

想針华務即打样机 Proofing Roller Sublimation Machine 操作说明

Operational Instruction



ZS-BA20120 ZS-BA20170



煮言 Preface

- 非常感谢您选用至上印花机械滚筒式升华转印机器。
- 本手册为您介绍热转印机器的安装、操作、功能设置和故障诊断、排除等事项。
- 不正确的安装和使用可能会导致热转印机的损坏或发生其他意外事故。在装机之前,请务必详细阅读本手册并正确安装和使用。
- 转印机长期运行在工业场合中,由于环境的温度、湿度、粉尘及操作的影响,机器本身的器件的老化及磨损等原因,都会导致转印设备潜在故障的发生,因此有必要对本设备进行日常和定期的检查与维护。
- 在使用过程中遇到疑难问题时,请和本公司的技术服务部联系。
- Thanks for choosing our new designed Best brand heat-transfer machine.
- This manual will lead you to know how to install, operate, set the function, and fault diagnosis to exclude such matters.
- Incorrect installation and use may cause damage to the heat transfer machine or other accident occurs. Installed before, be sure to carefully read this manual and the correct installation and use.
- The machine need inspection & maintenance every week, to make sure it works well and find some problem before it happened.

● 简介 Introduce

ZS 系列型滚筒式升华热转印印花设备,采用导热油层周边电加热发热导流的原理设计制造,升温快,筒体表面温度均衡稳定,毯带脱离等合理的机械结构,配用三相变频调速装置,使整机操作简单,维修方便,转印效果达到最佳,广泛适用于国内外数码印花行业.

ZS Heat-transfer Machine, enjoy a good reputation as it's steady temperaturere system, great quality, easy to operate, and fast feedback after-sale service team. Our product is used in everywhere of the world, bring much profits to our client.

注意事项 Announcements

- 本说明书提供给客户安装调试,参数设定,故障诊断及操作使用的有关注意事项,务请妥善保管.
- 在安装调试使用前,请您仔细阅读本说明书,以免由于误操作而引起设备,甚至人身安全事故损失.
- 用户必须按照本机额定功率选配供电导线和安装专用漏电保护开关.
- 开机前机器外表必须牢固单独接地线,否则可能造成严重的人身伤害事故.

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- 本机器必须安装在通风、光亮的场所.机器周围不得少于 1.5 米空间,垂直水平安装.
- 工作中发生异常情况应立即停机检查.同时应把毯带脱离滚筒,并用风扇帮助散热冷却,防止损坏 毯带.
- 操作人员必须严格遵守机器各部位的禁令标志进行操作.
- 机箱内的控制线路板上及变频器上,平常应保持清洁,不能有灰尘等金属导电物品掉入。转电器保护罩不得打开,小心触电。
- 需更换发热体、减速机、导热油等,必须采用本公司专用型号,不得私自更改、更换。
- 发热筒体外表经过特殊处理不得用腐蚀性液体擦洗及有硬物进入划伤。
- 关机时确保温度低于80度以下,方可关掉总电源
- 机器运转时一定要有人在位,停电时及时把毛毯与滚筒完全分离
- 机器原料进入口请不要堆放杂物,以免被滚筒卷入造成机器损坏。
- This manual is offered to client to install, technical data set, problem solve, and operate, pls keep it carefully.
- Pls read this manual very carefully before install.
- You must choose the Power Line and Professional electric leakage protection Switch as we asked.
- The machine outside must be firmly grounded separately, or it may cause serious personal injury accident.
- The machine must be installed in ventilation, bright place. Clearing all the stuff around the machine,
 1.5m would be fine.
- If there is something wrong, turn off the power, and move the blanket from the drum, use some big fun to make it cool down.
- The operator must follow the instruction at the machine, do not operate wrongly.
- Do not panic when you heard a "Bang", it's the drum's expanding voice as the high temperature, normal sign.
- Keep the Chassis control circuit board and inverter clean, do not let the dust or something in. Do
 not open the electrical protection cover shall unless you are a professional electronic engineer.
- Pls use the model we equipped before you change some parts, such as the heating element, the reducer, the heat conduction oil, etc..
- No Chemical Liquids or Hard mental object to touch the drum, will damage it, when there is something be sticked, pls use clean water, soft fabric pieces to swipe it off when machine is turned off, the drum is not hot.
- Turn the machine off when the temperature is less than 80 ℃.
- There must be someone when the machine working. Completely separate the blanket and roller in time when power cutting.

