

# SF-540A Laminator

# **Operating Manual**

## **Instructions of the operation manual:**

- ★ Before operating the laminating machine, please read and understand the contents described in the manual carefully.
- $\star$  Please keep this instruction manual for future reference.
- ★ Please pay special attention to the sections marked with warning symbols in the manual, which are very important for the correct use and maintenance of the machine and the safety of users.
- ★ With the improvement of product function and software upgrade, the information of operation manual will be constantly changed and perfected without further notice. The description and image involved shall be subject to the actual contents in the packing box. The company reserves the right to modify and interpret this instruction manual. We strive to ensure the accuracy of the instructions and the product functions and features described, but we do not assume any responsibility for any differences between the user manual and the product.

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## **1. Safety Precautions**

1.1 Before operation of this machine, please note if the supply voltage used matches the rated operating voltage of the machine. Use the supply voltage consistent with the rated operating voltage of this machine. Never misuse the supply voltage;

1.2 Please do not use damaged power cord or broken power socket;

1.3 The power supply should provide reliable grounding protection;

1.4 In order to avoid electric shock accident or machine failure, please do not spray water or other liquids on the machine;

1.5 Please do not touch the surface of the steel roller with your hands to avoid scalding skin;

1.6 Be aware not to entangle clothes, necktie, hair, necklace, cuffs and the like into the running machine during the operation, which may cause unnecessary damage to the machine;

1.7 In the process of film covering operation, please do not put any items other than the coating on the working panel or the boxes on both sides, so as to avoid accidental involvement of the articles and damage to the machine;

1.8 In case of fault, people other than professionals shall not attempt to dismantle the machine for repair. Repair shall be conducted by professionals or organized by local dealer. Dismantling and repair by unauthorized persons will adversely affect the normal service and maintenance of the machine;

1.9 The environment for the operation of the unit shall range 10°C—40°C.Ideal humidity: 55%. The unit should stay away from locations with high

temperature (e.g. by air-conditioner), and damp and dusty locations;

1.10 When the machine is running, the operator should not leave his post;

1.11 Please prevent children from using or touching the machine;

1.12 When the machine is out of service for a long time, please cut off the power supply;

1.13 Please do not change the original configuration of this machine. If the user makes any changes, we will not take any responsibility for safety.

## 2. Application and characteristics of SF-540A

2.1 Application of SF-540A:

SF-540A fast laminator laminates printed matter, spray-drawing products, packing boxes, books and the like, allowing them to resist water, stain and damage, and providing durability. Featuring compact size, fast and continuous lamination, automatic parting cut, easy operation, economics and utility, this unit is ideal for the post production of various types of printed and packing products.

2.2Performance characteristics

2.2.1 Mirror chrome plating roller, oil heating;

2.2.2 Touch screen human-computer interaction display system;

2.2.3 Frequency control system;

2.2.4Electric hydraulic pressure system, film pressure adjustable;

2.2.5 Full automatic paper feeding control system, can overlap;

2.2.6Pneumatic automatic cutting system;

2.2.7Curling-preventing device, preventing laminated paper from curling;

2.2.8Film slitting device;

- 2.2.9Air inflation shaft material roller device;
- 2.2.10Bronzing winding device;
- 2.2.11Upper point thread cutter device;
- 2.2.12Automatic stop function for paper shortage.

## 3. Schematic diagram of the whole machine



1.Feeder 2.Lifting paper feeding table 3.Foot switch 4. Upper left box
5.Operation display screen 6.Pressure regulating valve 7.Anti roll handle
8.Air expansion shaft and film winding shaft
9.Point line cutter mechanism 10.Slitter mechanism
11.Front guard 12.Vacuum pump switch



13.Slitter support plate	14.Emergency stop swit	ch 15.Castor wheel
16.Power switch	17.Power cord	18.Rear receiving tray
19.Right box	20. Tin foil winding me	chanism
21. Laminating tension	adjusting handle 2	2. Roll film damping device



## 4. Operating instructions for operation panel

#### 4.1 Main page

1. Temperature setting key 2. Speed setting area 3. Paper length setting key 4. Setting area of cutting value adjustment 5. Laminating roller lifting button 6. Lifting button of traction roller 7. Operation key 8. Stop key 9. Pedal forward button 10. Pedal reverse button 11. Foil 12. Set

#### 4.1.1Temperature setting display

temperature value of the laminating roller; the set value adjustment range is "80  $\sim$ 140 °C", and if it is lower than 80 °C, it will be displayed as "---"; when the button "+" is pressed, the value of 80 will appear, and the machine will start to heat up. Press "+" temperature setting value "+ 1" again, and press "+ 5" continuously; press "- 1" for temperature setting value and "- 5" for a long time. When the machine starts to heat up, the actual display temperature value changes with the actual temperature of the laminating roller surface.

