

# Autoclaves



**mrc**

## AUTOCLAVES Table Top



### STE-TAN-8L, 8 Liter Autoclave

Adopting European N standard, with thermal vacuuming & drying function, it can be used for A type hollow instruments and solid instruments

#### Technical feature:

- Sterilization temperature: 121, 134 Cent degrees
- Drying Program: Thermal Vacuum drying
- Digital display
- Sterilization record: mini external printer is available
- Safety: safety valve, temperature control, pressure protection system, temperature protector of chamber wall
- Sterilization and drying time adjustable help you to get the best sterilization effect
- Open type water storage tank
- Quick drain connector
- Optional type B: STE-8L(B).

Model	Voltage (V/Hz)	Power (W)	Capacity (L)	Chamber Size (mm)	Outside size (mm)	Weight (kg)
STE-8LN	AC220V/50Hz	1400W	8L	Φ170x320mm	W345xH530xD340	34 (Net:30)
STE-8LB		1500W		Φ170x320mm, 2 Trays	W370xH345xD565	37 (Net:34.5)



### STE-TAN, 16 Liter Autoclave

Adopting N-class (prED-13060), with thermal vacuumizing and drying function, it can be used for A-type hollow instruments & solid instruments. Thermodynamic vacuum guarantees elimination of cold air from the cavity and makes sure of perfect saturation of water stream. Three sterilizing water quantity selections are respectively for different material, which embodies the individualized service. Automatic malfunction detecting system makes easy maintaining.

- Liquid Sterilizing option
- Optional Printer



Model	Voltage (V/Hz)	Power (W)	Capacity (L)	Chamber size	Outside size (mm)	Weight (kg)
STE-TAN	220/50	1900	16	Ø230x360mm	W440xH400xD560	64 (Net:43)



## STE-TIN, 16 Liter Vacuum Autoclave

It adopts B-wclass(prED-13060), with 3-times pre-vacuum preceding vacuum drying. Residual humidity is <0.2: vacuum measurement reaches-0.7bar. It sterilizes and sanitizes miscellaneous packed or unpacked medical instruments, whether solid or A-type hollow, whether with multi- apertures or inset pipes. It efficiently rid air from every hollow area of any hollow instrument, such as hand-piece, making sure that water steam reaches every corner. It is installed with BOWIC & DICK which measures the penetration of water steam. Mini printer can be attached to record the process of sterilization.

Model	Voltage (V/Hz)	Power (W)	Capacity (L)	Chamber size	Outside size (mm)	Type	Weight (kg)
STE-TIN	220/50	2000	16	Ø230x360mm	W440xH400xD560	B	64 (Net:45)



## STE-18L, 18 Liter Autoclave

### Technical features:

- According to EN13060 standard completely
- Manual door locking system
- Sterilization temperature: 121, 134 Cent degrees
- Programs: 10 programs (Including test programs)
- Test program; Helix test, B&D test, Vacuum test
- Drying Program: Vacuum drying
- LCD display
- Sterilization record: mini external printer is available
- Safety: safety valve, temperature control, pressure protection system, temperature protector of chamber wall
- Independent steam generator inside
- Sterilization and drying time adjustable help you to get the best sterilization effect
- Open type water storage tank
- Quick drain connector.

Model	Voltage (V/Hz)	Power (W)	Capacity (L)	Chamber size	Outside size (mm)	Type	Weight (kg)
STE-TIN-18L	220/50	2200	18	Ø247x350mm	W480xH590xD455	B	Net: 47
STE-TAN-18L		2100				N	Net: 45



## STE-23L, 23 Liter Autoclaves

It adopts B-class (prED-13060), with 3-times pre-vacuum preceding vacuum drying. Residual humidity is <0.2, vacuum measurement reaches -0.7bar. It sterilizes & sanitizes miscellaneous packed or unpacked medical instruments, whether solid or A-type hollow, whether with multi-apertures or inset pipes. It efficiently rid air from every hollow area of any hollow instrument, such as hand piece, making sure that water steam reaches every corner. It is installed with BOWIC & DICK which measures the penetration of water steam. Mini printer can be attached to record the process of sterilization. Optional type N: with liquid sterilization.



