

YDFM-720、920、1200
HYDRAULIC QUICKLY LAMINATOR

USER MANUAL

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PREFACE

Dear users:

Welcome to use our products!

Do read installation and operation manual before make use of it.

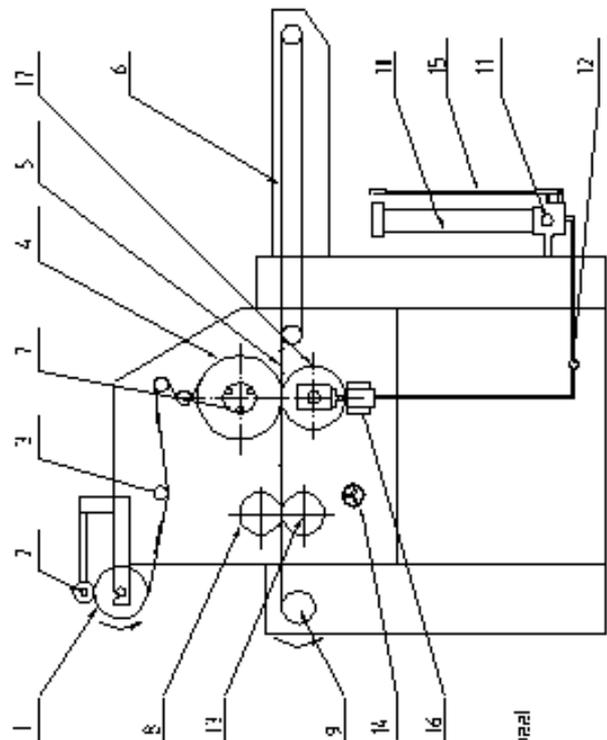
Make ensuring normal operation and good working condition.

1. Profile

YDFM-720、920、1200 quickly laminator is the newest product of our company which is introduced the advanced technology from abroad. This machine is advanced in design, compact in construction and convenient to use, it is mainly used to compounding automatically single or double sides of printed products by BOPP thermal film. After laminating, the printed products are smooth in appearance, bright in color and strong in intensity. It can widely apply to surface of laminating film for cover of books and periodicals, drawing sheet, advertisement papers, packing box and etc. Besides, it has big and even pressure force, high laminating speed with automatic temperature control and speed regulation

2. Main specifications

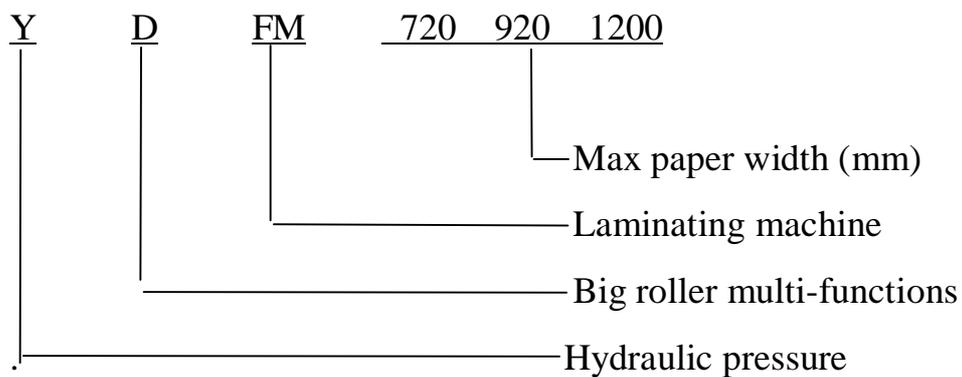
Model	YDFM720	YDFM920	YDFM1200
Width of laminating	620(mm)	820(mm)	1100(mm)
Speed of laminating	0-40m/min	0-40m/min	0-40m/min
Temperature of laminating	60-130℃	60-130℃	60-130℃
Power of motor	1.1KW	1.5KW	2.2KW
Heating power	4KW	6KW	6.5KW
Voltage	380V	380V	380V
Whole weight	400Kg	500 Kg	600 Kg



- 1 film material
- 2 cut knife
- 3 film-directing roller
- 4 front heating-roller
- 5 bracket
- 6 transportation belt
- 7 heating pipe
- 8 back pressure roller
- 9 windup roller
- 10 hand pump for pressure regulation
- 11 valve
- 12 valve
- 13 back pressure roller
- 14 back pressure roller adjusting handwheel
- 15 handle
- 16 pressure device
- 17 front pressure roller