Note: (1) laminating can be carried out when the actual surface temperature of the laminating roller reaches  $\pm$  5 °C;

(2) when the heating function needs to be turned off, the set temperature value should be reduced to 80 °C first, and then press the button "-" again. When "-" appears, it means that the heating function of the machine has been turned off;

(3) The temperature overshoot will appear in the initial heating, and the overshoot is about 10  $^{\circ}$ C and stable at the set value for about 15 minutes. Please wait until the temperature value is stable, so as not to affect the film quality.

4.1.2 Display of set speed value

The speed adjustment range of main roller is 1-20m / min, and the speed of each gear is 0.5m/min, increasing or decreasing. Press the icon "+" to increase the speed value, otherwise, press the icon "-" to decrease the speed value;

Note: the speed of slitting roller is not adjustable;

4.1.3 Paper length adjustment setting area

The adjustment range of paper length is 200-1200mm. Press the "+" or "-" button to change the value by one digit, increase or decrease by 1 mm, and press for a long time, and the value will increase or decrease in 20 units;

4.1.4 Setting area of cutting value adjustment

Press the "+" or "-" button to change the value by 1 bit, increase or decrease by 1 mm, and long press, the value will increase or decrease in 5 units;

4.1.5 Laminating roller lifting button

The icon is on, the icon is light, and the roller is closed. When the icon is under, the roller is opened and the icon is dark ;

Note: when the laminating roller is not closed, the machine will not move after

#### pressing the operation button

4.1.6 Lifting button of traction roller

The icon is at the top, the icon is light, the roller is closed, the icon is at the bottom, the roller is open, and the icon is dark;

#### 4.1.7 Run button

After pressing, the machine starts to work in linkage (i.e. both the cardboard baffle and the cutting roller can act); when pressed, the icon is light in normal operation, while it is dark in standby.

#### 4.1.8 Stop button

This button controls the stop of the machine in the linkage state; after pressing the button, the machine stops working, the icon is light, and the icon is dark during the operation of the machine.

#### 4.1.9 Pedal forward button

This button is used with the foot switch. Press this button to turn light. At this time, the machine starts to run when you step on the foot switch (only the main motor drives the rollers to run at the set speed). Release the foot switch and stop running. The icon will be dark if you don't press the button. What is the speed setting value of forward rotation, the actual machine will operate according to this set speed; Note: (1) this button is usually used when the machine is preheated or debugged;

- (2) if the foot switch is used, the cutting roller of the machine will not work;
- (3) When the pedal forward rotation button is on, press the operation switch to start the machine.

#### 4.1.10 Pedal reverse button

This button is used with the foot switch. Press this button to turn light At this time, the machine starts to run when the foot switch is stepped on (only the rollers driven by the main motor run). After the foot switch is released, the icon will be dark;

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Note: there is no speed regulation for pedal reversal, and the maximum speed is 3m / min;

4.1.11 Foil

This button can be used when there is no need to cut the coated finished product or add the gilding device without the action of the slitting roller. If it is pressed down, it will turn light and the cutting roller will not act; otherwise, it will be dark, and the cutting roller will work normally;4.1.12 Set button

This button is used to enter the secondary interface. Click once to enter the secondary page;

Note: this key is invalid during normal operation of the machine. If there is no need to move the slitting roller, please press this key before running the machine.

