

(CE, ISO9001)

Automatic Wire Cutting Stripping and Crimping Machine

Operation Manual

(FOR EW-8160)



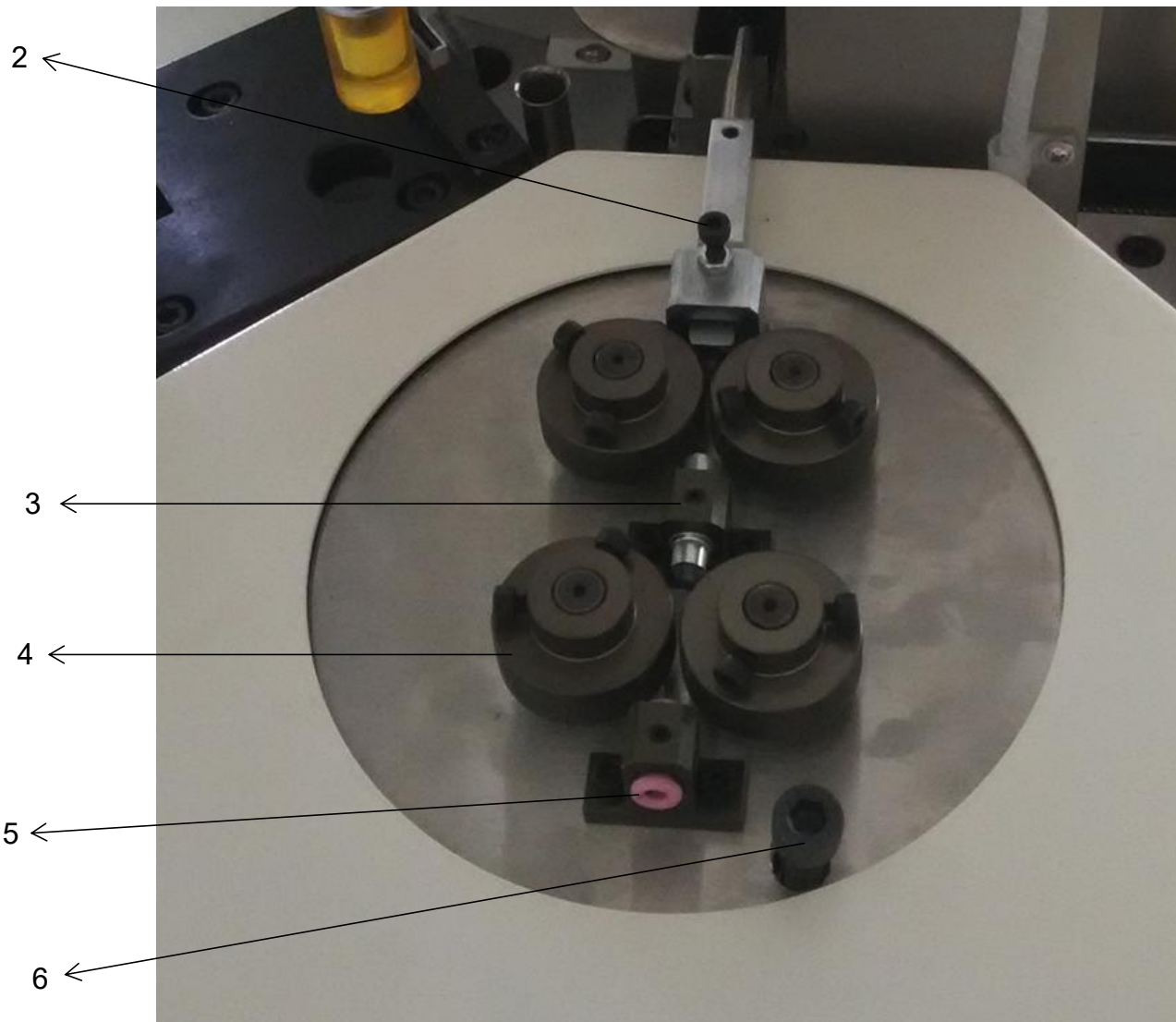