FIG1: YDFM720,920,1200 high-speed film coating machine

3. Type introduction



4. Structure and Working Principle

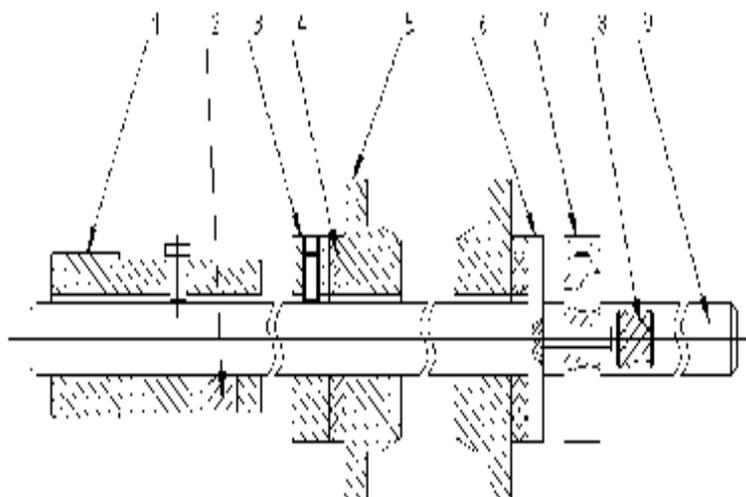
This machine is consisted of machine base, transmission mechanism, front and back rubber rollers, pressure adjustment mechanism, electric system etc. When laminating for single-side, its working principle is that: thermal film and the paper will pass through the front pressure roller 4 and 17 which has been heated to a certain degree; the glue on the thermal film will be melt and stick to the paper because of high temperature and pressure. And after being compounded by back pressure roller 8 and 13 again, it will be passed out and received by paper rewinding roller.

5. Adjustment & use of machine

5.1 Check the spare parts of the machine before first use, the machine shall be placed evenly.

5.2 Connect well with power supply; the machine shell connected to the ground should be in good condition.

5.3 Installation of film.



1、Seat ring 2、Install frame 3、Seat ring 4、Frictional ring 5、Tail
6、Distance piece 7、Seat adjusting ring 8、Adjusting screw 9、Film axis

- (2) 4: Installation axis of roller

5.3.1 The fig2 is the film shaft; take down the two thimbles and press them into film paper roll.

5.3.2 According to the width of the film, fix the stopper ring on the left side of the shaft and also fix the positioning jacket on the left side of the shaft, and then install the film on the shaft.

5.3.3 Insert the second friction piece and gasket, and then put into the positioning adjustable ring (the adjustment screw should retreat to inside of ring) close to gasket. Tight the screw and fix the adjustment screw on the gasket. More tightly, more tension of the film, it should be up to the requirement.

5.3.4 Place the shaft and film on the installation bracket, the position of all different components are shown on fig2, the position must be placed correctly. The adhesive face of film should be faced down when film pull down.

5.4 The use of film cutting knife

5.4.1 This machine adopts round cutting knife and it has been fixed on the tool carrier, and the tool carrier is fixed on the tool carrier shaft. Use stopper rings to fix onto the left and right of tool carrier.

5.4.2 Support the tool carrier by hand, pull up the pin of tool carrier, put down the tool carrier gently, and make the cutting knife piece press on the film.

5.4.3 Adjust the position of tool carrier according to the length of film need cutting, and then tighten the stopper rings. After this, use gummed tape to stick the film head, then the film will be cut separately with machine running. And the film being cut will remain in the film roll.

5.4.4 If do not use for cutting film, only need to lift up the tool carrier up gently, and the tool carrier will automatically fasten to the cutter shaft without turning and falling.

5.5 Operation method

When laminating, make the thermal film roll installed in the middle, connect with power supply, the red light is on, means that it has been with electricity. Press down the start button, the green light is on, means that there is instruction on temperature controller, adjust the temperature controller to the needed laminating temperature (generally at appr.80-100

degree) 80%. Adjust the speed button to let the motor rotate with low speed, and make the heating roller heated evenly. After the temperature rises to the needed degree, then set the temperature to the needed laminating temperature again. This temperature is set by hand and with automatic control, and it also directs to show the surface temperature of heating roller. Press down the handle 15 of oil pump again and again until attain to its needed pressure. The needed pressure is decided by the thickness of laminated paper. Generally, it will adjust the pressure according to the following data to reach the best lamination results. Then make the thermal film(the glued surface is downward) and the paper pass through the front pressure rollers 4 and 17 together, and pass through the back pressure rollers 8 and 13 again, then rewind on paper receiving roller and sent out directly. Compare with thickness of paper and pressure of machine

Thickness	pressure
80~127g/m ²	2MPa
127~250g/m ²	4MPa
250~350g/m ²	6MPa
Over 350g/m ²	Over 6Mpa

6. Maintenance

6.1 The front roller should increase pressure after machine running, and discharge pressure before machine stopping.

6.2 Add a little lubricating oil in chain wheel and bearing once half a month.

6.3 If the machine doesn't work for a long time, it should make the front and back two groups of pressure rollers loosen lest the roller will be deformed because of longtime being pressed.

