

BGD 626

Multi-section

Ink Proofing Press

INSTRUCTION

MANUAL



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1. General introduction

BGD 626 Multi-section Ink Proofing Press is the newest product used for the testing the adaptability of ink printing. Compared with other type, it has many features as below:

- Competitive price
- Ink distribution automation with distributing time modified; easy to use and clean
- Printing pressure can be adjusted to fit for a variety of substrates via simulating pressure adjustment of a print press.
- Speeds of ink distributing and printing can both be adjusted.
- 80% of the parts and accessories are chosen from brand names to ensure durability.
- Exclusive self-developed rubber rollers
- Four different colors can be printed and checked or four different density of same color can be made; also fit comparison for different batches of ink.
- high repeatability and reproducibility.

2. Specification

- Size of stamping specimen: 4~200×40mm (four strips)
- Ink Distribution: Ink distribution automation with modifiable distributing time
- Printing Pressure: can be adjusted to fit a variety of substrates via simulating pressure adjustment of a print press
- Speeds of Ink Distributing and Printing: can be adjusted according to the characteristics of ink and paper
- Speed of average ink roller: 0~900r/m
- Time of average ink: 1~50 second
- Print pressure: 0-2MM
- Electrical source: 220V; Power: : 250W (saving electrical power design)
- Dimensions of machine: 525X430X280mm
- Length of roller platen: 225mm (maximum printing area: 225mm×210mm)
- Weight: 75KG



3. Operations

3.1 Turn on the machine; enter the panel showing company information

3.2 Then the panel show Time “T1 T2”, Distributing Speed and Proofing Speed.

3.3 Press “SET” button to enter the Distribution Setting Selection Mode; then press “△” or “▽” button to select “Mode 1”, “Mode 2” or “Mode 3”.

3.4 Press “◀” button to enter the Distributing Speed Selection Mode; then press “△” or “▽” button to select “High Speed”, “Median Speed” or “Low Speed”.

3.5 Press “◀” button to enter the Proofing Speed Selection Mode; then press “△” or “▽” button to select “High Speed”, “Median Speed” or “Low Speed”.

3.6 Press “◀” button to enter the Time “T1” Setting Mode; then press “△” or “▽” button to setting T1.

3.7 Press “◀” button to enter the Time “T2” Setting Mode; then press “△” or “▽” button to setting T2.

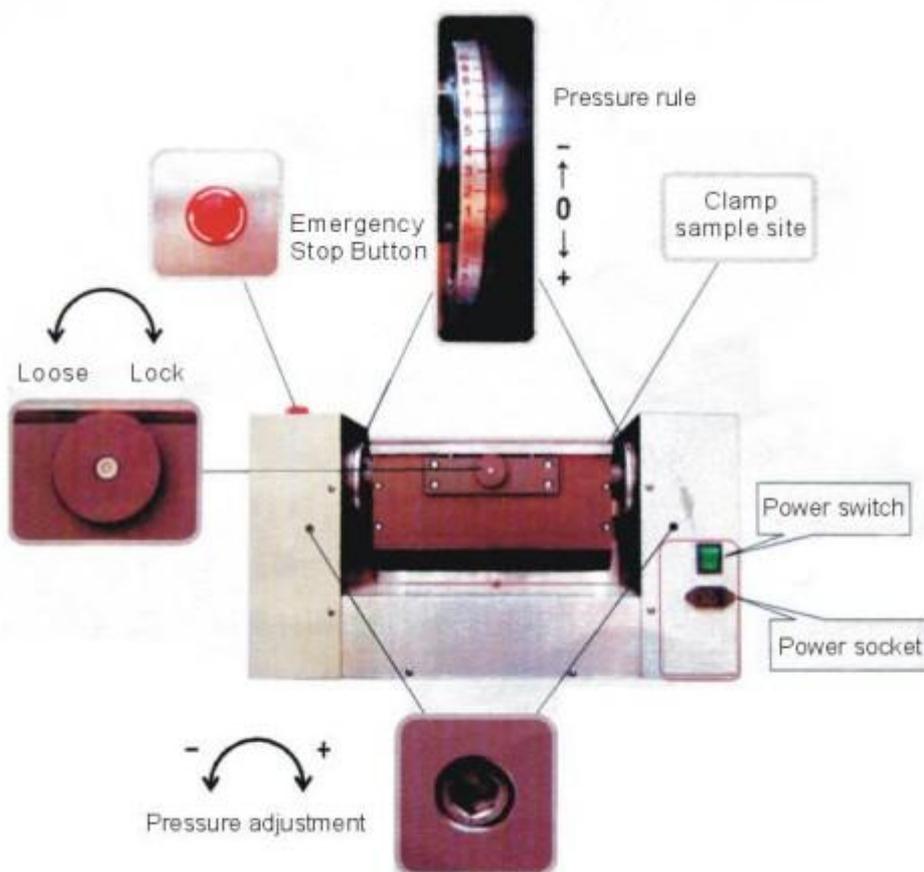
3.8 Press “SET” button to quit the Setting Mode and save the Setting Parameter.