STE-TIN-23T

Model	Voltage (V/Hz)	Power (W)	Capacity (L)	Chamber size	Outside size(mm)	Type	Weight (kg)
STE-TIN-23	220/50	1750	23	Ø247x450mm	W480xH699xD455	B	Net: 51
STE-TAN-23		2100				N	Net: 48
STE-TIN-23T		2200	25	Ø230x580mm	-	T	Net: 58

### Documentation:

1. Printer: an external printer is optional.
2. USB port: it is used for connecting a USB stick, all sterilization data are automatically written in the USB stick and can be read directly in any PC and stored electronically.
3. Internal memory: the last 20 cycles can be automatically stored in the autoclave system, which can be print out at any time.



# AUTOCLAVES Table Top, 45–80 Liter



## STE-HT-45/60/80, 45, 60 or 80 Liter Steam Sterilizers

STE-HT series sterilizer is an automatic high temperature and pressure rapid sterilizer which works with steam as medium. It can be widely used in department of stomatology and ophthalmology, operating room, supply room, dialysis room, delivery room & other medical institutions. It is suitable for all wrapped or unwrapped solid instruments, A-class cavity instrument (dental handpieces and endoscopes), implantable instruments, dressing fabric and rubber tubes, etc.

### Features

**Build-in open type water tank** The sterilizer adopts easy-clean open type water tank that equipped with water quality monitor to ensure the reliability of steam quality and sterilizer operation.

**Brand-new operation interface** The LCD screen can display temperature,

pressure, time, operating status, failure warning and other information. It is convenient for customers to observe the sterilizer running status.

**Multiple security protective device** Overheat auto protective device; multiple control and protection for steam generator; safe door interlock; double overpressure protection; electronic circuit safety device.

**Automatic door** STE-HT-45 series adopt auto door structure that can effectively prevent scald. STE-HT-60/80 series door structure adopt multipoint stitching technology to ensure seal reliability. The door equipped with convenient one-button switch.

**High-efficiency ultimate vacuum** The sterilizer adopts high-efficiency low-noise vacuum system which has excellent effects. The ultimate vacuum value can reach -90KPa or above.

**Multiple program types** The system has various programs that include: wrapped items, unwrapped items, rubber items, custom program, rapid program, BD testing program, vacuum testing program, preheat program and drying program.

**High-efficiency steam generator** STE-HT-45 equipped with build-in instant steam generator.

STE-HT-60/80 equipped with build-in energy-storing steam generator.

**Other features** 0.22μm high-efficiency sterilizing filter that guarantees the air is sterile and prevents repeated contamination. All the processes of water injection, pulse vacuum, heating up, sterilization, exhausting and drying are automatic.

### Optional configuration.

- Record type: printer.
- Electronic storage: USB flash disk.
- Remote monitoring: software.
- Power: 110v/100v/240v.

Model	Voltage	Power	Capacity	Chamber Size	Package size (mm)	Design Pressure (MPa)	Design Temp. (°C)	Temp. Range (°C)	Net weight
STE-HT-45	220V 50/60Hz	3.8Kw	45L	Ø316x618mm	L830xW640xH550	-0.1/0.3MPa	144°C	105-136°C	115kg
STE-HT-60		7Kw	60L	Ø385x595mm	L1002xW730xH560				160kg
STE-HT-80		7Kw	80L	Ø385x717mm	L1002xW730xH560				180kg



## STE-H-45, 45 Liter Table top Autoclave Sterilizer Class S

STE-H-45 Class S autoclave is an automatic high temperature and pressure rapid sterilizer which works with steam as medium. It can be widely used in medical and health department such as laboratory, ophthalmology, operating room, CSSD, dialysis room, delivery room and etc. It is suitable for all wrapped or unwrapped solid instruments, liquid in lid-open container, implantable instruments, dressing fabric and rubber tubes, etc.

