# HORIZONTAL RECTANGULAR H.P. STEAM STERILIZER



MSW-105(LCD)



Inner Chamber	Built with AISI 304 grade 6mm stainless steel
Jacket	Built with AISI 304 grade 6mm stainless steel
Boiler Tank	Built with AISI 304 grade 4mm stainless steel
Heavy Duty Stand	Built with AISI 304 grade 10mm stainless steel
All Pipe Line Makes	Built with AISI 304 grade 16mm stainless steel
Outer Cover	Built with AISI 304 grade 1.5mm stainless steel
Main Door	Heavy duty jointless SS-304 grade 10mm
Back Sheet (Chamber)	Heavy duty jointless SS-304 grade 8mm
Strong Argon arc welded	For grater durability
Double Door	Optional

Horizontal Autoclave High Speed Steam Sterilizer Fully Automatic Rectangular -made SS 304 with electric load 18kw digital time and temperature controller also

- Fitted with Microprocessor Based Fully Automatic Fuzzy Logic Control System with Alphanumeric Digital backlit LCD display with Set Value (SV) and Process Value (PV).
- Unit is fitted with water level indicator, safety valve, pressure gauge, water inlet and drain valves.
- Unit is also fitted with low-water level cut-off device and automatic pressure control device.
- All "MAC" rectangular sterilizes are fitted with SELF LOCKING SAFETY DOOR device.
- The door cannot be opened when chamber is under pressure.
- Two separate valves are provided for evacuating steam from inner chamber and jacket, as and when desired.
- Fitted with safety valve as a safety device.
- Drain valve is fitted at the side bottom for easy draining/cleaning.
- Fitted with vacuum breaker to break vacuum in case of formation of vacuum due to steam condensation.
- Triple Walled with Steam Jacket and Separate Boiler.
   Sterilization cycle is controlled by Multiport Valve. The unit is fitted with all standard accessories.
- PLC feature: Automatic features (steam in, steam out, vacuum & pre vacuum)
- Vacuum Pump: high water ring Kirloskar 3 hp pump for high vacuum
- Water Fill up pump : for fill water automatically with motor cromptan1hp
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### **SALIENT FEATURES**

## **WORKING CYCLE**

Available in three cycle types

- Standard speed working pressure (121°C)
- High speed working pressure (134°C)(1.2 kg)to (2.5 kg)
- As per your requirement

### **Test mode**

- 1 Leak Test Mode
- 2 Vacuum Leak Test
- 3 Chemical Indicators
- 4 Biological Indicators
- 5 The bowie-dick test

(All features can be controlled by manual mode also)

### **SAFETY FEATURES:**

• Self-locking Safety Door Gasket : Under pressure and heat resistant SILICON door gasket.

Water Level Gauge Glass : Show water level with senser

Spring Safety Valves : In jacket for over pressure protection.
 Wight Safety Valve : In jacket for over pressure protection.

Pressure Switch : For power consumptions. And pressure cut off

• Low Water Protection : To protect electric heaters.

Earth Safety System : For safety of operator and machine
 Steam Deflector : For better vacuum and dryness

Air Vent / Steam Trap : Moisture trap

Pressure Gauge : For show of steam pressure jacket

Compound Gauge : To show of chamber steam pressure and vacuum
 Operating System : Control by plc and operate by solenoid valve

• Alarm System : After the process complete buzzer system

◆ Display : Show steam pressure/ date /time /temp. & vacuum

• Insulation : High heat proof glass wool

Power Supply : To work on 440 volts, 3 Phase, A.C. Supply

### **COMPLIES WITH FOLLOWINGS**

### **NABHTEST PASS**

- THE BOWIE-DICK TEST is a standard operational test by which hospitals and laboratories can demonstrate proper air removal from their pre-vacuum autoclave chamber. It is primarily useful for testing pre-vacuum cycles that are sterilizing wrapped goods or packs.
- <u>BIOLOGICAL INDICATORS</u> (WITHIN A PCD) are often used for routine monitoring, qualification and load monitoring of a steam sterilizer.

  Biological indicators are designed to demonstrate whether the conditions during a steam (autoclave) cycle were adequate to achieve a defined level of microbial inactivation
- THE VACUUM LEAK TEST is used to determine the air-tight integrity of a pre vacuum autoclave's chamber and plumbing system. This test
  exposes the autoclave's plumbing and components to vacuum conditions and measures how much vacuum depth was lost over a given
  period of time.
- CHEMICAL INDICATORS are used to monitor whether the parameters to achieve sterilization have been met for a specific sterilization process, such as steam or vaporized hydrogen peroxide sterilization.

MODEL	INNER DIMENSIONS (W X H X D) in mm	CAPACITY	HEATER LOAD	OPERATING PARAMETERS
#HRSS-180(LCD)	450x450x900	180 ltrs	6.0 KW	15 - 20 psi at 121°C OR 30 psi at 134°C
#HRSS-240(LCD)	450x600x900	240 ltrs	9.0 KW	15 - 20 psi at 121°C OR 30 psi at 134°C
#HRSS-320(LCD)	600x600x900	320 Itrs	9.0 KW	15 - 20 psi at 121°C OR 30 psi at 134°C
#HRSS-430(LCD)	600x600x1200	430 ltrs	9.0 KW	15 - 20 psi at 121°C OR 30 psi at 134°C
#HRSS-810(LCD)	600x900x1500	810 ltrs	18.0 KW	15 - 20 psi at 121°C OR 30 psi at 134°C
#HRSS-1260(LCD)	900x900x1500	1260 Itrs	24.0 KW	15 - 20 psi at 121°C OR 30 psi at 134°C

# **OPTIONS**

- a) Automatic water feed system can be incorporated in the boiler, so that at higher level it switched off the water pump and restart it at lower level automatically.
- b) Vacuum pulsing through a closed coupled water ring high vacuum pump for creating forced vacuum and fast drying process.
- c) TFT Touch Screen Display Controller in lieu of LED/LCD Controller.
- d) Printer Port to cost extra.



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