

Automatic Slitting Machine

FQ-350/450

OPERATION MANUAL

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I .Summaries

FQ-350/450 automatic slitting machine is the auxiliary products of automatic die cutting machine. It has functions of automatic meter counting, number counting, The unwinding is controlled by photoelectric eyes. The structure is compact with high speed, high efficiency, easy and steady operation.

II.Main Technical Parameters

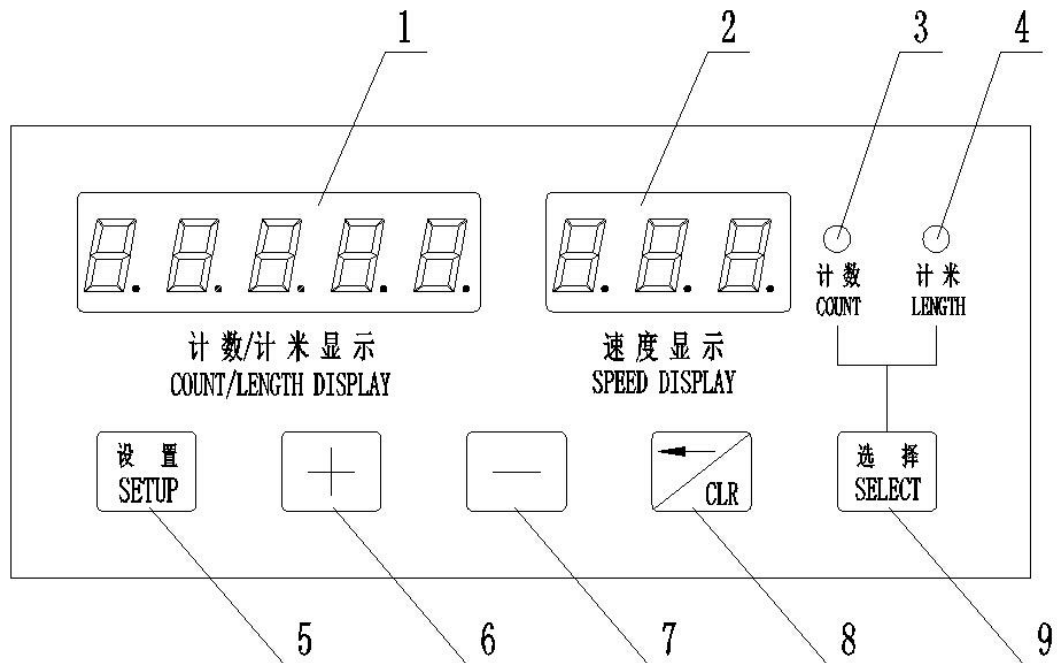
Model	FQ-350	FQ-450
Slitting speed	120m/min	120m/min
Max. Web Width	350mm	450mm
Max. Unwinding Diameter	500mm	500mm
Max. Rewinding Diameter	500mm	500mm
Precision of Slitting	±0.10mm	±0.10mm
Power of The Host Machine	2kw	2kw
Dimension	1300*900*1300mm	1300*1000*1300mm
Machine Weight	500kg	600kg

III.Electric Knob Illustration

- (1) Power indication: the indicator will be on after the machine is connected to the power supply.
- (2) Total power switch: the blower will work if it is turned on clockwise.
- (3) Waste ventilator switch: the blower will work if it is turned on clockwise.
- (4) Main Frame work switch
- (5) Main Frame Stop Switch
- (6) Governor of the main frame: Adjust it clockwise to speed up, while anticlockwise to slow down.
- (7) Counting and Calculating Option Switches.
- (8) Counting and Calculating Data Displayers.
- (9) Feeding-rectifying controller

IV.Counting and Length System

(I)Actions for the composed parts of panel



1. COUNTING AND LENGTH DISPLAY WINDOW: to automatically display current measured pieces or length(unit: m)while working according to “select counting or length mode”, It will display the parameters if the parameter mode is set;
2. SPEED DISPLAY WINDOW: display current work speed (unit: m/min)while working, it will display the set parameter digitals while mode is set;
3. COUNTING INDICATOR LIGHT: it means that the counting mode is selected if it is on;
4. LENGTH INDICATOR LIGHT: it means that the length mode is selected if it is on;
5. SETUP: used for setting and selecting the parameters;
6. ON(+):type the switch to have the set data to increase while the parameter is set;
7. OFF(-):type the switch to have the set data to reduce while the parameter is set;
8. CLEAR/SHIFT: type it to clear current accumulated quantity or length while working, If the parameter is set, type it to select and set

the modified place for the data;

