

High-Speed Servo Double-Headed Terminal Crimping Machine

Operation Manual

RBEW8360



Table of Contents

1.Precautions	3
2.Specifications	3
3.Operating Instructions	4
3-1 Installation Precautions	4
3-2 Pre-operation Preparation	4
3-3 Touchscreen Parameter Function Descriptions	4
4.Blade Replacement & Maintenance	12
4-1 Blade Installation & Replacement	12
4-2 Equipment Maintenance	12
5.Malfunctions & Solutions	13
5-1 General Fault Troubleshooting Table	13
5-2 Alarm Message List	13

1.Precautions

It is strictly prohibited to clean the workbench with a high-pressure air gun, as stripped wire insulation may fly into mechanical components and cause operational failure.

2.Specifications

Item	D06 High-Speed Servo Double-Headed Terminal Crimping Machine
Weight	350 kg
Overall Dimension	L1100 mm × W720 mm × H1550 mm
Required Floor Space	3.5 m ²
Power Supply	AC 220V / 50Hz
Rated Power	2000 W
Air Pressure	Approx. 6 kg/cm ²
Terminal Crimping Unit	Cast Precision Terminal Crimping Unit
Crimping Capacity	2 Tons
Display	Touch LCD Screen
Functions	Fixed-length wire cutting, stripping, double-end terminal crimping
Applicable Wires	Electronic wires, high-temperature wires, PTFE wires, etc.
Production Capacity	Output varies by wire length:100 mm – 4,500 pcs/h200 mm – 4,500 pcs/h600 mm – 4,400 pcs/h800 mm – 4,250 pcs/h1000 mm – 4,000 pcs/h1200 mm – 3,850 pcs/h1400 mm – 3,650 pcs/h1600 mm – 3,500 pcs/h2000 mm – 3,200 pcs/h2500 mm – 2,900 pcs/h3000 mm – 2,650 pcs/h
Applicable Wire Gauge	AWG30 – AWG14
Cutting Accuracy	Within ± 0.1 mm ($0.1 + 0.005 \times L$) mm, L = wire cutting length
Minimum Middle Insulation Retention	Standard machine: 28 mm (custom modification available for ultra-short wires)
Standard Stripping Clearance	Front & rear blade spacing: 9.0 mm (adjustable)
Compatible	Horizontal & vertical molds compatible

Molds	
Wire Feeding System	4-wheel wire feeding
Translating Mode	Servo-driven front & rear translation
Wire Collecting Mode	Rotating swing arm wire collection
Transmission Components	Lead screw, linear guide, timing belt & pulley
Detection Functions	Wire tangling detection, wire missing detection, carrier tape collection detection, air pressure detection
Auxiliary Devices	Terminal scrap discharge unit, insulation waste collection unit, carrier tape winder, air pressure buffer air tank
Optional Accessories	Terminal crimp force monitor

Warranty: 1-year warranty (limited to 2,500 operating hours; consumable parts excluded)

3. Operating Instructions

3-1 Floor Installation Precautions

A. Level Adjustment Rotate the four leveling bolts at the machine base to adjust height and horizontal balance, ensuring the machine weight is evenly distributed on the leveling bolts.

B. Air Supply Connection Connect air pipe (air pressure 5–8 kg/cm²) from air compressor to the machine's quick connector.

C. Power Connection Connect 220V/50Hz power supply to the machine.

3-2 Pre-operation Preparation

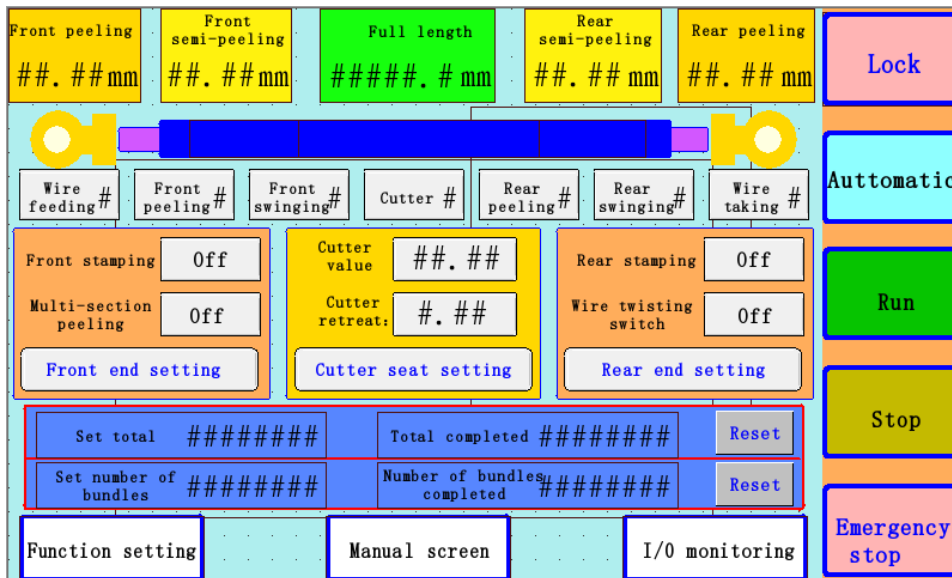
A. Thread target wires correctly through the machine.

