(CE, ISO9001)

Servo Crimping Machine

MODEL: RBEW5460

User Manual

Functional Introduction

Servo Crimping Machine: A new generation servo motor-driven control system featuring stable precision and quality, with user-friendly touchscreen input for easy setup. Specially designed for precision crimping of puncture terminals and new energy wire harnesses. Currently the most advanced domestic equipment for high-precision terminal crimping applications (including enameled wire puncture terminals).

I. Functional Specifications

Main Shaft Stroke: Approximately 45mm (varies by terminal thickness)

Height Adjustment: Micro-adjustment via touchscreen

Cycle Speed: ~2.5 seconds per complete crimping operation

Precision: ±0.015mm

Pressure Holding: Configurable dwell time at bottom dead center

Work Order Storage: 30 programmable slots (1-30)

II. Technical Parameters

Model: RBEW5460

Power Rating: 2.8KW (High Power)

Capacity: 50KN

Stroke Length: 45mm

Power Supply: 220V/50Hz

Operational Efficiency: 1,000 cycles/hour

Power-on Steps

1.Power On: Switch on the main power supply.

2.Mold Installation: Mount the die set (without loading terminals) and configure manual speed (adjustable range: 1-10).

3.Stroke Height Calibration:

Press and hold the "Lower Die" button to descend the crimping head.

When the crimping blades fully close, record this position as maximum stroke height.

For values outside the 30mm standard range, adjust the mold screw:

Turn LEFT to decrease numerical value

Turn RIGHT to increase numerical value

Always secure the screw after adjustment

Terminal Thickness Formula:
Crimping Height Reference = Stroke Height + Height Compensation - Punch Position

4.Opening Height Setup:

Press and hold the "Raise Die" button to ascend the crimping head.

When the die opening allows smooth product insertion/removal, record this as opening height.

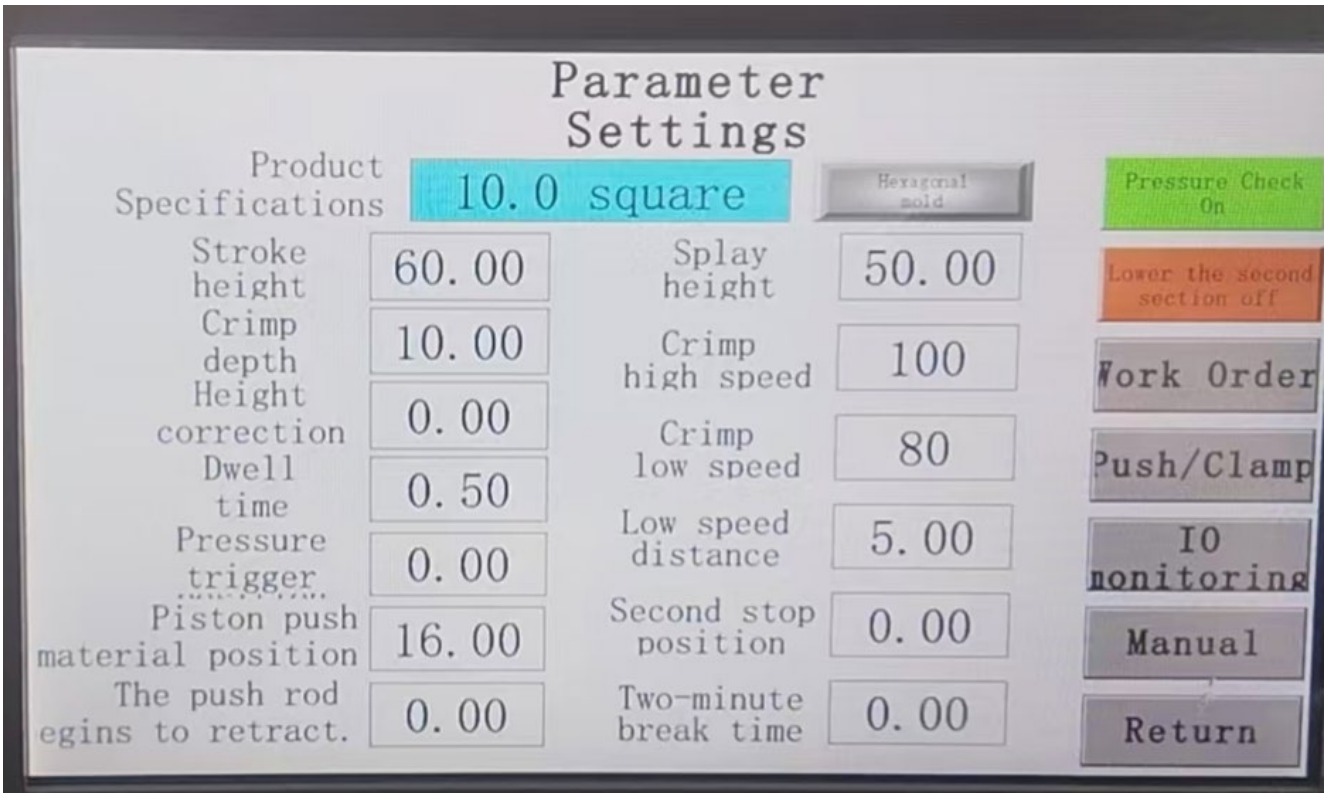
Input this value in "Parameter Settings" under "Work Order Opening Height."