■ 主要技术数据 Mainly Technical Data

供电方式: 单相 Power Supply: 1-Phase 2 line

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输入电压: 1 phase 220V Voltage: 1 Phase 220V

频率: 50-60HZ Frequency: 50-60HZ;

额定功率: 5.5KW(不同机器不同的输出功率)

Rated Power: 5.5KW (the output power is different with every machine)

输入电流:5A Input current: 5A

定时关机: 1-12 小时 Timing Shutdown: 1-12 hour.

毯带:1.49M(周长)×1.25M(宽) Blanket: 1.49M(circumference)×1.25M(宽)

机身:1.88M(长)×0.58M(宽)×1.35M(高) Main Machine: L1.88M×W0.58M×H1.35M

工作速度: 50-100 米/小时 Work Speed: 50-100m/h

总重量:大约 280KG(不同机器不同的输出功率)

Net Weight: 280kg(the weight is different with every machine)

噪声:20Db Noise: 20Db

损耗件 Wearing parts

毛毯, 发热管, 碳刷, 轴承

Blanket, heat tube, Carbon Brash, bearing.

机器维护

- 1、集电环碳刷维护
- 2、法兰轴承打油
- 3、电路板电器小风扇灰尘清理 毛毯清洁、滚筒清洁
- 4、滚筒定时加油, 使用 3-5 个月后, 每月加大概 8-10L.
- 5、大电箱里不要放过多的外物

Machine Maintenance

- Use the Carbon Brash to swipe for the Collecting Ring.
- Add Oil for the Flange Bearing every week, to make it runs smoothly.
- Use small fun & brush to clean the PCB board, keep the blanket & drum clean and dry.
- Add heat oil every week, 8-10L after 3-5monthes.
- No other stuff should be put in the Machine's electronic box.

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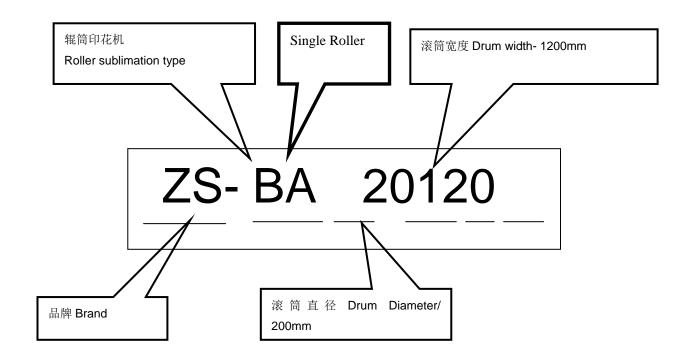
Website: Http://www.zsheatpress.com

