



The Global Scientific People

ESTEEM INDUSTRIES INC.

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ESTEEM MEDINCEPTION LTD.

The Global Scientific Group

Laboratory & Medical

Equipment Manufacturers

ESTEEM
AUTOCLAVES
CATALOGUE





Certificates



company profile

*Esteem Industries Inc. incepted in the year **1984**. It was the vision of **Mr. Mahendra Pratap Tandon and late. Mrs. Rachna Tandon**. The slogan of MRV (Morality, reliability and vision) was the birth child of Mrs. Rachna Tandon. Since then it has been offering state-of-the-art products in the able leadership of Mahendra Pratap Tandon and equal hand of his son Mr. Vipul Tandon in ever expanding field of instrumental analysis.*

*Esteem, founded and established with native fund, actively operates in the laboratory, medical and industrial sectors since **1984** and with customers worldwide, **Esteem shares a favourable reputation in both Indian and international market place complete with numbers of distributors.***

Esteem has built its reputation on a commitment to providing quality products and services while rapidly responding to international needs for innovative and quality products. A primary strategy is superior customer satisfaction. Esteem constantly analyzes market needs in domestic market as well as around the world to develop a full range of products for healthcare, industry, education and business use.

By widening its product range according to its research-development (R&D) studies and requests coming from the different sector. Today, due to quality and variety, Esteem products are in demand in both international and domestic markets. Definitely ESTEEM is leading in the TRADE.

*Manufacturing by "Customer focused quality vision", Esteem obtained **ISO 9001:2008 and ISO 13485: 2003** international quality certificate. Additionally each of Esteem's CE certified products go through constant quality control. Esteem have obtained **CE 1984** certificate for medical equipments.. Esteem obtained **CE - 1023** certificate for medical equipments. Esteem obtained **WHO-GMP & CE of Laboratory & Scientific Instruments, mortuary cabinets, Autoclaves** as well.*

*Esteem family is today having **more than 150 workers & office staff**. We welcome you for a good beginning with us and let us join hands for betterment of business relation and serve the nation and mankind.*

ESTEEM has started manufacturing of Surgical Instruments. For precision in quality we have all CNC machines & welding is being done by ROBOTS.

With an international concentration while maintaining an innovative approach toward products and solutions for its clients, Esteem welcomes you to come see what's new at Esteem!!!

Thank you for your valuable time and interest in Esteem's products!.....

**Mahendra Tandon
Vipul Tandon**



ESTEEM PORTABLE AUTOCLAVE

ESTA - 104

The body and lid constructed by joint less thick aluminum sheet. Suitable of general laboratory use as well as for field sterilization of instruments and dressings etc. Dome shaped S.S. lid is provided which seals the autoclave with neoprene joint less gasket. The lid is tightened to the body when closed. The working pressure is 1.1 to 1.2 Kg./cm² (15-18PSI).

The seamless construction allows no bacteria residue. It is equipped with dial pressure gauge 0-30 PSI, steam valve, dead weight type safety valve and steam release valve. The load is held in dressing drums (optional), which is supported on a stand (tripod). The autoclave is hydraulically tested at twice the working pressure as per ISI requirement. It is fitted with ISI marked heater. Supplied complete with plug & cord. Suitable to work on 220/230 Volt, single phase, 50 Hz, AC supply.

Size : 350 × 300-325 mm

Optional Accessories Dressing Drum.



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ESTEEM PORTABLE AUTOCLAVE

(As per IS : 8462/ 1977)



ESTA - 105

The body is constructed of S.S. 304/316. Suitable of general laboratory use as well as for field sterilization of instrument and dressings etc. Dome shaped S.S.lid is provided which seals the autoclave with neoprene jointness gasket. The lid is tightened to the body when closed. The working pressure is 1.1 to 1.2Kg./cm² (15-18PSI). The sterilizer is made of S.S. Sheet deep drawn to cylindrical shape. The seamless construction allow no bacteria residue from dirt accumulation. It is equipped with dial pressure gauge 0-30PSI, spring loaded safety valve, dead weight type safety valve and steam release valve. The load is held in dressing drums (optional), which is supported on a stand (tripod). The autoclave is hydraulically tested at twice the working pressure as per ISI requirement. It is fitted with ISI marked heater. Supplied complete with plug cord. Suitable to work on 220/230 Volt, single phase, 50 Hz, AC supplied with digital controller and cum indicator.

Size: 350 x 300 / 325 mm

ESTEEM PORTABLE AUTOCLAVE

(As per IS : 8462/ 1977)



ESTA - 105 A

The body is constructed of S.S. 304/316. Suitable of general laboratory use as well as for field sterilization of instrument and dressings etc. Dome shaped S.S.lid is provided which seals the autoclave with neoprene jointness gasket. The lid is tightened to the body when closed. The working pressure is 1.1 to 1.2Kg./cm² (15-18PSI). The sterilizer is made of S.S. Sheet deep drawn to cylindrical shape with Digital Controller. The seamless construction allow no bacteria residue from dirt accumulation. It is equipped with dial pressure gauge 0-60PSI, spring loaded safety valve, dead weight type safety valve, steam release valve & Digital Controller. The load is held in dressing drums (optional), which is supported on a stand (tripod). The autoclave is hydraulically tested at twice the working pressure as per ISI requirement. It is fitted with ISI marked heater. Supplied complete with plug cord. Suitable to work on 220/230 Volt, single phase, 50 Hz, AC supplied with digital controller and cum indicator

Size: 350 x 300 x 325 mm



ESTEEM VERTICAL AUTOCLAVE



ESTA - 106

The inner & Outer chamber is made of SS 304. The lid & radial locking system is S.S 202 Inner & Outer is nicely polished. Provided with ISI marked electric heaters. Pressure is controlled by pressure stat and temperature indicator is also provided. The pressure is controlled from 1.2 kg. to 2.00kg. / cm². Provided with double safety valve, Water inlet & outlet valves, pressure release valve S.S wire basket. The panel is provided with controls & indicators, 60 minute timer.

CONSTRUCTION

The unit comprises of steam Chamber electrically heated Inner lid made of stainless steel work on 3-phase 440A/C 50HZ supply fitted with automatic pressure control switch safety valve etc Chamber:- The chamber is made of 16SWG304 SS. Pressure gauge, water outlet valve and air inlet valve, SS steam condenser, tube with SS eject valve. Outer cover:- The outer cover is made out of SS duly insulated with high density mineral wool from the inner chamber and fitted with stable legs.

Our autoclaves are air insulated from inside, however we may incorporate mineral glass wool insulation if the customer desires so. The strong lid constructed out of thick stainless steel plate has a double safety radial locking arrangement, which ensures an easy and smooth opening and closing operation for all our autoclaves.

WORKING PRESSURE

Working pressure for our standard dry sterilization model vertical autoclave is 15 psi, however this can be upgraded to be used for higher pressures of up to 30 psi.

