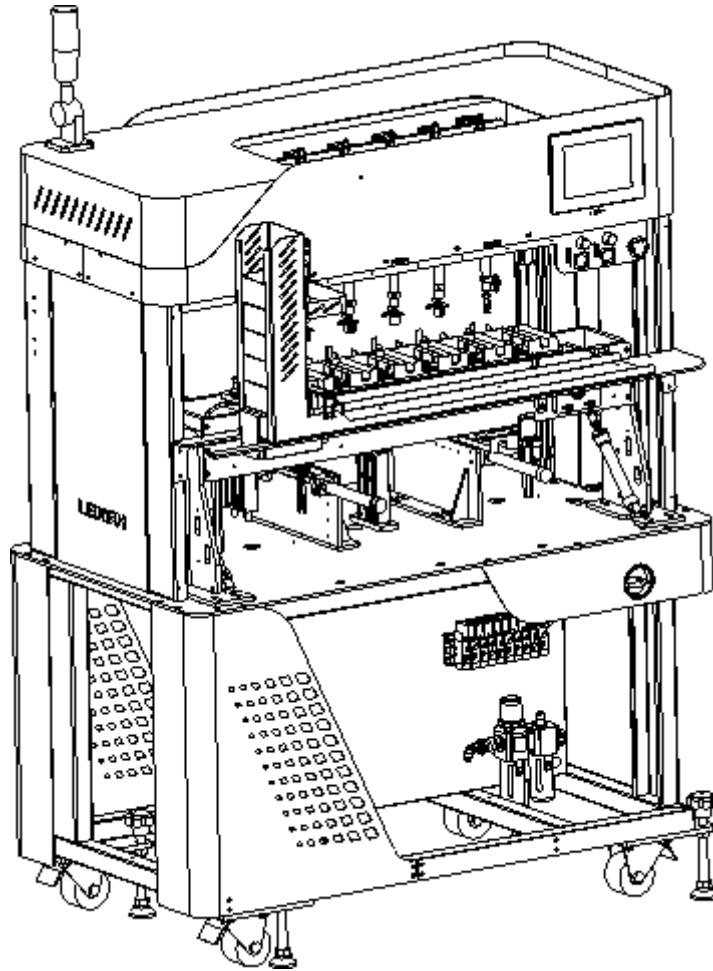


LS8121 Washing label seaming

Operating instruction



Zhejiang LENSH Intelligent Technology Co., Ltd.

COMPANY PROOFLIE

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Zhejiang LENSH Intelligent Technology Co., Ltd. is located in Zhejiang Ningbo, mainly engaged in automatic sewing equipment research and development, production, based on the frontier in sewing intelligent technology, is committed to becoming the intelligent sewing equipment research and application of benchmarking enterprises.

At present, the company has LS5011 intelligent rope tying machine, LS6021 rope piercing machine, LS7031 intelligent access control unit , LS5011C rope head inner plug knotting machine and LS8121 washing label seaming. The company's product design covers the concept of " integration of information technology and industrialization ", and achieves big data analysis and cloud computing. The company has a strong management and technology research and development team, adhering to the "innovation, efficiency, people, intelligent" business philosophy step forward.

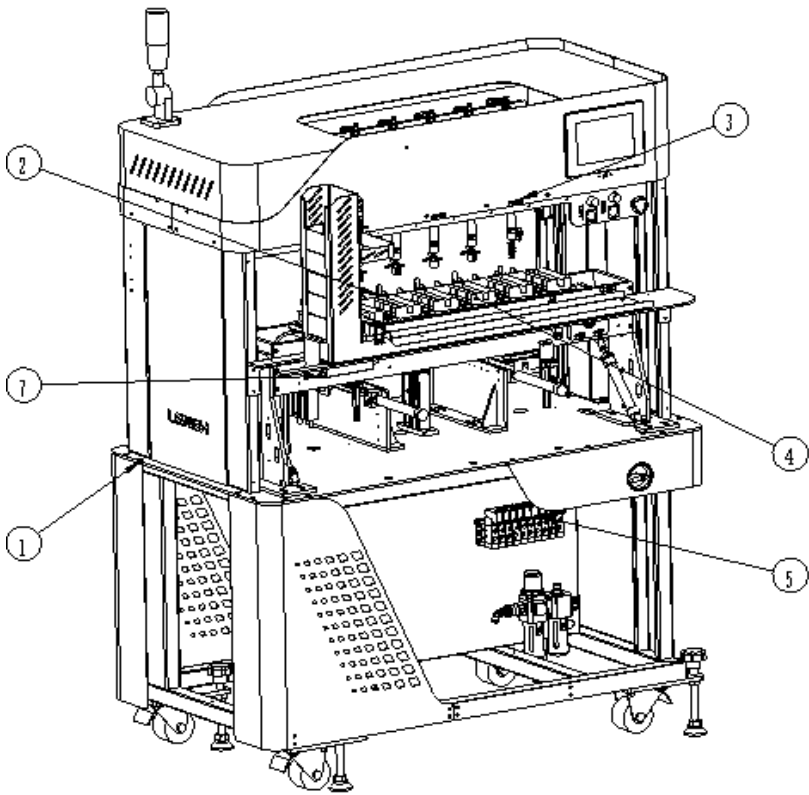
Orders to record

1. Specifications	.....
2. Component assembly drawing	.....
3. Start/debug/operate	.....
3-1. Operational considerations	.....
3-2. Start steps	.....
3-3. Touch screen operation	.....
3-4. Installation and trial run	.....
3-5. Whole machine transportation	.....
4. Safety precautions	.....
4-1. Safety matters	.....
4-2. Matters need attention	.....
5. Maintaining	.....
6. Circuit diagram	.....

1. Specifications

1	Model	LS8121
2	Outline dimension	1200×700×1650mm
3	Weight	200Kg
4	Nominal voltage	220V/60HZ
6	Power	1.0KW
7	Working pressure	0.5MPa~0.8MPa
7	Noise	<72dB
8	Standard washing size range	Length: 35-100mm for large scale and 20-40mm for small scale
		Dimensions: 25-55mm for large scale and 10-30mm for small scale
9	Speed	The fastest 3s/ piece
10	the protection grades	IP44

2. Component assembly drawing



7	LS8121收料组件	02.024.0006	1
6	LS8121粘合组件	02.024.0008	1
5	LS8121电控组件	02.024.0003	1
4	LS8121传送组件	02.024.0005	1
3	LS8121吸标组件	02.024.0004	1
2	LS8121料仓组件	02.024.0002	1
1	LS8121外观组件	02.024.0001	1
项目号	物料名称	物料编码	数量
材料明细表			

3. Start-up/commissioning/operation

3-1. Operational considerations

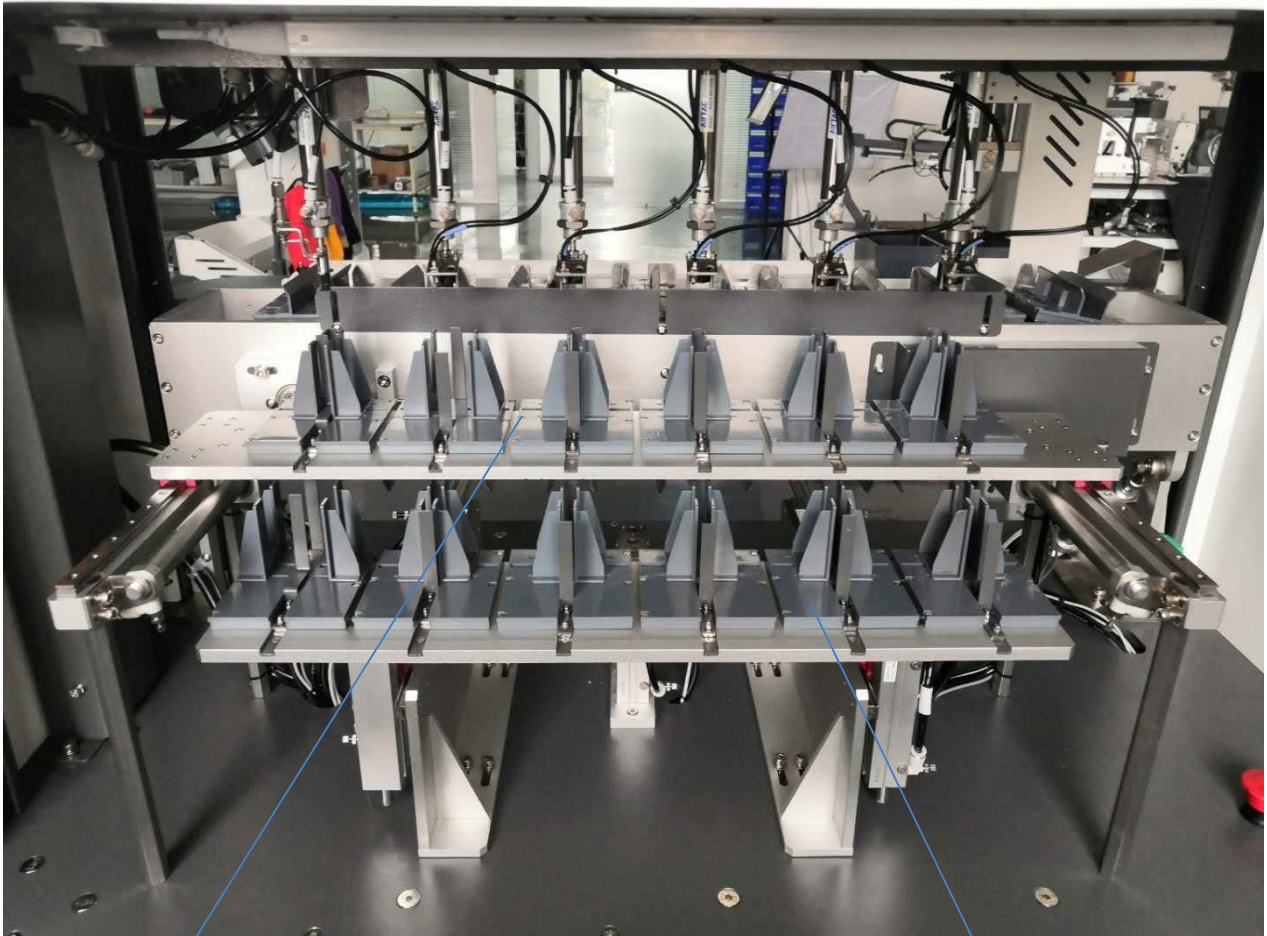
Startup considerations	
1	Before starting the machine, please check that there are no foreign bodies around the machine, on the bedplate and in the electric cabinet, to ensure that other irrelevant things have no influence on the starting and running of the equipment.
2	Before starting up, please ensure that the air source is unblocked and the air pressure of the air supply equipment is stable.
3	Please confirm that the power supply voltage meets the requirements of this product before starting up.
Matters needing attention in interface operation	
1	Personnel who have not been trained in the operation of this product are not allowed to operate the touch screen at will.
2	If you find that the touch screen buttons are ineffective, have bright spots or other abnormal conditions, please contact our company in time to solve them after sale.
Matters needing attention in debugging	
1	Personnel who have not been trained in the operation of this product are not allowed to debug at will.
2	Please handle with care during debugging, and pay attention to the damage of mechanical parts.
3	When debugging this product, it is recommended that one person operate alone to avoid personal accident caused by misoperation.
4	Please follow the debugging instructions when debugging this product.

3-2. Start step

(1) Load the washing label

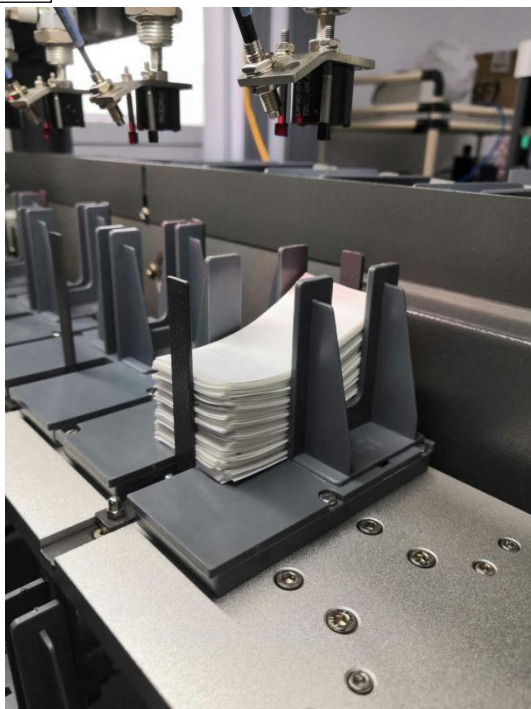
1) Put the washing labels into the hopper in the stacking order, and fill the upper and lower floors, as shown in the figure;

2) Check whether there is any inversion or misplacement.



