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生产线培训确认单

Training Confirmation Listing of Automatic Insulating Glass Production Line


第一部分：验收与安装

Section 1 :Checking and Installation

调试步骤 Debugging Steps	培训内容 Training content	所达标准 Required Standards	操作员签字 Signature of operator	主管签字 Signature of supervisor
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<p>第一步 Step 1</p>	<p>在现场开箱验收，检查设备有无丢失、破损、水淋，因运输造成的损坏。 Open the package and check the equipment for loss, damage, water pouring on the spot,if it due to transport.</p>	<p>检查登记确认无误，查收说明书、合格证、附件，有问题立即报告销售负责人。 Check Brochures, Certificates, Attachments,other problems immediately contact the sales person in charge.</p>		
<p>第二步 Step 2</p>	<p>设备安装场地确认： Confirm the equipment installation site:</p> <p>1、确认厂地、电源、气源、水源、地面是否具备安装条件。 1.Confirm factory, power, gas source, water and the ground are equipped with the installation conditions.</p> <p>2、保证设备顺利到达安装位置，现场清洁。 2.Ensure the equipment to arrival at the installation site, keep the working place clean.</p>	<p>现场评估安装条件，不能保证设备要求的向客户提出改进。 Checking if the installation conditions are perfect,or to make improvements to the customer.</p>		

<p>第三步 Step 3</p>	<p>各部分组装，用铝型材作直尺，使背靠轮在一个水平面上； Using aluminium ruler to keep the back wheels in a horizontal plane when assembly every part.</p>		
<p>第四步 Step 4</p>	<p>设备排线：距后墙或参照物 3.5 米画细实线，按设备外形图将各段排线,照顾首尾部留有操作维修空间。Equipment cable: Draw solid line 3.5 meters from the back wall or other reference , in accordance with the outline of the equipment will be the order of the cable, take care of the first and last to maintain the operation and maintenance space.</p>	<p>注意检修，安全空间>1m Notice: Keep >1m safe space for maintenance.</p>	
<p>第五步 Step 5</p>	<p>设备机械安装： Equipment mechanical installation:</p>	<p>整机传动辊共线度误差不大于 3mm，各段不大于 1mm。相邻两段用 2 块 1500×1500mm 玻璃对严，检查无眼观不平和间隙。Machine drive roller collinearity error is not more than 3mm, each paragraph is not more than 1mm. Adjacent 2 paragraphs are used 2 1500 × 1500mm glasses to make sure without unevenness and gap.</p>	

<p>1、检查所有紧固螺栓、螺母等有无松动，进行紧固。 1. Check all the fastening bolts, nuts and so on to make sure without loose.</p>		
<p>2、安装因运输等原因拆下的零件。 2. Install the removed parts due to transportation or other reasons.</p>		
<p>3、各段进出部位紧靠背靠轮（板）放同样厚度的玻璃，用吊线锤，吊到细实线上，全线调直；全线调整水平：用工业水平仪，以玻璃传动辊上母线测量，全线高度一致；用 6° 角度尺调整，传送背靠轮面倾角为 6°±15'，全线为同一倾斜面。按以上步骤反复多次调整后，紧固调整螺栓。 3. Each section of the access point close to the back of the wheel (plate) put the same thickness of glass, with hanging hammer, hanging to the thin line, straightening; full line adjustment level: industrial level instrument to glass drive roller busbar measurement, Highly consistent; with 6 ° angle ruler to adjust the transmission back to the wheel surface inclination of 6 ° ± 15 ', the same line for the same slope. Repeat the above steps repeatedly adjust the tune, the whole good, tighten the adjusting bolt.</p>		

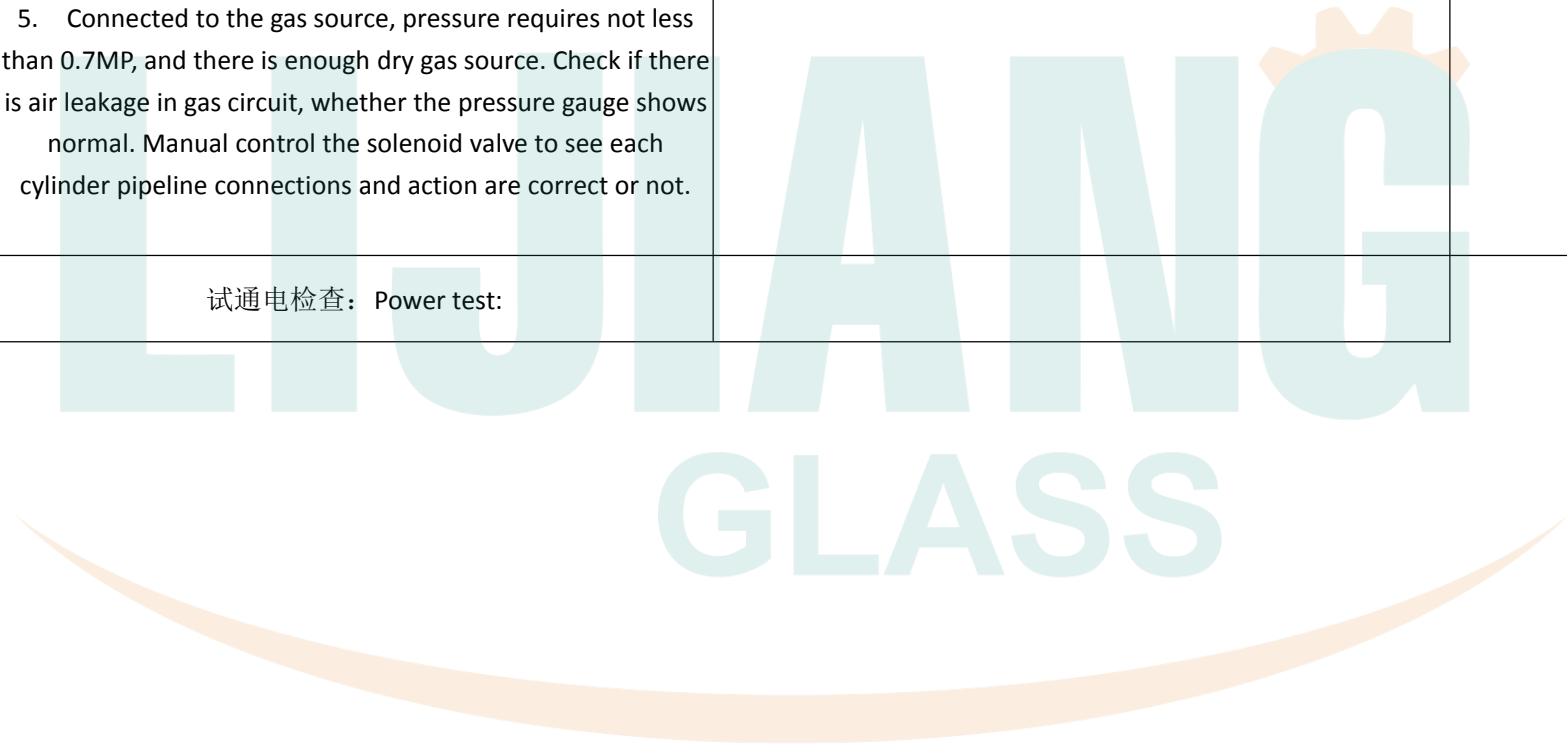
<p>4、风路系统安装：按风路系统图接好风管。 4. Air system installation: Connected air duct according to the air system diagram.</p>	<p>各接头联接紧固。Every joint must be fastened.</p>	
<p>5、气路系统安装：连接厂方气源，按气路系统原理图连接好管路。 5. Gas system installation: Connect with the factory gas source and connected gas duct according to the gas system diagram.</p>	<p>厂方气源压力不低于 0.7MPa，且流量足够的干燥气源。检查管路无泄漏，管路整齐排列适当，紧固可靠，开关正确。 There is enough dry gas source,the air pressure at the factory is not less than 0.7MPa. Check the pipeline without leakage, the pipeline neatly arranged properly without loose.The switch is correct.</p>	
<p>6、水路系统安装：清洗水箱，按水路系统原理图连接水路。 6. Water system installation : Clean the water tank, connected the water duct according to water system diagram.</p>		

