

18650 Cylindrical Battery Microcomputer Precision Dual Pulse Pneumatic Spot Welder

Item Number: YZ07



Introduction

Precision dual pulse pneumatic spot welder for 18650 cylindrical battery assembly delivers adjustable 0-99% energy stable 2500A welding current reliable low spatter joints microcomputer control and pressure verified firing for consistent production across mobile power and battery applications.

[Learn More](#)

Application	Description	Key Benefit
18650 Cylindrical Battery Packs	Welds battery tabs and connected components during cylindrical-cell pack assembly using a controlled pneumatic electrode head.	Stable dual-pulse energy and pressure confirmation support consistent electrical joints with reduced spatter.
Mobile Phone Battery Production	Supports high-end mobile phone battery assembly where weld appearance, repeatability, and compact equipment layout are important.	Adjustable timing and pulse energy help accommodate different assembly conditions while shortening setup work.
Portable Power Supply Assembly	Used for portable power banks and mobile energy-storage products requiring dependable resistance-welded connections.	Automatic voltage compensation helps maintain stable welding performance despite normal power-grid variation.
Power Battery Manufacturing	Provides a controlled welding process for power-battery assembly and related pack-building operations.	High welding capacity, programmable timing, and multi-level protection support demanding production environments.
Digital Battery Assembly	Suitable for digital-device battery products that require repeatable connections and an efficient operator workflow.	Foot-switch control and LED display simplify operation and help maintain consistent cycle execution.
Nickel-Metal Hydride and Nickel-Cadmium Batteries	Designed for assembly work involving nickel-metal hydride and nickel-cadmium battery products.	Adjustable welding parameters allow the process to be adapted to different battery materials and contact conditions.
Battery Research and Pilot Production	Useful for laboratory development, process validation, and small-batch battery-pack fabrication.	Compact integrated construction and stepless worktable adjustment support flexible experimental setups.

Parameter	YZ07 Specification
Product type	Microcomputer precision dual-pulse pneumatic resistance spot welder
Intended product range	18650 cylindrical battery packs, high-end mobile phone batteries, portable power supplies, power batteries, digital batteries, nickel-metal hydride batteries, and nickel-cadmium batteries
Welding method	Dual-pulse welding
Pulse 1 function	Removes surface coating and oxides and creates slight deformation at the electrode contact area to increase the effective contact surface
Pulse 2 function	Welds the base metal after surface preparation
Pulse energy adjustment	0-99%
Welding cycle frequency	Adjustable
Input-voltage compensation	Automatic tracking and compensation
Controller	High-speed, high-precision 8-bit microprocessor MCU
Display	LED digital display

Parameter	YZ07 Specification
Pre-pressure time	Adjustable, 0-99
Hold time	Adjustable, 0-99
Rest time	Adjustable, 0-99
Parameter protection	Parameter-locking function
Protection architecture	Two different protection circuits for the high-power circuit and control circuit
Protection functions	Protection against overheating, external high voltage, and power-supply fluctuation interference
Fault handling	Common-fault indication; automatic alarm and simultaneous power shutoff in case of overheating or damage
Welding head structure	Cylinder and spring buffering combined design
Electrode pressure	Relative pressure adjustment between the two welding needles; dual-needle pressure adjustable
Welding authorization	Internal photoelectric pressure switch allows discharge only after the two welding needles reach the set pressure
Worktable adjustment	Stepless height adjustment
Worktable locking	Hand-tightened locking
Operating structure	Integrated design with pneumatic operation
Rated power	15KVA
Secondary-side welding current	2500
Secondary no-load voltage	5.5V
Input voltage	220V±10%
Input frequency	50HZ±2Hz
Maximum working air pressure	6KG
Welding control method	Foot-switch control
Machine weight	30KG
Overall dimensions	Length 550mm X width 250mm X height 360mm
Packaging weight	45KG
Packaging dimensions	630330430mm