

# GOLDEN STAR SURGICAL INDUSTRIES PRIVATE LIMITED

STEAM STERILIZER AUTOCLAVE & ETO STERILIZER



Ministry of MSME, Govt. of India



# Company's Profile

We have successfully created the needs of over many of well renowned institutions in India, we serve more than 200 customers in government, corporate and private sector. The dedicated and cumulative efforts of GS members has produced and delivered the comprehensive range of scientific Equipment's, Hospital equipment and laboratory products.

## COMPANY'S OUTLOOK

Our commitment to quality is unflinching, our unflinching, our hunger for growth is deep-rooted and our capacity for details is amazing. Over the decade, we have demonstrated a rare resilience and fortitude. We are determined to improve productivity and focus continuously on innovation and upgradation of our products and people. We are determined to serve our fraternity and achieve "complete customer satisfaction through business ethics". Besides working very closely with our customers in research and development filed and providing end customized solutions we also providing high quality standard equipment from our comprehensive product. Range.

## QUALITY STANDARDS

At GSSIPL we design and develop a complete range of scientific and laboratory instruments with the highest quality standards. We constantly update technologies and methodologies to ensure reliability and consistency at each level of Instruments/ Equipments Production. Our transparent auditing system is supported by FQS India Associates, as we want to deliver the world class quality Instruments to all our valuable clients. We feel proud that our entire product range has brought satisfactory results for all the Government, Corporate and Public sector clients.

## INFRASTRUCTURE AND FACILITIES

The company has built and is operating manufacturing facilities that matches the latest system and techniques in the industry, having units in Jalandhar. Our team strictly follows the quality control standard of ISO 9991-2015 series while designing, developing, manufacturing and delivering, manufacturing and delivery of scientific & Hospital. Equipment's / Instruments. The manufacturing unit. Or GS is made with complete state-of-the-art equipment and technologies for producing high quality Instruments. We also acquired Environmental Friendly process certification ISO 13485-2016. For our entire range of Instruments to ensure reliability and durability in each product. Our range of products are certified by 'CF' to meet the best standard product satisfaction to our clients. We have company office in New Delhi (India) and branch offices in Gorakhpur, Lucknow (Uttar Pradesh), Bilaspur (Chhattisgarh), Kolkata, Darjeeling (West Bengal), Hyderabad, Bangalore and Maharashtra as well. We also have the post sales technical backup system in six places in India and are in the process of further developing them to assist the customers for post sales services.

## PROFESSIONAL TEAM

The continuous cooperation and support of our professional team has helped us to understand and deliver state of the art scientific instruments right from basic lab equipment to most sophisticated instruments for research labs. We believe that our treatment of success belongs to our expert engineers, managers, co-workers and other significant team members who have put their best efforts in the growth of the organization. It is their dedication and commitment that makes us the most trusted scientific instruments brand among our all satisfied clients. With the help of our GS team we are able to provide the best after sale service to our valuable customers in any part of the country which helps us to meet the maximum customer satisfaction and give us a long term relationship with them.

## FORTE

We strive hard to cater to our clients with the best product range and services while meeting international standards. Our aim is to meet the overwhelming demand of the scientific community and provide them with world class quality scientific & Hospital Equipment's. Along with the best after sale support.

## Vertical autoclave

MODEL NO: GS-SSV-100

### DESCRIPTION

The inner chamber is made of SS 304/316, and the complete unit is constructed of SS 304 and is triple walled. The jacket outside the inner chamber is made of SS 304. The unit is complete in all respect with an automatic water inlet valve, temperature controller cum indicator, pressure stat, automatic water level indicator, and mechanical timer.

### CONSTRUCTION AND SALIENT FEATURES

- ➔ Inner made of stainless steel and outer made of S.S
- ➔ Supporting Ring & Legs are madeup of S.S.
- ➔ Heater cover with stand.
- ➔ Bucket are made of Stainless Steel Sheet.
- ➔ Lid is made of thick machined S.S. plate lined with Stainless Steel from inside.
- ➔ Lid is tted with Pressure Gauge, Spring Loaded Safety Valve, Manual exhaust Valve, and water level indicator.
- ➔ Drain Valve facilitate easy cleaning of the chamber.
- ➔ Fitted with silicon rubber gasket
- ➔ All internal joints are argon arc welded.
- ➔ Pressure Control Switch and Low Water Level Cut-O system for general safety of the element.
- ➔ Operating range from 15psi to 22psi pressure.
- ➔ To work on 220/230 Volts, 50/60Hz AC supply.

### OPTIONS

➔ PLC Controller Provider

➔ Double wall /Triple Wall.

### Size

MODEL/ SIZE OF INNER CHAMBER	CAPACITY	LOAD
GS-SSV-250X450MM	22 LITERS	2.0010/V
GS-SSV-300X500MM	40 LITERS	3.00 10/V
GS-SSV-350X550MM	50 LITERS	3.00 10/V
GS-SSV-400X600MM	78 LITERS	4.00 10/V
GS-SSV-450X600MM	98 LITERS	6.0010/V
GS-SSV-550X750MM	250 LITERS	6.0010/V

Extra for Digital Timer

Extra for Automatic Water Control



## AUTOCLAVE CYLINDRICAL HORIZONTAL (SEMI AUTOMATIC)

**MODEL NO. : GS-SSHC-150**

### APPLICATION

GSSIPL have Comprehensive range of horizontal autoclave. Cylindrical Horizontal autoclave will be front loading and in Horizontal shape with triple layer with boiler. These high pressure front loading autoclave play important role in sterilization procedure required in hospital pharmaceutical companies, biopharma and microbiology laboratories etc.

horizontal autoclave units are made of stainless steel to ensure corrosion resistance surface. Triple walled construction ensure excellent level of safety. Boiler is fitted separately and connected to the chamber. The boiler with automatic low water cut-off.



### TECHINICAL SPECIFICATIONS

Model	GS-SSHC-150
Design	Cylindrical Horizontal Type
Construction	Triple Valve
Valve for Jacket to chamber transfer, chamber release and for post vacuum or dry mode	Use Heavy duty multi port Valve
Self steam generator System	SS 304 Boiler with heater
Pre -Vacuum or high Vacuum	YES
Water In boiler	Distilled/ Normal Water
Heater	Industrial Immersion types water heater
Working pressure	Variable 15 to 34 PSI
Working Temperature	121°C (up graded up to 135°C)
Internal Chamber	Corrosion Resistant Stainless SS 304 and 316 is customise
External Jacket	Corrosion Resistant 304 Grade Stainless Steel
Finishing	Mirror finished inner and external surface SS 304 L
All Piping	SS 304 L Grade
Door	Singel or Double Doors SS 304 L
Insulation	Glass wool fiber 100mm
Sterilization Period	25 to 35 Mintues
Steam Exhaust	5 to 7 Mintues
Dry	5 to 10 Mintues
Chamber Condensate line	Fitted with steam trap & NRV Valve
Hydraulic testerd	On 45 PSI



Sensor	PT-100
Temperature	Digital Display
Jacket pressure	Use Pressure Gauge
Chamber pressure (for positive pressure	Use Compund Gauge (for positive & Negative pressure
Mechanical Time w/ Alarm	Regulates sterilization time and activates buzzer when sterilization cycle complete
Safety Valve	For excess pressure inside chamber,jacket and steam generator
Temperature indication	→ 1% Accuracy
Pressure indication	→ 1.6 % Accuracy
Boiler	<ul style="list-style-type: none"> <li>→ Made of SS 304 sheet</li> <li>→ Water inlet &amp; outlet valves</li> <li>→ Water level glass window</li> <li>→ Boiler safety Valve</li> <li>→ With Water immersion type industrial heating element</li> </ul>
Standard Accessories	SS 304 Sterilization tray x 1pc
Power supply	220 Volts / 440 Volts ( Three phase)

### Safety lock for door

→ Every horizontal 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 Pressure 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 “PIEZOSTAT” (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-energies heaters when pressure falls down.

