



MODEL MPF

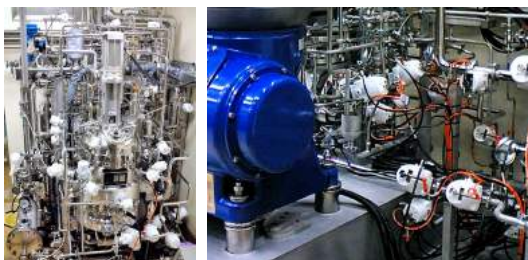
PILOT PLANT SCALE FERMENTOR



It's Biotechnology that Revolutionizes Human Life

High Quality Products Tank size

Various tank sizes are available for 100,200,300,400,500 liters, 1, 2 , 3, 5, 10 m³ as standard model, another tank sizes are also available according to the customer request.



Harvest port

The harvest port with a SIP connected to the vessel out-let port. The harvest valve and SIP port will be enable to complete free draining



Foam Probe

Conductivity type Foam Probe are insulated the vessel head plate and in the exhaust piping to detect the presence of foam, The foam control system will be executed by PLC.

Manhole & Circular Lighting Window

All vessels will have sanitary Manhole and circular lighting window on the upper side of vessel for observation of the fermentor content

Exhaust Condenser

An exhaust condenser made of stainless steel 316L the chamber of coolant will be installed in an exhaust line of the fermentor to reduce evaporation losses.

Baffle Plate

316L stainless steel baffle are provided to enhance mixing and promote heat transfer. Baffle support assemblies are designed to facilitate clean and drain ability.

All the piping Module

All piping for steam, air and water are stainless steel, which are located in a skid-mounted piping module, Filter, control, and measurement devices are piped-in. The construction material of the components varies with service. Piping is installed on skid in a mane that permits expansion and contraction during sterilization / cool down cycles, without stressing piping and attached fittings or instrumentation.

Hand valve, pressure regulators, filter and gauges will be accessible and identified for each operation

Piping Support Skid

The stainless steel support frame is designed to support the vessels and their utility piping process. Piping and fittings are 316L stainless steel with 400 grit electro polish internal finish and 200 grit external finish.

Process piping is fully drainage with on dead-legs.



STANDARD SPECIFICATION

MPF-N (TOP DRIVE TYPE)

Capacity	Vessel Dia	Vessel depth	Impeller dia.	Motor	Agitation speed	Temp range	Heater cap.	Aeration rate
(L)	mm	mm	mm	kw	rpm at 50Hz	°C	kW	NI/min
100	450	630	180	2.2	60~360	5°C above water supply temp. to 50°C	2.4	10~100
200	550	850	200	3.7			20~200	
300	650	900	240	3.7			30~300	
400	700	1040	260	5.5			40~400	
500	750	1140	280	5.5			50~500	
1000	1000	1280	330	11	4.2		100~1000	
2000	1250	1640	415	30	60~300		200~2000	
3000	1400	2000	470	37			6	300-3000
5000	1700	2300	570	37			9	500~5000
10000	2000	3150	660	45	45~230		9	1000~10000

MPF-U (BOTTOM DRIVE TYPE)

Capacity	Vessel Dia	Vessel depth	Impeller dia.	Motor	Agitation speed	Temp range	Heater cap.	Aeration rate
(L)	mm	mm	mm	kw	rpm at 50Hz	°C	kW	NI/min
100	400	630	150	3.7	100~500	5°C above water supply temp. to 50°C	2.4	10~100
200	550	850	184	3.7			20~200	
300	650	900	216	3.7			30~300	
400	700	1040	230	5.5			40~400	
500	750	1140	250	5.5			50~500	
1000	1000	1280	330	11	60~360		4.2	100~1000
2000	1250	1640	415	22			200~2000	

FLEXIBILITY TO SPECIAL DEMANDS

We are pleased to meet the various kinds of customers demand both for hardware and software.