



Full Series of Bioreactors



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Production Workshop

About us

Innova Bio-Meditech is one of the leading global providers of laboratory and medical devices. Firmly committed to our mission of “sharing innovative bio-meditech solutions with the world”, we are dedicated to innovation in the fields of Biology Project, Life Science, Pharmacy Industry and Medical Treatment.

Innova Bio-Meditech possesses a sound distribution and service network with business partners in North and Latin America, Europe, Africa and Asia-Pacific etc. We have built up a well established R&D, manufacture network with 3 centers in Beijing, Qingdao, and Shanghai. Inspired by the needs of our customers, we adopt advanced technologies and transform them into accessible innovation. This means constant effort and research, in order to more fully understand the developments of the market, produce constantly upgraded product ranges by adding new products year after year.

“Secure Quality, Continuous Innovation”



Offline Sterilization



Type	INO BIO-1/2/3/5/7BG	INO BIO-3/5/7JG
Total Volume	1/2/3/5/7L	
Vessel	316L Stainless Steel+Borosilicate Glass	
Stirrer	Bottom Driven by Magnetic Coupling	Top Driven
Sterilization	In Autoclave	
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration	
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂	
Controller	BIOWIT™ –Process Controller,	

In Situ Sterilization Fermentor



Type	INO BIO-5/7/10BGZ	INO BIO-5/7/10JGZ
Total Volume	5/7/10L	
Vessel	316L Stainless Steel+Borosilicate Glass	
Stirrer	Bottom Driven by Magnetic Coupling	Top Driven
Sterilization	In situ Sterilization (Steam Source External)	
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration	
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂	
Controller	BIOWIT™ –Process Controller	

Animal Cell Fermentor



Type	INOBIO-3/5/7BGC	INOFE-10/15/20/30/50/100BSC
Total Volume	3/5/7/10L	10/15/20/30/50/100L
Vessel	316L Stainless Steel+Borosilicate Glass	316L Stainless Steel
Stirrer	Magnetically Driven (Cell Lift Impeller, Marine Blade Impeller or Pitched Blade Impeller for option)	
Aeration	Air, O ₂ , N ₂ , CO ₂ delivery system with flow rate control	
Sterilization	Insitu Sterilization (Steam Source External)	
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure, 4-Gas System	
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂	
Controller	BIOWIT™ –Process Controller	

Plantcell Fermentor With Illumination



Type	INOBIO-3/5/7/10BGG	INOFE-20/30/50/100BSG
Total Volume	3/5/7/10L	20/30/50/100L
Vessel	316L Stainless Steel+Borosilicate Glass	316L Stainless Steel
Stirrer	Bottom Driven with Magnetic coupling (Top Driven and Airlift for option)	
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure	
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂	
Controller	BIOWIT™ –Process Controller	
Features	Magnetically driven and powerful agitator without mechanical seal, suitable to cultures conducted in a long period and with ease of cleaning.	

Top Driven



Type	INOFE-10/15/20/30/50/100/300/500/800/1000JS
Total Volume	10/15/20/30/50/100/300/500/800/1000L
Vessel	316L Stainless Steel
Stirrer	Top Driven
Sterilization	In situ Sterilization (Steam Source External)
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂
Controller	BIOWIT™ –Process Controller

Magnetically Driven



Type	INOFE-10/15/20/30/50/100BS
Total Volume	10/15/20/30/50/100L
Vessel	316L Stainless Steel
Stirrer	Driven by Magnetic Coupling
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure
Sterilization	In situ Sterilization (Steam Source External)
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂
Controller	BIOWIT™ –Process Controller