Email: sales@zsheatpress.com



● 结构说明 Construction of Machine

1.型号



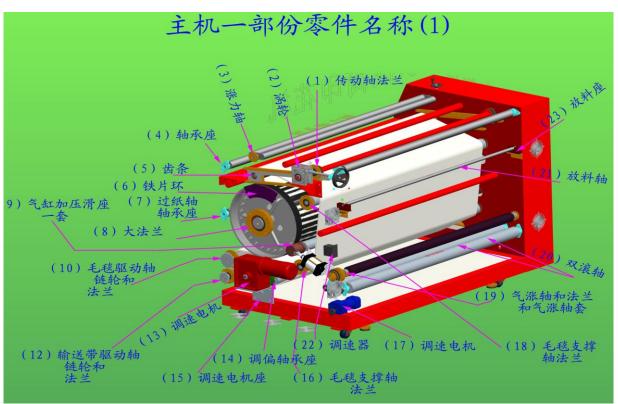
2.外观及各部件说明

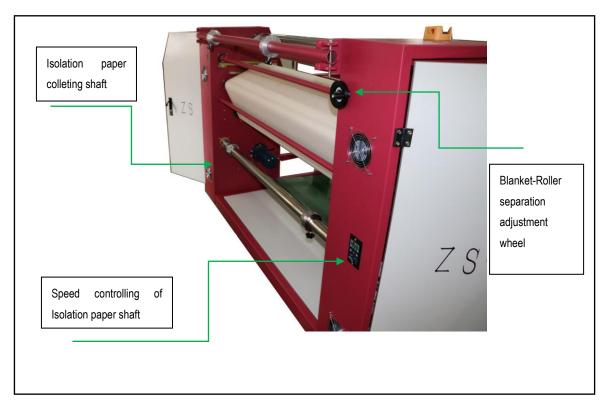
➤ 主机/Head



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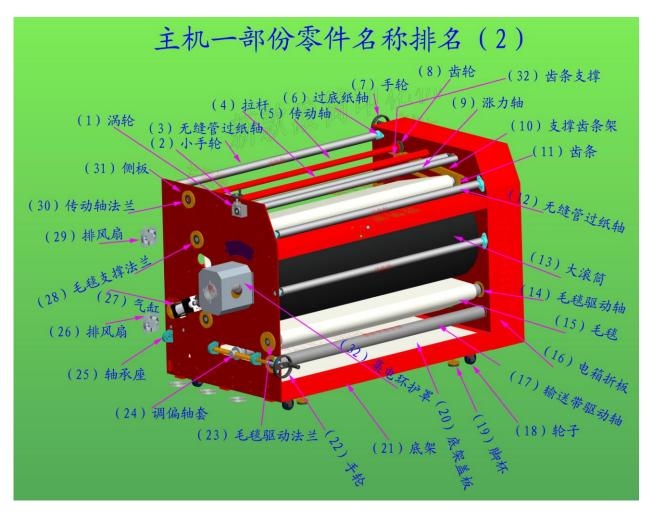
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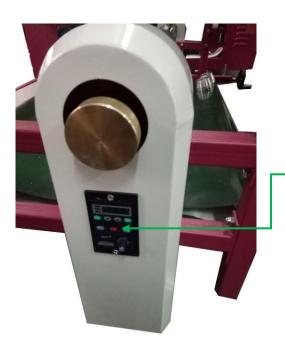


Item	名称	Item	名称
No.	Item Name	No.	Item Name
1.	传动轴法兰	13.	调速电机
	Propeller Shaft Flange		Speed-adjust generator
2.	涡轮 50 Turbine50	14.	UCF205
3.	张力轴	15.	调速电机座
	Tension Axis		Speed-adjust generator Seat
4.	UCFL204	16.	毛毯支撑轴法兰
			Blanket determination Bearing Flange
5.	齿条	17.	调速电机 1:36 和 3 分链轴
	Rack		Speed-adjust 1:36 & 3" sprocket
6.	铁片环	18.	毛毯支撑法兰
	Iron Ring		Blanket Supporting Flange
7.	UCFL204	19.	气胀轴和法兰,轴套
			Shafts, Flange & axle sleeve
8.	大法兰	20.	双滚轴
	Big Flange		Double side Axle
9.	气缸加压滑座	21.	放料轴
	Air Cylinder Pressure Slide		Protection Paper Axle
10.	毛毯驱动轴5分链轮&法兰Blanket	22.	调速器
	Drive Axis 5" Sprocket & Flange		Speed Controller
12.	输动带驱动轴 5 分链轮&法兰	23.	放料座
	Transfer Line Drive Axis 5" Sprocket &		Protection Paper Axle's Seat
	Flange		

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Speed controller for waste-paper