Upper
levels

lower
levels

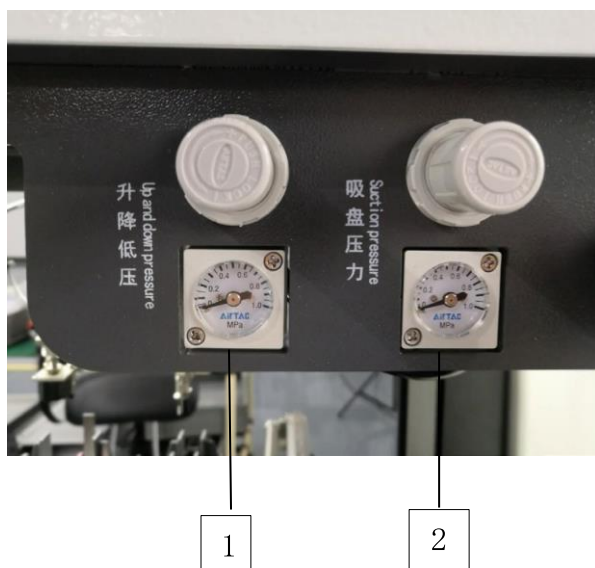


(2) Connect the air source

Attention: before opening the air source, please check that all air pipes are connected normally, and then slowly open the knob. If any leakage is found, immediately close the air source and notify the maintenance personnel.

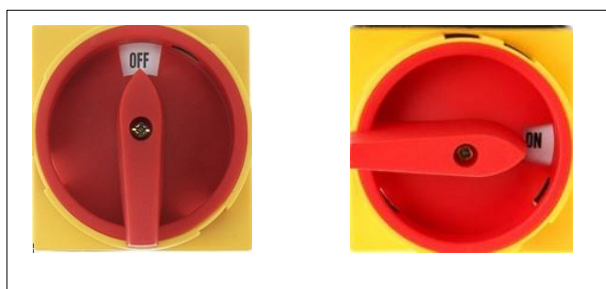


Press the compressed air switch [2] Turn on the air supply, and then turn the black knob on the upper end of the pressure reducing valve clockwise [1] Adjust the air pressure to 0.4MPa .



Turn the white knob on the upper end of the pressure regulating valve clockwise to adjust the lifting low pressure to 0.5MPa, and then adjust the suction cup pressure to 0.5MPa.

(3) power-on



First, plug the main power plug of the machine into the socket, and then turn the switch clockwise to turn on the power. OFF means closed (as shown ON the right) and on means open (as shown on the left).

(4) Reset, start and stop



Press reset button [1] to become standby state, press start button [2] to start operation, and press stop button [3] to stop the machine after completing one cycle automatically.

(5) Emergency stop button



The red button on the far right is the emergency stop button in front.



The red button next to the silo is the back emergency stop button.

3-3. Touch screen operation

(1) Boot interface



After turning on the power switch of the machine, the touch screen will enter the boot screen within 3 seconds, and select Chinese and English pages in the upper right corner. After entering the password, click Enter to switch to the main screen. Note: If no language is selected, the machine defaults to the Chinese version

(2) Main interface

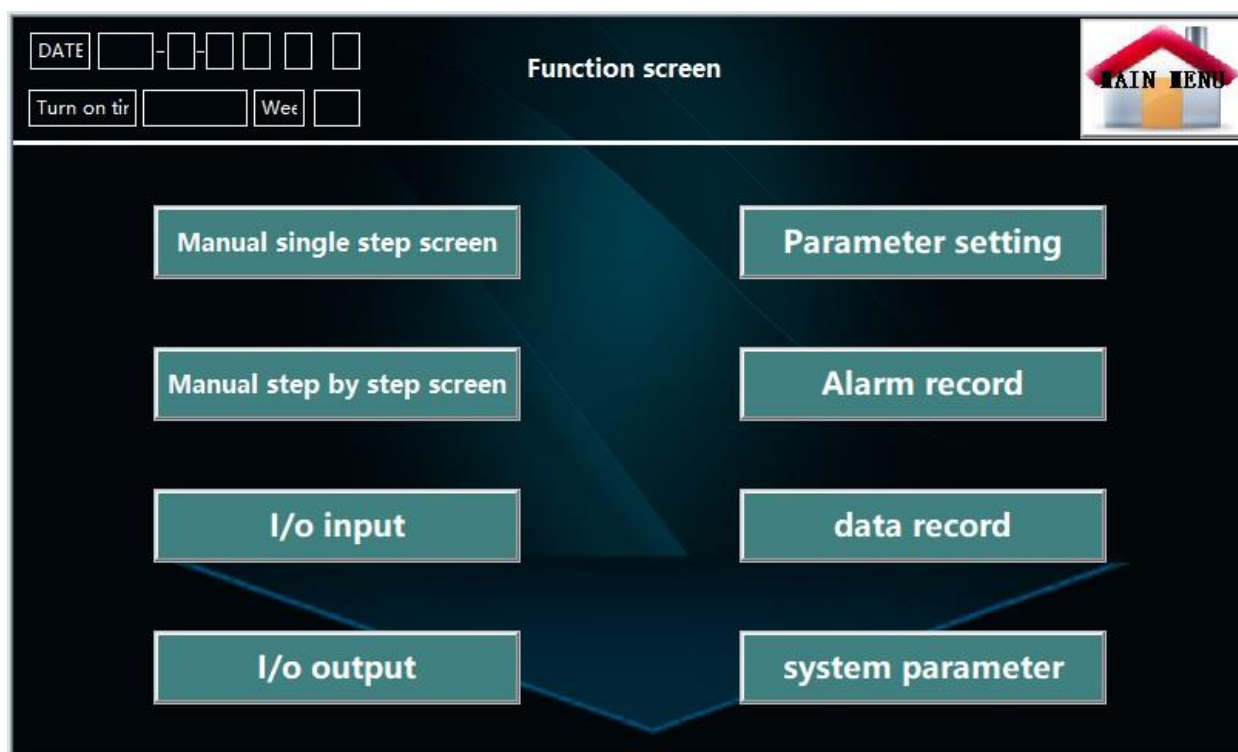


No.	Name	Function	No.	Name	Function
1	Function screen	Click this button to switch to the function scree	7	Switching silos	Manually switching silos
2	Planned quantity	Set the total production quantity	8	Pause	The equipment is suspended, and the state before suspension can be continued after startup
3	Production quantity	Displays the quantity currently produced	9	Start key	The machine starts to work
4	Number per box	Set the receiving number of each receiving box	10	Reset key	Return the device to its initial state
5	Zero production	Click this button to reset the production quantity	11	Stop key	Automatic cycle stops after one cycle

6	Without stopping the machine Artificial superscrip	Under the condition of non-shutdown, the next layer of washing standard is added manually without alarm	12	Guiding lights	When something happens, the corresponding indicator lights will flash Green lightflashes: the equipment is ready to stop yellow light flashing: equipment reset action The red-light flashes: the alarm of equipment without material stops
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Note: After the **stop key** is pressed, it will automatically cycle for one cycle and then stop, and the equipment is in reset state.

(3) Function screen



No.	name	Function
1	Manual single step	Click this button to enter the manual single-step operation screen
2	Manual step by step	Click this button to enter the manual step-by-step operation screen
3	I/O input	Click this button to enter the monitoring screen and monitor the input of each action point
4	I/O output	Click this button to enter the monitoring screen and monitor the output

		of each action point
5	Parameter setting	Click this button to set the motor data, disconnection alarm setting and cylinder action delay setting
6	Data record	Click this button to enter the data recording screen and record the weekly production capacity. (you can also view the cumulative capacity)
7	Alarm record	Click this button to enter the alarm record screen, displaying the date, time and content of the alarm
8	About	Click this button to enter the operation interface of "Restore Factory Settings", and also select the language

(4) Manual single step

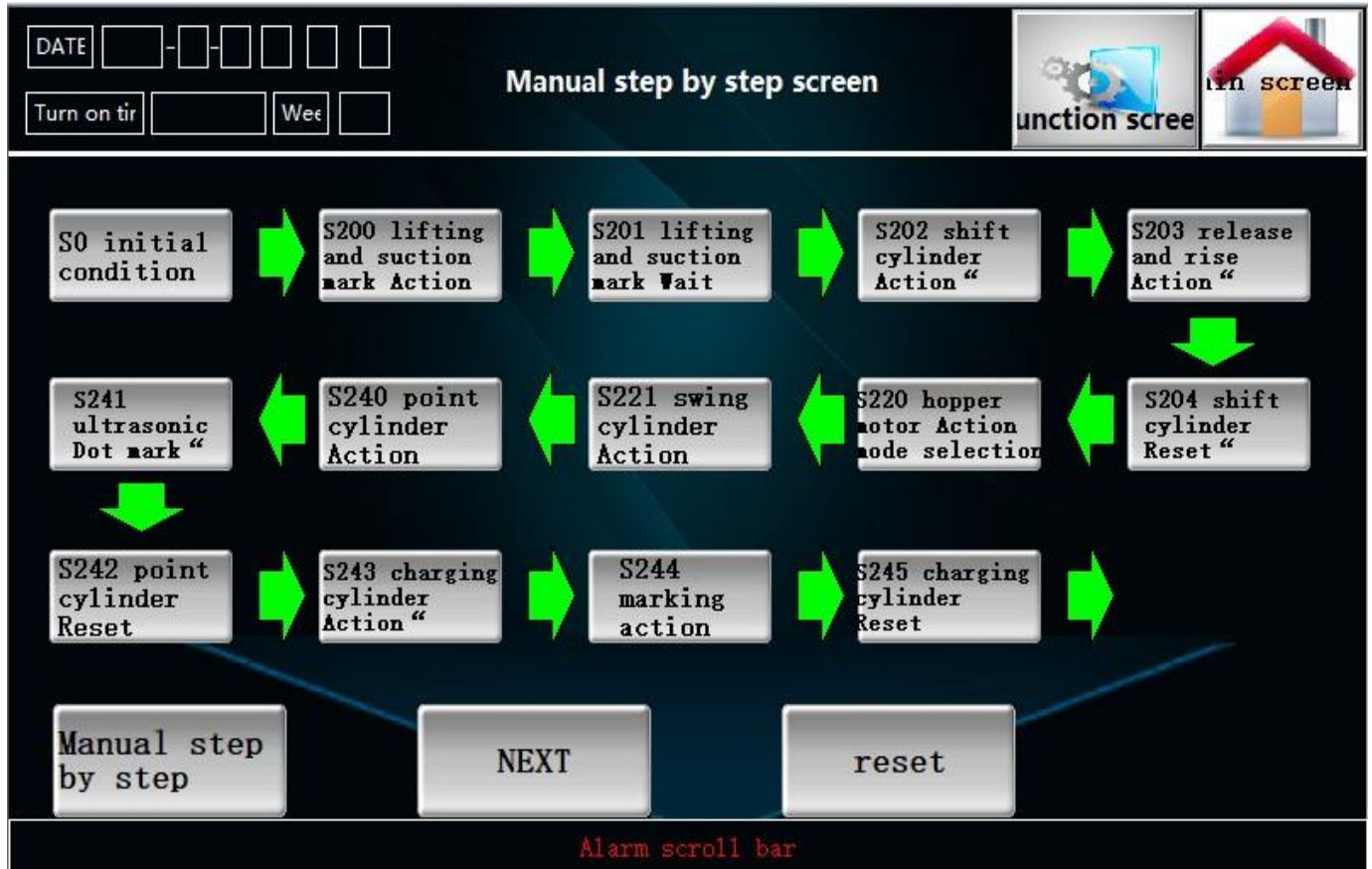
	warn	Non-trained personnel are not allowed to manipulate the hand animation surface.
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No.	Name	Function	No.	Name	Function
1	Lifting cylinder 1	Lifting action of No.1 cylinder	8	Suction nozzle 1	Suction nozzle 1
2	Lifting cylinder 2	Lifting action of No.2 cylinder	9	Suction cup 1	The suction cup 1 generates suction and release action
3	The lifting cylinder 3	Lifting action of No.3 cylinder	10	Suction cup 2	The suction cup 2 generates suction and release action
4	The lifting cylinder 4	Lifting action of No.4 cylinder	11	Suction cup 3	The suction cup 3 generates suction and release action
5	The lifting cylinder 5	Lifting action of No.5 cylinder	12	Suction cup 4	The suction cup 4 generates suction and release action
6	The lifting cylinder 6	Lifting action of No.6 cylinder	13	Suction cup 5	The suction cup 5 generates suction and release action
7	Shift cylinde	The cylinder drives the lifting cylinder to move back and forth	14	Small-scale screw cylinder	Telescopic action of screw cylinder

Note: The number of lifting cylinder and suction cup should correspond to the serial number on the equipment one by one.

