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## 丁基胶涂布机培训确认单

### Training Confirmation Listing of Automatic Insulating Glass Butyl Extruder Machine

#### 第一部分：Section 1: 安装与调试 Installation&Debugging

#### 目录 Content:

- 1-6.安装 Installation
- 7. 设备开关机的操作 Operation of equipment switch
- 8. 触摸屏功能键的使用 The use of touch-screen function keys
- 9.内部参数的调节与作用 Adjustment and action of internal parameters
- 9. 打胶压力的调节 Adjustment of beating pressure
- 11.胶嘴宽度的调节 Adjustment of the width of rubber mouth

12.横梁的调节 Beam regulation

13.如何换胶 How to change glue

14.打胶光电开关的调节 Adjustment of gelatinized photoelectric switch

15 如何更换皮带 How to change the belt

16 皮带松紧调节 Belt tightening adjustment

17.压轮的调整 Adjustment of pressure wheel

<p>培训内容 Training content: 安装与调试 Installation&amp;Debugging</p>	<p>操作员签字 Signature of operator</p>	<p>主管签字 Signature of supervisor</p>
<p>1.将机器调试水平位置 Keep the machine on the horizontal position: 将机器打开安装后摆放到确定位置将机器的六个底角装上调节螺栓，对正垫脚的中间凹坑。调节螺栓的高度将机器的工作台面调节到水平状态 Open the machine and install it to a certain position. Install the adjusting bolt on the six bottom corners of the machine to the center pit of the positive foot. Adjust the height of the bolt to adjust the working table of the machine to a horizontal position.</p>		
<p>2.安装传送电机及连接电机电源线 Install the transfer motor and Connect the power cable : 将电机安装到传送横梁上的电机座上，调节皮带从动轮的涨紧螺栓使皮带受力均匀，保证皮带传送时不会跑偏。连接电机电源线，电机往电箱里连接的有两根电源线，其中三芯的为电机散风扇的电源线，接到接线端子中部 U/V/W 位置。 Install the motor in the motor seat on the transfer beam, adjust the belt from the</p>		

<p>moving wheel makes the belt force uniform, so as to ensure that the belt does not deviate. When connect the power cable, there are two power cables from the power box, the three-core power cable is for the motor's diffusing fan. Then connect it to the U/V/W position in the middle of the terminal block.</p> <p>传送电机散风扇 transfer motor fan</p> <p>另一个四芯的电线连接的变频器输出端子（此根线较长）。 R1/R2/R3/PE Another four-core wire is connected to frequency converter output terminal (this line is longer). R1/R2/R3/PE</p> <p>传送电机电源 Transfer motor power</p>		
<p>3. 连接机器总电源 Connect the total power supply of the machine: 本机需要三项五线，即 U/V/W/N/PE,本机功率 5Kw 将电源线接到接线端子预留的接线位置 N/L1/L2/L3/PE The machine needs three five-wire lines, that is, U / V / W / N / PE, and the power is 5Kw, connects the power cord to the reserved connection position N/L1/L2/L3/PE of the terminal.</p>		
<p>4. 连接气源 Connecting gas sources: 将设备左侧箱体处/预留/安装/气动调压阀/装好 连接上调节范围在 0-0.8MPa 的气源，气源要求是干燥的压缩空气。Install the pneumatic pressure regulating valve on the left side of the equipment , then connect to the air source with adjustable range of air source in 0-0.8MPa. The air source is dry compressed air.</p>		
<p>5. 安装设备的触摸屏 Install the touch screen on the machine: 将设备台面左前方的预留孔处安装上触摸屏 将电源插头插好,将两侧的螺丝紧固，将通信插头插好 将两侧螺丝紧固。将安装面板固定住即可（打包设备有可能没有拆卸此触摸屏 即不用安装）Install the touch screen at the reserved hole in front of the left side of the equipment table. Plug the power and fasten the screws on both sides; plug the communication plug and fasten the screws on both sides. Fix the mounting panel. (It is possible that the packaging device does not need to install this touch screen without removing it)</p>		
<p>6. 通电试机 Power on and test machine:</p>		