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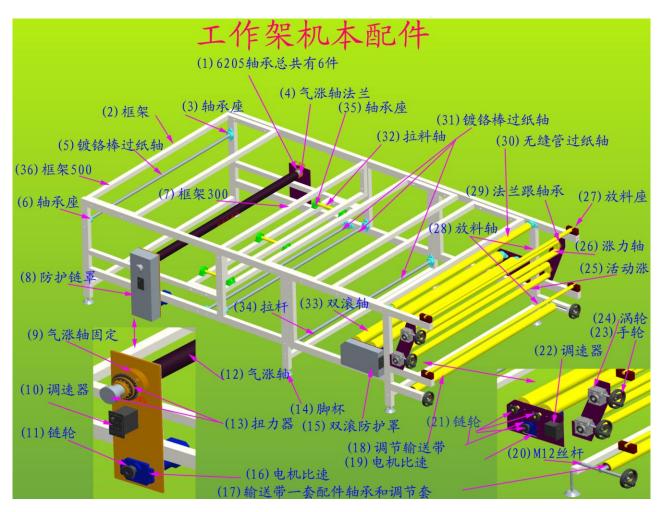
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No.	名称/Item Name	No.	名称/Item Name
1.	涡轮 30/Turbine 30	17.	输送带驱动轴
			Transport Drive Axle
2.	小手轮/Hand Wheel	18.	轮子/wheel
3.	无缝管过纸轴	19.	脚环/Bottom Point
	Sublimated Paper Axle		
4.	拉杆/Bar	20.	底座盖板/Bottom Plate
5.	转动轴/Rotating axis	21.	底架/Bottom Frame
6.	UCFL204	22.	手轮/Hand Wheel
7.	手轮/Hand Wheel	23.	毛毯驱动法兰
			Blanket Drive Flange
8.	齿轮/Gear	24.	调偏轴套
			Adjusting Axle Sleeve
9.	张力轴/Tension Axis	25.	UCPA205
10.	支撑齿条架	26.	排风扇/Fan
	Supporting Rack Frame		
11.	齿条/Rack	27.	气缸/ Air Cylinder
12.	无缝管过纸轴	28.	毛毯支撑法兰
	Protection Paper Axle		Blanket Supporting Flange
13.	大滚筒/Drum	29.	排风扇/Fan
14.	毛毯驱动轴	30.	传动轴法兰
	Blanket Drive Axle		Transport Axle Flange
15.	毛毯/Blanket	31.	侧板/Side Plate
16.	电箱折板	32	齿条支撑
	Electric box plate		Rack Supporting

➤ 工作架/Work Table

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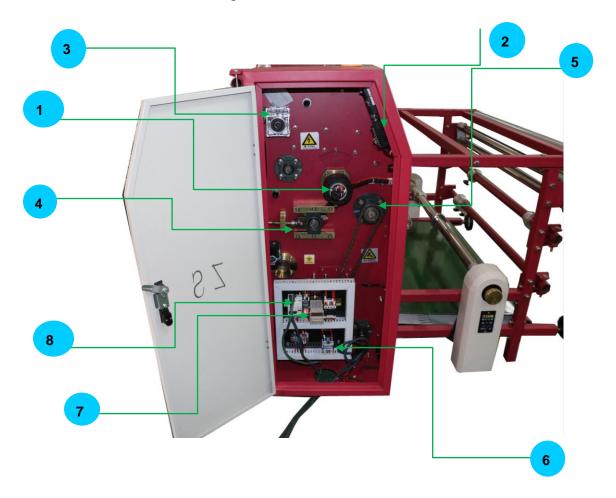
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Ite.	名称/Item Name	Item	名称/Item Name
1.	6205 轴承共 6 件	19.	120W 电机比速 1:36/120W
	6205 bearing, 6sets		Motor Speed 1:36
2.	框架/Frame	20.	M12 丝杆/M12 Screw Rob
3.	UCF1204	21.	3分18齿/3points 18teeth
4.	气胀轴法兰/ Shafts Flange	22.	调速器/Adjusting Speed Panel
5.	镀络棒过纸轴	23.	手轮/Hand Wheel
	Sublimated paper Through Axle		
6.	UCF1204	24.	涡轮/Turbine
7.	框架 300/Frame 300	25.	活动张/
8.	防护链罩/Chains Cover	26.	张力轴/Tension Axis
9.	气胀轴固定/Shafts Fixing	27.	放料座/Fabric Axle Seat
10.	调速器/Speed Control Panel	28.	放料轴/Fabric Axle
11.	3分18齿/3points 18teeth	29.	法兰, 6202 轴/Flange,6202Axle
12.	气胀轴/Shafts Axle	30.	无缝管过纸轴/Paper Through Axle
13.	扭力/Torque Converter	31.	镀络棒过纸轴/Paper Through Axle
14.	脚杯/Supporting Point	32.	拉料轴/Fabric Through Axle
15.	双滚防护罩/Two Roll Axles Cover	33.	双滚轴/Double Axles
16.	120W 电机比速 1: 36/120W	34.	拉杆/Bar
	Motor Speed 1:36		
17.	输送带(6305 轴承&调节套)	35.	UCPA204
	Convey-er Belt		
18.	调节输送带	36.	框架 500/Frame 500
	Adjusting Convey-er Belt		