Size of Inner Chamber Dia x Depth

- | | |
|-----------------|-----------------|
| 1) 250 x 450 mm | 4) 400 x 600 mm |
| 2) 300 x 500 mm | 5) 450 x 600 mm |
| 3) 350 x 550 mm | 6) 550 x 750 mm |



ESTEEM VERTICAL AUTOCLAVE

As per IS: 3829 Part- III



ESTA - 106 A CONSTRUCTION

The unit comprises of steam jacket electrically heated inner lid made of stainless steel work on 3-phase 440A/C 50HZ supply fitted with automatic pressure control switch safety valve etc Chamber:- The chamber is made of 16SWG304/316 SS. Pressure gauge, water outlet valve and air inlet valve, SS steam condenser, tube with SS eject valve. Steam Generator:- The steam generator is made out of SS heavy gauge fitted with pressure gauge and water draining valve. Outer cover:- The outer cover is made out of SS duly insulated with high density mineral wool from the inner chamber and fitted with stable legs.

Our dry vertical autoclaves are triple walled units. Outer body of our autoclave is constructed out of thick gauge stainless steel sheet of SS-304/316 SS grade. The inner chamber is also made of heavy gauge stainless steel sheet of SS-304/316 SS grade. The middle wall is also constructed from the strong and sturdy stainless steel sheet of SS-304 grade s stainless steel sheet. These are steam stocking models connected with a three way valve to control the sterilization cycle inside the autoclave.

The strong lid constructed out of thick stainless steel plate has a double safety radial locking arrangement, which ensures an easy and smooth opening and closing operation for all our autoclaves. Our deluxe vertical autoclaves are ideally suited for Bio-Tech laboratories, hospitals and research labs where safety is the first Priority of the users, since it is equipped with a double safety steam release valve. At the same time we test all our autoclaves for up to 2.5 times the standard working pressure to ensure maximum safety and protection from any unfortunate incident. All our triple walled vertical autoclaves are supplied complete with pressure gauge, pressure release valve and stainless steel basket as a standard feature.

HEATING

The heating process in our triple walled vertical autoclave is done through specially designed water heaters of suitable wattage to ensure optimum sterilization time in every sterilization cycle.



Provided with ISI marked electric heaters. Pressure is controlled by pressure stat and temperature indicator is also provided. The pressure is controlled from 1.2 kg. to 2.00kg./cm². Provided with double safety valve, Water inlet & outlet valves, pressure release valve S.S wire basket. The panel is provided with controls & indicators, 60 minute timer.

WORKING TEMPERATURE

As per the international standards and guidelines our triple walled vertical autoclave have a working temperature of 121°C. ,however for specific requirements our autoclaves can be upgraded to be used for up to 134°C.

WORKING PRESSURE

Working pressure for our standard dry sterilization model vertical autoclave is 15 psi, however this can be upgraded to be used for higher pressures of up to 30 psi.

TECHNICAL FEATURES OF DELUXE VERTICAL HORIZONTAL AUTOCLAVE

- Highly accurate temperature and pressure gauges for boiler chamber and jacket

PRESSURE CONTROL

The pressure inside our vertical autoclave is controlled through a semi automatic electro mechanical device called piezostat, which controls the pressure inside the chamber and cuts off the current from the heater whenever the pressure exceeds the set pressure value of the autoclave, thus making it very safe and energy efficient.

Size of Inner Chamber Dia x Depth

- | | |
|-----------------|-----------------|
| 1) 250 x 450 mm | 4) 400 x 600 mm |
| 2) 300 x 500 mm | 5) 450 x 600 mm |
| 3) 350 x 550 mm | 6) 550 x 750 mm |

ESTEEM VERTICAL AUTOCLAVE



ESTA - 106 B

High pressure, electrically heated vertical steam sterilizer is used for sterilization of surgical instruments, dressing material, linen, rubber, plastic material by means of saturated steam under pressure of 15 to 20 psi. (adjustable) Apart from health services it is also used in scientific research institutions and universities. Sturdy double walled construction with boiler/inner chamber made of stainless steel of 18 SWG 304 sheet. Outer shell is made of mild steel finished with powder coated paint. The boiler and outer shell is provided with insulation. Lid is made of stainless steel plate and is tightened all around by special mechanism a temperature controller is provided to set at any temperature from 121°C +134°C. Pulse Vacuum also incorporated in this controller. Molded, joint less gaskets are made of silicon rubber. Sterilizer is hydraulically tested up to 40 psi. Autoclaves are fitted with water level arrangements to indicate water position inside the boiler, pressure gauge, Air/steam release cock, spring loaded safety valve which can be set at any selected point from 10 psi. to 20 psi \pm 3 psi. and drain. ISI marked Immersion type heating element heats the water and steam to desired temperature and pressure. Supplied complete with S.S. basket, cord and plug to work on 220 Volts, 50 cycles AC supply.



ESTEEM AUTOCLAVE HORIZONTAL

As per IS: 3829 Part- I



ESTA - 107

We are manufacturers of triple walled horizontal autoclave India since 1984. Our horizontal autoclave are widely used for day to day mass scale sterilization procedures and in various bulk laboratory applications, where dryness of the sterilized medium is of paramount importance, given the fact that semi dry sterilized media is prone to various micro-bacterial and viral infections. We specialize in both standard and customized models, specifically designed to meet the challenging demands of various scientists for individual and specialized research applications. Over a short period of time Esteem brand have been established as reliable exporters of horizontal autoclave in India, catering to the vast markets in South East Asia, Middle East, Africa and Europe. Apart from that we are supplying our autoclave in India , catering to a variety of customers ranging from Defence Installations, Research Laboratories, Educational Institutes and various R and D laboratories of leading national and multinational companies.

SALIENT FEATURES

OUR TRIPLE HORIZONTAL AUTOCLAVE (DRY)

- Steam Stock Provision
- Versatile usage
- Stainless steel construction
- Ergonomic Design
- Energy Efficient
- Double Safety Radial Locking Arrangement
- Double Safety Valve Protection
- Hydraulic Testing Upto 2.5 times the working pressure
- Calibration And Protocol Documentation

CONSTRUCTION

Our horizontal cylindrical autoclave are triple walled units. Outer body of our autoclave is constructed out of thick gauge stainless steel sheet of SS-304 grade. The inner chamber is also made of heavy gauge stainless steel sheet of SS-304/316 SS grade. The middle wall is also constructed from the strong and sturdy stainless steel sheet of ss-304 grade s stainless steel sheet. These are steam stocking models connected with a three way valve to control the sterilization cycle inside the autoclave. Our autoclaves are insulated by generous mineral glass ass wool insulation. The strong lid constructed out of thick stainless steel plate has a double safety radial locking arrangement, which ensures an easy and smooth opening and closing operation for all our autoclaves. The steam generator of the autoclave is also constructed from stainless steel sheet of grade ss-304.

Our horizontal autoclaves are ideally suited for hospitals and research labs where safety is the first priority of the users, since it is equipped with a double safety steam release valve. At the same time we test all our autoclaves for up to 2.5 times the standard working pressure to ensure maximum safety and protection from any unfortunate incident. All our horizontal autoclaves are supplied complete with pressure gauge, pressure release valve automatic pressure control switch, vacuum breaker and steam trap as a standard feature. The unit is mounted on a tube stand constructed of high grade steel, which is duly pre treated with primers for rust proofing and painted with stove enamel.



HEATING

The heating process in our triple walled Horizontal autoclave is done through specially designed water heaters of suitable wattage to ensure optimum sterilization time in every sterilization cycle.

WORKING TEMPERATURE

As per the international standards and guidelines our triple walled Horizontal autoclave have a working temperature of 121°C., however for specific requirements our autoclaves can be upgraded to be used for up to 134°C.