<p>在通电前确认连接的电源与机器使用的电源电压匹配，确认无误后即可通电。 通电后打开设备急停开关旋钮 打开电源开关旋钮，等待约一分钟。机器完全启动后 在触摸屏画面里面将机器调整到自动运行状态即可，此时机器传送皮带应该自动启动、加热启动、 液压增压泵工作（连通气源后）等到温度升到设定温度后调整液压压力到适中位置即可工作，（温度和压力根据各个丁基胶厂家设定） Confirm that the connected power supply matches the power supply voltage used by the machine before the power is turned on, and the power can be turned on after confirming that the connection is correct. After the power is turned on, the power switch knob is turned on and the power supply switch knob is opened, waiting for about one minute. After the machine is fully started, the machine can be adjusted to an automatic running state in the touch screen. At this time, the machine convey belt should be automatically started, heating start, hydraulic booster pump work (after connecting the gas source) , until the temperature rises to set the temperature after adjusting the hydraulic pressure to a moderate position can work (temperature and pressure according to each manufacturers set)</p>		
<p>7.设备开关机的操作 Operation of equipment switchgear: 设备通电后打开急停旋钮开关---打开旋钮开关 Turn on the knob switch after the equipment is electrified-turn on the knob switch</p>		
<p>8.触摸屏功能键的使用 The use of touch-screen function keys: 温度设定 Temperature setting 实际温度显示 Actual temperature display 打胶速度设定 Glue speed setting 打胶参数 Beating parameter 补胶 Filling glue 矩形和圆形 Rectangular and circular 自动控制 automata 换胶 Exchange glue</p>		
<p>.9.内部参数的调节与作用 Adjustment and action of internal parameters: 前压轮落下抬起设定 Front wheel drop lift setting 打胶开始结束设定 Gelatinizing begins to end setting</p>		

<p>后压轮落下抬起设定 Rear pressure wheel drop lift setting</p>		
<p>10.打胶压力的调节 Adjustment of beating pressure:          调节气液增压泵的气源压力可以调节液压主系统压力大小 Regulating the pressure of gas-liquid booster pump can adjust the pressure of hydraulic main system.          调节减压阀手柄可以调节打胶压力大小 Adjustable pressure relief valve handle can adjust the size of the glue pressure</p>		
<p>11.胶嘴宽度的调节 Adjustment of the width of rubber mouth:          将铝条放在胶嘴右侧的胶嘴测距微动开关处，下面的金属检测器检测铝条后会自动调整胶嘴宽度 The aluminum strip that needs to work is placed at the distance measuring fretting switch of the rubber nozzle on the right side of the rubber mouth. The aluminum strip detected by the metal detector below will automatically adjust the width of the rubber mouth.</p>		
<p>12.横梁的调节 Beam regulation:          将电箱右上角和气源箱左上角的固定螺丝松开。旋转调节手轮调节横梁高度          Drive the screws in the upper right corner of the electric box and the upper left corner of the air source box.          Rotating adjusting handwheel adjusting the height and height of the crossbeam</p> <p>13.如何换胶 How to change glue:          点击换胶按钮 带活塞退出来后用手拉胶缸把手，将胶缸竖起来。将胶块放入胶缸，将胶缸座清理干净 刷点润滑油，再将胶缸按下对正 点击胶缸进按钮。Click the rubber change button. After the piston is withdrawn, use the handle of the plastic cylinder to raise the rubber cylinder. Put the rubber block into the rubber cylinder, clean the rubber cylinder seat, brush the lubricating oil, and then press the rubber cylinder to press the right button. Click the rubber cylinder to enter the button.</p>		
<p>14.打胶光电开关的调节 Adjustment of gelatinized photoelectric switch:          此光电开关为对射光电开关，铝条经过两个探头直接时挡住之间的信号传递，打胶开始工作，安装时要将两个探头之间对正 不能偏离过多 This optoelectronic switch is an optoelectronic opposite switch. The aluminum strip passes through the signal transmission between the two probes directly when blocking the signal, and the glue begins to work. When installing, the two probes should not deviate from each other too much.</p>		

