

User Manual

Electric automatic cable cutting stripping machine



Catalogue

1. Machine characteristics;
2. Signal connection description;
3. Operation instructions;

1. Machine characteristics

1.1 This product is independently researched and developed independently, with intellectual property patent procedures, 7-inch color touch screen and high-speed motion control system, easy operation and high stability.

1.2. Adopt 12 groups of wire feeding wheel, belt feeding method makes the contact area between belt and wire larger, so that wire feeding is more stable, length cutting is more accurate, and without indentation on cable skin.

1.3. Equipped with a large-capacity memory program, which can save 100 groups of parameters at the same time, which makes parameter setting more easy to operate and save time.

1.4. The distance between the front and rear rollers is controlled by a motor, only need to input the wire diameter parameter, and the operation is convenient;

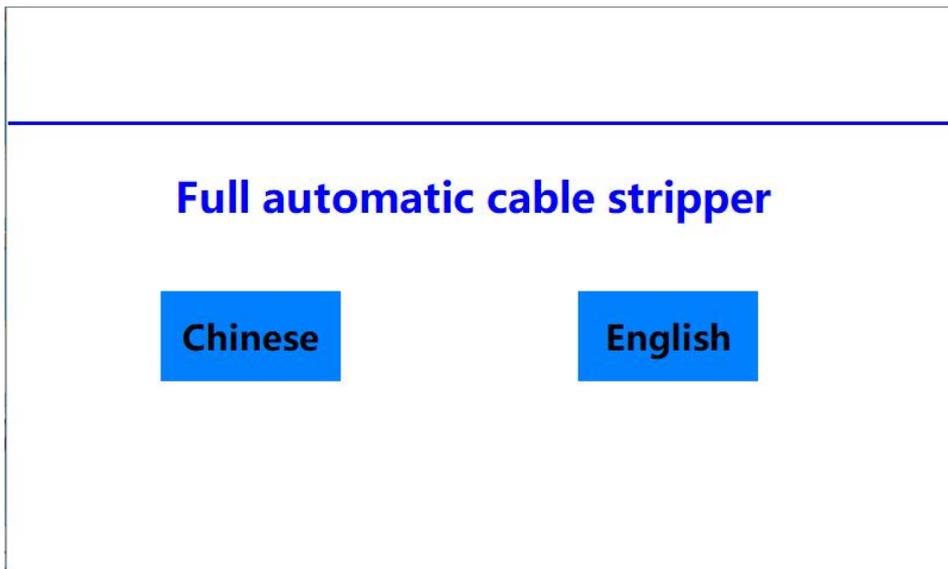
1.5. Electric jumping tube makes rear wheel strip longer length, up and down jumping distance can be set freely, with high stability;

1.6. The machine is all driven by a motor, and the upper and lower pressing wheels are screw rods, no source gas is needed, and it has strong versatility!

2 Instructions

Connect the machine to 220V or 110V power supply, after a few seconds after pressing power switch button, the screen will display the boot screen, then click to enter into the main screen of machine.

Boot screen



Main screen

New Energy Stripping Machine				
	Mode Switch	Run Mode Super Mode	Run State Stop	Instruct    
Product Num	0	capacity	Set Production	0 PCS
Line Length	2000	0	Finished	0 PCS
Product Name	*****		Each Bundle	0 PCS
Factory Set	I/O Monitor	Parameter	Finish	Reset
Auto	Manual	Alarm Infor	Start	Stop

Mode Switch: Stripping mode, three-layer mode, short-line mode, super mode (ultra-short wire length mode) can be switched freely, each mode has specific operation instructions; (Available to equip with inkjet code device, marking device, slitting and partial stripping function)

Factory Set: Original data of the factory, password is required if access to this page. Pls contact us if you need to modify any data).

I/O Monitor: Monitor the commands issued by the control system.

Auto: There are two modes strip. One is single step, another one is automatic mode. Single step is that machine runs step by step every time when you click the start button in this mode. It's useful to observe whether the parameters set are wrong. So before batch production, you can use this mode and set parameters well. Then you can do mass production in automatic mode.

