

Pneumatic Cylindrical Battery Sealing Machine For Laboratory Cell Research

Item Number: YZ19



Introduction

Pneumatic cylindrical battery sealing machine for 18650 cells delivers two station precision sealing, adjustable 0.4 to 0.5 MPa operation, inert gas compatibility, external exhaust, low gas consumption, compact construction, and reliable laboratory sample preparation for battery and capacitor research.

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Application	Description	Key Benefit
Cylindrical lithium battery research	Used to seal 18650 cylindrical cells after electrode, separator, electrolyte, and can preparation during laboratory cell development.	Produces controlled and repeatable cell closures for testing and evaluation.
Battery material development	Supports sample fabrication for new cathode, anode, electrolyte, and additive formulations.	Enables researchers to move efficiently from material preparation to sealed-cell testing.
Cylindrical capacitor research	Provides pneumatic sealing for cylindrical capacitor samples used in electrochemical and materials research.	Offers a practical sealing method for small-scale experimental devices.
Glovebox cell assembly	Operates with argon or nitrogen and provides an external exhaust connection for controlled-atmosphere environments.	Helps preserve glovebox atmosphere while supporting inert-environment cell fabrication.
Small-batch pilot production	Suitable for limited production runs, process trials, and engineering validation outside full-scale manufacturing lines.	Provides a compact production aid without the complexity of a large automated system.
Alternative cylindrical formats	Optional tooling can be selected or added for cylindrical sizes such as 21, 26, and 32 series formats.	Extends equipment utility across multiple cylindrical cell development programs.
Academic and advanced materials laboratories	Supports battery, capacitor, powder, ceramic, and related materials research where controlled sample encapsulation is required.	Combines simple operation, compact installation, and adaptable tooling for varied research needs.

Parameter	Specification
Product Item Number	YZ19
Product Type	Pneumatic cylindrical battery sealing machine
Primary Application	Laboratory cylindrical battery and cylindrical capacitor sealing; small-batch trial production
Operating Method	Fully pneumatic operation; no electrical power required
Standard Sealing Tooling	18650 series cylindrical battery sealing die set
Standard Sealing Method	Two-stage sealing using two sealing stations

Parameter	Specification
Optional Tooling	Additional cylindrical battery sealing dies available for other specifications, including 21, 26, and 32 series formats
Gas Supply Options	Argon gas cylinder, nitrogen gas cylinder, or compressed air
Gas Supply Pressure	0.4 MPa to 0.5 MPa
Recommended Operating Pressure	0.4 MPa
Pressure Control	Adjustable regulating valve
Gas Consumption	Approximately 1 L per sealing operation
Sealing Stroke	30 mm
Exhaust Design	Dedicated exhaust port for external connection
External Exhaust Compatibility	Can be connected through components such as KF40 fittings
Compressed Air Guidance	Compressed air is not recommended for use inside a glovebox
Safety Function	Designed to help prevent battery short circuits during sealing
Construction	Steel structure
Installation Dimensions	L360 mm × W220 mm × H490 mm
Approximate Weight	30 kg