



SPD-C2018

ULTRASONIC CLEANER

USER MANUAL



Before placement and use of equipment, please be sure to read this manual in detail in order to fully understand the equipment performance, process and method of operation. And on the basis of accurate operation of the device. All accidents due to misuse of your company personnel and caused by the Division I has nothing to do.



When using the washing machine, should pay attention to the operating manual safety tips.



Affecting the cleaning effect of the work are many: pollutants, cleaning media, the cleaning conditions (temperature cleaning fluid, cleaning time, cleaning fluid replacement frequency), physical function (strength of ultrasonic waves), environmental factors (environmental cleanliness). All the above link will



affect the final cleaning. Basic work equipment must meet technical agreement outside the device before ordering requirements, the device can meet the customer's final cleaning cleanliness requirements.

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1. Device Overview:

In the rapid development of science and technology today, China's manufacturing industry has also been greatly improved. Followed for cleaning cleanliness requirements of the increasingly high. Cleaning equipment is widely used in various fields. With suitable cleaning machines are constantly being introduced. Cleaning equipment series and variety. SPD-C2018 cleaning device is a Superda company independently design and production of a cleaning device. Cleaning the same hardware and optical products artifacts than conventional cleaning equipment for a small footprint, save energy and save hours of work. Such equipment is simple, the operator needs to operate in accordance with the device prompts, followed by the process according to the wash basket into the process tank. Finally, the process is removed from the last slot. In addition to change artificial artificial tank is completed, the device in which the links are completed.



2. Process:

Manual Loading → Ultrasonic Cleaning → Steam cleaning →
Manual off

3. Equipment main structure and Features:

3.1 two cleaning stations:

Use cleaning solution to dissolve and emulsify contaminants peeled off from the workpiece surface. The first cleaning tank ultrasonic fine cleaning. The use of cleaning liquid chemical and ultrasonic cavitation, in the case of the dual in-line preliminary workpiece cleaning; the second cleaning tank vapor sperm washing. Use cleaning fluid evaporation of liquid on the surface cleaning.

3.2 Cooling devices:

Considering having a volatile cleaning liquid, in order to save cleaning liquid, the device is equipped with refrigeration devices. Refrigeration unit with a compressor, a condenser, tank, filter drier, expansion valve, an evaporator, high and low pressure protection switch pipe fittings and other components.

3.3 watershed means:

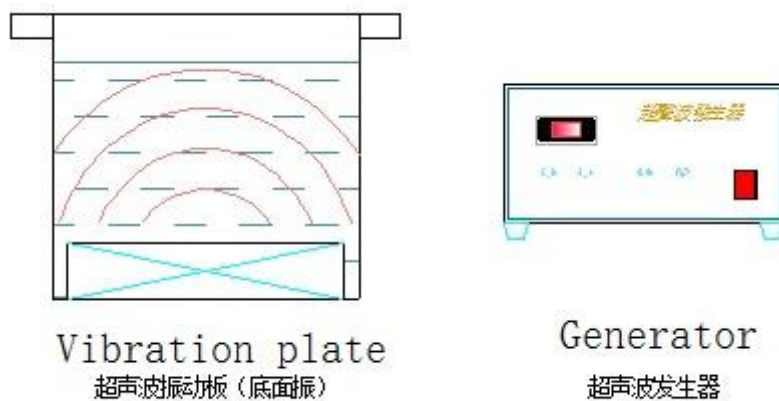
Making device installed in the upper portion of the cleaning tank, in the condensate solvent cleaning fluid at the same time, some water vapor condenses into condensate, reducing solvent



cleaning fluid concentration. In order to ensure continuous cleaning, to reduce the water concentration in the cleaning liquid, the device is equipped with means watershed. There watershed watershed device box, cold pipes, tubing and other components. Use solvent to separate the cleaning solution of water.

3.4 ultrasonic device:

Ultrasonic apparatus ultrasonic generator and ultrasonic vibration plate. Ultrasonic vibration plate mounted on the bottom of the cleaning tank installation. As shown below.



3.5 Automatic heating device:

Cleaning fluid are required to work at a certain temperature. The device is equipped with a heating device. Heating mounted behind the front door, and when the operation please open the front door with a handle to adjust the temperature, but it must be under maximum temperature 70 °C , such as adjusting the temperature exceeds 70 °C and occur machine problem, it is not responsible for the warranty. Heating device with a mechanical



thermostat, stainless steel heater and temperature probe (ultrasonic bath heaters 3KW heating pipes, steam tank heater heating the aluminum plate 3 * 1KW) components. When pressing the automatic heating switch (in the external protective circuit normal startup conditions), automatic heating device and started. When the cleaning fluid temperature reaches the set value, the automatic heating device and will automatically stop; when the cleaning fluid temperature is below the set lower limit value of the device will automatically start heating until the set value to stop. The device is one of the cleaning routine to configure the device.