4.1.12 Set

This button is used to enter the secondary interface. Click once to enter the secondary page;

4.2 Setup page



#### 4.2.1 Paper length

It is used to adjust the error between the paper length value recognized by the system and the actual measured paper length value. The factory setting of this parameter has been completed, and the operator does not need to adjust it;

#### 4.2.2 count

Record the total number of paper and the operator can read it;

## 4.2.3 home button



This button is used to return to the home page. Click to return;

# 5. Main technical parameters

Model			
Technical	SF-540A		
parameters			
Max. size of roll film	0.53m ×	<3000 m	
Film thickness range	17Mic~	~42Mic	
Applicable dimension of reel for roll film	Φ75mm		
Max. O.D. dimension of roll film	Φ260mm		
Applicable thickness of paper	Laser printing paper	$128 \sim 450 \text{g/m}^2$	
core	Printing paper	157~350g/m <sup>2</sup>	
Max. applicable size of printed matter	540×760mm		
Min. applicable size of printed matter	297×420 mm		
Capacity of paper table	500mm		
Speed regulation range	1~20m/min		
Temperature regulation range	nperature regulation range 80~140°C		
Preheating time	20°CAt room temperature 10min (100°C)		
Operation and display system	Touch screen		
Pressurization mode	Hydraulic pressure		
Heating mode	Oil heating		
Laminating roll diameter	Upper roll	High gloss chromium plating 160mm	
	Lower roll	Silicon rubber 100mm	

SF-540A	202205
Paper overlap accuracy	±2mm
Rated input power	7000W
Rated input voltage	AC 3P/N/PE 400V, 50/60Hz
Net weight of complete machine	445Kg
Gross weight of machine	540Kg
Physical dimensions of machine (L×W×H)	2150×960×1500 mm
Machine transport dimensions $(L \times W \times H)$	1500×1180×1350 mm

**\*** Recommended specifications of air pump: air storage tank volume:  $\geq$  50L, exhaust capacity:  $\geq$  80L / min, power:  $\geq$  1000kW

## 6. Operating cautions

6.1 The surface of the hot steel roll of the machine should be kept clean and frequently wiped in alcohol of high purity, thus eliminating the effect on the lamination.

6.2 When cleaning the machine, never wipe this machine with corrosive liquid to avoid damaging the machine body. Use soft dry cloth to wipe the machine.

6.3 After the lamination, cool the surface of the steel roll before stopping the machine, and lift the front steel roll and the rear rubber roll to avoid the deformation of the rubber roll surface.

6.4 Never use this machine for other purposes than film overlay. Otherwise, it may cause accidents or damage to the machine.

6.5The pressure setting value of the pressure gauge of the laminating roller should not be over 0.6MPa;

6.6When the machine is under 2m / min, the normal working speed should be

higher than 2m / min;

6.7When heating, please ensure that the machine is running at a low speed, so as to ensure that the temperature of the hot roll is uniform;

6.8When the actual temperature reaches the set temperature, please do not rush to wear the film. Wait about 10 minutes before wearing the film, because there is a temperature shock.

6.9After laminating, please lower the laminating roller to avoid the deformation of COTS caused by long-term closure;

6.10High temperature lubricating oil should be applied at intervals between temperature sensor and steel roller.

6.11 the oil window of negative pressure vacuum pump should be observed regularly. When the oil level drops, vacuum oil should be added; (as shown in the figure)

6.12This machine is equipped with the function of automatic stop for paper shortage. The detection sensor is as shown in the following figure. If there is a stop during the paper feeding process, please check whether there is no paper here first;



### 7. Assembly of machines

7.1Packing box disassembly:

7.1.1Remove the baffle, upper cover and fixed wood strips around the packing box in turn;

7.1.20pen the plastic cover;

7.1.3Remove the pressing plate and wood strip fixing the fuselage;

7.1.4Remove the machine from the bottom bracket (use forklift, lifting screw and lifting belt);

7.1.5Place the machine on the flat ground and lock the caster;

7.2Installation of rear paper receiving station

7.2.1Install the tray support rod, as shown in the following figure:



7.2.2Fix the rear paper receiving platform on the support plate as shown in the figure with hand screws, then turn it over along the direction as shown in the figure, and support the support plate on the support rod of the machine (the angle can be adjusted as required);



7.2.3As shown in the figure below, install the side baffle board on the paper receiving platform with M5 stainless steel hand screw and butterfly nut;



7.2.4As shown in the figure below, install the rear baffle board on the paper receiving platform with M5 plastic hand screw and baffle mounting rod;