WORKING PRESSURE

Working pressure for our standard dry sterilization model Horizontal autoclave is 15 psi, however this can be upgraded to be used for higher pressures of up to 30 psi.

PRESSURE RANGE

The normal pressure range of our autoclave is 5 psi to 20 psi

PRESSURE CONTROL

The pressure inside our vertical autoclave is controlled through a semi automatic electro mechanical device called piezostat, which controls the pressure inside the chamber and cuts off the current from the heater whenever the pressure exceeds the set pressure value of the autoclave, thus making it very safe and energy efficient.

TECHNICAL FEATURES OF HORIZONTAL AUTOCLAVE

- Hi-tech radial lock locking mechanism for ultimate ease of operation and safety Lock is Provided.
- Steam Release valve of Stainless Steel ensuring a long life of the equipment.
- Huger grade spring loaded safety valve of brass, duly chrome plated.
- Water Indication Gauge with stainless steel enclosure
- High accuracy and reliable pressure gauge.
- Multiple operating valve for the control of the sterilization cycle.
- Accidental Vacuum Break Device: Ensuring vacuum break due to power failure or any other usage
- Water Level Cut Off Device

- Schneider contractor for long trouble free usage
- Specially designed ISI marked stainless steel heaters
- Plug screen to prevent line choking due to sediment discharge
- Highly accurate temperature and pressure gauges for boiler chamber and jacket
- Silicon food grade gasket

UPGRADES (STANDARD)

LOW WATER PROTECTION DEVICE

This automatic system can be incorporated with our Horizontal autoclaves to give protection against the low water scenario under prolonged usages.

TIMER WITH ALARM SYSTEM

This semi automatic device can be incorporated with the standard models of our Horizontal autoclave which helps the user to set the sterilization time of the system and do other tasks without bothering to monitor the sterilization cycle. This device cut off the current from the main system when the set value for a given sterilization cycle is attained and gives a loud audio alarm.

PROGRAMMABLE TEMPERATURE CONTROLLER

A programmable micro processor based temperature controller cum indicator can be incorporated in our basic Horizontal autoclave models to pre program the sterilization cycle temperature with high amount of accuracy and reliability.

OPTIONAL FEATURES :

CHART RECORDER

This a semi automatic self contained easy to use recording device, which permanently records the temperature is any given sterilization cycle of our vertical autoclave on a graph sheet., with the help of a bimetallic strip transducer chip incorporated in the unit.

Technical Features :

Chart size : 4" dia

Accuracy : 2% (FSD)

Response Time : 12 minutes

Size of Inner Chamber Dia x Depth

- | | |
|------------------|------------------|
| 1) 400 x 600 mm | 3) 500 x 900 mm |
| 2) 400 x 1100 mm | 4) 500 x 1200 mm |



PLC CONTROL SYSTEM (OPTIONAL)

Our standard plc control system is based on the hi-tech state of the art micro-processor circuit technology, ensuring a complete automatic operations along with high efficiency and great reliability. This computerized logic control system ensures a 100% automatic operation throughout the sterilization cycle of our vertical autoclave. No intermediary human intervention is necessary after choosing the parameters and initiating the sterilization process in our autoclaves. The primary cycle phase and the actual parameters of our Horizontal autoclave and along with set values are displayed on the LCD panel during the entire cycle progress.

The main parameters of the process such as, temperature, pressure, time are controlled and displayed, on the LCD panel of the system. The ergonomically designed keyboard located on the front level enables the user to choose the desired program, initiate and terminate the cycle, and allows a trained

technician to preset the main parameters using an access code. Our PLC control system is extremely easy to use, user friendly and fully programmable.

For a elaborate and presentable documentation of cycle process, our logic control unit is provided with a diligent wipro/epson dot matrix printer, which is connected to the central microprocessor system.. The printer generates a hard copy of the printout of the relevant or desired information relating to the cycle operation like the pressure , sterilization time, temperature at any given/pre set time interval, vacuum, and drying time, number of cycles, number of pulsing etc.

The standard Horizontal autoclave with PLC control system is designed to operate up to six standard sterilization programs between 105oC and 137oC and two test programs optional. The desired programs can be easily selected by using the numeric keypad, provided at the front level, Apart from that other parameters such as air removal, sterilization and drying stages can be programmed with utmost ease.

ESTEEM HORIZONTAL AUTOCLAVE HIGH SPEED

As per IS: 3829 Part- I



ESTA - 107 A

High Speed Horizontal Cylindrical Sterilizers pressure type designed to operate on steam generator as per is: 3829 (Part-2)/ 1978 (reaffirmed 2001) with amendment nos. 1 to 4 and shall be fitted with only silicon rubber door gasket (expansion type). The steam generator shall be electrically heated by immersion heaters having mineral filled sheathed heating elements confirming to IS: 4159/2002 duly BIS Marked and complying with safety requirements as per IS: 302-2-201 (1992). The immersion heaters shall be wired for operation on 3 phase 4 wire 400/440 V 50Hz AC supply and electric load for the unit shall be 18 KW. The control will be of independent switch. All the steel materials shall be made out of SS 304 quality steel only.

Air shall be removed from the sterilization chamber the size of inner loading the sterilizer by one or more pressure/ vacuum pulsing for proper steam penetration either manually or automatically through the automatic control system.

Size of Inner Chamber Dia x Depth

- 1) 400 x 600 mm



ESTEEM AUTOCLAVE HORIZONTAL

As per IS: 3829 Part- I



ESTA - 108

The sterilizer is based on the principle that microbiological action of saturated steam at elevated temp is rapid and thorough. All models work on downward displacement of air principle which is most economical method of obtaining for all types of bulk sterilization which are commonly needed in Medical, Agricultural and Pharmaceutical institute Suitable for sterilizing hospital dressings, linen, rubber plastic goods, surgical instruments, glassware's and utensils etc. Construction Robust and rugged all weld construction which is leak proof unlike riveted construction. Inner chamber is made of thick plate of Mild Steel of non magnetic stainless steel of 304/316 quality and jacket is made out of rolled steel. Sterilizers will have single door made out of rolled steel lined with S.S. sheet on both sides. All the sterilizers are hydraulically tested to withstand 2.5 times the working pressure. The steam jacket is lined on the outer side with asbestos sheet or glass wool which prevents heat losses due to radiation and is covered by strong rolled steel sheet duly painted. Boiler Made of thick stainless steel plate suitably located under the sterilizer.

High grade flanged type heating elements are fitted from front side for easy replacement/repair. Fitted with water gauge glass for water level, safety valve, water inlet and drain valves. It is also provided with Low Water Level cut off device. This device protects the heater in the generator from burning out dry. The steam pressure in the boiler is indicated on an individual pressure gauge. Safety Lock for Door Every horizontal rectangular sterilizer is fitted with SELF LOCKING SAFETY DOOR which cannot be opened when the chamber is under pressure.



The clutch mechanism automatically disengages the threads of the radial locking system for precluding any eventuality of accident when the chamber is under pressure. A heat resistant Neoprene Rubber gasket ensure steam tight fitting. Pressure Control Electrically operated Dan Foss (Pressure Control Device) is incorporated in all electrically operated sterilizers. It economizes power consumption and limits the use of release valve which would frequently blow steam into the room. It cuts off the power supply to heaters when the set pressure is achieved and re-energizes heaters when pressure falls down.