3.9 Press “Washing” button to enter the Washing Mode; then press the “Washing” button one time to

3.10 Press “Start” button to enter the selected Distribution Mode; the machine will auto-stop after completing the process; during the process, press “Stop/Reset” button to force-stop.

3.11 During distributing or washing process, press “Emergency stop” button to stop all the processing mode; after unlocking the “Emergency stop” Mode, press “Stop/Reset” button to continue the previous process.

3.12 Press “Proof” button to enter the selected Proofing Mode; the machine will auto-stop after completing proofing process.



How to adjust the pressure between two rollers



Control Panel

4. Trouble Shooting

4. 1. Sample printed by the Multi-section Ink Proofing Press are not coherent with those from printer

Reason	Examination & Solution	Reference Column
Roller platens are unclean.	Examination: stop the machine before filling ink; erase the platen by using a white cloth with solution to examine whether the cloth is dyed. The color of frontal part is nonuniform from the hinder part or there is sand holes on the platen are the unexpected situations. Solution: wash the platen by using abluent, or scour it repeatedly.	Primary Cause
Non-uniform thickness of ink-layer.	Examination: observe by eye or test by instrument Solution: control the quantity of ink during proofing process.	Test the quality control bar by spectrophotometer and by eye.
Ink is not dispersed homogeneously.	Solution: extend the distributing time or improve the distributing method.	The proofing ink is not coherent with the ink in duck
The water in tank is unclean.	Examination: observe by eye when it is contained by a transparent container. Solution: change water.	Obvious effect on the light or bright color
Ink is oxidized.	Examination: measure pH value by using pH meter; measure roller platen temperature by using infrared radiation thermometer. Solution: adjust pH value, conductivity, water shortage or roller platen temperature.	In general, the () is active, the other ink is inoxidable.
Ink is over emulsified.	Examination: measure ink emulsifiability by using emulsification tester. Solution: adjust pH value, conductivity, water shortage, roller platen temperature or change appropriate ink.	Caused by the insufficient water since the constantly contact between ink and fountain solution. Generally, the hue is not hugely affected, but the ink will become 3% shallower.

4. 2. Proofing unevenly

Reason	Examination & Solution	Reference Column
Insufficient distributing time or wrong distributing method.	Examination: observe whether the ink attach with the platen homogeneously. Solution: extend distributing time; use metal and rubber platen to distribute ink intermittently.	Distribution must be intermittent so that the ink can be dispersed homogeneously.
Rubber platen or main axletree is damaged.	Examination: take apart the platen or axletree to observe. Solution: change the damaged part.	Platen and axletree are made in Germany or Japan.

4. 3. Color is distorted

Reason	Examination & Solution	Reference Column
Insufficient pressure (especially for lubricous surface).	Examination: press "Emergency Stop Button" during proofing to examine the width of the ink bar. Solution: adjust the width of the ink bar to 5-6mm	The width of ink bar can be adjusted by adjusting the pressure device.
The substrate has poor adhesiveness or deep grain.	Solution: take a little ink, dilute it with transparent ink (lacquer varnish) to reduce the viscosity and increase the fluidity, and then enhance the proofing pressure.	Modify the viscosity and fluidity of the ink has little effect on the color. Retain the adjusted ink for color matching next time can obtain higher accuracy.

5.0 Factory-adjusted Parameter of S type Frequency controller

RUN	Selecting button
STOP/RESET	Stop/reset button: stop process and return after unexpected suspend
MODE	Function display button: show the condition of the AC drive, such as frequency instruction, output frequency, current output, physical quantity and parameter group.
PROG/DATA	Data confirm button: enter the data after modify the parameter

F 50.0	Setting the master frequency
H 0.00	Actual working frequency
End	Input is affective
Err	Input is ineffective

These parameters below need to be amended after resetting data: (*must be amended)