Tips: Set the temperature mechanical temperature controller can be adjusted according to the performance of syrup, you can adjust the set value in the range of 40-70 °C, but the maximum should not exceed 70 °C (as a result of man-made causes mishandling device is not responsible for the warranty, the corresponding costs to your company themselves).

3.6 Electrical control devices: The entire electrical equipment of the control center. All components are in control of them. The part of the composition of domestic and imported high-quality components.

4. Before using infrastructure and transport

4.1 peripheral devices before infrastructure: 4.1.1 City electric access: the use of units required from the plant within the distribution box in the electrical lead to the electrical equipment control box. Wiring requires three-phase five-wire



system (GB 6mm2).

4.1.2 Wastewater pick out: solvent non-environmentally friendly green cleaning liquid cleaning solution, do not direct emissions.

4.1.3 Equipment shall leave some space for maintenance equipment around the unit from the wall over a distance of a minimum of 600mm.

4.1.4 Good ventilation environment.

4.2 Equipment Transport:4.2.1 Transport site only designed for the weight of the device itself; not attach any additional loads. Rally direction
4.2.2 slings must not exceed a 45 ° angle. When device can not enter the elevator and the factory gate, the device can not tilt and side down (because the compressor can not be placed lying down, as a result of man-made causes the compressor discharge lying cause damage to the phenomenon, not the warranty period, the need customers at their own expense).

4.3 The whole machine arrived factory, please kindly check for shipping damage immediately, if damaged please immediately inform the transport company and Superda Company.

5 Operation and description:

5.1 Instructions Before starting of the operating

5.1.1 before the beginning of this boot make sure to confirm the good overall power cable specifications meet the requirements.
Be sure to use the unit to match this peripheral infrastructure.

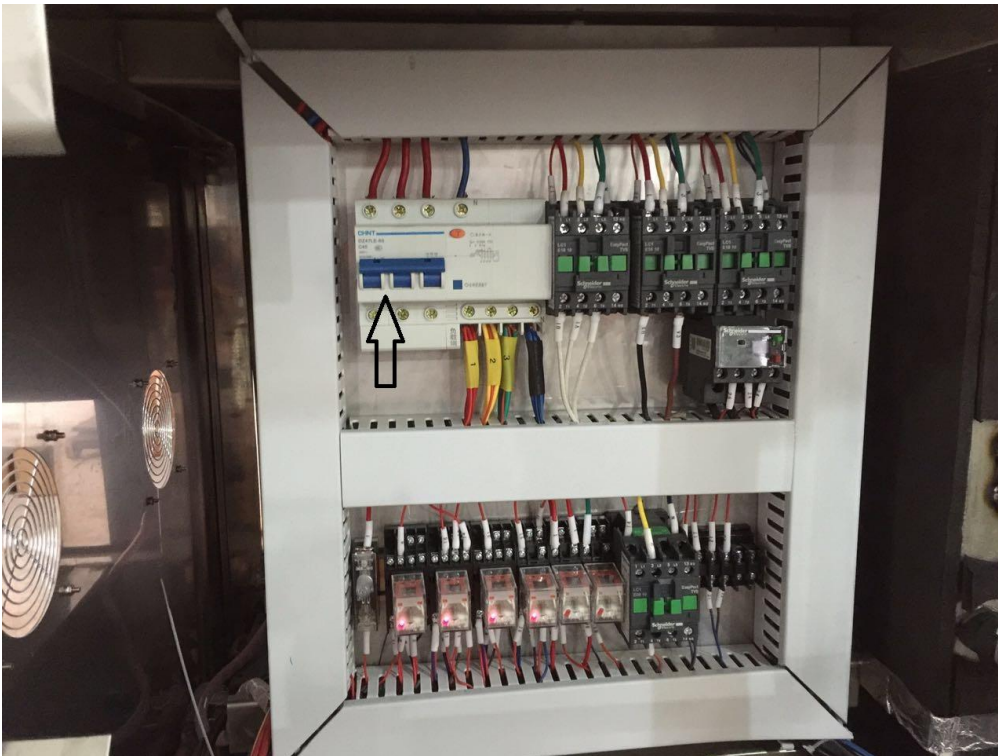


5.1.2 Normal boot, Check whether the equipment cleaning tank with cleaning solution. Each cleaning tank cleaning solution is deposited in accordance with the configuration process.