### Features:

Build-in open type water tank • Easy-clean open type water tank • Water quality monitor • Water filter inside • Water level sensor • A fully injected water tank can support repeated program running.

**Other features:** Heating, sterilization, exhausting, drying totally automatic. Chamber is heated by film heater, saving energy and time.

### Brand-new operation interface:

LCD screen can show temperature, pressure, time, running process, error and alarm information, etc. Sterilization information is more obvious and it's easier to observe the running status.

### Multiple safety protection devices:

Over temperature automatic protection device, multiple control and protection for steam generator, door safety interlock protection and dual chamber over -pressure protection, electronic circuit safety device.

### Automatic door structure:

STE-H-45 adopts automatic door structure, operation fast and simply, protecting the operators from scald. Efficiency steam generator STE-H-45 adopts build-in instant steam generator.

Model	STE-H-45
Capacity	45L
Design Pressure(MPa)	-0.1/0.3MPa
Design Temp. (°C)	144°C
Temp. Range(°C)	105-138°C
Chamber Material	Medical Stainless steel 304
Standard Loading Tray	Type B
Power Supply/Consumption	AC220V±10%, 50/60Hz/5.8kw
Chamber Size(mm)(Ø*L)	Ø 316x618
External Size(WxDxH) mm	830x640x550
Gross Weight (kg)	80

### Optional

#### Configuration:

- Operation type: push-button operation or inductive operation
- Record type: built-in printer
- Electronic storage: USB flash disk
- Remote monitoring: computer or pad.





STE-V-80

### Main Technical Parameters

- Designed pressure: 0.26Mpa.
- Designed temperature: 150°C.
- Rated working pressure: 0.22Mpa.
- Sterilization temperature: 105°C–136°C.
- Sterilization time range: 0–99min.
- Material of chamber: SUS 304 stainless steel.
- Accessories: 2 stainless steel sterilization baskets.

### Safety Devices

- Auto protection device against over temperature: This system cuts off power automatically if the designed temperature is surpassed. Light and sound alarm meanwhile.
- The program will be stopped if water level lower than the low limit. alarm with sound and light.
- Door safety interlock. The door cannot be opened until there is no pressure in the chamber and power for heating cannot be switched on until the door is firmly closed.
- Safety valve of auto release against overpressure It opens when the designed pressure is surpassed.
- Heat insulation dock shelter: the door is made of high performance heat insulation material. not only beautiful but also prevents the operator to be injured.
- Over current and creepage protector.

### STE-V-60/80, Automated Water Filling Vertical Autoclave

- Microcomputer control technique. touch-key. LCD display the menu.
- Automatic control over the processes of filling water, heating, sterilization, steam exhaust and dryness.
- There are equipped with dressing, instrument, rubber, culture medium sterilization and keep warm. culture medium and keep warm programs for customer's choice.
- Process, temperature, time dynamic LCD displayed, Fault automatic displayed and alarm.
- Positive pressure pulse function exhaust cool air of chamber thoroughly and ensure the steam saturation.
- Rapid and slow exhaust steam Automatic control function, It avoids liquid overflow while sterilization.
- Automatic maintenance function, The program will be continued when the power connection again.
- The buzzer alarms when a cycle of operation is completed.
- Preheating control function.
- Built-in water tank. Steam and water circulation system. no external water source. not exhaust steam outside. environment is clean and dryness.
- Horizontal sliding door, self- bulge seal ring. operated easily.
- Printer is available for optional.



Baskets



STE-V-80

Model	Capacity	Chamber Size	Outside Size (mm)	Net weight	Voltage	Power
STE-V-60	50L	Ø315xL668mm	616x476x990	65kg	220V/50Hz	4.2Kw
STE-V-80	80L	Ø386xL695mm	688x546x1030	75kg	380V/50Hz	4.5Kw



SK310-230

### SK310-230/SK410-230, Heat Sealer, sealing width – 300/400mm

- It fits nearly everywhere for world-wide use in laboratory.
- Polyethylene, polypropylene films can be easily sealed.
- Easy to handle with convenient and reasonable structure.
- Powerful transformer and high quality circuit components guarantee years operation.

