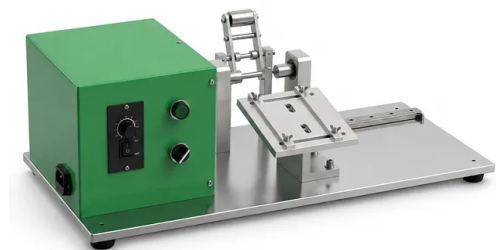


Lithium Battery Electrode Manual Winding Machine For Cylindrical And Pouch Cells

Item Number: JR06



Introduction

Accelerate battery prototyping with this manual winding machine for pouch, cylindrical, and supercapacitor cells. Featuring stepless speed control, bidirectional rotation, and multi-axis guide plate positioning, it delivers precise winding tension and defect-free core assemblies every single cycle.

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Application	Description	Key Benefit
Cylindrical Battery Prototyping	Winding anode, cathode, and separator layers into tight cylindrical jelly rolls up to 35 mm in diameter and 90 mm in length.	Guarantees tight core concentricity and uniform outer diameter for seamless can insertion.
Prismatic Pouch Cell Fabrication	Winding flat electrode-separator assemblies for soft-package lithium-ion cells with adjustable width and thickness settings.	Eliminates interfacial bubbling and electrode edge overhang, reducing short-circuit risks.
Supercapacitor Core Assembly	Integrating thick activated carbon or porous nanomaterial electrodes with porous separators into dense capacitive cores.	Delivers consistent packing density and low internal equivalent series resistance (ESR).
Solid-State & Gel Battery R&D	Processing advanced solid electrolyte composite membranes and thin metallic or alloy foils under controlled manual tension.	Minimizes mechanical stress and micro-cracking on brittle or pressure-sensitive experimental separators.
Academic & Industrial R&D Testing	Rapid turnaround of small-batch experimental cell designs using newly synthesized binder formulations or active chemistries.	Accelerates screening cycles with minimal material waste and tool-free parameter reconfigurations.

Parameter	Specification (Item No. JR06)
Power Supply	220 V / 50 Hz
Rated Power Consumption	25 W - 40 W
Winding Rotational Speed	0 - 170 rpm (Continuously Variable / Stepless)
Rotational Direction	Bidirectional (Forward / Reverse)
Applicable Flat (Pouch) Cell Dimensions	Length: 20 - 100 mm Width: 20 - 80 mm Thickness: Up to 30 mm max (customizable)
Applicable Cylindrical Cell Dimensions	Outer Diameter: $\leq \Phi 35$ mm Length: ≤ 90 mm
Standard Cylindrical Mandrel Diameter	$\Phi 3$ mm (Interchangeable)
Mandrel Types Supported	Round Mandrel & Square/Flat Mandrel Components
Guide Slot Plate Adjustability	3-Axis Adjustable (Up/Down, Left/Right, Forward/Backward)
Actuation Mechanism	Electric Motor Drive with Foot-Pedal Valve Control
Overall Equipment Dimensions (L x W x H)	550 mm x 310 mm x 280 mm
Total Equipment Weight	25 kg