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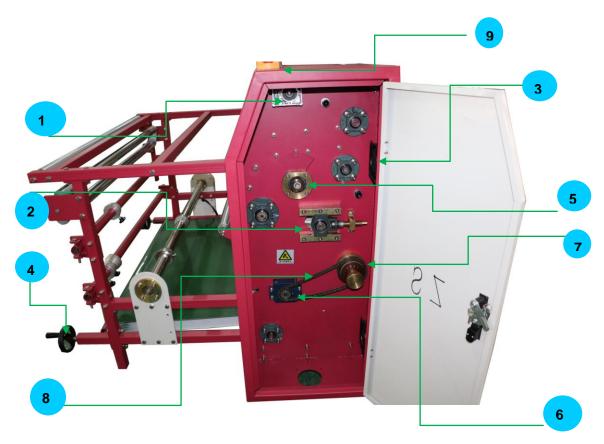
➤ 左右机箱/The Left & Right Electrics Box



Item	名称	Item	名称
No.	/Item Name	No.	/Item Name
1.	集电环	5.	毯带轴
	/ Collecting Ring		/Blanket shaft
2.	温控器	6.	交流接触器
	/Temperature controller		/AC Connector
3.	涡轮蜗杆	7.	计时器
	/Turbine		/Time-meter
4.	压力调节装置	8.	断路器
	/ Pressure adjustment device		/Circuit-breaker

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Item	名称/Item Name	Item	名称/Item Name
1.	涡轮/Turbine	6.	毛毯驱动链轮
			Drive Chains & Wheel for the blanket
2.	毯带调节装置/	7.	驱动轴/Drive shaft
	Blanket adjustment device		
3.	散热风扇/ Fan for Cooling	8.	电机轮链/Motor Chains & wheel
4.	调节轮/Wheel	9.	急停开关/Stop
5.	辊筒轴/Roller axis		



配装玻璃平台/Glass for Work Table

因为玻璃在运输过程中易碎,我们机器没有配置玻璃给到客户,请您再当地按照我们的尺寸购买玻璃,我们建议您选择钢化玻璃(因为滚筒温度可以达到 **400** 度,目前市面上能耐高温且在适合价位的为钢化玻璃)。

We do not equipped with the Glass for you as it's very fragile and easy to broken while transporting. Pls purchase it at your local market according to the below size we offered, and Toughened Glass is the one we recommended, it can bear the heat over 400°C. If the work table you asked is the standard size, pls contact our sales or after-sell stuff to get the right size.

● 操作与控制

How to Operate the Machine

1. 机械部分

开机前检查一下机械传动部分是否正常,调正好毯带张力,待温度适合您的工作温度时即可开始工作.