Total output: When machine reached the set quantity, it will stop automatically and transmit signal. When set as 0, the machine will not start.

Completed output: Display the quantity already produced. When machine reaches "total set" quantity, it will automatically stop and transmit signal.

Each bundle: Batch quantity at a certain time, when machine reaches this value, it will automatically pause (pause time setting will describe later) and transmit signal, when reach pause time preset, machine will continue to run

automatically. If set this value as 0, machine will keep processing until reaching the total output as preset.

Product name(Program No.): Displays the name of the product saved in the file. The product name can be edited in both Chinese and English or in numbers. There are 100 file numbers in total on the machine, and each product name is relatively independent. If save as file number 1, all parameters currently exist in screen will saved as program 1. Next time when you process this type of wire again, just collect this program, no need to set each different parameter again.

Manual screen : Click to enter into manual control screen.

Alarm info: View the historical alarm information.

Start: The function is consistent with the green entity button on the operation panel. Press it and the machine will start stripping until reaching the total output preset.

Reset: Press reset button after setting parameters and each time stop production.

Finish: The function is consistent with the yellow entity button on the operation panel. Press it and the machine will stop automatically after finishing the last wire of the preset output.

Stop: The function is consistent with the red entity button on the operation panel. Machine will stop instantly once press it during working, and must press reset to make machine run again.

Parameter: Click enter into setting screen

2021-05-15 18:23:47 **Multistage Mode** Next Exit

Line Length MM

Rear Set		Front Set	
<input type="text" value="20.0"/>	Stripping L	<input type="text" value="30.0"/>	
<input type="text" value="20.0"/>	Pull L	<input type="text" value="30.0"/>	
<input type="text" value="10.00"/>	Stripping Dia	<input type="text" value="10.00"/>	
<input type="text" value="2.00"/>	Cutting Back	<input type="text" value="2.00"/>	
<input type="text" value="12.00"/>	Pinch D	<input type="text" value="12.00"/>	
<input type="text" value="0.00"/>	Pressure H	<input type="text" value="0.00"/>	

Speed Set Function Set Advanced Param

Multistage stripping mode:

Line length: Set total wire cutting length.

Stripping Length: Set stripping length at front and rear ends. If set as 0, other parameters relate to this parameter are invalid.

Pulling length: Set stripping length at front and rear ends. If the pulling length > stripping length, it is full stripping. If pulling length < stripping length, it is partial (half) stripping.

Stripping dia: Set the cutting depth of the stripping cutter, the smaller the value, the deeper the cut depth, the larger the value the lighter the cut depth.

Cutting back: The distance of cutter back to original position after cutting.

Pinch D (Clamping distance): The pressing gap between upper and lower wheel of front wheels. (Normally refer to outer diameter of the cable wire)

Pressure H: Pressure height refers to the front and rear wheel instantaneous clamping pressure when stripping wire.

Speed set screen:

The screenshot shows a 'Speed Setting' screen with a cyan background. At the top, there is a title bar with 'Speed Setting', a timestamp '2021-05-15 17:59:59', and an 'Exit' button. Below the title bar, there are two buttons: 'High' (grey) and 'Low' (blue). The 'Low' button is selected. Below these buttons, there are six input fields, each with a numerical value of '6'. The input fields are arranged in two columns. The left column contains 'Cutter', 'Wire Delivery', and 'Lifting Wheel'. The right column contains 'Pinch Wire', 'Catheter', and 'Stripping'. At the bottom of the screen, there are three buttons: 'Speed Set' (green), 'Function Set' (green), and 'Advanced Param' (green).

Function	Speed Setting
Cutter	6
Wire Delivery	6
Lifting Wheel	6
Pinch Wire	6
Catheter	6
Stripping	6

Speed setting:

High/low speed: High speed for smaller wire, Low speed for larger wire.

Cutter speed: Set the cutter running speed when cutting off cable.

Wire delivery (feeding speed): Set the rolling speed of the roller when feeding wire.