7.3Installation of material roller support plate and material roller

7.3.1Use M5\*20 hexagon socket head screws to install the support plate of the air inflation shaft feed roller mechanism on the right support plate as shown in the figure;



M5\*20 socket head cap screw

7.3.2Install the slitting knife support plates on the left and right support plates of the machine respectively;





Slitter support plate

7.4Installation of slitting cutter and upper point line cutter mechanism

7.4.1As shown in the figure, insert the slitting cutter mechanism and the upper point line cutter mechanism into the support rod respectively;



7.4.2String the support rod into the slitter support plate hole, then install the baffle and fasten it with m5\*16 socket head cap screws;



M5 Socket head cap screw

#### Note: two people are required for this installation

7.5 Installation of auxiliary working platform;

7.5.1As shown in the figure below, install the auxiliary working platform on the main paper table;



Socket head cap screw

7.6 Connect the power line of the machine to the power distribution box;

# 8. Operating procedure and method of machine

8.1 Connect the air supply: turn on the  $\phi$  6mm compressor air pipe and  $\phi$  8mm vacuum pump air pipes are respectively inserted into the air source interface of the machine (as shown in the following figure):



Air compressor interface



Vacuum pump air source

8.2 Connect the power supply of air compressor and vacuum pump.



Vacuum pump power supply

8.3Turn on the host power switch. (the display is on at this time);



8.4Set temperature and speed

8.4 .1First press the pedal forward button, and then step on the foot switch to make the machine run;

 $\times$  Now, the speed shall be set below 2m/min.

8.4.2 Set the required temperature value for operation, and the machine will start to warm up.

\* The temperature value should be set according to the thickness of the coating, the color of the printed matter on the surface and the working speed. The setting value should not be too high at the beginning, so as not to affect the laminating effect. 8.5 Install the roll film as follows:

8.5.1Pull out the latch and open the feed roll support bracket.



Bolt

Feed roll support

8.5.2 Install the roll film on the inflation shaft (Note: Please place it in the middle based on the ruler);



8.5.3 Inflate the inflation shaft with the inflation nozzle to support the film roll paper cylinder;



8.5.4Rotate the handle shown in the figure below clockwise to preset the air inflation shaft tension;



8.6Loosen the fixed handle of Feida, and the direction of the key head will make Feida to the outermost position;



Feeder fixed handle



8.7 Turn the lifting switch of the paper table to "Down", Feeder switch should be in "Stop"", lower the paper table to the bottom position, and then stack the coated paper on the paper table



8.7.1 Loosen the fixing screw and open the front side board;



8.7.2 The paper to be covered with film is stacked on the paper table in turn; Note: the stacking should be in the middle as far as possible, and the left and right sides and the back of the stack must be neat;



8.7.3 Use the side backup plate to hold the paper pile respectively, and then fasten it with screws;

Note: the backing plate is not easy to stack too tightly against the paper, and there should be a gap of about 0.5 mm;





Side baffle

8.8 Turn the lifting switch of the paper table to "up" to make the paper table rise automatically, and it will stop automatically when it is in place,



8.9 Push Feeder forward to make the rear baffle board lean against the back of the paper pile, and then lock the fixed handle of Feeder;



8.10Adjust the blowing nozzle, brush and side baffle according to the thickness, width and length of the paper. The specific methods are as follows:

8.10.1Adjustment of the height of the middle blowing nozzle: clockwise adjust the screw blowing nozzle shown in the figure to rise, otherwise lower. Loosen the fastening nut before adjustment, and then lock it after adjustment.



8.10.2Adjustment of the height of the rear baffle board: loosen the screws shown in the figure below, adjust the height of the rear baffle board, and then tighten the screws (the rear baffle board generally needs to be flush with the paper or about 2mm higher than the paper stack).

8.10.3Adjustment of the front and rear positions of the rear baffle board: loosen the hand screws as shown in the figure below, adjust the front and rear positions of the rear baffle board, and then adjust the rear fastening screws (the rear baffle board needs to lean against the back of the paper stack, but cannot be too tight).



