



Horizontal Sterilizer HS 3600



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

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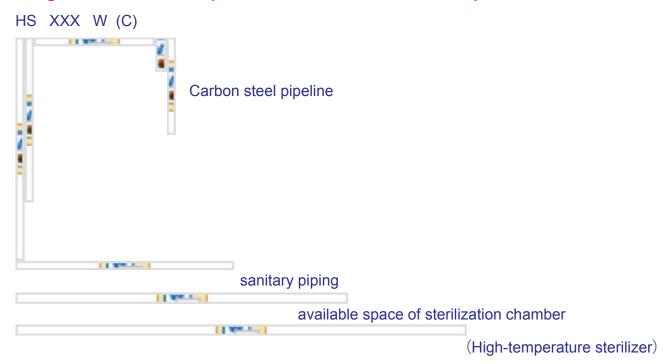
1. Definition and application:

Pulsation vacuum sterilizers (motorized door), a series of advanced sterilizers developed and produced by our company according to the latest national standard- "Technical Requirements for Large-Scale Steam Sterilizer (an Automatic Control Type)", are fully in line with the CSSD, and GMP regulatory requirements of the sterilization device. The series can be large steam sterilizers require available for the sterilization of medical, pharmaceutical, research institutions, surgical instruments, dressings, fabrics.

2. Design concept:

Pulsating vacuum sterilizer, with the saturated steam as the sterilization medium and in the air exclusion method of mechanical forced pulsating vacuum, makes the air inside excluded by the alternation of vacuuming and injecting steam repeatedly and completely eliminates the cold points in the sterilizing chamber; so that the air exclusion volume can reach 90% or more and the temperature "dead ends" and "small amount effect" can be completely eliminated, ensuring the thorough sterilization effect. The vacuum dehumidifiers make the sterilization chamber evacuated to the negative pressure of the vacuum pump limit vacuum, and dry it with the fixture of the sterilizer in the high temperature of 132°C-134°C, so the objects after sterilization can be dry and clean and when removing them, your hands will not be wetted or burned.

3. Significance of the composition of the models and their representatives:





4. Advantage features

- 1. The sterilization chamber shell, door pane, real closure panel adopt SS304 material. Mechanical polishing and electro polishing treatment is throughout the contacts with the sterilization articles, smooth, no dead ends, easy to clean. Avoid breeding of residual bacterium.
- 2. Vibration aging treatment after the molding of the main body and the door welding, greatly eliminate welding stress and to increase its service life
- 3. New double door interlock function: sealing doors are equipped with safety interlocks system which only when one door is locked, the another door can be opened. The design makes full isolation between sterile area and contamination area in sterilization room of hospitals.
- 4. Perfect and environmental heat insulation: The main structure of sterilizer is equipped with heat insulation made of high temperature resistance material. The embossed aluminum cover the insulation layer. Sterilizer pipe, door panel also adopt insulation layer made of heat resistance material to heat insulation, thereby greatly reducing the room temperature and energy consumption of cooling equipments.
- 5. Liquid crystal touch screen is used as man-machine control interface and can dynamically display the parameters such as temperature, pressure and time etc during the operation process of the program. The parameters are stored on files for future reference after being printed. Color touch screen operation; menu type program selection; and simple and convenient operation. The entire process including water injection, pulsation vacuum, warming up, sterilization, exhausting and vacuum drying is controlled automatically.
- 6. Be equipped with mini-printer. Record in real time the entire process of the sterilization and fault warning information.
- 7. Dual-core PT100 temperature sensor: reflects faster and more accurate.
- 8. Adopting water circulation vacuum pump, vacuum supply need short time and is high efficiency. The vacuum pump is a water –cooling system, long term pumping high temperature steam less prone to failure, and high reliability. Internally installed vacuum pump and 3-6 times of pulsation vacuum. Extent of the vacuum reach -0.08MPa. The air in the dressing and cavity instrument can be vacuumized completely to reach complete sterilization effect.