Model	SK310-230	SK410-230	SK510-230
Available resin	polyethylene, polypropylene		
Sealing width	2mm		
Sealing length	300mm	400mm	500mm
Weight	4.3kg	5.4kg	6.5kg
Dimensions (mm)	W440xD85xH175	W530xD85xH175	W630xD85xH175
Wattage	390W	750W	900W
Power	AC 110V/220V, 50/60Hz		

UTKBS-50V



## UTKBS-30V/50V/75V/100V, Vertical Autoclave Sterilizers

Vertical autoclave is mainly used in hospitals, laboratories, universities & other institutes where users need to sterilize temperature-resistance solid & liquid.

### Safety Features:

- Over pressure, safety valve can automatically open to release pressure.
- Over temperature, the system will stop heating automatically & start alarm.
- Anti dry-out function. If water level is too low, heating stops and error code displays on screen.
- Over current, over voltage or electric leakage protection apparatus-air switch.

### Technical Features:

- Complete protection system.
- Flip-open door structure with spring booster, easy to open.
- LED displays inner temperature, time and error codes.
- Automatic exhausting steam function.
- Reliable mechanical safety interlock feature.
- External material: Cold rolled steel with anti-bacteria powder coating.
- Fixed sterilization programs for dressings, unwrapped and wrapped equipment, rubber, and liquid.
- Door cover is wrapped completely, to prevent scald effectively.
- Radial self-expanding silicone rubber seals with high effect & long using life.



Model	UTKBS-30V	UTKBS-50V	UTKBS-75V	UTKBS-100V
Capacity	30L	50L	75L	100L
Chamber Size (Ø x L)	385x412mm	385x515mm	385x715mm	385x915mm
Chamber Material	Polished SUS304 medical stainless steel			
Max. Pressure	0.3MPa			
Rated Working Pressure	0.22MPa			
Max. Temperature	150°C			
Working Temp. Range	105-134°C			
Temp. Accuracy	±0.1°C			
Timing Range	0~999 min			
Dynamic Pulse Exhaust Time	0~9 times			
Water Requirement	Distilled water or demineralized water			
Standard Accessories	Stainless steel basket, 1pc		Stainless steel basket, 2pcs	
Consumption	4KW	4KW	4KW	4.5KW
Power Supply	220V, 50/60Hz			
Chamber Size (φ x H)	385x412mm	385x515mm	385x715mm	385x915mm
Outer Size (W x D x H)	610x645x710mm	610x645x850mm	610x645x1000mm	610x645x1200mm
Net Weight	68kg	75kg	85kg	100kg

UTKBS-200LV



### UTKBS-150LV/200LV, Hand Wheel Vertical Autoclaves

#### Application Range:

There are 5 fixed programs and 4 DIY programs according to different sterilization objects such as dressings, equipment, tools, rubber, liquid, culture medium, waste, etc.

#### Safety Features:

- Over pressure: safety valve can automatically open to release pressure.
- Over temperature: the system will power off automatically.
- Door sensor: Sensor at door closing position, to check the door status. If door is open, operation will stop.
- Anti-dry out function: If water level is too low, system will power off and error code displays on screen.
- Over current: over voltage or electric leakage protection apparatus-air switch.
- Door cover: The door is covered with safety shell made of thermal insulation material, which can protect operator from burning by heat and looks nice.

#### Technical Features:

- Optional printer for recording sterilization data.
- LED screen displays all steps of full process as well as error codes.
- Independent quick service window, easy for repairing and maintenance.
- Automatic selecting quick or low exhaust to avoid sterilization liquid overflowing.
- Sterilization programs for dressings, equipment, rubber, culture medium, waste, etc.
- Hand wheel type of quick-open door structure, self-expandable sealing ring, easy operating and safe.
- Complete process of filling water, dynamic pulse exhaust, heating, sterilizing, draining and drying runs automatically.
- Adopting certain temperature (98-102°C) exhaust method and dynamic pulse exhaust method to completely empty the cold air inside chamber for ensuring steam saturability.



