



GENIST
Leading Medical Advancement

STEAM STERILIZER AUTOCLAVE



एन एस आई सी
NSIC
ISO 9001 : 2008



AUTOCLAVE VERTICAL

MODEL NO. : GTA-001

DESCRIPTION

The inner chamber is made of SS 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 fitted 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-Off 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

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

Extra for Digital Timer

Extra for Automatic Water Control

CUSTOMIZED SIZE AVAILABLE.

AUTOCLAVE VERTICAL DELUXE

MODEL NO. : GTA-001A

DESCRIPTION

The construction is as per vertical autoclave designed to meet the Quality of any international standard. The lid & locking system is designed in such a way to be handled by a square handle at the top. All the locking systems and lids are made of thick gun metal duly chrome plated. The outer is made of a square shape. Water level & pressure is locked in an enclosure. The castor wheels are provided at the bottom. Supplied with complete IQ, OQ & PQ documentation

CONSTRUCTION AND SALIENT FEATURES

- ▶ The outer body is rectangular in shape.
- ▶ The lid and tightening system is provided of gun metal duly chrome plated.
- ▶ It is complete with all the optional accessories, thus having a triple safety system.
- ▶ It is supplied with an extra heater which can automatically be used as & when required with separate switch.
- ▶ Automatic water inlet valve.
- ▶ Temperature controller cum indicator.
- ▶ Validation port.
- ▶ We can match this model with any world-class autoclave.



SIZE

CAPACITY

22 LITERS

40 LITERS

50 LITERS

78 LITERS

98 LITERS

250 LITERS

OPTIONS

▶ Triple wall

▶ Double wall

▶ PLC controller instead of digital controller

AUTOCLAVE PORTABLE STAIN LESS STEEL

MODEL NO. : GTA-002

DESCRIPTION

The body is constructed of STAINLESS STEEL 304/316. Suitable for general laboratory use as well as for field sterilization of instrument stand dressings etc. A dome-shaped STAINLESS-STEEL lid is provided, which seals the autoclave with a neoprene/silicone joint-less gasket. The lid is tightened to the body when closed.



CONSTRUCTION AND SALIENT FEATURES

- ▶ The working pressure is 1.1 to 1.2 Kg. /cm² (15- 18PSI).
- ▶ The sterilizer is made of STAINLESS STEEL. Sheet deep drawn to a cylindrical shape.
- ▶ The seamless construction allows no bacteria residue & free from dirt accumulation.
- ▶ It is equipped with dial pressure gauge 0-30PSI, spring-loaded safety valve, dead weight type safety valves, and steam release valve.
- ▶ The load is held in dressing drums (optional), which are 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
- ▶ Size: 350 x 300 (D x H)

OPTIONS

These are also available in sizes of 5 Liters. to 15 Liters. Non-Electric Models are also available.

SIZE IN INCHES		CAPACITY IN LITERS
9X9	ELECTRIC / NON-ELECTRIC	9 LITERS
9X11	ELECTRIC / NON-ELECTRIC	11 LITERS & 13 LITERS
9X12	ELECTRIC / NON-ELECTRIC	14 LITERS
9X13	ELECTRIC / NON-ELECTRIC	15 LITERS
12X11	ELECTRIC / NON-ELECTRIC	18 LITERS & 20 LITERS
12X12	ELECTRIC / NON-ELECTRIC	23 LITERS
12X14	ELECTRIC / NON-ELECTRIC	26 LITERS
12X16	ELECTRIC / NON-ELECTRIC	30 LITERS
12X22	ELECTRIC	30 LITERS

CUSTOMIZED SIZE AVAILABLE.

AUTOCLAVE CYLINDRICAL HORIZONTAL

MODEL NO. : GTA-003

APPLICATION

- ▶ Triple walled unit horizontally mounted on a sturdy, heavy Stainless Steel.
- ▶ Both inner chamber and outer wall made of Stainless Steel.
- ▶ Pressure is adjustable from 5-20psi.
- ▶ Fitted with pressure gauge, safety valve, and steam release valve.
- ▶ Available with the separate boiler.
- ▶ For units fitted with S.S. Boiler, separate valves for injecting the steam into the main chamber and releasing the steam in the atmosphere after use are provided.
- ▶ Fitted with Automatic Pressure Control Switch.
- ▶ Lid is made of S.S. plate provided with radial locking system.
- ▶ Industrial grade energy efficient heaters reduce power bills drastically.
- ▶ As per the international standards and guidelines, our triple-walled horizontal autoclave has a working temperature of 121 °c. However, for specific requirements, our autoclaves can be upgraded to be used for up to 134° c.
- ▶ Automatic Vacuum Breaker is provided to break the vacuum in case of formation of vacuum due to steam condensation.