	<p>7、液压系统安装：检查各接头处连接是否紧固，液位是否正常。</p> <p>7. Hydraulic system installation: Check every joint fastened well without any loose and the hydraulic level is normal.</p>	<p>液位在液位计的 2/3 处，N46 液压油</p> <p>Hydraulic is located at 2/3 of the gauge with N46 hydraulic oil.</p>		
	<p>8、检查、擦拭设备，细心逐一到位。</p> <p>8. Check and clean the machine carefully.</p>	<p>设备机械安装正确，检查无误，擦拭干净。The equipment is installed correctly and cleanly.</p>		
<p>第六步</p> <p>Step 6</p>	<p>电控件安装：</p> <p>Electrical components installation:</p>	<p>按公司设计要求，摆放电控柜，固定电控箱。According to the company's design requirements, put the control cabinet and fixed electric control box.</p>		
	<p>1、摆放电控柜，安装电控箱。</p> <p>1. Put the control cabinet and fixed electric control box.</p>			
	<p>2、安装调整因运输等原因拆下的人机界面、光电开关、行程开关等控制元器件。</p> <p>2. Install the touch screen, photoelectric switch, travel switch and other control components.</p>			

	<p>3、按电气原理图,将各段联接电缆按线号、标识等连接好,并连接各段接地线。检查所有的线号、标识等与说明书一致,分别放置在线缆槽内。 According to electrical schematic diagram, Connect each section of connecting cable by line number, logo, etc., and connect each section of grounding line. Check all the line number, logo, etc. in line with the instructions, placed them separately in the cable tray.</p>			
	<p>4、检查所有的紧固螺钉, 保证控制线不松动。 4. Check all the fastening screws to ensure that the control line is not loose.</p>	<p>按电气设计要求, 正确规范接线, 安全可靠。According to the electrical design requirements, connect wires safely.</p>		
<p>第七步 Step 7</p>	<p>运转前准备: Preparation for operation</p> <p>1、检查所有传动辊轮、传送电机、链轮、链条、传动齿轮啮合是否正常, 传动运转部件不得有卡死现象。 1. Check all the transmission roller, transmission motor, sprocket, chain, transmission gear meshing is normal, the transmission components must not have stuck.</p>	<p>环境温度 15~35°C, 无明显粉尘。 Ambient temperature 15 ~ 35 ° C, no significant dust.</p>		

<p>2、检查清洗干燥段的毛刷转动是否灵活，传动轴传动是否正常。下托轮是否在一条线上，前挤紧装置是否滑动自如，风刀角度是否正确。</p> <p>2. Check the brushes on the washing and drying part turn flexibility, normal drive shaft. Under the wheel is in a line, the front squeeze device is free to slide and air knife angle is correct.</p>	<p>毛刷转动灵活无卡滞，前挤紧轮滑动自如。The brush is flexible without jamming, and the front squeeze wheel slides freely.</p>		
<p>3、检查合片平压段液压站、上下滑轨、直线轴承运动副、压合油缸、检查油缸、拉杆背母是否背死。检查前定位与下定位各个定位块的上平面是否在同一平面上。</p> <p>3. Check the pressing part with hydraulic pressure station, the upper and lower rails, linear motion bearing, pressure cylinder, checking cylinder, rod back are installed well. Check the plane of each positioning block are on the same level.</p>	<p>前定位于下定位各个定位块必须在同一平面上，平面度不得大于 1mm / 全长；且前定位与下定位要共面。Every positioning block must be in the same plane with the same level,the length of plane is not more than 1mm.</p>		
<p>4、水箱加水到规定要求，检查水箱及管路是否有漏水现象。</p> <p>4. Add water to the tank by requirements, check the water tank and piping for any leaking phenomenon.</p>	<p>水箱及循环管路无漏水现象。Check the water tank and piping for any leaking phenomenon.</p>		