Lifting wheel: Set the rear wheel lifting speed.

Pinch wire (clamping speed): Set the clamping speed of front and rear wheels.

Catheter: Set the catheter lifting speed.

Stripping: Set the speed of stripping and pulling.

Function setting screen:

New Energy Stripping Machine						Exit
Cut Back	20.0	Front Correct	0.0	Double Cutter D	0	
Lifting Wheel H	5.0	Rear Correct	0.0	Stamp Delay	0 S	
Cutter Standby H	30.0	Catheter Jump	ON	Retract Delay	0 S	
Bundle Delay	3.0	Disconnect Detec	OFF	Blow Time	0 S	
Push Line	OFF	Cover Detec	OFF			
Sheath Peeling	OFF	Front-OFF		Residual Remove	Rear-OFF	
Speed Set		Function Set		Advanced Param		

Function Settings:

Cut back: The distance of the front and rear wheels back to original position after cutting off cable.

Lifting Wheel H: Set the lifting distance of the rear wheel when stripping the front end. When set as 0, the wheel is not lifted.

Cutter Standby H: Refers to the distance of the cutter when waiting for other procedures finished process.

Bundle delay: The pause time between each bundle , the time unit is second.

Push Line: This function is on when it equips with a cable collector device.

Sheath Peeling: If the cable skin is eccentric, this function is recommended.

Front correct: Refers to the correction of the front end stripping length.

Rear correct: Refers to the correction of the the rear end stripping length.

Catheter jump: Catheter jump when it is ON, and don't jump when it is OFF.

Disconnect Detect: When make it ON, machine stops automatically when wire used up and is sensed by front wheel.

Cover detect: When open the protective cover, machine will automatically stop. This function is optional with extra cost. Please contact with sales.

Residual remove: Make it ON in full stripping status when stripping scrap material stuck on the knife edge. It is invalid in partial (half) stripping function.

Advanced Param: Enter into this page with password.

Parameter	Value
Catheter Jump	8.00
Return Delay	0.0
Catheter Lay Flat	0.10
Back Press D	50.0
Translation Delay	0.0
Rear Wheel Swing	200.00
Pay Off Delay	0.0

The height at which a catheter jumps

Catheter Jump: The height of the catheter jump.

Catheter Lay Flat: The height of the tube placed horizontally.

Translation Delay: The time of the mechanical arm waiting.

Pay Off Delay: The time of the mechanical arm feeding wire.

Return Delay: The time of the mechanical arm returning.

Back Press D: The distance of rear wheel pressing wire when the front wheel is stripping.

Rear Wheel Swing: Distance for rear wheel throwing (loose and push) wire.

Three Layer mode screen:

Tree Layer Mode
2021-05-15 18:09:04
Exit

Line Length MM

Rear				Front		
1st Part	2nd Part	3rd Part		1st Part	2nd Part	3rd Part
<input type="text" value="200.0"/>	<input type="text" value="400.0"/>	<input type="text" value="600.0"/>	Stripping L	<input type="text" value="200.0"/>	<input type="text" value="400.0"/>	<input type="text" value="600.0"/>
<input type="text" value="200.0"/>	<input type="text" value="300.0"/>	<input type="text" value="400.0"/>	Pull L	<input type="text" value="200.0"/>	<input type="text" value="300.0"/>	<input type="text" value="400.0"/>
<input type="text" value="10.00"/>	<input type="text" value="11.00"/>	<input type="text" value="12.00"/>	Stripping Dia	<input type="text" value="10.00"/>	<input type="text" value="11.00"/>	<input type="text" value="12.00"/>
<input type="text" value="2.00"/>	<input type="text" value="2.00"/>	<input type="text" value="2.00"/>	Cutting Back	<input type="text" value="2.00"/>	<input type="text" value="2.00"/>	<input type="text" value="2.00"/>
		<input type="text" value="12.00"/>	Pinch D	<input type="text" value="12.00"/>		
		<input type="text" value="0.00"/>	Pressure H	<input type="text" value="0.00"/>		