<p>15..如何更换皮带 How to change the belt:</p> <p>固定螺丝 fix screw                      调节手轮 adjusting handle  侧挤紧螺丝 Side squeeze screw        左侧护板 Left side plate  右侧护板 Right side plate                后胶嘴 Rear rubber nozzle  中压轮 Medium pressure wheel        后压轮 Rear press wheel  前压轮 Front press wheel                前胶嘴 Front rubber mouth</p> <ul style="list-style-type: none"> <li>● 更换皮带 Replacement belt</li> <li>● 将后胶嘴退到后面，将前胶嘴拧到前面。Pull back the back rubber mouth and twist the front rubber mouth to the front.</li> <li>● 将气源断开 将压轮手动压下 disconnect the gas source and manually press the pressure wheel</li> <li>● 将左右两侧护板拆卸下来 Remove the left and right sides of the shield</li> <li>● 将固定螺丝拆卸下来 remove the fixing screw</li> <li>● 将两端四个挤紧螺丝松开。Loosen the four tightening screws at both ends</li> <li>● 调节横梁调整手轮 将横梁调整到最高，从横梁两端托住横梁向左上方抬起就能将横梁抬起来。Adjust the beam adjustment handwheel adjust the beam to the maximum, from the two ends of the beam supporting the beam to the upper left lift the beam can be too up.</li> <li>● 将旧皮带拆卸下来换上新皮带 Remove the old belt and replace it with a new belt</li> </ul>		
<p>16.皮带松紧调节 Belt tightening adjustment:</p> <ul style="list-style-type: none"> <li>● 涨紧调节螺丝 Tensioning adjusting screw</li> <li>● 使用久了之后皮带会变松，调整涨紧调节螺丝可以调节皮带的涨紧。After long use of the belt will become loose, adjust the tension adjustment screw can adjust the belt tightening.</li> </ul>		
<p>17.压轮的调整 Adjustment of pressure wheel:</p> <ul style="list-style-type: none"> <li>● 压轮固定座 Press wheel fixed seat</li> <li>● 压轮气缸伸缩管 Pressure wheel cylinder telescopic tube</li> <li>● 压轮可以通过气缸固定座调整高度 The pressure wheel can be adjusted by fixing the seat of the cylinder.</li> <li>● 可以通过气缸伸缩杆调节伸出角度 You can also adjust the extension angle through the cylinder telescopic</li> </ul>		

## 第二部分 Section 2

## 第二部分 故障的排除与保养 Troubleshooting&amp;Maintenance

## 目录 Content:

## 故障排除 Troubleshooting:

1. 胶缸不能前进到位 Rubber cylinder can't move in position
2. 油缸活塞完全缩回的情况下, 液压站冒油 When the cylinder piston is completely retracted, the hydraulic station will come out of oil
3. 气弹簧不能定位(胶缸后退到位后有轻缓的位移现象) Air spring can not be located (rubber cylinder back into place after a gentle displacement phenomenon)
4. 气弹簧不能自动伸展 Air spring can't stretch automatically
5. 出胶不匀、断流、铝框打不上胶 Butyl extruding unevenly, cut off, aluminum frame can not be glued
6. 在自动状态下, 压轮不下压, 胶嘴不出胶 In the automatic state, the press wheel does not press, the rubber mouth does not come out
7. 光电信号不稳, 导致打胶断流 The instability of photoelectric signal leads to the beating of glue and cutting off the current.

8. 打胶过程中铝框跑偏 Deviation of Aluminum frame during Gelling process

9. 测厚不准确 Thickness measurement is not accurate

10. 胶嘴出现渗胶 Seeping of nozzle

11. 打胶座渗胶或漏胶 Percolation or leakage of glue

#### 保养 Maintenance:

1. 皮带残胶（每日保养） Belt residue (daily maintenance)

2. 工作台（每日保养） Workbench (daily maintenance)

3. 过滤器（每日保养） Filter (daily maintenance)

4. 油箱（每周保养） Tank (weekly maintenance)

5. 气路油路（每周保养） Gas lines (weekly maintenance)

6. 整机清理（每周保养） Machine cleaning (weekly maintenance)