### Switch box (control panel)

→ Houses the Pressure control switch, digital temperature indicator, Main switch, Pilot lamps, relays etc. and mounted on the stand of the sterilizer for easy operation.

### 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.

INNER CHAMBER IN MM	INNER CHAMBER IN INCHES	CAPACITY IN LITER	LOAD (KW)
400x600mm	16"x24"	80 liter	6-8 KW
400x900mm	16"x36"	120 liter	12 KW
400x1200mm	16"x48"	165 liter	12 KW
450x600mm	18"x24"	100 liter	12 KW
450x900mm	18"x36"	150 liter	12 KW
450x1200mm	18"x48"	200 liter	12 KW
500x600mm	20"x24"	120 liter	12 KW
500x900mm	20"x36"	165 liter	12 KW
500x1200mm	20"x48"	250 liter	12 KW
550x1200mm	22"x48"	300 liter	18 KW
600x1200mm	24"x48"	350 liter	18 KW

# AUTOCLAVE CYLINDRICAL HORIZONTAL

**MODEL NO. : GS-SSHC-250**

## DESCRIPTION


GSSIPL have Comprehensive range of horizontal autoclave. Cylindrical Horizontal autoclave will be front loading and in Horizontal shape with triple layer with boiler. These high pressure front loading autoclave play important role in sterilization procedure required in hospital pharmaceutical companies, biopharma and microbiology laboratories etc.

GSSIPL horizontal autoclave units are made of stainless steel to ensure corrosion resistance surface. Triple walled construction ensure excellent level of safety. Boiler is fitted separately and connected to the chamber. The boiler with automatic low water cut-off.

User can easily set the temperature with help of digital controller fitted on the side the unit. We provide radial locking pressure door with silicon gas kit. We use automatic pressure control switch and user easily can set temperature by digital controller. Our machine work with pressure 34 PSI



## TECHINICAL SPECIFICATIONS

Model	GS-SSHC-250
Design	Cylindrical Horizontal Type
Construction	Triple Walled
Automation Hardware	PLC/HMI
Display	4/7 (inches) touch screen multi -Colure. The information shows in display like cycle stage, chamber temperature, chamber pressure, jacket pressure, along with the information about failures and interrupts .
Printer 	Thermal printer with last 100 Cycle stronge capacity.
Dry Chamber	Use Vacuum pump for chamber dry → Pre Vaccum → post vaccum → Chamber 100%
Working pressure	Variable 15 to 34 PSI
For over pressure	Use Wika pressure switch
Working Temperature	121°C (up graded up to 150°C)
Sterilization period	25 to 30 Minutes

Inner Chamber	Corrosion Resistant stainless steel SS 304/ 316
Outer Jacket	Corrosion Resistant 304 Grade Stainless Steels
Finishing	Mirror Finished inner and External surface
All piping and fittings	SS 304 Steel
Door	Single or Double Doors SS 304
Insulation	Aluminum silicate which is the best insulating material.
For water Level	Water level Indicator
When Water Level Low	Low water level sensor indicate in display Water Level
Steam Exhaust	5 to 7 Minutes
Dry	5 to 10 Minutes
Chamber Condensate line	Fitted with steam trap & NRV Valve
Hydraulic tested	on 66 PSI
Sensor	PT-100
Safety Valve	For excess pressure inside jacket and steam generator
Boiler	→Made of SS 304 Sheet →water Inlet & Outlet Valves →Water level glass Window →Boiler Safety Valve →Water Immersion Type industrial
Mechanical Time W/ Alram	Regulates sterilization time and activates buzzer when sterilization cycle Complete
Power supply	220 Volts / 440 Volts(Three phase)

## AUTOMATION WITH PRINTING FACILITY

- FULLY Automatic with PLC Controller.fitted a Vaccum breaker to break vaccum in case of formation of vacuum due to steam condensation/Vaccum pump.
- Automatic low water Level Cut-off Device fitted for the general safety of the element.
- Printing facility

## SIZE/LOAD

SIZE OF INNER CHAMBER ( WXHxD )	CAPACITY IN LITERS	LOAD
GS-SSHC-(16X24)	75 LITERS	6.00 KW
GS-SSHC-(18X24)	100 LITERS	6.00 KW
GS-SSHC-(16X36)	138 LITERS	12.00 KW
GS-SSHC-(18X36)	150 LITERS	12.00 KW
GS-SSHC-(20X36)	175 LITERS	12.00 KW
GS-SSHC-(20X48)	250 LITERS	12.00 KW
GS-SSHC-(22X48)	300 LITERS	12.00 KW
GS-SSHC-(24X48)	355 LITERS	12.00 KW
GS-SSHC-(26X48)	400 LITERS	12.00 KW

CUSTOMIZED SIZE AVAILABLE.

## AUTOCLAVE CYLINDRICAL HORIZONTAL

CUSTOMIZED SIZE AVAILABLE.  
MODEL NO.: GS-SSHC-200

### DESCRIPTION

manufactures microprocessor-controlled

Bench-top, pre-and post-vacuum autoclave with an automatic temperature control system, self-test system before an operation, self-test mode diagnoses, fully automatic steam ejection and safety device containing safety valve, vacuum facility, automatic sterilization cycles and auto detections for steam sterilization of glass wares and plastic wares.



**Deluxe Model**

### TECHNICAL SPECIFICATIONS OF THE PRODUCT ARE MENTIONED BELOW:

### MATERIAL OF CONSTRUCTION & SILENT FEATURES

- ➔ Triple walled unit horizontally mounted on a sturdy, heavy Stainless Steel 304/316.
- ➔ Both inner chamber and outer wall made of Stainless Steel.
- ➔ Fitted with Dial thermometer to indicate the inner chamber temperature.
- ➔ Chamber releasing the steam in the atmosphere after use
- ➔ Lid is made of S.S. plate provided with radial locking system.

### GASKET

- ➔ Fitted with silicone rubber gasket.

### DOOR

- ➔ Sterilizers have a single or double door made from rolled steel lined with stainless steel sheet on both sides.

### COMPONENT

- ➔ Vacuum Pump & Water Feeding Pump.
- ➔ Fitted with Automatic Pressure Control Switch.

### INSULATION

- ➔ 100mm gap between the wall is Walled with special grade glass wool for proper insulation and to avoid heat losses.



## TEMPERATURE & POWER SUPPLY

- ➔ As per the international standards and guidelines, our triple walled Horizontal autoclave has a working temperature of 121 °C; however, for specic requirements, our autoclaves can be upgraded for use up to 134°C.
- ➔ Pressure is adjustable from 15-20psi.
- ➔ To work on 440 Volts 3 Phase A.C. Supply.
- ➔ Pressure gauge, safety valve, and steam release valve.

