# Anaerobic Chamber: Technical Specification

- Anaerobic chamber should essentially be made up of flexible and optically clear Vinyl with aluminium frame and padded base
- Chamber size must not be less than 245 cm length x 95 cm depth x 140 cm height
- Interior work area should not be less than 195 cm length x 80 cm depth
- The chamber should have minimum four ovals shape large glove ports for working with a size of approx. 25 cm width x 40 cm height.
- Should have provision for the operation through Palladium catalyst to essentially maintain 0 to 5 ppm level of oxygen (strictly anaerobic) and strictly maintain the gas concentration as 5% Hydrogen and 95% carbon dioxide.
- Automatic chamber Temperature Control in the range of +3 ambient to 40°C ± 1°C.
- Glove box working Incubation capacity should not be less than 1340 petri dishes of 90 mm size.
- Should be fitted with automatic airlock, vacuum airlock, heavy duty, and vacuum pump with essentially sliding shelf preferably at the right side of the airlock.
- Air lock size should not be less than 75 plates of 100 mm size
- Airlock should have a cycle of 30-160 seconds and must be user adjustable.
- Provision for interior power supply, minimum 4 outlets/Plug strips,
- Complete with gas regulators and spare feed through.
- Control pane at airlock must be programmable with interchangeable sequence and should be user adjustable.
- Anaerobic monitor must have Real Time display for O2 in ppm and H2 in % in same system with user replaceable sensors and adjustable alarms
- Should be compatible with 95%$CO_2$ compensation
- Should supply with complete gas panel, SS tubing and fittings (20 meter each) for $CO_2$ and $H_2$ mixture (95% and 5%, respectively), desiccators and regulators.
- Should supply with two gas cylinders for 100% $N_2$ and mixture of 95% $CO_2$ + 5% $H_2$, minimum 47 liters capacity of each and fitted with appropriate regulators
- Should supply with minimum four aluminium desiccators (plates) for inside chamber
- Should also supply with digital gas leak detector and appropriate tape roll
- Should provided 2 pairs of extra oval shapes large size gloves, and two spare palladium catalyst, gas tube connectors and regulators
- Minimum 18 months warranty on all the components
- Provide 2 KVA Servo voltage Stabilizer
- Installation and gas paneling should be free of cost at the institute