1) 确认机体良好接地和电源接线无误后,推上机箱内断路器,然后,按下"总电源"按钮,再按下变频控制面板上"运行"键,把频率调在适当位置上。



- 2) 按下"加温"键,设定好所需温度,此数据靠客户根据不同的面料成分而定。我厂建议,客户在到达设定温度时先用小块面料和转印纸转印。如温度过高或过低,可作出相应调整,以保证大幅转印品的质量。
- 3) 在工作台的放布架和放纸架上放好面料和转印纸,主机温度达到转印效果时,把面料平整的拉至台板上,使之

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平整进入滚筒内。注意,转印纸有墨水的一面对着面料,且在面料下面。

4) 在转印过程中,客户可根据转印出的图案深浅来调整温度上升或降低,也可调整筒体的速度来控制。

5) 转印工作结束后,关掉"加温"键,本机停止加温,当温度下降到80℃时可以关掉主机,并将毛毯与滚筒分离。

6) 特殊情况下,可以同时关掉"总电源"和"加温"按钮,当主机运行到时间后会自动停机,正常情况下,不建

议使用该功能。

Pls check if every part is ok before start the machine, make the blanket in the right position and tightness. And start the

printing after the showed temp. Is the one you needed.

1. Push the State Relay on after check the power is supplied and the machine is grounded. Press "Power" and then

"Start" to turn to the right frequency.

2. Press "Start", and set up the temp. You needed, the temp. Is decided by the material type printing pattern, and if the

color is dark or light. Pls use a small piece to make the best before mass production, so you would not waste the

material. If the printed affection is not so good, pls try to raise or down the temp. & speed, pls do not stop until you find

the correct temp..

3. Put the Printed Paper Roll and Blank Fabric Roll in the Work table, and let them go through as we trained you. Let

the fabric rolled into the drum, without any fold. Pls attention, make the fabric above the printed paper, so the ink can

be transfer to fabric. And the paper with patterns towards the fabric.

4. While the machine working, you can raise or down the temp. According to the patter, raise it while in dark color, and

down it while in light color. The work speed also can reach this, make it faster while light color and slower while dark

color.

5. Pls press "Start" after you finished work, and wait for another 30min-50mins to let it turn to 80℃, and then turn the

machine off, and let blanket and drum be separated.

6. If there is any urgent thing happened, pls turn "Power" & "Start" off, and the machine would stop work. Pls do not

use it in well condition, it would damage the machine and reduce it's lifetime.

警告!!!机器停电或操作人员离开时,没有将毛毯与滚筒完全分离,有可能引起毛毯燃烧。

Attention!!! Pls make the Blanket & Drum be separated while the machine is not work, especially nobody in the

work house. If not, it may cause the fire and burn the blanket itself.

由于受水平引力的影响,印花机的毛毯和输送带有可能左右偏移,因此机器上设置了偏调移手柄,

具体操作如下:

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如果毯带往右偏移,将毛毯调节手柄左方向旋转顺时针,注意:调节时根据毯带的实时偏移情况,逐次调节,不能一次旋转很多圈,这样反而调不好的要慢慢调整,而且毯带调节过程不是一两分钟就可调好的。反之,如毯带往左偏移(指电控柜一端),将毛毯调节手柄右右方向旋转顺时针。(人面对机器右手为右边) (人面对机器左手为左边)

特别提示:

新毛毯与机器有一定的磨合期(毛毯在中间时不需要向左右偏移),前期(半个月)在毛毯调偏边过程中一定要专人看守,专人调节,毛毯为损耗品,不在保修范围内。

The Blanket & Transport Belt will go left and right as the Earth Gravity, you can use the Wheels at the machine to make it right, the method as below:

If the blanket go to right, then use the Wheel in Clockwise until it in the correct position. Pls note turn the wheel according to the distance the blanket move. It may take times to correct, you need to try and try. If the Blanket go to the left, then use the Wheel in anti-clockwise. When you face the machine, your right hand is the right we called, and left hand is left.