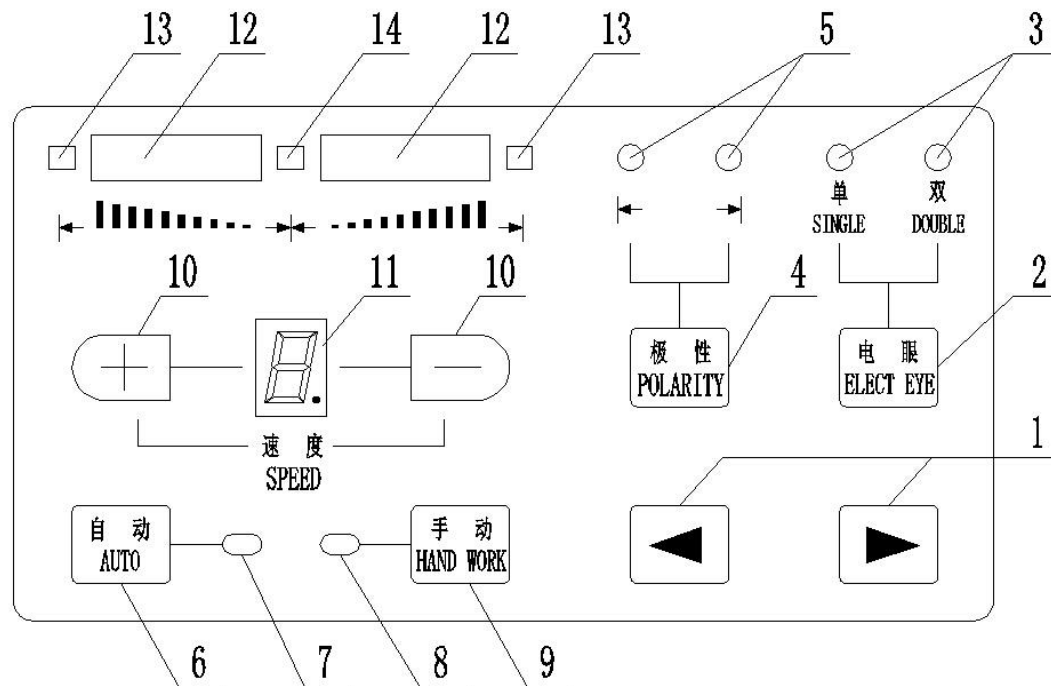
9. SELECT: type it to select the counting or length work mode.

(II)Set parameters

1. SET THE LENGTH OR QUANTITY: type SET, the speed display window displays "-L-"or "-P-". "-P-"will be displayed if it is working in the counting mode, on the contrary, "-L-"will be displayed. The counting and length display window will display the last set data and twinkle to display the modified position. At this time,type CLEAR to select the modified data bit.Type ON(+)to modify the data.The system will automatically keep data and quit the setup after 5 seconds or so while the required data is adjusted.At this time,the counting and length display window will display "SAVE".
2. SET THE MASTER DRIVE ROLL PERIMETER: continually press SETUP about 10 seconds, the speed display window will display "-C-",the length display window will display the last set data and twinkle to display the modified place.At this time,type CLEAR to select the modified data bit,type On(-)to modify the data.The system will automatically keep the data and quit the SETUP after 5 seconds or so while the required data is adjusted.At this time,the counting and length display window will display "SAVE".(Note:Set 0.2199 at EXW)
3. Set the deceleration in advance:type again SETUP to turn the SET THE DECELERATION IN ADVANCE while setting the drive roll perimeter.At this time,the speed display window will display "-A-".The length display window will display the last set data and twinkle to display the modified place.At this time,type CLEAR to select the modified data bit.press ON(+)/OFF(-)to modify the data.The system will automatically keep the data and quit SETUP after 5 seconds or so while the required data is adjusted.At this time,the counting and length display window will display "SAVE".