Sterilization Complete sterilizing cycle is controlled from one point with the help of "Multi port valve" fitted at front top. Two speeds of exhaust are available for evacuating.

The Chamber Two separate valves provided for evacuating air and steam from inner chamber and jacket as and when desired. A steam trap is fitted in the chamber discharge line to eliminate the condensate automatically. Switch Box Houses the Pressure control switch, Main switch, Pilot lamps, relays etc. and mounted on the stand of the sterilizer for easy operation.

SAFETY

The sterilizer is provided with triple safety.

- (a) By a pressure control switch which automatically limits the pressure to the required set valve.
- (b) Two spring loaded safety valves one each at chamber and boiler level.
- (c) A dead weight safety valve at chamber level.

PLUG SCREEN

Prevents the discharge line from choking. The plug is easily removable for routing cleaning.

- A powerful Ejector (for drying sterilized linen) circulates air through the chamber.
- The circulating air passes through a corrosion resistant metal wool filter.
- A Dial thermometer is provided to show the chamber temperature.
- AUTOMATIC VACUUM BREAKER is provided to break vacuum case of vacuum formation due to steam condensation.

OPERATING TEMPERATURE AND PRESSURE

Sterilizing Temp. : 121°C + 134°C

Sterilizing Pressure : 1.2 to 2.2 kg / Cm², (15 psi to 22 psi)

OPTIONAL FEATURES :

- Chamber/Jacket of S.S. 316
- Carriage & Trolley
- Direct steam supply from centralized boiler
- Temperature recorder o High pressure High vacuum model
- Additional door (Double door) model.
- Fully automatic micro processor controlled model
- Spare Accessories

Size of Inner Chamber

WHD	Capacity	Load
450x450x900mm	180 Liters	18 KW
450x600x900mm	240 Liters	18 KW
600x600x900mm	320 Liters	18 KW
600x600x1200mm	430 Liters	27 KW
600x900x1500mm	810 Liters	36 KW
900x1050x2100mm	1980 Liters	48 KW
1050x1200x2100mm	2650 Liters	60 KW



33 Years of Excellence

Creating The Finest Range
of High Precision

Laboratory Equipment

**ESTA - 108 A****ESTEEM SLIDING DOOR AUTOCLAVE****GENERAL DESCRIPTION**

- For Sterilization of glass wares / containers, vessels, linen, rubber articles culture media etc.
- Sliding doors with high temperature resistant silicone gaskets.
- Standard cycles, HPHV cycles, Bowie Dick cycle & leak test cycle.
- Fully Automatic P.L.C. based control system covering all parameters with facility for printing. Manual maintenance mode independent to P.L.C.
- Confirming to various international specifications. Complete cGMP models.
- Guaranteed precise chamber temperature control with temperature uniformity as per EN554 & HTM2010.
- On line printing & recording confirming to 21 CFR PART 11.
- Options like electrical steam generator, vacuum pump, carriage, trolleys, chart recorders, data loggers, Dx station etc.
- Complete S.S 316 or economic model with only contact parts in S.S 316 For value display & printing option.

SALIENT FEATURES

- Door movement Vertical
- Smooth Noiseless Door Operation
- No Human Effort Required to Operate the Door
- Aesthetic Full S.S Flush Mounting
- Door Locking System under Pressurized Chamber Condition

OPTIONAL FEATURES

- Single Door / Double Door.
- Electrical thermograph.
- Digital thermograph
- Rapid Heating
- Air Oven Steam Pulsing Pressure System
- PC Based / Micro Processor Based Controls

DOUBLE DOOR STEAM STERILIZER, SLIDING DOOR

Autoclave for HPHV cycle as per General Technical Specifications enclosed. Extra attachment of Bunk washer with PLC control system is also provided

Size : 600 x 600 x 900 600 x 900 x 1200
900 x 900 x 1200

SCOPE OF SUPPLY

- 1) Basic Unit
- 2) S.S Carriage 1no.
- 3) S.S Floor Trolley 2 nos.
- 4) Automation
Fully Automatic PLC based control system Including Pneumatic actuated Valves, Solenoid Valves, Pressure Transmitter, S.S control Panel etc
- 5) 6pt strip chart recorder with Class - A sensors
- 6) Vacuum Pump (Water ring type) with S.S condenser Installation and commissioning charges

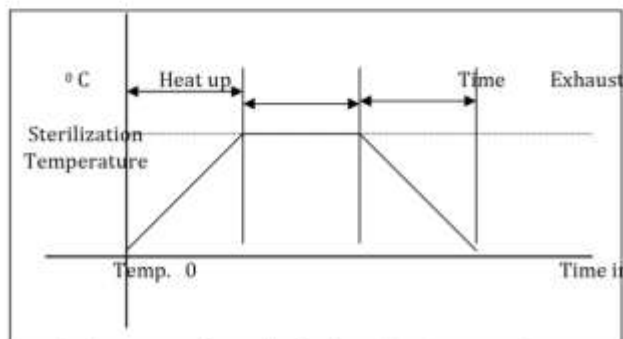


SALIENT FEATURES OF ESTEEM AUTOCLAVE

- I. **Autoclave** will be in sturdy construction using plates of appropriate thickness which prevents buckling under vacuum or bulging due to pressure. Made to conform to EN 285 or HTM 2010 performance requirements.
- II. Fully automatic by means of PLC based controls, which operate pneumatically actuated solenoid valves. Provision of four different cycles and programs:

1. Standard cycle

- 1a. Heat up – ster hold (1210 C) – exhaust
- 1b. Heat up – ster hold (1340 C) – exhaust



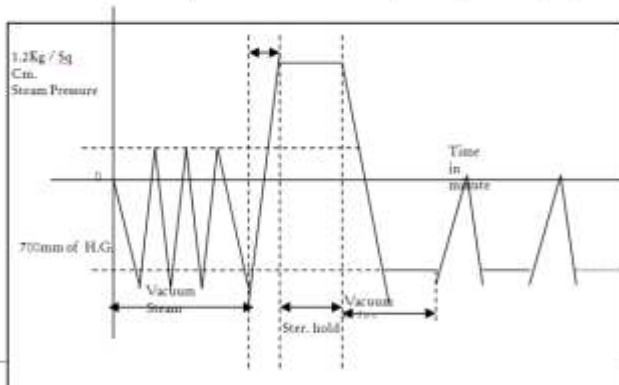
The technique uses the method of gravity air removal to ensure uniform steam distribution and penetration. Steam trap equipped with air vent ensure maximum air removal.

Useful for sterilization of glass containers i.e. ampoules, vials, glass bottles etc.

It is also useful for Sterilization of glass wares, utensils, vessels, instruments, rubber articles linen etc. in Laboratories and hospital.

2. HP HV cycle

- 2a. 3 pre ster vacuum pulses - heat up - ster hold - exhaust
- 2b. 3 pre ster vacuum pulses - heat up - ster hold - exhaust - post ster vacuum pulsing for drying



This technique uses near 100% air removal from sterilization chamber which results in better temperature uniformity in the chamber because of the absence of air pockets i.e. cold spots.

This technique increases the penetration of steam in porous products from which removal of air is difficult. Vacuum drying at the end of sterilization hold period ensures drying of the material which has been sterilized. This cycle is useful for garments, fabrics, drying rubber bungs vessels machine parts etc.