## STEAM GENERATOR

- ➔ Available with the separate boiler.

## AUTOMATION WITH PRINTING FACILITY

- ➔ FULLY Automatic with PLC Controller.fitted a Vaccum breaker to break vaccum in case of formation of vacuum due to steam condensation/Vaccum pump.
- ➔ Automatic low water Level Cut-off Device fitted for the general safety of the element.
- ➔ Printing facility

## QUALITY & STANDARDS

- ➔ We are an ISO 9001:2008/WHO-GMP, CE, ISO 13485:2003 Certied company with strict quality control measures conforming to national and international standards.

## SIZE/LOAD

SIZE OF INNER CHAMBER ( WXHxD )	CAPACITY IN LITERS	LOAD
GS-SSHC-(16X24)	75 Liters	6.00 KW
GS-SSHC-(18X24)	100 Liters	6.00 KW
GS-SSHC-(16X36)	120 Liters	12.00 KW
GS-SSHC-(18X36)	150 Liters	12.00 KW
GS-SSHC-(20X36)	175 Liters	12.00 KW
GS-SSHC-(18X48)	200 Liters	12.00 KW
GS-SSHC-(20X48)	250 Liters	12.00 KW
GS-SSHC-(22X48)	300 Liters	12.00 KW
GS-SSHC-(24X48)	350 Liters	12.00 KW
GS-SSHC-(26X48)	400 Liters	18.00KW

**CUSTOMIZED SIZE AVAILABLE.**

# Rectangular Horizontal Autoclave

**MODEL NO.: GS-SSHR-450**

## DESCRIPTION

- ➔ Construction Robust and rugged all weld construction which is leakproof, unlike riveted construction. The inner chamber is made of a thick plate of Mild Steel of non-magnetic stainless-steel of 304/316 quality, and the jacket is made from rolled steel. Ge
  - ➔ Sterilizers will have a single door made from rolled steel lined with STAINLESS STEEL 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 an 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 Ranged type heating elements are fitted from the water front side for easy replacement /repair.
  - ➔ Fitted with water gauge glass for water level, safety valve, water inlet, and the drain valves.
  - ➔ It is also provided with a Low Water Level cut-off device. This device protects the heater in the generator
  - ➔ All units are hydraulically tested up to 40psi.
  - ➔ Drain valve is Fitted at the side bottom for easy draining/cleaning.
  - ➔ Triple walled with Steam Jacket and Separate Boiler. The sterilization cycle is controlled by Multi port Valve.
- The unit is fitted with all standard accessories.
- ➔ To work on 440volts 3 Phase A.C. Supply.
  - ➔ The steam pressure in the boiler is indicated on an individual pressure gauge. Safety Lock for Door
- Every horizontal rectangular sterilizer is fitted with a SELF-LOCKING SAFETY DOOR, which cannot be opened when the chamber is under pressure. The sterilizer is provided with triple safety.
- ➔ Unit is also fitted with Low-Water Level Cut-OFF device and automatic pressure control device.
  - ➔ Fitted with a vacuum breaker to break vacuum in case of formation of vacuum due to steam condensation.

## OPTIONS

- ➔ PLC controller instead of the digital controller.
- ➔ 20% extra charges for a double door.



## MODEL NO.: GS-SSHD -800 (FULLY AUTOMATIC)

CHAMBER & JACKET	SS 304 & SS 316
SINGLE DOOR/DOUBLE DOOR	SS 304 PLATES ON CONTACT & NON-HINGE TYPE
HINGE & LOCKING ROD	SS 304
CENTRAL LOCKING PARTS	SS 304
SHOOTING BOLTS	SS 304
OUTER INSULATION	SS 304
OPERATING TEMPERATURE	121 °C I 134° C / BOWIE - DICK CYCLE
OPERATING PRESSURE	2.1 KG/CM2
STAND	SS 304 Square PIPE
OPERATION	AUTO/MANUAL (BOTH)
STEAM GENERATOR	SS 304 L
HEATING	IMMERSION HEATERS
OTHER ACCESSORIES	STREAM TRAP, PRESSURE SWITCH, FLOAT SWITCH, TEMP SENSOR, PRESSURE TRANSMITTER, PRESSURE GAUGE, TEMP GAUGE, NON-RETURN VALVE, TYPE SOLENOID VALVES, VACUUM PUMP, ETC.
HANDLING ACCESSORIES	FABRICATED WITH SS 304
BASKET PROCESS WITH PRINTER	REPORTS ARE GENERATED BY THE SOFTWARE FOR EACH AND EVERYCYCLE IN DETAILED REPORT.
WHEELS	ADJUSTED TO THE FLOOR
WORKING PRESSURE	CHAMBER & JACKET 2.5 KG/CM2
HYDRO TEST PRESSURE	Chamber 3.5 KG/ CM & Jacket 4.0kG/CM2
INNER CHAMBER	AFABRICATED WITH SS 304/ 316L
JACKET	FABRICATED WITH SS 304
DESIGN TEMPERATURE	121 & 134 DEGREE CENTIGRADE
VACUUM	0-760 MM HG



### DOOR

- ➔Door is fabricated from 304 Maximum operator safety.
- ➔Process-lock to prevent the opening of the door during the process.
- ➔Process-lock to prevent the opening of the door after successful completion of the cycle.

### INSULATION

- ➔The sterilization chamber is insulated with a minimum of 50 mm thick R. B Glass Wool, which is held in place by an outer cover of SS 304. A 0.3- micron vacuum break. Air filter provided on the sterile side for pressure equalization after vacuum creation.

### PIPING PACKAGE

- ➔All process piping in contact with the chamber is fabricated from SS 304 with argon welding. All connections and Settings used are sanitary tri-clamp with silicone seals. All non-contact piping is fabricated from SS 304 with argon welding. All drain lines and exhausts are connected to a drain manifold. The pipelines should have a 2 % slope for full draining to prevent contamination. All pneumatic lines shall be polyurethane with aluminum die-cast connectors.

---

## **VALVE PACKAGE**

---

- ➔ The process valves in contact with the chamber should be SS 304 contact parts with Teon seat and tri-clamp connections. All automatic valves are to be pneumatically actuated angle valves. The valves are to be actuated by instrument air controlled via solenoid valves.

## **STEAM ACCESSORIES**

---

- ➔ The jacket and chamber are provided with an over-pressure safety valve. The chamber is provided with a steam trap. The inside of the chamber and doors are to be nished to a surface nish better than the 0.8 Ra value. All other noncontact parts are to be polished to a surface nish better than 180 grit.

## **PROCESS MANAGEMENT SYSTEM**

---

- ➔ The sterilizer is designed to perform a wide range of tests and production programs to meet the latest regulatory requirements.

## **TEMPERATURE AND PRESSURE SENSORS**

---

- ➔ Two sensors are provided, one inside the chamber and one at the drain outlet. For accurate process control and recording, all sensors are connected to the PLC and Recorder. The system must have a least count of 0.10 C. A pressure transmitter to be connected to the chamber. The system should have a pressure least count of 0.002 bars. All utility lines are provided with a pressure switch for generating an alarm in case of utility failure.

## **ELECTRICAL SWITCHGEAR**

---

- ➔ The control cabinet is provided with a main isolator for the three-phase supply and a separate switch for the control supply. The fascia of the control panel is provided with indication LEDs and switches for operation.

