

Polymer Battery Simple Top Sealing Machine

Item Number: RB25



Introduction

Polymer battery top sealing machine with adjustable sealing time, precise temperature control, guided fixture positioning, lug alignment, pneumatic compression, temperature alarm, and customizable copper sealing heads for reliable laboratory and pilot production battery packaging applications across advanced materials research

[Learn More](#)

Application	Description	Key Benefit
Polymer Battery Pouch Sealing	Seals the top edge of polymer battery pouches after electrode and electrolyte handling operations.	Provides controlled dwell time and heated compression for repeatable pouch closure.
Battery R&D Laboratories	Supports experimental battery fabrication where cell dimensions, sealing conditions, and process timing may change frequently.	Broad time adjustment and customizable groove dimensions support flexible development work.
Pilot Battery Production	Performs repeatable top-sealing cycles for small pilot batches before production-scale process transfer.	Pneumatic actuation and automatic head return help standardize operator workflows.
Electrode Tab Alignment and Sealing	Positions electrode tabs with the dedicated alignment block before the sealing head is activated.	Improves tab-location consistency and helps reduce positioning errors.
Advanced Materials Research	Supports research teams evaluating new pouch materials, cell formats, and sealing processes.	Adjustable operating parameters make the unit suitable for comparative process studies.
Battery Assembly Training and Process Validation	Provides a practical platform for establishing sealing procedures and training operators on controlled cell assembly.	Guided fixture travel, foot-switch activation, and temperature warning support a clear operating sequence.

Parameter	Specification
Model	RB25
Application	Battery sealing process
Battery maximum sealing length	500mm
Sealing time	1-99 seconds, freely adjustable
Time accuracy	±0.1 seconds
Sealing head working temperature range	MAX 2500C
Temperature control accuracy	±20C
Equipment weight	Approximately 120KG
Required power supply	AC220V 2.2 KW
Compressed air requirement	0.6MP or above
Copper sealing head sealing edge	5.5mm
Groove dimensions	Customized according to customer-provided drawings
Heating tube power	800W

Parameter	Specification
Fixture movement	Manual movement on a guide rail
Actuation method	Pneumatic cylinder
Cycle activation	Foot switch
Upper sealing head return	Automatic rise after sealing time is completed
Positioning accessory	Electrode-tab positioning block
Protective function	Temperature alarm to prevent incorrect operation before the set temperature is reached