B. Verify air pressure meets the required range (5–8 kg/cm²).

C. Clear all foreign objects on the machine.

3-3 Touchscreen Parameter Function Descriptions

4



Main Screen

Front Strip Length: Stripping length of wire front end

Front Half-Strip Length: Half-stripping length of front end; set to 0 for full stripping

Total Wire Length: Overall wire length including front and rear stripping segments

Rear Half-Strip Length: Half-stripping length of rear end; set to 0 for full stripping

Rear Strip Length: Stripping length of wire rear end

Front Crimp Toggle: Enable/disable front terminal crimping. If front half-strip is enabled without wire twisting, the system automatically disables front crimping.

Multi-stage Stripping: Tap to enter multi-stage stripping parameter page

Front Setting: Tap to open front-end crimp parameter page

Blade Depth: Wire stripping cutting depth; higher value = deeper cut

Blade Retract: Retraction distance of stripping blades; higher value = larger retraction gap

Blade Holder Setting: Tap to open blade holder function page

Rear Crimp Toggle: Enable/disable rear terminal crimping. If rear half-strip is enabled without wire twisting, the system automatically disables rear crimping.

Rear Twist Toggle: Enable/disable rear wire twisting. Automatically disabled if rear full stripping is set.

Rear Setting: Tap to open rear-end parameter page

Target Total Quantity: Preset total production quantity for this batch

Target Bundle Quantity: Preset wire count per bundle; set to 0 to disable bundle counting

Completed Total Count: Actual finished wire quantity

Completed Bundle Count: Finished bundles within preset target

Clear Total Count: Reset completed total quantity counter

Clear Bundle Count: Reset completed bundle counter

Function Setting: Tap to enter function configuration page

Manual Screen: Tap to switch to manual operation page

I/O Monitoring: Tap to open I/O signal monitoring page

Lock/Unlock: Lock/unlock touchscreen parameter input to prevent accidental modification

Jog / Auto Mode: Jog mode – single cycle per RUN tap; Auto mode – continuous operation when RUN is pressed

RUN Button: Auto homing if machine not reset; continuous operation after homing completes

STOP Button: Halt operation after finishing the current wire in auto mode.

Long press external STOP to open front wire clamps for threading; press again to close clamps.

Emergency Stop: Different from hardware emergency stop. Touchscreen E-Stop halts all motion and triggers automatic homing; hardware E-Stop locks machine in emergency state.

Function setting

Wire detection	Wire missing OFF	Knotting OFF
Paper collection detection	Front OFF	Rear OFF
Stamping fiber optic	Front OFF	Rear OFF
Stamping pressure	Front OFF	Rear OFF
Bundle pause	##. # S	
Paper collection delay	#. ## S	
Defective product detection	### mm	
File number	##	

Length correction Manual screen I/O monitoring Home screen

Function Setting Page

Wire Missing Detection Toggle: Turn wire absence detection on/off

Wire Tangling Detection Toggle: Turn wire tangle detection on/off

Bundle Pause Time (s): Delay before auto-restart after finishing one bundle; set to 0 to disable auto-restart

Front/Rear Carrier Tape Detection Toggle: Enable/disable carrier tape collection timeout alarm

Carrier Tape Delay (s): Adjust sensitivity of carrier tape detection

Crimp Fiber Optic Detection Toggle: Enable/disable terminal fiber optic inspection; set to 0 to disable

Crimp Force Detection Toggle: Enable/disable crimp force monitoring (requires optional crimp force detector)

Defect Inspection Toggle: Turn terminal defect detection on/off

Recipe No.: Store wire parameter sets for quick recall; 0–99 recipe slots available

Multi-section peeling			
Position 1	####. # mm	Push forward	##. # mm
Position 2	####. # mm	Push forward	##. # mm
Position 3	####. # mm	Push forward	##. # mm
Position 4	####. # mm	Push forward	##. # mm
Position 5	####. # mm	Push forward	##. # mm
Position 6	####. # mm	Push forward	##. # mm
Position 7	####. # mm	Push forward	##. # mm
Position 8	####. # mm	Push forward	##. # mm
Multi-section knife values: ##. ## Cutter retreat: #. ## Keep pushing forward: #. ## S			
Return			

Forward Push Distance: Forward travel distance for stripping action per stage

Multi-stage Blade Depth: Cutting depth for each intermediate stripping segment

Blade Retract: Stripping blade retraction distance

Forward Hold Time (s): Blade hold duration after forward push to stabilize stripping length

Front end parameters	
Stamping depth	##. ## mm
Stamping delay	#. ## s
Stamping depth	No advance
Stamping back-off	##. # mm
Stamping pre-feed	###. # mm
Stamping translation	###. # mm
Shredding interval	## Pin
Wire feeding delay	#. ## s
Wire feeding and supporting	Off
Return	