## **PROCESS RECORDING**

---

- ➔ All the switchgear: - Schneider do matrix data printer for recording, date, time, process parameters, process status, etc., shall be provided alarms with the machine

## **CONTROL PANEL**

---

- ➔ The system is provided with a user-friendly HMI as a front-end user interface. Following minimum attributes shall be provided. RS 232 port for data communication. In-built Real-Time Clock with date and time function.

## SAFETY

The process management system shall be provided with a series of safety and alarm features are as follows:

- ➔Cycle over
- ➔Too long time to create a vacuum.
- ➔Pressure Achieve.
- ➔Utility Failure Alarm.
- ➔No sharp corners should be present.
- ➔No welding edges.
- ➔Low water level.
- ➔Jacket pressure over.
- ➔Chamber pressure over.

## SIZE/LOAD

SIZE OF INNER CHAMBER ( WXHxD )	CAPCITY IN LITERS	LOAD
GS-SSHR-450 X 450 X 900 MM	180 Liters	18 KW
GS-SSHR-450 X 600 X 900 MM	240 Liters	18 KW
GS-SSHR-600 X 600 X 900 MM	340 Liters	18 KW
GS-SSHR-600 X 600 X 1200 MM	450 Liters	18 KW
GS-SSHR-600 X 900 X 1500 MM	650 Liters	27 KW
GS-SSHR-600 X 900 X 1500 MM	810 Liters	36 KW
GS-SSHR-900 X 900 X 1200 MM	972 Liters	36 KW
GS-SSHR-900 X 1050 X 2100 MM	1980 Liters	48 KW
GS-SSHR-1050 X 1200 X 2100 MM	2600 Liters	72 KW
GS-SSHR-1200 X 1200 X 1800 MM	3000 Liters	90 KW

CUSTOMIZED SIZE AVAILABLE.



# LOW TEMPERATURE ETO STERILIZER

MODEL NO.: GS-ETO -80

## TECHNICAL DETAIL

GSSIPL Ethylene oxide gas sterilizers are designed to be used with Ethylene oxide gas cartridges to provide a safe & effective temperature sterilization process for Hospitals, Cath Labs, Medical Institutions, Eye Specialists, Ortho Specialists, etc. GSSIPL has reliable ETO Sterilizers that provide the latest technology. GSSIPL sterilizer uses Ethylene oxide to sterilize heat and/or moisture-sensitive devices. All Model Available in semi/fully automatic.

## FULLY AUTOMATIC

In fully automatic, the sterilization is a one-touch operation; where the operator loads the material in the trolley provided along with the machine, closes the door, and then presses the Start button to initiate the cycle; the cycle then continues on its own, and after sterilizing and aerating the load; informs the operator that the cycle is complete. Once stored, this program cannot be modified by invoking the password command.

## BOQ OF FULLY AUTOMATIC ETO (IMPORTANT PARTS)

SR. NO.	MATEIAL	MAKE/GRADE
01	INNER CHAMBER SS	JINDAL / 304/316
02	OUTER BODY SS	JINDAL 304
03	GASKET	Silicon
04	GLASS WOOL	INSULATION 50MM
05	PLC	DELTA
06	HMI	DELTA
07	PUNEMATIC VALVE	JANATICS
08	CARTRIDGE	GS ENTERPRISES
09	COMPRESSOR	MATRIX
10	HEATER	ARTI
11	SENSOR	THERMOTECH
12	AIR CYLINDER	JANATICS
13	VACCUM GAUGE	MASS



TABLE TOP ETO STERILIZER

## EQUIPMENT DESCRIPTION

- ➔ Heating System.
- ➔ Vacuum System.
- ➔ Humidity System.
- ➔ Control Panel.
- ➔ Air Inlet Filter.
- ➔ PLC/HMI.
- ➔ Instrument Printer.



## SAFETY FEATURES

- ➔ All sensors linked to the automation ensure reliability and failsafe operation.
- ➔ Screen on the control panel indicates a specific phase during the operation.
- ➔ Every cycle, there is a Leak test period, which checks the leakage and aborts the cycle if there is a leakage in the system.
- ➔ Negative chamber pressure ensures that gas cannot escape into the operating area. Locked door sensor during cycle.
- ➔ Constant watch over entries and break diagnostic from automation, which warns the operator, by means of messages on indicator and buzzer.
- ➔ Cycle completion record is shown on the printout.
- ➔ Chamber and cabinet made of high-grade stainless steel.
- ➔ PLC display 7" color touch screen.

## SIZE

Model	Size (Chamber Dimensions)	Liter Capacity
GS-ETO-45	12"x12"x18"	45 Liters
GS-ETO-60	12"x12"x24"	60 Liters
GS-ETO-85	12"x12"x36"	85 Liters
GS-ETO-115	12"x12"x48"	115 Liters
GS-ETO-125	12"x12"x54"	125 Liters
GS-ETO-145	12"x12"x60"	145 Liters
GS-ETO-200	18"x18"x36"	200 Liters
GS-ETO-250	18"x18"x48"	250 Liters

## SLIDING DOOR AUTOCLAVE

MODEL NO.: GS-SD-500

### CONSTRUCTION

- ➔ Construction Robust and rugged all weld construction which is leak-proof, unlike riveted construction. Chamber and jacket are made of a thick plate of stainless steel of 316.
- ➔ Pass a hollow load (A) test (batch Monitoring System) High Vacuum compressor with recycling facility.

### DOOR

- ➔ The equipment provided with vertical sliding single/double door. The door is fabricated from SS 316 quality material, and sealing is done through a movable silicon gasket pressurized by compressed air. The pressure gauge is provided for a gasket.



### INSULATION

- ➔ Glass wool Insulation to surface temperature of the sterilizer to be less than 45°C and it has low thermal conductivity and should not release any particles.

### DOOR GASKET

- ➔ Silicon Door gasket, and on commencement of the process, the door gasket is pressed against the rear face of the door by steam/air to ensure the doors remains closed during the process.

### CONTROL SYSTEM WITH CONNECTIVITY

- ➔ Fully automatic microprocessor controlled horizontal steam sterilizer.
- ➔ PLC-based system has 4-5 color touch-sensitive, LCD display interface.
- ➔ With battery back-up & non-volatile memories. Digital input/output controls, analog measuring inputs & ports for PC connectivity.

### PASSWORD PROTECTION

- ➔ Monitoring & documentation system and multiple password access levels would be provided to control access/operation of the machine preventing unauthorized access.

## **PRINTER**

- ➔ Equipped with built thermal printer.

## **DOOR SAFETY**

- ➔ The steam pressure in the boiler is indicated on an individual pressure gauge. Safety Lock for Door Every horizontal rectangular sterilizer is fitted with a **SELF-LOCKING SAFETY DOOR**, which cannot be opened when the chamber is under pressure.

## **ALARMS**

- ➔ Automatic process checking & failure correction.
- ➔ Self-diagnosis and check the autoclave for the different audio/visual alarm situations.

## **OTHER SAFETY**

- ➔ Power to shut on heaters should water in the heating section falls below a preset level.
- ➔ The terminals & contacts are housed in a watertight cabinet.
- ➔ Electronic water saving control - condensing the exhaust chamber steam with drain system designed to prevent pollutants from entering water supply & sterilizer.
- ➔ Automatic process checking, and failure correction should be possible by the control system. The range of alarm should include over temperature pressure sensor failure, phase time out, doors not properly closed, power failure (less than 10 sec should be ignored), continuous self-checking of all the safety devices, low water level, water in the chamber, etc. should be possible.