	<p>5、接通气源，气压要求不低于 0.7MP，且流量足够的干燥气源。检查气路是否有漏气现象，压力表是否显示正常。手动各电磁阀，看各个气缸管路连接、动作是否正确。</p> <p>5. Connected to the gas source, pressure requires not less than 0.7MP, and there is enough dry gas source. Check if there is air leakage in gas circuit, whether the pressure gauge shows normal. Manual control the solenoid valve to see each cylinder pipeline connections and action are correct or not.</p>			
<p>第八步 Step 8</p>	<p>试通电检查: Power test:</p>			

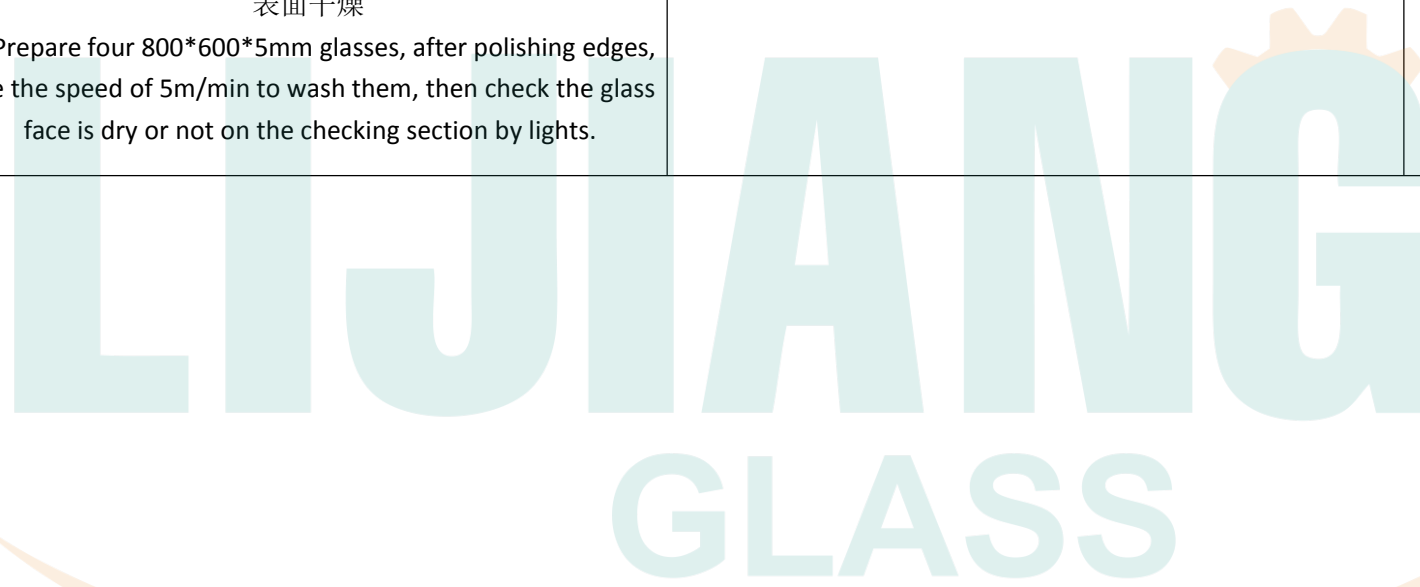


<p>1、检查设备接地绝缘电阻$\geq 1M\Omega$，各段分别接地。</p> <p>1. Check the equipment ground insulation resistance $\geq 1M\Omega$, each section respectively reach grounded.</p>	<p>绝缘电阻$\geq 1M\Omega$，个相线及零线位置是否正确，3相 380V、50Hz，总功率约 40Kw，（不同规格稍微有偏差）并有接地装置，电压稳定。(出口设备按特殊要求).Insulation resistance $\geq 1M\Omega$, phase and zero line position is correct, 3-phase 380V, 50Hz, the total power is about 40Kw, (different specifications slightly deviate) and there must be a grounding device, keeping voltage stability. (Export equipment according to special requirements).</p>		
<p>2、检查厂方电源是否符合说明书中的电源要求，准确无误后方可接电。</p> <p>2. Check the factory power if it is the same by instruction. Make sure there is no any problem.</p>	<p>传送电机转向、毛刷转向、玻璃定位、铝框定位、下定位、前定位正确。吸盘 4 个分区工作正常,玻璃检测开关工作可靠。</p> <p>Make sure transmission motor steering, brush steering, glass positioning, aluminum frame positioning, under positioning and front positioning are correct. Four suction cups work well, Glass detection switch work reliably.</p>		

	<p>3、操作面板上各控制旋钮均打到手动位置,人机界面转到手动程序上。检查各传送电机运转是否平稳,转向是否正确;毛刷电机转向是否正确,水泵喷淋正常;铝框定位、玻璃定位动作是否正确;吸盘吸附是否正常;合片平压段正常开合、检修是否正确;伺服定位是否正确。</p> <p>Each control knob on the operation panel hits the manual position, the man-machine interface goes to the manual procedure. Check if each convey motor work smoothly and whether the steering is correct; whether the brush motor is turned to the right position and the pump is properly sprayed; whether the positioning of the aluminum frame is correct or not; whether the chuck suction is normal or not; Servo positioning is correct.</p>	<p>链轮与链条安装后,应保证链条处于状态。链条不应拉得过紧,亦不过松,保证各轮轴转动自由,不应有发卡、咬链或异常声音出现。After installed sprocket and chain,the chain should be in a normal state. The chain should not be pulled too tight, nor too loose, to ensure that each all wheel axles move freely. There should be no stuck, bite chain or abnormal sound.</p>		
	<p>4、手动程序检查各动作均正确无误后,转到自动程序上运行,空运行 15~20 分钟。用小玻璃运行,不跑偏、不掉下传送辊。若有问题微调各部分,</p> <p>4. Check every function is right by manual programme, then turn to automatic programme and working in 15 to 20 minutes. Using small glass to test machine, make sure there is no problems, or adjust every part.</p>	<p>玻璃运行平稳,不跳动,不落下。Transfer glass smoothly without any jump and falling.</p>		
<p>第九步 Step 9</p>	<p>设备交验前自检: Machine test</p>	<p>眼距离玻璃 0.5m 在检查灯下检查无污迹、轮印(下边轮印小于 12mm) Check the glass under the lights be away from 0.5m by eyes. Make sure there is no dirt, wheel prints (the wheel prints is less than 12mm).</p>		

1、准备 4 块 800×600×5mm 玻璃，经过磨边后，进行清洗，速度调至 5 米 / 分，经清洗后在检查段的灯光下检查玻璃表面干燥

1. Prepare four 800*600*5mm glasses, after polishing edges, use the speed of 5m/min to wash them, then check the glass face is dry or not on the checking section by lights.