Manual operation action sequence flow



Note: The manual step-by-step screen displays each action flow.

(5) Parameter setting screen

DATE --
Turn on tir Wee

Parameter setting - 1




cylinder
Start time:
Reset time:

Large scale suction mark
Start time:
Stop time:

Small label Lifting jitter
Start time:
Stop time:

Down
Delay time of small scale:
Delay time of large scale:

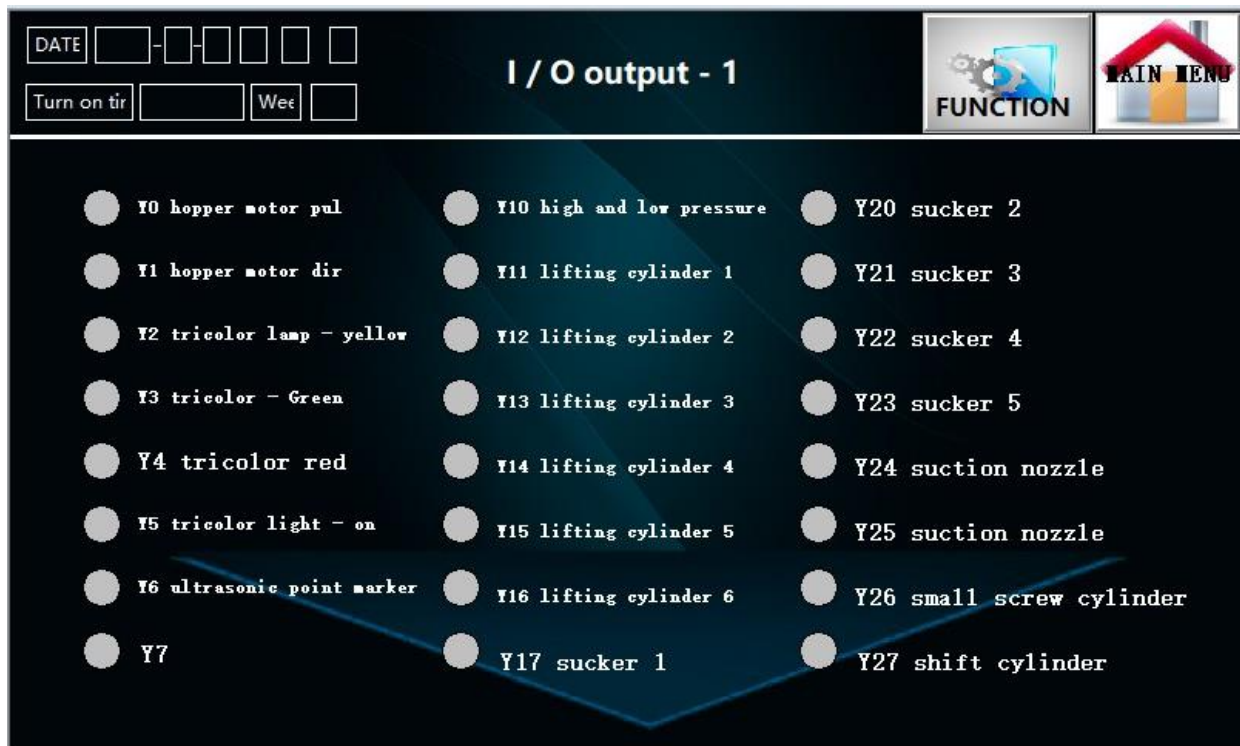
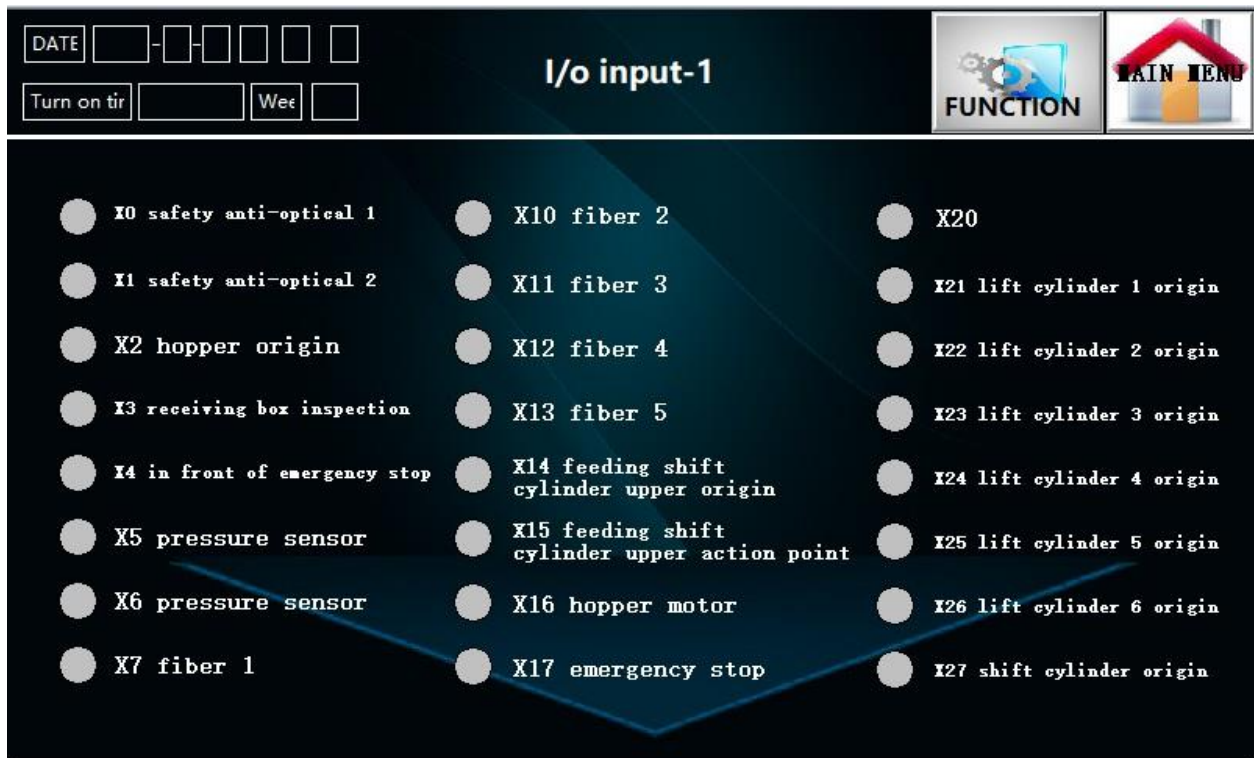
Lifting and lowering low pressure
Start time:
End time:

Alarm scroll bar

No.	Name	Function	No.	Name	Function
1	Pneumatic time of screw cylinder	Set the pneumatic time of the screw cylinder	6	End time of lifting and lowering pressure	Set the end time of lifting and lowering pressure
2	Reset time of screw cylinder	Set the reset time of screw cylinder	7	Start time of lifting jitter of large standard suction	Set the start time of lifting jitter of big bid suction
3	Start time of small mark suction mark lifting jitter	Set the start time of small mark sucking up and down jitter	8	Stop time of jitter in lifting and lowering of big bid	Set up the stop time of shaking up and down of big bid suction
4	Stop time of jitter of small mark suction	Set the stop time of the small standard suction standard lifting jitter	9	Delay time of releasing and lowering small scale	Set the delay time of releasing and lowering the small mark
5	Start time of ascending and descending low pressure	Set the start time of lifting and lowering pressure	10	Delay time of releasing and lowering large scale	Set the delay time of releasing and lowering the big bid

(6) Monitoring screen

This interface is the signal monitoring screen of PLC input and output. When the indicator light is on, it means that this point is running, and when the indicator light is off, it means that this point is closed.



7) Alarm screen

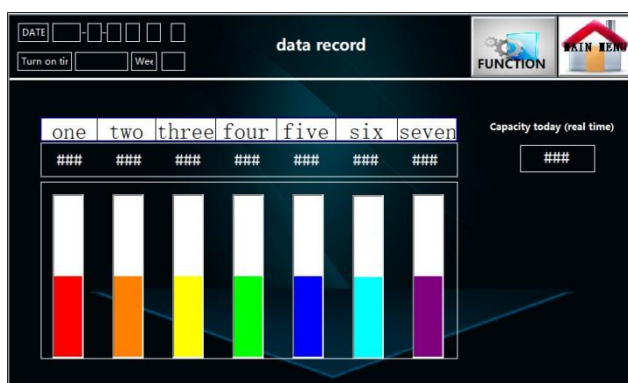
Note: when the machine fails, the alarm light will flash from green to red and give a sharp whistle; The interface displays the alarm content.



No.	Name	Function
1	Trigger date	Displays the alarm occurrence date
2	triggering time	Displays the specific time when the alarm occurred
3	content	Display the alarm content annotation

Alarm interpretation			
serial number	Alarm name	Alarm description	Alarm release
1	Safety alarm	When the equipment is working, hands or other foreign objects enter the loading area	Remove hands or foreign objects
2	Non-suction alarm	When the suction cup or suction nozzle does not suck the material, the optical fiber will alarm and stop when it detects that the suction cup or suction nozzle is boring	Re-suction or adjust the optical fiber position
3	Material shortage alarm	When the materials have been used up and not replenished in time, or other abnormalities lead to abnormal feeding, they will automatically stop after the current completion	Reset after adjusting feed
4	Air pressure limit alarm	When the air pressure is lower than 0.45MPa or higher than 0.75MPa, the machine cannot start or automatically complete a cycle shutdown	Adjust the inlet pressure of pressure reducing valve

(8) Data recording screen



No.	Name	Function
1	Capacity record week	Displays the production quantity in a week
2	Cumulative capacity	Displays the production quantity per weekmonthyear
3	Capacity clearance	It can clear the production quantity per weekmonthyear

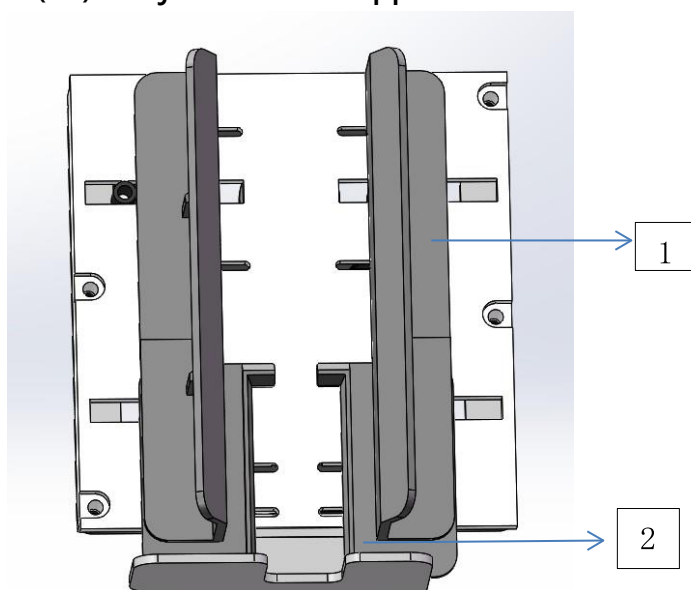
3-4. Installation and trial run

(1) Air pressure regulation



Turn the white knob on the upper end of the pressure regulating valve clockwise to adjust the lifting low pressure to 0.5MPa, and then adjust the suction cup pressure to 0.5MPa.

(2) Adjustment of hopper size

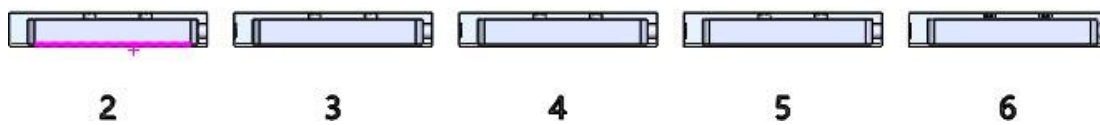


(1) Adjust the width of hopper 1 according to the size of large washing standard (generally, the width of hopper is 1mm wider than washing standard);

(2) Adjust the width of hopper 2 according to the size of the small washing standard (generally, the width of hopper 2 is 0.5mm wider than the washing standard). If there is no small washing standard, adjust hopper 2 to the minimum.