## **STEAM GENERATOR**

- ➔ Separate Steam generator of suitable capacity for each sterilizer made of 316 Stainless Steel. Fitted with all safety & control devices.
- ➔ Steam Generator has automatic operation for water level control energizes the water pump and supply valve to ensure proper water level in the boiler drum.

## **VACUUM**

- ➔ Electric vacuum system consists of a multistage vacuum pump with a liquid ring that ensures air removal during the pre-vacuum stage.

## **TEMPERATURE AND PRESSURE SENSORS**

- ➔ Working temperature 121 °C to 134 °C
- ➔ o work on 440VAC, 50 Hz, 3 Phase
- ➔ Condensate free 97-100 % saturated vapor complete with piping, valves, and pressure relief etc., delivery at 50-80 PSIG pressure.

## **AIR FILTER**

- ➔ A disposable air filter provided by filtering the atmospheric air for entering inside the chamber.

## **CYCLE**

- ➔ Designed to operate various programs.
- ➔ Apart from standard pre-programmed cycles, the special cycle should be programmed by an authorized supervisor code only.

## **PROGRAMS INCLUDE**

- ➔ Wrapped instruments, porous load 134°C / Heat Sensitive material, rubber, plastic, porous load 121 °C (working holding temperature 121°C to 134°C)
- ➔ Bowie & Dick test (7kg), PCD test / Leak test and equipped with pre-vacuum, gravity and preferably with liquid cycle (121 °C Liquid cycle for liquids & no drying time)
- ➔ Automatic cycling and drying and indicating completion both visually and audible.

## **LOADING/ UNLOADING SYSTEM**

- ➔ Sterilizers have SS 304 internal carriage/ trolley and
- ➔ 2 No. 's External trolley/carts equal to chamber depth for easy loading and unloading of the material.

## **DOCUMENTATION**

- ➔ Operation Manual of the equipment in English will be provided at the time of machine supply.
- ➔ Calibration Certificate.
- ➔ Warranty Certificate.

## **SIZE/LOAD**

SIZE OF INNER CHAMBER ( WXHxD )	CAPACITY IN LITERS	LOAD
450 X 450 X 900 MM	180 LITERS	18KW
450 X 600 X 900 MM	240 LITERS	18KW
600 X 600 X 900 MM	320 LITERS	18KW
600 X 600 X 1200 MM	430 LITERS	27KW
600 X 900 X 1500 MM	810 LITERS	27KW

**CUSTOMIZED SIZE AVAILABLE.**



## WASHER DISINFECTOR

MODEL NO.: GS-WDSH

### INTRODUCTION

Series Washer Disinfector is developed in accordance with ISO 15883 and other international regulations and actual washing and disinfecting requirements in hospitals, fully automatic process for washing, disinfecting, and drying maintaining that highly improves washing efficacy and turnover time of medical instruments, and in the meantime protects the safety of operators and avoids cross-infection.

### ADVANTAGES

- ➔ Small footprint and the no-maintenance access required.
- ➔ Low water consumption to reduce energy and detergent consumption and the cycle times
- ➔ All washing stages can be customized, and enhanced washing and drying are applicable for all programs to ensure cleaning and drying efficacy.
- ➔ 32M memory for more than 10,000 cycle records.
- ➔ Cycle can be paused for adjusting the load and restarted after load adjusted.
- ➔ Easy maintenance, all mechanical parts can be replaced, even the chamber
- ➔ All cycle parameters can be exported as a file for easy maintenance and customized configuration.
- ➔ All spray arms on the standard rack can be removed for cleaning internal pipelines.
- ➔ Dual spray arm design to avoid any dead angle.
- ➔ Illumination on top of the chamber for convenient checking inside of chamber during a washing cycle.
- ➔ Multiple language displaying and printing.



### APPLICATION RANGE

GSSIPL Washer Disinfector is applicable to washing and disinfecting instruments, bowls, glassware, and other reusable medical instruments, such as

- ➔ Surgical instruments (scissors, pliers, forceps, etc.).
- ➔ Utensils (dressing bowls, kidney plates, test tubes, beakers, etc.).
- ➔ Glassware (beakers, tubes, etc.).
- ➔ Anesthesia instruments & breath tubes and related accessories (anesthesia tubes, breathing bags, respiratory masks, various pipes, etc.), surgical shoes, endoscopes, etc.

### TECHNICAL PARAMETERS

MODEL	GSWD-001	GSWD-001A
SHAPE DIMENSION	W99XD100XH1840	W1100XD100XH1920
CHAMBER DIMENSION	W672XD830XH820 (12DIN)	W710XD860XH890 (15DIN)
WATER CONSUMPTION	23L/STEP	23L/STEP

DRAINING PORT	2(51)	2(51)
EXHAUSTING PORT	31/2"(90)	31/2"(90)
	G 3/4" INNER THREAD	G 3/4" INNER THREAD
NET WEIGHT	APPROX.450 KG	APPROX.450 KG
GROSS WEIGHT	APPROX. 500KG	APPROX. 500KG

CUSTOMIZED SIZE AVAILABLE.

## WASHING RACKS



STANDARD RACK



HUMIDIFICATION RACK



RESPIRATORY RACK



GLASSWARE RACK



DENTAL HAND  
PIECE RACK

## ADVANTAGES PRECISION ASSEMBLING

- ➔ Advanced chassis design and production man craft to have automatic seamless joints and panels without welding. Dramatically reduce delivery lead time, increase the stability and provide convenience for maintenance

### STABLE & RELIABLE

- ➔ All working stages are precisely controlled by imported PLC, plus a smart self-diagnosing and alarm system to guarantee stability and reliability.

### SMART CONTROL

- ➔ One-key to starting the cycle for smart and convenient control of the process and ensuring the efficacy of washing and disinfection.

## **ECONOMIC**

- ➔ Advanced sprinkling design requires less circulating water (23/ stage to eciently save water & detergent.

## **OPTIMIZED PROGRAMS**

- ➔ All programs are built and optimized as per actual washing and disinfection conditions in hospitals.

## **DATA MANAGEMENT**

- ➔ Cycle data is able to be shared and downloaded via a built-in USB port to ensure the convenience of traceability and data management.

## **SAFETY**

- ➔ The washer is designed and built strictly as per EC standards. The chamber door bounce back to open when it is closing, and articles are found in its way.

## **DOUBLE WALLED WINDOW**

- ➔ The washer is designed and built strictly as per EC standards. The chamber door bounce back to open when it is closing, and articles are found in its way.

## **MULTIPLE WAYS TO OPEN DOOR**

- ➔ You may choose to open the door manually or set an automatic door opening when the cycle nishes

## **DOUBLE INTERLOCK**

- ➔ Efficiently isolate Soiled Area and Clean Area to Strictly meet related regulations of CSSD.