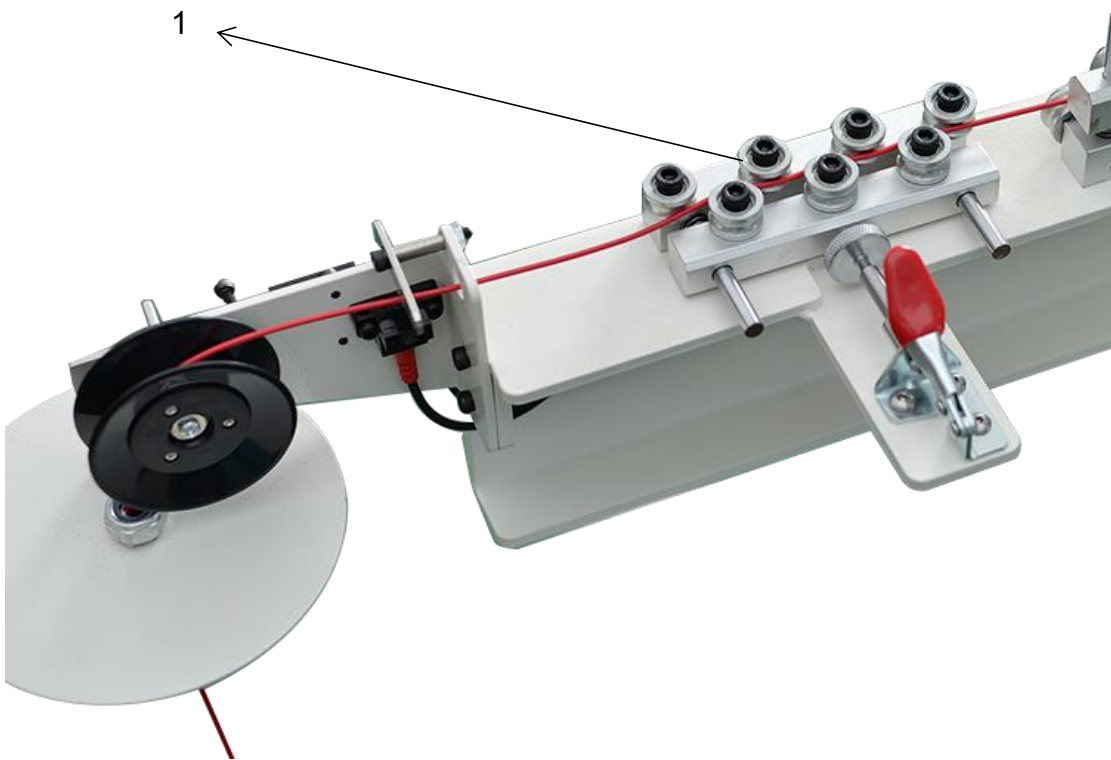
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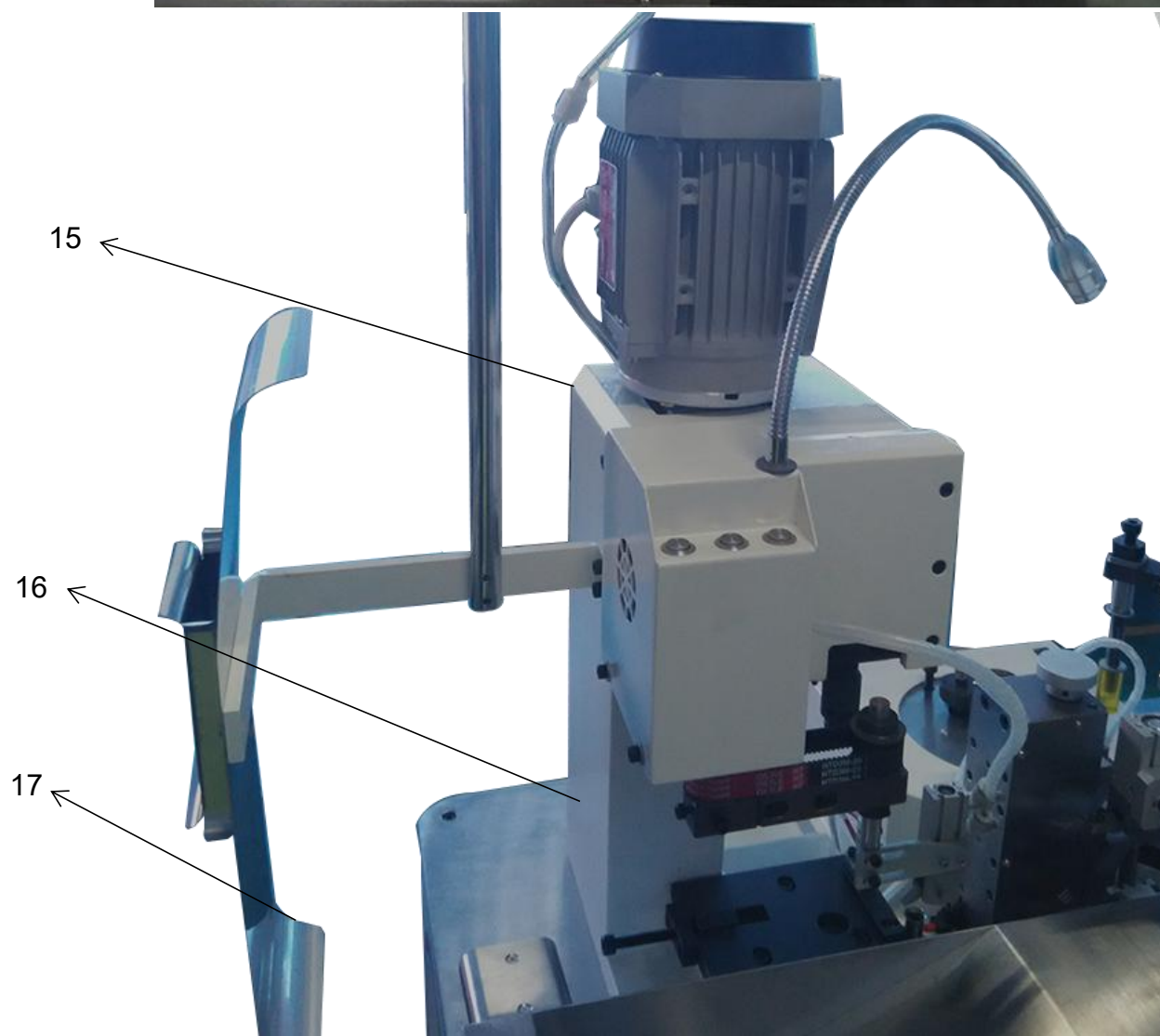
I. Structure

