

BSC Serial TS Model Paper Bag Making Machine



I. Overview

Serial TS Model Paper Bag Making Machine, is suitable for the mass bag production, it is the first choice of medium and top-grade handbag device. This product adopts mechanical, electricity, light, gas integration technologies, combines and uses the paper as raw material finish: paper feeding positioning, die-cutting tube forming, gusset forming bottom opening, bottom cardboard inserting and automatic bottom gluing, Seamless viscose (hot melt adhesive), then compaction output adopt the PLC programmable control frequency control technology to realize the integral multidimensional control, more centralized control and single point remote control operating. Our product is character by good quality and high efficiency, its technology ranks leading level in domestic similar products.

II. Precautions



The structure of this machine is sophisticated, and the whole machine length is up to 17.5meters. Please pay attention to following warnings when transport, move, operate or maintain the machine.

(1) Transportation, installation

- 1. The machine should be dismantled into certain segments during movement or transportation. Please note that the central part of the machine segment can not be off center, lest the equipment should be damaged. (Figures 5, 6)
- 2. After installation, adjust the foot screw of the machine to place the equipment stable and balanced, and also maintain the horizontal level of the whole machine.
 - 3. Spatial dimension of the machine (Fig. 4)
- 4. The equipment enclosure must be grounded, to avoid electric leakage, electric shock and lightning stroke.

(2) Use

- 1. Please read the manual before using.
- 2. Warning: Pay special attention to the position where warning signs are showed.
- 3. The operator must go through qualified training.
- 4. Do not place any objects on the equipment, and tools should be put on the predetermined position
 - 5. The machine should be checked to be safe and normal before power on.

Alarm button should be pressed before starting the main machine. (Long warning tone)

6. Stop the machine and turn off the power immediately once faulty operation occurs. Only allow professionals for inspection.

(3) Maintenance

- 1. Maintenance personnel must be trained and qualified.
- 2. The equipment must be carried out in power off condition.
- 3. Check the functioning parts and add lubrication oil regularly.
- 4. Keep the device clean.

III. Introduction

1. The working principle and characteristics:

Automatic Feeding \rightarrow Die Cut $1\rightarrow$ Edge Matching \rightarrow Folding Mouth Before \rightarrow Folding Edge \rightarrow Set of Mouth \rightarrow Side gluing \rightarrow Tube making \rightarrow Bottom Edge Die Cut \rightarrow Bottom folding \rightarrow Put Base Card \rightarrow Edge Pasting \rightarrow Bag output

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Technical data

Machine Size 17200mm×1800mm+4500mm×1800mm

Total Weight 14T Production Power 20Kw

Max. Sheet 580mmx1150mm Min. Sheet $290 \text{mm} \times 520 \text{mm}$ Bag Width 160mm-450mm 200mm-550mm Bag Height Tube Height 65mm-180mm paper Weight 100g-350g Top Folding Width 25 mm - 60 mmReinforced paper Length 410mmx150mm Reinforced paper Width $20 mm \times 55 mm$ Reinforced paper Weight 200g---400g 160mm--425mm Bottom Cardboard Width Bottom Cardboard Height 60mm---175mm Bottom Cardboard thickness 200mm--600mm interval ≥2mm

Speed 50-70pcs/min

- 3. Main structure and function
 - (1) The main structure: (Fig. 1)
 - (2) Parts functions:
- a. Paper feeder section: ⊕Paper platform, ⊘Elevator, ⊙ Paper feeding part, ⊕
 Control box II

© Elevator: automatically maintain the height of paper stacking, and protect the high and low limit position

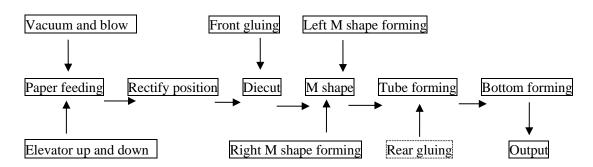
3 Paper feeding: suck the paper sheet one by one automatically, and convey the papers to the paper delivery board