Multifunctional Fermentor



Total Volume	INOFE- 5/7/10L		10L ~ 2KL
Vessel	316L Stainless Steel+Borosilicate Glass		316L Stainless Steel
Stirrer	Driven by Magnetic Coupling or Top Driven		
Sterilization	In Autoclave or In situ Sterilization (Steam Source External)		
Basic Features	Temperature, rpm, pH, DO Antifoam, Feed, Aeration, Pressure, Weigh Culture Medium, Weigh Feed, Exhaust O ₂ & CO ₂ , Offline Operation: CER, OUR,RQ,KLa		
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ &CO ₂		
Controller	BIOWITT™ –Process Controller		
Features	Automatic control and monitor rpm, temperature, pH, DO, foam, air flow rate, weight exhaust O ₂ & CO ₂ , offline parameter (Bacteria number, Base, Nitrogen, Valence)could be input manually.		
With Tail Gas Analysis System (Multichannel)	Measuring CO ₂ online(Auto), Range(Modifiable): 0~5% ± 0.5% O ₂ online(Auto), Range(Modifiable): 0~5% ± 0.5%		

Auto Sterilization



Type	Applicable to Any Type of Fermentor
Sterilization	Auto in situ Sterilization (Steam Source External)
Controller	BIOWITT™ –Process Controller
Application	All Fermenters

Cover Lifter



Type	Applicable to Any Type of Fermentor
Lift	Lift cover for 500mm by electric or pneumatic system
Controller	BIOWITT™ –Process Controller
Application	50–500L

Solid Fermentor



Type	INOFE-20/30/50/100/200/500/1000/2000SS
Total Volume	20/30/50/100/200/500/1000/2000L
Load Rate	20 – 60%
Vessel	316L Stainless Steel
Stirrer	Rolling Ax.Or Rolling vessel
Sterilization	In situ Sterilization (Steam Source External)
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure
Controller	BIOWITT™ –Process Controller
Features	Equipped with large viewing port
Application	For pilot experiment.

Airlift Fermentor



Type	INOFE-10/15/20/30/50/100QS
Total Volume	10/15/20/30/50/100
Load Rate	75 ~ 90%
Vessel	316L Stainless Steel
Stirrer	Airlift (Dia.: H=1.6 ~ 8)
Sterilization	In situ Sterilization (Steam Source External)
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂
Controller	BIOWIT™-Process Controller
Features	Large viewing port, low shear.

Reactors Enzyme-catalyzed Reactions



Type	INOBIO-3/5/7/15/30/50M
Total Volume	3/5/7/15/30/50L
Vessel	3/5/7L: 316L Stainless Steel+Borosilicate Glass
Stirrer	Top Driven
Basic Features	Temperature, rpm, pH, Feed, Aeration
Advanced Features(option)	DO, Antifoam, Level
Controller	BIOWIT™-Process Controller
Features	Specific Air-distributing ring make liquid and air mix completely; bottom webby for recycling Enzyme catalysis

Biotrickling Filter

Multilayer Coupled Biotrickling Filter Reactor



This reactor includes a set of gas distribution system, and two sets of purification towers (multilayer coupled biological trickling reactors)

1. Gas distribution system: Control high concentration waste gas flow accurately by mass flow meter. Connect two gaseous pollutants, concentrations of each pollutant: 10–1000mg/M³.
2. Main purification tower: Each tower contains three vessels with packing material. The vessel is made of borosilicate glass, and has a jacket for temperature control. There is an inlet and an outlet for circulating fluid, a sample port for packing materials, as well as an inlet and an outlet for gas sampling on the side of each vessel. There is a water inlet and a water outlet in the vessel jacket.
3. Control system: Real time detection and automatic control for variable parameters, such as: temperature (15–45°C, accuracy: 1°C), pH (3–10), air flow (1–50L/min), and waste gas residence time (12–90s).
4. Exhaust purification system: The pipeline is made of stainless steel tube. The effective volume of adsorption unit is 30L.

Coupled Chemical Oxidation Biotrickling Filter Reactor



This reactor contains two towers, which shared a touch screen, a gas distribution system and a exhaust gas absorption system. Each tower is assembled from two vessels with packing materials. Each vessel has its own circulating water. The pollution gases come from the bottom of the tower, and finally flow out through the top of the tower.

