

Specification for Horizontal Rectangular High Pressure High Vacuum Steam Sterilizer with double door hinge type under buy back of old autoclave- 432LTS and old Air compressor	Criteria Matching(Yes /No)	Remarks
Make and Model		
Horizontal Rectangular High Pressure High Vacuum Steam Sterilizer with double door hinge type with bioseal, chamber size: 600 x 600 x 1200 mm, suitable for operation on electricity. Electric load 18 KW (6kw 3 nos heater). Chamber cap. 432 ltrs. for Bsl3 lab facility		
Bioseal should be provided for separation of loading and unloading area.		
The sterilizer to be equipped with automatic Cum manual double hinge doors.		
Pneumatic valve to be used for actuating control valves as response to an electric signal from the control panel.		
The steam sterilizer to be operated through a PLC. The PLC to be equipped with a non-erasable memory and battery back up for in-interrupted operation. PLC make should be either of Mitsubishi/Siemens.		
Door interlocks safety in double hinge door machines.		
Application of Steam Sterilization is for a wide range of instruments, rubber articles, metal components and fabric commonly sterilized in any Hospital. Sterilization to be carried out at 121 C or 134 C depending on the load configuration for settable sterilization times.		
Door interlocking to prevent simultaneous opening of both doors.		
The chamber & jacket to be hydraulically tested to 2 times the working pressure. The normal working pressure would be 2.1Kg/cm ² corresponding to temperature 134 deg C. The test certificate/report for the same to be attached for the same.		
All Piping to be of SS 316 L. The pipeline should have 2% slope for complete drain to prevent contamination.		
Jacket and chamber to be provided with pressure gauge and compound gauge.		
Provision to be made for fixing a validation port.		
There should be manual override in case of electronic failure.		
The chamber and door plate would be made of stainless steel AISI 316 quality and electric steam generator should be made of stainless steel AISI 304 quality. The jacket should be made of boiler-quality steel.		

The unit also should be incorporated with a water ring vacuum pump to create a vacuum of 24" when the temperature of cooling water to the pump is less than 30oC for total evacuation of the air from the chamber, thus allowing complete sterilization of the load in the shortest possible time.		
The sterilizer should be supplied with the following mountings and fittings:		
a) Fully automatic system with pre-selected & variable programs		
b) Self-sterilizing vacuum drier		
c) One spring-loaded safety valve and one vacuum breaker.		
d) The chamber discharge line would consist of one plug screen, one swing check valve, and one steam trap.		
e) Automatic self-locking device - The door would have an automatic locking device when it is under pressure.		
f) Stainless steel electric steam generator fitted with 3nos. 6KW heaters each, one low water protection and one automatic pressure controller, one air break contactor with toggle switch indicating lamps, gauge glass assembly for the steam generator. The heaters would be mounted on a thick stainless steel plate.		
The sterilizer should be provided with SPECIAL type of COPPER SENSOR and other related accessories for boiler to save the ELECTRIC and WATER consumption drastically and also save the overall cycle time.		
PLC-based microprocessor with the facility of HMI (Human-Machine-Interface) incorporated with the sterilizer.		
The Micro-Processor based control Panel (Microster) to control entire cycle of sterilization and steam pulsing automatically through a water ring vacuum pump. The control panel shall house the complete automatic process control arrangement, including timers, relays, contactors etc.		
Suitable air compressor must be provide along with instrument with proper shed for fixing outside lab		
The digital display at front panel should show the following parameters:		
1. Cycle no.		
2. Batch no.		
3. Time & Date		
4. Alarm indicator		
5. Error display		
6. Low water indicator		
The unit should be manufactured as per Bureau of Indian standards specification and should bear certification mark IS:3829(Part-I), ISO 13485 : 2016 & CE certified.		
ACCESSORIES EXTRA		

a) S. S. 316 Loading/Unloading Trolley (Carriage) for the above unit.= 1NO.		
b) Steel (powder coated) Tubular Transfer Trolley for the above carriage. 1NO.		
Installation and all associated civil work , plumbing work alongwith material, if required is in the scope of work		
Annual calibration/validation with certification provided of the machine for 5 years must be in vendor scope.		
Down time of less than 24 hours		
Company must provide a compliance statement supported by technical literature and website.		
Authorisation certificate from the OEM must be included in the technical bid		
Site visit certificate to be enclosed in the technical bid duly signed and stamped by the supplier.		
Certificate for spare availability upto 10 years for quoted model to be provided from OEM alongwith the technical bid.		
Unpacking and shifting of the instrument including manpower ,crane during installation and also in dismantling of old autoclave and air compressor must be in the vendor scope.		
User list must be enclosed for the quoted model supplied to any other institute/Organization in Delhi and NCR.		
Min.3 Customer satisfactory / performance certificate for specific quoted model from the end user should be included in the quote.		
Warranty 5 years for autoclave and air compressor including all spares , PM kit and calibrations of instrument on regular basis as and when required.		
Consumables required during installation to setup the new instrument must be quoted along with the instrument.		
AMC & CMC Charges for the next 5 years after standard warranty must be quoted in optional item		