8.10.4Adjustment of air blowing nozzles on both sides: rotate the nut clockwise to raise the air blowing nozzle, and vice versa;

Notes: 1. The paper thin blowing nozzle can be properly raised to ensure that five pieces of paper can be blown away;

2. The left, right and front and rear positions of the blowing nozzle have been set at the factory, and generally do not need to be adjusted.



Side blowing nozzle

8.10.5Adjustment of brush on both sides:

8.10.5.1Height adjustment: rotate the nut brush clockwise to rise, otherwise it will fall;

8.10.5.2Adjustment of the front and rear position of the brush: loosen the fastening screw and adjust the position of the brush (it is generally necessary to press the paper stack, as shown in the figure below);

Notes : The left and right positions of the brush have been adjusted before leaving the factory. Generally, they do not need to be adjusted





8.10.6 Adjust the position of the paper pressing rod and the side baffle according to the paper width, loosen the fastening handle, and the paper pressing rod mechanism can move left and right. It should be placed on both sides of the paper stack, lean against the paper stack, and fasten it after determining the position;



8.11 Stop the machine and set the paper length value on the screen according to the actual length value of the coating.

\* Example of adjustment method: the actual length of the covered object is 450 mm, and the display screen value is set to 450. At this time, the lap edge between the front and rear sheets should be 0. If the front and rear paper lap edges are required to be 2 mm, the display value can be adjusted to 448. (Note: to avoid the glue of the lower rubber roller, please do not allow the gap between the front and rear sheets)

8.12Turn on the safety protection switch and remove the front protective cover;



8.13 Observe the actual temperature value in the display interface. When the actual temperature value is within  $\pm$  5 °C of the set temperature value, the membrane penetrating operation can be carried out. The specific methods are as follows:

8.13.1 Press the control buttons of the laminating roll and the rear pressing roll to open the laminating roll and the rear pressing roll respectively;



8.13.2 Feed the thicker paper (preferably 200g) with a length of 600mm or more from the front end of the front steel roller (as shown in the figure below).



8.13.3 The paper passes through the middle of the anti crimp device and passes through the rear traction roller to the position of the rear slitting roll;



8.13.4 Put the film through the guide roll, put it on the front hot laminating roll, and then bond it with the end of the paper; (as shown in the figure below)



X During this operation, do not glue the coated surface of the adhesive film on the steel roller. If there is glue, please remove it in time to avoid affecting the laminating effect.

8.14Install the front protective cover and close the safety protection switch;

8.15 Turn on the vacuum pump switch;



8.16 Turn the lifting switch of the paper dropping table to "stop";



8.17 Turn the control switch of Feida in the following figure to the reset position to reset Feeder;



Note: this step is to prevent Feeder from being out of position during the last shutdown. If it is in the original position, the suction nozzle mechanism has no action. If it is no longer in the original position, the suction nozzle will move automatically (if there is jamming phenomenon in the reset process, please manually assist its reset);

8.18Turn the Feeder control switch to "Auto" and the first sheet of paper is fed in.

Note: the first piece of paper fed by Feder may not be fully in place. Please hold the front end of the paper against the baffle manually;





First piece of paper

8.19Adjust the pressing force of the paper feeding auxiliary wheel and the brush wheel as follows:

Adjust the adjusting screw clockwise to increase the preload, otherwise decrease.

Note: the preload needs to be adjusted according to the different thickness of the paper. The general adjustment is as follows: one paper feeding wheel does not rotate, two papers are fed, and the paper can be rotated;



8.20 Close the laminating roller and traction roller, and then start the operation button. When the paper feeding wheel is lifted, place the second sheet of paper. When the end of the second sheet of paper reaches the position shown in the figure below, press the stop key to stop the machine.



Note: it is better to use waste paper with the same size and specification for the first few sheets of paper, so as to avoid waste due to improper adjustment of previous parameters; 8.21 Rotate the hand wheel according to the anti crimp schematic diagram to preset the anti crimp gear position;





Adjust the handwheel

8.22 The reference table is set according to the anti crimp position and cutting value, and the cutting value is set on the display screen;



Anti rolling gear





8.23 Install and adjust the position of the lower point thread cutter and press it down:

8.23.1Install the lower point line cutter device at the position shown in the figure below and tighten it by hand;



8.23.2 Loosen the fastening screw of the point line cutter mechanism with an After loosening the fixing screw, the point line cutter device can be moved left and right, and the screw is tightened after the position is determined;