OPTIONS

- ▶ Automatic Low Water Level Cut-off Device fitted for the general safety of the element.
- ▶ PLC controller instead of the digital controller.
- ▶ 20% charges extra for the double doors in all sizes.
- ▶ Double Door.

SIZE/LOAD

SIZE OF INNER CHAMBER	CAPACITY IN LITERS	LOAD
400X600MM	78 LITERS	6.00 KW
400X1100MM	138 LITERS	12.00 KW
500X900MM	165 LITERS	12.00 KW
500XL200MM	220 LITERS	12.00 KW

A HIGH-SPEED MODEL IS ALSO AVAILABLE (GTA-005-A)

- ▶ The construction is the same as per GTA-005 but provided with a vacuum system to be attached with a vacuum pump.
- ▶ The only size available is 400x 600 mm and by electric load shall be 18 KW to give fast Sterilization.
- ▶ Air shall be removed from the Sterilization chamber after loading the Sterilizer by one or more pressure/vacuum pulsing for proper steam penetration either manually or automatically through the automatic control system.

AUTOCLAVE CYLINDRICAL HORIZONTAL

MODEL NO. : GTA-003A

DESCRIPTION

Genist Technocracy 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, with vacuum facility, automatic sterilization cycles and auto detections for steam sterilization of glass wares and plastic wares.



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 and 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

- ▶ 75mm gap between the walls is filled 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 specific requirements, our autoclaves can be upgraded to be used for 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 with a vacuum breaker to break vacuum in case of formation of vacuum due to steam condensation/Vacuum 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 Certified company with strict quality control measures conforming to national and international standards.

SIZE/LOAD

SIZE OF INNER CHAMBER (WXHXD)	CAPACITY IN LITERS	LOAD
400X 600MM	75 LITERS	6.00 KW
450 X 600MM	100 LITERS	6.00 KW
400X 1100MM	138 LITERS	12.00 KW
400 X 1200MM	150 LITERS	12.00 KW
500 X 900MM	175 LITERS	12.00 KW
500 X 1200MM	220 LITERS	12.00 KW
550 X 1250MM	300 LITERS	12.00 KW
600X 1200MM	355 LITERS	12.00 KW
650 X 1200MM	430 LITERS	12.00 KW

CUSTOMIZED SIZE AVAILABLE.

AUTOCLAVE CYLINDRICAL HORIZONTAL

CUSTOMIZED SIZE AVAILABLE.
MODEL NO.: GTA-003-A+

DESCRIPTION

Genist Technocracy Pvt Ltd 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.



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

- ▶ 75mm gap between the walls is filled 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 specific 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 with a vacuum breaker to break vacuum in case of formation of vacuum due to steam condensation/Vacuum 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 Certified company with strict quality control measures conforming to national and international standards.

SIZE/LOAD

SIZE OF INNER CHAMBER (WXHXD)	CAPACITY IN LITERS	LOAD
400X 600MM	75 LITERS	6.00 KW
450 X 600MM	1 00 LITERS	6.00 KW
400X 1100MM	1 38 LITERS	12.00 KW
400 X 1200MM	1 50 LITERS	12.00 KW
500 X 900MM	1 75 LITERS	12.00 KW
500 X 1200MM	220 LITERS	12.00 KW
550 X 1250MM	300 LITERS	12.00 KW
600X 1200MM	355 LITERS	12.00 KW
650 X 1200MM	430 LITERS	12.00 KW

CUSTOMIZED SIZE AVAILABLE.

RECTANGULAR AUTOCLAVE HORIZONTAL

MODEL NO.: GTA-004

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.
- ▶ 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 flanged type heating elements are fitted from the 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 from burning out dry.
- ▶ 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.

SIZE/LOAD

SIZE OF INNER CHAMBER (WXHxD)	CAPACITY IN LITERS	LOAD
450X450X900 MM	180 LITERS	18 KYV
450X600X900 MM	240 LITERS	18 KYV
600X600X900 MM	320 LITER	18 KYV
600X600 X1200 MM	430 LITER	27 KYV
600X900X1500 MM	810 LITER	36 KYV
900X1050X2100 MM	1980 LITERS	48 KYV
1050X 1200X2100 MM	2600 LITERS	60 KYV

CUSTOMIZED SIZE AVAILABLE.