<p>第十步 Step 10</p>	<p>洁净无痕迹。检查后加速进入合片平压段，玻璃定位、下定位自动移出，前压板压合，吸盘吸住玻璃，前压板自动打开。与此同时，第二片玻璃自动停在铝框装配段玻璃定位处，铝框定位自动移出，人工安放铝框后，踩脚踏开后，铝框定位自动退回，玻璃进入合片平压段，前压板压合进行合片压合，中空玻璃达到规定厚度尺寸。压合完成后玻璃自动进入翻转台，检查中空玻璃厚度误差不大于 $\pm 0.35\text{mm}$。No trace of cleanliness. After the inspection, it accelerates into the laminated flattening section, the glass is positioned and the positioning is automatically removed, the front pressing plate is pressed and the suction cup sucks the glass, and the front pressing plate is automatically opened. At the same time, the second piece of glass automatically stops at the glass positioning section of the aluminum frame assembly section, and the aluminum frame positioning is automatically removed. After manually placing the aluminum frame, the aluminum frame positioning automatically retreats and the glass enters the flat- The front pressure plate is pressed and pressed together, and the insulating glass reaches the specified thickness. After the lamination is completed, the glass automatically enters the reversing stage and the thickness error of the insulating glass is not more than $\pm 0.35\text{mm}$.</p>	<p>清洗速度先低后高，速度在 3~7 米/分。 Cleaning speed should first low after high , the speed of 3 to 7 m / min.</p>		
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<p>2、在铝框装配段安放铝框同时，第三块玻璃自动停在检查段的末端，若铝框装配段无玻璃时，则玻璃正常运行。</p> <p>2, When the aluminum frame assembly section placed aluminum frame at the same time, the third piece of glass automatically stop at the end of the inspection section, if the aluminum frame assembly section without glass, then the normal operation of the glass.</p>			
<p>3、压合后的玻璃传送到翻转台终点时，传送自动停止。在人工状态下踩脚踏开关，翻转台以较低速度落下；移走玻璃后，再次踩脚踏开关，翻转台自动复位。在自动状态下，玻璃传送到翻转台终点时，踩动翻转脚踏开关，翻转台自动以较低速度落下；移走玻璃后，再次踩动脚踏开关，翻转台自动复位。</p> <p>3, When the pressed glass sent to the end of the flip table, the transfer automatically stop. In the artificial state, press the foot switch, the flip table down at a lower speed; remove the glass, step on the foot switch again, flip stable automatically reset. In the automatic state, when the glass is transferred to the end of the flip table, the foot switch is stepped on and the flip table automatically falls at a lower speed. After the glass is removed, the foot switch is stepped on again and the flip table automatically resets.</p>			

<p>4、在运转的同时，检查各段零部件工作状况，发现不合适立即停机调整。</p> <p>4. When the machine is working, checking each spares' working condition.</p>	<p>吸盘真空度不低于 0.6。</p> <p>Suction cup vacuum value is not less than 0.6.</p>		
<p>5、试验最小玻璃、最大玻璃和最厚玻璃均应达到设备技术要求。打膨胀螺栓固定各段。</p> <p>5. Test the smallest glass, the largest glass and the thickest glass should meet the technical requirements of equipment. Play expansion bolts to fix each section.</p>	<p>标准中可玻璃公称厚度平行度误差不大于$\pm 0.35\text{mm}$。（450×350×3mm、1500×1000×5mm、3000×2000×8mm 三种规格玻璃） Standard glass nominal thickness parallelism error should be not more than $\pm 0.35\text{mm}$. (450 × 350 × 3mm, 1500 × 1000 × 5mm, 3000 × 2000 × 8mm three kinds of glass)</p>		

第十一步 Step 11		认真重复检查运动稳定性，应重复 10 次以上保持正常，确认各段运行平稳可靠。 Repeatedly check the stability of exercise should be repeated more than 10 times to maintain normal, to confirm the smooth and reliable operation of each section.		
	特殊功能自检： Special features self-test:			
	1、如客户订单是大小片、三玻、异形，自动充气等将功能选择按钮调整到相应的位置，按规定要求进行功能试验。 1. If customer orders is stepped glass, triple glass and shaped glass, automatic filling gas , etc, just need to press the related button and test the function according to the requirements.			

<p>2、生产大小片时，先在人机界面上设置 X 向与 Y 向的距离，手动试运行各距离是否正确。先清洗大片，直接进入合片平压段，同时小片玻璃在铝框装配段安放铝框，完成后踩脚踏开关，玻璃进入合片平压段进行合片平压。</p> <p>2.When produce stepped glass, firstly set in the man-machine interface X and Y to the distance, manual test the running distance is correct. Firstly clean the large glass, directly into the co-oppression section, while a small piece of glass in the aluminum frame assembly section placed aluminum frame, then step on the switch, began to press the stepped glass.</p>	<p>检查大小片玻璃的 X 向与 Y 向值，误差不得大于 0.65mm。 Check the size of glass X and Y values, the error shall not be greater than 0.65mm</p>		
	<p>三玻错位不得大于 1mm。 Triple glass misplaced not more than 1mm.</p>		