7. 紧固件（每周保养） Fasteners (weekly maintenance)

8. 电器连线（每周保养） Electrical wiring (weekly maintenance)



9.更换液压油（每年保养） Replacement of hydraulic oil (annual maintenance)

<p>培训内容 Training content: 故障的排除与保养 Troubleshooting、Maintenance</p>	<p>操作员签字 Operator's signature</p>	<p>主管签字 Signature of supervisor</p>
<p>1. 胶缸不能前进到位 Rubber cylinder can't move in position:</p> <ul style="list-style-type: none"> <li>● 胶缸内胶块的尺寸过大，应小于 250mm The size of the rubber block in the cylinder is too large and should be smaller than 250mm</li> <li>● 胶缸放平后水平到位微动开关没有信号 after the rubber cylinder is flattened, the horizontal position fretting switch has no signal</li> <li>● 查看输入信号画面中的“停止吹气”是否有输入信号，有信号时胶缸不能前进到位，调整吹气气缸后端的磁性开关位置 check the input signal screen "stop blowing" whether there is an input signal, when the rubber cylinder can not move into place, adjust the rear end of the blowing cylinder magnetic switch position.</li> </ul>		
<p>2. 油缸活塞完全缩回的情况下，液压站冒油 When the cylinder piston is completely retracted, the hydraulic station will come out of oil:</p> <ul style="list-style-type: none"> <li>● 油箱内液压油过多，应放出多余的液压油 There is too much hydraulic oil in the tank and the excess hydraulic oil should be released.</li> <li>● 因为缩回后油缸内腔空间较小 Because after retraction the cylinder cavity space is smaller.</li> </ul>		
<p>3. 气弹簧不能定位（胶缸后退到位后有轻缓的位移现象） Air spring can not be located (rubber cylinder back into place after a gentle displacement phenomenon): 系统压力有泄露 There is a leak in the system pressure.</p>		
<p>4.气弹簧不能自动伸展 Air spring can't stretch automatically:气弹簧坏了，需要更换新的气弹簧。The air spring</p>		

<p>is broken and a new air spring needs to be replaced.</p> <p>5.出胶不匀、断流、铝框打不上胶 Out of rubber uneven, cut off, aluminum frame can not be glued:</p> <ul style="list-style-type: none"> <li>● 打胶压力太小 Glue pressure is too low.</li> <li>● 将打胶温度升高, (打胶温度是根据角度参数要求设定的) raise the beating temperature (the beating temperature is set according to the angle parameter)</li> <li>● 胶缸内有气泡, 打开高压球阀手动排气 there are bubbles in the rubber cylinder, open the high pressure ball valve manual exhaust</li> <li>● 前后胶嘴距离过大, 铝条在胶嘴间的距离有 0.2mm 的间隙 the distance between the front and the back of the rubber nozzle is too large, and the distance between the aluminum bars in the rubber mouth has the gap of 0.2mm</li> <li>● 观察打胶过程中气压表和油压表的压力是否稳定, 如果不稳定应检查气源压力是否稳定, 气路是否有漏气, 油箱是否缺油, 油路是否有泄露。Observe whether the pressure of the barometer and the oil pressure meter is stable during the gelatinizing process. If the pressure is not stable, the pressure of the gas source should be checked, whether there is gas leakage in the gas path, whether the tank is short of oil, and whether there is leakage in the oil pipeline.</li> <li>● 如果以上故障都不存在, 就要考虑可能是胶本身的粘接性能问题 If none of the above faults exists, consider the adhesive properties of the adhesive itself</li> </ul>		
<p>6. 在自动状态下, 压轮不下压, 胶嘴不出胶 In the automatic state, the press wheel does not press, the rubber mouth does not come out:</p> <ul style="list-style-type: none"> <li>● 胶的温度低于 80 摄氏度, 等温度升上来后再试试 The temperature of the glue is below 80 degrees Celsius. Try again when the temperature rises</li> <li>● 检查无胶报警是否有提示, 无胶时机器不工作, 换胶后使用. check if there is no glue alarm prompt, no glue when the machine does not work, after the use of glue.</li> <li>● 光电开关是否有信号, 调整前后对射开关的两个探头对齐 whether the photoelectric switch has signal, adjustment before and after the two probe alignment of the radio switch.</li> </ul> <p>7. 光电信号不稳, 导致打胶断流 The instability of photoelectric signal leads to the beating of glue and cutting off</p>		

