

Autoclavable lab Fermenter:



TECHNICAL SPECIFICATIONS & SCOPE OF SUPPLY:-

1. Fermentor Glass vessel :-

- Top and bottom plate Material SS304/SS316
- Total capacity 2,3,5,10 liters
- Working volume 70%

Noozles & fittings for the following :

- Top & Bottom plate ,Tie rods -4 nos
- Air Sparger
- Vent
- Pressure Gauge
- Safety valve

- Thermo well
- Cooling finger
- Sensor port(s)
- Spare port(s) with blind plug(s)

3. Agitation (stirring) arrangement :-

- Bottom driven seal-less & totally leak-proof magnetic drive agitator with single/double turbine impeller
- Industrial grade AC induction motor
- Variable frequency (ACVF) drive for motor speed variation, range 150 – 500 RPM
- Digital RPM meter for motor speed

4. Aeration control system :-

- Air compressor
- Air flow rotameter with needle valve for manual flow control setting
- Autoclavable air filter capsules, rating 0.2 micron, for air inlet & exhaust

5. Cooling-based temperature measurement & control system :-

- RTD Pt-100 temperature sensor
- Microprocessor-based digital on/off type temperature controller for cold water control
- Control range : 5 above cold water temperature upto 60°C

6. Control panel console :-

- Powder coated control panel console with electrical switchgear, panel accessories & mounting arrangement for various panel-mounted instruments
- Suitable for Trolley/Wall mounting adjacent to fermentor

7. Mounting arrangement :-

- Sturdy top mounting stand for the complete system to move.

Optional Features:

- Air compressor
- Water chiller
- Automated PH control
- Automated DO Monitoring

This model is suitable for the following applications :- (Discription)

- Demonstration, Manufacturing, Research purpose.
- Batch production on the following :-
Microbial cultures (bacteria, yeasts, actinomycetes, fungi)
- Low, medium or high conditions of the following :-
Broth viscosity, broth density & cell density.