

SUN series Quick Steam Sterilizer

Operation Manual



Content

1、General Introduction	2
2、Application Scope	2
3、Tech. Parameter	2
4、Diagram Specification	2
5、Installation	3
6、Control Panel	3
7、Operation	3
8、Emergency Condition	4
9、Maintenance and Service	5
10、Transportation and Storage.....	6
APPENDIX	6
I Working status display table	6
II Steam way Map	7
III Wiring map.....	7

SUN series Quick Steam Sterilizer

1. General Introduction

This Autoclave is a precision instrument specializing in the operation occasion in need of simple, fast and efficient sterilization by the doctor or his/her assistants, and the doctor shall take the responsibility for such work.

This Autoclave is equipped with the microprocessor for intelligent control and man-machine interface for convenient operation. With the distinctions in displaying parameter and condition actively, evaluating malfunction automatically, shutting off for self-protection automatically in case of excessive temperature and pressure, this type autoclave is reliable product in sterilizing.

2. Application Scope

This product is N-level sterilizer for dental, ophthalmology, operating room, laboratory, small dental equipment, surgical instruments sterilization 135 °C for rapid sterilization of items

3. Tech. Parameter

Inner chamber of the quick steam sterilizer (Diameter X Depth) 125mm X 195mm
Rated Voltage..... 220V $\pm$ 22V, 50Hz $\pm$ 1Hz ; 110V $\pm$ 11V, 60Hz $\pm$ 1Hz
Rated Power.....500VA
Sterilizing:(Pressure/Temp.).....2.0~2.3bar/134°C
(Both of above are Under Standard Atmospheric pressure)
Fuse-Melting pipe..... T15A; T30A
Water Consumption volume per recycling round..... .0.15L
Operating Temp.....0-40° C

4. Diagram Specification



Attention and warning



I Sort B model device



Protective Grounding

5. Installation

The clearance between the exterior side surface of the autoclave and the ambient neighboring articles shall be 10cm as retained, and the top surface shall be 20cm retained.

The air-cooling window attached to the exterior surface of the autoclave shall be non-clog by dust or articles, and the autoclave shall be located in the proper air flowing environment by recommendation of the supplier.

The autoclave shall be installed on the horizontal working base.

PREPARATION BEFORE OPERATION

Before operation, please connect well to the power source. Connect the power source hole under the back left side of the autoclave and the power socket by the attached power cable inside the product's package so as to switch on the autoclave. Push down the main power button at the right bottom corner of the front side, when LCD display bright it means that the autoclave get through with the electric power, and the process then is in initialization status with "LOAD" being shown on the screen. The autoclave is not heated while under such initialization status.

Note: If the boot display "DOOR", need to open the door knob, so that the work status display "LOAD".

6. Control Panel

6.1 Air pressure display

Display on time the air pressure inside the cavity. Unit: Bar

6.2 Temperature display

Display on time the temperature inside the cavity. Unit: °C

6.3 Sterilization time display. Unit: Minute

6.4 Status/ malfunction code number display

Applied for displaying kinds of status of the autoclave during its working time. See more details in "Appendix working status display form".

When alarm occurs to the autoclave, the digital pipe of the display will show the alarm code number, the user can find out the malfunction part. (Once the malfunction occurring to the autoclave, please contact the service center or distributor immediately).

7. Operation

Before operation, please connect well to the power source. when LCD display bright it means that the autoclave get through with the electric power, and the process then is in initialization status with "LOAD" being shown on the screen. The autoclave is not heated while under such initialization status. Otherwise, you need to close the door by handle completely. Then press the "Start" button to start the sterilizing.

7.1 Water filling

First sterilizing need to fill no less than 150 ml of distilled water, after that, each sterilizing just need to fill 30 ml of distilled water. (Note the water level should keep at the position of supporting basket frame)



Note: please use distilled water, in order to prolong the service life of sterilization.

7.2 After modification, on the status of "READY", press the "START" key to start working.

Note: If the door is not completely closed, the machine can't work when press down the "START" button. If the door is opening during working process, the working status display will flash "E5" as alarm and the autoclave will stop working until restart again by switching off the power and dismissing the alarm.

7.3 Status display "END", and has a beep after sterilizing process, then you can open the door and take the sterilized apparatus out.



Note: In case of scald, use the attached hand-support plate to take out the sterilized apparatus.

After opening the door of autoclave, the process is reset at "LOAD" state, which means the autoclave is under heat preservation status and waiting for another sterilizing procedure.

