

AIRLIFT BIOREACTOR

Airlift bioreactors are an alternative to mechanically agitated systems that reduce shear stress and heat generation by eliminating the mechanical agitator. Airlift systems are similar to bubble column reactors where air transfer, internal circulation and mixing are achieved by bubbling air. Airlift bioreactors contain an inner draft tube that creates the drafting force required for liquid circulation and possible improvement of bulk mixing. Utilization of an airlift system may also demonstrate cost savings in the elimination of a mechanical agitator and from the reduction of extra cooling requirements.

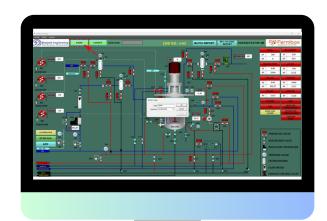


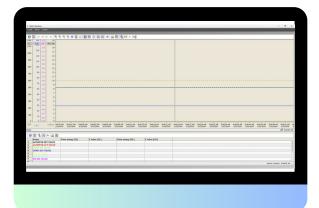
General Features



- Special design used to lightly shear sensitive cells Gas raiser achieved with draft tube or baffles
- Different wave length light source available to cultivate phototrophic microorganism
- Available in different volume Remote access via PC or Tablet
- Mean density gradient between riser and down comer regions causes continuous circulation.
- More than one no. of raiser ensures 100% gas distrubution
- Remote access via PC or Tablet Gas bubbles are available in micron or fine holes sparger







Biojenik Engineering SCADA Software

Biojenik Engineering's SCADA software is designed for real-time monitoring and control, offering a range of features to improve efficiency and ensure compliance.

- Software: Siemens WinCC.
- Simulation and Auto-Tuning: Generates random process values for simulation and auto-tuning.
- Third-Party Integration: Free OPC server for third-party device integration.
- Remote Operation: Webex-based remote operation/control of setpoints.
- Customized Interface: Personalize display to show Process, Profiles, Set Points, and Cascade.
- Batch Management: Manage batches and track them using tags.
- Access Control: Different access levels for enhanced security.
- **Dosage Tracking:** Monitor and record material consumption during production.
- Real-Time Data Recording: Automatic recording and trending of setpoints and measurement values.
- Data Export: Export data to Excel for analysis and reporting.
- Data Comparison: Compare and analyze data for improved decision-making.
- Event Alarms & History: Alerts for issues, historical data access, and ANSI-18.2 compliant alarm management.
- Audit Trail: Record-keeping compliant with 21 CFR Part 11 standards.
- **Lifetime Support:** One-time license with lifelong updates and support.

Benefits:

- Simplifies process monitoring and control.
- Increases efficiency by automating tasks and tracking.
- Ensures compliance with regulatory standards.
- Provides actionable insights with data comparison and analysis.

Technical Specification

S.No	Specifications	Details
1	Vessel	Glass : Insitu, Autoclavable and Stainless Steel
2	Total Volume	 Glass Insitu: 2.5Lts, 3.5Lts Glass Autoclavable: 1Lts, 3.5Lts, 5Lts, 7.5Lts, 10Lts, 15Lts Stainless Steel: 15Lts to 2000Lts and above as per customer requirement Micron and fine bubble gas stream
3	Vessel Geometry	• D:H ratio 1:7 to 10
4	Aeration	 O.1 micron to 20 micron (Sintered Sparger) 1mm to 3mm (fine bubble Sparger)
5	Mixing	Draft tube and Baffle
6	Light illumination	LED with different wave length adjustable intensity 0 to 100%
7	Ports and Fittings	All mechanical plugs, ports and fittings are available as standard in Bioreactor / Fermenter
8	Measurement and Control	All process measurement and control system available as applicable for the standard Bioreactor / Fermenter

Our Valuable Clients

SBiocon Fermbox FEDMENTING THE FITTING

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— CENTRE





























Biojenik Engineering Services

We offer a comprehensive range of services to ensure the smooth operation and longevity of your systems:











Process Consultancy



Technical Customized Engineering Support & Solutions Troubleshooting



Warranty

Services

AMC &

CMC Services





Parts Delivery

24x7 Customer Support

2 SERVICE

Our Certifications













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