⊕ Control cabinet II: control the up and down of paper platform automatically or manually



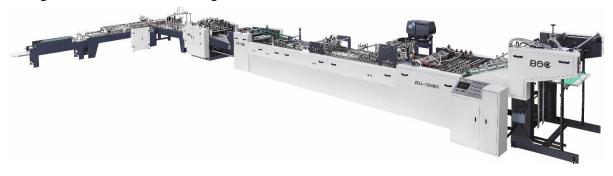
- b. Paper delivery board: arrange and deliver the paper sheet neatly and accurately to gauge, and locate X, Y axis position by lay gauge and tilt-shift.
- c. Tube forming part: fold "small brim" (gluing line), fold "M" sides, and then gluing it to be a bag tube. Different sizes of bag tube should be adjusted in this process.
 - d. Composite pressurized discharge unit: the paper tube will be pressurized and glued at this part, and then will be delivered out and counted.
- e. Vacuum pump: separate the paper sheet by blowing air and deliver the paper sheet by sucking air for the feeder
- f. Electrical control box (I): The machine is equipped with three kinds of operation that are remote control operation, HMI operation and panel button operation.

4. Bag making procedures: Figure.2



IV. Testing and operation

1. Connect the power supply, close the main power switch in electrical box, turn on the power switch on the control panel, HMI start-up procedures, click on the "BSC" pattern, and then get into the normal working scree



n.

- 2. Stack the paper neatly on paper platform, press rise button of paper platform to make the paper close to the sucker of feeder, adjust vertical and horizontal hand wheel of feeder, and position the paper feeder in the middle of the paper.
 - 3. Press the "Start Warning" button on the remote control, make long signal sound "di".



- 4. Try to slow down when testing the machine, so as to facilitate the observation of each process of paper feeding.
- 5. Press the "Paper Feed" button, then press "vacuum" button to open the vacuum pump.
 - 6. Press the "Inching" button to feed paper, entering testing state.
- 7. According to the paper moving process, to "rectify" paper, "align" paper, "crease" paper, "fold small edge", "fold M edge", gradually adjust each process of square tube forming until meet the requirements.
 - 8. Add glue into glue box.
 - 9. Press the start button "Host" ("Main machine") to enter the normal production.
- 10. Press the "Emergency stop" button when failure or emergency occurs. Only allow to continue to work after failure being solved timely.

V. Breakdown and solution

Similar breakdown		Reason analysis	Solution	
oreand with	The power supply has not been connected.	Bad contact to the power socket.	Inspect the power socket to re-connect.	
		Air controlling switch trips.	Inspect the electrical parts and replace it timely.	
Machine does		Start switch has problem.	Replace a new switch.	
not run when		Power supply is lack of	Measure the power supply and	
start.		phase.	re-connect.	
	Parameters in touch screen have not been		Re-set the parameters in touch	
	set.		screen.	
	The frequency of frequency changer is 0.		Adjust the frequency of	
	The frequen	ey of frequency changer is 0.	frequency changer.	
Vacuum pump does not run normally.	Vacuum is not enough.	Pipe lines are clogged.	Remove the blockage and adjust the vacuum pump.	
	Air blow is not big enough.	Interior humidity of air blow pump of vacuum pump exists.	Open the pump cover and use electrical hot dryer to blow it dry.	
Remote control	The voltage of battery in remote control is not enough.		Replace the battery	
does not work.	Remote control system goes bad.		Replace the remote control system.	
Paper sheets do	The position	of paper feeding is not right.	Adjust the vertical and	