2. 控制面板操作键/The Control Panel



- ① 温度控制仪,客户按该仪器操作说明操作。
- ② 交流电机变频控制器,客户按照该变频器操作说明书操作。
- ③ 红色闭锁按钮,按一下开(红灯亮)、再按一下关(红灯灭),该钮为本机二次控制电源总开关,同时作为急停开关,如工作完毕、客户必须拉开本机供电总闸。
- ④ 绿色闭锁按钮,按一下开(绿灯亮)、再按一下关(绿灯灭),该钮控制本机加温系统。
- ⑤ 绿色闭锁按钮,按一下开(绿灯亮)、再按一下关(绿灯灭).该钮控制本机变频器的电源供给,客户 在按下该钮后变频器开始运行,变频控制盘面显示原始工作状态,客户可根据需要进行盘面操作。
- ① Temperature Display & Control Panel, operate as the below instruction.
- ② The Speed Control Panel, you can make the drum worker faster & slower.
- ③ Power light, press it once, then the power is on and press it again, then it would turn the power off. This bottom also is the Urgent Stop bottom when needed.
- 4 Heating, it control the machine's heating system, press it to make the heating system start,

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and press again to stop.

⑤ Start, it control the Frequency Transformer's power.



The Start Panel.



当前测定温度 PV-The current temp.

设定温度 SV-The setting temp.

The Temp. Display & Control Panel.

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常见故障排除与推护 Trouble and shooting

1常见故障排除对策

故障现象	故障原因	排除方法
	①集电环与碳刷接触不良	①用细砂纸除去积碳,吻合安装
	②缺相—即进线或主线有脱离或松动	②检查路线
温度加不上	③有一组或多组发热管烧坏或接线柱松动	③更换发热管或拧紧接线
	④发热体老化,(新机不可能有此项情况)	④更换发热管
	⑤固态继电器坏掉	⑤更换
	①固态继电器击穿	①更换
温度控制不了	②温控仪坏掉	②更换
	①毯带太松	①拉紧毯带
	②链轮打滑	②拧紧卡紧螺丝
筒体不转	③轴承卡死	③更换轴承
	④变频器故障或交流接触器故障	④更换
	⑤电机或减速机故障	⑤更换
	①温度探头坏掉	①更换
显示温度	②碳刷与集电环之间接触不吻合	②用细砂纸磨到吻合
浮动	③集电环上有异物	③除去异物
	①电热管老化或烧掉	①更换
总开关跳闸	②集电环击穿	①更换集电环
		②更换固态继电器



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Problem	Reason	How to Solve
	①Collecting ring and Carbon brush did not connect well.	①Take the Carbon Brush out, and use fine Sandpaper to polish it, and then install it and see if the connection is well.
Temp. Cannot be	② The power supply problem	②Checking the Wires, and try to make every wire be connected with the machine.
	③Heat tube is broken	③ Replace heat tube
	④ Heat tube used for a long time.	④ Replace the heat tube
	⑤Relay is broken	⑤ Replace the relay
Temp. is	① Relay is broken	① Replace the relay
Out of control	② Temperature controller is broken	② replace it
	① Blanket is too Flabby	① Tighten the Blanket
T. D. III.	②The chain is skid	② Screw down the chain
The Drum did not move	③the bear is broken	③Replace the bear
	4Transducer is broken	④Replace
	⑤ Motor is broken	⑤Replace
	①The temp. probe is broken	①Replace
Temp. Go down and up without operate	② The collecting ring and carbon brush did not connect well.	② Take the Carbon Brush out, and use fine Sandpaper to polish it, and then install it and see if the connection is well.
	① Dust on collecting ring	③Remove the dust
The total switch trip	① Heat tube is broken	①Replace
	Collecting ring is Breakdown	①Replace the ring ②replace the relay

注:检修排除故障必须具备专业知识的技术人员.如确不能排除,请及时与生产厂家联系.