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I. Structure







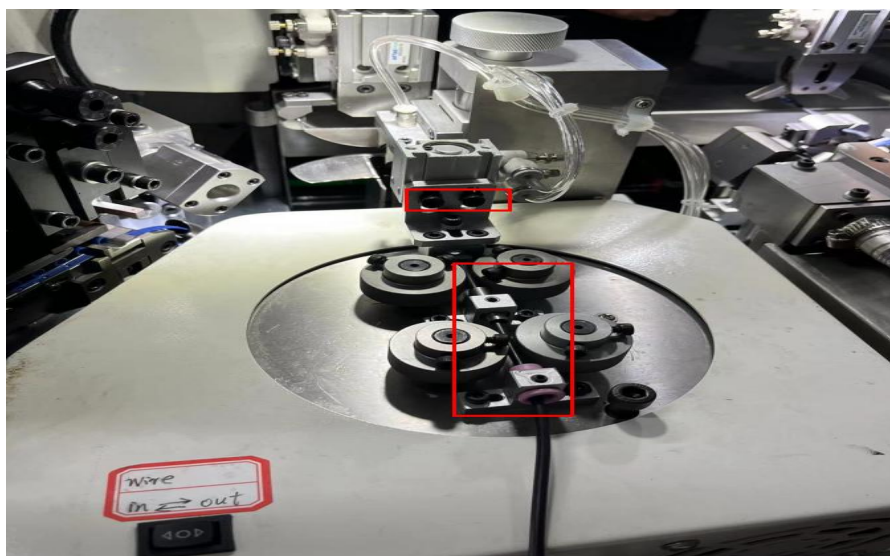
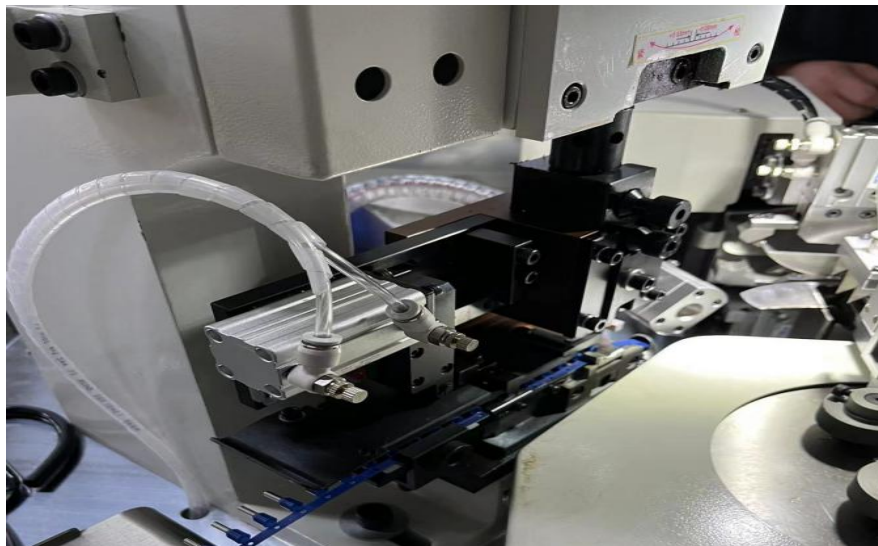
1. Wire straightener
2. Blade
3. Guide tube
4. Wire feeding roller
5. Wire feeding hole
6. Rotary knob for feeding roller gap adjustment
7. Wire tail claw
8. Wire movement claw
9. Wire discharge claw
10. Collecting tray
11. Power switch
12. Start button
13. Stop button
14. Emergency stop button
15. Terminal holder
16. Applicator adjustment
17. Terminal guide board
18. Wire tail twister

