

**Model DW-280D**

**PORTABLE STEAM STERILIZER**



**USER'S MANUAL**

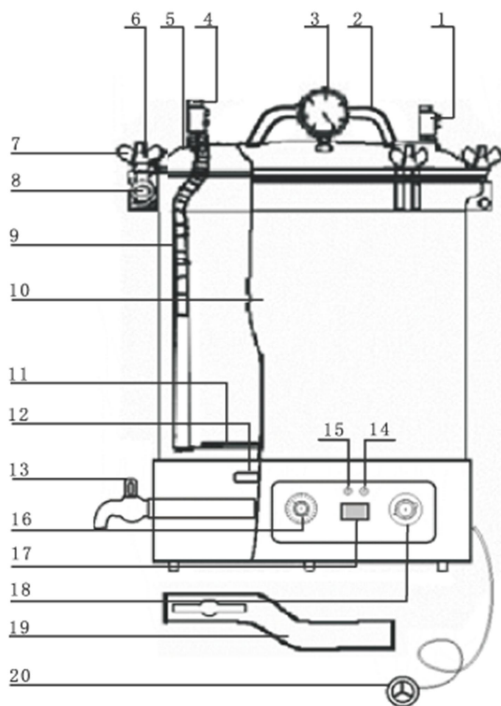
## Warm tips

1. Please read the instruction manual carefully before operating the equipment, and make the book well-kept, so that you can make reference to and we can serve for you in the future .
2. We are not responsible for the damage and malfunction due to improper installation, operation, moving, and other contrived reasons.
3. If the safety valve doesn't vent even when the pressure gauge pointer exceed 0.165Mpa, stop using immediately and check its sensitivity. Don't strike the apparatus during using; never use the machine under over-high pressure condition; pressure gauge must be checked 1-2times every year to ensure its accuracy.
4. The equipment should be keep clean and dry in ordinary times, pour water out of container when finishing using, to help to prolong the life of the sterilization machine.
5. Check the sealing ring to find whether abrasion or aging occur, and change it timely, to ensure its sealing capacity.

## Brief introduction

The sterilization machine we produce for objects sanitation and sterilization works through saturated high-pressured steam, it has following advantages of being easy to operate, heating up quickly, sterilizing thoroughly etc. It can be used in hospitals, academies of health, health care stations, infirmaries in mineral factories, laboratories, cosmetic factories, food factories, scientific research centers and so on. It can work on medical apparatus, dressing, glass utensils, solution, culture medium, etc. It can also be used as cook instrument in Altiplano area.

## Main body structure



1. Safety valve
2. Handle
3. Pressure gauge
4. Safety valve
5. Container lid
6. Silicone seal
7. Butterfly nut
8. Bolt
9. Container
10. Sterilization chamber
11. Sieve plate
12. Electric heating tube
13. Water discharge cock
14. Sterilization termination indicator
15. Pressure increasing Indicator
16. Timer
17. Switch
18. Pressure adjuster
19. Wrench
20. Power cable

## **Structure characteristics**

1. The main body of the container to our product is made of high—quality stainless steel with one portion of Cr, eighteen of Ni, nine of Ti. Our product is not only acid—proof, alkali—proof, but also safe and durable to consume, its life is three times longer than aluminum metal alloy product.
2. Our product heated up by immersion electric heating tube, consumes little power, while temperature goes up quickly.
3. Equipped with high-pressure faucet to drain water off, convenience and safely.
4. The safety valve can release over-high pressure automatically when the steam pressure exceeds 0.165MPa to insure the safety.
5. The pressure gauge is designed to have double scales, with two types of reading to show pressure and temperature clearly .

## **Technique parameters**

1. Capacity of disinfect cylinder: 0.018 m<sup>3</sup> 0.024 m<sup>3</sup> 0.03 m<sup>3</sup>
2. Working pressure rating: 0.14~0.16MPa
3. Maximal safety pressure: 0.165MPa
4. Power source pressure: 220V/50Hz
5. Power of electric heating tube: 2.0KW