6.4 Keep each roller clean. If dirty, you can use the cotton dipped with water less alcohol to clean it.

6.5 Common trouble and elimination

Fault	Cause	Method
Machine can't start	1. Fuse melts 2. Voltage abnormal	1. Exchange fuse 2. Check whether power and voltage is normal
Temperature rise too slowly or can't rise	1. Electrical heat pipe is damaged 2. Temperature controller is out of control	Exchange the electrical heat pipe and temperature controller
Wrinkles on the surface of laminated product	Adjustment for front and back pressure rollers is not improper.	Adjust the pressure roller to make the pressure even
Fog or white spot on the face of laminated product	Temperature set too low	Raise temperature
Sticking force between film and paper is not strong enough	Pressure of pressure roller is not enough	Adjust pressure
Too big difference between measured and set temperature	Temperature measuring couple not pressed on rolling pipe	Adjust setup position to make it pressed on the face of rolling pipe
Temperature out of control	Double-side control silicon is damaged	exchange

7. Electrical systems

7.1 YDFM-720\920\1200 electric principle chart (PAGE 3).

7.2 Attention notes:

7.2.1 If start the machine for the first time, please must connect it to the grounding device to make the machine in good ground-connecting condition.

7.2.2 User can not randomly increase the capacity of electric system's fuse. Our factory won't be responsible for any quality accident resulted from such act. Do not use copper wire instead of fuse.

The wire connecting method of JDIA electromagnetism speed adjusting motor has been indicated in diagram 4. Wire connection method of temperature indicating regulator's ends has been indicated in diagram 5.

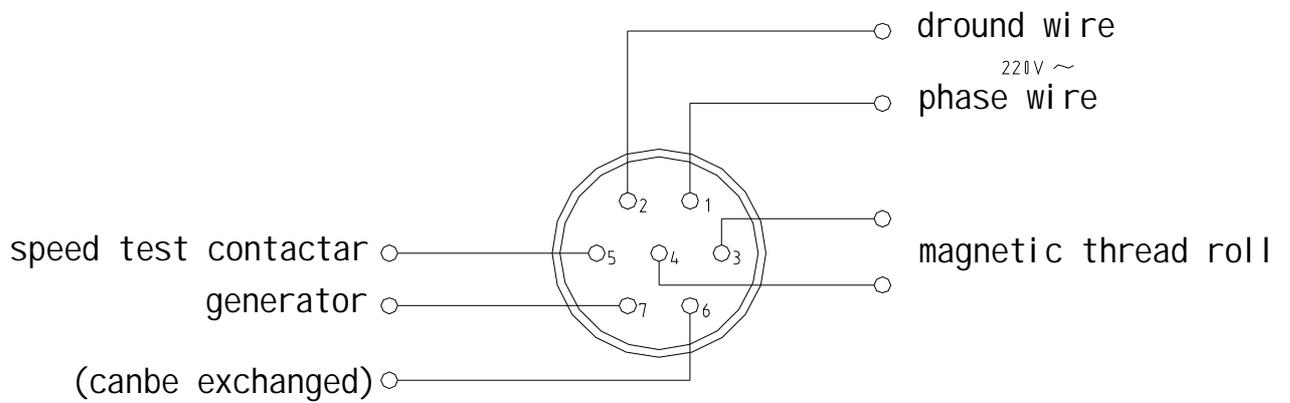


Diagram 4:
wire connecting of electromagnetism speed adjusting motor

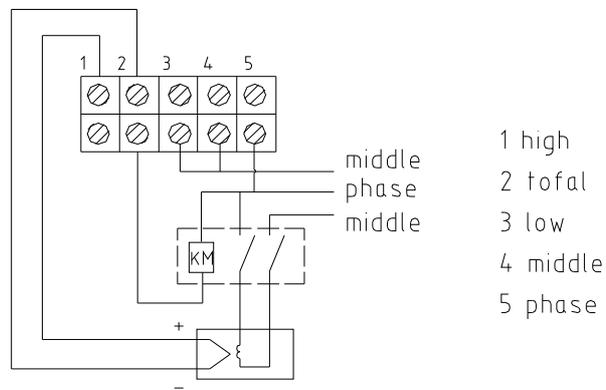


Diagram 5:
wire connecting of temperture indicating regulator's ends