19. Wire head twister

II. Get Prepared

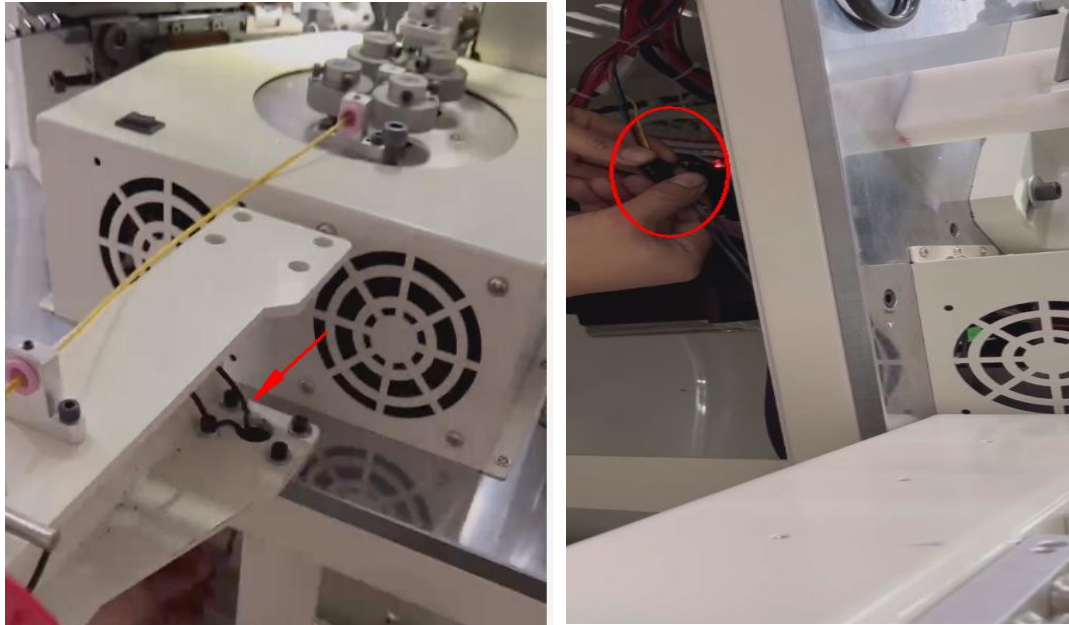
- Mechanical Part

1. Feed the wire to the blade position (as shown in the Pic.1)
2. Place the terminal on the terminal holder, and feed the terminal, through the terminal guide board, into the applicator (as shown in the Pic.3)
3. Adjust the guide tube base to make sure the trace, when wire being fed through wire feeding hole, wire feeding roller, guide tube and wire discharge roller, is in same horizontal.
4. Check the gap of wire feeding roller and wire discharge roller, which shall be smaller than wire diameter.
5. Try to pull out the wire with a strong pulling force. If the wire is not pulled out, the gap and pressure of wire feeding roller is suitable.

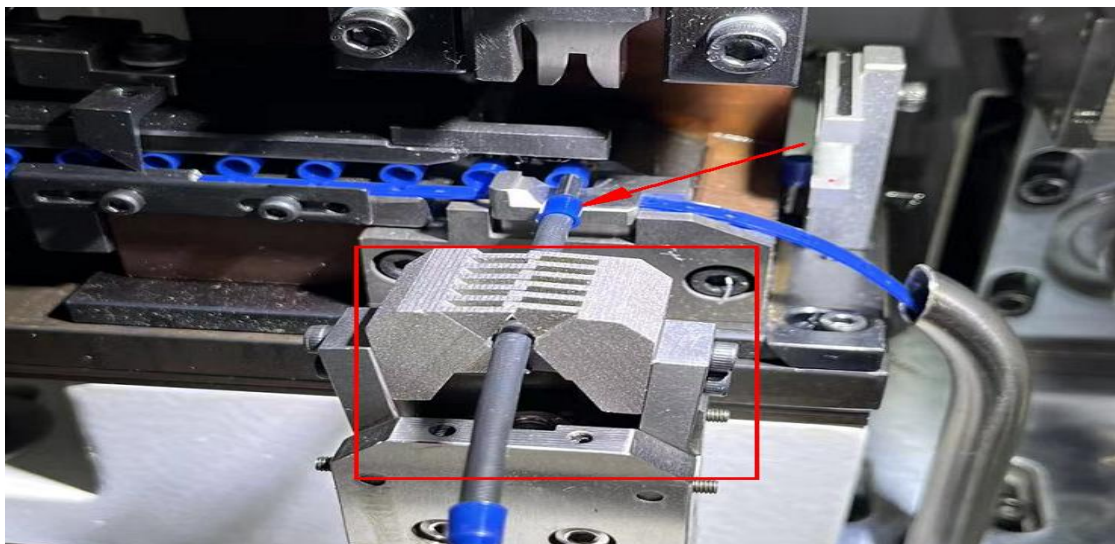


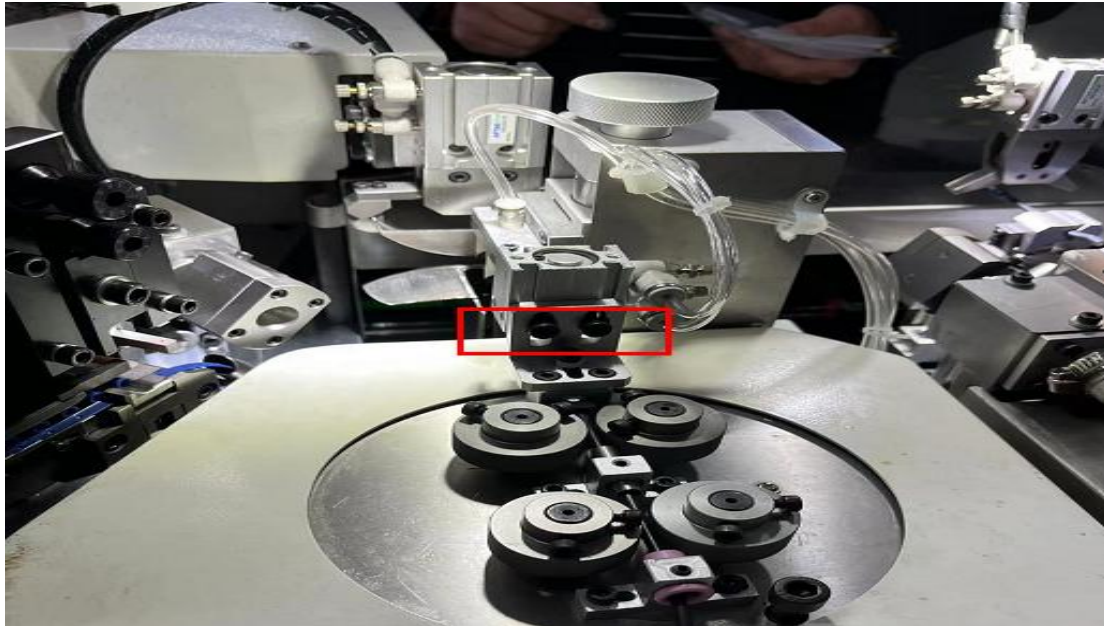
6. To install the right size twisting toolings, clamp and peumatic stripping tool for its corresponding wire size.