Leak Test Cycle for periodic testing of door integrity and pipeline connections & detecting leakage ampoules. Another **HP HV cycle** with post vacuum pulses can be provided, if required, for special purpose.

III. General Information –

SS construction with internal contact parts of SS 316.

SS construction with Jacket and non-contact parts of SS 304.

The unit is mounted on sturdy SS tubular stand with level adjustment facility.

The jacket volume is comparatively large (depth of 50 mm) which ensures better heat distribution in chamber.

IV. No drives are required. For sliding door movement, pneumatic cylinders are used.

V. Autoclaves with hinged doors have mechanical pressure locking device which prevents opening of doors under pressure. The quick throw lever mechanism ensures further safety.

Door interlocking provision prevents opening of doors under pressure as well as opening of both doors at the same time – after sterilizing cycle only Aseptic side door can be opened. Besides this interlocking, an visual indication is also provided.

The unit has two safety valves, on the chamber and one on the Jacket, besides having a pressure switch which shuts off steam supply to the chamber.

VI. PLC's used are Imported and compatible with P C. SCADA system can be incorporated for remote monitoring OR monitoring, controlling and data acquisition if required (Optional).

VII. Electrical switchgear of SIEMENS / L & T / TEKNIK make. Cables of ISI brand.

VIII. UTILITIES –

Raw steam for jacket supply through your P.R.V

Pure steam for chamber supply through PSG (User's Scope)

Compressed air – through FRL for instrumentation, vacuum through water ring vacuum pump. Single phase electric supply for control panel and instruments.



TECHNICAL SPECIFICATIONS OF STEAM STERILIZER

1. CHAMBER:

Type : Rectangular
MOC contact parts : SS 316

2. JACKET:

Type : Rectangular
MOC : SS 304

3. DOORS:

Type : Double Door, Hinged
MOC of contact parts : SS 316
Sealing : Solid square door gasket provided for effective Sealing.
Interlock : Safety interlocks provided.

- a) For avoiding possibilities of door opening during the process.
- b) to prevent both doors from opening simultaneously.

4. INSULATION

: Resin Bonded Glass wool - 50 mm
Outer Cover : S.S 304 1mm

5. OPERATING PARAMETERS:

Temperature : 1340 C Max.
Pressure : 2.1 kg/cm². Max.
Vacuum : Full

6. HYDRAULIC TEST PRESSURE:

Chamber : 3 kg/cm²
Jacket : 4 kg/cm²

UTILITIES REQUIRED AT BUYER'S FACILITY FOR FUNCTIONING OF THE STEAM STERILIZER

Steam : Dry saturated steam at 3 kg/cm² Through your P.R.V
Air : Compressed air through F R L will be Required at a pressure of 6 kg/cm² for operating pneumatic valves and door.
Vacuum : Full/as required
Water : Water for water ring vacuum pump
Power supply : Single Phase, 230 Volts.
Three Phase, 440 Volts.

WIDE RANGE OF MODELS AND SIZES



- Vertical Sliding Door - Control Panel on Top

SCOPE OF SUPPLY FOR STEAM STERILIZER

1. Interconnecting piping
MOC : SS 316 : 1 Set
2. Pneumatically actuated Valve : 1 Set
3. Poppet / Solenoid Valve : 1 Set
4. Spring loaded safety valves : 3 Nos.
5. Steam traps for condensate
Evacuation from jacket & chamber : 2 Nos.
6. S S port for insertion of multiple
Probes for validation : 1 No.
7. Pressure and compound gauges : 3 Nos.
8. PT - 100 (RTD) probe at drain (Duplex) : 1 No.
9. Temperature dial gauge : 1 No.
10. S.S 304 mounting stand : 1 No.
11. Air Vent Filter : 1 No.
12. Pressure / Vacuum switch : 1 set.
13. S.S control panel : 1 No.



- Manual Hinged Door



- Vertical Sliding Door - Control Panel on Side

HORIZONTAL LARGE CAPACITY SERIES

Large autoclaves with chamber volumes ranging from 510 Liters to 1010 Liters.

The series is available with two door options :

- Fully automatic horizontal sliding door.
- Hinged door with automatic locking

Chamber Dimensions (WxHxD) mm	Chamber Volume (Liter)
610 x 910 x 915	510
610 x 910 x 1215	680
610 x 910 x 1515	840
610 x 910 x 1815	1010



- Horizontal Sliding Door



- Automatic Hinged Door

TURBO AUTOCLAVES

Turbo autoclaves are equipped with stronger high performance systems to accelerate cycle process times.

Get more capacity for your limited space

Turbo autoclaves reduce cycle times up to 36% providing you a high performance capacity-to-space ratio per autoclave. For sterile processing facilities with limited floor space the Turbo models increase capacity without requiring extra space.





SPEED UP SUPPLY TO OR

The time required to sterilize loads in a Turbo autoclaves is much shorter, reducing turnaround time, thereby allowing for sterilized equipment to be available for re-use sooner.



GET TURBO STERILIZATION IN OR

Due to short sterilization cycles turbo autoclaves reduce operating Room (OR) dependency on a CSSD by making sterilized equipment available sooner in the place where it is needed.



GREEN ECO WATER SYSTEMS

Save water & the Environment

Water Saving

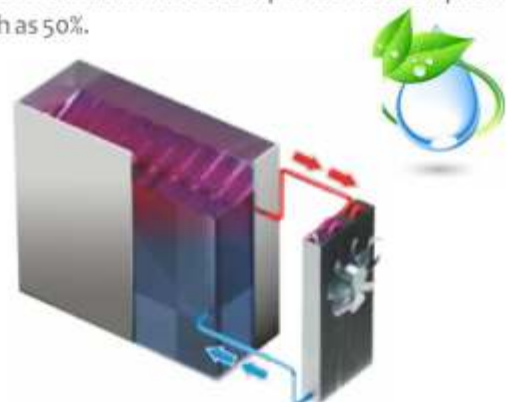
Hospitals autoclaves traditionally consume significant amounts of water using utility resources and increasing operational cost. Customers are increasingly looking for eco-friendly green features. Water saving system will make your facility more environmentally-friendly and cost-efficient by saving hundreds of liters of water per cycle.

Most water consumption of an autoclave takes place during effluent cooling via a heat exchanger and during vacuum-pump cooling when generating a vacuum in the chamber.

Water saving systems reduces the water usage during effluent cooling and vacuum generation thereby making efficient use of water.

EcoWater-Radiator

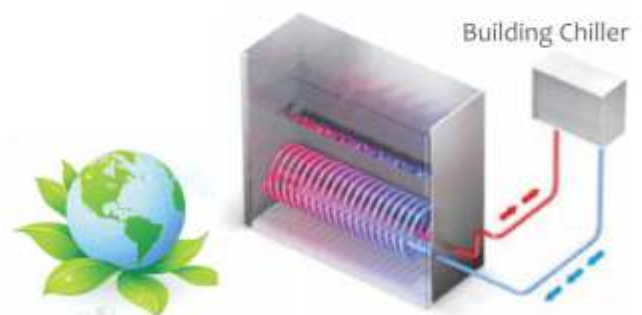
The EcoWater-Radiator reduces tap water consumption by as much as 50%.



A powerful radiator system cools and re-circulates water used in the autoclave

Eco Water - Chiller

The EcoWater-Chiller is the best solution to minimize water consumption by as much as 90% and is suitable for facilities with a chilled water supply.