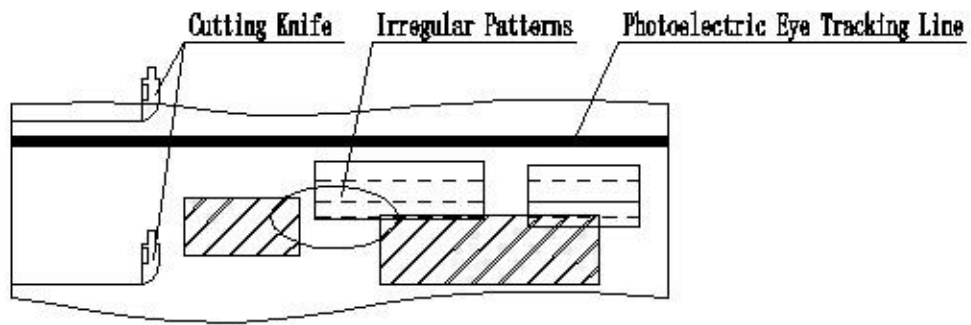
V.Feeding and Rectifying System

(I)Panel and switch schematic drawing

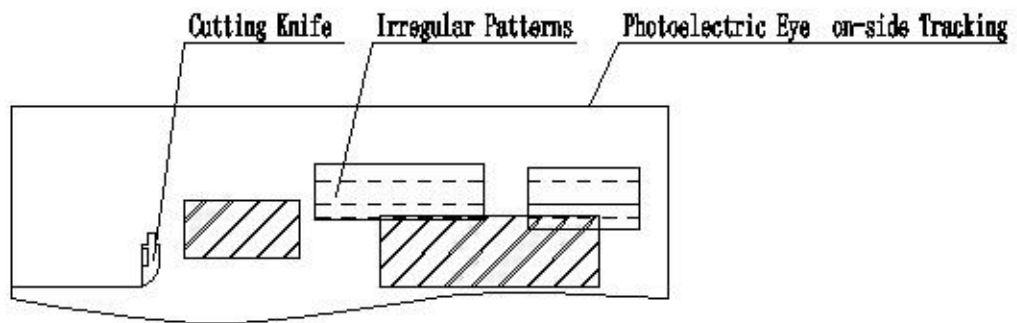


(II)Rectifying control part(See Figure 1-14 above)

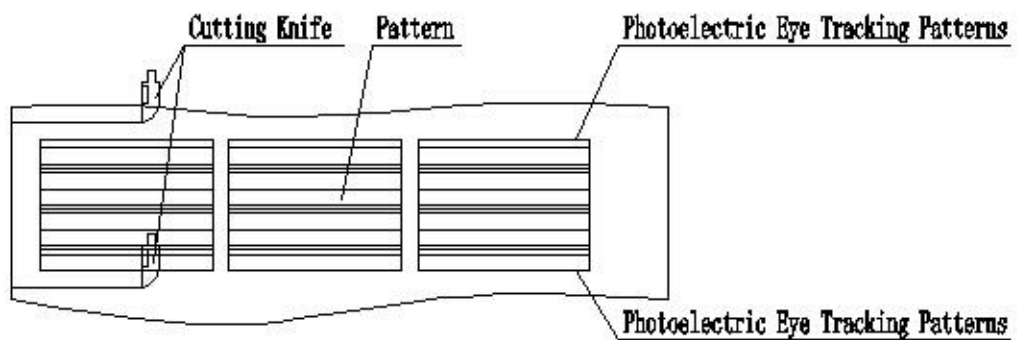
1. INCH: type the two switches up and down to inch the synchronous motor to have the feeling support move left or right no matter whether the rectifying controller is in auto or manual mode or not;
2. PHOTOELECTRIC EYE SELECT: type the switch to select single photoelectric eye or double photoelectric eye mode for the controller. Generally speaking, the single photoelectric eye is used for tracking printing line and material side; while the double photoelectric eye is mainly used for tracking left-right symmetric printing patterns(See the figures below)
3. INDICATOR LIGHT FOR PHOTOELECTRIC SYE SELECT: respectively indicate that the single photoelectric eye or double photoelectric eye is selected;