<p>4、生产异型时，第一片玻璃自动停在铝框装配段的末端，人工安放铝框，同时第二片玻璃自动停在检查段的末端，人工将玻璃搬至铝框装配段进行合片，合完片后，踩脚踏开关，合好片的玻璃进入合片平压段压合至规定的尺寸。</p> <p>4. When produce shaped glass,the first piece of glass is automatically stopped at the end of the aluminum frame assembly section, the aluminum frame is manually placed, and the second piece of glass is automatically stopped at the end of the inspection section. The glass is manually moved to the aluminum frame assembly section to be assembled and combined, then step on the foot switch, the glass come to the pressing section.</p>			
<p>客户交验：Customer inspection:</p>	<p>清洗机清洗洁净，破碎率低于 0.5%，各处无泄露。可以提供中空玻璃 GB/T11944-2002 给客户进行验收。</p> <p>Keeping washing clean ,the broken less than 0.5%, no leaks everywhere. Can provide insulating glass GB / T11944-2002 for customer acceptance.</p>		
<p>1、确认设备工作运行正常可靠，进行客户交验。</p> <p>1. Make sure the machine work normally, and let customer check.</p>	<p>如果特殊定货，按双方合同增加条款。If there is special orders, can add terms according to contact.</p>		

	<p>2、请客户验收负责人到现场，按设备正常工作程序、客户的特殊要求，逐项进行交验，并作好记录，包括清洗速度、清洗表面质量、加工数量/小时、玻璃尺寸等，设备正常连续运行不低于 3 小时。</p> <p>2, Please let the charge person to test, according to the normal working procedures of the equipment, customer's special requirements, one by one for inspection, and make a record, including cleaning speed, cleaning surface quality, processing quantity / hour, glass size, normal continuous operation should be not less than 3 hours.</p>			
第十二步 Step 12	<p>交验项目： Checking terms:</p>			
	<p>1、清洗玻璃功能（厂方提供水源 PH=6~8，电导率 $\leq 150\mu\text{s}/\text{cm}$），玻璃尺寸 450×350×3mm、1500×1000×5mm、3000×2000×8mm、800×600×12mm 各一批次。</p> <p>1, Glass cleaning function (the factory provides water source PH = 6 ~ 8, conductivity $\leq 150\mu\text{s} / \text{cm}$), glass size 450 × 350 × 3mm, 1500 × 1000 × 5mm, 3000 × 2000 × 8mm, 800 × 600 × 12mm A batch.</p>			
	<p>2、玻璃运行平稳，清洗速度 3~10 米/分。</p> <p>2. Glass runs smoothly, washing speed is 3-10m/min.</p>			

	<p>3、玻璃压合后平行度误差，不得大于±0.35mm。 3, The parallelism of insulating glass error, shall not be greater than ± 0.35mm.</p>			
	<p>4、设备外观干净、整齐、美观。 4. The machine keep clean and nice.</p>			

LIJIANG
GLASS

第二部分：操作与使用

Section 2: Operation and Usage

培训内容 Training content:	操作员 工签字 Operation staff signature	主管签字 Executive signature
<p>一： 开机检查 Boot check</p>		

<p>正确开机：检查机器各开关处于关闭状态再打开电源开关。勿带负载开机。 Correct Opening: Before open the power,pls check all the switch are closed.</p>		
<p>打开气源：检查各个调压阀是否气压正常。油雾器是否有润滑油。 Open the gas power: Check the pressure regulator is normal pressure. Oil mist has enough lubricants.</p>		
<p>检查水箱水位是否合适。必须是清洁的纯净水。 Check if the water tank has enough clean water.</p>		
<p>机器通电后，将平压机与清洗机操作面板上的急停开关旋开，板压操作屏处按一下复位或启动按钮，检查平压机与清洗机操作面板上的各个旋钮开关是否处于相应的状态。触摸屏里面的参数设置的是否符合加工要求。 After the machine is powered on, press the emergency stop switch on the plane press and the cleaning machine operation panel, and press the reset or start button at the press operation panel to check whether the respective rotary switches on the flat press and the cleaning machine operation panel are corresponding status. Make sure the parameters inside the touch screen meet the processing requirements.</p>		
<p>开启机器后空运行检查各传送部位、水泵、风机是否正常 Open the machine after the air to check the transmission site, water pump, fan is normal.</p>		
<p>二：自动生产 Automatically work</p>		

生产中空玻璃，先依次将两块玻璃放在上料段，踩脚踏或推玻璃通过入料段光电，让玻璃进清洗段，根据当时的气温调节面板上的无级调速旋钮，调节清洗风干速度。
When produce insulating glass, firstly, put two glass on the loading section, step on the switch or push the glass through the feed section photoelectric, so that glass into the cleaning section, according to the temperature control panel at the time of the variable speed knob, adjust the cleaning Drying speed.

玻璃出清洗段，通过检查段，到上框检查段停止，检查玻璃是否干净，合格后踩脚踏开关让第一块玻璃进板内合片定位段，下托架托起玻璃，前板过去压合吸住玻璃，板面再打开到位，停在检查段第二块玻璃自启动，进入上框检查段，定位停止，手工装框合格后踩脚踏开关，玻璃进去合片段定位压合。压合好的中空玻璃出合片段，进入输出段。（进翻转台，到光电停止。踩脚踏，翻转台自动落下，取走玻璃后，踩脚踏，翻转台升起。根据玻璃的大小选择是否使用翻转台翻转功能，或者自动传送到自动封胶线的入料段。）

Glass out of the washing section, through the inspection section, to check the upper frame to stop, check the glass is clean, pass the foot switch after the first piece of glass into the board within the piece positioning section, the lower bracket care glass, the front plate in the past Press and hold the glass, then open the board in place, stop the second piece of glass in the inspection section from the start, into the upper box inspection section, positioning stop, hand stamped after the foot switch, glass into the preassing position. Then insulating glass get into the flip table, until to stop photoelectric. Step the foot switch, flip table automatically fall, remove the glass, step on the switch, flip Taiwan raised. (Depending on the size of the glass, it is possible to choose whether to use the flip-up function or to be automatically transferred to the feeding end of the

automatic sealing line.)

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如客户订单是大小片、三玻、异形，充气等将功能选择按钮打到相应的位置。

If customers orders is stepped glass, triple glass, shaped glass and filling gas on line and so on, elect the related buttons.