7. There is a wire in the wire straightening unit that needs to be connected as in below picture for wire loss detection function.



8. Wire clamp height adjustment : It's very important to make sure the wire is horizontal level with the ferrule for accurate crimping.





B/F sides clamp height are adjusted with the two marked screws correspondently.

- Electrical Part

1. Check the voltage supply
2. Check if the ground wire connection of the socket is available
3. Check the power cord status (if any broken parts)
4. Check if there is any foreign bodies in working units
5. Check if minimal 0.6 MPa compressed air is prepared
6. Check the blades

- Single Step Mode

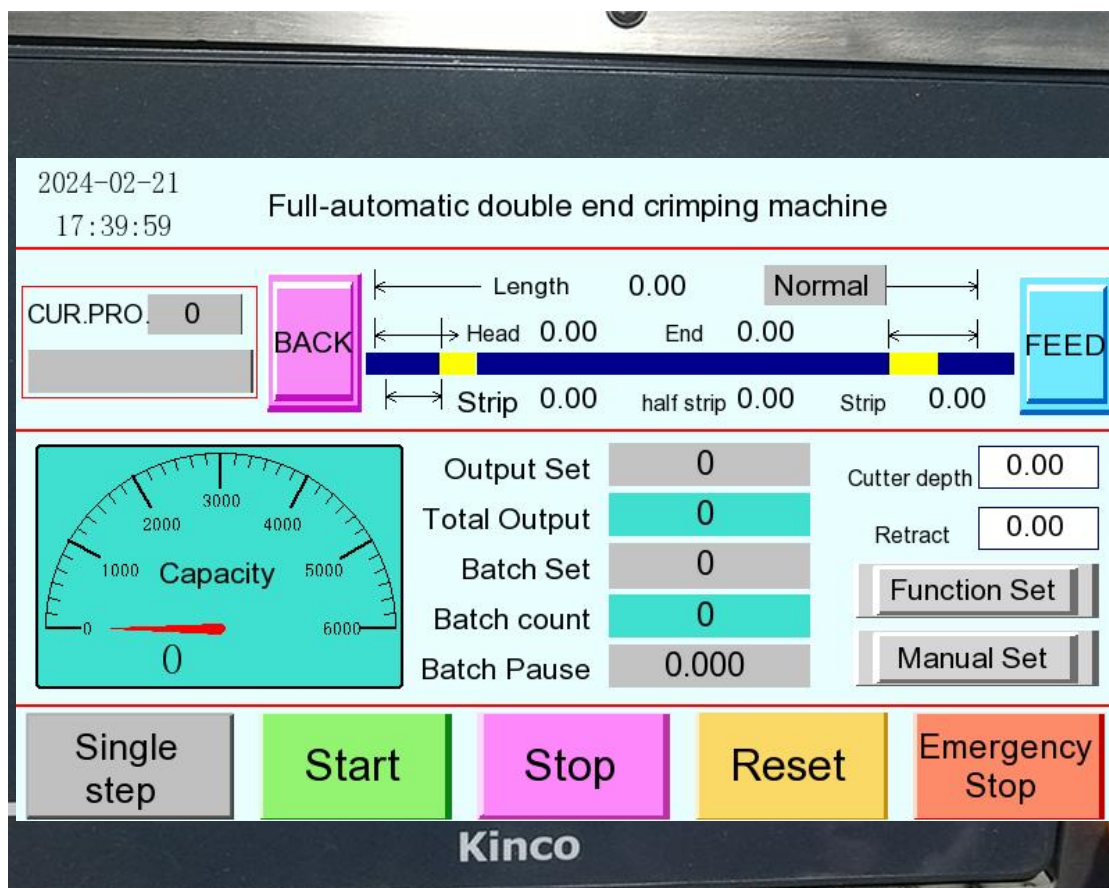
1. Power the machine and change the working mode on home page to "single step".
2. Press the start button again and again, and the machine will do the whole process step by step, by which the operator can observe if any procedure is wrong.

- Automatic Mode

1. Change the working mode on home page to "Auto".
2. Press the start button, and the machine will automatically process the wire.