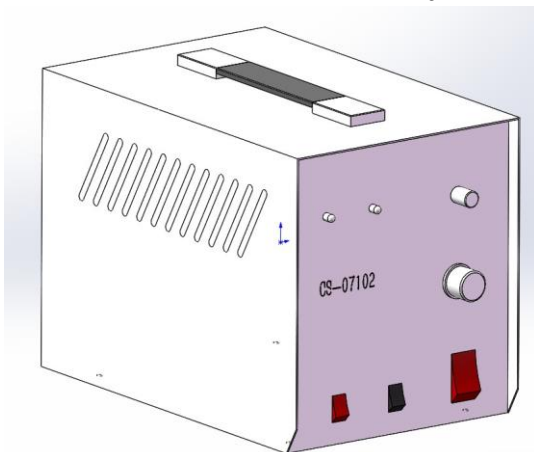
(3) Optical fiber parameter adjustment

光纤参数调整 Fiber parameter adjustment



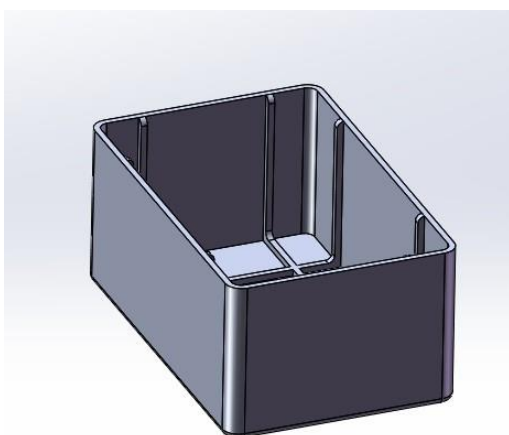
According to the washing marks of different colors and materials, adjust the optical fiber parameters of the corresponding sucker, so that the optical fiber can sense whether there is a tie mark or not.

(4) Ultrasonic parameter adjustment



Adjust the marking time according to the number of layers of washing marks. The more layers, the slightly longer marking time (touch screen)。

(5) Adjustment of receiving parameters



Adjust the number of labels received in each box according to the number of layers of washing labels (touch screen adjustment)

4. Safety precautions

4-1. Safety matters

- (1)  In order to prevent operation accidents, please do not touch any parts of any machine when the equipment is running;
- (2)  To prevent electric shock, please do not open the electric cabinet for any operation when it is powered on. ;
- (3) The operating air pressure of this equipment can be up to 0.8MPa, so please close the origin during maintenance. ;
- (4)  In order to prevent leakage accidents, please be sure to ground the ground wire;
- (5)  In order to prevent personal accidents, please turn off the power supply and air source when stopping for maintenance.

4-2. Matters need attention

- (1) Please don't put anything on the countertop to avoid getting involved in moving parts and causing mechanical accidents;
- (2) All parameters of the machine have been adjusted before leaving the factory, so do not adjust them at will.
- (3) Please read this manual carefully before specific operation.
- (4) This product is a precision instrument, so don't splash water/oil on the machine.
- (5) In order to prevent damage to the electrical components of the machine, please  stop the operation and unplug the power supply to ensure safety during thunder.
- (6) When the equipment fails, it should not be adjusted at will, Please contact the manufacturer in time.

5. Maintaining

- (1) The equipment should be cleaned after the production capacity of the day is completed, and air guns can be used to purge the equipment to prevent dust accumulation



Be careful not to wipe with alcohol solvent;

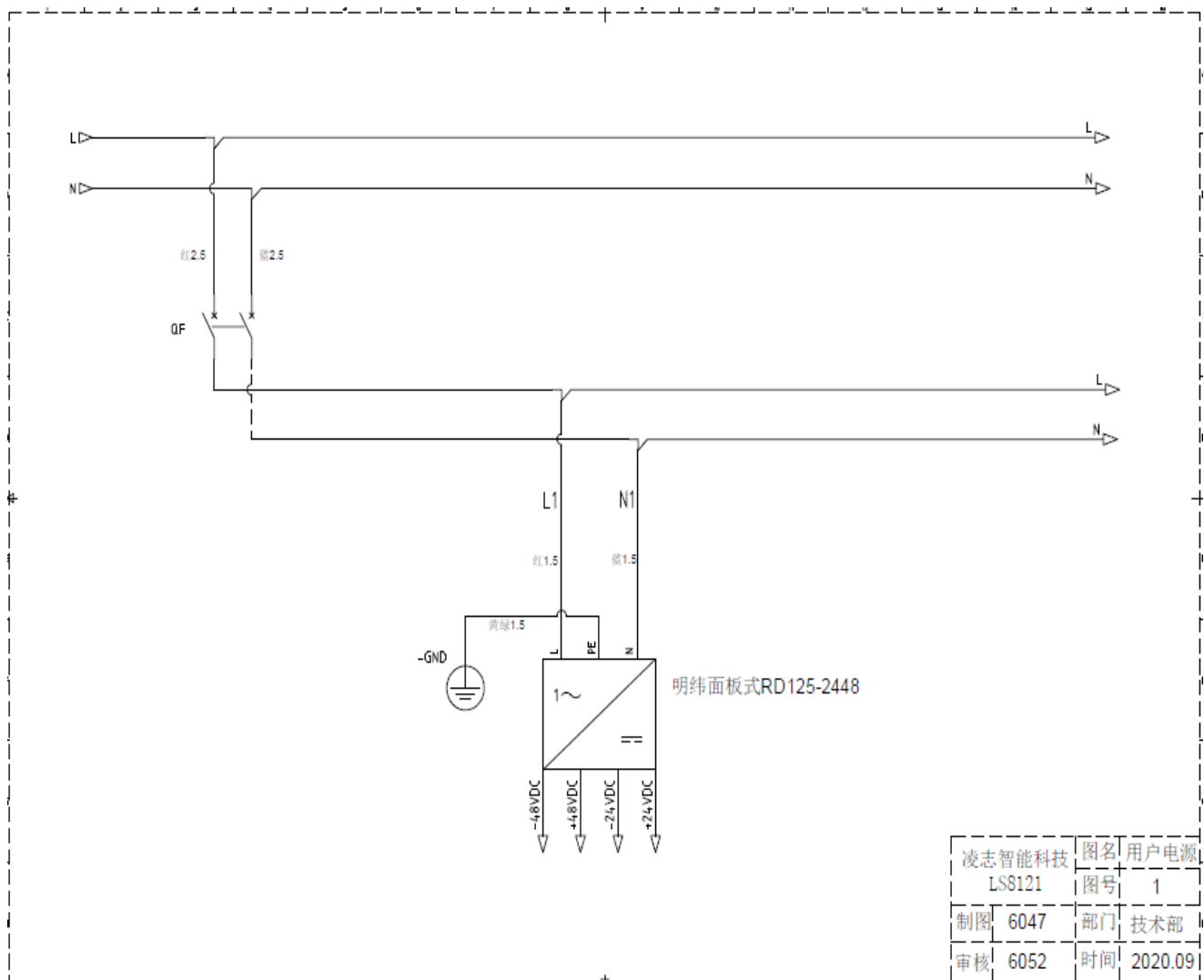


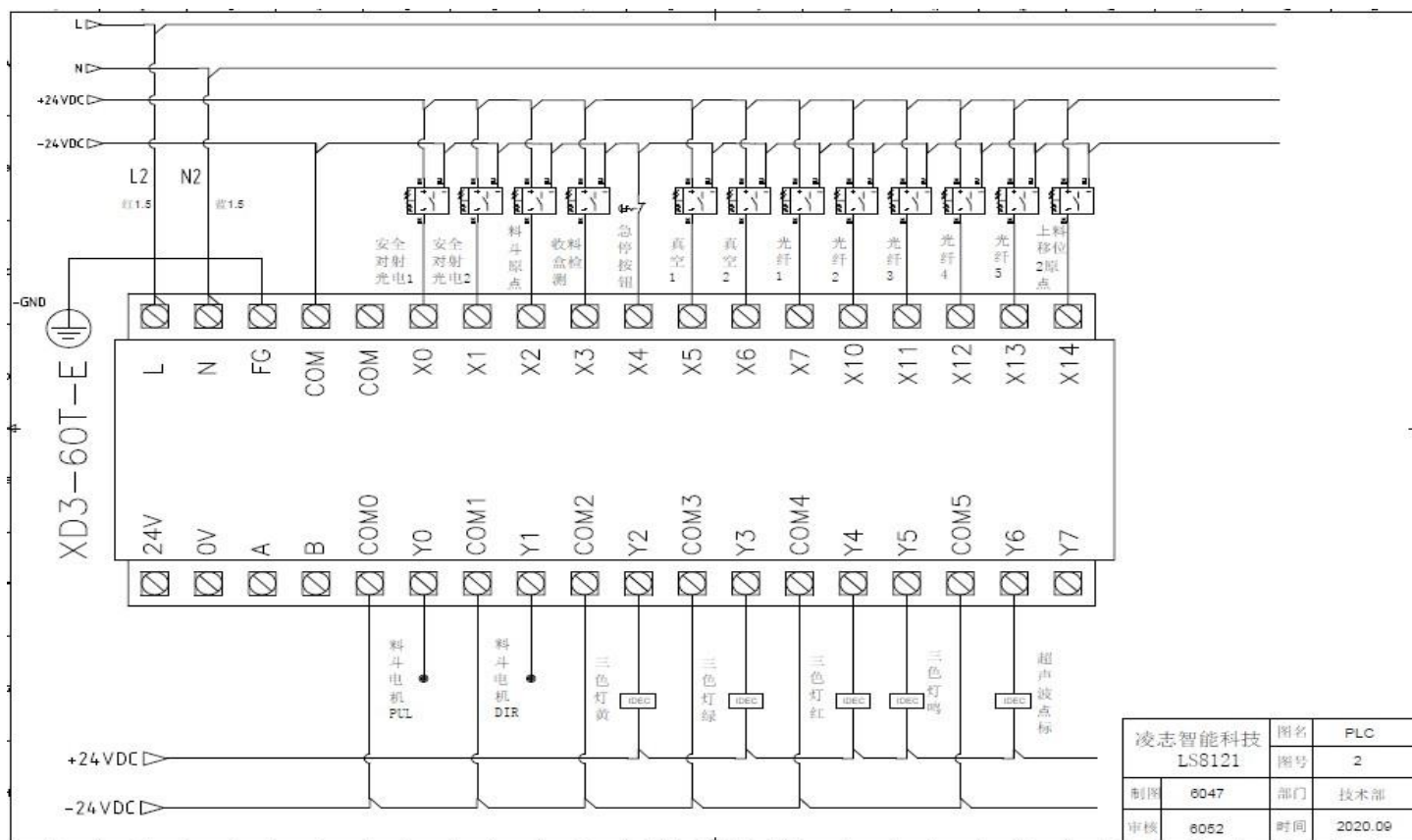
- (2) Please refuel the gas-liquid separator [1] on a regular basis, usually for 3 months. Open the gas-liquid separator by holding down the gas-liquid separator button [2] and rotating the oil tank clockwise.