Tap water in reservoir is cooled by a cooling coil through which chilled water is passed.

The tap water is circulated for re-use in the autoclave.



LOADING EQUIPMENT

High quality stainless steel loading equipment for loading and unloading.

- **Pull Out Trays**

Stainless steel trays equipped with rails for easy loading and unloading. The rails are designed to prevent the trays from rolling over.

- **Loading Carts and Transfer Carriages**

The 316L loading carts are designed to roll from the transfer carriage onto the chamber rails for easy handling of heavy loads. To ensure safety and ease-of-use the carriage is equipped with a lock preventing sliding of the cart. Swivel wheels with wheel breaks maximize mobility in limited space.

- **Automatic Loading**

Autoclave is designed to connect with automated loading and unloading systems, which are controlled via the autoclave controller.



COMPLIMENTARY PRODUCTS

Ultrasonic Cleaner

Deep cleaning of hollows before sterilization



Sealing Machine

For sealing instruments in pouches for sterile storage



Reverse Osmosis Water System

For demineralized water supply to sterilizer



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ESTEEM TABLE TOP AUTOCLAVE



FEATURES

Bench-top, pre and post vacuum autoclave with automatic temperature control system, self-test system before operation, self-test mode diagnose, fully automatic steam ejection and safety device containing safety valve, automatic sterilization cycles and auto detections for steam sterilization of glass wares and plastic wares, Tank Capacity - 20 to 25 ltrs.

- Stainless steel seamless chamber and epoxy coated chamber cover for more safety.
- Sterilize cycle, dry timer and indicator lamps display on panel which allows the operator to
- visibly acknowledge the phase. It is having programmable based controller.
- Safety locking mechanism that prevents opening while the autoclave is under Pressure. Complete control panel is provided in the front.

Technical Parameters

Model No.	Voltage	Power	Tank Cap.	Inside Dimensions	Packing Dimensions	Weight
ESTA-112-12	220V 50Hz	1400w	12 Liters	200 * 368	620*520*500mm	46
Model No.	Voltage	Power	Tank Cap.	Inside Dimensions	Packing Dimensions	Weight
ESTA-112-16	220V 50Hz	1500w	16 Liters	240 * 360	650*520*500mm	47
Model No.	Voltage	Power	Tank Cap.	Inside Dimensions	Packing Dimensions	Weight
ESTA-112-18	220V 50Hz	1800w	18 Liters	245 * 355	650*520*500mm	48
Model No.	Voltage	Power	Tank Cap.	Inside Dimensions	Packing Dimensions	Weight
ESTA-112-23	220V 50Hz	1800w	23 Liters	245 * 465	780*520*500mm	56

We can manufacture this up to 40 Liters.

ESTA - 112

- Steam release valve will exclude cool air and extra steam.
- If electrical AC power is unavailable or is interrupted, the autoclave shall automatically shut off power and buzz to protect autoclave and instruments
- The autoclave controls are easy to operate. Just choose the mold and time you want first and you want first and press start.
- It is thoroughly tested and proven technology. (CE 1023 approved).
- Uniform rubber gasket which endure high pressure and temperature with low dilatibility.

Specification

- Sterilize temperature: 121°C or 134°C
- Electrical: AC 220V or 110V, 2100watts/220V and 1600watta/110V
- Water reservoir capacity: Approx. 5 L
- Safety device: safety valve, pressure regulator, and overheat protection
- Maximum Temperature: 150°C
- Maximum Pressure: 0.25mpa
- Warranty: one year



ESTEEM ETO STERILIZER



ESTA - 114

STRUCTURE PRINCIPLE OF ETO STERILIZERS :

"Ethylene oxide sterilizer" is defined as equipment which uses ethylene oxide as a biocide to destroy bacteria, viruses, fungus and other unwanted organisms. Ethylene oxide is used in sterilization of items that are heat and moisture sensitive. E.T.O consists of a closed chamber mostly double jacketed, corrosion resistance, gas resistant of suitable alloy (mainly mild steel). The middle jacket is surrounded with the hot water to raise the temperature of the product. The outer jacket of ethylene oxide sterilizer is insulated with proper insulation material for heat resistant. This E.O. gas sterilizer equipment is provided with vacuum pump, pressure gauges, temperature gauges, and nozzle connection for hot & cold water. It consists of one door which is made with radial locking arrangement in order to make chamber close tight.

APPLICATIONS OF ETO STERILIZERS :

- In hydration plants (where onion powder, onion flakes, garlic powder, garlic flakes).
- Products are manufactured and exported.
- In plywood industries where ply woods are sterilized against white ants and residual bacteria.
- In food industries where various seeds like sesame seeds are sterilized and exported. Wheat flour, grains, all types of spices etc.
- In pharmaceutical products, hospitals.
- Used in industries where all the food products are exported.
- Used for sterilization of catheters IV

OUTSTANDING FEATURES OF ETO STERILIZERS

- Compact design to suit all environmental conditions.
- Internal cage provided for non sticking of bags inside the chamber.
- Provided with HMI screen complete PLC controlled.
- Provided with thermal printer
- Door is provided with joint less food grade gasket.

**WORKING OF ETO GAS STERILIZER :**

- 1. PRE STERILIZATION CYCLE :** This process begins with the end cycle of previous batch, when sterilization gets complete and complete eto gas is removed from the chamber through vacuum pump. Aeration cycle process is carried out by drawing fresh air inside the chamber until the pressure inside the chamber becomes atmospheric. The door is opened, sterilized material is taken out and new batch is started. The material to be sterilized is fed into the ETO chamber before making a radial lock.
- 2. VACCUME CYCLE :** Vacuum is done in two stages.
1) After feeding material into the chamber, the chamber inside is vacuumed to 250 to 300 mm of HG. Air is removed completed and Air nozzle vent is closed. 2) After sterilization is complete to remove ETO gas from the chamber.
- 3. STERILIZATION CYCLE :** E.T.O gas is fed inside the chamber in appropriate proportion and simultaneously hot water is supplied in the jacket. This

water inside the jacket is maintained at 80° C. The gas inside the chamber goes under thermal process thus increasing the pressure inside the chamber. When the pressure approaches the desired value i.e. (1.5 kg/cm² or 14.7 k pas), this pressure and allowable temperature is maintain for specific time (5 To 7 or 8 to 10 hours) depends upon the material to be sterilize.

- 4. AERATION CYCLE :** This process involves extracting residual gas out of the sterilized material followed after vacuum cycle. The air vent nozzle is kept open. The fresh air is allowed to pass inside the chamber until it attains atmospheric.

We at Esteem Industries Inc. have manufactured different size of eto gas sterilizer and utmost care has been taken during its manufacturing stages. Our eto gas sterilizer undergoes different test (hydro test, vacuum test, pressure test) before it is finally dispatched to our consumers.