III. Parameter Setting

- Home Page



C=Head=6; A=Strip=2.5; B=End=6.5; D=Half strip=2.5

Back: press and hold, the wire will be pulled back

Feed: press and hold, the wire will be fed

Length: the total length of finished product, including the stripping part

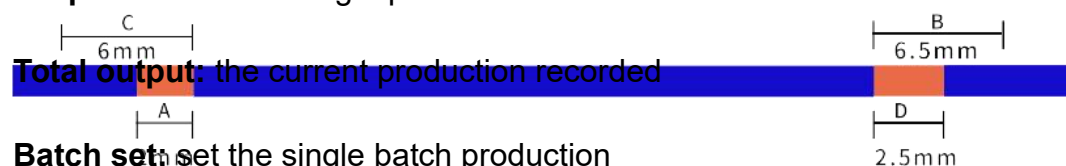
Head: wire head stripping length

End: wire tail stripping length

Strip: pull-off length

Half strip: wire tail half stripping length

Output set: set the target production



Total output: the current production recorded

Batch set: set the single batch production

Batch count: the current batch production recorded

Batch pause: the pause time between two batches

Cutter depth: the larger the value is, the deeper the blade will cut into

Retract: to avoid hurting the inner copper, the blade will retract a certain distance after cutting into the wire, and the value to be set here is usually equal

to the wire insulation thickness. The retract distance can be shorter/longer by decreasing/increasing the value.

Single step/single cycle/automatic: press to change the working modes.

Single step: press the start button again and again, and the machine will do the whole process step by step

Single cycle: press the start button, and the machine will do the whole process once.

Automatic: press the start button, and the machine will continuous do the whole process.

Start: press to start the working

Stop: press to stop the working

Reset: press to reset the mechanical parts

Emergency stop: press to stop the working. “Emergency stop” and “stop” differ in the timeliness. Pressing “emergency stop” button will stop the working right away, while “stop” will only stop the working after single cycle process is completed.

Function set: press to enter the function setting page

Manual set: press to enter the manual setting page

- Function Setting Page

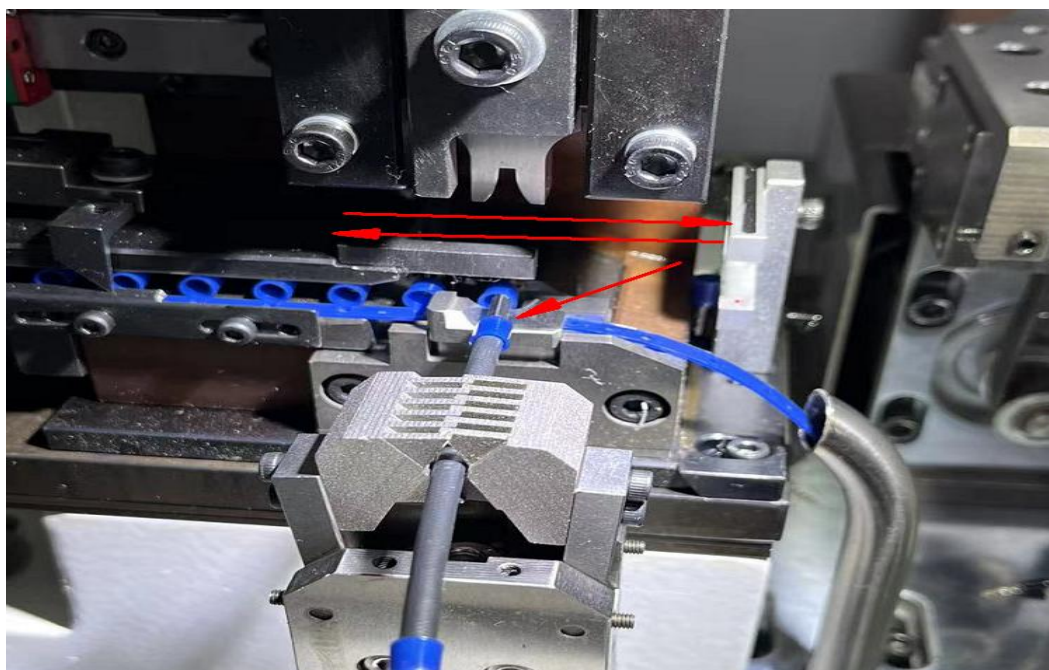
CRIMP F	OFF	CRIMP B	OFF	Front crimp chk OFF
CRIMP POS.	0.00	CRIMP POS.	0.00	Back crimp chk OFF
SENSOR POS.	0.00	SENSOR POS.	0.00	Wire chk OFF
CRIMP DOVID	0.00	CRIMP SEND	0.00	Knotted chk OFF
BEFORE DELAY	0.000	CRIMP BACK	0.00	Air chk OFF
AFTER DELAY	0.000	BEFORE DELAY	0.000	Crimp Mach ON
ROLLER SEND	0.00	AFTER DELAY	0.000	Press ding OFF
CRIMP SEND	0.00	Back send get pos	0.00	Upwards OFF
CRIMP BACK	0.00	Cutter depth down	0.00	Twisting
PRE-SEND	OFF	Put Wire Pos	0.00	Next
PRE-SEND POS.	0.00	Wire loading Pos	0.00	Retrun
PRE-SEND LEN.	0.00	Crimp half F	0.00	
		Crimp half B	0.00	

Crimp F= Front /right side crimping

Crimp B= Back/left side crimping

Crimping switch (on/off): press to turn on/off the wire head crimping procedure

Crimping pos: the distance that movement claw conveys the wire to crimping applicator. The large the value is, the longer distance the movement claw moves. It controls the horizontal position of the wire head to be fed into the ferrule. Increase to move left. Crimp POS (F) ranges from 60-70. Crimp POS (B) 170-178.



