

Battery Cell Tab Cutting And Flattening Machine Manual

Loading Unloading

Item Number: RB10



Introduction

Manual loading and unloading battery cell tab cutting and flattening machine for stacked cell tab processing, pneumatic trimming, controlled flattening, automatic counting and dependable laboratory production workflows with foot pedal control and guarded operation for consistent throughput across demanding battery research environments

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Application	Description	Key Benefit
Stacked Battery Cell Tab Trimming	Removes excess stacked tabs and welded tabs after the cell has been positioned in the work area.	Establishes a cleaner tab profile before the flattening step.
Post-Welding Tab Flattening	Flattens the remaining tabs after the operator manually transfers the work position from cutting to flattening.	Helps produce a more uniform tab form for subsequent cell-processing operations.
Battery Research and Development	Supports repeated tab processing during cell design studies, process trials, and parameter verification.	Provides controllable manual operation for flexible laboratory experimentation.
Pilot-Scale Cell Production	Processes cells in small-batch or pilot workflows with manual loading and unloading.	Balances operator oversight with a stated throughput of 300-500 cycles per hour, depending on process parameters.
Tab Process Standardization	Applies the same dedicated cutting and flattening sequence across repeated batches.	Reduces variation caused by inconsistent manual tab preparation.
Production Output Monitoring	Uses the integrated automatic counter to record completed actions during trial or routine production.	Gives operators a straightforward reference for batch progress and equipment utilization.

Category	Parameter	Specification
Identification	Product item number	RB10
Function	Intended operation	Cutting and flattening of tabs on stacked battery cells after tab welding
Operation	Loading method	Manual loading
Operation	Unloading method	Manual unloading
Operation	Cutting and flattening transfer	Manual conversion between cutting and flattening stations
Operation	Control method	Manual or foot-pedal control
Operation	Counting	Automatic counting function
Safety	Protection	Safety door panels installed around the equipment perimeter
Pneumatic system	Required compressed air	≥0.6 MPa
Pneumatic system	Air source	0.5-0.8 MPa compressed air
Cutting	Cutting pressure	≤1000 Kgf
Cutting	Cutting stroke	15 mm

Category	Parameter	Specification
Cutting	Cutting tool length	200 mm
Flattening	Flattening pressure	≤1000 Kgf
Capacity	Working speed	300-500 cycles/hour, depending on process parameters
Battery compatibility	Applicable battery width	Less than 225 mm
Electrical	Voltage	Single-phase AC220V ±10%
Electrical	Frequency	50 Hz/60 Hz
Electrical	Power	100 W
Electrical	Plug	Standard national plug
Construction	Approximate equipment weight	Approximately 140 kg
Finish	Spray-paint color	Customized according to the purchaser's requirements; purchaser provides color sample
Mechanical components	Frame and structural elements	Aluminum-profile frame, sheet-metal doors, cutting tooling, machine frame, and linear guide components
Pneumatic components	Main pneumatic parts	Taiwan-brand Baili cylinder, solenoid valve, and related pneumatic components
Electrical components	Main electrical parts	Counter, power switch, and emergency-stop button