

# equitron<sup>®</sup>

## AUTOCLAVE - SLVSG

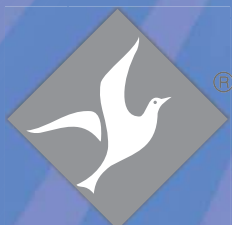


CE

**Versatility**

**In steam sterilisation**

**As never before....**





With over four decades of experience in design and manufacture of Autoclaves, we at Medica take immense pride in presenting the Single Lever Vacuum (SLV) series of Vertical Autoclaves. The SLV provides enhanced capabilities to meet the stringent demands of today's Microbiologist.

The new and innovative **EQUITRON-SLV** has been designed to meet the strictest & varied requirements of the most demanding applications in the following sectors:

- Microbiology and Analysis Laboratories
- Research Institutes and Government Agencies
- Life Sciences and Genetic Engineering
- Pharmaceutical and Food Industries
- Hospital and Biomedical Sectors
- Waste Treatment
- Other industrial sectors and special technological applications

#### ***EQUITRON Advantages:***

- ❖ Unique single lever lock for lid, with single hand opening.
- ❖ 4 PT100 temperature sensors. Cycle controlled on all 4 temperature sensors.
- ❖ Library with preset cycles of different load patterns, enables easy operation.
- ❖ Highly versatile programming and control system.
- ❖ Optional online print of cycle information with  $F_0$  calculations.
- ❖ Protection of personnel and products, thanks to temperature and pressure interlocks.
- ❖ Complete cycle is automatic.
- ❖ Temperature band complies with HTM 2010.

#### ***Construction:***

The SLV range, like all *EQUITRON* Autoclaves, is designed for ease of use and dependability and is manufactured under strict supervision. Each & every chamber is hydrostatically tested as per standards. Rigorous inspection standards and traceable calibration reports ensure dependable performance.

- ❖ Internal chamber and lid along with all wetted parts fabricated from Stainless Steel.
- ❖ Chamber, lid and all wetted parts are of SS 304.
- ❖ Outer body of SS 304 with matt finish.
- ❖ Integral steam generator for steam on demand.
- ❖ Single lever pronged closure system with a patented Silicone Gasket (registered design No. 208774).
- ❖ Easy lift and closing of the lid by assisted support.
- ❖ PU Castors for ease of movement.
- ❖ Modular panel design - for easy access to all critical components.
- ❖ Built in validation port enables user for self calibration checks.
- ❖ Two independent gauges for steam generator & chamber.
- ❖ Manual release valve with a 0.2 $\mu$  filter to normalise chamber pressure at the end of cycle - with sterile air.
- ❖ CE Certified safety valves for the chamber and steam generator.