RECTANGULAR AUTOCLAVE HORIZONTAL

MODEL NO.: GTA-004 A (FULLY AUTOMATIC)

CHAMBER & JACKET	SS 316 & SS 304
SINGLE DOOR/DOUBLE DOOR	SS 304 PLATES ON CONTACT & NON-HINGE TYPE RADIAL LOCKING
HINGE & LOCKING ROD	SS 304
CENTRAL LOCKING PARTS	SS 304
SHOOTING BOLTS	SS 304
OUTER INSULATION	SS 304
OPERATING TEMPERATURE	121 °C 134° C / BOWIE - DICK CYCLE
OPERATING PRESSURE	2.1 KG/CM ²
STAND	SS 304 ROUND PIPE
OPERATION	AUTO/MANUAL (BOTH)
STEAM GENERATOR	SS 316 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 EVERY CYCLE IN DETAILED REPORT.
WHEELS	ADJUSTED TO THE FLOOR
WORKING PRESSURE	CHAMBER & JACKET 2.5 KG/CM ²
HYDRO TEST PRESSURE	CHAMBER 3.5 KG/CM ² & JACKET 4.0 KG/CM ²
INNER CHAMBER	AFABRICATED WITH SS 316 L
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 fittings 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 Teflon 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 finished to a surface finish better than the 0.8 Ra value. All other noncontact parts are to be polished to a surface finish 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
450 X 450 X 900 MM	180 LITER	18 KYV
450 X 600 X 900 MM	240 LITER	18 KYV
600 X 600 X 900 MM	320 LITER	18 KYV
600 X 600 X 1200 MM	430 LITER	18 KYV
600 X 900 X 1500 MM	650 LITER	27 KYV
600 X 900 X 1500 MM	810 LITER	36 KYV
900 X 900 X 1200 MM	972 LITER	36 KYV
900 X 1050 X 2100 MM	1980 LITER	48 KYV
1050 X 1200 X 2100 MM	2600 LITER	72 KYV
1200 X 1200 X 1800 MM	3000 LITER	90 KYV

CUSTOMIZED SIZE AVAILABLE.

AUTOCLAVE CLASS (B) OR (N) TABLETOP HORIZONTAL

MODEL NO.: GTA-005

CONSTRUCTION AND SALIENT FEATURES

- ▶ 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 first, 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. 5 L.
- ▶ Safety device: safety valve, pressure regulator, and overheat protection.
- ▶ Maximum Temperature: 150°C.
- ▶ Maximum Pressure: 0.25 mpa.
- ▶ Warranty: One year.

SLIDING DOOR AUTOCLAVE

MODEL NO.: GTA-006

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.
- Panel include various pressure and temp. Display for the depiction of actual pressure/temperature in the chamber, jacket, and on the gasket.

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.

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ALARMS

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

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OTHER SAFETY

- ▶ Power to shut off 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
- ▶ To 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.

DIRECTIVES & STANDARDS

- ▶ Our firm is ISO 9001 and ISO 13485, CE & GMP, EN, ASME.PED, OHSAS, IEC 60601 certified.

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 LITER	18KW
600 X 600 X 1200 MM	430 LITER	27KW
600 X 900 X 1500 MM	810 LITER	27KW

CUSTOMIZED SIZE AVAILABLE.

INDUSTRIAL AGRICULTURE STERILIZER HORIZONTAL

MODEL NO.: GTMA-001

CONSTRUCTION & SILENT FEATURES

Autoclave steam curing, also known as autoclave/ pressure steam
Kettle tank, a large pressure vessel steam-cured for the aerated
concrete, sand-lime brick, and ash bricks, is also be used in other
pressure steam-cured production processes of production projects,
Such as gypsum, insulation materials, rubber products, cement pipe
and wood, medicine, chemical industry and so on. The company
also designs and manufactures according to user requirements in various forms
of pressure vessels in order to meet the needs of the user in a variety of uses.



The horizontal tube-type reactor with the steel material plant tank cover is pressed with one complete
steel block 16MnR. Tank cover flange and vessel body flange overall forging are processed by using 16Mn
totally. The welding seam of pressure parts was heat-treated and strict non-destructive testing according

DOOR WITH SAFETY FEATURES

Opening methods of the door structure are the active door autoclave structure, hoist reducer gear by hand to open and
close, and can be customized with an electric, pneumatic, or hydraulic hoist. The autoclave is equipped with a perfect
safety interlock protection technology, ensuring the safe functioning of the appliance and the safety of the operator. Two
types of opening ways for the users to choose one side the door open and open door up or down. Side-door structure
with rotating arm. Rotating flexible, low-operating, easy opening; on the use of lever-type door open institutions, lever
bottom connecting.