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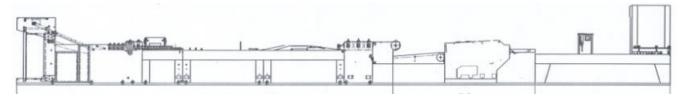
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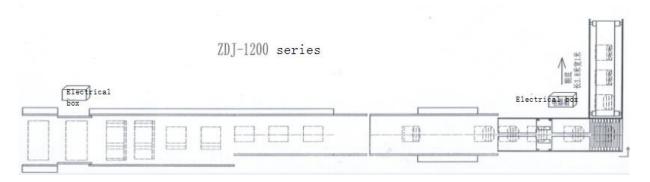


not move		horizontal position of the paper
normally.		feeder.
	The paper sheet is folded in correct position.	Adjust the folding parts.
	The specification of paper is out of range.	Choose suitable paper.
D 1 1 '	Not enough glue is added.	Adjust the gluing parts and add enough glue.
Dad gluing	Glue problem (Glue is different when in winter and in summer.)	Change the glue.

VI. Spare parts (along with machine)

VII Machine schematic diagram Fig.1-6





Electrical diagram:



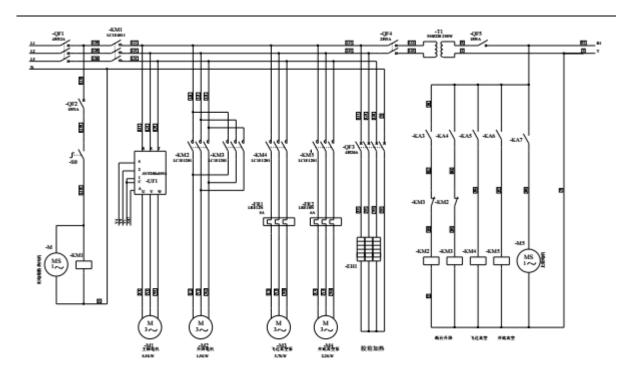
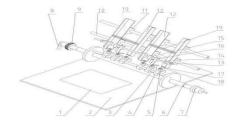


Fig. 1



- (1) Paper (2) conveyor belt (3) suction nozzle mounting shaft (4) suction nozzle regulating seat (5) suction nozzle
- (6) suction shaft (7) blow slip ring (8) suction rotating joint (9) suction shaft drive wheel (10) brace shaft
- (11) clamping slot adjusting seat (12) front card placement slot (13) pressing card bracket (14) mounting shaft (15) pressing card
- (16) Front block card (17) side block card (18) lower block card (19) front card

 The working principle of fig. 1 is as follows: when the photoelectric system con-

The working principle of fig. 1 is as follows: when the photoelectric system senses the bag paper 1 entering the pre-sticking process of the portable paper bag, under the control of the electronic control

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system of the whole machine, the glue is sprayed by the glue spraying system in the sticking position of the bag paper 1, and then the bag paper 1 continues to be transported to the suction card shaft 6 by the conveyor belt 2. The suction nozzle 5 starts to work when the bag paper 1 is sensed by the optoelectronic system to enter the process of the bag sticking front card of the portable paper bag at the same time the suction rotating joint 8 is turned on and starts to inhale (at this time the positive pressure connected with the blowing slide ring 7), the suction nozzle 5 absorbs the front card 19 placed in the front card placement slot 12, and the front card 19 is adsorbed on the suction nozzle 5. At this time, the servo motor (not drawn) The front card 19, which is sucked on the suction nozzle 5, rotates at the same linear speed as the bag paper 1 on the conveying platform 2, so as to ensure that the synchronization of the front card 19 and the bag paper 1 is stable. When the card 19 rotates directly below the suction shaft 6 with the suction shaft 6 on the suction nozzle 5, the card position of the bag paper 1 also reaches directly below the suction card shaft 6. At this time, the suction rotation joint 8 closes the suction while the blowing slip ring 7 turns on the positive pressure and starts blowing, so that the front card 19 leaves from the suction nozzle 5 and sticks to the card position of the bag paper 1. The card is affixed to the bag paper 1 and the blow slip ring 7 The positive pressure is disconnected, the front card 19 is affixed to the paper bag and continues to be transported with the bag paper 1 to the back leveling process with the conveying platform 2; at this time, the suction card shaft 6 continues to rotate under the servo motor to make the suction nozzle 5 turn directly below the front card placement slot 12, waiting for the next bag paper 1 to enter the working order of the front card of the portable paper bag, so circulation.