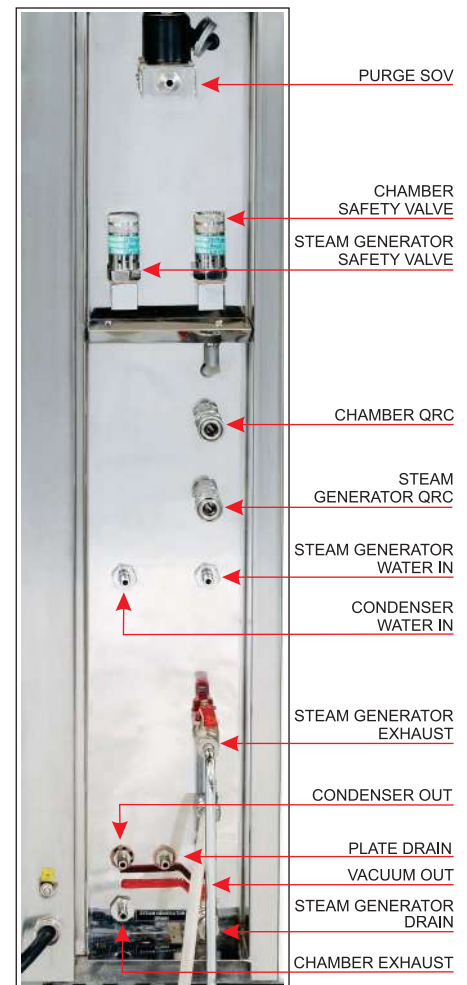


## Control Systems:

- ❖ At the heart of *EQUITRON SLV* is a Programmable Logic Controller (PLC) with 3.5" touch screen colour display which provides for a flexible user friendly interface and accurate control.
- ❖ All the critical parameters including set parameters & alarms are displayed on the touch screen. The PLC controls and monitors each and every parameter which provides higher reliability:
  - Selection of preset cycles from cycle library
  - Preset Bowie Dick Test
  - User customisable cycle with flexibility of setting following parameters:
    - Number of negative pulses
    - Number of positive pulses
    - Sterilisation temperature
    - Sterilisation hold time
    - Vacuum drying
- ❖ Automatic service and calibration reminders.
- ❖ Customizable sterilization temperature setting from 105°C to 121°C in steps of 0.1°C.
- ❖ Timer range up to 99 minutes.
- ❖ Sterilizer hold time adjustable in steps of 1 minute.
- ❖ If temperature falls below temperature set point, the sterilization timer gets automatically readjusted.
- ❖ Corrective action program on power failure.
- ❖ Working temperature range: upto 122°C.
- ❖ Working pressure range: upto 15 psi.
- ❖ Heater Wattage:
  - #7441SLV - 7 kW
  - #7451SLV - 10 kW

## Safety:

- ❖ Every single Autoclave chamber is hydraulically tested to twice its operating pressure. Inspection as per set standards - right from the raw material inward stage, to in-process inspections to final tests and calibrations is conducted by qualified Engineers.
- ❖ Spring loaded safety valves for steam generator and chamber.
- ❖ Pressure Switch for over pressure detection in steam generator.
- ❖ Electronic safety switch that does not allow cycle to run if door is not locked properly.
- ❖ Pressure-interlock and the lid cannot be opened when chamber is under pressure.
- ❖ Door interlock for cycle start.
- ❖ Audio & visual alarms for:
  - Low water
  - Over temperature
  - Over pressure
- ❖ MCB for electrical safety.





**Utilities required:**

	#7441SLVSG	#7451SLVSG
Electrical Supply	230 VAC, 50/60 Hz, Single phase, 40A (MCB)	415 VAC, 50/60 Hz, Three phase + 1N, 60A (MCB)
Water Supply	Two connections of demineralized / purified water line with hardness & temperature less than 2.8 (German) (50ppm) & 30°C respectively. Tubing size required of ID 8mm.	
Exhaust / Drain Line	Capable of handling steam temperatures of 121°C and pressure 2100 mbar steam / water.	
Foot Print	1155 x 765 mm	1365 x 890 mm
Height (with lid open)	1590 mm	1750 mm
Silicone Tubings Size	Ø8 x 11mm of required lengths from SLV to Drain / supply (7 nos.)	

**In-built online printing facility:**

- ❖ Display of five channels - 4 temperature plus one pressure.
- ❖ Print to external DMP LX-300+ (part of standard supply) with date, time, set point, reading of 4 temperature sensors & pressure.
- ❖ Print of process status with each print.
- ❖ Print of F<sub>0</sub> value for Sensor A.
- ❖ Optional printing facility of connecting an external printer to print all cycle data – customer name, operator name, equipment number, recipe, hold time, number of positive pulses, batch number, date, time, temperature setpoint, readings of four temperature sensors, pressure channel, F<sub>0</sub> summation and cycle status.
- ❖ Print interval user settable 15 - 600 seconds.



**Software:**

- ❖ Provided with a PC based 21 CFR Part 11 compliant software with 2 levels of electronic signature facility with meaning, name of signer, date and time of signature execution, and their comments.
- ❖ Provided with a desktop PC with 18-inch monitor of appropriate configuration.

SPECIFICATION & ORDERING DETAILS					
Model*	Type of Autoclave	Working Chamber Size (Ø x D) / Capacity	External size (LWHT) Lid Closed (Opened Ht)	Carrier (Ø x D)	Packing Dimensions (WxDxH) mm / Gr. Weight
#7441SLVSG	Vacuum	450 x 710 mm / 113 lit	1280 x 800 x 1240 (1700) mm	2 of 400 x 330 mm	1430 x 1020 x 1430 / 258 kg
#7451SLVSG	Vacuum	550 x 760 mm / 180 lit	1300 x 920 x 1300 (1830) mm	2 of 500 x 350 mm	1470 x 1140 x 1520 / 302 kg

All electrical appliances work on 230V AC, 50Hz, single phase. Other Voltages available on request. Due to continuous improvement in design, the product supplied may have modified features.

**Accessories:**

- ❖ Supplied with two wire mesh carriers of SS 304 and two dressing drums of SS304 of appropriate sizes so that either 2 wire mesh carriers or 2 dressing drums fit in it at once.



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