tabletop pressure steam autoclave with vacuum drying

Tabletop pressure steam autoclave using high temperature and high pressure saturated steam to achieve rapid and reliable sterilization, can inactivate a variety of viruses, bacteria and their germs, such as HIV, Hepatitis B Virus, Mad Cow Disease Virus and so on.

Tabletop pressure steam autoclave equipped with a number of intelligent detection and control technology to ensure that the sterilization process is safe, accurate and traceable.

Tabletop Pressure Steam Autoclave Features

1. intelligent detection to ensure sterilization quality: built-in Bowie Dick test, Helix spiral test and Vacuum vacuum test, to ensure that the steam penetration capacity and vacuum degree is up to standard, sterilization effect can be controlled.
2. high-precision sensors: the German Heraeus high-precision temperature sensor, accuracy of 0.1 °C and the United States Freescale pressure sensor, accurate to 0.1 kPa, to ensure accurate control of sterilization parameters.

3. water quality monitoring: built-in water quality sensor real-time detection of water quality, effectively preventing impurities in the water due to high temperature calcification triggered by clogging of the pipeline, reducing the equipment failure rate.
4. energy efficient heating system: performance optimization system to enhance the heating efficiency, sterilization time is shortened by about 20%, to meet the modern medical needs for rapid sterilization.
5. user-friendly operation interface: high brightness LED display, graphical button design, intuitive display of the sterilization process, easy for the operator to control the whole process.
6. durable plastic side panel design: all plastic side panels with good thermal performance and easy to remove, easy to maintain and extend the life of the equipment.
7. intelligent maintenance reminder: built-in two years 4000 sterilization cycle automatic reminder and automatic pipeline cleaning function, to protect the long-term stable operation of the equipment.
8. flexible energy-saving standby settings: support for user-defined standby time to achieve personalized energy-saving management.
9. diversified sterilization applicability: suitable for solid instruments, perforated instruments, packaging instruments and fabrics and other types of sterilization needs.

Advantages

1. safe and efficient sterilization: can completely inactivate a variety of viruses and bacterial spores, to protect the sterility and safety of medical equipment.
2. stable and reliable: accurate sensors and water quality monitoring system to reduce the failure rate and improve the service life of the equipment.
3. Simple and convenient operation: friendly man-machine interaction interface reduces the operation difficulty and is suitable for personnel of different skill levels.
4. low maintenance cost: automatic pipeline cleaning and intelligent reminder, reduce maintenance frequency and labor costs.
5. energy saving and environmental protection: optimized heating system and standby mode, help institutions to reduce energy consumption and operating costs.
6. a wide range of applications: covering a variety of common medical and laboratory sterilization needs, adapting to different forms of sterilized items.

Working Principle

Tabletop pressure steam autoclave is based on the principle of saturated steam sterilization at high temperature and high pressure. Firstly, the air in the sterilizing chamber is extracted by a vacuum pump to avoid the air hindering the steam penetration. Subsequently, the saturated steam generated by heating and high pressure into the sterilization chamber, the temperature is generally up to 121 °C or more, the latent heat of the steam destroys the protein and nucleic acid structure of the microbial cells, rapid inactivation of bacteria, viruses and their stubborn spores. The whole process is dynamically monitored by high-precision temperature and pressure sensors, together with water quality sensors to ensure the purity of the water supply, to avoid clogging of the pipeline due to scale. The equipment controls the sterilization time, heating and cooling cycles through the built-in program, and activates automatic venting and cooling after completion to ensure safe removal of sterilized items.
The built-in Bowie Dick and Helix tests are used to detect the penetration of steam into cavities and the sterilization effect inside complex structures respectively, while the vacuum test ensures that the air is completely excluded, making the sterilization process more thorough and safer.

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Model	**DA102-18**	**DA102-23**
Capacity	18L	23L
Working Temperature	121°C, 134°C	

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Model	**DA102-18**	**DA102-23**
Sterilization Grade	European Class B Standard	
Special Sterilization	inactivation of HIV, HBV, Prions (e.g., BSE), and Bacterial Spores	
Drying Program	powerful Vacuum Drying	
Temperature Control Accuracy	±0.1°C	
Pressure Control Accuracy	±0.1kPa	
Tests	bowie-Dick Steam Penetration Test, Helix Test, Vacuum Leak Test	
Sterilization Record	Equipped with a Printer and USB Interface for Recording the Sterilization Process	
Safety	Safety valve, motor-driven self-locking door, pressure interlock system, fault self-diagnosis, over-temperature and over-pressure protection	
Water Supply System	Built-in open-type water tank, clean water tank capacity: 3.5L	Built-in open-type water tank, clean water tank capacity: 4L

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Model	**DA102-18**	**DA102-23**
Sterilization Chamber Configuration	four-layer removable tray rack with 4 trays	
Chamber material	Medical-grade 304 stainless steel	
Water Consumption per Sterilization Cycle	0.16L to 0.18L	
Noise	less than 50db	
Sterilization Chamber Dimensions	diameter 245x360mm	diameter 245x470mm
External Dimensions	560X470X400mm	675X470X400mm
Weight	47kg	53kg
Power Supply	220Vac, 50Hz, 1.8kw	220Vac, 50Hz, 2.0kw