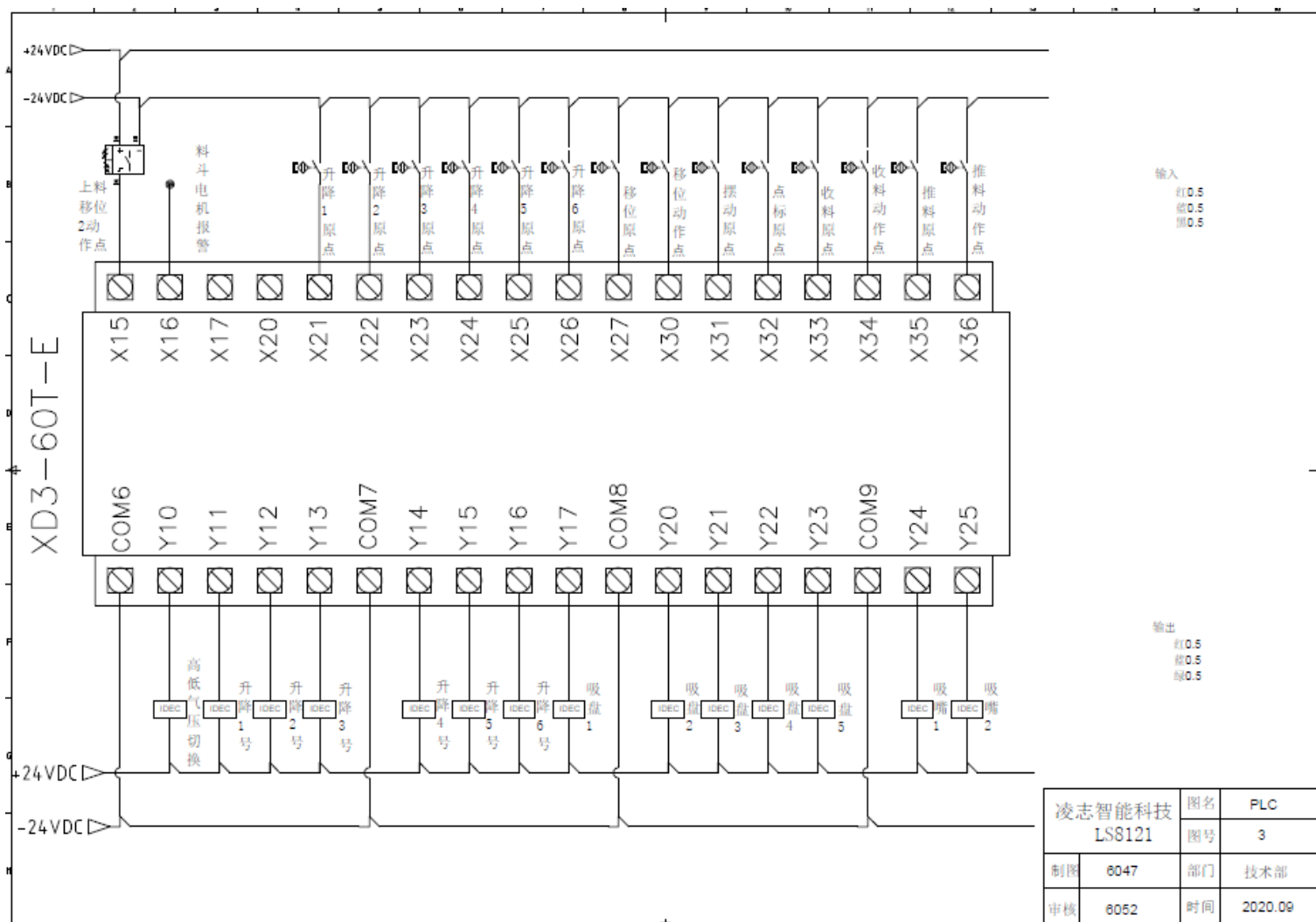
Note: Oil must use special oil cylinder, can't use sewing machine oil.

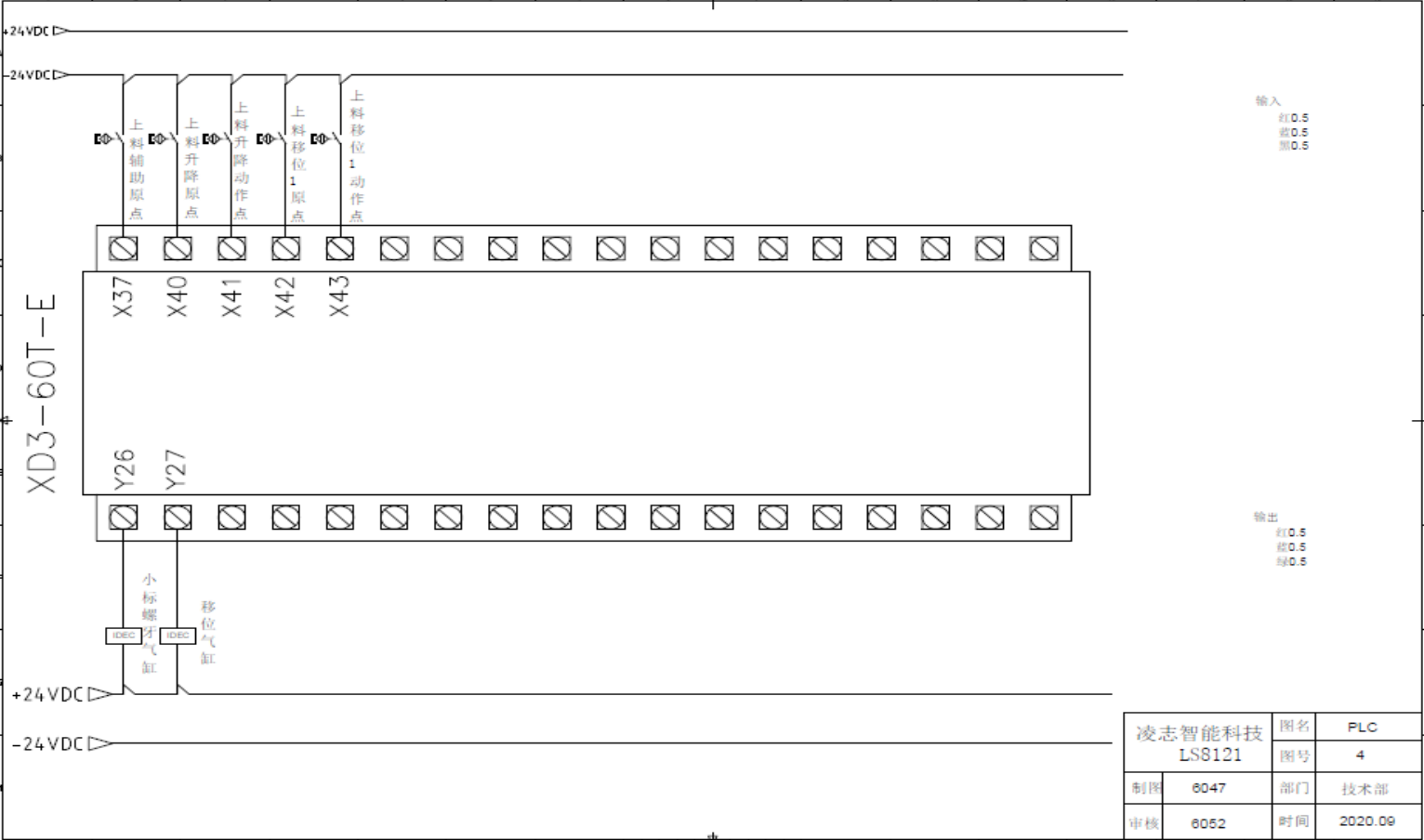
- (4) Please use our company's parts or parts approved by our company when replacing parts, our company is not responsible for accidents caused by using non-our company's parts;
- (5) When the equipment is not used for a long time, please carry out anti-rust and anti-corrosion treatment on key components, package the whole machine and store it in a dry and ventilated place;
- (6) Please refer to the specification for working environment;
- (7) Regularly check the electric cabinet for foreign bodies and whether the lines are aging.