## **WASHING PROGRAMS**

- ➔ GSSIPL Washer Disinfector has three kinds of washing programs: Preset Programs, Customize Programs, and Manual Programs. Preset programs are listed below

<b>FAST WASH</b>	<b>NORMAL MEDICAL INSTRUMENTS.</b>
<b>HIGH-TEMPERATURE CYCLE</b>	<b>INSTRUMENTS MADE FROM STAINLESS STEEL.</b>
<b>HEAT SENSITIVE ITEM</b>	<b>PLASTIC INSTRUMENTS</b>
<b>ANESTHETICS</b>	<b>ANESTHESIA/RESPIRATION INSTRUMENTS</b>
<b>DRESSING BOWL</b>	<b>KIDNEY BASINS, BOWLS, PANS, ETC.</b>
<b>DELICATE ITEMS</b>	<b>HIGH PRECISION INSTRUMENTS (SURGICAL NEEDLE, ETC.)</b>
<b>GLASSWARE</b>	<b>GLASSWARE SUCH AS TEST TUBES, BEAKERS, ETC.</b>
<b>HEAVILY SOILED ITEMS</b>	<b>HEAVILY SOILED INSTRUMENTS</b>
<b>DISINFECT &amp; DRY</b>	<b>RUN ONLY DISINFECTION STAGE AND DRYING STAGES</b>
<b>DISINFECT</b>	<b>RUN ONLY DISINFECTION STAGE</b>
<b>DRY</b>	<b>RUN ONLY DRYING STAGE</b>
<b>CHEMICAL</b>	<b>DISINFECT THE INSTRUMENTS WITH CHEMICALS. OTHER STAGES ARE IDENTICAL TO HIGH-TEMPERATURE CYCLE.</b>
<b>DESCALE</b>	<b>SELF-DISINFECTION AND OILING</b>
<b>RESERVED</b>	<b>RESERVED FOR CUSTOMIZED PROGRAM AS PER YOUR REQUIREMENTS</b>

## AUTOCLAVE CLASS (B) OR (N) TABLE TO HORIZONTAL

MODEL NO.: GS-SSTB-20

### CONSTRUCTION AND SALIENT



- ➔ Bench-top, pre- and post-vacuum autoclave with an automatic temperature control system, self-test system before an operation, self-test mode diagnoses, 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 liters.
- ➔ Stainless steel seamless chamber and epoxy coated chamber cover For more Safety.
- ➔ Sterilize cycle, dry timer, and indicator lamps display on a panel which allows the operator to visibly acknowledge the phase. It has a program-based controller.
- ➔ Safety locking mechanism that prevents opening while the autoclave is under pressure. A complete control panel is provided in the front.
- ➔ 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 the autoclave and instruments.
- ➔ The autoclave controls are easy to operate. Just choose the mold and time you want rst, and then press start.
- ➔ It is thoroughly tested and proven technology. (CE 1023 approved).
- ➔ Uniform rubber gasket which endures high pressure and temperature with low dilatibility.

### SPECIFICATIONS

- ➔ Sterilize temperature: 121 °C or 134°C.
- ➔ Electrical: AC 220V or 110V, 2100 watts/ 220V and 1600 watt / 110 V.
- ➔ Water reservoir capacity: Approx. 2/4 L.
- ➔ Safety device: safety valve, pressure regulator, and overheat protection.
- ➔ Maximum Temperature: 150°C.
- ➔ Maximum Pressure: 0.25mpa.
- ➔ Warranty: One year.

## Triple Valve Vertical Autoclave Steam Stock Sterilizer

**GSSIPL:-** have two model of vertical triple walled steam be TOP loading and in Vertical shape With Two chamber.one is inner Chamber for Equipment sterilization and second will Store steam in jacket with biker.These high pressure TOP loading autoclave play important role in sterilization procedures required in hospital, pharmaceutical companies, biopharma and microbiology laboratories etc.



**GSSIL:-** Vertical Autoclave are made of stainless steel to ensure corrosion resistance Surface. Triple walled construction ensures excellent level of safety.boiler is fitted with Chamber and connected to ther chamber . Water level indicator is also attached to the boiler with automatic low water cut -off,

User can easily set the desired temperature with the help of digital controller fitted on the front side of the unit ,We provide radial locking pressure door with silicon gas kit. We use automatic pressure control switch and easily can set temperature by Digital controller. Our machine work with pressure between 15-22 PSI.

## FEATURES & BENEFITS:

- Vertical Triple Walled steam strong Autoclave
- Stainless steel interior and exterior
- Triple Walled construction
- Standard temperature 121°
- Working pressure 15 psi to 22 psi
- Silicon jointes rubber door gasket
- Automatic Pressure Control switch
- Vaccum breaker in chamber
- ISI safety valves
- Digital Temperature controller with Timer and alarm ( buzzer)
- Automatic water level cut -off
- SS Pressure gauges
- water level Glass to check water Level
- ISI marked flange/ immersion heating elements



## TECHNICAL SPECIFICATIONS

Model	GS-VS-80
Design	Vertical Triple Walled Steam Strong
Working Pressure	variable 15 to 22 PSI
Construction	Triple Walled
Working Temperature	121°C
Internal Chamber	Corrosion Resident Staimies Steel SS 304/316
External Chamber	Corrosion Resident 304 Grade Stainless. Steel
Finishing	Mirror Finished inner and external surface
All Piping	SS 304
Door	Single Door
Sterilizer Period	25 To 35 minutes
Steam Exhaust	5 To 7 minutes
Hydraulic tested	on 40 psi
Sensor	PT 100
Safety Valve	For excess pressure inside Chamber and steam generator.
Machanical Time w/Alaram	Regulates sterilization inside time and activates Buzzer when sterilization Cycle Completes
Power Supply	220 Volts /440 Volts ( Single Pase)
Boiler	<ul style="list-style-type: none"> <li>• Made of SS 304 Sheet</li> <li>• water infel ET Outlet valaves</li> <li>• water level Glass window</li> <li>• Biker Safety valve</li> <li>• With ISI marked water immersion type industrial heating elements</li> </ul>
Optional Accesories	<ul style="list-style-type: none"> <li>• PLC Operation</li> <li>• Vaccum Drying</li> <li>• Printer</li> <li>• Auto add water</li> <li>• Door inter lock</li> <li>• Automatic Pressure Control switch</li> <li>• Water cut - off</li> <li>• Temperature indicator</li> <li>• Caster Wheels</li> </ul>

## Size of Vertical Autoclave

INNEER CHAMBER IN MM	INNEER CHAMBER IN INCHES	CAPACTY IN LTR	LOAD (KW)
250x450 MM	10"x 18"	22 Liters	2 KW
300x500 MM	12"x 20"	40 Liters	3 KW
350x550 MM	14"x 22"	50 Liters	3 KW
400x600 MM	16"x 24"	78 Liters	4 KW
450x600 MM	18"x 24"	98 Liters	4 KW
550x750 MM	22"x 30"	180 Liters	6 KW

- Used for Sterilization under saturated steam pressure at any selected point between 15 to 22 psi (adjustable), however this can be used for higher pressure up to 30 psi.
- Working temperature of 121°C.
- These Double walled units have inner Chamber ( Boiler) made of stainless steel SS 304/SS 316 grade
- ( As Per Demand)
- Outer wall is covered with stainless sheet
- Thick stainless steel lid is tightened by radial locking system and can be lifted through a pedal lifting device for user comfort
- Fitted with joints less neoprene rubber gasket
- All autoclave are fitted with standard accessories such as water indicator/ water level gauge pressure gauge, steam release cock spring loaded safety valve. Vacuum Breaker, pedal lifting device and heating element.
- System are hydraulically tested up to 40 P.S.I. as a safety Measures
- Space between boiler and outer shell works as air insulation however we may incorporate mineral glass wool insulation if customer desires
- Heating is done through specially designed water heater of suitable wattages to ensure optimum Sterilization time in every Sterilization cycle.
- Supplied complete with S.S. basket, cord and plug.
- Sublied with cord and plug to work on 220/230 volts A.C.Supply.