## Installation and debugging

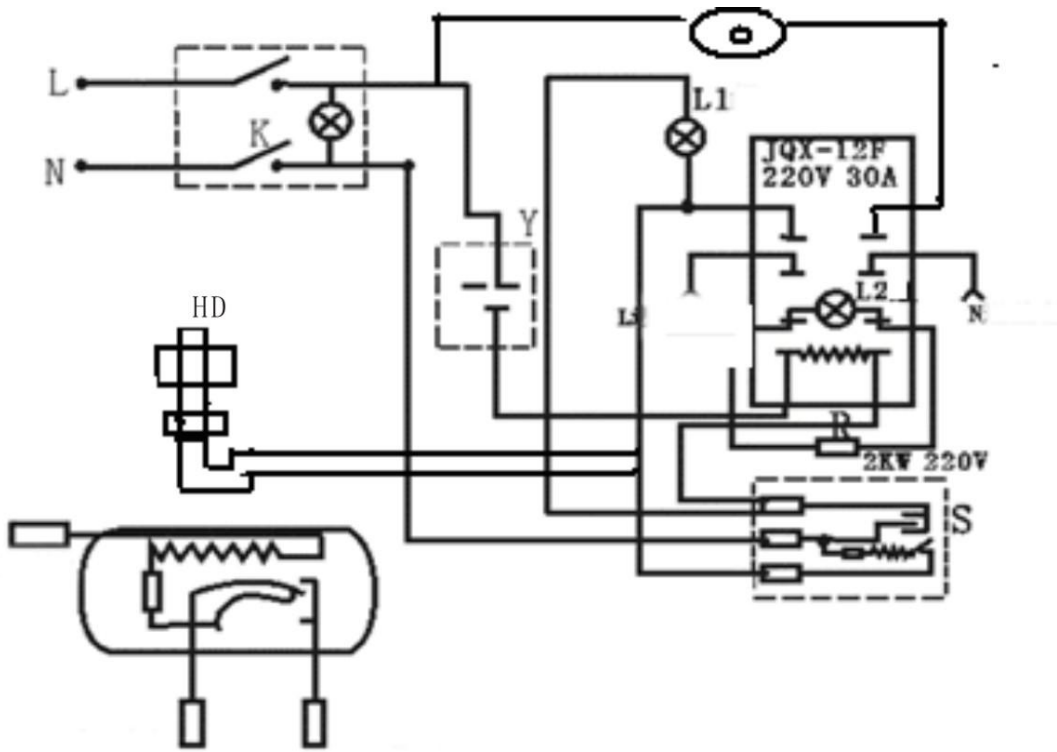
1. Take out the product from the packing box properly.
2. The apparatus must be installed on flat surface; not in rugged ground.
3. The left 、 right and back sides of the apparatus should be kept away from walls by 15cm at least.
4. To be sure the power source voltage is in accordance with the demand of the apparatus, and dependable earth wire required.
5. Don't locate the apparatus near inflammable gas sources; it should be installed in dry and ventilatory environment.

## Operating instructions

1. **Adding water:** it can be used when 4.5L water has been added into the container, but the water level can't exceed the three shelving plane which is under inner barrel. Water rating must be supply enough during circulate use, in order to prevent damaging the electric heating tube due to water shortage.
2. **Heaping objects:** Put these objects needed to be sterilized on sieve plate, there should be gaps among these packed objects, to help steam to permeate and improve working quality.
3. **Air proofing:** put the sanitizing cylinder into the container, and then insert the soft tube which is on container lid into the semicircle groove in the cylinder, screw the container lid with wing-shaped nut in container tightly, make no distance between the lid and container.
4. **Heating:** connect the power source to power source; Two safety safety valve should be raised when heating begin to make cold air in sanitizing cylinder go out; when temperature inside is more than 100°C, and when rapid steam jet out, restore the hats of the two valves to original.
5. **Cooling:** When finishing sterilizing, turn off power first, and then open the vapor valve and the lid when the reading of pressure gauge turns back to zero after cooling. Be cautious to not open valve to venting or open the lid as soon as finishing satirizing, to avoid seething lotion overflowing which may cause accident.

## Different Materials Sterilization Time & Pressure & Temperature

Object of sterilization	Time For temperature holding(min)	Steam pressure (gauge pressure)			Relative temperature of saturated steam
		MPa	kgN/cm <sup>2</sup>	ponud/in <sup>2</sup>	
Rubber	15	0.11	1.1	16	121-126°C
Dressing	30-45	0.105-0.14	1.05-1.4	15-20	121-126°C
Utensil	15	0.105-0.14	1.05-1.4	15-20	121-126°C
Instrument	10	0.105-0.14	1.05-1.4	15-20	121-126°C
Bottled solutions	20-40	0.105-0.14	1.05-1.4	15-20	121-126°C



DW-280D Circuit Diagram

- |        |   |                            |       |   |                        |
|--------|---|----------------------------|-------|---|------------------------|
| 1. K   | — | Two Wire Switch            | 6. R  | — | Electric heating tube  |
| 2. Y   | — | Pressure Controller Switch | 7. L1 | — | Green Light Insulation |
| 3. JQX | — | Relay                      | 8. L2 | — | Red Dry Heat Light     |
| 4. S   | — | Timer                      | 9. FM | — | Buzzer                 |
| 5. HD  | — | Water Level Device         |       |   |                        |