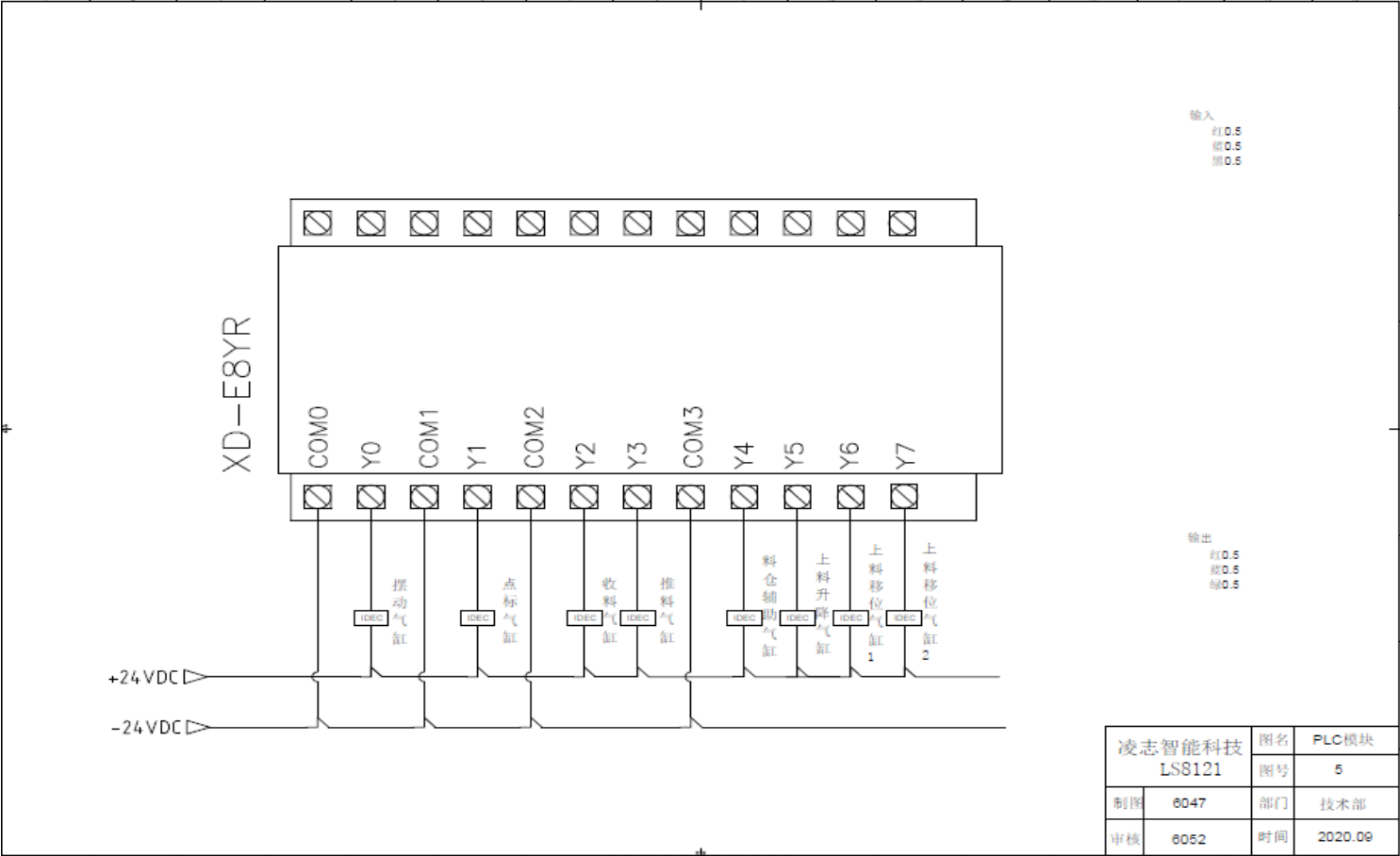
6. Circuit diagram

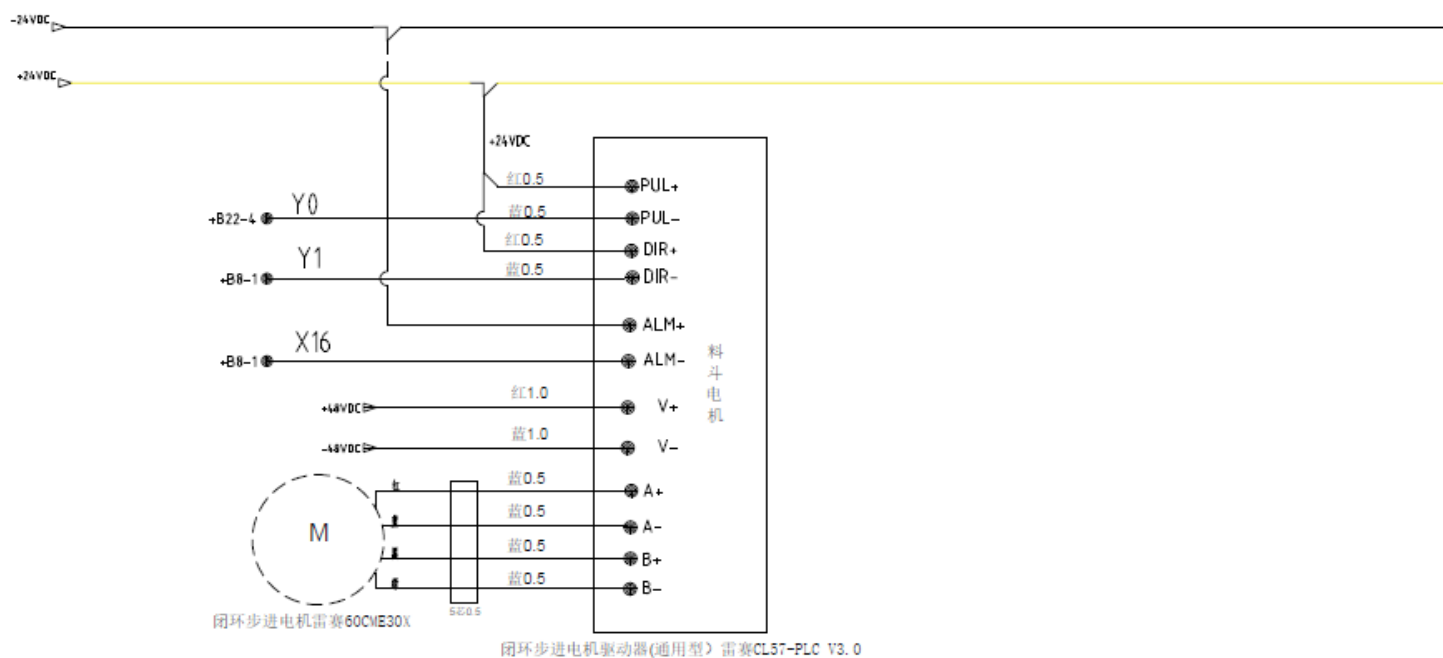








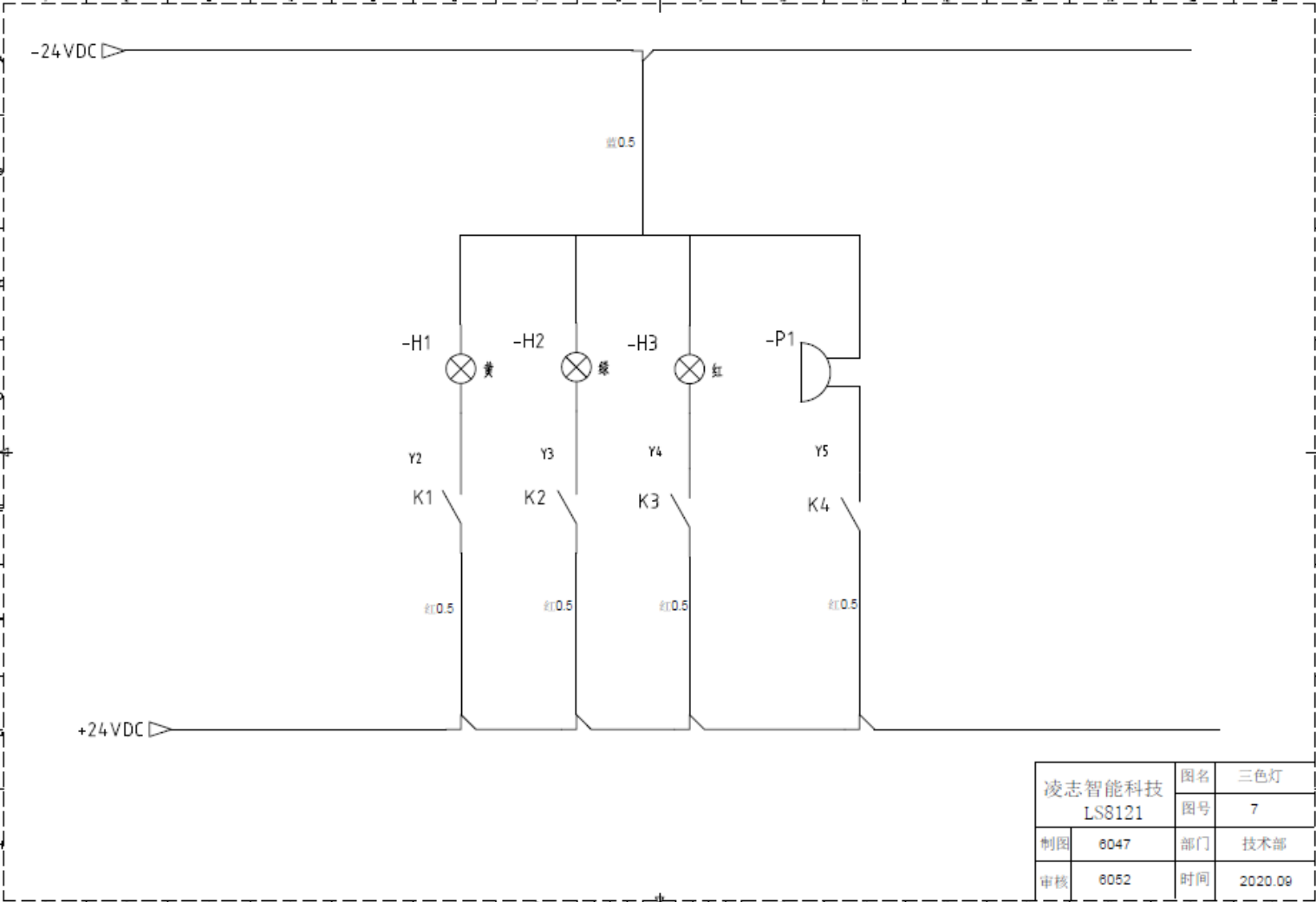


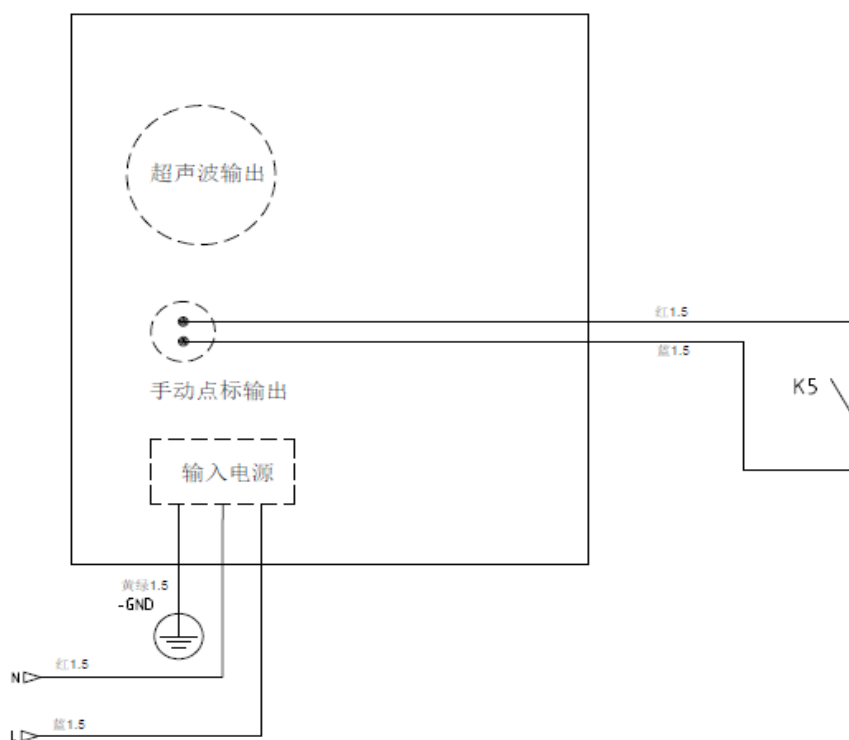


料斗电机细分数设置表

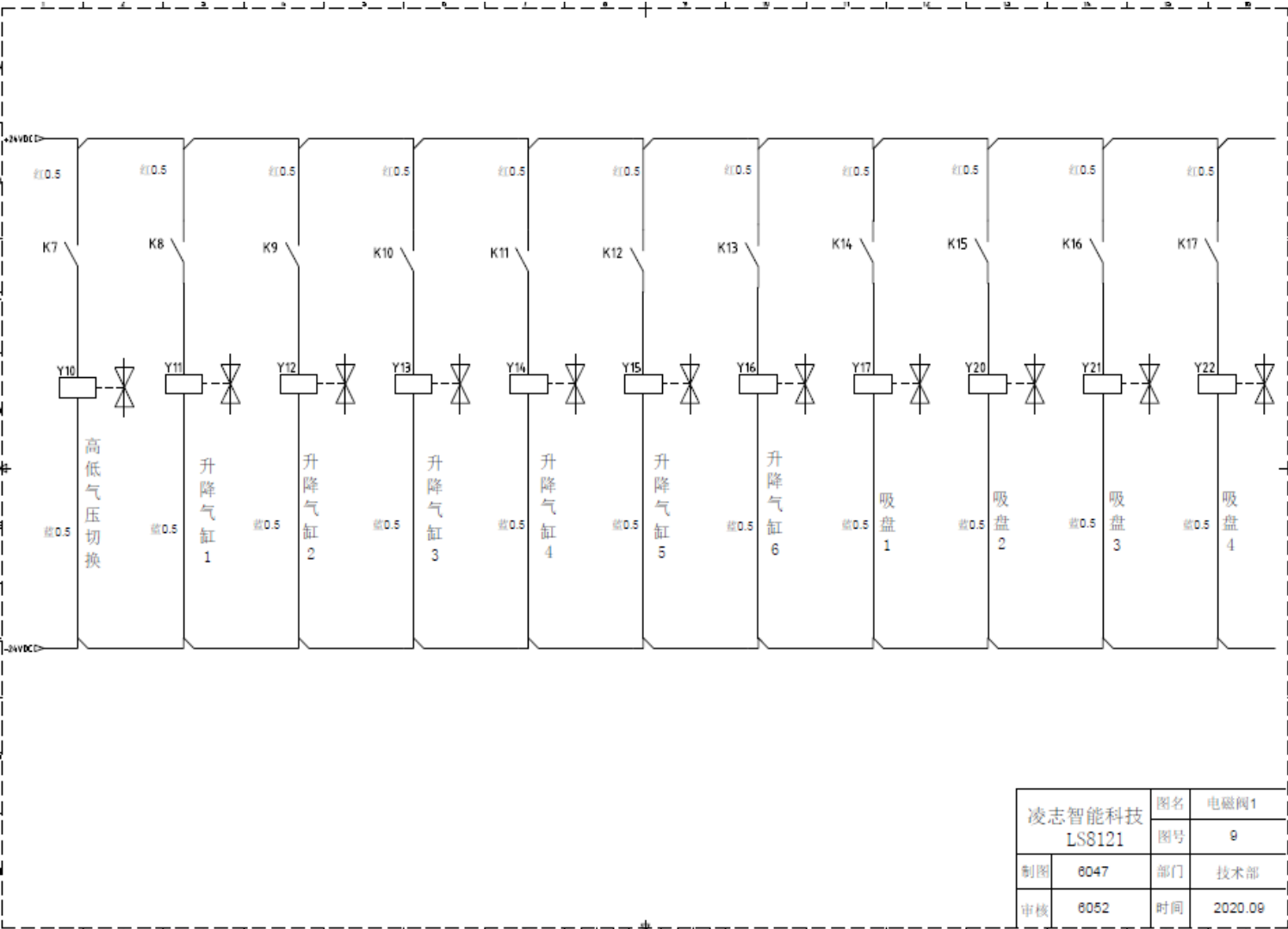
SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
ON	OFF	ON	ON	OFF	OFF	OFF	OFF