# LOW TEMPERATURE HYDROGEN PEROXIDE PLASMA

## MODEL NO:- GSSIPL -1500

Shortest 17 mins cycle and small installation space required. It is especially good for OT/CSSD for. Fast Sterilization of Instruments in a small amount.

WORK MODE	SHORT TIME LOADING CONTINUOUS RUNNING
POWER SUPPLY	3N 380V / 1 PHASE ,220V
WORK TEMPERATURE	35-55°C
CHAMBER SHAPE	RECTANGULAR
DIMENSION	700(L) x 970(W) x 750(H)
DOOR(S)	SINGLE



Shortest 25 mins cycle and small installation space required. It is especially good for OT/CSSD for. Fast Sterilization of Instruments in a large amount.

WORK MODE	SHORT TIME LOADING CONTINUOUS RUNNING
POWER SUPPLY	3N 380V / 1 PHASE ,220V
CASSETTE USAGE	SHORT 12 CYCLE STANDARD :- 6 CYCLES
WORK TEMPERATURE	35-55°C
CHAMBER SHAPE	RECTANGULAR
AVAILABLE DIMENSIONS	800(L) x 1050(W) x 1730(H)
	800(L) x 1050(W) x 1790(H)
	1000(L) x 1100(W) x 1790(H)

SIZE AVAILABLE AS PER CUSTOMER REQUIREMENT



## ADVANTAGES

### FAST STERILIZATION

Shortest 17 minutes Cycle. A shorter cycle time requires fewer instruments to meet the supply-demand. Therefore, cycle time is extremely important. With a shorter cycle time, the plasma Sterilizer saves costs for extra instruments and enables the fastest turnover of important instruments.

### SAFE AND GREEN STERILIZATION

GSSIPL Plasma Sterilizer is in full compliance with medical devices safety standards. Sterilant is hydrogen peroxide and byproducts are only water and oxygen, which are completely safe for both human beings and the environment,

The Sterilization cycle is strictly controlled below 60. C in a dry condition, avoiding damages caused by temperature and humidity changes. Dynamic laminar flow oil and gas separation technology together will create a special air absorbing device. Be ensuring exhausted air sir clean and safe.

## **LOW- COST STERILIZER**

In the long run, compared with other Sterilizer technology ( such as steam, Eo, formaldehyde, etc.) GSSIPL Plasma Sterilizer has lower cost cycle than Sterilizer precision instruments in a very gentle fashion, prolonging their lifespan while saving hospital purchasing costs In the meantime, the cost of the Sterilizer and consumables are much lower the than similar products, , which saves a lot of daily expenses.

## **POWERFUL STERILIZATION**

Sterilization Assurance Level means the probability of a single being sterile after it has been subjected to the Sterilization process. GSIPL Plasma Sterilizer can achieve 10 saal.

## **SIMPLE OPERATION And CONTROL**

An intelligent sterilization control system allows one key Sterilization and displays cycle progress % countdown, which is convenient for relative work arrangements is hospitals.

## **EASY INSTALLATION AND SERVICE**

Installation doesn't need room analysis, drainage system , ventilation system, detoxification devices, safety management, regulation measures, personal protective device, and traning. Our experienced engineers will provide professional services for installation.

## **CONSUMABLES**

Best material & competitive price consumables such as Biological Indicator (B1 ), Chemical Indicator (C1), Hydrogen Peroxide Cassette, Non-woven Fabric, Instrument Tray. Package etc.

## **CASSETTE**

Fixed volume and connection of hydrogen peroxide is sealed in every capsule. A short consumes a capsule The injection system and transformationsm procedure ensure the concentration and volume of hydrogen peroxide injected in the Sterilization Chamber, which is exactly the same for every cycle. in this way the Sterilization cycle is repeatable and guaranteed Moreover a cassette is easy for storage and operation and for staff when replacing a cassette.

## **BIOLOGICAL INDICATOR**

- Simple Incubation and doesn't need a sterile environment.
- Special chemical ink for easy observation of colour changes.
- Chemical Indicator is easy to be torn off for long term storage.
- In accordance with related pharmacopoeial, laws, and regulations.

## CHEMICAL INDICATION TAPE

- Used To fix non-woven fabrics when packing.
- Chemical Indicator on tape to indicate whether the package is sterilized.

## CHEMICAL INDICATION STICKER

( Two- layer sticker can be separate and written with Packing information )

- Used to fix non-woven fabrics (SMS) when packing.
- Chemical Indicator on tape to indicate whether the package is sterilized.
- Stickers are separate and don't need cutting.
- Sticker can be removed and stored after Sterilization.

## NON-WOVEN FABRIC

Uses to pack Instrument Tray during packing air permeable, waterproof, flexible, non-toxic.

## CHEMICAL INDICATOR

- Made with special ink to indicate Sterilization status.
- Can write information on it.
- Convenient for Sterilization on record.
- Show the Sterilizer's working status directly.

## PACKAGES

- Used to pack Instruments for Sterilization.
- With chemical indicator.
- Disposable medical item.

## SIZE & CAPACITY

SIZE OF INNER CHAMBER IN MM	CAPACITY
300x300x300MM	50 LITERS
300x300x1200MM	100 LITERS
320x320x1200MM	125 LITERS
350x350x1200MM	150 LITERS
410x410x1200MM	200 LITERS

SIZE AVAILABLE PER CUSTOMER REQUIREMENT.



# MORTUARY CHAMBER

MODEL NO:-

## DESCRIPTION

GSSIPL is the leading company in Biomedical Equipment Since 2004. We are Provided best Quality Products all over India & Aboard .We are one of the leading manufacturers and supplier of Medical & Bio-Medical Equipment that meet the Quality standards of various Quality Assurance Laboratories and Research & Development Establishments .



## DESCRIPTION

Capacity:2,3,4,6,8,12 etc .  
( Dead Body Storage Capacity according to requirements).

## MATERIAL OF CONSTRUCTION

- Double - walled cooling units
- Corrosion - free interior and exterior.
- Inner & Outer body of the mortuary chamber is constructed out of thick S.S.304 sheets.

## INSULATION

100 mm gap between the walls filled high- grade poly urethane insulation, which ensures maximum Thermal efficiency.

## ALARM SYSTEM

Audio visual alarm for high and low temperatures.

## BODYTRAYS

Sturdy,proper loading body trays, with sturdy telescopic castors and castor -locks to prevent rolling out of the tray.

## SILENT FEATURES

- Designed for long storage of cadaverous.
- Washable interiors with a channel for water Outlet that can be plugged with rodent resistant material.
- Vapor proof lamp inside.
- Energy - efficient and sturdy construction.
- Lightweight , Reliable, Low maintenance.

## **DOOR TYPE**

- Door sturdy chrome plate hinges and fitted with hard chrome plated lubricated. latches for the opening of the door. Individual standard key lock for each.
- Door will be fitted with high-quality triple point neoprene rubber gasket for airtight fittings and magnetic closure fittings and lock.
- The doors are made of galvanized steel sheets, lined with stainless steel for extra protection and long life.