7.4 The waiting time for next sterilizing is at least 10 minutes, and ensure temperature decreasing enough.

7.5 Please shut off the main power supply when you don't use the autoclave. (The light of power is off).

8. Emergency Condition

During the running time, the autoclave will automatically raise the alarm, release pressure, stop heating and display the warning code. (The definition of the warning code is as the below: malfunction code and resolving method) for ensuring the safety of the operator if the emergencies occur.

Any emergencies happen, please check the warning code table for resolving the according malfunctions. If not possible to resolve, please contact the dealers. We will try our best to provide help to you in short time.

Malfunction code and resolving measures

01	E1	Heating failure	Check the heating heater Check inlet valve of water is normal Check water level Check for gas leaking away
02	E2	Failure to maintain the temperature	Check temperature sensor Check inlet valve of water is normal Check water level
03	E3	Excessive Temperature	Check temperature sensor
04	E4	Pressure can not be released	Check the exhaust, drain valve
05	E5	Door switch bounce	Check the door knob

9. Maintenance and Service

9.1 Clean the pure water tank by medical disinfectant once a week.

9.2 Disinfect and clean the interior surface of the autoclave room once a month..

9.3 Replace the fuse-melter.

(1) Shut off the power

(2) Revolve the fuse base by counter-clockwise by screwdriver to bring out the melting fuse to be replaced;

(3) Replace the new fuse and reset the fuse base on the original position, then use the screwdriver to fasten the base by clockwise.

(4)Check the correctness of the parameter of the new fuse replaced.

9.4 Clean the sealing ring periodically

The user shall clean the sealing ring periodically for avoiding the influence to the seal caused by the dust/dirt left due to the long period use. Use the smooth cloth with distilled water to wipe the surface of the sealing ring or sealing cap gently. The user shall discharge the sealing ring for further cleaning or replacement if the air-leaking problem can not be resolved after the above process (The user shall discharge the sealing ring periodically for cleaning and inspection as recommendation by the supplier). Put back the ring to the original door groove after cleaning. Most Important: the inset work must be done equably to the groove During the installation, the laid four equal points of the ring must be inserted to the groove firstly, later for the same work for the remaining segments of the ring. After finishing, press the sealing ring equally by the force of hand.

9.5 Shut off the power before service or components' replacement, and the service or replacement work shall be done by the supplier or his designated technician.

10. Transportation and Storage

The autoclave shall be transferred and stored with the below conditions:

Ambiance temperature: -40°C -+55°C

Relative humidity: $\leq$ 85%

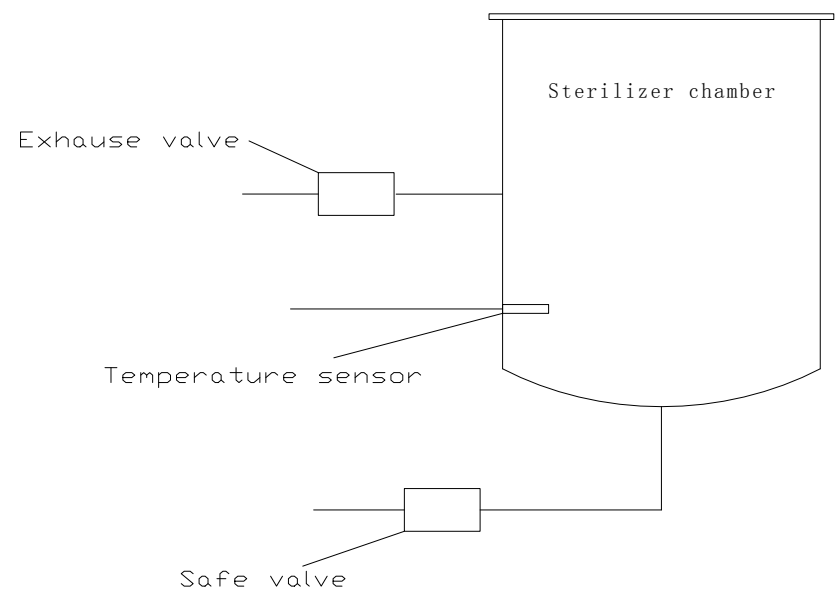
Atmospheric pressure: 500HPA-1060HPA

APPENDIX

I Working status display table:

NO.	Display	Explain
01	DOOR	Note opening the door
02	LOAD	Loading status, prepare working
03	READY	In this state you can start the sterilization process
04	END	That the normal sterilization process is completed
05	T	That temperature, unit: °C
06	P	That pressure, unit: kgf/cm ²

II Steam Way Map



III Wiring Map