生产大小片时，先在触摸屏"大小片模式"上设置 X 向与 Y 向的距离，先清洗大片，直接进入合片平压段，同时小片玻璃在铝框装配段安放铝框，完成后踩脚踏开关，玻璃进入合片平压段进行合片平压。（注意：一定要大片做第一片）如果出现问题需要手动将同步带横梁复位，按停止按钮，再按复位按钮后才能正常生产

When producing stepped glass, first set the distance between the X direction and the Y direction on the touch screen "stepped glass mode", first clean the large piece, directly enter the flat pressing section of the combined piece, and at the same time, the small piece of glass is placed in the aluminum frame assembly section, and the aluminum frame is placed. When the switch is turned on, the glass enters the flat pressing section of the flat piece to perform flat pressing. (Note: Be sure to make a large piece of the first piece.) If there is a problem, you need to manually reset the timing belt beam, press the stop button, and then press the reset button to normal production.

生产三玻时，前两片压完后，吸盘吸附玻璃前压板打开，第三片玻璃在铝框装配段安放铝框，完成后玻璃进入合片平压段进行合片平压，压完后自动传送至输出段。

When produce triple glass, after the pressed the two glasses, the suction cup suction glass front plate open, the third piece of glass placed in the aluminum frame assembly section aluminum frame, the glass into the pressing part and began to press, then automatically transfer to flip table.

<p>生产异型时，第一片玻璃自动停在铝框装配段的末端，人工安放铝框，同时第二片玻璃自动停在检查段的末端，人工将玻璃搬至铝框装配段进行合片，合完片后，踩脚踏开关，合好片的玻璃进入合片平压段压合至规定的尺寸。</p> <p>When produce shaped glass,the first piece of glass is automatically stopped at the end of the aluminum frame assembly section, the aluminum frame is manually placed, and the second piece of glass is automatically stopped at the end of the inspection section. The glass is manually moved to the aluminum frame assembly section to be assembled and combined, then step on the foot switch, the glass come to the pressing section.</p>		
<p style="text-align: center;">三：手动调整 3. Adjust manually</p>		
<p>合片段触摸屏上点‘运行状态’，选择‘手动程序’，（或者将操作面板上的旋钮开关拧到手动模式）机器各动作可在操作屏上手动控制，选择‘手动调整’，点击进去相应控制按钮，可控制对应的动作运转。</p> <p>常用功能</p> <p>Click the "running status" on the touch screen of the pressing part, select 'manual program' (or turn the knob switch on the operation panel to manual mode). Each action of the machine can be manually controlled on the operation screen, select 'manual adjustment' and click into the corresponding control Button, you can control the corresponding action.</p> <p>Common Functions</p>		

取走玻璃：自动状态下点击‘取走玻璃’，板面闭合，放下玻璃，板面打开，玻璃传送出板面。（在自动生产时第一片玻璃已经吸在活动板上而没有后续的玻璃，需要将第一片玻璃取出，使用此功能）

Remove the glass: Click 'Remove the glass' automatically, the plate is closed, put down the glass, the plate is opened, and the glass is delivered out of the plate. (In the automatic production of the first piece of glass has been sucked in the movable board, there is no follow-up glass, you need to remove the first piece of glass, use this feature)

生产结束关闭压板：生产结束后，点击压板关闭。

Close the pressing board after finished the processing: When finish the processing, click the button of 'Platen closed'.

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<p>检修状态，在手动状态下，活动板处于工作打开位置。点击检修状态，选择检修打开，一直按着，至板面完全打开。关闭停止按钮或急停开关后，人可以进入两个板面之间。打开停止按钮或急停开关，选择检修关闭，活动板关闭至压板工作打开位置。（注意：使用此功能时注意检查在活动板处于工作打开位置时 到平压机后面检查扇形齿轮是否完全分开。只有完全分开时才能操作此功能）</p> <p>Maintenance status, in the manual state, the movable plate is in opening position. Click on the maintenance status, select the maintenance open, you should press it all the time until the board fully open. After the stop button or emergency stop switch is closed, one person can enter between the two boards. Open the stop button or emergency stop switch, select the inspection closed, the movable plate closed to the platen open position. (Note: When using this function, check that the toothed gears are completely separated behind the press when the movable plate is in the work open position.) This function can only be operated when it is completely separated.</p>		
<p>输入输出状态：相应的信号触发，触摸屏上的信号状态改变。观察信号输入输出。</p> <p>Input and output status: the corresponding signal is triggered, the status of the signal on the touch screen is changed. Observe the signal input and output.</p>		