Keep the “Total air switch” open position.

Remark: This total air switch is normally open switch
(Before packing, we set it “On” position.)

Below photo for your reference.



Next , Press total switch from “OFF” to “ON” .



Note: Before open the heating button, Please open the
refreigeration equipment about 20-30 mins first, make sure
the frosting about 2-3mm thickness, then just begin open tank
heating and other features.

Frosting as below photo show



5.1.3 The value (Data) of such instrument not need to be adjusted



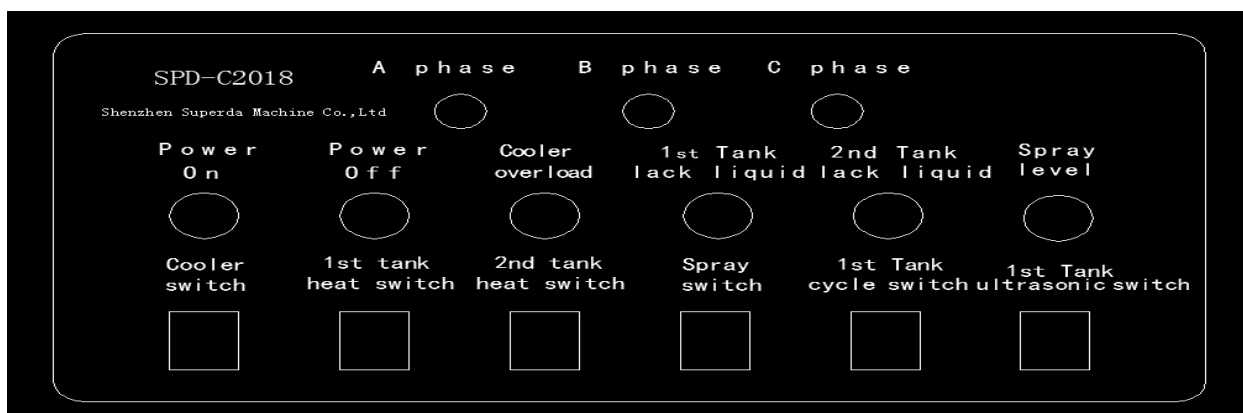
again. Just observations on each instrument meets the specified requirements. Thermostat operating instructions please read this user manual

Remark: The electronic control box and electrical control box for each instrument parameter setting table.

No.	Meter Function name	Parameter settings
1	1# Tank mechanical thermostat	35℃~45℃
2	2# Tank mechanical thermostat	35℃~45℃