Detection position: this is to detect if the wire head crimping procedure is completed successfully

Crimping pos delay: the delay time after the wire is conveyed to the position as set in the “crimping pos”, which is set for steady crimping procedure.

Crimping delay: the delay time (after crimping procedure) before machine continue to do the next procedure

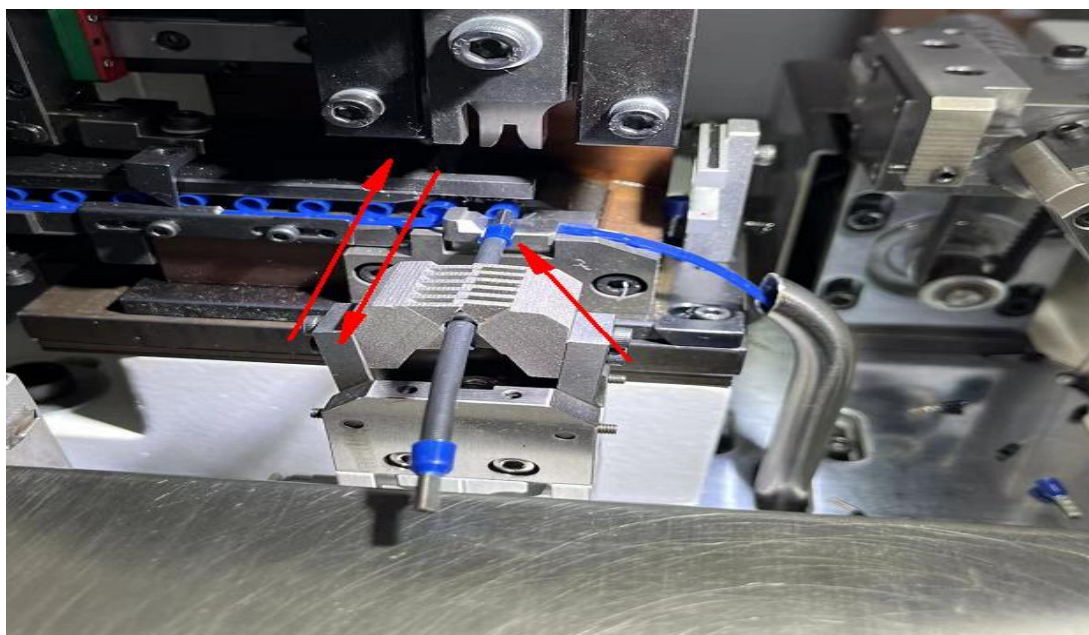
Round front: N/A

Crimping front: after the twisting procedure, the guide tube will turn to the crimping applicator, and in order to make the wire reach the crimping position, the discharge roller will rotate to send wire out a certain distance, and this distance is the value set here.

Crimping back: after the crimping procedure is completed, the roller will rotate to pull back the wire a certain distance (the value set here) and back to the stripping position.

Odd header (on/off): press to turn on/off the odd header function. This function shall be turned on only when the terminal is flag-shaped.

Presend pos: after the crimping procedure is completed, and the guide tube back to the stripping position, the discharge roller will rotate to send wire out a certain distance (the value set here), waiting for the movement claw for the next procedure.



Presend length: N/A

Back crimping (on/off): press to turn on/off the wire tail crimping procedure

Crimping pos: this value is to adjust the distance that movement claw conveys the wire to crimping applicator. The larger the value is, the longer distance the movement claw moves.

Detection position: this is to detect if the wire head crimping procedure is completed successfully

Crimping front: after the twisting procedure, the guide tube will turn to the crimping applicator, and in order to make the wire reach the crimping position, the discharge roller will rotate to send wire out a certain distance, and this distance is the value set here.

Crimping back: after the crimping procedure is completed, the roller will rotate to pull back the wire a certain distance (the value set here) and back to the stripping position, waiting for the movement claw to take out for the next procedure.

Crimping pos delay: the delay time after the wire is conveyed to position as set in the “crimping pos”, which is set for steady crimping procedure.

Crimping delay: the delay time (after crimping procedure) before machine continue to do the next procedure

Cutter depth down: the larger the value is, the deeper the blade will cut into wire, and the value to be set here is when blade just cut the wire off.

Put wire pos: related to the position that movement claw place the wire on the Collecting tray

Wire loading pos: related to the wire detection procedure

Crimp half F: wire head crimping height, and the larger the value is, the stronger the crimping force is

Crimp half B: wire tail crimping height, and the larger the value is, the stronger the crimping force is