9. Security sound and light alarm:

A. starting door closing and sterilization procedure in the case is not closed in place. –sound and light alarm;

- B. fault in equipments running.- sound and light alarm;
- C. The chamber pressure does not reach the safe range. –sound and light alarm;
- D. Upon the finish of sterilization circulation, prompt with buzzing240
- 10. Be equipped with several sterilization programs such as instruments, dressing, rubber and user-defined etc for selection of the users.
- 11. PLC program control, pulsation can be freely set, completely rule out blind angle of sterilization and unsatisfactory effect of small loading, in order to ensure a thorough sterilization.
- 12. During the sterilization process, inadequate temperature, overpressure detection control function, in order to ensure the sterilization effect and safety.
- 13. single door is one sterilization cart, one unit carrier trolley.

Dual door is one unit sterilization cart, two units carrier trolleys.

Sterilization cart go through mechanical polishing and electro polishing.

- 14. Wall cavity is covered with heater band. The preheating is rapid and the temperature is even.
- 15. Pulsation Vacuum after-drying system ensures good drying effect for the package.
- 16. Built-in steam generator and steam-water separation ensures the quality of the steam provided. It is unnecessary to external connection to steam source.



- 17. Be equipped with B/D testing, vacuum testing program, manual adjusting program and has passed PCD process challenge device testing.
- 18. Be equipped with automatically timing organism incubator device and after cultivation, make alarm automatically with noise and light for users to pick.
- 19. Be equipped with 0.22µm high efficient air filter to guarantee the air after breaking the vacuum to be sterile air and to prevent the articles after sterilization being polluted again.

5. Technical Parameters

- 1. Rated working pressure: 21Mpa; rated operating temperature: 132°C.
- 2. Setting range of pulse times: 0 -99 times;
- 3. Setting range of sterilization time: 0 -9999 times (2 hours 46 minutes 39 seconds);
- 4. Setting range of drying time: 0 -9999 times (2 hours 46 minutes 39 seconds);
- 5. Settings of the safety valve: Open at 0 .235Mpa and close at 0. 21Mpa;
- 6. Pulse amplitude settings: positive at 0. 065-0. 09Mpa, and negative at -0. 065:-0. 08Mpa;
- 7. Settings of jacket pressure controller: Upper switch value 0. 23Mpa; lower switch value 0. 21Mpa; (for jacketed pressure control);
- 8. Water source: demineralized water with pressure from 0.15 to 0.3Mpa;
- 9. Compressed air: 0.5-0. 7Mpa processed by degreasing, water and dust treatment;
- 10. Steam source: 0.3-0. 5Mpa saturated steam;



11. Power supply: power supply AC 380V/50Hz (power subject to the order numbers of the specific equipment); Control power supply AC 220V/50Hz/0. 5KW.

12. Chamber size: 1500×610×910/0.6 Overall size: 1880×1320×2100 mm.

Package size: 2040×1480×2320 mm N.W: 1500KGS

Kg/cycle Max Steam Consumption: 28KGS/cycle Max Water Consumption: 300Kg/cycle

Sterilization Time: 38 (Minute)

Safety Precautions

Overheat automatic protection.

If the temperature exceeds setting temperature, the system will automatically disconnect the heat power supply and display warning.

- Safe interlock system of Door. If only the door is closed properly, the program is able to be started. If dangerous pressure exists in inner chamber, the door cannot be opened.
- Safety valve with double over pressure protection and self-relieving function, if the pressure exceeds
 design pressure, safety valve is started to relieve the pressure. The overpressure protection is controlled automatically. If the pressure exceeds setting pressure, the system will automatically relieve
 pressure and display alarm.
- •Lower water level alarm device, upon the water in the equipment is lower than design level, the system will automatically disconnect heating and display alarm.
- Safety device for electric circuit, main AC return circuit is equipped with short circuit protection. DC control circuit is equipped with overvoltage and overload protection.



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