

# STEAM STERILIZER

**A highly safe sterilizing product with stable function, suitable for major hospitals, clinics and biochemical research laboratories etc.**



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ISO9001 ISO13485 ASME IEC61010-1 GMP



**MEDSOURCE CO., LTD.**

# STEAM STERILIZER

## Purpose:

The steam sterilizer is a highly safe sterilizing product with stable function, suitable for major hospitals, clinics and biochemical research laboratories etc., for the sterilization of instrument, cloth, glassware and liquid etc.

Designed of double-layers with inner and outer chamber for good drying efficiency, and totally made of stainless steel 304 # (316 # is optional). The outer layer uses thermal insulation wool for heat preservation, and then covered with 304 #stainless steel sheet for both functions of aesthetic appearance and heat preservation.

Stainless steel door with radial lever can effectively lock tight the door cover and prevent steam leakage.

Silicone door gasket is high- temperature resistant, durable, and without deformation.

The chamber body is supported by a stainless steel support, and the height of level can be adjusted from the adjustable footpad of support base.

## Practical Sterilization Function:

- 1.Preset Vacuum Function is able to shorten the sterilization time.
- 2.Vacuum drying function is able to remove unwanted moisture quickly, and to reach the Bowie Dick test criteria.
- 3.Cloth / apparatus  $\leftrightarrow$  glass / liquid, Sterilization Functional Switch Mode can be selected to switch according to different kinds of materials to be sterilized. When liquid sterilization, make sure liquid ingredient to avoid rust and corrosion occurred. For medical & chemical ingredient, physiological salt water etc. pls select stainless steel #316
- 4.Auto Water Supply Device: Electrical control system is able to detect and sense the water volume automatically. Upon insufficient water volume, it will supply to high water level automatically. Use equipment for soft water purification can prolong the life cycle of sterilizer.

## Safety Devices:

- 1.Auto Power-Off Protection Device for water shortage, when water runs out, the electrical control system will automatically cut off the heating power to prevent heating device from overheating, dry-out or even meltdown. .
- 2.Pressure Controller, the maximum pressure in the boiler is limited to  $2.2 \pm 0.1 \text{kg/cm}^2$ . When the pressure reaches the set value, the heating power will be automatically off to prevent the pressure from rising.
- 3.Safety Valve, when the pressure reaches  $2.5 \text{kg/cm}^2$ , it will start a rapid exhaust of steam and release the pressure from the chamber .
- 4.Pressure Lock, when the pressure of inner chamber exceeds  $0.2 \text{kg/cm}^2$ , the clutch will be locked automatically, and the door cover will not be able to open, in order to keep the operator safe.
- 5.Safety Switch of Door Cover, when the door cover opened, the steam in the outer chamber is unable to enter the inner chamber. It cannot be operated normally unless the door cover is closed tightly.

## Simple Operation Interface:

- 1.Digital LED electronic timer is able to control the working hours of sterilization and drying precisely within the range of 0~99 minutes.
- 2.Digital LED electronic temperature controller is able to set the required working temperature quickly, and show the current temperature status of inner chamber. The highest setting temperature is  $134^\circ\text{C}$  ( $218.47^\circ\text{F}$ )
- 3.The pressure gauge of inner and outer chamber is able to clearly show the current working temperature status of interior of sterilizer.
- 4.The open and close of turning type door cover is easy for operation.

The highest sterilization temperature is  $134^\circ\text{C}$ ( $218.47^\circ\text{F}$ ), and the pressure value for sterilization is able to reach  $2.2 \text{kg/cm}^2$  ( $2.16 \text{ bar}$  or  $31.29 \text{ psi}$ ).

Heating device with high power will take 20 minutes to complete sterilization under  $121^\circ\text{C}$ , or 15 minutes under  $132^\circ\text{C}$ .



Trail Cart is optional



The preparation steps for sterilization function shown as following:

**Manual operation-**

put the items to be sterilized inside, and close the door cover ▶ supply water manually ▶ set time ▶ turn on the power ▶ heating ▶ sterilization time completed ▶ exhaust steam manually ▶ set drying time ▶ completion

**Automatic operation-**

put the items to be sterilized inside, and close the door cover ▶ set temperature/time ▶ turn on the power/activate the switch ▶ supply water manually ▶ heating ▶ sterilizing ▶ steam exhaust for inner chamber ▶ drying ▶ completion

**Fully-automatic operation-**

put the items to be sterilized inside, and close the door cover ▶ set temperature/time ▶ turn on the power/activate the switch ▶ supply water automatically ▶ heating ▶ preset vacuum for 3 times ▶ sterilizing ▶ steam exhaust for inner chamber ▶ vacuum drying ▶ completion

Function list

Functions	Operating system	Manual drying function	Automatic drying function	Automatic and vacuum drying function
Steam exhaust valve outer chamber		Yes	Yes	Yes
Dry valve, inner chamber		Yes	Yes	Yes
Dry function		Manual	Auto	Auto
Sterilization function		Manual	Auto	Auto
Thermometer, inner chamber		Yes	N/A	N/A
Temperature controller		N/A	Yes	Yes
Timer		60Minutes x 1pcs	90Minutes x 2pcs	99Minutes x 2pcs
Safety valve		1pcs	1pcs	1pcs
Pre-heating function		Yes	Yes	Yes
Auto water filling		Optional	Optional	Yes
Vacuum drying (Pre-vacuum)		N/A	N/A	Yes
Glass & Liquid sterilization function		N/A	Optional	Yes
Low water Indication / cut-off		Yes	Yes	Yes
Water Level Control & Protection		Yes	Yes	Yes
Safety door lock activated by pressure		Optional	Optional	Optional
Chamber material stainless steel #316 (standard#304)		Optional	Optional	Optional
Trail cart		Optional	Optional	Optional
Stainless steel tray		1pcs	1pcs	1pcs

Model	External DIA L.W.H.(cm)	Chamber ØxD(cm)	Capacity (Liter)	Power Consumption(Kw)	Max Sterilization Temperature(°C)	Operate Pressure (kg/cm <sup>2</sup> )	N.W. (Kg)
TC-615	204x76x175	60x150	424	24	134±2	2.2±0.1	360
TC-612	174x76x175	60x120	339	18	134±2	2.2±0.1	321
TC-600	154x76x175	60x100	283	12	134±2	2.2±0.1	285
TC-500	135x66x169	50x100	196	10	132±2	2.0±0.1	265
TC-459	117x61x163	45x90	143	7	132±2	2.0±0.1	197
TC-409	117x56x160	40x90	113	6	132±2	2.0±0.1	140
TC-407	104x56x160	40x75	94	6	132±2	2.0±0.1	125
TC-406	93x56x160	40x66	83	6	132±2	2.0±0.1	115
TC-339	117x48x148	33x90	77	5	132±2	2.0±0.1	110
TC-336	93x48x148	33x66	56	4	132±2	2.0±0.1	97

AC 220V 1P, 220V 3P, 380V 3P, 50/60Hz (please specify when ordering)

TC-500, TC-600, TC-612, TC-615:3 phase only

**AMPERE conversion formula**

**(1-phase → 3-phase) Wattage/ Voltage | 1.732=Amp for 3-phase**



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