purification pH Level	11 - 12
Ca/Li Ratio	0.00096

Output Specifications

Leachate Slag Water Content	35 %
Lithium Precipitation Rate	85 %

Material Handling

Milling Fineness Requirement	>90% at 0.074mm
Concentrated Sulfuric Acid Usage	0.21 t/t baking material