2 日常维护/Daily Maintenance

定期检查机内积尘,并及时清理,保持各部件清洁。

定期检查减速机及链条链轮是否正常,如发现异常情况及时处理。

定期检查电线连接桩头,发现机动或烧焦现象应及时处理。

定期清除变频器散热器及外壳的灰尘。

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定期检查电机风罩周围是否有杂物堆积,如有应及时清除保证电机散热。

- (1) Checking the Electric Box every day, clear the dust and keep every part clean.
- (2) Checking the Decelerator & Chains & Wheels everyday, if there is any problem, fix it and call us if you cannot solve it by yourself.
- (3) Checking the Wire Connection every day, if there is any lose, fix it.
- (4) Checking the Frequency Transformer everyday, clear the dust if it have.
- (5) Checking the Fan everyday, and if there is some dust, clear it and make sure no surroundings around.

●更换加热管

Replace Heat Tube

注意: 想确保机器已断电

- 1. 打开机器两端检修孔。
- 2. 松开加热管固定螺丝机连接铜片.
- 3. 拔出加热管。
- 4. 检查新加热管两端绝缘瓷片是否拧紧。
- 5. 插入新加热管,并检查加热管两端露出筒体的距离是否一致。
- 6. 固定好加热管,放入绝缘瓷片,并用铜片连接好。
- 7. 更换好所有发热管后,再次检查所有螺丝是否拧紧。



- 1. Open the Electrics Box and check if the Heat Tube is broken or not.
- 2. Unfix the copper connection's screw.
- 3. Pull out the heating tube.

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- 4. Check if the Insulation Ceramics of the new Heat Tube are fixed tight, if not, make it tighter.
- 5. Insert new heating pipes, check if the distance of every ends are the same.
- 6. Fixed the heating pipes tight, put the ceramic in, use the copper to connect the two.
- 7. Check the Heat Tube's screw before you finished.

在操作过程中请切记一下警告!/

Pls take the below Attention into mind while operating.

警告!!! 机器滚筒存在高温,请勿用手触摸,以防烫伤!

Attention!!! The Drum is very hot, pls do not touch it, will burn you.

警告!!! 机器操作过程,工作台请避免放置任何杂物,以免进入滚筒,损坏机器!

Attention!!! Pls do not put anything except the fabric needed to print, or it would be took to the Drum and damage the machine.



警告!!! 机器周围应避免堆放任何易燃物品, 否则可能导致火灾。

Attention!!! No Inflammable goods should be around the machine, or it may cause a fire. Pls be careful!

警告!!! 经过专业培训的电工人员才能维修机器。

Attention!!! Only Trained Electrical Engineer can repair this machine, pls do not open the Electrics Box by yourself.

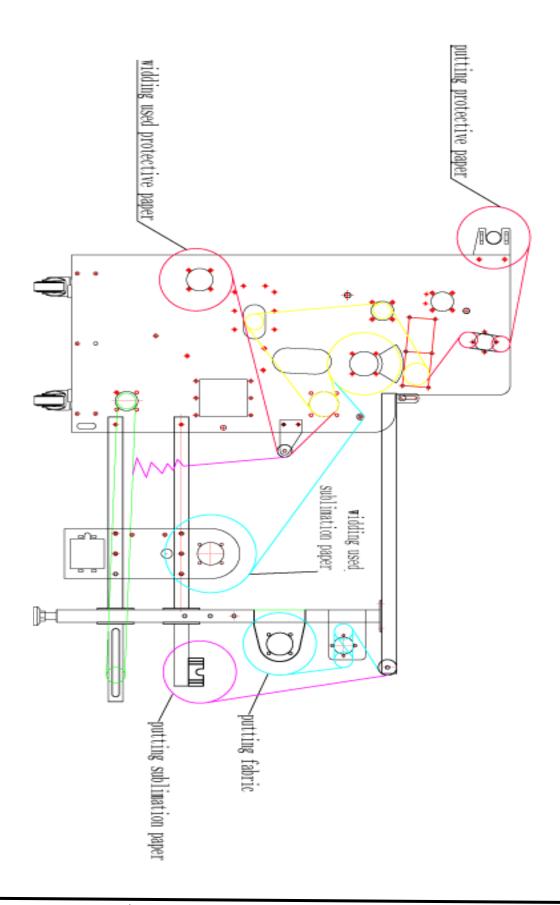
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