SPECIFICATION OF ETO STERILIZER

Model	volumetric capacity in M ³	Working pressure	Working temperature	Total HP required Vacuum pump + Domestic pump
ETO 2x2x4	0.45 cu.mt	1 to 1.5 kg/cm ²	55 to 60°c	1.5 HP + 0.5 hp
ETO 4x4x6	2.72 cu.mt	1.0 to 1.5 kg/cm ²	55 to 60°c	2 HP + 1 hp
ETO 6x6x10	10 cu.mt	1.0 to 1.5 kg/cm ²	55 to 60°c	3 HP + 1 hp
ETO 6x6x18	18.34 cu.mt	1.0 to 1.5 kg/cm ²	55 to 60°c	5 HP + 2 hp

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LOW-TEMPERATURE PLASMA STERILIZER



ESTP - 100

Application

It is suitable for all kinds of surgical instruments which are sensitive to heat and moisture including consecutive operation of gynecological laparoscopic, ophthalmic, ear-nose-throat, cardiac, especially for rigid endoscope to be sterilized.

It is widely used in the fields of key medical departments such as operation room and supply room.

Technology Advantage :

- PLC control, touch screen display, man-machine interface, U disc storage, U disc reading position machine software, stable performance, user-friendly operation.
- Hydrogen peroxide sterilizer is injected accurately with adjustable injection rate, reducing the cost under the guarantee of sterilization effect.
- It can effectively sterilize for the stainless steel lumen with internal diameter $\geq 1\text{mm}$, length $\leq 500\text{mm}$ and PTFE hose with internal diameter $\geq 1\text{mm}$, length $\leq 2000\text{mm}$ to ensure sterilization effect.
- Full automatic up & down sealing door with far infrared ray hand-protected design gives an alarm in advance when meeting obstacles and protect operator safety without touching obstacles.
- Only a few oxygen and water are left after sterilization, no harm to the environment and human.
- Automatic detection function can real-timely monitor the process of sterilization. If abnormal, system will automatically give an alarm and display the reason of failure.
- All core parts such as vacuum pump, electromagnetic valve, metering device, air filter are high-performance components.
- Purification equipment for hydrogen peroxide can increase concentration of hydrogen peroxide effectively and enhance sterilization effect.

Advanced Configuration :

1. International well-known brand touch screen display.
2. International well-known brand PLC, high reliability.
3. Integrated biological indicator culture box, integrated sterilization and culture.
4. Double control system, foot induction switch at the bottom



LOW-TEMPERATURE PLASMA STERILIZER



Main Parameters

- Sterilizing agent: 60% Hydrogen peroxide
- Environmental requirement: temperature between 10°C and 40°C, humidity below 60%RH.

Model	Capacity	Door	Chamber Dimensions	Outer Dimensions	Net Weight	Power Supply	Power
MD-J.T (80F)	80L	Single Door	450×312×670 mm	696×1440×923 mm	180KG	220V, 50Hz	3 KW
MD-J.T (120F)	120L	Single Door	450×410×780 mm	816×1798×1018 mm	240KG	220V, 50Hz	3 KW
MD-J.T (120F)	120L	Double Door	450×410×780 mm	816×1798×1020 mm	300KG	220V, 50Hz	3 KW
MD-J.T (240F)	240L	Double Door	650×550×780 mm	1070×1920×1020 mm	400KG	380V, 50Hz	3.8 KW

Note: Custom-made according to special requirement. Pictures and parameters only for reference, the factory has the right to modify and optimize for them

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CSSD FURNITURE

ESTEEM WASHER DISINFECTOR



ESTWD - 101

CONFIGURATION

- Door opened type: Motorized door
- Program: more than 30 program for selection
- Heating method: Electric heating or steam heating
- Display: Touch screen display
- Printer: Built-in Printer
- Optional configuration: air compressor, water treatment system, steam generator.

APPLICATION SCOPE

- Surgical instruments: shears, pliers forceps and other metal instruments etc.
- Vessel: dressing change, bending disk, tube, beaker, etc.
- Anesthesia instruments: anesthesia tube, breathing bag, mask, various catheters, etc.
- Surgical shoes, endoscopic instrument, dental hand piece and so on.

PRODUCT FEATURE & FUNCTION

- Whole processes including enzyme washing, rinsing₁, rinsing₂, disinfecting, oiling and drying, adjust parameter during phases flexibly.
- The time of the whole process (electric heating) ≤45 minutes.
- The time of the whole process (steam heating) ≤35 minutes
- Double-door with interlock function, full-automatic.
- PLC control system, color touch screen man-machine interface.
- The lifting of motorized sealing doors adopts bilateral synchronous transmission mode, which is stable and reliable.
- Automatic downward opening door model with far infrared ray hand-protected design gives an alarm in advance when it encounters obstacle, which protects operator safety without touching obstacle.
- The device with network extended interface and USB interface can realize interconnection and store cleaning record from U disk.
- The core components including high-quality cycle pump, fan, control system, pneumatic valve, direct reducer, pressure difference switch, micro switch, metering pump ensure operation stable.

**SAFETY DEVICE**

- Whole processes including enzyme washing, rinsing¹, rinsing², disinfecting, oiling and drying, adjust parameter during phases flexibly.
- Leakage protection: The device will trip automatically to protect operator when meeting leakage accident.
- Overheating protection: Alarm for protection when heating tube temperature is too high during the process of drying.
- Fan Protection: Alarm for protection in order to prevent the fan from locked rotor and overheat when sundries enter into the fan.
- Cycle pump protection: Alarm for protection in order to prevent the fan from locked rotor and overheat when sundries enter into the fan.
- Door motor protection: Alarm will work for protection in order to prevent the door motor from locked rotor and overheat when the door get stuck.
- Door safety protection: Alarm will work for protection in order prevent the door from extrusion deformation

PACKING :

CHAMBER SIZE	OUTER SIZE	PACKING SIZE	GROSS WEIGHT
630x643x1000mm	850x1090x1950mm	940x1260x2120mm	400 kg
800x1270x1950mm	1000x1270x1950mm	1090x1440x2120mm	550 kg

DISTRIBUTION TROLLEY**ESTDT - 110****SPECIFICATIONS :**

- Shall be made of good quality Stainless Steel SS 304 Base frame and body, 14SWG thickness.
- Shall have heavy duty castor wheels with 2 Nos. fixed type and 2 Nos. swiveling type.
- Shall have two foldable type door, the doors are designed to fold back against each end.
- Shall be fitted with a central locking handle to operate rod at the top and bottom of the door – for opening and locking of the door.
- Shall have minimum Two Stainless Steel shelves, 16SWG thickness.
- Size: 1280mm length x 650mm width x 1170mm height



ESTEEM DRYING CABINET



ESTD - 115

SPECIFICATIONS :

- Digital timer Controlled Drying Cabinet with single door suitable for easy and quick drying of instruments, utensils, glass will be and anesthetic accessories such as corrugated hoses, breathing masks, respiration bags and surgical instruments trays etc.
- The unit will be provided with digital display with countdown drying time and drying time selectors, temperature selector including indication of selected temperature.
- The drying cabinet will be provided with a quick lock door with heat resistant gasket expansion type Silicon.
- The chamber design will allow uniform air circulation.
- Piping and valves.
- Low pressure piping and valves.
- High pressure piping and valves.
- Electrical and Control Panel .
- Power cabling and Control cabling.
- Size -750X750X1500 mm.

ESTEEM SPRAY GUN



ESTSG- 101

Unlike any of other spray guns, this is a cleaning gun made completely of stainless steel. One of the greatest advantages of the stainless steel spray gun is its resistance to cold demineralized water. The stainless steel spray gun is able to sterilize, thus the pistols can be used in the operating room or in the clean room. Use this product to effectively clean instruments in a quick and easy way. The stainless steel spray gun comes equipped with two nozzles, an inject attachment piece, a trigger locking ring, a wall-mount, a hose with stainless steel snap-closing connector, and a coupling protection cover.