1. Each vessel equipped with a sampling port for packing material, an inlet and an outlet for gas sampling, a microporous spray device, and a well-distributed gas inlet device.
2. Each vessel equipped with a temperature probe and a pH probe. Real time detection and automatic control for variable parameters, such as temperature (15–45°C, accuracy: 1°C), pH (3–10), air flow (1–50L/min), and waste gas residence time (12–90s).
3. In the center of tower there is a glass casing tube, in which a light can be installed.
4. Gas distribution system: Controls high concentration waste gas flow accurately by mass flow meter.
5. Exhaust gas absorption equipment (optional)
6. The pipeline is made of stainless steel tube. The effective volume of adsorption unit is 30L using activated carbon.

Multiple Glass Fermentor System



Type	INO BIO-1/2/3/5/7/10GB-X	INO BIO-3/5/7/10JG-X
Total Volume	1/2/3/5/7/10L-X	
Vessel	316L Stainless Steel+Borosilicate Glass	
Stirrer	Driven by magnetic coupling	Top Driven
sterilization	In autoclave	
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure	
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂	
Controller	BIOWIT™-Process Controller	



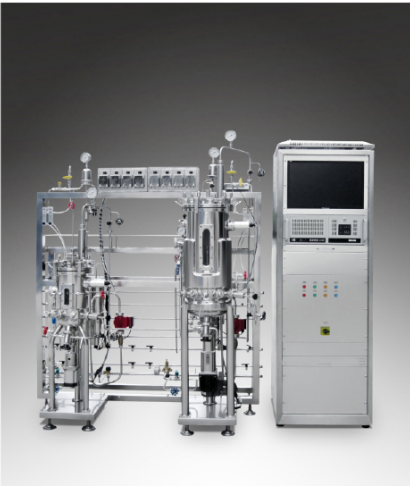
Multiple Fermentor System



Features	Composed of 2 ~ 8 fermentors
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure
Advanced Features (option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂
Controller	BIOWIT™ –Process Controller
Application	Screen of medium, improvement of process control, validation of strain performance



Multi-step Fermentor System



Features	Innova Series Multi-Step Fermentors System is composed of fermentors and Multi-degree seed fermentor, it could be composed of any type fermentors, any fermentor of this system could be used separately; seed-transfer pipeline could be sterilized separately; unit rack; center console.
Basic Features	Temperature, rpm, pH, DO, Antifoam, Feed, Aeration, Pressure
Advanced Features(option)	Level, Weigh Feed, Multi-Feeds, Methanol & Ethanol, Exhaust O ₂ & CO ₂
Controller	BIOWIT™ -Process Controller
Application	For pilot experiment and small-scale production.

Bio-Process Controller

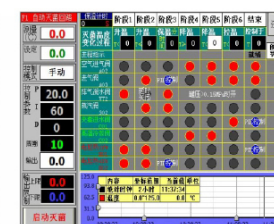
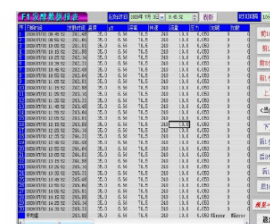
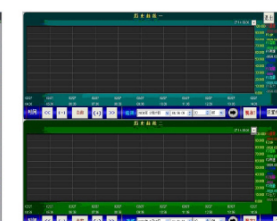
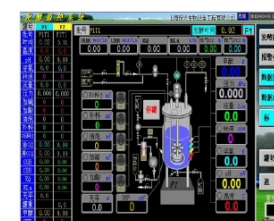
Item	Series	7000 Series	3000 Series
Appearance			
Control Unit		PLC	PLC
Interface		10.1" touch screen, with port for keyboard, mouse and printer	19" VGA, Industry PC, with port for keyboard, mouse and printer
Data Storage		5000 Hours	Unlimited
Controllable Features		Online: Temperature (including auto sterilization), RPM, pH, DO, Muti-Feeds, Antifoam, Aeration, Pressure, Culture medium, O ₂ , CO ₂ , Methanol, Ethanol, Bacteria number (Other features could be customized) Offline: OUR, CER, RQ, KLa, EO ₂ , ECO ₂ , Bacteria number, Base, Nitrogen, Valence etc. Tendency curve, History curve, Data form, Alarm, Data store by batch, Password access etc.	
Recommend /Max of connection		1 / 2	1~4 / 4
Fermentation Analysis System		Connect upper computer with LAN, one computer for several controllers	Built-in Fermentation Analysis System, connect upper computer with LAN, one computer for several (up to 32) controllers