Speed Set
Function Set
Advanced Param

Three layer mode:

Stripping data: The front end and rear end can be stripped for 3 times respectively. Each stripping includes four parameters: cut length, half strip, knife value and knife return value. When stripping wire, it is processed in the order of 1#, 2# and 3# (1st/2nd/3rd part). When the length of a certain layer set as 0, the program will skip this layer and directly process the next layer automatically. The front-end and rear-end parameters function the same. (Setting parameters same as in strip mode)

Short Line Mode Screen

Short Line Mode
2021-05-15 18:11:54
Exit

Line Length MM

	Rear Set		Front Set
	<input style="width: 60px;" type="text" value="20.0"/>	Stripping L	<input style="width: 60px;" type="text" value="30.0"/>
	<input style="width: 60px;" type="text" value="20.0"/>	Pull L	<input style="width: 60px;" type="text" value="30.0"/>
	<input style="width: 60px;" type="text" value="10.00"/>	Stripping Dia	<input style="width: 60px;" type="text" value="10.00"/>
	<input style="width: 60px;" type="text" value="2.00"/>	Cutting Back	<input style="width: 60px;" type="text" value="2.00"/>
	<input style="width: 60px;" type="text" value="12.00"/>	Pinch D	<input style="width: 60px;" type="text" value="12.00"/>
	<input style="width: 60px;" type="text" value="0.00"/>	Pressure H	<input style="width: 60px;" type="text" value="0.00"/>

Setting suggestions
The line is less than 100 mm

Speed Set
Function Set
Advanced Param

Short line mode: Setting parameters same as in strip mode.

Short line mode is used when wire cut length under 100 mm, and rear wheel cannot press wire firmly. This function is also called pushing strip way, (e.g. if wire cut length is 50mm, front strip 15mm, rear strip 15mm. Process method is to strip front end 30mm, then push the middle rubber skin from back to front 15mm, so that the front and rear ends to reach the preset parameter)

Super Mode Screen:

2021-05-15 17:59:08
Super Mode
Next
Exit

Num	Line length	Front Peel	Front Pull	Rear Peel	Rear Pull	Quantity	
0	<input style="width: 60px;" type="text" value="500.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="30.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="30.0"/>	<input style="width: 60px;" type="text" value="5"/>	Current Layer <input style="width: 60px;" type="text" value="0"/>
1	<input style="width: 60px;" type="text" value="800.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="10"/>	Comple Quantity <input style="width: 60px;" type="text" value="0"/>
2	<input style="width: 60px;" type="text" value="1000.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="15"/>	Cumulative Yield <input style="width: 60px;" type="text" value="0"/>
3	<input style="width: 60px;" type="text" value="1200.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="18"/>	Cycle Num Set <input style="width: 60px;" type="text" value="0"/>
4	<input style="width: 60px;" type="text" value="1500.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="40.0"/>	<input style="width: 60px;" type="text" value="20"/>	Current Cycle Num <input style="width: 60px;" type="text" value="0"/>
5	<input style="width: 60px;" type="text" value="2000.0"/>	<input style="width: 60px;" type="text" value="80.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="80.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="3"/>	Cycle Clear
6	<input style="width: 60px;" type="text" value="2500.0"/>	<input style="width: 60px;" type="text" value="80.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="80.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="15"/>	
7	<input style="width: 60px;" type="text" value="3000.0"/>	<input style="width: 60px;" type="text" value="80.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="80.0"/>	<input style="width: 60px;" type="text" value="50.0"/>	<input style="width: 60px;" type="text" value="6"/>	
8	<input style="width: 60px;" type="text" value="3300.0"/>	<input style="width: 60px;" type="text" value="100.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="100.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="20"/>	
9	<input style="width: 60px;" type="text" value="4000.0"/>	<input style="width: 60px;" type="text" value="100.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="100.0"/>	<input style="width: 60px;" type="text" value="60.0"/>	<input style="width: 60px;" type="text" value="3"/>	Cycle Time <input style="width: 60px;" type="text" value="0.0"/> s

In one cable, it can process 20 kinds of different lengths according to the sequence of processing procedure. For example: strip 1 meter cable 10 pieces, 2 meters cable 20 pieces, the number of cycles and pause time can be set.