← Printing Line for the
sing photoelectric eye
track

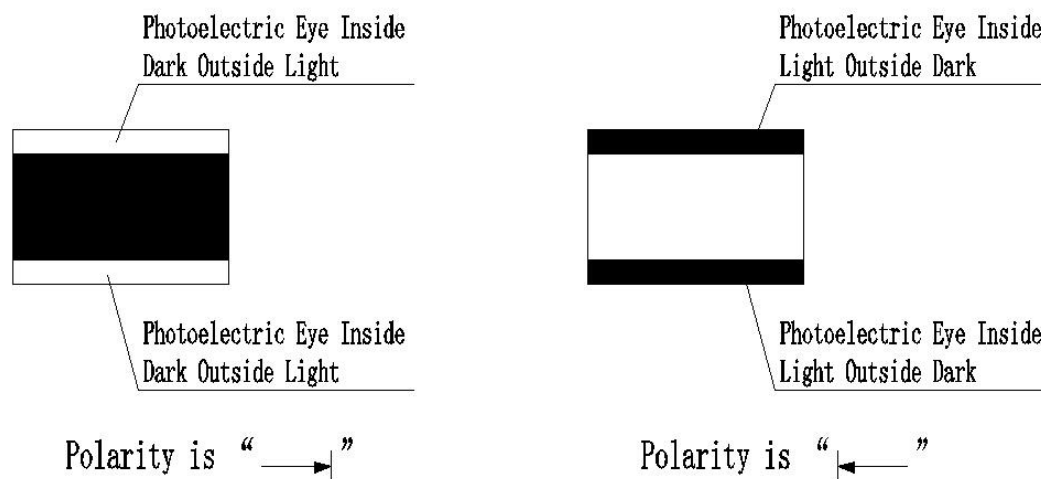


← Sing photoelectric eye
On-side tracking



← Double photoelectric eye
pattern tracking

4. POLARITY SELECT: type the switch to select the polarity method for the photoelectric eye. i.e. Light or dark(See the figures below);
5. POLAARITY SELECT INDICATOR LIGHT: respectively indicate how to select polarity for the tracking photoelectric eye;
6. AUTO: type the switch, the controller will automatically recetify. At this time, the synchronous motor working in corotation or in reversing is controller by the color code tested by the photoelectric eyes whether they are offsetting the aim or not;



7. AUTO(INDICATOR LIGHT):the indicator light will be on while the rectifying controller works automatically;
8. MANUAL(INDICATOR LIGHT):the indicator light will be on while the rectifying controller works manually;
9. MANUAL: type the switch, the controller will rectify manually. At this time, the synchronous motor working in coronation or reversing is controlled by Switch(1)
- 10.SPEED ADJUST: type the two switches to adjust the rectifying the responding speed. The bigger the value is, the more slowly the responding speed is. And vice versa, the responding speed is more quickly;
- 11.RESPONDING SPEED DISPLAYER: to display the responding speed in rectifying;
- 12.SYNCHRONOUS MOTOR RUNNING DIRECTION INDICATION: the two pieces bars of luminophors respectively indicate the running direction for the synchronous motor;
- 13.LIMIT INDICATOR LIGHT: if the indicator light is on, it suggests that the rectifying support has moved to the two-end terminal in the effective rectifying scope;

14.POWER INDICATOR LIGHT: to indicate the power supply for the rectifying computer main board.

VI.Slitting and Rolling System

First, adjust the tool support to the middle position. Then adjust the slitting width of the lower disc knife and lock it before starting machine. Then place the upper disc knife in the lower one's channel, and level the position, then lock it. Adjust the upper knife away from the lower one, then adjust the feeding shaft to the middle position (Figure 6),cross the material according to the Schematic Diagram of Material Route(Figure 1).

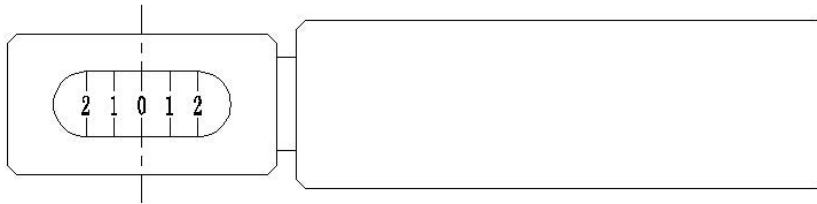


Figure 6

Adjust the photoelectric switch to the color code position, well adjust the sensitivity of the two photoelectric switches(Figure 7),turn on the AUTO (please change the “polarity” for rectifying if the feeding support moves to one side.),Place the upper disc knife to match the lower blade. In this way it can slit. Adjust the left-right handwheel for the tool support or the left-right handwheel for rectifying if the left-right position is of slight deviation after the material is slit.