Note: the point line cutter should be placed 10 mm away from the paper edge;



#### 8.23.3 Adjust the screw to press down the point cutter



Note: adjust the knife clockwise to press down, otherwise the knife will lift up. After adjustment, please lock it with nut;

8.24 Adjust the position of the press wheel as shown in the figure. The specific method is as follows: rotate anticlockwise to loosen the fastening screw, and then move the paper feeding pressure wheel mechanism horizontally to lock it after confirming the position;



Note: The position of paper guide wheel should be about 150 mm away from the right paper edge;

8.25 The specific method is as follows: loosen the hand screw, then rotate the bracket along the direction shown in the figure to determine the tilt angle, and then lock it after determining the position;



Locking screw

Note: 1. The tilt angle of the guide roller should be adjusted according to the different thickness of the coating. The thinner the coating is, the smaller the angle is, otherwise, the larger the angle is;

2.Viewed from the rear of the machine, the inclination angle of the left pressure roller should be larger and that of the right pressure roller should be smaller.

8.26 Set the working speed of the machine and press the "Run button". At this time, Feida starts to feed paper automatically and starts to cover the film.

8.27 After several sheets of continuous film covering, the machine can be stopped (the stop position is the same as that in 7.9), and the laminating effect, paper overlap size, cutting condition and flatness of the product after plastic coating can be observed; (Note: since there are many devices to be adjusted to avoid waste of paper in the early stage, this operation process should be carried out at a low speed);

8.28 According to the actual situation of the coated products, adjust the working parameters and fine tune the devices that need to be adjusted to achieve the best working effect;

8.29 After the parameters are adjusted and stabilized, the speed can be increased properly;

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\*Because speed, temperature, pressure and anti curling position are a group of matching factors, that is, the faster the speed, the higher the temperature and pressure required, and the higher the anti coiling gear. Therefore, if the speed needs to be changed during the operation, the temperature, pressure and anti rolling gear should be adjusted;

8.30 After working for a period of time, sort out and take out the products after laminating;

8.31Now a film covering operation is completed, it is necessary to cover the film again in a short time, and repeat the above feeding steps. If you replace the film covering, you need to repeat all the above steps.

## 9. How to use the slitter mechanism

9.1 Loosen the fastening screw of the slitting mechanism with an internal hexagonal wrench, and then move the mechanism laterally along the supporting rod, and put the mechanism down and press on the roll film to determine the position of the slitting cutter;



Note: the position of slitting cutter should be determined according to the required film width.

9.2 After confirming the position, lift up the point line cutter mechanism and fasten it with screws;

9.3 Pull out the fixing pin along the direction shown in the figure, and then put down the slitting cutter. At this point, the adjustment is completed. If it is necessary to fine tune, operate according to this method.



## 10.Application method of upper point line cutter mechanism

10.1Loosen the fastening screw of the dotted line mechanism with an Allen wrench, then move the mechanism horizontally along the support rod, put the mechanism down and press it on the roll film, and determine the position of the dotted line knife;

Note: the point and line knife shall be placed at the position about 10mm away from the film edge on the left side of the roll film;



10.2After determining the position, lift the dotted line cutter mechanism and fasten it with screws;

10.3Pull out the fixing pin along the direction shown in the figure, and then put down the knife. So far, the adjustment is completed. If you need to fine tune, just follow this method.



Note: the upper point line knife is for easier cutting and is only an auxiliary function (it is generally used for thicker film, such as more than 30mic. If the film is thin, it is not recommended to use it, because it may cause the film to be disconnected at the anti curl position);

# 11. How to use aluminum foil mechanism

11.1 Heating, placing paper on the paper table, setting the paper length and speed according to the steps in item 8;

Note: the operating temperature of aluminum foil is generally not 105  $^{\circ}$ C. In addition, please operate at the speed lower than 5m / min;

#### 11.2 Remove the point line cutter mechanism as shown in the figure;



11.3 Wear a piece of paper as described in item 8;

11.4 Wrap the aluminum foil around the guide roll and lap it on the laminating roll and bond it with the paper with adhesive tape;



