

In situ sterilizable Fermentor

Biosis SP(Plant)

- In situ sterilizable pilot scale fermentor ; for bio reaction or bio response such as microbial fermentation, conversion and enzyme bioconversion.
- Applicable to the special culturing processes such as tissue culture, animal cell culture and insect cell culture with the attachment of additional devices.
- The sterilization in place procedure done automatically by using the external steam supply and conveniently changeable of the parameters and sequences on the basis of user's experience or designated data.



Vessel : 1Ton ~ 35Ton
Speed : 50RPM ~200RPM

Features

- Intelligent 17" wide touch screen fermentation controller
- High density fermentation : DO-stat, pH-stat, Exponential feeding, etc
- Remote control by PC software Data Logging system
- Automatic flow control : mass flow controller and data logging system
- User's programmable sterilization process program : user password, valve step, sterilization time, pressure and temperature
- Reliable operation due to the automatic controllers
- Intelligent self diagnostic system to maintain fermentation process from start to the end : Diagnostic, Setup, Dead Band, Offset, Warning, Feeding condition
- IQ/OQ documentation compliant to cGMP level

Specification

| | | | | | | | |
|--------------------|---|--|--------|--------|--------|--------|---------|
| Vessel | Total Vol. | 1,000L | 1,500L | 2,000L | 3,000L | 5,000L | 10,000L |
| | Working Vol. | 700L | 1,000L | 1,500L | 2,000L | 3,500L | 7,000L |
| | Dia:Height | 1 : 2 | 1 : 2 | 1 : 2 | 1 : 2 | 1 : 2 | 1 : 2 |
| Agitation | Motor | Top mount type AC geared motor | | | | | |
| | Range | 50~300rpm ± 1rpm | | | | | |
| | Impellers | Standrad : Rushton turbine impeller and Foam breaker (316L stainless steel) Optional : any kinds of blade type impeller | | | | | |
| | Control | Inverter | | | | | |
| Materials & Finish | Vessel | Using 316L stainless steel and polishing | | | | | |
| | Piping | 316L stainless steel to prevent contamination | | | | | |
| | O-ring / Gaskets | Viton or silicone material is used for the O-ring and the EPDM is used for gasket. | | | | | |
| Temperature | Sensor | RTD(Pt-100) | | | | | |
| Power Supply | Controller system : 220V 50/60Hz, single phase Fermentor system : 440V~220V 50/60Hz, single and/or three phase | | | | | | |
| Data Storage | pH, DO, Pressure, Temperature and Agitation speed | | | | | | |

※ Please note that technical specifications subject to change.