## **GASKET**

All the doors are fitted with high-quality neoprene rubber gasket for airtight fitting with very sturdy casters.

## **COMPRESSOR**

CFC Free compressors conforming to the latest informational standards and guidelines.

## **CASTER WHEELS**

Mobile with brakes for castor wheels.

## **SAFETY FEATURES**

- Audiovisual alarm for high and low temperature.
- Automatic defrosting system.
- Noise levels -less than 60 Db.

## **POWER SUPPLY**

- Power input to be 220-240VAC, 50 HZ and suitable stabilizer (4kVA or Higher)
- Battery back-up on Display for 0 to 4 hrs. in case of power failure.
- Fitted with Indian plug.

## **TEMPERATURE & DISPLAY**

- Microprocessor -based temperature control.
- Temp range + 2 to +8°C.
- Digital LED display .Touch -pad data entry for adjustable temperature and alarm settings.
- PUF insulation .
- High -end ultra -mute CFC-free hermetically sealed compressor conforming to latest international standards and guidelines.
- Efficient condenser with an automatic evaporating system (condensate).
- Forced air circulation system.
- The unit shall be capable of operating at 30-40 deg C and relative humidity of 15-19%
- The unit shall be capable of being stored continuously in ambient temperature of 10-50°C and relative humidity of 15-90%.

## **STANDARDS, SAFETY, AND TRAINING**

We are an ISO, GMP, CE, OHSAS, IEC, EN 1789 Standards Certified Company with strict quality control measures conforming to National and international standards.

# HEAT SEALING MACHINE

MODEL NO:- GSSIPL

- Rotary heat sealers validated sealing of sterilization bags and clear -view pouches (paper/plastic laminate).
- Microprocessors -co trolled.
- The rotary heat seal gives documentation of process parameters via an integrated printer and could be integrated with documentation system.
- The ergonomic design titled forward for increased user convenience and space saving installation.
- The sealer housing is powder coated, and the control panel is of the flat- membrane type fir easy cleaning.
- Operationally simple.
- when a bag is fed into one side of the Machine,the machine 47=0 starts automatically or by pushing a Button, moving the bag through the machine, and applying pressure and heat to form a perfect seal.
- The warmup time is 30 seconds.



- The temperature is adjustable from 50-200C with a tolerance of 1% of the set value.
- Regulated by a heating element that is highly sensitive to temperature fluctuations, assuring even temperature and perfect Seals.
- 056 offers a number of additional features, including, a) Automatic starts-up  
b) Reverse feed function in case an instrument accidentally enters the sealing area,  
c) Energy -saving standby mode, d) preset temperatures,e) Re-settelble counter function
- Rotary heat sealers come with a port and cable for connection of the sealers to a PC and printer enabling monitoring and documentation of the entrie process.
- Protection mechanism again overheating and start prevention at a temperature.
- Deviations outside+/-5 tolerance.

# STEAM CUM ETO STERILIZER

MODEL NO :-

## SPECIFICATIONS

- End ring hydraulically formed without joints bto sustain required pressure .  
All other joints Argon Arc welded.
- Unique MULTI PORT VALVE Located at the top. Controls all operations manually .
- Two safety valves( dead wt.& Spring - loaded) and a pressure switch provide to prevent accidental pressure build -up.
- Works on 134°C at 32 psi.( 2.1 kgf/cm)
- Hydrostatically tested 2 times the working pressure.
- Best suited for rapid sterilization of Instruments for Cardiac, Ortho,Neuro, and Urology.
- Vaccum Pump provided along with the unit.
- Power: 18 Kw, 440 V, 3- phase.
- First Cycle: 35 mins. 20 mins. Preheating time, 15 mins. Actual time . Subsequent -09 mins.



## PREMIUM TECHNOLOGIES

- Locking System: Manual safety lock provi on the door.
- Low water level protection for heater.
- Pressure lock device for the door.
- Instruments come out dry after the cycle.

## APPLICATIONS

- Steam:- Effective sterilization for general OT Tools.
- ITO:- Used to sterile disposables & materials with a low melting point.

## SIZE/ LOAD

SIZE OF INNER CHAMBER ( DIAXDEPTH) MM	CAPICITY ( LTR)	LOAD
400x600MM	78 LITERS	6.00KW
400x1100MM	138 LITERS	12.00KW
500x900MM	165 LITERS	12.00KW
500x1200MM	220 LITERS	12.00KW
600x1200MM	350 LITERS	15.00KW

# Bio Safety Cabinet

MODEL NO :- GSS IPL

## SPECIFICATIONS

### Biosafety Cabinets



- ➔100 % air exhaust
- ➔Negative pressure air surrounding all biological contaminated parts
- ➔Class II, Type B2 cabinets are total exhaust cabinets, widely used in toxicology laboratories and similar applications where chemical effluent is present and clean air is essential.
- ➔There is no recirculation withing the work area.
- ➔Room air enters through a blower/motor in the top of the cabinet and passes through a HEPA supply filter into the work area as the vertical unidirectional airflow.
- ➔Descending air is pulled through the base of the cabinet through the perforated front and rear grilles.
- ➔Simultaneously, air entering through the perforated front opening is pulled through the grille and exhausted immediately,
- ➔100% of the air is pulled into the facility exhaust system for appropriate treatment.
- ➔Type B2 cabinet are hard-connected to an exhaust system.
- ➔Negative pressure surrounds the work area with double wall plenums for protection.
- ➔Air drawn through pre-filter is made to pass through highly effective HEPA (High Efficiency Particular Air) filters MAIN/SUPPLY FILTER having efficiency rating as high as 99.99% with cold DOP and 99.97% with hot DOP, thus retaining all air-borne particles of size 0.3 micron and larger. The highly efficient HEPA filter maintains the optimum cleanliness and purity. Being equipped with the prefilter, it can extend the life of HEPA filter.
- ➔Aerodynamic airflow grills maintain safety and prevents blockage.
- ➔U.V and fluorescent interlock available
- ➔Ergonomic and comfortable sloped front window for comfortable head and elbow rest position, thus reducing fatigue
- ➔Sash is counterbalanced for smooth and light weight operation with standard opening for easier access to work zone and enhanced user safety.
- ➔CLASS-II design ensures PERSONNEL, PRODUCT and ENVIRONMENT PROTECTION.

Class - II	Protection From Particulates	From Vapors and Gases
Type B2	Personnel, Work Area (Product) and Environment	Offer protection to personnel (offer protection to environment if exhausted to treated system.



# ABOUT US

We the ' SSIPL ' is an organization committed to manufacturing and export of international quality Medical Equipment and laboratory Equipment in india & abroad since 2010. We are dedicated to server the mankind and the nation by providing World class Medical Equipment and laboratory Equipment at affordable prices.

**01** **Our Vision**  
To best in class of laboratory and medical Equipment manufacture and Supplier with Achieving international quality standards a heading.

**02** **Our Mission**  
Provide the best products with international quality. Reliable low maintains as well as affordable laboratory and medical equipments.

**03** **Technology**  
we have faith in trading latest and most scientific paths to manufacture each and every medical equipment with perfect precision so our products meet the right efficiency and perfect alignment.our products are specially designed, less maintenance, durability easy, to operate and long service life.  
visit us on [www.goldenstarsurgical.com](http://www.goldenstarsurgical.com)