Accessories:

- Set of Nozzles
- Internal flow adjustment control mechanism
- Wall mounted holders
- Spiral spring hose
- Fitting valves and Non return valves



ESTEEM WORKING TABLE WITH TWO SINKS



ESTWT - 102

Our Work Tables are available in many different sizes and configurations to meet any facility's needs. Recessed Shelves or Full-width Shelves, Overshelves, and Drawers can be combined to select the best table available.

SPECIFICATION:

- The bench top is fabricated out of 16SWG SS 304 qty. ground and polished with smooth surface and edge section.
- The top is designed to give a stable work surface.
- The table top frame is a complete assembly with front, back and two ends welded together.
- The sinks are made of stainless steel with inside ground and polished.
- Each sink is provided with a drain valve and a strainer
- On the bench top, just above the sinks mixer for hot and cold water connection is provided
- Overall size 2400mm L x 650mm W x 900mm Ht

ESTEEM SS CONTROL AND PACKING TABLE



ESTPT- 101

Driven by technically advanced facilities at our ultra-modern manufacturing unit, we are presenting an extensive range of S.S Control and Packing Table. Our offered range is manufactured by our talented professionals by making use of cutting-edge technology and quality assured stainless steel in compliance with set universal norms. The offered range is highly demanded in the market for its brilliant features like perfect finish and industry approved design. In order to meet maximum clients' satisfaction, this is made available in diverse specifications.

- Table is used for separation, control and packing of various sets of sterilized goods for wards, clinics, operation theatres etc.
- Designed for standing and sitting workers.
- A removable hatch made of laminated particles board is provided.
- The hatch contains a SS drawer and a laminated particles board plate.
- Overall size: 2000mm L x 1400mm W



ESTEEM WATER DISTILLER



ESTW - 503

Remember ! Purified water is not distilled water!

Autoclave must use distilled water as the working medium. Even pure water, it also contains various minerals, evaporation at high temperatures will produce scale. Over time, the accumulation of scale will be causing the steam leak, causing a small pipe jam, pressure and temperature sensor failures etc. While in chamber with the hole sterilizing equipment, scale easy to jam into the small pipes and bearings, to make equipment performance degradation, which affects using life. This shows the importance of using distilled water.

Clinics, hospitals, laboratories and other occasions often use a little of distilled water, it's the best way to get distilled water by Esteem Water distiller. You just need to fill into the ordinary tap water, and then you can get high-quality distilled water! Everything so easy!

Specification :

VOLTAGE	POWER	TANK CAPACITY	INSIDE DIMENSIONS	OUTLINE DIMENSIONS	OUTSIDE DIMENSIONS	G.W
220V50Hz	750W	4	Φ180*200mm	Φ230*380	290*260*450mm	3.5kg

ESTEEM STEAM STERILIZER



ESTS - 501

- General Introduction
- High Energy Consumption
- Multiple Safety Assurance
- Operation Safety Guaranteed
- This sterilizer is installed with imported electromagnetic valve and header

Application Scope

The machine, characterized by small and elegant. High efficient and thorough sterilization, can be used for the sterilization of small high-temperature resistant utensils and articles of medical users. It is also applicable for family usage, it's of best application for dentistry clinics.

Specification :

TYPE	VOL TAG E	Power	Sterilization temp.	Pressure sterilization	Sterilization time	Sterilization cycle time	Tank capacity	Water quality	Outside Dimensions	G.W
ESTEEM -3-I	AC220±2V	0.5KW	134°C	0.22Mp	4min	11min	3L	Distill ed or deionized water	330*220*380	8kg



ESTEEM INSTRUMENT STERILIZER



ESTIS - 101

- Stainless Steel seamless shell.
- Automatic tray lifting system
- Handle on side with insulated grip.
- Thermostatically controlled.
- 220/240 V, 50 Cycles, Single phase A.C.
(110V can be supplied)

Length : 510 mm

Width : 200 mm

Height : 150 mm

ESTEEM INSTRUMENT STERILIZER



ESTIS - 102

- Stainless Steel seamless shell.
- Automatic tray lifting system
- Handle on side with insulated grip.
- Thermostatically controlled.
- 220/240 V, 50 Cycles, Single phase A.C.
(110V can be supplied)

Length : 430 mm

Width : 200 mm

Height : 150 mm

ESTEEM INSTRUMENT STERILIZER



ESTIS - 103

- Stainless Steel seamless shell.
- Automatic tray lifting system
- Handle on side with insulated grip.
- Thermostatically controlled.
- 220/240 V, 50 Cycles, Single phase A.C.
(110V can be supplied)

Length : 300 mm

Width : 150 mm

Height : 125 mm

ESTEEM INSTRUMENT STERILIZER



ESTIS - 104

- Stainless Steel seamless shell.
- Automatic tray lifting system
- Handle on side with insulated grip.
- Thermostatically controlled.
- 220/240 V, 50 Cycles, Single phase A.C.
(110V can be supplied)

Length : 300 mm

Width : 150 mm

Height : 65 mm



PRODUCT RANGE

All types of Autoclave

- Portable Autoclave
- Vertical Autoclave
- Horizontal Rectangular Autoclave
- Horizontal Cylindrical Autoclave
- Sliding Single Door Autoclave
- Double Door Autoclave
- Sliding Double Door Autoclave
- Front Loading Autoclave
- Flash Autoclave
- Table Top Autoclave
- Plasma Sterilizer
- ETO Sterilizer

All types of Incubators

- BOD Incubators
- Bacteriological Incubator
- Walk in chamber/ incubator
- CO₂ Incubator

Mobile Van Services

- Mobile Medical Unit
- Critical Care Ambulance
- Refrigerated Van
- Plant Health Clinic Van
- Mobile Dental Clinic
- Mobile Ambulance
- Mobile Health Care system
- Mobile Service Van
- Mobile HIV/STD & Viral Hepatitis Prevention
- Mobile Clinic

Laboratory & Medical Products

- Hot Air Oven
- Hot Air Sterilizer
- Growth Chamber
- Fume Hood
- Humidity Chamber
- Biosafety Cabinet
- Stability Chamber
- Laminar Air Flow Vertical & Horizontal
- Serological Water Bath
- Refrigerated Water Bath
- Deep Freezer ambient to -86 deg C
- Chest Freezer
- Muffle Furnace
- De- humidifier
- Lypholizer
- Mortuary Chamber
- Drying Oven
- Distillation Plant
- Lab Freezer
- Ultra Low Freezer (Vertical & Horizontal)
- Blood bank Refrigerator
- Bio-safety Cabinet
- Tissue Processor
- Plasma Thawing Water Bath



The Global Scientific People

ESTEEM INDUSTRIES INC.

AN ISO 9001:2008, ISO 13485, CE, FDA, WHO - GMP, NSIC & DGS & D Registered

ESTEEM MEDINCEPTION LTD.

WORKS & HEAD OFFICE : 2EF, EPIP, PHASE-I, JHARMAJRI, BADDI- 174103 H.P. (INDIA)

P 01795-271037, 01795-271038 **F** 01795-271436 **E** info@esteem.ind.in & esteem.lab@gmail.com

W www.esteem.ind.in / www.esteemind.com



CE

FDA