Put the holder on the rolling web, property adjust the force of friction for the rolling friction disk while slitting. In this way proper tension can be achieved. The smaller the rolling material is, the lighter the force of friction is, and vice versa, the force of friction should be increased to ensure the tension in working.

If it needs adding or reducing the slitting cutters, see Figure 8.

FQ-350 450 Automatic Slitting Machine

Operation manual

Common troubles and remedy

I .The main motor doesn't work or run after pressing the Key for running.

Common trouble	Remedy
1.The governor potentiometer isn't connected with power	Connect the converter's terminals TC7 and TC8.After that, if it can run at a full speed, which means there must be something wrong with this potentiometer. Then refresh it at once.
2.The converter protects automatically. The digital cubes displays "Overload protection", "over electric current protection "or"...Then please go through the converter instruction.	Switch off the total power supply for three minutes till the contents displayed on the digital tube disappear, And then switch on the power supply.

II.The feeding support moves toward one direction after switching on the total power supply.

Common Trouble	Remedy
1.The controllable silicon on the rectifying control pen is broken	Refresh the controllable silicon or the rectifying control pen.

III.the feeding support moves toward one direction after turning on the Auto Rectifying mode.

Common Trouble	Remedy
1.The regulation of Sensitivity for rectifying photoelectric switch is not well done	Well regulate the sensitivity for rectifying photoelectric switch
2.Wrong selection of rectifying "Polarity"	Switch the "Polarity"
3.rectifying controller is of short circuit	Check the circuit and the rectifying pen.

IV.The feeding support can only move toward one direction in a single mode in inching when it is in Manual/Hand rectifying mode.

Common Trouble	Remedy
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1.The limit indicator is bright	Check whether the limit switch is broken or not, or it is of short circuit.
2.The limit indicator is dark	1.Are the circuits of the rectifying motor and the rectifying penal of short circuit or broken? 2.Check whether the voltage is output or not from the rectifying penal. If no voltage is output, please repair or refresh the rectifying control penal.

V.The rectifying motor can't run

Common Trouble	Remedy
1.There is no AC sound from the rectifying motor.	1.Are the circuits of the rectifying motor and the rectifying penal of short circuit of broken? Have a good check.
2.There is AC sound from the rectifying motor.	Is the resistance of the rectifying motor of short circuit of broken?

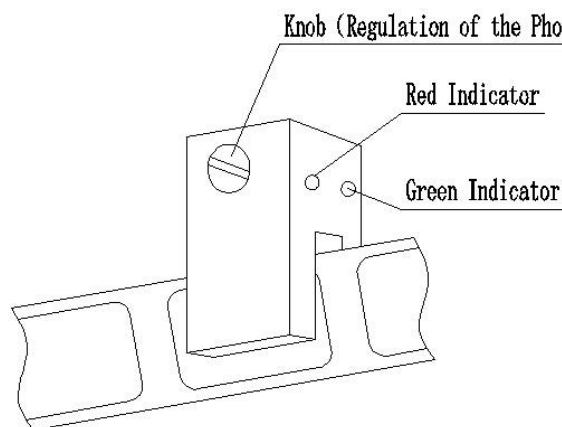


Figure A

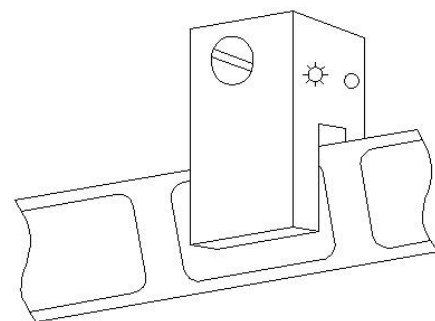


Figure B

- (1) The regulation method of the photoelectric sensitivity: a)The red indicator should be off while the gummed labels are places in the grooved photoelectric switch; adjust the red indicator to fo off in anticlockwise direction if isn't off.
- b)The red indicator is on while the Gelasin bottom paper between the two gummed labels is places in the grooved photoelectric switch (Figure A);adjust the red indicator to go on in clockwise direction if it isn't on.

(2) Have a test to make sure the sensitivity is the best position after the photoelectric sensitivity has been well regulated.

a) The red indicator shouldn't flash while the gummed labels are placed in the grooved photoelectric switch and are shaken up and down at a high speed. Adjust the red indicator lightly in anticlockwise direction if it flashes.

b) Place the Gelasin bottom paper in the grooved switch and shake it up and down to see if the red indicator is still on. If it is on, the photoelectric sensitivity has been well regulated, Then you can feed, slit and count.

