



DEPARTMENT OF BIOTECHNOLOGY
Indian Institute of Technology, Madras, Chennai, 600 036.

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THE HEAD OF THE DEPARTMENT

Ref: BT/ATHI/2018/033/SPL Date : 26/11/2018 Due date : 17/12/2018

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

Specifications for Autoclave

- The Vertical Autoclave should have Chamber Capacity of 180 ltr.
- The Working Chamber Dimensions should be Ø 55 Diameter x 76 Height in cm
- The chamber of Vertical Autoclave should be manufactured as per ASME standards.
- The Vertical Autoclave should work on the domestic power supply of : 230 V AC, 50 HZ, Single phase.
- The units internal chamber, cover lid and all wetted parts should be fabricated from stainless steel of 304 grade.
- The Vertical Autoclave's all joints should be smooth finished for crevice free internals.
- The chamber should be hydrostatically tested at 1.5 times of its working pressure.
- The outer body should be made up of MS sheet with heat cured epoxy coating on both sides.
- The lid should be equipped with single lever lock mechanism and lever handle moulded from industrial plastic.
- The lid should be provided with auto purge cum vacuum breaker valve and a manually operable valve for exhaust.
- The unit should have a solenoid valve for auto purging of air & normal exhaust.
- The Vertical Autoclave should have stainless steel pressure gauge with dual range dial display in KPA and PSI along with a co-related temperature scale for steam in degrees Celsius.
- The operations of the unit should be controlled by a microprocessor based controller.
- The user should be able to set the temperature up to 122°C in steps of 0.1°C each.
- The user should be able to set the Sterilization hold time in steps of 1 minutes each.
- The timer range should be up to 95 mins.
- In case of abrupt power failure / switching off, the Last Cycle which was set should remain in the memory.
- The display for the parameters should be Two line Alpha-Numeric digital display.
- The unit should be equipped with Low Water Detection unit and should give Audio- Visual alarm in case of Low Water in the chamber and cut off the supply to the heater.
- The unit should have safety valve to protect the equipment in case of overpressurisation.
- The Lid should be equipped with pressure interlock device. Also the heater should not start if the Lid is open.
- The unit should be provided with safety cut-out for high temperature.

- The unit should give indication by audio-visual alarm on completion of set autoclave cycle.
- The electrical safety should be ensured by inbuilt MCB.
- The unit should be mounted on 04 Nos. PU coated castors out of which atleast 2 should have locking mechanism
- The Vertical Autoclave should be **CE** certified.
- Autoclaves should carry a CE certificate and the chambers should be certified under the stringent PED (Pressure Equipment Directive)
- Manufacturer shall be ISO 13485 certified & should submit photocopy for the same.
- Local Service Setup for prompt and efficient post sales support.

Calibration reports with NABL traceability.

- Price- around 2,30,000.00
- Delivery within 4 to 6 weeks of order placement
- Payment will be done after delivery.
- Minimum of 2 years warranty period.

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