

100Mm Laboratory Heated Electric Vertical Two Roll Mill

Electric Rolling Roller Press

Item Number: DG02



Introduction

100mm laboratory heated electric vertical two roll mill for precise battery electrode rolling, adjustable thickness, independent temperature control, high hardness rolls, and consistent small batch materials processing for lithium battery nonferrous metal precious metal and advanced materials research applications

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Application	Description	Key Benefit
Lithium Battery Electrode Development	Roll lithium battery electrode sheets to reduce thickness and increase material density during cathode, anode, and electrode process development.	Adjustable gap, speed, and temperature support repeatable electrode preparation and parameter comparison.
Battery Materials Research	Process small quantities of experimental battery powders and coated materials under controlled heated or unheated conditions.	Independent roll heating and digital monitoring help researchers evaluate thermal effects on material compression.
Copper and Aluminum Rolling	Perform laboratory-scale rolling of copper, aluminum, and other nonferrous materials when controlled thickness reduction is required.	Motorized reversible operation provides convenient handling for small samples and development batches.
Precious Metal Materials	Roll limited quantities of gold, silver, and related precious metal materials for laboratory investigation and sample preparation.	Compact construction and adjustable thickness reduce material waste during small-volume trials.
Advanced Materials Research	Study the relationship between rolling gap, feed speed, temperature, and material density in experimental processing programs.	Digitally displayed operating values improve test documentation and process repeatability.
Powder Metallurgy and Ceramic Processing	Support controlled compression and sheet-forming investigations for powder-based materials where laboratory-scale rolling is appropriate.	Fine gap adjustment enables controlled trial conditions across different sample compositions.
University and Institutional Laboratories	Provide a practical rolling platform for teaching, process demonstrations, materials characterization, and research projects.	Simple electric operation and direct digital displays shorten setup time and simplify routine use.

Parameter	Specification
Product Item Number	DG02
Product Type	100mm laboratory heated electric vertical two roll mill and electric rolling roller press
Roll Diameter	Φ100 mm
Roll Arrangement	Vertical placement
Roll Hardness	HRC62
Roll Surface Finish	Ra0.4 or better
Roll Cylindricity	≤±2 μm
Rolling Thickness	0 to 2 mm, adjustable gap
Adjustable Gap	0 to 2 mm
Heated Width	80 mm
Rolling Temperature	Upper and lower rolls independently heated; room temperature to 130°C adjustable; digital display

Parameter	Specification
Temperature Control	Independent upper and lower temperature controllers
Temperature Control Accuracy	±0.5°C
Temperature Resolution	0.1°C
Operating Mode	Electric
Rolling Direction	Forward and reverse operation
Feed Speed	0 to 40 mm/s, digitally displayed and adjustable
Thickness Display	Digital display available for sheet thickness adjustment and observation
Speed Display	Digital display
Heating Selection	Heated or unheated operation selectable
Power Supply	AC220V/50Hz
Power	1 kW
Overall Dimensions	L670 mm × W220 mm × H330 mm
Equipment Weight	70 kg
Standard Accessories	One set of hexagonal wrenches, two digital dial indicators, one feeler gauge