Model	UTKBS-150LV	UTKBS-200LV
Capacity	150L	200L
Chamber Size (Ø x L)	φ500x760	φ500x1000
Chamber Material	304 medical stainless steel	
Max. Pressure	0.28Mpa	
Max. Designed Temp.	150°C	
Working Pressure	0.217MPa	
Working Temp. Range	50-134°C	
Temp. Accuracy	±0.1°C	
Timing Range	0-999min	
Dynamic Pulse Exhaust Times	0~9 times	
Dynamic Pulse Exhaust Temp.	105-134°C	
Dissolution Temp. Range	60-100°C (programmable)	
Temp. Holding Range	40-60°C (programmable)	
Power Supply	380V, 50Hz	
Power Consumption	6KW	
S.S Basket	3 pcs	4 pcs
Outer Size (W x D x H)	715x720x1350mm	715x720x1550mm
Package Size (W x D x H)	760x800x1500mm	760x800x1690mm
Gross Weight	230kg	260kg

# AUTOCLAVES

## Table Top



### STE-8LB, 8 Liter Autoclave

#### • Overview:

8 Liter benchtop autoclaves with class B pre-post vacuum type, complies with the European standard EN13060. This 8 liter autoclave is light weight, easy to move and requires minimal bench space making it an ideal solution for small businesses such as tattoo, podiatry, beauty, veterinary and small microbiology requirements.

#### • Excellent Performance:

- Full automatic table top autoclave with pre set programs.
- Complies with European standard EN13060.
- In built independent rapid steam generator ensures quick sterilization cycles.
- Rapid post sterilization vacuum drying.

- User friendly interface.
- LCD screen displaying time, temperature and pressure, process alert and instrument conditions.
- Choice of language setting including: English, Spanish, German, Polish, French, Hungarian, Romanian, Dutch, Lithuanian, Latvian, Czech, Italian and Chinese.
- Easily accessible watertank.

#### • Safety and Monitoring:

- Double door protection system prevents the cycle from starting if the door is not correctly locked. This system also prevents the door from opening if the pressure inside the chamber is not equal to atmospheric pressure outside the chamber.
- Pressure safety valve prevents over pressure in the chamber and steam generator.
- The power is automatically cut if a short circuit or electrical fault occurs.
- Able to detect and identify the exact cause of any problem, and to issue a specific error code to the operator.
- Water level main switch in the main tank controlling the min and max water level.
- Automatic warning for maintenance.

#### • Documentation:

- Printer (option): an external printer is optional for all "icanclave" autoclaves.
- USB port (option): it is used for connecting a USB stick, all sterilization data are automatically written in the USB stick, and can be ready directly in any PC and stored electronically.
- Internal Memory: the last 20 cycles can be automatically stored in the autoclave system, which can be printed out at any time.

Model	Voltage (V/Hz)	Power (W)	Capacity (L)	Chamber Size (mm)	Outside size (mm)	Weight (kg)
STE-8LB	AC220V/50Hz	1500W	8L	Φ170x320mm, 2 Trays	W370xH345xD565	34.5

### STE-MAN, 16 Liter Autoclave



#### Features: Semi-automatic Class N sterilizer • Chamber Volume 16L

- 121/134°C, 2 programs • High precision temperature control within 0.1°C
- Pressure safety locker (optional) • Temperature & pressure overload protection • Not suitable for liquid sterilization.

