

Capacitor Tab Punching Machine

Item Number: CX09



Introduction

Precision capacitor tab punching machine with 3 mm hole, ± 0.05 mm hole accuracy, ± 0.02 mm position accuracy, ≥ 100 kg cutting force, compact glovebox-compatible design for reliable cell assembly preparation and clean, repeatable riveting workflows in laboratory and pilot-scale capacitor manufacturing.

[Learn More](#)

Application	Description	Key Benefit
Capacitor Cell Tab Preparation	Punches accurately positioned round holes in capacitor cell tabs before washer and end-cap riveting.	Improves tab readiness and supports more consistent downstream assembly.
Laboratory Capacitor Prototyping	Provides repeatable tab punching for research teams producing small batches of capacitor cells.	Offers controlled, flexible processing without requiring a large production machine.
Glovebox-Based Cell Assembly	Passes through transfer chambers with diameters of 200 mm or more for use in controlled-atmosphere environments.	Helps preserve workflow continuity between glovebox operations and external preparation areas.
Pilot-Scale Capacitor Manufacturing	Supports repeatable punching during pilot production and process validation activities.	Combines compact installation with stable hole and position accuracy.
Battery and Energy-Storage Research	Supports tab preparation studies associated with capacitor, hybrid capacitor, and related electrochemical cell development.	Provides a practical mechanical preparation step for experimental cell assembly.
Advanced Materials Laboratories	Enables controlled punching operations during materials processing and component fabrication research.	Delivers a dedicated, easy-to-maintain tool for precision laboratory work.
Academic and R&D Facilities	Serves research groups that need a compact tab punching solution for repeated experiments and prototype assembly.	Reduces manual variability while remaining easy to relocate between workstations.

Parameter	Specification
Product Item Number	CX09
Product Type	Capacitor cell tab punching machine
Application	Punching holes in capacitor cell tabs for washer and end-cap riveting
Standard Hole Shape	Round hole
Standard Hole Diameter	3 mm
Hole Diameter Accuracy	± 0.05 mm
Hole Diameter Customization	Available upon request
Hole Position Accuracy	± 0.02 mm
Cutting Pressure	≥ 100 kg
Cutting Stroke	≥ 25 mm
Overall Dimensions	L150 × W170 × H320 mm
Glovebox Transfer Compatibility	Can pass freely through glovebox transfer chambers with a diameter of $\Phi 200$ mm or larger
Body Material	Aluminum alloy

Parameter	Specification
Body Properties	Corrosion-resistant and rust-resistant
Collection Box	Static-resistant ABS material; supports residual material discharge
Weight	8 kg