



version 1.0

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2023-2024 Catalogue

SIP Fermentation Systems (Pilot)



Innovative Life Sciences Tools

SIP (Pilot Scale) Fermentation System / Bioreactor

The 30L / 50L SIP Pilot Scale Fermentation Systems allow you easily to run small volume of fermentation experiments. These systems are perfectly suitable for small up-scaling in the academic labs. The easy programmability and application of our Winpact software let you find your peace of mind regarding operation procedures. System comes with rolling wheels for mobility. All materials are made from the highest standard to ensure optimization of your fermentation process. A variety of optional devices are also available for selection to maintain an optimum performance.

30L / 50L System



FS-50L



Motor
Manual or automatic control of constant agitation speed

Control Station
Large screen and graphical user interface

FS-50L



Peristaltic Pump
Uses four Watson Marlow built-in peristaltic pumps for all your feeding needs

Stainless Steel Vessel
Special designed heating jacket provides better heating efficiency

FS-30L

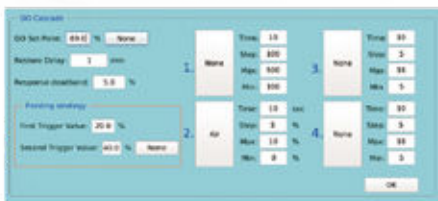
* ASME standard



Features

- Wide range of vessel selection, from 30L to 50L working volume
- Colorful interface at 10.4" or above
- Fully automated process with remote monitoring
- 15-step automatic program setting
- Orbital welding ensures minimal residue buildup
- Highest grade construction with 316L stainless steel
- Jacket design provides astounding temperature control
- Exhaust pressure relief valve for maximum safety precaution
- Multiple safety design integration for peace of mind operation
- Remote monitoring & controlling software free from purchase
- Password protection for multiple users with customized special requirements
- Various optional devices for process optimization and needs
- Ethernet communication with Winpact SCADA software, and IP address

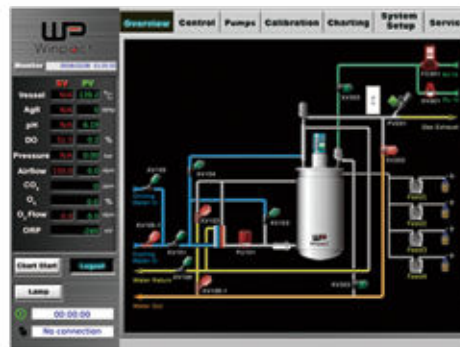
Capacity	30L	50L
Total Volume	42L	67L
Working Volume	30L	50L
Vessel And Jacket Maximum Working Pressure	3 bar (43.5 psig) / 4 bar (58 psig)	
Type	Double layered fully enclosed capsule-type tank	
Material	Direct contact to medium - 316L stainless steel; all others - 304 stainless steel	
Surface Finish	Interior polish ≤5 Ra/in (0.6 μm) Mechanical polishing; Electropolish optional Exterior polish ≤32 Ra/in (0.8 μm) MeSize(including manual lifter)	
Size(including manual lifter)	130 x 95 x275 cm	130 x 95 x295 cm



Four-staged DO cascade



15-Step programmable PID control



Immediate visualization on operation overview



Easy and intuitive operation for manual and sequence control



One-Touch automatic sterilization for vessel and system tubing



Online system calibration with system feedback



System expansion with various optional devices

* All images are for reference only, actual products might differ from the pictures above.
* Technical specifications subject to change without notice.

SIP (Pilot Scale) Fermentation System Bioreactor



100L System

(Approx. 170Wx130Dx245H cm, Open distance of headplate lift : 60 cm)



Harvest valve
Sanitary level
diaphragm type

Detachable aseptic
feeding device

Mechanical seal with auto generated
lubricant and automatic cooling device



Pump

200L System

(Approx. 200Wx150Dx330H cm, Open distance of headplate lift : 40 cm)

* Customized vessel is available

Winpact offers pilot and production scale bioreactor/fermentation systems for all of your large scale fermentation needs. Our standard SIP Production Scale Fermentation System is constructed with BPE standard piping with orbital welding and top grade automatic valves to allow stable and repeatable result for every experiment. All of our features are designed to provide a high level of productivity and automation while maintaining a low operation cost. All other great features including total sterilization process, mechanical seal break indication, golden vessel ratio design and complete selection of optional devices for optimizing the fermentation process.

Features

- Wide range of vessel selection, from 100L to 1000L working volume
- Multi-lingual 12" colored graphical control interface
- Fully automated process with remote monitoring
- 15-step automatic program setting
- Orbital welding ensures minimal residue buildup
- Highest grade construction with Stainless Steel SUS316L
- Hive jacket design provides astounding temperature control
- Exhaust pressure relief valve for maximum safety precaution
- Multiple safety design integration for peace of mind operation
- Remote monitoring & controlling software free from purchase
- Password protection for multiple users with customized access levels
- Various optional devices for process optimization and needs
- Ethernet communication with Winpact SCADA software, and IP address



- Pneumatic valves for accurate and automatic control
- Orbital welding provides top quality



Monitor page for operation overview



Automatic and manual operation



Automatic sterilization process



Online system calibration

SIP (Production Scale) Fermentation System / Bioreactor



500L System
(Approx. 300Wx1900Dx360H cm)



1000L System
(Approx. 330Wx340Dx450H cm)

5000L System



*For system over 200L, please contact Major Science or authorized distributors for more information.

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