<p>the current: 光电开关是否有信号 Io.1,调整前后对射开关的两个探头对齐 Whether the photoelectric switch has signal Io.1, adjustment before and after the two probe alignment of the radio switch.</p>		
<p>8.打胶过程中铝框跑偏 Deviation of Aluminum frame during Gelling process:</p> <ul style="list-style-type: none"> <li>● 皮带跑偏导致铝框跑偏, 调整皮带涨紧螺丝, 调正皮带 Belt deviation causes aluminum frame deviation, adjust belt tension screw, adjust belt.</li> <li>● 压轮落下后压轮的方向和皮带传送的方向不垂直导致压轮带着铝条跑偏 the direction of the press wheel and the direction of belt transfer are not vertical after the wheel falls, which results in the deviation of aluminum strip.</li> </ul>		
<p>9.测厚不准确 Thickness measurement is not accurate:</p> <ul style="list-style-type: none"> <li>● 检查行程开关安装是否牢固且有输出信 Check that the stroke switch is securely installed and has an output signal</li> <li>● 测厚时压铝条的移动弯板安装是否牢固且要求移动弯板与导向护板平行 When the side is thick, the moving bending plate of the aluminum bar is firmly installed and the moving bending plate is required to be parallel to the guide plate.</li> <li>● 小油缸活塞是否伸缩自如, 且能够伸缩到位, 行程 25mm。若不能完全伸缩, 则检查小油缸紧固螺丝是否松动或者活塞杆是否变形卡住, 检查节流阀调节的位置是否合适 small cylinder piston is flexible, and can be telescopic in place, travel 25 mm. If not fully telescopic, check that the small cylinder fastening screw is loose or the piston rod is deformed and jammed, and check that the throttle adjusting position is appropriate.</li> <li>● 以上三条都没有问题的情况下, 调整面板的调压阀手柄卸掉压力, 系统在加热的情况下将铝条放在胶嘴之间, 旋转调节手轮将胶嘴调到合适的位置, 重新侧厚即可。 Without any problem, the pressure is removed from the valve handle of the adjusting panel, the aluminum strip is placed between the rubber nozzles under the heating condition, the rotary adjusting handwheel adjusts the rubber nozzle to the proper position, and the side thickness can be re-adjusted.</li> </ul>		
<p>10.胶嘴出现渗胶 Seeping of rubber mouth:</p>		

<p>将渗胶对应的与开关轴连接的丝杆长度调短，具体操作：用平口螺丝刀撬开固定销轴的卡子，摘掉销轴，将丝杆调短，然后装上销轴，合上固定销轴的卡簧 The length of the wire rod connected with the switch shaft is shortened by glue infiltration. The concrete operation is that the clip of the fixed pin shaft is pricked open with a flat screwdriver, the pin shaft is removed, the wire rod is adjusted short, then the pin shaft is mounted and the spring of the fixed pin shaft is closed.</p>		
<p>11.打胶座渗胶或漏胶 Percolation or leakage of glue:          需要更换打胶座下面的密封：调整面板的调压阀手柄卸掉压力，胶嘴温度在 40-50 度情况下，拆开打胶座的六个固定螺丝，掀开滑块下面的长圆形铜垫，注意不用拆坏铜垫，拆除坏了的密封圈，将打胶座上的胶清理干净，装上新的密封圈，压上铜垫，安装上打胶座即可          Need to replace the sealing ring under the rubber pedestal, specific operation, adjust the pressure of the valve handle of the panel to remove the pressure, the rubber nozzle temperature at 40-50 degrees, remove the six fixed screws of the rubber pedestal, open the long circle copper pad under the slide block, Take care not to remove the broken copper pad, remove the broken seal ring, clean up the glue on the rubber pedestal, install the new seal ring, press the copper pad, and install the rubber pedestal.</p>		
<p>设备保养 corrective maintenance:</p> <ul style="list-style-type: none"> <li>● 皮带残胶（每日保养） Belt residue (daily maintenance)</li> <li>● 工作台（每日保养） Workbench (daily maintenance)</li> <li>● 过滤器（每日保养） Filter (daily maintenance)</li> <li>● 油箱（每周保养） Tank (weekly maintenance)</li> <li>● 气路油路（每周保养） Gas lines (weekly maintenance)</li> <li>● 整机清理（每周保养） Machine cleaning (weekly maintenance)</li> <li>● 紧固件（每周保养） Fasteners (weekly maintenance)</li> <li>● 电器连线（每周保养） Electrical wiring (weekly maintenance)</li> <li>● 更换液压油（每年保养） Replacement of hydraulic oil (annual maintenance)</li> </ul>		
<p>1.皮带残胶（每日保养） Belt residue (daily maintenance):          在工作时有残留的丁基胶粘接在传送带上，每天下班前或者当时就清理干净，不然会影响打胶效果或者阻</p>		