Please adjust the temperature setpoint depending on chemical liquid.。

5.1.4 The above items to be verified, and then in turn to open air-conditioning unit, turn on heating, ultrasonic.。



Control panel

5.1.5 Please note that don't open the "Spray switch" button if you don't

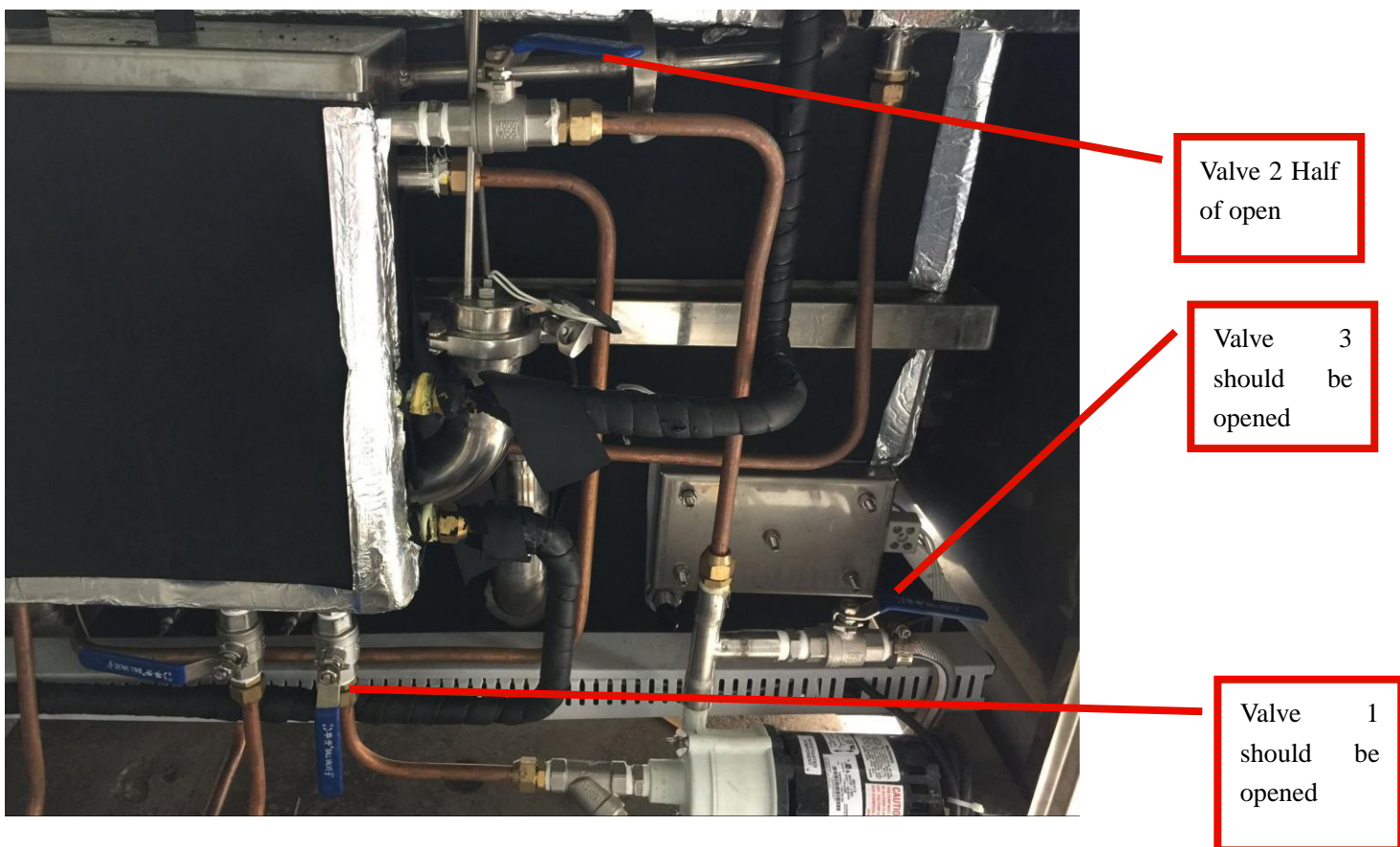


use manul spray gun. Because if you open the “Spray switch” , It will cause the pump to be burned when you don’ t use the spray gun.

If user don’ t operate manul gun but turn on the spray button cause the pump to burn out, user need to bear the corresponding costs.

Special Note: Before Open the Spray switch, please make sure the valve 1 (front of pump) and valve 2 (pump outlet connect to gun) ,and valve 3 ,these 3 set valves should be keep open first . (Please read below picture). If operator mishandling pump was burned, User need to bear the cost.

It should be follow below photo show situation (before packing, we will open it, and you not need to turn the valve off. It should be opened always)



5.1.5 Gun is using this box liquids , when spray level indication alarm



occurs, user should add the chemical liquid into this box.



Add chemical
liquid into this
box

5.1.6 Heating process is a waiting period. It takes some time working medium from room temperature (20 °C) to the set value. This time takes about 20-45min, summer will be shorter than winter. Be safely using equipment, in the process also need to pay attention to personnel near the equipment device.

5.1.7 Steam cleaning solution tank according to working hours and reduce evaporation, if the tank liquid alarm reduction in work for some time, suggesting that less liquid tank, we can choose from two methods add liquid. One is add to tank directly, Another method is add to backside small box (this method heating is slowly).

