

**MODULAR, FLEXIBLE & USER FRIENDLY**



**GLASS INSITU FERMENTOR**



**STAINLESS STEEL INSITU FERMENTOR**

# SF Series Fermentors/Bioreactors/In-situ Reactors

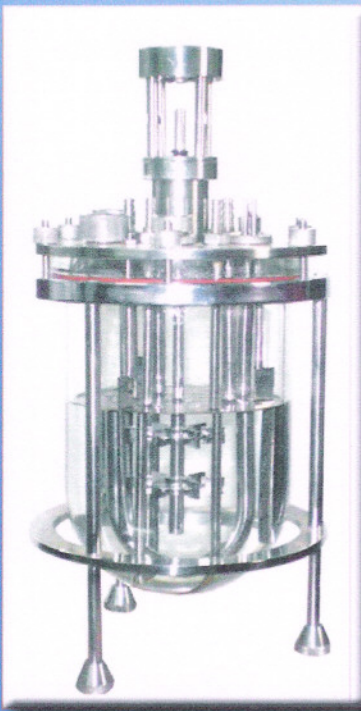
## Control Unit:

- Elegant Powder Coated Housing
- Digital Control for pH, DO, Temperature, Agitation and Peristaltic Pumps
- Calibration function for pH, DO
- Foam Control
- Cooling Water Valve
- Sparging Air Valve
- Agitation Speed 20 – 1000 RPM



## Reactors/Vessels:

- Round bottom Borosilicate Glass Vessel
- 3 Ltr., 5 Ltr., 7 Ltr. Capacity
- Mirror Polish S.S. 316L Head Plate
- Batch, Fed batch & continuous Vessels
- Fully Autoclavable
- Unique Agitation Assembly
- Ruston Propellers
- Other type of Propellers available on request
- Micro Air Sparger Assembly.



## Optional Accessories:

- Additional Variable Speed Peristaltic Pumps (2-20ml, 50-150ml) with digital Display
- Online Data recording with PC interface for online view of trend graph & data storage.
- Classic Model: Data Acquisition system with Colour Graphic LCD for ON/OFF line Data acquisition, Memory Card for data storage to read it on PC link software.
- Chiller-cum- Circulator for below ambient Temp.
- DO control with DO Sensor etc.



# SF Series FERMENTOR

Modular system - User friendly, flexible, reliable & easy maintenance Fermentors

## BIO CONTROLLER'S Specifications:

<b>Agitation</b>	Stirrer Motor PMDC Speed Range - 20-1000rpm Rpm display Accuracy 1rpm
<b>Temperature</b>	PID control Temperature Range Ambient+5 to 60°C Accuracy +/-0.01°C Uniformity + / -0.4°C Digital Display, Simultaneous display of SV & PV Feather touch keypad
<b>pH Display</b>	PID control Larger LCD display Feather touch key pad pH Range 0-14, Accuracy +/- 0.01, Uniformity +/-0.1 Auto calibration, BNC connector
<b>BIO SENSORS</b>	RPM - Tacho Feed back Method P+100 thermal sensor Length - 210mm  pH sensor Gel filled autoclavable 220mm length 12mm dia
<b>ACTUATORS</b>	Rotameter 0.5-5lit/min Air pump - oil free medical grade
<b>Power Supply</b>	Voltage: 230 VAC /50khz Power Consumption: 1KW Single / Three Phase

## REACTOR ASSEMBLY Specifications:

<b>Culture Vessel</b>	3lit, 5 Lit & 7 Lit total volume Dished bottom Borosilicate Glass vessel mounting stand with safety ring
<b>Head Plate Assembly</b>	16 Port head plate Diameter 200mm & thickness 7mm Material - SS 316L Micro polished 6-head plate fixing screws
<b>Mixing Assembly</b>	Stirrer Assembly with Shaft. Contamination free with Lip seals & Viton V- rings, 2 Smooth bearings, 2- Height Adjustable Ruston Impeller with 6 blades each, 3 Baffles - No Welding joints Material SS316L
<b>Aeration</b>	Air sparger - L - type with Micro Pores Air outlet with 0.2µ filter
<b>Sampling Addition</b>	6mm Dia sample pipe Innoculum port with septum.
<b>Heat Exchanger</b>	Thermopocket for pt100 sensor. Heating finger U-tube for cold water circulation
<b>Holders</b>	Nipple M3/8xpsp for Ph Sensor.

All material contact with media / culture  
designed with SS316L

Marketed and Serviced By:



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