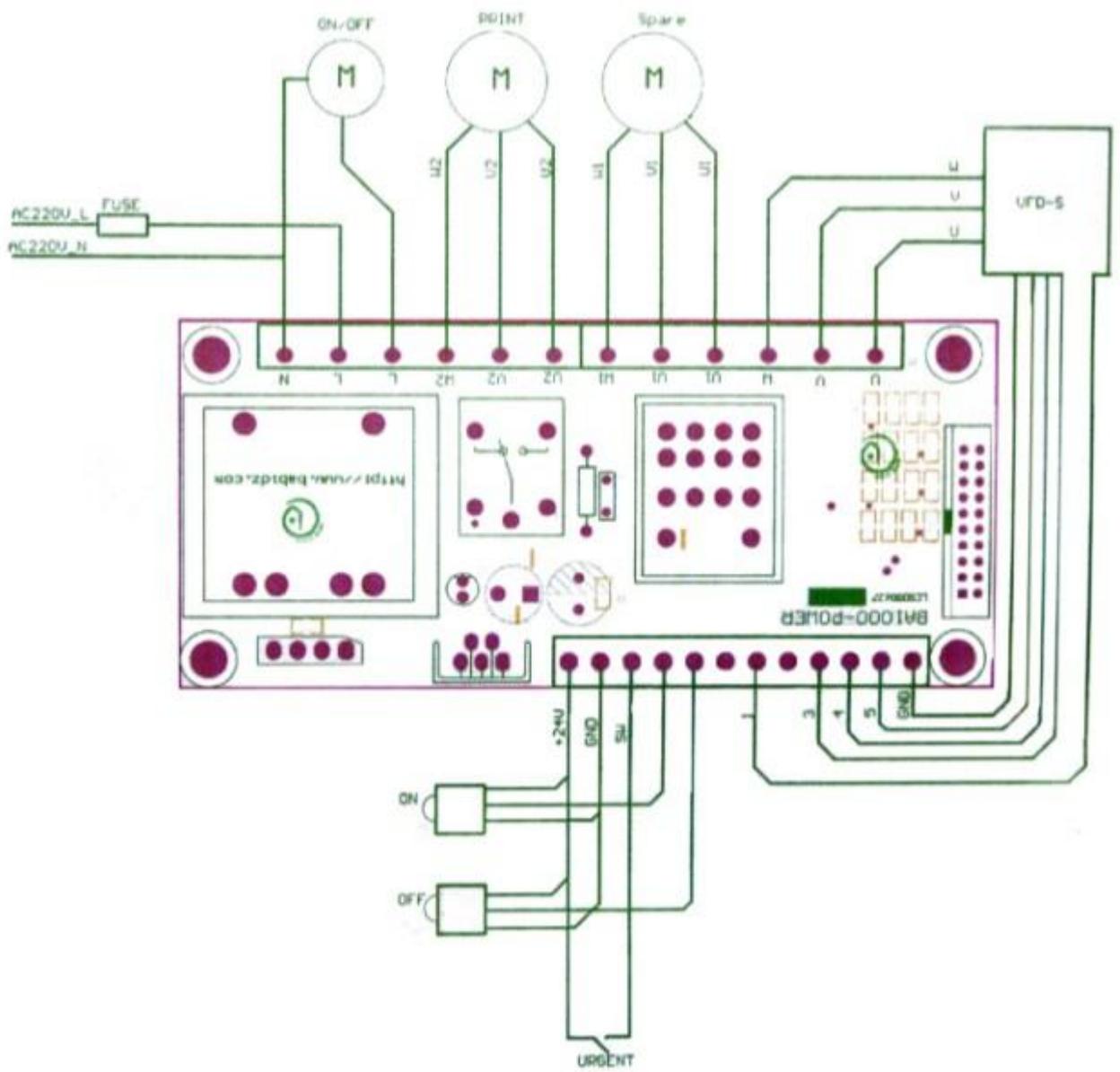
1-09	1st acceleration time	d10 à d2
1-10	1st deceleration time	d10 à d0.05

2-10	* running instruction resource setting	
	Range of set value	d0 à d8

2-03	PWMF carrier frequency	d10 à d8
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5-00	*Slow distributing speed	d 31.7	500 r/min	0-900 r/min
5-01	*Media distributing speed	d 41.1	650 r/min	
5-02	*High distributing speed	d 50.5	800 r/min	
5-03	*Slow distributing speed	d 23.5	10 r/min	0-25 r/min
5-04	*Media distributing speed	d 36.5	15 r/min	
5-05	*High distributing speed	d 45.5	20 r/min	

7-00	Rated current of motor	d85 à d48
8-00	*DC braking voltage quasi-phase	d0 à d20
9-00	*Time of starting DC brake	d0 à d 0.3



Circuit Diagram