Crimp Depth (mm): Adjust terminal insulation crimp position at front end

Advance Crimp Toggle: OFF – feed crimp depth after translation finishes; ON – feed crimp depth during translation

Crimp Delay (s): Delay before crimping to eliminate wire vibration impact

Crimp Retract (mm): Retract terminal out of mold after crimping; set to 0 for no retraction

Crimp Translation Start (mm): Starting coordinate of front crimp translation axis

Scrap Interval (Pin): Carrier tape cutting cycle; set to 0 to disable cutting

Wire Feed Delay (s): Delay before wire feeding after swing arm returns to origin

Wire Support Toggle: Enable/disable wire support function

Rear end parameter

Stamping depth	##.## mm	Rear peeling back-off	##. # mm
Stamping depth	No advance	Long wire blowing	#.## s
Stamping delay	#.## s	Pay-off delay	#.## s
Stamping translation	###. # mm	Shredding interval	## Pin

Return

Crimp Depth (mm): Adjust terminal insulation crimp position at rear end

Advance Crimp Toggle: OFF – feed crimp depth after translation finishes; ON – feed crimp depth during translation

Crimp Delay (s): Delay before crimping to eliminate wire vibration impact

Crimp Translation Start (mm): Starting coordinate of rear crimp translation axis

Rear Strip Retract (mm): Retract terminal out of mold after rear crimping; set to 0 for no retraction

Long Wire Air Blow Delay (s): Air blow for wires longer than 200 mm to organize wire routing; set to 0 to disable

Wire Release Delay (s): Delay before releasing finished wire

Scrap Interval (Pin): Carrier tape cutting cycle; set to 0 to disable cutting

Cutter seat setting

Cutter seat inhalation:	#. ## S	Blade withdrawal delay:	#. ## S
Inhalation cutter value:	##. ##	Cutting value:	##. ##

Return

Blade Holder Air Suction Duration (s): Suction to remove insulation scraps after stripping; set to 0 to disable

Suction Blade Depth: Cutting depth for stripping suction process

Retract Delay (s): Delay before blade retraction after cutting completes

Cutting Blade Depth: Cutting depth for wire full cutting; higher value = deeper cut

Manual screen

Roller Wire retreat ####. ## Wire feeding ☐ Forward Move back ###. # Move out ☐ Cutter Open ##. ## Cutting ☐ Rear peeling Retreat ####. ## Push out ☐ Backward Move back ###. # Move out ☐ Wire taking Retrieve ##### Take out	Wire wisting Reverse twisting ##### Forward twisting Rear peeling clamp Wire taking clamp Twisting clamp Tool aspiration Long-wire blowing Wire twisted inhalation Front stamping Shredding belt Front paper collecting Rear stamping Rear wire holder Rear paper collecting
---	--

Function setting

Manual screen

I/O monitoring

Home screen

Motor Manual Page: Manually test all motors to check function availability.



I/O Monitoring Page

Displays all input and output signals. Corresponding icons light up green when signals are triggered.

4.Blade Replacement & Maintenance

4-1 Blade Installation & Replacement

Install three sets of blades into blade sliders correctly. Ensure front and rear stripping blades have identical cutting edges; asymmetric tilt is forbidden. Insert upper and lower sliders together into the blade holder, then fasten slider locking screws.

4-2 Daily Maintenance

Pre-operation: Complete machine inspection and lubrication.

Power off the main switch before lubrication to prevent accidental startup and injury.

Waste Scrap Removal: After work, brush insulation scraps off the workbench, material tray and blade holder.

Prohibition: Do not use high-pressure air guns to clean the workbench to avoid insulation scraps entering mechanical assemblies.

5.Malfunctions & Solutions

5-1 General Fault Troubleshooting Table

Fault Symptom	Root Cause	Solution
Inconsistent wire lengths	Excessive wire pull clamp gap / over-tight clamp pressure / insufficient blade cutting depth	Adjust clamp gap / reduce clamp pressure / increase blade depth setting
Scratches on wire insulation	Over-tight pull clamp / damaged clamp pads	Loosen clamp pressure / replace wire pull clamp
Poor stripping quality	Improper blade depth / excessive blade retract / worn blade edges	Adjust blade depth to suitable value / replace new blades
Cut wire conductors	Over-deep blade cutting depth	Fine-tune blade depth to proper position

5-2 Alarm Message List

Wire Missing Alarm: No wire detected. Thread wire and press Confirm to clear alarm.

Wire Tangling Alarm: Wire knot detected. Remove tangled wire and press Confirm to clear alarm.

Low Air Pressure Alarm: Insufficient supply air pressure. Fix air supply and press Confirm to clear alarm.

Target Total Complete Alarm: Preset total production quantity reached. Press Confirm to clear alarm.

Bundle Complete Alarm: Preset bundle quantity finished. Press Confirm to clear alarm.

Bundle Restarting Alarm: Machine auto-restarting after bundle completion.