5.Test Crimping:

Perform trial crimps and measure actual terminal height.

Compensate for deviations in "Height Correction" parameter (Example: If set height=1.0mm but actual=1.5mm, apply -0.5mm compensation).

1. Device Status—Displays the current device operating status.
2. Die Type—Displays the current crimping die type.
3. Current Specification—Displays the specifications of the product being crimped. Set based on the actual wire specifications (unit: square meter).
4. Current Position—The current punch position (unit: mm).
5. Terminal Thickness—Displays the terminal thickness to be crimped. Select a work order and modify the thickness in the parameter settings interface (unit: mm).
6. Current Production—Displays the total completed production. Press and hold the reset button for one second to reset the output.
7. Set Production—Displays the production quantity. Exceeding this quantity will trigger an alarm.
8. Work Order Square Dimensions—Displays the current work order specifications. Click on the work order square dimension to select the work order to crimp or enter the parameter settings to modify the work order specifications.
9. Next Page—Switch to the next page of the work order specifications table. Each page contains ten work orders, for a total of three pages, and a total of thirty work order specifications can be stored. 10. Parameter Settings—Edit the specifications of the currently selected work order. Click the work order square size to select the work order, then click Parameter Settings to enter the parameter settings interface. You can modify the work order specifications, switch mold types, view I/O input and output status, and perform manual debugging.
11. Auto/Single Step—Auto: Click once to start, and the servo crimping machine automatically completes the terminal crimping operation. Single Step: The servo crimping machine performs the terminal crimping operation in a single step. Click once to start, and the crimping operation is performed one step at a time.
12. Start—Press this button to start the crimping machine.
13. Stop—Press this button to complete the current operation and wait for the next operation.
14. Reset—Press this button to return the slider to its highest point, clear alarms, and perform other operations.
15. Emergency Stop—Press this button to enter an emergency stop state for the entire servo crimping machine, pausing all operations. After the emergency stop hazard is resolved, press Reset to resume operation.



1. Stroke Height—The maximum stroke height the crimping machine's punch can move (unit: mm).

2. Crimp Depth—Sets the terminal height required for crimping (i.e., terminal thickness, unit: mm).

3. Height Correction—Sets the error compensation between the actual terminal thickness and the set terminal thickness (i.e., die clearance, unit: mm).

4. Hold Time—Sets the time the terminal remains crimped after crimping.

5. Open Height—The height at which the terminal is raised after crimping, awaiting the next crimp.

6. High-Speed Crimping—The speed at which the punch reaches the low-speed position, shortening the lead screw rotation time and improving production efficiency.

7. Low-Speed Crimping—The speed at which the servo crimping machine performs low-speed crimping.

8. Low-Speed Distance—The distance from the terminal at which low-speed operation begins and low-speed crimping occurs.

9. Four-Sided Die/Six-Sided Die/OTP Die—Switch between the die model and the display. 10. I/O Monitoring—Click to jump to the I/O Monitoring screen to view the current status of the control card input and output ports.

11. Manual Debugging—Click to jump to the Manual Debugging screen to perform mold adjustments.

12. Blade Use Count—Counts the total number of times the mold blade has been used.

13. Torque Learning—Jumps to the Terminal Learning screen to learn the current pressure. Torque learning is required after changing molds to adjust the average pressure.