11.5Pull the film to the slitting roller position with paper, and then install the special aluminum foil guide roller mechanism at the position shown in the figure and fix it tightly;

11.6 Wrap the paper around the guide roller as shown in the figure and stick it on the winding paper drum;



Special	device
for alumi	num foil

Aluminum foil guide roller

Paper reel

Note:

1.please pay attention to the rotation direction of the paper cylinder when bonding;2.The left side of the winding cylinder is equipped with a damping adjusting handle, which can increase the damping when it is turned clockwise and decrease on the contrary. As shown in the figure below:

Damping adjustment ~ handle



### 11.8 Turn on the fan switch;



11.9 Press the aluminum foil switch;



- 11.10 Adjust the paper guide wheel angle, do not tilt;
- 11.11 Start the machine running switch, the machine aluminum foil work will start;

## 12.Work to be done after operation

11.1 After the operation is completed, if the machine is shut down for a short time, please adjust the temperature value of the display screen to 80 °C; if it is shut down for a long time, please set the temperature value of the display screen to "----";

11.2 Lift the point line cutter;

11.3 Set the machine to the pedal operation mode and step on the foot switch to make the machine run without load and send the remaining paper out of the machine;

- 11.4 Return the anti crimp device to the first gear position;
- 11.5 Wait till the temperature drops, and raise the front hot laminating roll and the

top tractive roll.

11.6 Turn off the power switch of vacuum pump and machine and cut off the power supply;

11.7Turn off the air source and the operation is finished.

## 13.Film covering process guidance

13.1 Effect of film on coating quality:

13.1.1Confirm whether the selected roll film material and specification meet the use requirements of the machine. If not, it should not be used;

13.1.2Confirm whether the core of the roll film is flush with the edge of the film, and whether the two ends of the film are neat. If not, the film covering effect will be affected;

13.1.3Confirm whether the tension of the roll film is consistent, that is, whether the tightness of the film winding is consistent. If not, the film covering effect will be affected.

13.2Influence of printed matter on film covering quality:

13.2.1Check the dust condition on the printing surface. If there is too much dust, please handle it first, because the dust will affect the bonding strength and surface brightness;

13.2.2Check whether the ink on the surface of the print is dry. If the ink is not dry, it will affect the bonding strength. Inspection method: touch the printed matter by hand and it shall not stick to the hand;

13.2.3Check whether the surface of the printed matter is flat. If the surface is not flat, it is easier to curl or fold after heating;

13.2.4The thickness and color of the ink on the paper surface have an effect on the bonding strength and surface brightness.

13.3Effect of parameters on film covering quality:

13.3.1The temperature setting must be appropriate. If the temperature is too low, the bonding is not solid and the surface is hollow; On the high side, the film will shrink and deform, and the product will wrinkle, curl or even bubble locally.

13.3.2Speed is a coordination factor, which needs to be adjusted according to the actual conditions and temperature. The principle is that the faster the better on the premise of quality assurance, but the faster the speed, the higher the temperature requirements.

13.4Matching principle between various film covering conditions:

13.4.1Film and temperature - the thinner the film, the lower the melting point of the adhesive surface, the lower the temperature required, and the temperature required for the bright film is lower than that for the bright film. When the machine uses the bright film, the starting temperature is generally set to 100  $^{\circ}$ C, and the matte film is generally set to 110  $^{\circ}$ C;

13.4.2Print thickness, weight and temperature - the thicker the print, the higher the weight, and the higher the temperature. Generally, the printing temperature of this machine is set as (120 °C -130 °C) for printing products larger than 250g/  $m^2$  and (100 °C -120 °C) for printing products lower than 200 g/  $m^2$ ;

13.4.3Surface condition and temperature of printed matter - the thinner the ink layer on the surface, the lower the temperature required; otherwise, the higher the temperature required. The darker the surface color, the higher the temperature required, and vice versa. The rougher the printing surface, the higher the temperature;

13.4.4 printing and speed - the thinner the paper, the smaller the weight, and the faster the speed; The smoother the paper, the faster the speed; The thinner the ink layer, the lighter the color, and the faster the speed;

13.4.5 print thickness and anti roll position - the greater the print thickness and

weight, the smaller the anti roll position, and vice versa.