(Note: Adjust the red indicator in clockwise direction it will go on; adjust the red indicator in anticlockwise direction it will go off.)

Sensitivity of Regulation

Photoelectric Switch:

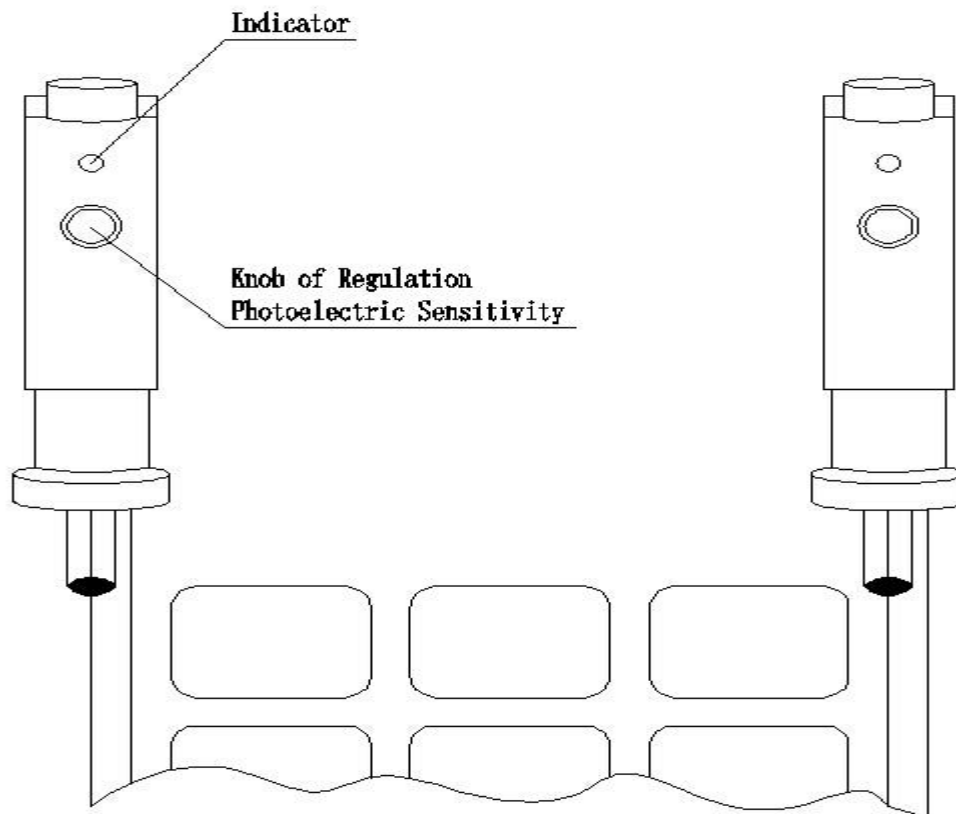


Figure 7

Note: Adjust the photoelectric sensitivity to face to the color code, then the indicator is dark, when the color code is moved away, the indicator is bright.

Adjust the indicator anticlockwise, then it is dark, adjust the indicator clockwise, it is bright.

VIII. Lubrication and Maintenance

- (2) The slitting machine works an intermittent manner. Oil the gear, chain wheel and chain with several drops of machine Oil N22 before

starting the machine with a oilcan every time.

IX.Transportation and Installation

- (3) Check if the quantity of the tool parts and spare parts are complete referring the packing list after opening the box. And thoroughly read the operation manual. Then transport it to the flat and firm ground. Adjust the levels with bolts. Connect it with the power supply. Then have a test operation for each part of the machine according to the directions of Sections 3,Section 4 and Section 5.

X.Random Tool List

No.	Items	Unit	Quantity
1	Complete slitting machine FQ350 450 type	pcs	1
2	Tools	pcs	1
3	Regulation Screw Spike	pcs	4
4	Iron pads	pcs	4
5	Operation Manual(in the tools box)	pcs	1
6	Air Inflation Gun	pcs	1
7	Special clamber	pcs	1
8	Special Spanner	pcs	1
9	Retainer Pliers	pcs	1

XI.Electric Circuit Diagram and Attached Drawing