Front crimp chk (on/off): wire head crimping detection

Back crimp chk (on/off): wire tail crimping detection

Wire chk (on/off): check if there is any wire available for processing

Knotted (on/off): check if the wire is knotted during the process

Air chk (on/off): check if compressed air connection is prepared

Crimp mach (on/off): turn on/off the crimping procedure

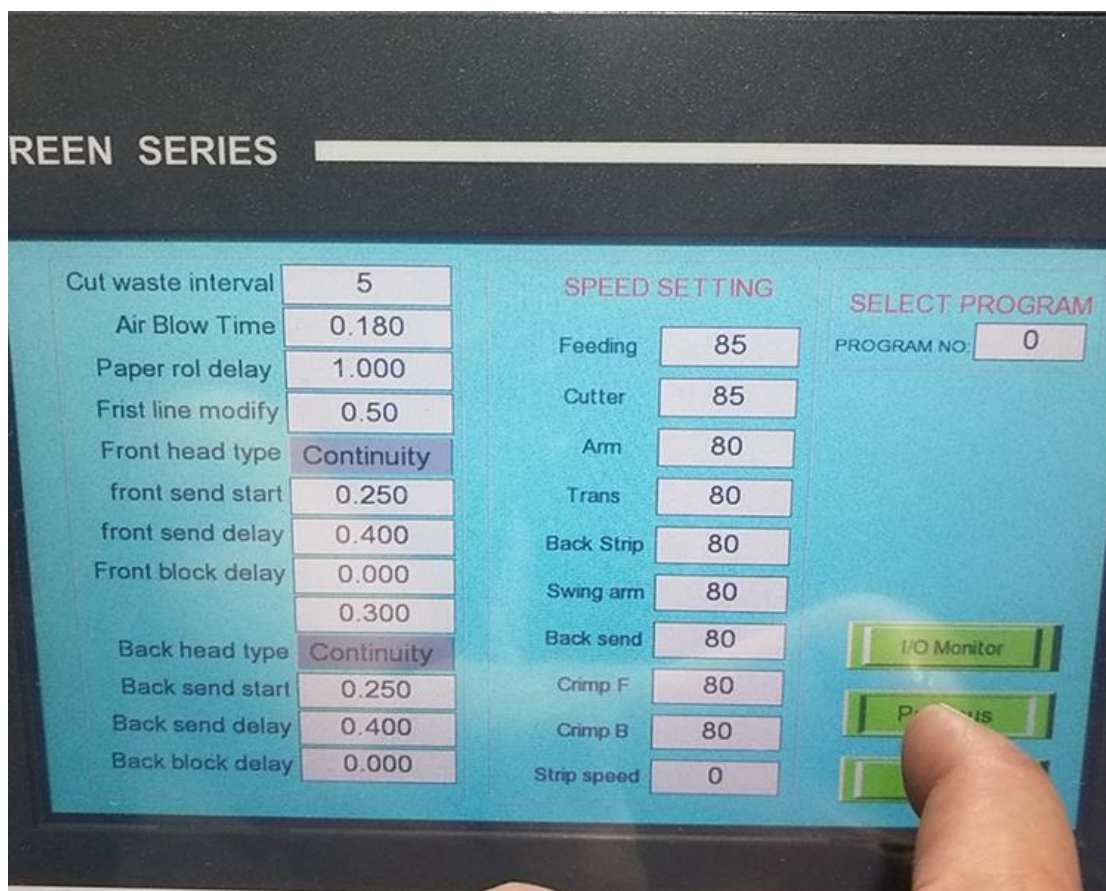
Press ding (on/off): for better crimping procedure

Upwards (on/off): N/A

Twisting: press to enter the twisting setting page

Next: press to enter the next page

Return: press to return to home page



Cut waste interval: the time interval for cutting left terminal chain

Air blow time: the single air blow time

Paper rol delay: N/A

First line modify: N/A

Front head type: set the terminal type

Front send start: N/A

Front send delay: N/A

Front block delay: N/A

Back head type: set the terminal type

Back send start: N/A

Back send delay: N/A

Back block delay: N/A

Feeding: wire feeding speed

Cutter: blade cutting speed

Arm: discharge claw speed

Trans: the left and right moving speed of movement claw

Back strip: wire tail stripping speed

Swing arm: the turning speed of the guide tube

Back send: the front and back moving speed of movement claw

Crimp F: wire head crimping speed

Crimp B: wire tail crimping speed

Strip speed: N/A

Program No.: select the program No.

I/O monitor: press to enter the I/O monitor page

Previous: press the go to the previous page

Return: press to return to home page

- Twisting Function Setting Page

Front twist	OFF	Back Twist	OFF
Twist dir	Foward	Twist dir	Foward
	0.00		OFF
Twist pos	0.00	Twist pos	0.00
Twist send	0.00	Twist send	0.00
Twist back	0.00	Twist back	0.00
Twist cycles	0.0	Twist cycles	0.0
Rotate speed	0	Rotate speed	0
Air Blow Time	0.000	Air Blow Time	0.000
Retrun			

Front twist (on/off): press to turn on/off the wire head twisting procedure

Twist dir: press to change the twisting direction

Twist pos: related to the wire head twisting position

Twist send: the distance that roller rotates to send out the wire to the twisting unit

Twist back: the distance that roller rotates to pull back the wire after twisting procedure

Twist cycles: number of twisting turns

Rotate speed: rotation speed of twisting unit

Air blow time: the air blow time

Back twist (on/off): press to turn on/off the wire tail twisting procedure

Twist dir: press to change the twisting direction

Twist pos: related to the wire tail twisting position

Twist send: the distance that movement claw conveys wire to the twisting unit

Twist back: the distance that movement claw take wire out from the twisting unit

Twist cycles: number of twisting turns

Rotate speed: rotation speed of twisting unit

Air blow time: the air blow time

Return: return to the function setting page