

Semi Automatic Cylindrical Battery Grooving Machine

Item Number: YZ08



Introduction

Semi automatic cylindrical battery grooving equipment delivers adjustable 1.2 to 2.0 mm depth precision for steel cell cases and aluminum capacitor shells with PLC touchscreen control dependable 400 EA per hour production and stable adjustable speed operation performance.

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Application	Description	Key Benefit
Cylindrical lithium battery research	Grooving steel cylindrical cases for laboratory development of 18650, 21700, and 26650 cell formats.	Adjustable groove dimensions support work across multiple common cylindrical case sizes.
Battery pilot-line assembly	Preparing cell-loaded cylindrical steel cases during semi-automatic pilot-scale cell fabrication.	400 EA/H capacity supports repeatable processing without requiring a large machine footprint.
Battery case process development	Evaluating groove depth, width, and rotational operating conditions when developing cylindrical-case forming procedures.	PLC settings and digital speed display provide clear, adjustable process references.
Aluminum capacitor manufacturing	Forming grooves in aluminum capacitor cases with diameters up to Phi 30.	Extends the equipment's use beyond steel battery cases to compatible capacitor housings.
Battery laboratory prototyping	Processing different cylindrical battery case configurations during prototyping and experimental assembly.	Compatibility with multiple steel case formats helps laboratories accommodate changing project requirements.
Academic electrochemical research	Supporting hands-on cylindrical cell fabrication work in university and research institute laboratories.	Compact dimensions and straightforward touchscreen operation suit controlled laboratory workflows.
Quality-focused case preparation	Producing uniform case grooves where dimensional repeatability is important before subsequent assembly operations.	+/-0.1 mm processing accuracy supports stable groove dimensions.
Electrolyte-adjacent assembly environments	Operating a grooving station in battery-processing areas where moisture and electrolyte exposure are relevant considerations.	Metal waterproof buttons resist moisture and electrolyte corrosion.

Parameter	Specification
Product Item Number	YZ08
Control Method	PLC touchscreen control
Suitable Steel Cylindrical Battery Cases	18650, 26650, 21700, and other steel cylindrical battery cases
Suitable Aluminum Capacitor Cases	Within Phi 30
Groove Depth	1.2-2.0 mm, adjustable
Groove Width	1.1-1.5 mm, according to roller thickness
Processing Accuracy	+/-0.1 mm
Roller Service Life	Greater than 1 million operations
Capacity	Semi-automatic 400 EA/H
Speed Regulation	Digital display; precise adjustment and display of current rotational speed
Control Buttons	Metal waterproof push buttons, resistant to moisture and electrolyte corrosion

Parameter	Specification
Power Supply	220v/50Hz
Power	140W
Compressed Air	0.5MPa-0.7MPa
Product Dimensions	L740X 250X 350mm
Net Weight	37kg
Routine Cleaning Requirement	Frequently wipe dirt from guide posts and other moving parts; keep clean and lubricated for smooth movement
Long-Term Idle Care	Clean the forming mold and apply oil to keep the forming surface clean and smooth when the equipment is not used for an extended period
Fastener Inspection	Regularly inspect screws, nuts, pins, and other fasteners to prevent loosening and avoid sealing-quality and personal-safety incidents
Operating Safety	Do not place hands in the active area of the forming mold during operation to avoid hand injury
Mold Inspection	Regularly check the forming mold for foreign objects
Mold Protection	Do not strike the forming mold section with hard objects