Scribing mode screen:

The screenshot shows a software interface titled "Scribing Mode" with an "Exit" button in the top right corner. Below the title, there is a diagram of a red wire with a diameter of 10.00 mm. The wire is labeled with "Rear" at the left end and "Front" at the right end. The total length of the wire is set to 2000.0 mm. Below the diagram, there are two columns of settings: "Rear Set" and "Front Set". The "Rear Set" includes "Scribing L" (20.0), "Stripping Dia" (10.00), and "Pinch D" (12.00). The "Front Set" includes "Scribing L" (30.0), "Stripping Dia" (10.00), and "Pinch D" (12.00). At the bottom of the screen, there are three green buttons: "Speed Set", "Function Set", and "Advanced Param".

Scribing Mode		Exit
Line Length	2000.0	MM
Rear		Front
Diameter		
Rear Set		Front Set
20.0	Scribing L	30.0
10.00	Stripping Dia	10.00
12.00	Pinch D	12.00
Speed Set	Function Set	Advanced Param

Line length: total wire cutting length.

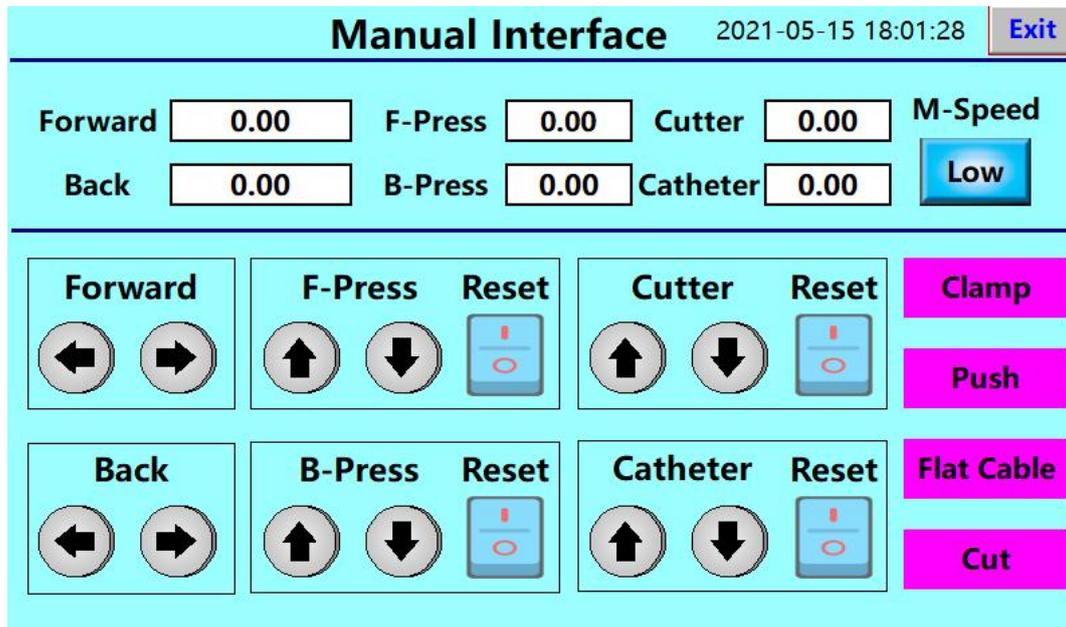
Scibing L: the slit length for front and rear end

Stripping Dia: set the cutting depth of the stripping cutter, the smaller the value, the deeper the cutting depth, otherwise the lighter;

Pinch D: clamping distance refers to wire outside diameter. Also the clearance between the front upper and lower wheels when setting stripping parameter.