Item	Series	9000 Series	7X Series & 9X00 Series
Appearance			
Control Unit		PLC	PLC
Interface		10.1" touch screen, with port for keyboard, mouse and printer	10~12" touch screen, Industrial computer with port for printer
Data Storage		Unlimited	Unlimited
Controllable Features		Online: Temperature (including auto sterilization), RPM, pH, DO, Muti-Feeds, Antifoam, Aeration, Pressure, Culture medium, O ₂ , CO ₂ , Methanol, Ethanol, Bacteria number (Other features could be customized) Offline: OUR, CER, RQ, KLa, EO ₂ , ECO ₂ , Bacteria number, Base, Nitrogen, Valence etc. Tendency curve, History curve, Data form, Alarm, Data store by batch, Password access etc.	
Recommend /Max of connection		1 / 2	1~6/Unlimited (theoretically)
Fermentation Analysis System		Built-in Fermentation Analysis System, connect upper computer with LAN, one computer for several (up to 32) controllers	Built-in Fermentation Analysis System, connect upper computer with LAN, one computer for several (up to 32) controllers

Distributing Control System



BLOWIT™-DCS Distributing Control System has the features such as central management and distributing control. Control and data collection is finished by root controller, the host computer monitors the entire fermentation process in time , record and analyze data and prints report forms. Due to distributing control, root controllers are separated which reduce probabilit of system crash because of local fault. BLOWIT-DCS is suitable for fermentation workshop or pilot experiment.



Customer Site



Company has many technical personnel who are specialized in such fields as fermentation engineering, biochemical industry, automation control, computer, mechanical engineering, etc. and have rich experience in fermentation engineering design and field construction. While helping our users to solve various problems in production and processes and providing whole-set process solutions, we are making our contributions to the improvement of industrialization capacity of China's biotechnological field through our excellent product quality and services of high added value.



Customer Site



Company provides complete biopharmaceutical upstream and downstream process system equipment and comprehensive solutions. We are able to meet customers' different process requirements for cell culture or microbial fermentation, including culture medium preparation, seed expansion, cell culture and fermentation, harvesting and clarification, buffer solution preparation and storage, chromatography system, ultrafiltration system, etc., so as to help customers to realize high-standard and high-efficiency technological processes.



Cutomer Site



We have practical experience in microbial fermentation and powerful process and technology equipment capacity, advanced equipment manufacturing capacity, comprehensive project organization and construction capacity and project commissioning and personnel training ability. Currently, we have many complete examples in the biopharmaceutical fermentation field and enjoy a good reputation.



Customer Site



We have the ability and experience in manufacturing large-sized pressure vessels, especially the manufacturing of stainless steel vessels. We have accumulated rich experience in such aspects as equipment manufacturing,

surface treatment (matte treatment, mechanical polishing, pickling and passivation). Meanwhile, we have standard production workshops and have the ability to carry out automatic manufacturing and produce various special pressure vessels.



Valve



● Angle seat valve



● Angle seat valve



● Angle seat valve



● Solenoid valve



● Diaphragm valve



● Diaphragm valve



● Diaphragm valve



● Sample Valve



● Diaphragm valve



● Diaphragm valve



● Diaphragm valve



● Diaphragm valve



● Tank bottom valve



● Tank bottom valve



● Tank bottom valve



● Hydrophobic device

Fittngs



● Impeller



● Impeller



● Impeller



● Impeller



● Impeller



● Impeller



● Impeller



● Peristaltic pump



● PH Sensor



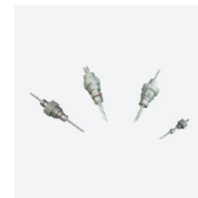
● DO Sensor



● Electrode sheath



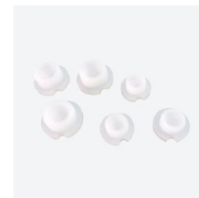
● Transmitter



● Feeding needle



● pH Controller



● Silicone plug



● Filter element

More Products