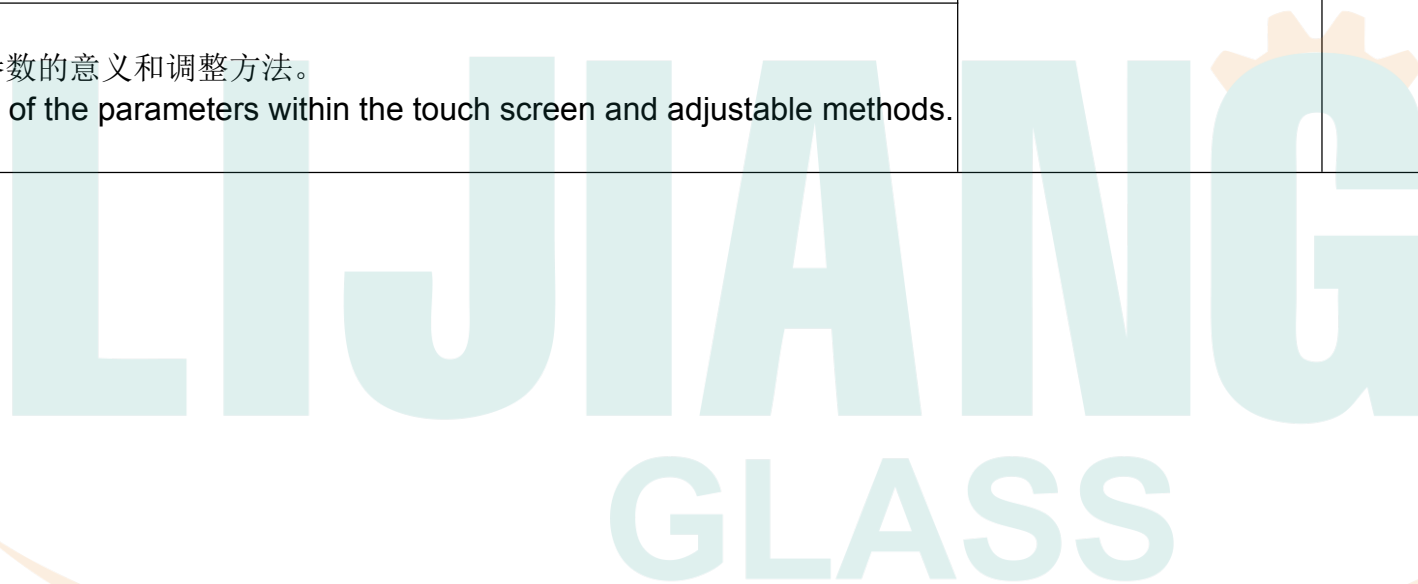
操作台上各开关旋钮的作用。

The role of each switch knob on the console.

触摸屏内各参数的意义和调整方法。

The meaning of the parameters within the touch screen and adjustable methods.

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The logo for LIJIANG GLASS features the brand name in a large, light blue, sans-serif font. A small, stylized gear icon is positioned above the letter 'I' in 'JIANG'. Below the brand name, the word 'GLASS' is written in a smaller, light blue, sans-serif font. A thick, light orange curved line arches across the bottom of the logo area.

第三部分：常见故障及排除

Section 3: Common Malfunction and Solution

常见问题 Common malfunction	故障分析 Malfunction analysis	解决办法： Solution	操作员 工签字 Signature of operator	主管签字 Signature of supervisor
	1. 毛刷，风机过滤棉，风路系统污染，车间粉尘太多 1. Brush, fan filter cotton, air system pollution, too much dust in workshop.	1. 清洗毛刷，更换过滤棉，清洗风路系统，做粉尘处理装置 1. Clean the brush, replace the filter cotton, clean the wind road system, and do the dust treatment device.		
清洗不干净 Not clean completely	2. 水质问题 2. Water quality	2. 使用合格的水（水源 PH=6~8，电导率 $\leq 40 \mu s/cm$ ） 2. Use qualified water (water source PH=6 ~ 8, electrical conductivity is less than 40 m2 /cm)		
	3. 喷水嘴堵塞 3. The water spray nozzle is blocked.	3. 清理喷水嘴 3. Clean the spray nozzle .		
	4. 毛刷磨损严重 4. The brush is worn badly.	4. 调整毛刷间隙或更换毛刷 4. Adjust the brush clearance or		

		replace the brush.		
	5. 刮水胶皮污染 5. Water-scraping rubber skin pollution.	5. 更换刮水胶皮 5. Replace the scratch rubber.		
吹不干 Cannot dry completely	1. 风刀位置不对 1. The position of wind knife is wrong.	1. 调整风刀 1. Adjust the position of wind knife.		
	2. 刮水胶皮刮水不干净 2. Scraping water is not clean.	2. 更换刮水胶皮 2. Replace the scratch rubber.		
	3. 风加热不加热 3. Air heating cannot be heated.	3. 更换加热器 3. Replace the heater		
	4. 传送速度过快 The transmission is too fast.	4. 降低传送速度 4. Lower transmission speed.		
清洗内碎玻璃 Glass broken in washing machine	1 玻璃挤紧系统不灵活 1 Glass squeeze system is not flexible.	1. 调整挤紧系统 1. Adjust the squeeze system.		
	2. 托轮磨损 2. Roller wear	2. 更换托轮 2. Replace the supporting wheel		

	<p>3. 清洗部分的中心线与风干不垂直</p> <p>3. The center line of the cleaning part is not perpendicular to the air knife.</p>	<p>3. 调整两部分挤进部件使之一条线</p> <p>3. Adjust the two parts to make it at one line.</p>		
	<p>4. 水温与玻璃温度相差大</p> <p>The water temperature is too different from the glass temperature.</p>	<p>4. 冬天工作时注意室内外玻璃与水加热温差</p> <p>4. Pay attention to indoor and outdoor glass and water heating temperature difference when working in winter.</p>		
<p>传送过程中掉玻璃</p> <p>Drop glass when the transfer wheel is running</p>	<p>1. 传送轮角度不对</p> <p>1. The transmission wheel angle is incorrect.</p>	<p>1. 调整传送轮角度</p> <p>1. Adjust the angle of transmission wheel.</p>		
	<p>2. 传送轮不平或者磨损严重</p> <p>2. The transmission wheel is uneven or badly worn.</p>	<p>2. 调整水平或者更换新的传送轮</p> <p>2. Adjust the level or replace the new transmission wheel.</p>		
	<p>3. 背靠轮不平整或者角度不对</p> <p>3. The back wheel is not flat or the angle is not correct.</p>	<p>3. 调整背靠轮</p> <p>3. Adjust the back wheel.</p>		
<p>玻璃错位</p> <p>Glass dislocation</p>	<p>1. 板压玻璃定位轮固定螺丝松动(充气线不包括此项)</p> <p>1. Plate pressure glass positioning wheel fixing screw loose. (gas felling no use)</p>	<p>1. 紧固螺栓</p> <p>1. Fastening bolt</p>		

	<p>2. 平压风机过滤网堵塞 2. Horizontal pressure fan filter screen is blocked.</p>	<p>2. 清理过滤网 2. Clean the filter</p>		
	<p>3. 玻璃抬起定位块位置高于传送轮(充气线没有此项) 3. The glass lifting positioning block is above the transmission wheel. (gas felling no use)</p>	<p>3. 降低定位块 3. Lower the positioning block.</p>		
	<p>4. 固定板出风孔堵塞 4. Fixed plate outlet air hole is plugged.</p>	<p>4. 疏通出风孔 4. Dredge the air hole.</p>		
	<p>5. 同步带跑偏 excursion of the timing belt</p>	<p>调整同步带 Adjust the timing belt</p>		
	<p>6. 同步带横梁外面高里面低 (上下错位) Timing belt beam outside high inside low (up and down dislocation)</p>	<p>调整横梁 Adjust the beam</p>		
	<p>7. 传送轮 (带) 松动 7. The transmission wheel is loose.</p>	<p>5. 紧固传送轮 (涨紧同步带) 5. Tighten the transmission wheel.</p>		

