

## Vertical Pressurized Steam Sterilizer

## MVS-83



## 1. Scope of application

The saturated pressure steam is used for rapid and reliable disinfection and sterilization of medical devices, dressings, glassware, solution culture bases and other items.

## 2. Technical Parameters:

- 1. Designed Volume; 83 L; available volume: No less than 75 L;
- 2. Exterior Material: Painted steel;
- 3. Interior Material: SUS304;
- 4. Temperature Sensor: PT100;
- 5. Designed Pressure: 0.3 Mpa; safety valve discharge pressure: 0.28 Mpa;
- 6. Pressure Gage Range: -0.1 Mpa ~ 0.5 Mpa;
- 7. Pressure Vessel Class: Class I;
- 8. Manufacturing Permissive Class: Class DI;
- 9. Electric-Shock Safeguard Class: Class I;

10. Sterilization Temperature:  $115^{\circ}$ C ~  $135^{\circ}$ C with a minimum scale division of 0.1°C; dissolution temperature:  $60^{\circ}$ C ~  $115^{\circ}$ C with a minimum scale division of 0.1°C; insulation temperature:  $45^{\circ}$ C ~  $60^{\circ}$ C with a minimum scale division of 0.1°C;

- 11. Opening Method: The top is designed with a vertical door assembly of multi-point locking and protecting mechanism to save space;
- 12. Start the reservation procedure, cooperate with the experimental process, and sterilize according to demand.



13. The inner wall of tank is subject to 3K physical polish for easy cleaning.

14. The 5-inch 65K capacitive touch screen enables users to operate the sterilizer accurately even with rubber gloves on; the sterilizer adopts the interface in Chinese simple and convenient to operate; its man-machine interaction is more intuitive; temperature, pressure and time are clearly displayed on the same screen; the sterilization process is also displayed in real time;

15. The circulating exhaust in the steam can be used through the sterilization program.

16. With a fault -automatic diagnosis function, the alarm information is automatically displayed, and it is clear at a glance.\* The sterilizer is designed with four working modes, namely general sterilization, sterilization insulation, dissolution insulation and instrument sterilization; each mode can preset four kinds of program parameters; timing range: 0 ~ 4320 min with a minimum scale division of 1 min;

17. \* Users only need to directly press down the running key to start the program as per parameters

from last operation and the sterilization can be started at once; this method reduces repeated operations so it is convenient, quick and suitable for batches of operations; during the sterilization process, there is always an audio prompt at the beginning of each stage and the touch screen displays a corresponding progress curve with a distinct color;

- 18. \* Users can set the high-altitude sterilization parameters by altering the altitude data in the controller, which is available for the range from 0 m to 3000 m;
- 19. The sterilizer is designed with an inspection window on the cooling barrel located in the front, so as to facilitate observing the water level in that barrel;

20. \* The dual cooling heat dissipation system enables a rapid cooling; the cooling unit is automatically initiated after sterilization; the sterilizer is equipped with 1 high-power axial flow fan, 1 shaded pole fan and 1 standard condenser;

- 21. \* The flexible exhaust unit is adjustable in 5 gears, of which all exhaust modes face down;
- 22. The hierarchical permission protection prevents the mistaken change in parameter settings by servicing or technical personnel;

23. Multiple Alarming Mechanisms: Abnormal temperature alarm, abnormal sensor alarm, abnormal pressure alarm, water level alarm, abnormal controller alarm, abnormal heating alarm, door-locking alarm and abnormal main control panel alarm;

- 24. Multiple Safety Protection Devices: Pressure safety valve, mechanical and electronic dual over-temperature limiter, mechanical dry burning resistance limiter, interior door lock, over-voltage limiter, earth leakage protection device and over-current limiter;
- 25. \* The sterilizer has a class II medical device registration certificate and a special equipment production license;

26. \* The pressure vessel conforms to design standards of GB/T150-2011; the closure head and the barrel materials is made of S30408-2B stainless steel in line with GB/T 24511-2017 with a thickness of 3 mm.

- 27. The main electrical components are all imported from Japan, of which over 90% meet RoHS standards.
- 28. Configurations:
  - 1). 1 host machine;
  - 2). 3 sterilization baskets

3). 1 set of accessories (Including drainage hose, front cooling barrel, rear bucket and rear bucket fasteners);



- 4). USB data export function, thermal printer, stainless-steel barrel are optional for the sterilizer;
- 29. The tank is equipped with 2 standard G1/2 source nipples for either temperature or pressure sensors.