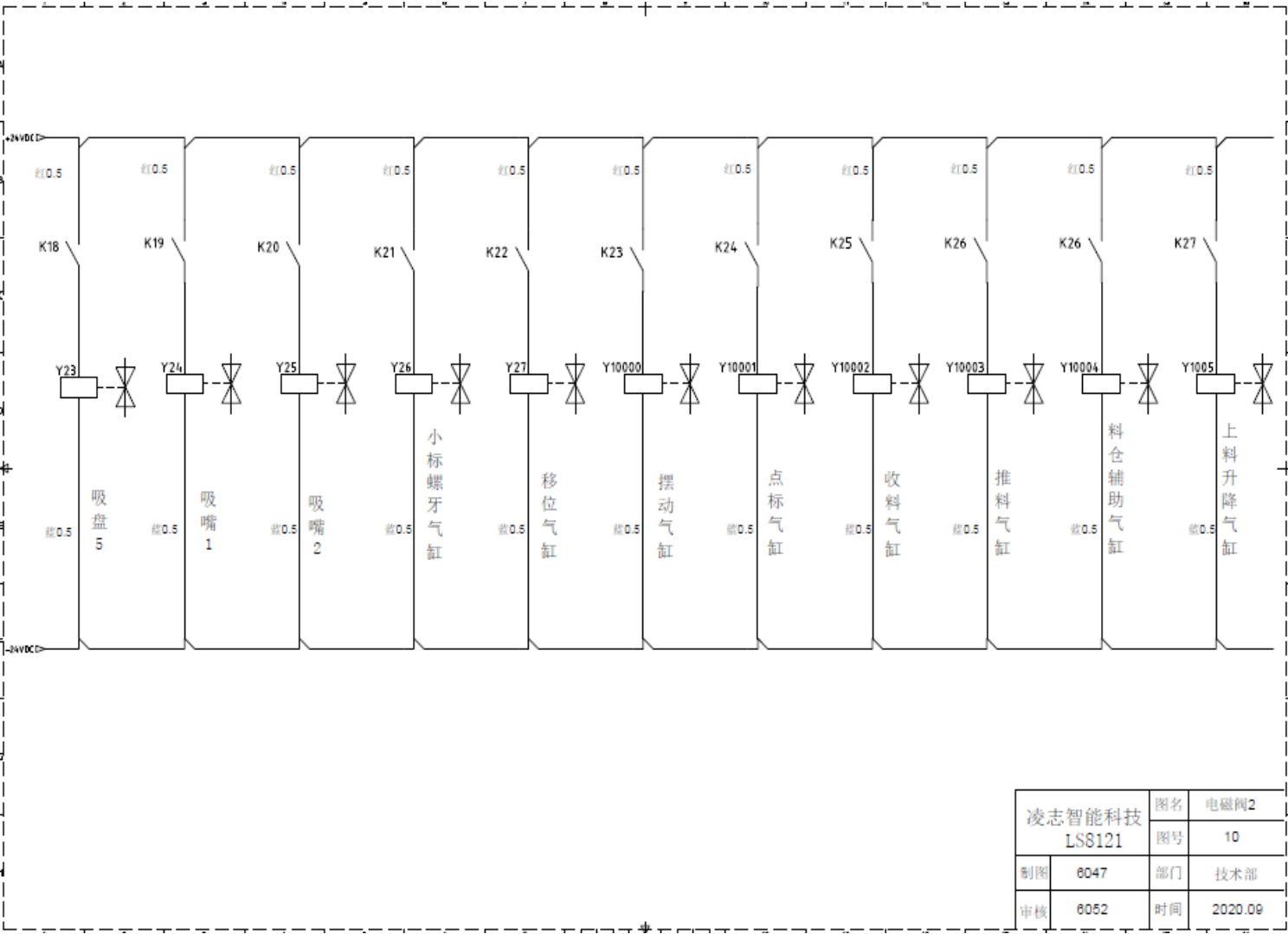
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制图	6047	部门	技术部
审核	6052	时间	2020.09

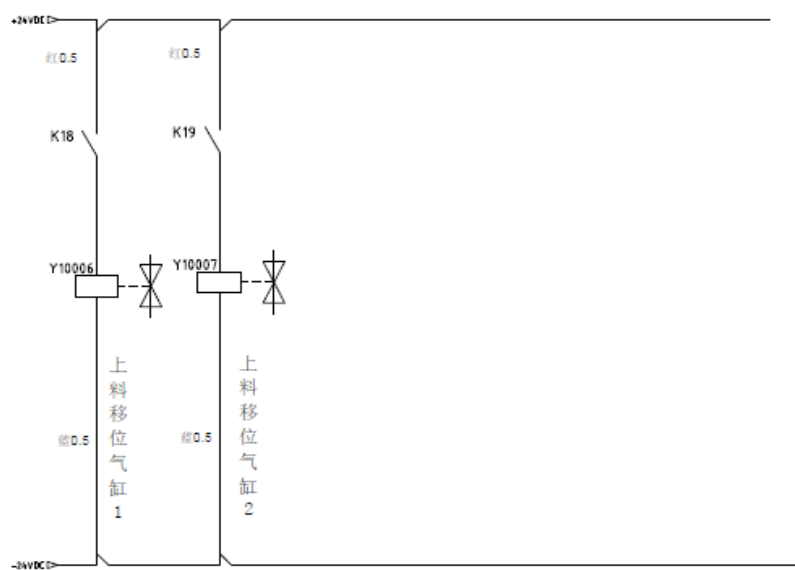




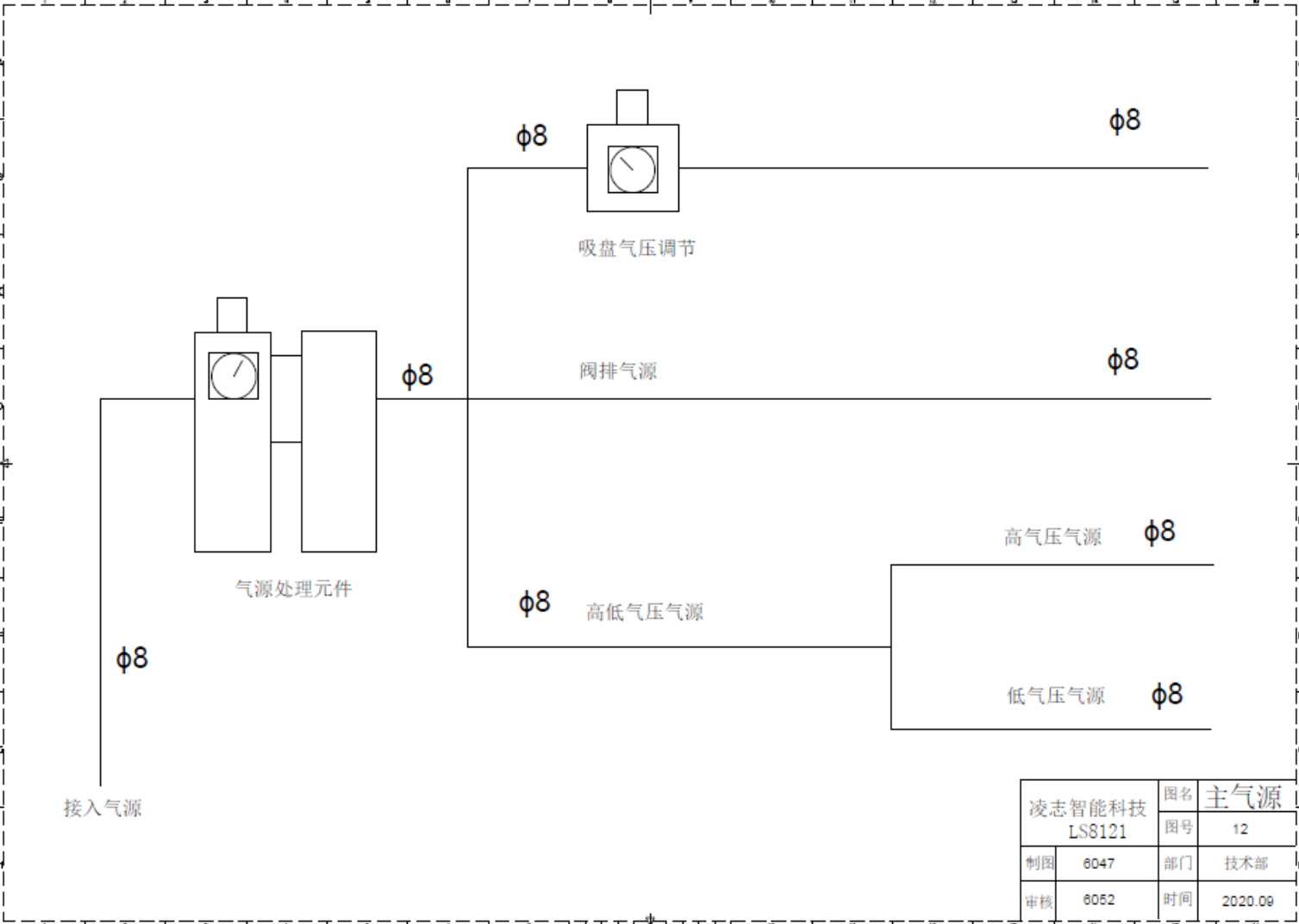
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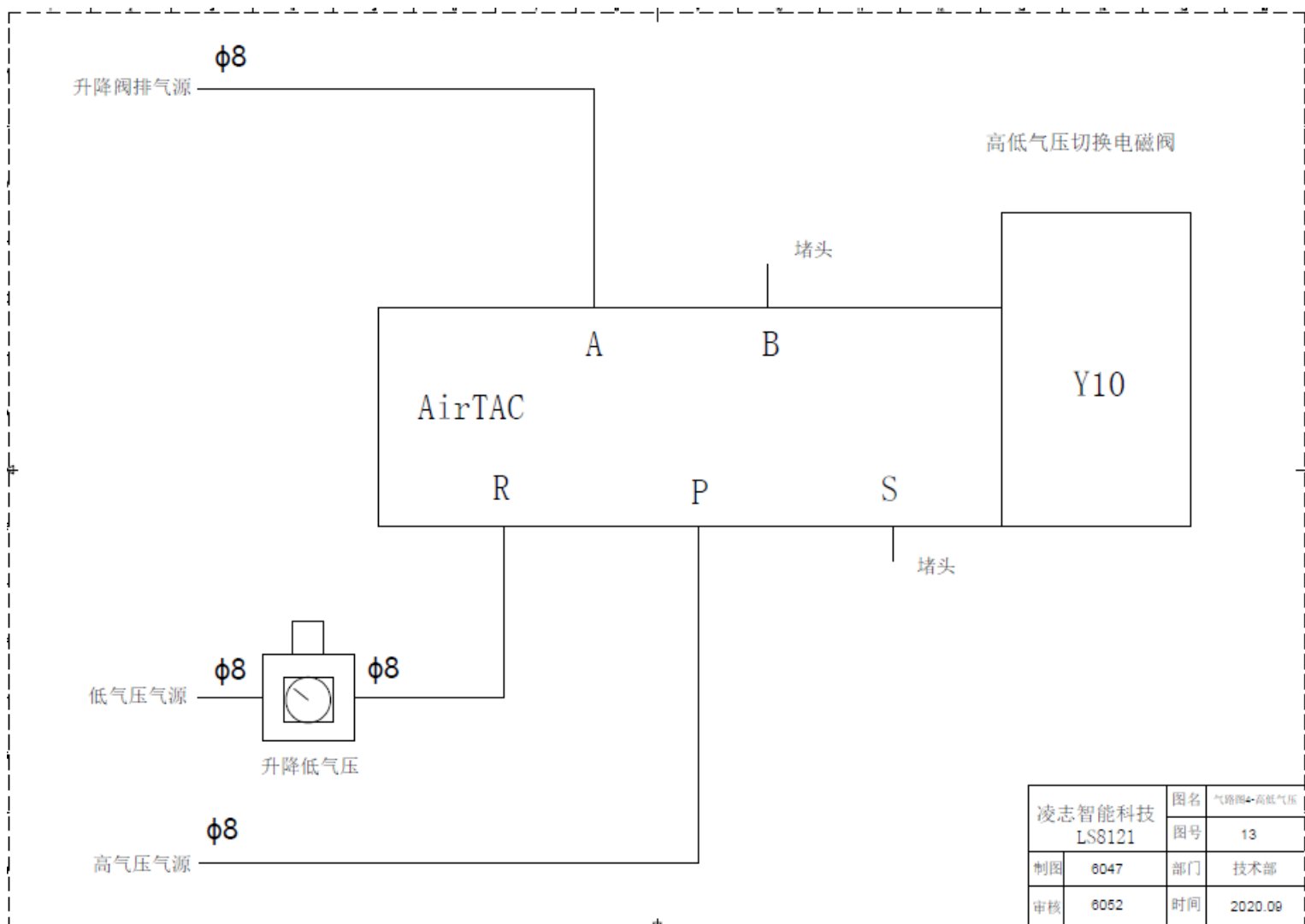