玻璃不进入板压段 The glass does not enter the plate pressure section.	1. 板压玻璃定位光电一直有信号 1. There is always a signal for the positioning of plate pressure glass. (gas felling no use)	1. 将光电开关调至无信号或更换光电 1. Adjust the photoelectric switch to no signal or replace the photoelectric switch.		
	2. 板压工作打开接近开关没有输入信号, 压板打开没到位 2. The plate pressure work opens close to the switch without input signal, and the pressure plate is not in place.	2. 调整接近开关或检查液压系统是否正常 2. Adjust the proximity switch or check whether the hydraulic system is normal.		
平压机不压玻璃 The flat press does not press the glass.	1. 液压系统无压力(没有设定伺服电机扭矩或扭矩太小) 1. No pressure on the hydraulic system.	1. 调整液压压力(重新设定扭矩) 1. Adjust hydraulic pressure.		
	2. 检修关闭磁性开关没有到位 Overhaul to close the magnetic switch is not in place	检查检修气缸是否全部缩回, 调整磁性开关位置。Check if the inspection cylinder is fully retracted and adjust the magnetic switch position.		
	3. 防撞气缸伸出位置磁性开关、侧密封挡板打开位置磁性开关没有到位。 Anti-collision cylinder extended position magnetic switch, side sealing baffle open position magnetic switch is not in place	调整磁性开关位置 Adjust the magnetic switch position		

	4. 中间密封缩回位置磁性开关没有到位 4. The middle seal retracts the position and the magnetic switch is not in place.	调整磁性开关位置 Adjust the magnetic switch position		
	5. 板压玻璃抬起没有到位 5. The plate glass lifting is not in place.	5. 玻璃抬起后调整抬起磁性开关至有输入信号 5. When the glass is raised, adjust the magnetic switch to the input signal.		
板压内碎玻璃 Broken glass in plate.	1. 液压压力过大(电机扭矩过大) 1. Excessive hydraulic pressure. (motor too much pressure)	1. 调整液压压力(调整电机扭矩) 1. Adjust hydraulic pressure. (adjust motor pressure)		
	2. 板面不平 2. Uneven surface	2. 维修板面 2. Maintenance panel		
	3. 同步带跑偏 excursion of the timing belt	调整同步带 Adjust the timing belt		
	4. 定位块损坏挤坏玻璃 (充气线不含此项) 4. The location block is damaged and extruded glass. (gas felling no use)	4. 维修或更换定位块 4. Repair or replace the positioning block.		

充气浓度不够 Insufficient gas concentration	1. 充气压力不足 1. Insufficient inflating pressure.	更换新的氩气罐，压力低于 0.6Mpa 自动报警，检查充气嘴是否堵塞，用气枪吹干净 Replace the new argon gas bottle with pressure less than 0.6mpa to automatically alarm, check whether the filling nozzle is blocked, and blow clean with air gun.		
	2. 充气嘴位置不正确 2. Incorrect position of gas filling nozzle.	1. 看传送横梁电子尺是否准确，校准电子尺 1. Check if the beam electronic ruler is accurate and calibrate the electronic ruler.		
		2. 点动横梁伸缩到合适的充气位置。 2. Point the moving beam to the appropriate inflatable position.		

		<p>3. 铝框和玻璃测厚不准确, 校准测厚电子尺</p> <p>3. The aluminum frame and glass thickness are not accurate, and the thickness measuring electronic ruler is calibrated.</p>		
	<p>3. 密封不好</p> <p>3. Poor sealing</p>	<p>1. 横梁传送带两侧 9 字密封条是否损坏, 抬起时密封条是否压实。</p> <p>1. Whether the sealing strip on the two sides of the conveyor belt is damaged, and whether the sealing strip is compacted when lifting.</p>		
		<p>2. 侧密封用 9 字密封条是否损坏</p> <p>2. Whether the "9" side sealing device is damaged</p>		
		<p>3. 中间密封打开是否准确。</p> <p>3. Whether the middle sealing device is opened accurately.</p>		

	<p>4. 检查氧气传感器是否正常</p> <p>4. Check whether the oxygen sensor is normal.</p>	<p>1. 校准氧气传感器通道纯空气和纯氩气时数值</p> <p>1. Calibration of values when there is pure air and pure argon in oxygen sensor channels.</p>		
		<p>2. 检查抽气真空发生器是否正常。</p> <p>2. Check whether the suction vacuum generator is normal.</p>		
		<p>3. 检查氧气传感器是否损坏。</p> <p>3. Check whether the oxygen sensor is damaged.</p>		
	<p>5. 前压板第一片玻璃充气时位置是否准确</p> <p>5. Whether the position of the first piece of glass is accurate.</p>	<p>1. 铝框和玻璃测厚不准确，校准测厚电子尺</p> <p>1. The aluminum frame and glass thickness are not accurate, and the thickness measuring electronic ruler is calibrated.</p>		

		<p>2. 前板打开用电子尺不准确，校准前板电子尺</p> <p>2. The front plate is not accurate with the electronic ruler, and the front plate electronic ruler is calibrated.</p>		
<p>中空玻璃压合厚度不均匀</p> <p>The thickness of insulating glass is not uniform.</p>	<p>1. 板面不平</p> <p>1. Uneven surface</p>	<p>维修调整板面</p> <p>Maintenance adjustment panel.</p>		
	<p>2. 伺服压合力矩不够</p> <p>2. Insufficient servo compression torque.</p>	<p>适当提高参数设置里面的伺服压合力矩</p> <p>Improve the servo pressure moment in the parameter setting properly.</p>		