



NEMR Industries Pvt. Ltd.
Empowering Nation with Quality Products

HORIZONTAL CYLINDRICAL DOUBLE DOOR AUTOCLAVE

Is based on the principle that the microbiological action of saturated steam at elevated temperature is rapid and thorough. All models work on the principle of downward displacement of air which is the most economical method of obtaining sterilization. Robust and rigid construction, designed for all types of bulk sterilization which are commonly needed in Medical, Agricultural, research Institute, and Pharmaceutical Industries. Suitable for Sterilizing hospital Materials, rubber, and plastic goods.

Construction

Triple walled with the steam jacket and separate boiler Inner chamber and steam jacket is made up of Heavy gauge SS 304 Sheet with leak-proof argon-arc welding. The sterilizer has a single-piece door made of stainless steel 316/304. The backplate and ring are also made of a thick stainless steel sheet. All the sterilizers are hydraulically tested to withstand 3.5kg/cm² times the working pressure. Mounted on a tubular steel frame with ground leveling screwed flanges. The Outer jacket is wrapped with an asbestos sheet or glass wool to minimize the heat losses due to radiation and is covered by a polished stainless steel sheet for that elegant appearance.

Boiler

Made of heavy stainless steel sheet. A heavy ring mounted in front of the boiler with a folding thick stainless steel plate is fitted with heating elements and a low water level cutoff device to protect the former from burning out dry. The front folding plate system provides for easy cleaning of the deposited scale on the elements and the walls for long life and efficiency. Fitted with water gauge glass for water level indication, water inlet, and outlet valves

Heaters

Flanged type, immersion heating elements are made of high-grade SS 304 material and duly ISO certified. The Pressure control device is incorporated in all electrically operated sterilizers. It economizes on power consumption and reduces the frequent opening of the steam release valve and thus prevents the release of steam in the room, It cuts off the power supply to heaters when the set pressure is achieved and re-energies the heating elements.

Safety Door

The sterilizer has a hinged type and self-locking single-piece thick SS 304 plate door and cannot be opened when under pressure. The self-locking device automatically disengages the thread mechanism when the sterilizer is under pressure to preclude any eventuality of an accident

Single Point Control

The complete sterilizing cycle is controlled from one point with the help of a "Multiport Valve" fitted at the front top. Two speeds of the steam exhaust are available; fast and slow. Easily readable jacket and chamber pressure on gauges mounted on the Multiport valve. A moisture trap is fitted in the chamber discharge line to absorb the condensate automatically to prevent moistening of the subject matter to be sterilized.

Control Panel Switch Box

To provide an electrical control panel box mounted on the stand of the sterilizer for easy operation. Electrical parts – pressure switch, contactor, water level relay, MCB, YBR Indicators, & on-off switch.

Triple Safety: –

The Sterilizer is provided with triple safety features. At the boiler level, a PIEZOSTAT automatically limits the pressure to the required set value and a spring-loaded safety valve in case of its failure which releases the steam to keep pressure within the safety limits. At the chamber level, a spring-loaded safety valve and a dead weight release valve release the steam in case the pressure exceeds the safety limit. All these safety features function independent of one another and sequentially i.e. one takes over the charge in case of the other's failure.

- Prevents the discharge line from choking. The plug is easily removable for daily cleaning.
- Powerful Ejector for drying sterilized linen circulates air throughout the chamber. The circulating air passes through a corrosion-resistant metallic wool filter.
- Digital Display is provided to show the chamber temperature.
- Automatic Vacuum breaker is provided to break vacuum in case of formation of vacuum due to steam condensation.



Operating Temp. & Pressure

Working Temp: 121°C to 134°C Working pressure : 1.2 to 2.2 kg/cm² (15 psi to 30psi) Hydro test - 4 kg/cm² Power Requirement: Suitable to operate on 440V volts, 3Ph,50 Hz, Ac supply

Chamber- SS 316

Jacket of – SS 304

The door of - SS 304

Optional Door – SS 316

Digital Temperature controller with timer

High-pressure High vacuum model

Additional Single door/ Double door model.

Optional- Fully automatic PLC & HMI with printer microprocessor base controlled model

Optional Spare Accessories

Pressure gauge/Compound gauge

Water level glass tube

Temperature Gauge

Non-return valve

Moisture trap

Joint less Gasket: – silicon food grade. Heating elements

(Flange Type) Rating 6.0 kw,9.0,kw,12.0,kw

Available In Following Capacities

Sr. No.	Dia (mm)	Depth (mm)	Capacity (Liters)	H.Speed (Elect.load)	Normal (Elect.load)
01	400	600	75	9 kw/415v/3ph	6kw/415v/3ph
02	450	600	98	9 kw/415v/3ph	6kw/415v/3ph
03	500	900	177	12kw/415v/3ph	9kw/415v/3ph
04	500	1200	235	18kw/415v/3ph	12kw/415v/3ph
05	400	1100	138	18kw/415v/3ph	12kw/415v/3ph
06	600	1200	340	24kw/415v/3ph	18kw/415v/3ph

Note - Utility Requirements

- 1)Water supply RO & Soft water, 2)Electrical Power supply 415v/3ph.
- 3)Compressed air 5-8 Kg/cm² 4)Water inlet & outlet.
- 5)UPS Power supply for monitoring display after power failure.