

Servo Polymer Battery Top And Side Sealing Machine

Item Number: RB21



Introduction

Servo polymer battery top and side sealing machine for pouch lithium battery packaging delivers adjustable temperature pressure and dwell control reliable single station sealing and high yield for laboratory production and process development applications demanding consistent controlled seals

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Application	Description	Key Benefit
Polymer lithium battery top sealing	Seals the top edge of polymer lithium cells after placement in the dedicated fixture.	Controlled temperature, pressure, and time settings for a defined top-seal cycle.
Pouch lithium battery side sealing	Performs side-seal packaging operations for soft-pack lithium battery formats.	Single-station fixture handling supports orderly processing of individual cells.
Battery R&D sample preparation	Supports sealing of laboratory-developed pouch-cell samples during iterative cell-development work.	Touchscreen-adjustable process settings allow researchers to establish specified sealing conditions.
Pilot-scale pouch-cell fabrication	Provides a dedicated manual sealing workstation for pilot operations handling individual cells.	≥1 PPM capacity supports a practical cycle rate for controlled small-batch work.
Battery packaging process development	Enables evaluation of packaging conditions through adjustment of thermal, pressure, and dwell parameters.	Settings can be adjusted without changing the fundamental manual loading sequence.
Soft-pack cell finishing	Completes a sealing operation after a cell is located and clamped in the fixture.	Fixture position detection and servo sealing-bar motion provide a defined processing sequence.
Battery education and technical training	Allows operators and students to follow the physical stages of pouch-cell loading, clamping, positioning, sealing, return, and unloading.	Manual fixture movement provides direct visibility of each packaging step.

Parameter	RB21-200	RB21-400
Site-facing model identifier	RB21-200	RB21-400
Compatible battery sealing range	Length ≤200 mm, width ≤200 mm (including air-bag size), battery thickness 5-25 mm	Length ≤400 mm, width ≤350 mm (including air-bag size), battery thickness 5-25 mm
Sealing-head sealing width	5 mm (customized according to customer requirements)	5 mm (customized according to customer requirements)
Sealing-head parallelism	≤0.02 mm	≤0.02 mm
Heating-tube power	800 W per tube	800 W per tube
Temperature-control accuracy	±3°C; adjustable on touchscreen from room temperature to 300°C	±3°C; adjustable on touchscreen from room temperature to 300°C
Sealing pressure	Adjustable on touchscreen, 5-250 kg	Adjustable on touchscreen, 50-300 kg
Sealing time	Adjustable on touchscreen, 0-99"	Adjustable on touchscreen, 0-99"
Capacity	≥1 PPM	≥1 PPM
Equipment dimensions	L570 × W550 × H1320 mm (final dimensions subject to actual equipment)	L570 × W550 × H1320 mm (final dimensions subject to actual equipment)
Equipment weight	Approximately 150 kg	Approximately 150 kg

Parameter	RB21-200	RB21-400
Power supply	AC220V±10%/50Hz, total power 2.5 KW (subject to final actual design)	AC220V±10%/50Hz, total power 2.5 KW (subject to final actual design)
Air supply	0.5~0.7 Mpa, 100 L/min	0.5~0.7 Mpa, 100 L/min
Qualified-product rate	≥99.8% (excluding defective incoming materials, human factors, process factors, etc.)	≥99.8% (excluding defective incoming materials, human factors, process factors, etc.)
Equipment failure rate	≤2% (excluding incoming-material defects and impacts from plant power supply, air supply, etc.)	≤2% (excluding incoming-material defects and impacts from plant power supply, air supply, etc.)