As blow photo shown



**Method1, Add
chemical liquid
to tank**

Method2, Add liquid to
small box, and it will
from here overflow to
tank



5.2 Operating instructions:

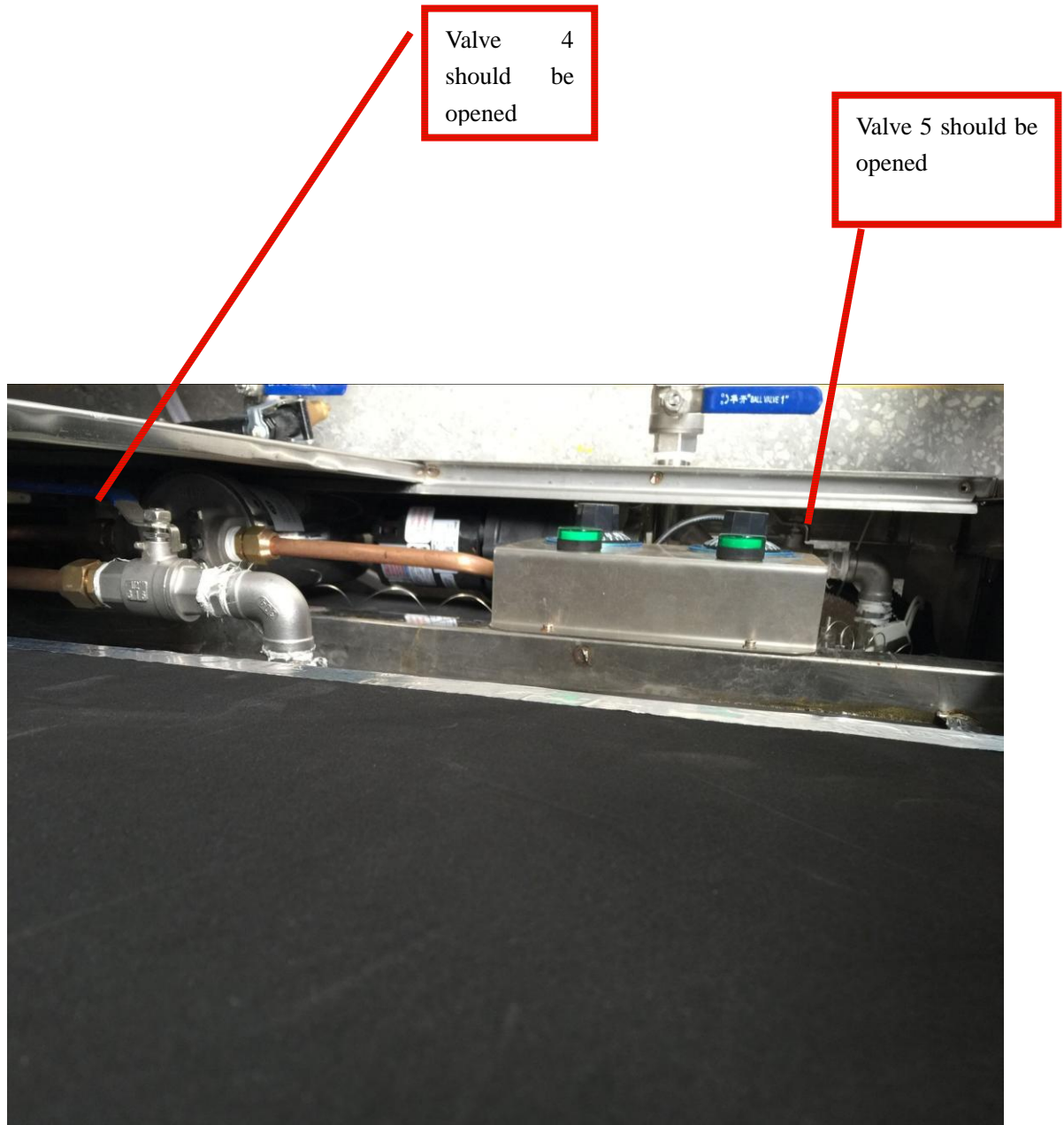
5.2.1 working medium were heated to a set point .

5.2.2 Then, the operator put bracket with workpiece to 1st tank, press switch button "1st tank cycle switch" and "1st tank ultrasonic switch", depending on the product and the customer decides cleaning time, after the cleaning is completed with the operator removes the cleaning basket, remove the wash basket into the next tank, because this tank steam was heating already (Remark, before, we have press on "1st tank heating switch" and "2nd tank heat switch" already). so, it not need to press any switch. Directly put into the 2nd tank. After the end of the second tank cleaning station, operator will remove the cleaning basket from equipment.

Special Note: Before Open the button “ "1st tank cycle switch", please make sure the valve 4 and valve 5 should be open first, as a result of operator mishandling that pumps were burned, User need to bear the cost.



