Vacuum Pre Sealing Machine Top Side Sealing Machine

Item Number: RB22

Introduction

Vacuum pre sealing machine and top side sealing machine for battery packaging with adjustable sealing time precise temperature control high vacuum operation and dependable laboratory production performance for consistent pouch cell processing and efficient glovebox workflows across demanding research environments

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Application	Description	Key Benefit
Pouch Cell Pre-Sealing	Evacuates air and process gases from a pouch cell package before the final sealing sequence. The operator places the battery on the internal fixture and selects the vacuum pre-sealing mode.	High vacuum operation and automatic sequencing improve package consistency before subsequent cell processing.
Lithium Battery Research	Supports repeatable sealing operations during laboratory development of pouch-format lithium battery cells. Adjustable sealing time allows process teams to evaluate different packaging conditions.	Provides controlled, adjustable process parameters for battery R&D and small-batch cell fabrication.
Top-Side Pouch Sealing	Completes a top-side sealing operation after the battery is positioned in the fixture. The sealing head descends, holds for the programmed time, and returns automatically.	Short, repeatable cycles support efficient pouch cell assembly and finishing.
Glovebox Battery Assembly	Operates with the work area inside a glovebox while keeping the electrical control box outside for access. This arrangement supports integrated battery fabrication workflows.	Simplifies maintenance and control access while preserving compatibility with glovebox-based research environments.
Pilot-Scale Cell Fabrication	Handles battery packages up to 350 mm by 350 mm by 12 mm for pilot production, process validation, and repeated laboratory assembly.	A relatively large working capacity supports scale-up studies and larger pouch cell formats.
Advanced Materials Packaging	Provides controlled thermal sealing for research packages and material systems that require consistent enclosure and repeatable edge positioning.	Stable temperature, time control, and head guidance help reduce process variation.
Process Setup and Equipment Adjustment	Uses manual functions, a movable baffle, and a filter screen to assist fixture adjustment and operator setup before automated cycles begin.	Improves commissioning efficiency and makes parameter adjustment more practical for development work.

Parameter	Specification
Product Item Number	RB22
Equipment Function	Vacuum pre-sealing and top-side sealing
Sealing Mode Selection	Selector switch on the changeover panel
Compatible Battery Package Size	350 mm (L) × 350 mm (W) × 12 mm (H)
Sealing Head Working Temperature Range	MAX 2500C
Temperature Control Accuracy	±20C
Sealing Head Sealing Time	Adjustable from 1 to 99 seconds
Time Accuracy	±0.1 seconds
Soft Sealing Width	6 mm
Cylinder Diameter	63 mm

Parameter	Specification
Equipment Dimensions	L × W × H = 630 mm × 420 mm × 730 mm
Automatic Head Alignment	Upper and lower sealing heads have automatic guiding function
Sealing Edge Position Accuracy	Sealing edge distance from the battery package edge does not exceed 0.5 mm
Vacuum Level	More than -95 kPa
Operating Functions	Automatic and manual functions
Baffle	Movable baffle for equipment adjustment
Filter Component	Filter screen included for equipment adjustment
Electrical Control Box Position	Outside the glovebox
Control System	PLC control
Cylinder	AIRTAC cylinder
Temperature Controller	OMRON temperature controller
Timing Component	Time relay
Vacuum Measurement	Panasonic digital vacuum gauge