The vessel door, the top equipped weight unit device, open the type of lightweight, occupy small space for autoclave

CHAMBER DIMENSION & TEMPERATURE

INSIDE DIAMETER (MM)	1000
EFFECTIVE LENGTH (MM)	1800MM/2400MM
DESIGN TEMPERATURE (OC)	121°C-134°C
TEMPERATURE MEDIUM	WATER
OPEN-DOOR FASHION	MANUAL OPERATION
SEALING	PNEUMATIC
CONTROL PANEL	AUTOMATIC

STEAM CUM ETO STERILIZER

MODEL NO.: GTSE-001

SPECIFICATIONS

- ▶ End ring hydraulically formed without joints to 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 provided 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.
- ▶ Vacuum 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 provided on the door.
- ▶ Low water level protection for heaters.
- ▶ 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	CAPCITY(LTR.)	LOAD
400 X 600 MM	78 LITERS	6.00 KW
400 X 1100 MM	138 LITERS	12.00 KW
500 X 900 MM	165 LITERS	12.00 KW
500 X 1200 MM	220 LITERS	12.00 KW
600 X 1200 MM	350 LITERS	15.00 KW

CUSTOMIZED SIZE AVAILABLE.

DRY HEAT STERILIZER

MODEL NO.: GTDHS-001

Dry Heat Sterilizer finds application for humidity-sensitive materials such as glassware and metal containers that can be sterilized by steam sterilizers but cannot depyrogenate the load. At Genist Technocracy, we assure the performance of DHS, meeting the following specifications.

DRY HEAT STERILIZER

- Dry heat sterilization and depyrogenation are used for complete destruction & removal of all micro-organisms by means of dry heat. These stainless-steel dry heat sterilizers use air as a medium of sterilization.

OPERATING TEMPERATURE

- It employs higher temperatures up to 300°C and requires exposure time up to 2 hours, depending upon the temperature employed.

APPLICATIONS

- Glass Bottles, Vials, Ampoules, Containers
- Stainless steel and aluminum containers
- Powders like sulphonamides and talcum powder

APPLICATIONS

- Load is arranged to ensure uninterrupted airflow.
- OHS may be pre-heated for materials with poor heat conductivity.
- The temperature is allowed to reduce up to 55°C-60C prior to removal of sterilized material.

DESIGN AND FUNCTIONAL FEATURES

- Chamber is manufactured in SS316L. Fully welded with round corners.
- The doors are of hinged type, equipped with double edge seal gasket for maximum safety
- For operation, control, and data acquisition, a PLC is provided. HMI facilitates the interface between operator and equipment.
- Equipment is available with a single door as well as double door pass-through the arrangement.
- Bio seal flange to seal the equipment into the building wall can be provided
- HEPA filters are installed in the fresh air, recirculation, and exhaust module. In addition, a 0.5 micron
- "Micro B" filter is installed as a pre-filter to the Fresh Air HEPA
- Three modules for air handling
- Fresh air (air intake)
- Recirculation
- Exhaust





CONTROL SYSTEM

- ▶ Control Systems are available with Siemens, Allen-Bradley & Mitsubishi PLC. The control system design enables an easy & logical operation with a graphical user interface, menu-driven display & passwords at several levels. PC & Printer can be connected directly to the control system.

OPTIONAL ACCESSORIES

- ▶ A complete range of carriages, transfer trolleys to simplify handling.
- ▶ Plates, trays, wire baskets, and other relevant accessories are supplied depending on the application.



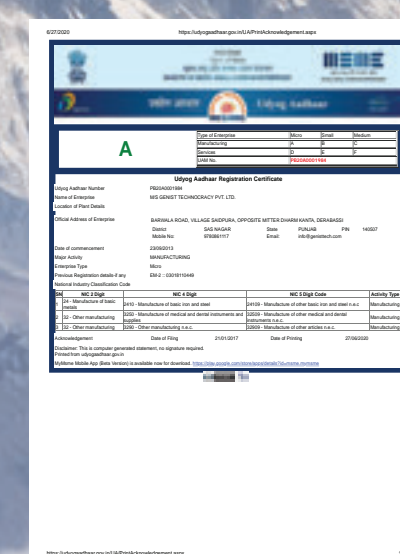
SIZES

WORKING SPACE IN (MM)	CUBIC FEET	HEATING LOAD (KW)
900 X 900 X 1200	36	24
900 X 1200 X 1200	48	30
1200 X 1200 X 1200	64	36
1200 X 1200 X 1500	80	80

or as per customer requirement

Our Certifications

We Believe that the way to the summit passes through high-quality and reliable manufacturing.





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