Note: there are many factors that affect the quality of film covering. During actual operation, the setting of anti roll gear of pressure, temperature and speed must be coordinated according to the actual situation.

Common phenomena	reason	resolvent
	<ol> <li>Notched cutter is improperly located</li> <li>Notched cutter is not depressed</li> <li>Inclination angle of the inclined guide wheel is</li> </ol>	<ol> <li>Adjust the position of the notched cutter as required</li> <li>Depress the notched cutter</li> <li>Increase the inclination angle of</li> </ol>
Low cutting efficiency or no cutting-off possible	small 4. The pressure of the inclined guide wheel is low 5. The inclined guide wheel is improperly located 6. The cutting position is improper	<ul> <li>5. Increase the memation angle of the inclined guide wheel</li> <li>4. Increase the pressure of the guide wheel</li> <li>5. Adjust the position of the guide wheel</li> <li>6. Increase properly the fine-tune value for cutting</li> </ul>
The two edges of the roll film shrink	<ol> <li>High temperature</li> <li>Low speed</li> </ol>	<ol> <li>Lower the temperature</li> <li>Increase the speed</li> </ol>
The roll film slacks in operation	1. Small damping of feed roll	1. Increase the damping of feed roll
The roll film generates sound during operation	1. Large damping of feed roll	1. Reduce the damping of feed roll

SF-540A		202205
The surface of laminated product is not clear and with white spots	<ol> <li>The pressure of laminating roller and traction roller is small</li> <li>Dust is present on the picture and text</li> <li>Film quality is poor</li> <li>Low temperature</li> <li>High speed</li> </ol>	<ol> <li>Increase the pressure according to the pressure regulation mode</li> <li>Wipe the surface of the picture and text clean</li> <li>Replace the film</li> <li>Raise the temperature</li> <li>Reduce the speed</li> </ol>
The surface of laminated product wrinkles and bubbles	<ol> <li>Glue found on the surface of hot laminating roll</li> <li>High temperature</li> <li>Low speed</li> <li>High pressure of laminating roller</li> <li>Pressure mismatch between laminating roller and traction roller</li> <li>The damping is not even on the left and right sides of the roll film</li> </ol>	<ol> <li>Clean the surface of steel roll</li> <li>Reduce the temperature</li> <li>Increase the speed</li> <li>Reduce the pressure according to the pressure regulation mode</li> <li>Adjust the pressure of the two rollers according to the pressure regulating mode</li> <li>Adjust the damping level</li> </ol>
Impress found on the surface of laminated product The laminated	<ol> <li>Over-pressure from the inclined guide wheel</li> <li>Excessive inclination angle of the inclined guide wheel</li> <li>Picture and text are not flat during lamination</li> <li>Position of the curling-preventing device</li> </ol>	<ol> <li>Reduce the pressure</li> <li>Reduce the inclination angle</li> <li>Improve the operating level</li> <li>Readjust the position of the</li> </ol>
product is not flat and curling-up or down are found	is improper 2. High temperature 3. Low speed	<ul><li>2. Reduce the temperature</li><li>3. Increase the speed</li></ul>

Motor stalling	1. Brush wear	1. Replace the carbon brush
Double sheet feed	<ol> <li>Improper position of blowing nozzle</li> <li>There is electrostatic adsorption between the paper</li> </ol>	<ol> <li>Adjust the position of blowing nozzle</li> <li>Shake the paper loose before stacking</li> </ol>
No paper suction	<ol> <li>Positive empty pump switch not on</li> <li>The air pipe of positive air pump interface is disconnected</li> </ol>	<ol> <li>Turn on the switch</li> <li>Connect the trachea</li> </ol>

## **15.Technical service**

As our users, you will receive our dedicated technical service and support. When you need us, you can contact your local dealer or our company directly.

The company's products have a one-year warranty period from the date of delivery, but only for users who comply with the installation and operation instructions. During the warranty period, if the machine parts are defective or damaged, the company will replace them free of charge or with compensation. The technical department of the company is the only organization that has the right to confirm whether the damage is within the scope of quality assurance. The quality assurance does not cover the direct or indirect loss or damage of people or objects caused by incorrect operation or unauthorized disassembly and maintenance, but is limited to the damage of materials and components (excluding the normal wear and tear of all components).