List of random accessories

S/N	Item	Specifications	Quantity	
1	sucker (white)	Ø13.8 x Ø13	20	
2	sucker (vacuum chuck)	32 x 36 x 8	10	
3	sucker (red)	Ø20x15(高)	30	
4	Paper dividing blade		30	
5	Helical gear (grooveless)	ø25 x ø55	3	
6	wheel (white)		2	
7	wheel		2	

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			1		
8	Chain buckle	3分	4		
		4分	4		
		5 分	4		
9	leather belt (red)	ø5	4.5m		
10	leather belt (XH-30)	6250 x 30	1		
		1272-8m	1		
		M8-432-15mm	3		
11	locking-in range on	HTD1246-14M	1		
11	synchronization	B1397Li*1437LD	2		
		1472-8m	1		
		1960-8m	1		
10	Bearing (card slot)	Z6005	2		
12	bearing	Z6005	2		
13	Small open bearing	25vv	1		
14	lesh estab	Ø15	2	HD. 3-1-1A	
14	lock catch	ø25	2	AD. 3-7-1A	
15	1 :	120 长	2		
15	sword iron	180 长	2		
10	gas pope joint (Cu)	Ø8−M8X1	4		
16	Trachea elbow (Cu)		4]	
17	hand valve	4H210-08	1		
18	rubber wheel		1		
19	Wire wheel		1		
20		45	1		
		60	1	A + - + - 1 - 6 7	
			70	1	A total of 7 species
	cam B (L / R)	80	1	(including installed	
			90	1	machine)
	-	100	1		
		110	1		
			1		

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21	Omnipotent locking	Ø12	2	
22	Fanda platform	plank	2套6块	
23	air cylinder	16×40	1	
	Suction bracket (AL)	260*60	2	
24	DKJ Expansion platform (AL)	80mm*230mm	2	Need to be equipped
		100mm*230mm	2	with screws
		DK430. 3-10	2	
	Suction screw	DK430. 3-10-2	2	
25		DK430. 2-19	2	
20	copper sheathing	DK430. 2-18	2	Ø8 * 22
	annina	Ø10*40	8	
	spring	Ø1 0* 31.5	5	
26	Trap bar		1	
27	damper		1	
28	Pipe Joint	8to6 (blue)	2	
29	Swing arm	(L / R)	1	KD430. 2-11
30	Dina laint	T	2	
30	Pipe Joint	Y	2	
31	air tube	ø8	3	
32	Side Clamp on the Hub for	30mm	3	
32	Forming Bottom (L / R)	22mm	1	
33				
34				
35	optic axis	Ø12 x 60	4	
		Ø12 x 160	4	
		Ø12 x 240	2	Ø12 * 215
		Ø10 x 45	4	
		Ø10 x 75	4	
		Ø10 x 135	4	
		Ø10 x 165	4	

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			ī.	
		Ø10 x 105	4	
36	Pull spring	Ø10 x 50 x Ø1.2	3x2	
		Screw		
37	Machine heelpiece	Block	48pcs	
		M16nut		
38	Button base	ZB2BZ101C	1	
39	Relay base		1	
40	Ac energy receiver	LC1N1201M5	1	
41	midget relay	RXM2LB2BD	1	
42	proximity switch	E3-D4NK-M	1	
43	photoelectric switch	CX-441	1	
44	2 file button	ZB2BD2C	1	
45	PTFE TAPE		1	
46	ribbon	Medium	40	
47	screw	M3*5mm	20	
48	Semicircular screw	M6*15mm	10	
49	air cylinder	16*100	1	
		M8*25	4	
50	Adjustable fastening screw	M10*25	4	
		M12*63	2	