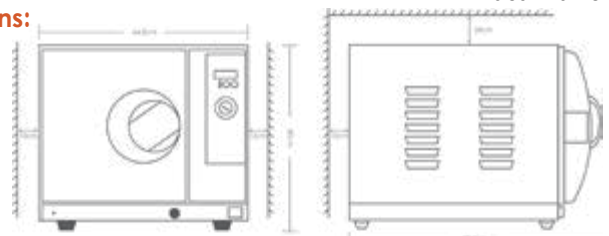


#### Instrument Trays:

2pcs, 192x285mm



#### Installation Dimensions:



Model	STE-MAN
Voltage	220-240VAC / 110-130VAC
Chamber Dimensions	230x360mm (inner diameter/depth)
Power	1100VA
Sterilization Temperature(°C)	121°C / 134°C
Overall Dimensions (mm)	445 (W) X 400 (H) X 605 (D)
Net Weight (kg)	30kg
Holding Time (min)	121°C / 30min 134°C / 10min





### STE-F-8, 8 Liter Autoclave

"Class B" autoclave with QUICK cycle included. It takes approx. completed time 10 to 17 minutes for unwrapped instruments according to different weight of loading. It is a solution for emergency sterilization using, also an idea for ophthalmic clinic. Excellent Performance:  
Full automatic table top autoclave with pre-set programs.  
Complies with European standard EN13060.  
In built independent rapid steam generator ensures quick sterilization cycles.  
Rapid post sterilization vacuum drying.  
With one flash water tank and used one water tank.  
LCD screen displaying time, temperature and pressure, process alert and instrument conditions.  
User friendly interface.

Double safety protection system prevents the cycle from starting if the door is not correctly locked. This system also prevents the door from opening if the pressure inside the chamber is not equal to atmospheric pressure outside the chamber.

Pressure safety valve prevents over pressure in the chamber and steam generator.

The power is automatically cut if a short circuit or electrical fault occurs.

Able to detect and identify the exact cause of any problem, and to issue a specific error code to the operator.

Water level main switch in the main tank controlling the min and max water level.

Automatic warning for maintenance.

#### Default Program:

Program	Temperature	Pressure	Sterilization time [min.]	Cycle time [min.]
<b>Quick 134°C</b>	134°C	210 Mpa	4	10-14
<b>Wrapped 134°C</b>	134°C	210 Mpa	10	22-40
<b>Wrapped 121°C</b>	121°C	110 Mpa	30	38-50
<b>Prion</b>	134°C	210 Mpa	18	35-55
<b>Dry</b>	-	-	-	-
<b>B&amp;D Test</b>	134°C	210 Mpa	3.5	10-20
<b>Helix Test</b>	134°C	210 Mpa	3.5	10-20
<b>Vacuum test</b>	-	-	-	17-20

Model	Chamber Size	Type	Capacity (L)	Overall Size (WxHxD)	Packing Size (WxHxD)	Power	Weight (kg)
<b>STE-F-8</b>	Ø170x320mm 2pcs, Max 3pcs (Aluminum Tray's optional, Size: 130x265mm)	Class B	8L	420x370x525mm	503x438x640mm	2200W	37



### ICLAVE-SERIES, Pulse Vacuum Sterilizers

Pressure display Analogue pressure gauge for chamber and jacket on the front panel.

Temperature display Digital Temperature Display on the front panel (touch screen).

Built-in steam generator 24 kW, working pressure: 0.3MPa.

Fittings on built-in steam generator.

Safety valve, Analogue pressure gauge, Water level gauge, water level electric cut out, Automatic air ventilate, Control Switch.

Water pump:

Not less than 3 bar should be fitted with a protection against overload and phase failure.

Volume: 146-655L.

Type: Vertical.



STE-CAS-2

### STE-CAS-2, Cassette Sterilizer

#### Application:

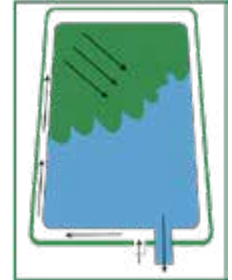
It is used for the repaid sterilization of small instruments in stomatology, ophthalmology, E.N.T. department, gynecology, operating room, etc.