<p>碍传送 At work, there is residual Ding Ji glue on the conveyor belt, clean it before or at work every day, otherwise it will affect the glue effect or hinder the transmission.</p>		
<p>2.工作台（每日保养）Workbench (daily maintenance): 每天下班前将机器的台面清理干净，不要存放胶块或者其它杂物，防止卷到传送带下面割坏了传送带，或者缠住电机 Clean the machine table before work every day, do not store pieces of glue or other debris, to prevent the conveyor belt under the cut damaged, or entangled in the motor.</p>		
<p>3.过滤器（每日保养）Filter (daily maintenance): 每天下班关闭气源 放掉油水分离器里的水分。检查油雾器里面是否有润滑油。没有时加润滑油，（有油雾器专用油 或者比较稀得机油） Close off the gas source every day and release the water from the oil-water separator. Check for lubricating oil in the fogger. No time to add lubricating oil, (special oil with oil mist or relatively thin oil) 油水分离器油雾器幻灯片 42 Oil water separator oil mist slide 42</p>		
<p>4.油箱（每周保养）Tank (weekly maintenance): 每周检查一次油箱看看是不是有漏油的现象，通过液位计查看液压油是否需要更换，当液压油的颜色变黑时就需要更换 Check the tank once a week to see if there's a leak, check the hydraulic fluid to see if it needs to be replaced, and change it when the color of the fluid darkens.</p>		
<p>5.气路油路（每周保养）Gas lines (weekly maintenance): 油路及气路的管接头和电磁阀等每周检查一次查看是否有漏油漏气现象。如有上述现象请及时更换接头或者密封件 Oil and gas connections and solenoid valves are checked weekly for leakage. If you have the above phenomenon, please replace the joint or seal in time 油水分离器油雾器 Oil water separator oil mist</p>		
<p>6.整机清理（每周保养）Machine cleaning (weekly maintenance): 每周检查整机的所有位置，及时清理卫生，电器箱内不能放置杂物 Check all locations of the machine every week, clean up in time, no sundries can be placed in the electric box.</p>		
<p>7.紧固件（每周保养）Fasteners (weekly maintenance):</p>		

<p>检查整机所有螺丝及传动件是否有松动现象，及时紧固 Check that all screws and drive parts are loose and fasten in time</p>		
<p>8. 电器连线（每周保养） Electrical wiring (weekly maintenance):          检查电源线及电器原件是否有老化现象。如有老化现象及时更换以免出现危险 Check if the original power cord and electrical appliances are aging. If there is aging phenomenon in time to replace to avoid danger.</p>		
<p>9. 更换液压油（每年保养） Replacement of hydraulic oil (annual maintenance):          新机器半年内更换一次液压油，以后每年（每天工作 8 小时）更换一次 46# 液压油。（根据当地的温度变化可以适当调整标号） The new machine will replace the hydraulic oil once in half a year and 46 # hydraulic oil once a year (8 hours a day) thereafter. The label can be adjusted appropriately according to the local temperature change.</p>		