It should be follow below photo show situation (before packing, we will open it, and you not need to turn the valve off. It should be opened always)



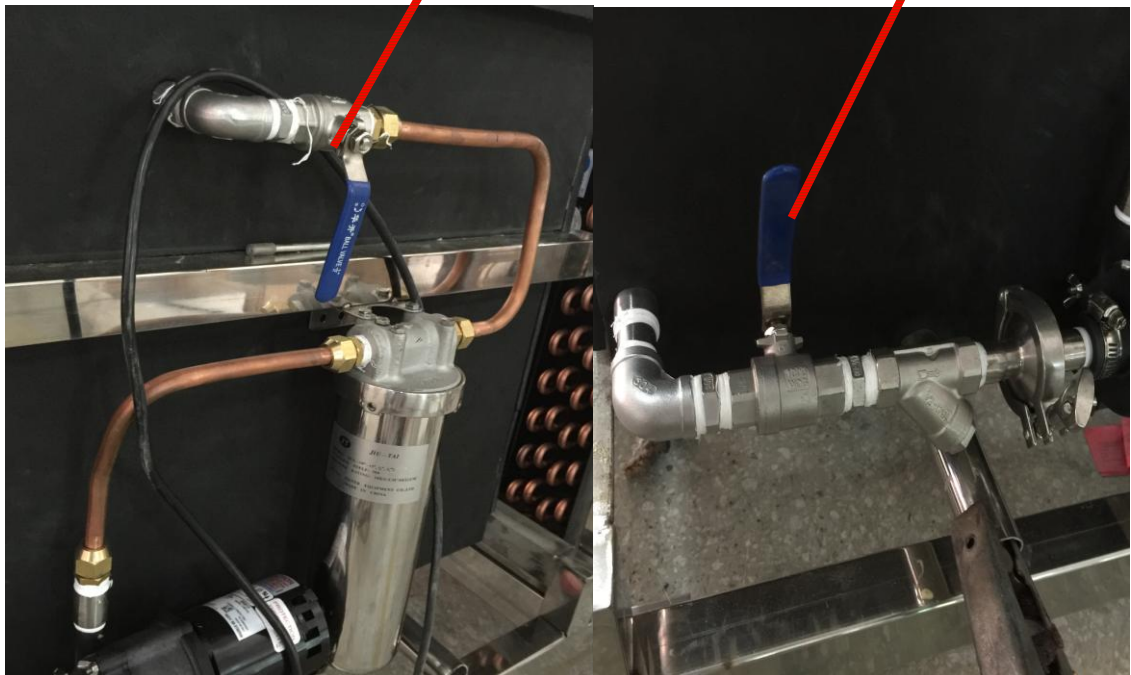
For example, below photo show Valve situation were closed ,these



are uncorrected. we will make it open before packing. And you not need to turn it off , it is a normally open switch.

Valve 4 was closed (it should open)

Valve 5 was closed (it should open)



5.3 Equipment stop instructions

The operator turn off the control panel in turn , Close air-conditioning switch, heating, shower, cycling, ultrasonic all button, At last, just turn off the power button.

5.4 Abnormal situation Instructions:



Equipment any irregularity (such as: fire, personal safety accidents, overlapping washing basket, washing basket hit the groove face or other parts, etc.), be sure to stop equipment. When the abnormal condition is relatively simple elimination of the start switch is turned on again, people need to observe whether the device will appear abnormal. For more intractable but exceptions can be dealt with by yourself using the unit, be sure to follow the instructions to stop the operation before processing. For exceptions need to ask the supplier to resolve, but also need to be sure to follow the instructions to stop the operation. And hang in a prominent place equipment "equipment in need of repair, please do not operate this equipment," and other words are shown hanging cards.

5.5 Ultrasonic generator instructions, please read file "SPD-C2018 Generator manual".

6 Caution:

6.1 vibration plate surface (surface amplitude) can not have a heavy compression and heavy impact, vibration plate surface (surface amplitude) it can not be scratched;

6.2 ultrasonic transducer is prohibited to start in less liquid state;

6.3 heating is prohibited to start in less liquid state;

6.4 ultrasonic generator, electric control box and the control panel is strictly prohibited to enter the water;

6.5 voltage exceeding the national standard , it should immediately stop using the device;



6.6 The parameters and position of the ball valve on the device is prohibited artificially tampering;

6.7 grounding wire on the device must be grounded. Non-human tampering;

6.8 prohibited the user to touch cleaning liquid;

6.9 heating components during use, is strictly prohibited by hand, foot or other body position to touch the cleaning solution;

6.10 Wash hand in equipment is prohibited ;

6.11 electrical control box should be placed in a well-ventilated place.

6.12 Please turn of power when equipment repair and maintenance .

6.13 after the air-conditioning unit turn off but it need to re-start please make sure stop time more than three minutes;



Please comply with the above requirements. If you are using the device contrary to the process of the damage caused by the project are no longer free warranty. If the actual use of the process equipment have personal safety accident caused by a breach of that project and I have nothing to do!

