



ESS-250RD series

Horizontal Pulse Vacuum Steam Sterilizer Class B or N



STERILIZATION



Application

The sterilizer works on pressurized saturated steam for sterilization of items, eliminating the impact of cold air on the temperature by means of pulsating vacuum exhaust and eventually drying the items by vacuum dehumidification realized in a jacket.

It utilizes the physical property that pressurized saturated steam can release a large amount of latent heat when condensing, rendering the items to be sterilized under high temperature and humidity.

The purpose of sterilization is attained after a period during which the bio-structure of all the germs in the items are completely destroyed.

It is mainly used in the hospitals, chemical industry, scientific research, pharmaceutical and other units for disinfection and sterilization of surgical instruments, dressings, medicines, culture medium, food etc.

Characteristics

- Automatically controlled the sterilizing process, easy to operate.
- With three or more pulsating vacuums, it is suitable for all kinds of packaged, unpackaged, porous instruments with internal pipelining system.
- The sterilizer is equipped with a steam generator and a set of mobile sterilization trays.
- The inner chamber of the sterilizer is a circular double-layer design, which is composed of a sterilization chamber and jacket, capable of deep drying.
- With printing function and the printer can record the whole process of sterilization.
- With Bowie & Dick test function for steam penetration test, automatic fault detection is also enable, which is convenient for self-maintenance.
- With over-temperature, over-pressure and auto-protection.
- The door cannot be open until the pressure in the chamber is reduced to 0.027MPa and the unit cannot be started on if the door doesn't close well.
- The safety valve will be open automatically when the inner pressure over 0.24MPa and the steam would be exhausted the water tank.
- Automatically cut off the power if the water-lack happened and alarm at the meanwhile.
- Sealed doors are opened and closed manually, using the revolving handles on the door, equipped with secondary self-locking and interlocking safety devices, single door design (double-door design optional), with pressure safety interlocking device.
- The chamber of the sterilizer is made of stainless steel 304.

The main technical parameters

- 1-Manually open and close the door, self-expansion door sealing ring, easy and safe operation.
- 2-Pressure safety interlock and liquid procedure temperature door safety interlock; If it is a two-door sterilizer, it has a two-door interlock to ensure the inspection package and effective isolation between the sterilization area and the sterile item storage area.
- 3-Main part :
 - ①The main structure has a single circular structure with strong bearing capacity and long container life.
 - ②The material contacting with steam, such as the liner, door plate and main flange, is S30408 stainless steel.
 - ③The longitudinal joint of the inner liner is automatically welded by pulsed argon arc welding process. The surface of the inner liner and the door is mechanically polished and then the electrolytic polishing process is highly resistant to corrosion.



- 4-Microcomputer program control,LCD screen, touch key.The whole process is controlled by automatic program, and the status, temperature, pressure and time parameters of the running process are displayed automatically.
- 5-It is equipped with sterilization procedures such as fabric, instrument, lumen instrument, implant instrument, rubber, liquid, gravity program, quick program, custom program, BD test, lumen PCD test, vacuum leakage test and other test procedures as well as manual control program, drying and other auxiliary procedures. The custom program can change the working parameters according to the actual situation.
- 6-Real time printing process data through the built-in micro needle printer; the record of thermal printer printing is not easy to be saved for a long time. Print out the temperature,pressure, sterilization items, sterilization time and operator.
- 7-Intelligent maintenance system: automatically count the use times of parts and check the status of parts, and timely warn the maintenance information to users, including the change tips of door gaskets, air filters, door lifting mechanism lubrication maintenance tips, filter cleaning and maintenance tips, etc.
- 8-Built in independent steam generator, no external steam is required.
- 9-Pipe system: 304 stainless steel sanitary pipe, clamping connection, and all welds are welded by automatic pipe welding machine. The main control valves are imported Japanese SMC solenoid valve and SIHI direct water ring vacuum pump (mmq.sd-0.08 is equipped with diaphragm vacuum pump).

Models 100, 150, 250 and 280 liters have 7 programs: INSTRUMENT, TEXTILE, RUBBER, FLUID, BD test, SELF-DEFINE, Custom
Models 135,185 and 300 liters have 11 programs: Fabric, Liquid, BD, Instrument, Prion, PCD, Rubber, Lumen, Implant, Custom 1, Custom 2

Class N Models

Model	ESS-250RD/150N	ESS-250RD/200N	ESS-250RD/280N
Sterilizing chamber volume	150L Ø440 x 1000 mm	200L Ø515 x 1000 mm	280L Ø600 x 1000 mm
Working pressure	0.22MPa		
Working temperature	134°C		
Temperature adjust range	40°C ~ 134°C		
Time for sterilization	0 - 99 min		
Time for drying	0 – 99 min		
Heat average	± 2°C		
Power	AC 380V, 50Hz, 9kw	AC 380V, 50Hz, 9kw	AC 380V, 50Hz, 12kw
Dimension (mm)	1400x650x1820	1400x750x1700	1520x850x1900
Transport dimension (mm)	1560x860x1820	1560x910x1880	1680x1060x2050
G.W. / N.W	430kg/340kg	436kg/350kg	570kg/462kg



Class B Models

Model	ESS-250RD/100B	ESS-250RD/135B	ESS-250RD/150B	ESS-250RD/185B	ESS-250RD/200B	ESS-250RD/300B
Sterilizing chamber volume	100L Ø440x670 mm	135L Ø500x750 mm	150L Ø440x1000 mm	185L Ø500x950 mm	200L Ø515x1000 mm	300L Ø600x1100 mm
Working pressure	0.22MPa					
Working temperature	134°C					
Temperature adjust range	115°C ~ 134°C					
Time for sterilization	0 - 99 min					
Time for drying	0 - 99 min					
Heat average	≤ ± 2°C					
Vacuum limit	-0.08MPa					
Power	AC 380V, 50Hz, 10kw	AC 380V, 50Hz, 10kw	AC 380V, 50Hz, 10kw	AC 380V, 50Hz, 10kw	AC 380V, 50Hz, 10kw	AC 380V, 50Hz, 20kw
Dimension (mm)	1400x660x1640	1010x660x1580	1400x660x1640	1250x660x1580	1400x750x1740	1350x760x1580
Transport dimension (mm)	1560x820x1820	1180x820x1800	1560x820x1820	1410x820x1760	1560x910x1880	1510x920x1880
G.W. / N.W	430kg/340kg	350kg/260kg	440kg/350kg	390kg/300kg	460kg/370kg	540kg/450kg



Model 100-150-200 liter



Model 135-185-300 liter