#### Features:

- It only takes 6-7 minutes for the shortest sterilization cycle which can extend service life of the instrument
- Three shortcut keys for sterilization programs, the sterilization temperature and time can be set freely
- Alarm for unqualified water and water shortage, the autoclave will stop working when there is a low temperature and low pressure
- Small dimension, light weight, easy to operate, the cassette can be also used for instrument transfer and temporary storage.

#### Schematic Diagram:

The steam generator heats to the optimum temperature when the sterilization program started. The distilled water is pumped into the generator & converted into steam immediately, then the steam is injected into the cassette which is loaded with instruments to be sterilized. The polluted air in the cassette is exhausted after the steam is injected.



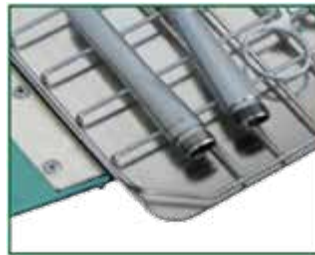
#### Details:



Simple operation



Standard printer, real-time record for sterilization process

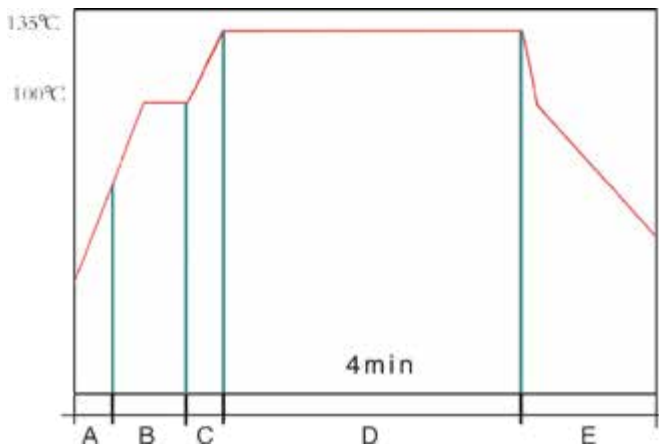


Ultra-thin cassette box design makes heating & cooling faster



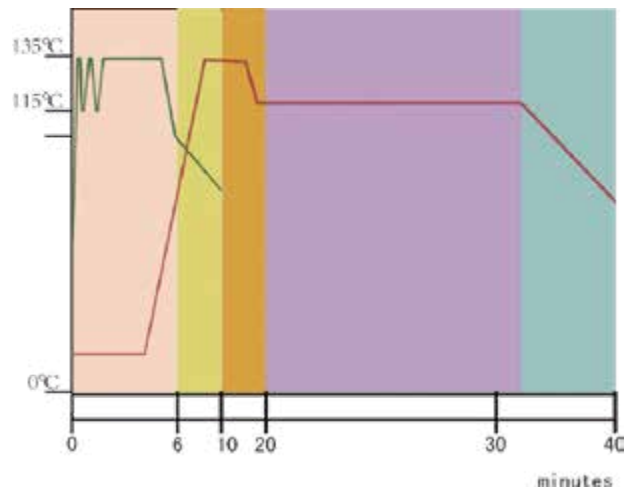
1.22 µm Biofilter

#### Working Curve:



Sterilization Chart

A. Air removal B. Warming up  
C. Pressurizing D. Sterilizing E. Venting



Sterilization Cycle Comparison

Advantages:  
Shorter cycle time, higher efficiency

Model	STE-CAS-2	STE-CAS-5	STE-CAS-6
Capacity	1.8L	5.2L	6.0L
Chamber Size (WxDxH) mm	280x180x38	380x180x78	480x180x78
External Size (WxDxH) mm	570x415x170	580x460x190	
Temp. Range	110°C - 135°C		
Temp. Fluctuation	±5°C		
Ambient Temp.	5 - 40°C		
Working Pressure	42 kPa - 212 kPa		
Chamber Material	304 Stainless Steel		
Water Tank Volume	3.4 L		
Power Supply	AC 220V±10%, 50Hz/60Hz; 110V±10%, 60Hz		
Packing Size (WxDxH) mm	580x580x700		
Net/Gross Weight	34/49kg	46/61kg	