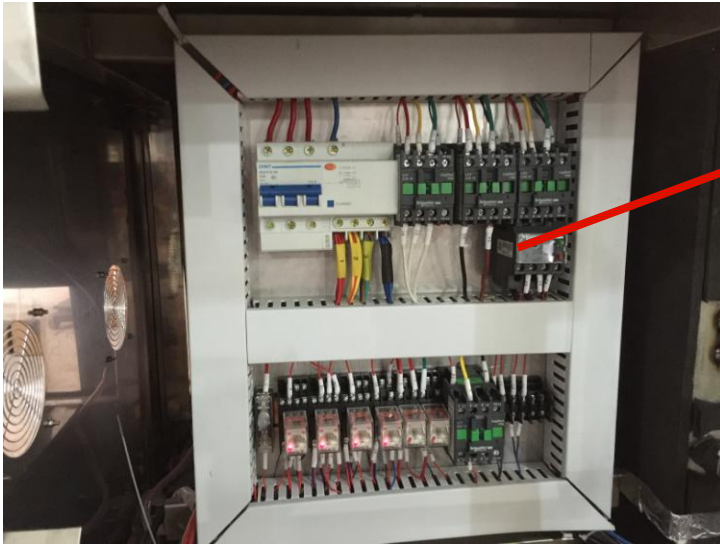


7 General failure and treatment:

Fault Feature	cause of issue	Solution
Turn on button air-conditionin g. lighting but the cooling effect not good .	1、 the control circuit has problem	1、 Check the control circuit;
	2、 air-conditioning unit failure	2、 professional refrigeration person to maintenance.
Heating button is pressed, the temperature on the thermostat display not changed	1、 control circuit has a problem;	1、 Check the control circuit;
	2、 heating component damage;	2、 replace the heating components;
	3、 thermostat damage;	3、 replace the thermostat;
	4、 mechanical thermostat temperature setting unreasonable;	4、 re-set temperature;
Ultrasonic button turned on, ultrasonic vibration does not appear	1、 ultrasonic vibration plate or transducer is damaged	1、 repair or replacement;
	2、 ultrasonic generator is damaged	2、 repair or replacement;
	3、 Level switch is damaged	3、 the replacement level



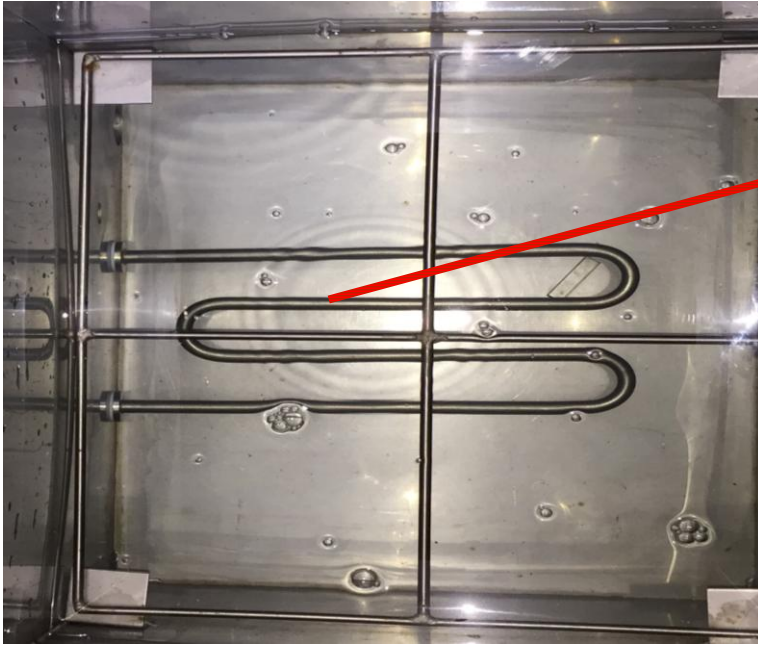
		switch;
	4、Control circuit have problem	4、 Check the control circuit;



