

1L 2L 3L 5L Hand Operated Laboratory Vacuum Mixer

Item Number: JL04



Introduction

Hand operated laboratory vacuum mixer for battery slurry, glue, and chemical processing, featuring 1L and 2L capacities while supporting 3L and 5L product searches variable speed heating and dependable vacuum processing for research teams

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Application	Description	Key Benefit
Lithium Battery Electrode Slurry	Mixes positive and negative electrode materials during laboratory-scale battery formulation and process development.	Supports uniform dispersion under controlled vacuum conditions and adjustable speed.
Battery Materials Research	Enables researchers to evaluate formulation changes, viscosity behavior, and mixing sequences using small effective volumes.	Reduces material consumption during experimental development and screening.
Adhesive and Glue Preparation	Processes glue and adhesive formulations that require consistent blending and controlled batch conditions.	Helps produce repeatable small batches with programmable mixing time.
Chemical Formulation Development	Supports laboratory mixing and dispersion for chemical materials with different viscosities and process requirements.	Provides adjustable speed, torque, vacuum, and optional heating functions.
Academic and Advanced Materials Research	Serves research teams investigating powders, slurries, binders, and other formulation systems.	Offers a flexible platform for controlled experiments and scale-oriented process studies.
Vacuum-Sensitive Mixing Processes	Handles applications where air removal and stable vacuum retention are important parts of the process.	Maintains a -0.098 MPa state for more than 24 hours through soft-sealing technology.

Parameter	JL04 1L Configuration	JL04 2L Configuration
Product type	Hand-operated laboratory vacuum mixer with vacuum mixing and dispersion	Hand-operated laboratory vacuum mixer with vacuum mixing and dispersion
Effective volume	1 L	2 L
Rated power	0.55 kW	0.75 kW
Voltage	220 V	220 V
Mixing speed	0-1400 r/min; speed adjusted through frequency converter	0-1400 r/min; speed adjusted through frequency converter
Vacuum retention	-0.098 MPa state maintained for more than 24 hours through soft-sealing technology	-0.098 MPa state maintained for more than 24 hours through soft-sealing technology
Mixing blade configuration	Dual dispersion blades	Dual dispersion blades
Vessel material	304 stainless steel	304 stainless steel
Vessel opening method	Cover raised by handwheel through dual-arm linear guide rails	Cover raised by handwheel through dual-arm linear guide rails
Vessel internal dimensions	Φ102 mm internal wall diameter × 185 mm height	Φ125 mm internal wall diameter × 200 mm height
Overall dimensions	Approximately 0.6 × 0.5 × 0.3 m, height × length × width	Approximately 0.6 × 0.5 × 0.3 m, height × length × width
Heating function	Available; 0-80°C	Available; 0-80°C

Parameter	JL04 1L Configuration	JL04 2L Configuration
Timer function	Settable from 0 to 99 h; automatic stop at completion while maintaining vacuum	Settable from 0 to 99 h; automatic stop at completion while maintaining vacuum
Approximate machine weight	Approximately 88 kg	Approximately 88 kg
Mixing drive	Geared motor with frequency-converter speed adjustment	Geared motor with frequency-converter speed adjustment
Primary processing functions	Vacuum mixing and material dispersion	Vacuum mixing and material dispersion
Referenced site identifier	JL04 1L Configuration	JL04 2L Configuration