

## **Technical Specifications For Anaerobic Glove Box/Anaerobic Work station/ Anaerobic Hood Cabinet**

1. This instrument is required for facilitation of culture, identification and antibiotic susceptibility of Anaerobic pathogens, which cannot be grown with present day available aerobic culture systems.
2. The system should have an Advanced microprocessor based acrylic anaerobic workstation for structural stiffness and optical clarity, for cultivating anaerobic cultures.
3. Workstation must be with instant access porthole required to be operated bare hand or using sleeves/gloves.
4. Anaerobic workstation should have the incubation capacity to accommodate atleast 500 x 90mm Petri dishes.
5. The size of the system should be approx. 1200x700x700 mm (LxDxH)
6. The system must have full colored touch screen interface for simultaneous display, control & monitoring of all parameters with stringent password protections.
7. It must be supplied with internal power socket to use small laboratory instrument inside the workstation.
8. It should have an integral automatic airlock for transfer of minimum 30 or more plates at a time to and from the workstation.
9. Gas Alarms and Control Systems should be displayed clearly on the touch screen panel. Low gas pressure, Inner and outer airlock door status conditions, along with the status of the airlock should be displayed on the touch screen.
10. Temperature, Humidity, Time, Alarms and status notices should be displayed clearly on the touch screen.
11. System should have Cable Gland to allow cables and probes (18mm- 25mm in diameter) to be introduced into the chamber without compromising internal conditions. For cables less than 18mm, a packing piece should be supplied. More than one gland may be fitted. The size of the connectors should be first assessed by onsite visit to the intallation site.
12. System should have remote access facility for service diagnostics.
13. Should have facility for event Log lists, events showing the date and time they occurred. The event log should retain information for all the days of the month.
14. System should have chamber temperature of 5°C above ambient to 45°C. Display of the temperature, humidity, Gas pressure, anaerobic indication, time etc should be available.
15. System should have fully integrated Real time Anaerobic Indicator System and Real time catalyst monitoring with O<sub>2</sub> sensor for display of real time oxygen levels using any indicator/different colour system. It must have automatic onscreen calibration of O<sub>2</sub> cell.

16. Chamber shall have bright fluorescent light system and adjustable shelf inside.
17. System should be capable of maintaining anaerobiosis using appropriate gases ( $H_2/CO_2/N_2$ ), catalyst, palladium and Anotox.
18. System should have automatic de-humidity control system.
19. System should have Data Logging facility - For temperature, humidity, gas controls and chamber pressure etc. & retain information in system memory for atleast a month.
20. System should have ISO 14001:2015, ISO9001:2015, BIS compliant certification
21. Cylinders of each anaerobic gases (10%  $CO_2$ , 10%  $H_2$  + 80%  $N_2$ ), Nitrogen, double stage gas regulators and provision of regular supply should be made by the bidder .
22. All required consumables along with their cost to be quoted at the time of bidding.
23. Equipment should have onsite warranty of 5 years followed by CMC of 5 years after expiry of warranty period.
24. Demonstration of the quoted model should be done.