

New Analytical Product Brochure

industrial equipment integration



Make fermentation more efficient ■ Integration of process equipment

Meet production scale requirements

Customized fermentation vessels can meet a variety of needs. Modular design allows different configurations to be added according to the growth performance and needs of plant cells, animal cells, and microorganisms. In addition, it can be connected to a small laboratory fermenter for pilot-scale fermentation. We provide technical support for pilot-scale fermentation. It can also be connected to post-fermentation treatment equipment and assist customers in establishing a complete fermentation production line, from strains to fermentation, from fermentation to post-treatment, etc.



product

Stainless steel bioreactor

Controller:	650x700x870mm(length x width x height)
power supply:	220v/380V/50HZ/60HZ
Diameter-to-height ratio:	about 1:2~2.5
Volume:	5-200000L
Material:	316L stainless steel vessel and 304 stainless steel jacket
Sterilization:	Manual sterilization in place, automatic sterilization optional
stirring:	needleless magnetic stirring/Mechanical stirring
Stirring speed:	50~1000rpm±1rpm
pH:	display range:0.00~14.00±0.01, control range:2.00~12.00±0.02
DO:	0~150%±3%, can be linked to speed , pressure, ventilation, and feeding control
Temperature:	display range: 0-150°C±0.1°C, cooling water temperature +5°C-55°C±0.2°C
Control mode:	PID intelligent fuzzy control, high control accuracy, not prone to fluctuations
Foam:	Automatic detection of foam level
Aeration:	Top surface aeration, bottom ring aeration, optional four-way gas; (Air/O ₂ /N ₂ /CO ₂ mass flow meter)
Exhaust gas:	with exhaust condenser
Pump/feed:	Variable speed peristaltic pump for feeding, such as acid, alkali and feed, etc.
Expandable	two feed, exhaust oxygen and carbon dioxide detection, etc.



characteristic

The Baoxing cells F3G series products provide strong support for teaching demonstrations and microbial fermentation processes with their excellent performance and advanced design concepts.



Design optimization and precision manufacturing

At the beginning of the design of the new generation of products, the combination and value of the paddles in the vessel have been repeatedly optimized by CFD to pursue better theoretical results. In the processing of each component, precise laser welding technology is used to ensure the maximum realization of the no-dead-angle design. The vessel cover adopts grinding and polishing technology, which not only improves the texture, but also greatly enhances the oil resistance. The various interfaces on the vessel cover are clearly marked, providing great convenience for users.

Humanized detail design

The use of colored wires such as power cables and data transmission cables facilitates functional distinction; the design of hidden connectors for each functional cable prevents accidental contact; the specially designed cable organizer neatly divides the equipment cables; the waterproof connector and front USB interface design all reflect the humanized care of the product.

More convenient

The control system can be connected to a host computer to facilitate real-time transmission of bioreaction process detection parameters to the computer for analysis. The touch screen has a built-in Internet of Things function, allowing users to view bioreaction data in real time even at home. The internal storage of the device can save at least 1,000 batches of bioreaction data, and historical data can be viewed. The software can set at least 3 levels of operation permissions to ensure the security of process data.



High-definition touchscreen with embedded installation

Baoxing cells F3G series adopts 13.3-inch full-view HD LED touch screen, which has the characteristics of embedded installation, which improves the convenience of operation and cleaning. The tempered glass outer screen is firm and durable, which fully improves the beauty of the product. The viewing angle design ensures clear visual effects from any angle, which is especially suitable for teaching demonstrations.



product	Parallel comparison of bioreactors with ex situ sterilization
Controller	480x320x665mm(L*W*H)
power supply	220v/50HZ
Diameter-to-height ratio	About1:1.4-2.2
volume	1L, 1.5L, 2L, 3L, 5L, 7L, 10L, 15L
Material	316L stainless steel vessels cover and bottom + borosilicate glass body
Sterilization	Off-site autoclave sterilization
Stirring	No-thimble magnetic stirring / mechanical stirring
Stirring speed	50~1000rpm±1rpm
pH	Display Range:0.00~14.00±0.01, Control scope:2.00~12.00±0.02
DO	0~150%±3%, Can be linked with stirring, pressure, aeration and feed control
temp.	Display range:0-150°C±0.1°C, cooling water temperature: +5°C-65°C±0.2°C
Foam	Automatic detection of foam level
Control method	PIDintelligent fuzzy control, high control accuracy, not prone to fluctuations
Aeration	adopt top surface ventilation and bottom ring ventilation, optional four-way gas (Air/O ₂ /N ₂ /CO ₂ mass flow meter)
exhaust	With exhaust condenser
Pump/feed	Fixed-speed or variable-speed peristaltic pump for adding acid, alkali, defoamer and feed, etc.
Scalable	Feed weighing system, two way feed, online detection of methanol and ethanol content, exhaust oxygen and carbon dioxide detection, etc. *Can be customized according to needs.



The inside of the vessel is coated to effectively prevent the culture medium from sticking to the wall. The stainless steel material of the vessel body is electrolytically polished and electroplated to ensure the durability and cleanliness of the equipment. The scientific design, laser welding and electroplating of the stirring shaft and blades all reflect the exquisite manufacturing process. The electroplating and spray painting treatment of the cabinet and vessels base makes the equipment easy to clean and beautiful in appearance. The electric baking and spray painting treatment of the sub-base makes the equipment easy to clean and beautiful in appearance.

Comprehensive upgrade of manufacturing technology

product Parallel comparison of bioreactors with ex situ sterilization

Controller	670x1570x1700mm(L*W*H)(Contains a feed bottle shelf)
power supply	220v/50HZ
Diameter-to-height ratio	About 1:1.4-2.2
volume	1L, 1.5L, 2L, 3L, 5L, 7L, 10L, 15L
Material	316L stainless steel vessels cover and bottom + borosilicate glass body
Sterilization	Off-site autoclave sterilization
Stirring	No-thimble magnetic stirring / mechanical stirring
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Thank you for reading this Biopharmaceutical Equipment brochure. We are committed to providing you with high-quality, high-performance equipment to meet the growing needs of the biopharmaceutical industry. Our products combine advanced technology and strict quality control to improve your production efficiency and ensure product safety.

If you have any questions or need further information about our equipment, please do not hesitate to contact our customer service team. We look forward to establishing a long-term relationship with you to jointly advance the development of the biopharmaceutical industry.

Thank you again for your attention and trust, and I wish you greater success in your future work!