

Pneumatic Battery Electrode Sheet Trimming Machine Edge Cutting Machine

Item Number: RB09



Introduction

Pneumatic battery electrode sheet trimming machine delivers accurate top side seal edge cutting after aluminum plastic film pocket forming with foot pedal operation custom width control and durable high speed steel blades for reliable pouch cell production workflows.

[Learn More](#)

Application	Description	Key Benefit
Pouch-cell production	Trims the top and side sealed edges after aluminum-plastic-film pocket forming in pouch-cell fabrication.	Provides a dedicated post-forming edge-cutting operation.
Battery R&D sample preparation	Supports laboratories preparing sample pouch cells with customer-defined reserved seal-edge dimensions.	Custom profiling fixture dimensions can be based on the supplied sample cell.
Pilot-scale cell manufacturing	Performs a foot-switch-controlled trimming step for pilot-line pouch cells before subsequent handling or evaluation.	Simple one-hand loading and foot-actuated cutting sequence.
Aluminum-plastic-film forming workflows	Addresses edge finishing after the film pocket has been formed and the top/side seal area requires trimming.	Matches the stated post-pocket-forming process stage.
Custom pouch-cell format development	Accommodates projects where top and side seal allowances differ between cell designs.	Trimming width is determined by the customer blueprint and can be adjusted with the positioning stop edge.
Battery process equipment integration	Can serve as a dedicated manual handling station within a broader cell-fabrication workflow using pneumatic utility supply.	Defined 0.5 MPa minimum air requirement and AC220V/50HZ electrical configuration simplify utility planning.

Parameter	Specification
Product Item Number	RB09
Primary function	Trimming of the top and side sealed edges after aluminum-plastic-film pocket forming
Applicable cutter length	300 mm
Trimming accuracy	±0.2mm
Trimming width	Determined by the profiling fixture; customized according to the reserved dimensions of the top and side seals on the customer-provided sample cell
Trimming-width adjustment	Adjustable through the positioning stop edge
Cutting method	Cylinder punching method
Upper blade guidance	Mold ball guide posts and guide bushings
Guidance purpose	Maintains zero clearance between upper and lower cutting blades and supports working life
Upper cutting blade material	High-speed steel
Lower cutting blade material	High-speed steel

Parameter	Specification
Blade edge condition	Sharp cutting edge
Cutter hardness	HRC $\geq$ 58
Cutting control	Foot switch control
Operating method	Hold the battery on the positioning plate with one hand; press the foot valve to complete trimming
Mechanical components	Upper cutting blade mechanism; lower cutting blade mechanism; guide-post and guide-bushing mechanism; battery positioning plate mechanism
Electrical components	Solenoid valve; foot switch
Air supply	0.5MPa or above
Configured power supply	AC220V/50HZ
Power	500W
Equipment weight	Approximately 40KG

Process Area	Reference-Backed Configuration	Procurement Relevance
Cell location	Battery positioning plate mechanism	Provides the defined location where the operator places the battery for trimming.
Blade movement	Cylinder punching with foot-switch control	Establishes the stated method of initiating the cutting cycle.
Cutting interface	Upper and lower high-speed-steel blades, HRC $\geq$ 58 cutter hardness	Identifies the blade material and hardness requirement for the trimming task.
Alignment	Mold ball guide posts and guide bushings on the upper blade	Supports high-precision guidance and the specified zero-clearance blade relationship.
Width setup	Profiling fixture plus positioning stop edge	Allows the cutting width to reflect reserved seal dimensions and be adjusted at the stop edge.
Facility connections	$\geq$ 0.5 MPa air supply; AC220V/50HZ, 500W electrical supply	Defines the pneumatic and electrical utilities to confirm before installation.

Review Point	What to Confirm
Sample-cell geometry	Provide the blueprint or sample cell showing the required reserved dimensions at the top and side seals.
Required cutting span	Confirm compatibility with the 300 mm applicable cutter length.
Edge tolerance requirement	Compare the required process tolerance with the specified $\pm$ 0.2 mm trimming accuracy.
Width-setting approach	Verify the profiling-fixture requirement and the intended positioning-stop adjustment range for the application.
Utility availability	Confirm compressed air at 0.5 MPa or above and AC220V/50HZ electrical power.
Operator workflow	Assess the manual loading, positioning-plate, and foot-switch sequence for the planned workstation layout.