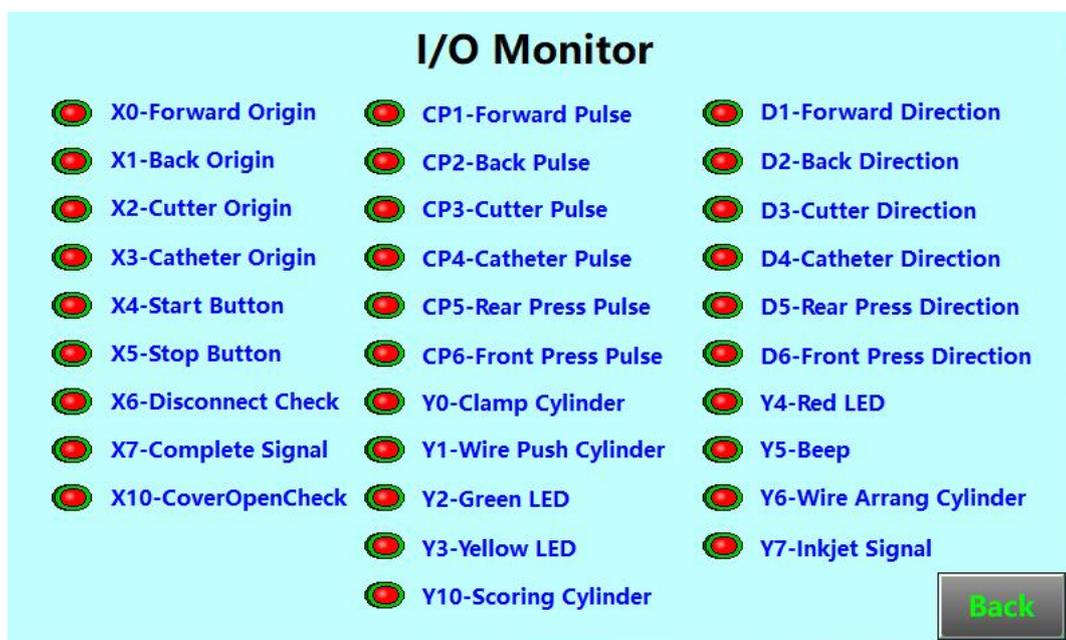
(E.g. wire diameter 10mm, clamping distance can be set 10mm or 9mm. If set it too small, the belt is easily get worn)

Manual screen >>> : Click to enter the manual control screen.



Note: The main function of manual control is to control the operation of all motors in machine and test the value of the cutter. Before enter into this page, must reset machine first, otherwise some buttons in this picture may not work or appear chaotic.

The I/O monitor > >



I/O monitor is to monitor the instructions issued by the control system.

Adjusting skills:

1 Eccentric wires may easily damage the core wire. You can turn on the sheath cable process function. This function switch is in the function parameters setting page.

2. If sometimes both end with very long strip length or cable jacket rubber with very strong adhesion caused difficulty in stripping, you can consider the three-layer mode, divided into two or three times of stripping. For example, the front length need strip 150mm, set the first length as 50mm, second strip length as 100mm, third segment strip length as 150mm. The knife value of the three segments is the same. Rear end adopt same setting way, so it's easier to strip off.

3. In the state of adjusting machine, select the single-step (manual) mode. Press the start button each time, the machine will go one step, so as to observe whether the setting is correct or not.

4. When adjusting the knife value, you can manually control the knife feed in the manual control screen. When you see that the knife edge is about to touch wire core, remember the knife value displayed currently and input it into the knife value setting area. Wire distance parameter for front and rear end can also adopt this method.

5. In case you can't strip off the wire head or tail (cut depth not enough), reduce stripping diameter value or reduce wire strip retreat knife value. If hurt core wire/copper strands or directly cut them off (cut too deep) in wire head or tail stripping, pls increase stripping diameter value or increase wire strip retreat knife value..

6. The machine is driven by a stepping motor. The characteristic of the stepping motor is that the torque is large when the speed is low. As the rotating speed increases, the torque drops sharply, so it is very important to choose a suitable operating speed, which can improve efficiency and stability.