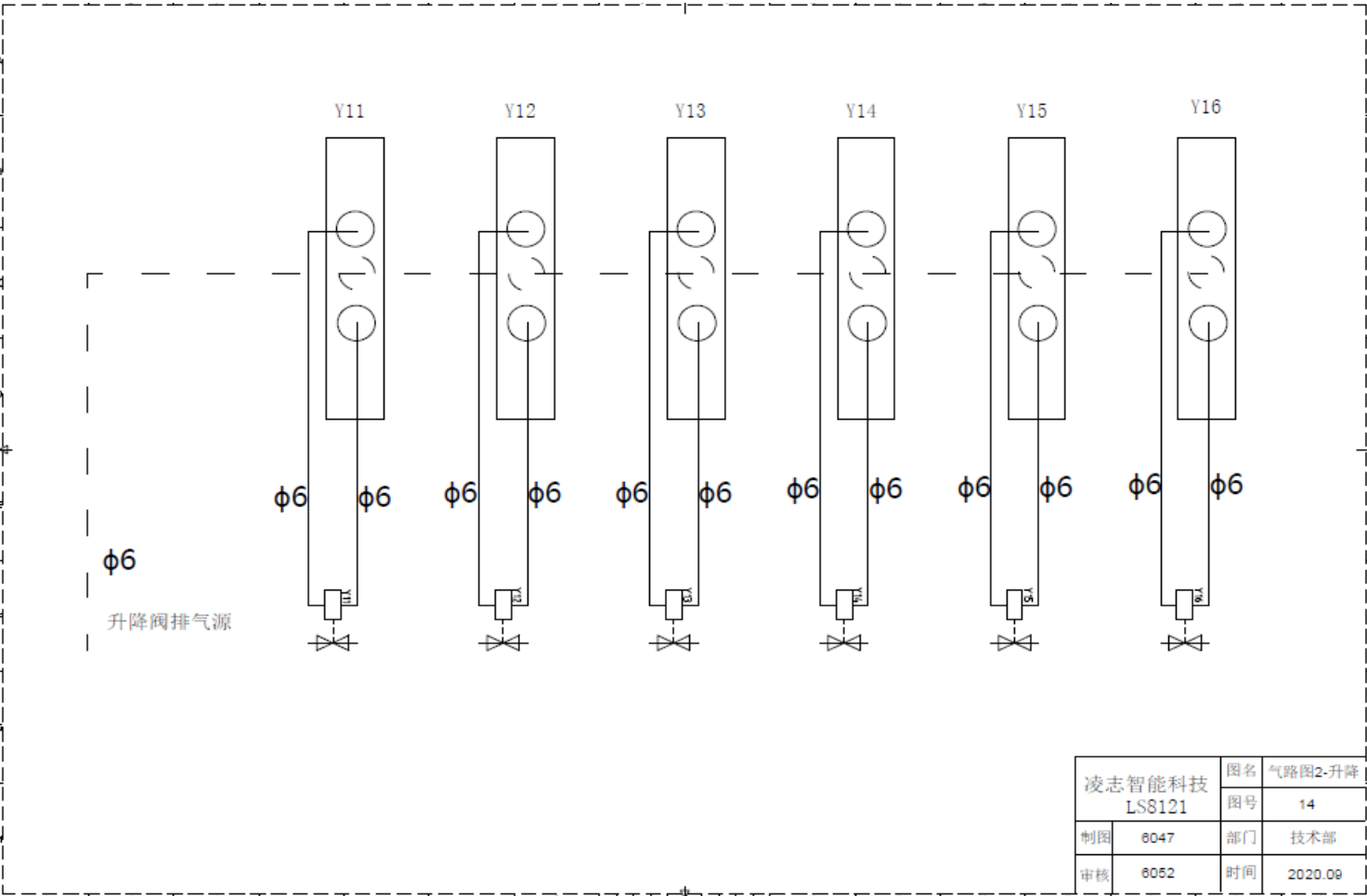


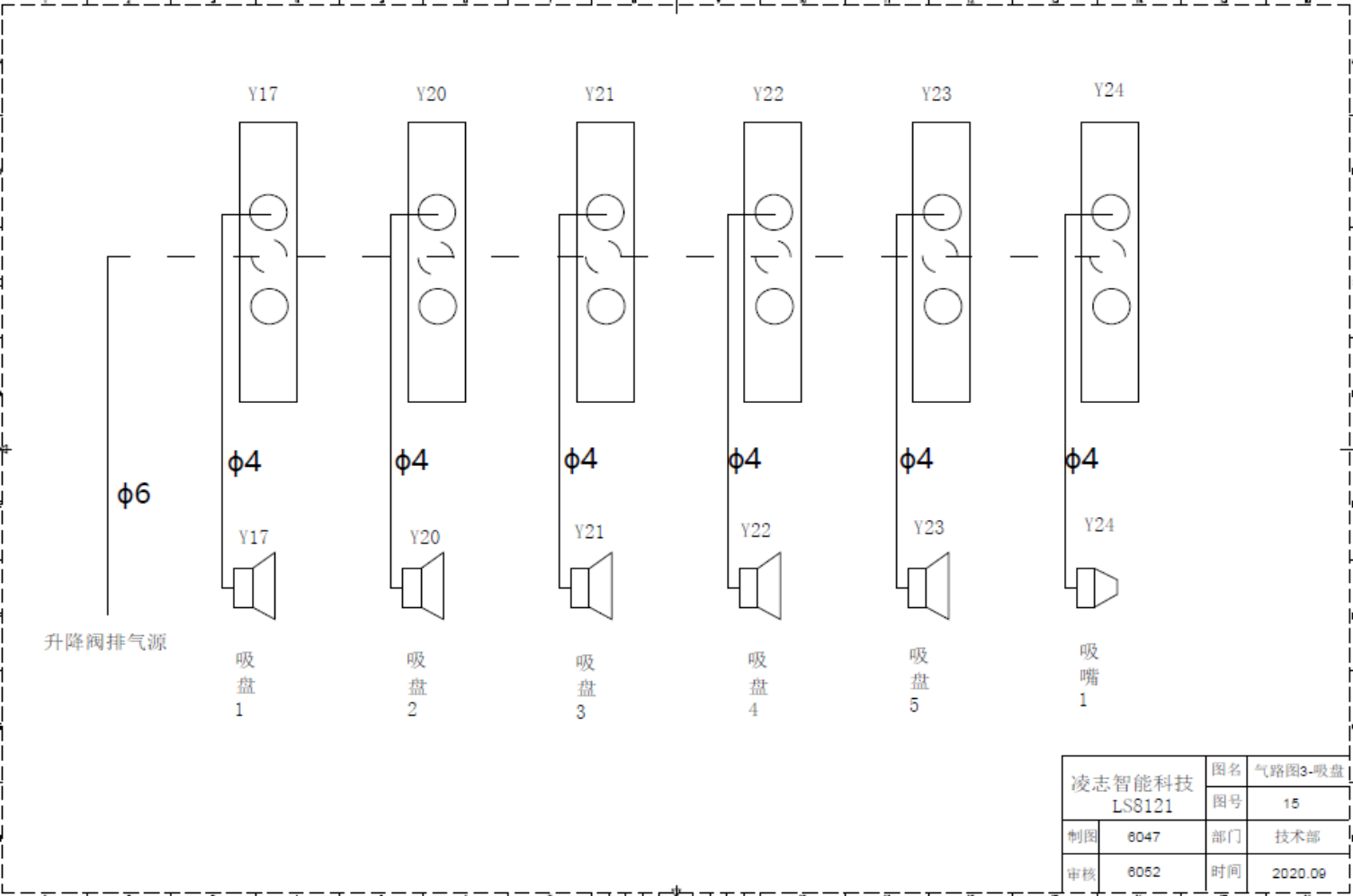


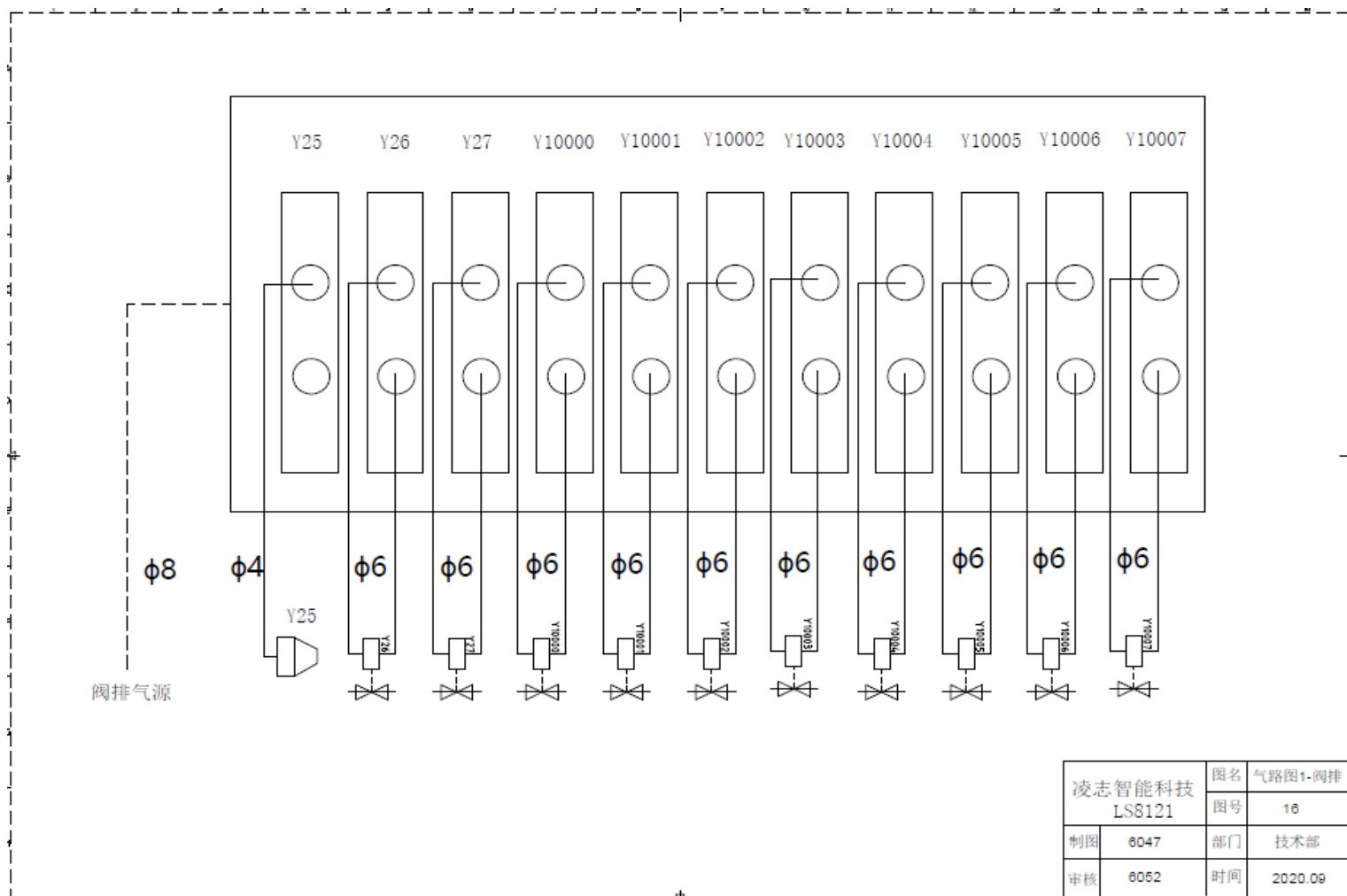
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制图	8047	部门	技术部
审核	8052	时间	2020.09

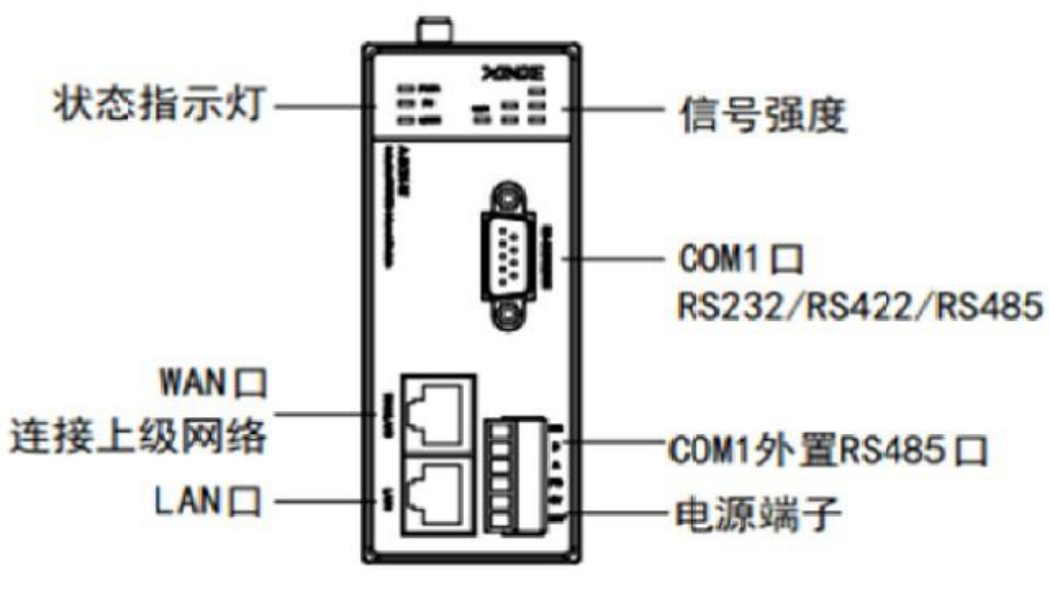












- SG ●
- S ●
- A ●
- FG ●
- 0V ●
- 24V ●

凌志智能科技 LS8121		图名	远程模块（选配）
		图号	17
制图	6047	部门	技术部
审核	6052	时间	2020.09