

Laboratory Manual Vertical Double Roller Mill Manual Rolling Press With Two 100 Mm Rollers

Item Number: DG04



Introduction

Laboratory manual vertical double roller press with 100 mm rollers, adjustable 0 to 2 mm rolling gap, up to 200 mm sheet width, high hardness chromium plated rollers, and precise battery electrode material rolling for consistent density and repeatable results

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Application	Description	Key Benefit
Lithium Battery Electrode Rolling	Reduce the thickness and increase the density of lithium battery electrode sheets after coating or material preparation.	Supports controlled electrode densification and more consistent sheet dimensions.
Clean Energy Materials Research	Process experimental battery materials and investigate the relationship between rolling conditions, density, and final electrode performance.	Enables rapid manual adjustment during formulation and process development.
Battery R&D Scale-Up Studies	Evaluate rolling gaps, material widths, and operating speeds before transferring a process to larger production equipment.	Provides a practical laboratory reference for early-stage process optimization.
Advanced Materials Laboratories	Roll and compact research sheets, strips, and other compatible materials during materials development programs.	Offers flexible width and thickness adjustment within a compact laboratory unit.
Academic Materials Science Research	Conduct repeatable demonstrations and experiments involving mechanical densification, thickness reduction, and sheet processing.	Simple operation supports efficient teaching, testing, and repeatable laboratory work.
Powder Metallurgy and Ceramics Research	Investigate rolling-based forming or densification behavior for suitable powder-derived sheets and experimental materials.	Delivers controlled mechanical processing without requiring complex automated systems.

Parameter	DG04-100	DG04-200
Roller diameter	2-Φ100mm	2-Φ100mm
Roller cylindricity	≤±2um	≤±2um
Roller hardness	HRC62	HRC62
Roller surface finish	0.4μm	0.4μm
Rolling thickness or gap	0~2mm, gap adjustable	0~2mm, gap adjustable
Sheet rolling width	0~100mm	0~200mm
Roller arrangement	Vertical	Vertical
Operating method	Manual	Manual
Feed speed	0~40mm/s, determined by hand-crank rotation speed	0~40mm/s, determined by hand-crank rotation speed
Overall dimensions	L360mmW200mmH350mm	L460mmW200mmH350mm
Equipment weight	45KG	70KG