14. Basic Parameters—Accesses the interface to modify basic parameters.

15. Two-Stage Crimp—Adjusts the two-stage crimp switch and related parameters.

16. Work Order Directory—Accesses the interface to modify work order parameters, read work orders, copy work orders, and more.

Manual debugging

1. Manual Speed—Directly select a speed to manually modify it, or click the plus or minus signs to adjust the speed.

2. Punch Position—Real-time position of the punch. (Display only)

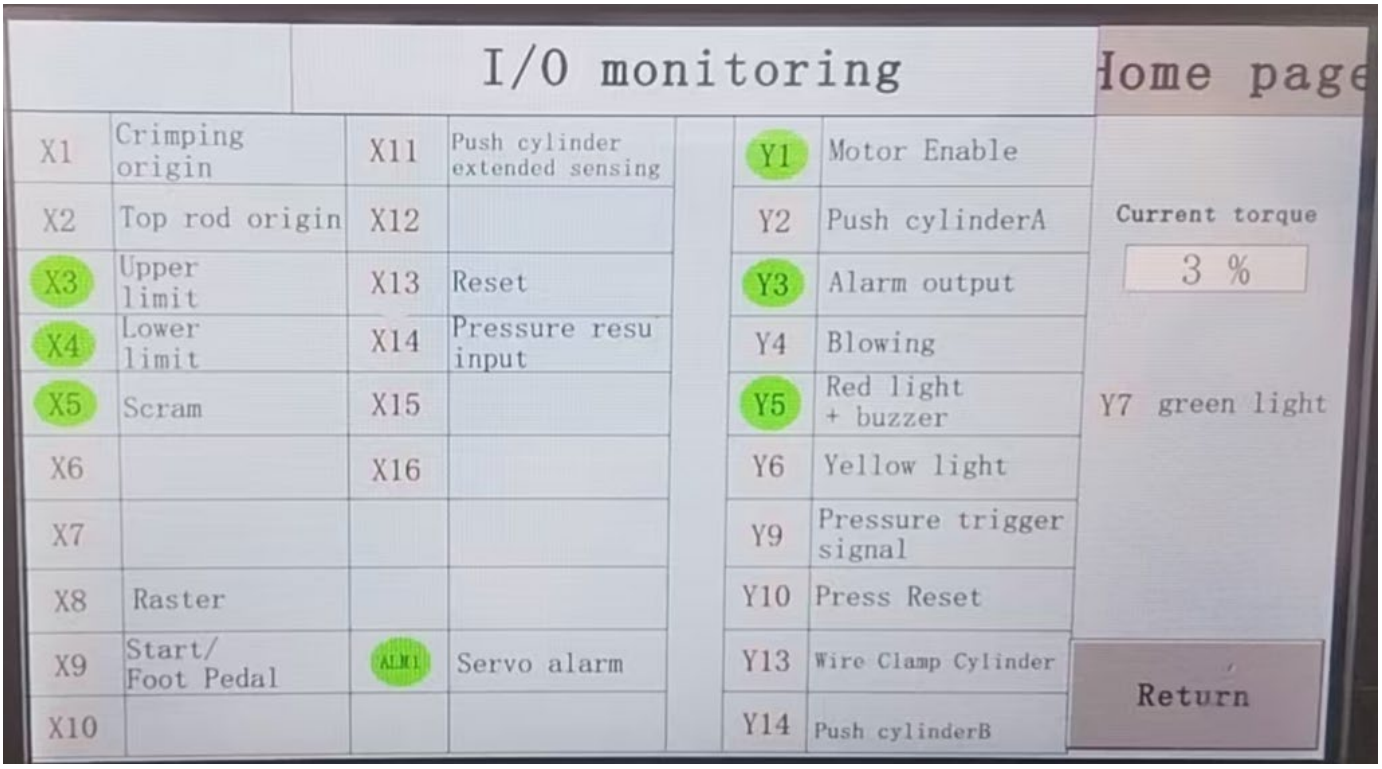
3. Motor Position—Displays the real-time position of the motor.

4. Current Encoder—Displays the real-time position of the motor as read by the encoder.

5. Reset—Press this button to return the slider to its highest point, clear alarms, and perform other operations.

6. Up/Down Indicator—Adjusts the module's vertical movement, using the motor and punch positions as references for mold adjustments.

I/O Monitoring



(I/O monitoring jump interface)