

STEAM AUTOCLAVE 680 LITRES

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GROUP



STEAM AUTOCLAVE 680 LITRES

The Feature and the use

The cabinet utilize the physical characteristics of the saturated steam, which would release large amounts of latent heat and humidity during condensation, and with a period of time to keep the objects at high temperature and moist condition, the main protein of the bacteria would be solidified so that the bacteria can be killed.

FEATURES

Characteristics

The main body is with horizontal rectangle double layer structure, the inside chamber is made of SUS30408 or SUS31608 Stainless steel, the outer layer is made of the brushed decorative sheet, and the there is motorized door or sliding door for choose, pneumatic sealing, and the double door interlocking are strictly in accordance with the GSSD required.

- The control system: Adopt the Siemens PLC and Siemens touch screen.
- The piping system: Adopt with the reliable Germany Burkert or GEMU pneumatic angle type valve, water ring vacuum pump and 0.22um high efficiency sterile medical grade filters, the pipe clamp adopts the quick connectors, the piping and the related spares are all according to the sanitation standard.

The characteristics for the software

- With Germany Simens PLC platform independent research and development, human-Machin Interaction, convenient for operation.
- Software design and manufacture products in strict accordance with the technical requirements for the sterilization process.
- The Operating authority is divided into three levels to the manager, the technologist, and the operators.
- Program interlocked, by the program is running, the sealing door can not be open.
- All the alarm and the technical figures can be recorded and print.
- If the inner chamber is higher than the safety pressured, the door can not be open.
- Perfect products safety protection measure, 4 level emergency treatment of abnormal state.

Sterilizing Cycles:

- The sterilization cycle to the solid objects:
- Applied to the instruments, dressing, utensils and other items.

TECHNICAL SPECIFICATIONS

PHYSICAL SPECIFICATIONS

- Electric Generator
 - Power 10-30 Kw
 - Voltage 380/400V
 - Current 40-60A
- Cold feed water supply
 - Pipe size ½ Inch
 - Pressure 2-4 Bars
 - Consumption 120Ltrs/cycle
 - Type Water hardness 0.7-2.0 mmol/l
- Chamber Dimensions
 - Width 670mm approx.
 - Height 670 mm approx
 - Depth 1850 mm approx
 - Weight 1.6 Tones approx
- Chamber Volume
 - Ltrs 680 ltrs
- Door
 - Type Vertical sliding door
 - No. of Doors Single door system
- Electric steam generator
 - Type stainless steel with high pressure feed pump
 - Electronic water level control
- Loading equipment specifications
 - Stainless steel loading cart & trays
 - Stainless steel trolley
- Other specs
 - Provision of a data printer to show the sterilization cycle
 - Chart recorder

TECHNICAL FEATURES

- The chamber and the door are constructed from heavy-duty stainless steel.
- The Jacket is constructed from stainless steel.
- The pipes and fittings are made of stainless steel.
- The valves are ball type, self-cleaning and pneumatically operated.
- Free-standing with cabinet, pit-Mounted and floor loading.
- The panel chamber has two rails for easy loading.
- Fully automatic horizontally sliding door.
 - Door Safety Features
 - In case of obstruction the automatic sliding doors will be stopped and retreat
 - The door cannot be opened if the chamber is pressurized.
 - The door should not open while the autoclave is in operation
 - The door should not open if the chamber is under pressure
 - The door should not open if there is liquid in the chamber
 - The door should not open at the end of the cycle if the chamber temperature is higher than the preset final temperature.
- Steam supply
 - The sterilizer is heated by steam.
 - The steam should be supplied by a built-in electric steam generator
- Loading Equipment
 - Pull-out trays, Floor Loading Carts and Transfer Carriages are supplied to assist in the loading and unloading process.
 - The Trays, Loading Carts and Transfer Carriages are made of stainless steel.
 - The Transfer Carriages and Floor Loading Carts have four heavy-duty castors mounted on their base.
- Control System
 - The sterilizer control system should be based on microcomputer technology, to providing high reliability and safe operation.
 - The computerized control unit ensures a fully automatic operation through the entire cycle.
 - The cycle progress and the autoclave's actual parameters are displayed on the LCD panel during the cycle.
 - The main physical parameters of the process i.e. temperature, pressure, time and jacket pressure is controlled and displayed.
 - The keypad is located on the front panel to enables the operator to select a program, start and stop the cycle and allows access to the main parameters.
 - The control system should be easy to use and programmable

- **Printer**

- The control unit is provided with a 24 character per line printer, which is connected to the processing.
- The printer should submit a hard copy printing of the relevant information concerning operating during the cycles such as temperature, pressure, vacuum, sterilization and drying time, number of cycles, etc.
- In the event of an uncompleted cycle, the documentation system is able to submit a printout indicating cycle failure and the cause of the failure.
- An additional the autoclave should be supplied with graphic printer or a circular chart temperature and pressure recorder.

- **Program Cycles**

The sterilizer is designed to operate using the following programs.

- Standard programs of 134°C and 121°C
- Gravity Cycles (s)
- Porous load cycle
- Pre-Vacuum (s)
- Bowie & Dick test
- Vacuum Leak Test
- The autoclave must have the following sterilization programs
 - INSTRUMENTS 134°C
 - Sterilization temperature 134°C
 - Sterilization time 3 minutes
 - Dry time 1 minute
 - WRAPPED INSTRUMENTS 134°C
 - Sterilization temperature 134°C
 - Sterilization time 7 minutes
 - Dry time 10 minutes
 - POUCHES –INSTRUMENT 121°C
 - Sterilization temperature 121°C
 - Sterilization time 15 minutes
 - Dry time 1 minute
 - WRAPPED POUCHES-BIG PACKAGES 121°C
 - Sterilization temperature 121°C
 - Sterilization time 20 minutes
 - Dry time 10 minutes
 - WRAPPED DELICATE INSTRUMENTS 121°C
 - Sterilization temperature 121°C
 - Sterilization time 15 minutes
 - Dry time 10 minutes

- BIG PACKAGES 134°C (1 Marks)
 - Sterilization temperature 134°C
 - Sterilization time 7 minutes
 - Dry time 10 minutes
- VACUUM TEST
- BOWIE AND DICK TEST
 - Sterilization temperature 134°C
 - Sterilization time 3.5minutes
 - Dry time 2 minutes
- Steam generator
 - The autoclave is fitted with a steam generator made of Stainless Steel.
 - Fitted with Safety device in case the set pressure is exceeded.
 - Fully automatic Electric Steam Generator.
 - Steam capacities of between 16 and 75 kg/hour.
 - The steam generator is equipped with a water reservoir, which maintains and regulates the water level for the generator feed pump.
 - It contains at least 2 electrodes and heaters using 12 – 54 kW.
- Air Compressor control (2 Marks)
 - In the event that the autoclave uses pneumatic control the autoclave is then supplied with an air compressor.
 - The compressor is small and very quiet.
 - It should have a motor running on a 240Volts: 50/60 Hz,
 - The minimum capacity of the compressor of 6L volume compressor with a maximum working pressure of 8.5 bars.



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