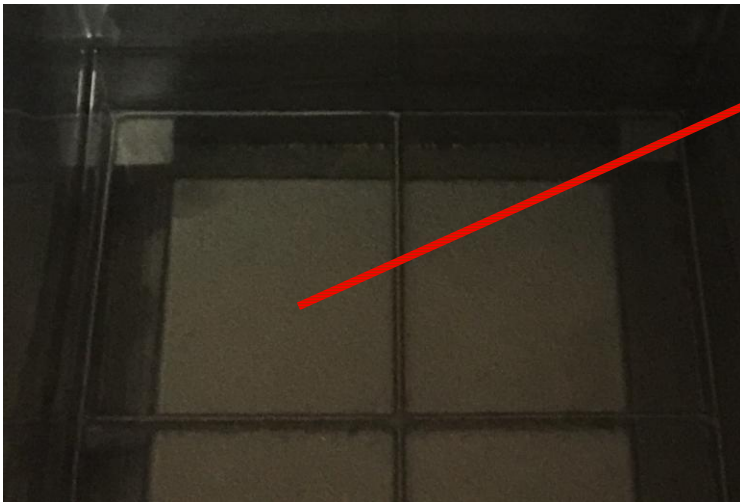
Control
circuit



1KW Aluminum
heating panel



3KW Stainless steel heating
pipe



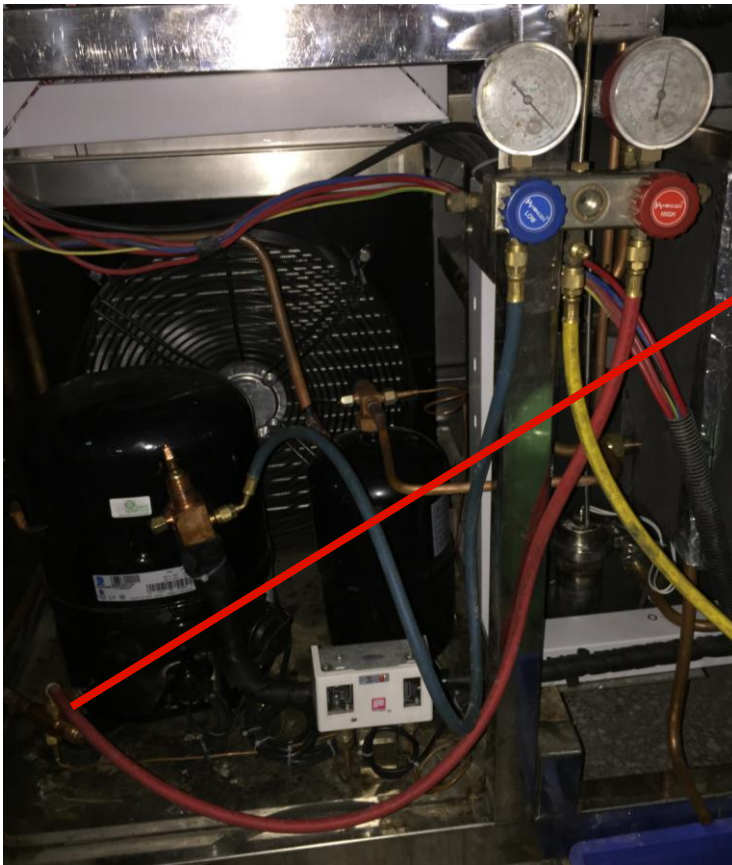
Ultrasonic vibration
plate



Level
Switch



Connect to Low
pressure gauge



Connect to High
pressure gauge

8 Equipment inspection and maintenance

No.	Equipment Inspection	Maintenance	Times
1	Tank cleaning	Clean	1~2 week/ time
2	Frame outer seal plate	Clean	1 month/time
3	Electronically controlled	Blowing	1 month/time



Checking item needs to do by each class power on, at least once a day. If not check for a long time, resulting in damage to the equipment and malfunction. it won't be free warranty.



9 Equipment parts brand:

No.	Name	Size	Brand
1	Stainless steel heater	1KW heating plate Aluminum	Taiwan “Honglong”
2	Compressor	3HP	Taikang (Tecumseh)
3	Ultrasonic vibration plate	40KHz/900W	Shenzhen” Lizen”
4	Generator electric box	Blue case	Shenzhen” Lizen”
5	Level Switch	M10 *L85mm	Shenzhen” Lizen”
6	Stainless steel heating pipe	380V 3KW heating pipe	Taiwan “Honglong”



10, Spare Parts

Item	Name	Quantity
1	Level Switch	4pcs
2	3kw Heating Pipe	2pcs
4	10 inch Filter cotton core	4pcs
5	Bread board	1pc
6	60A power tube	4pcs
7	6A protective tube	6pcs

Note: water heater, liquid level switch and other vulnerable parts warranty period is three months.