



From designing new systems to duplicating or expanding systems, we have the expertise to build your next fermentor to your exact specifications. Use this Selection Guide to decide on the features you would like included on your system. Please contact a DCI-Biolafitte sales engineer to answer your questions and provide you with pricing information. If you need solutions beyond our standard bioreactor selections, we'll work with you to develop a custom solution for your specifications.

Vessel, Agitation & Accessories



Code	Vessel Capacity (Working / Minimum / Total)	Vessel Dimensions ¹ (Depth x Width x Height)	Weight Empty	Select
F01	10 L / 5 L / 17 L	950 x 950 x 1950 mm	175 kg	
F02	20 L / 8 L / 30 L	950 x 1000 x 2200 mm	185 kg	
F03	30 L / 12 L / 40 L	950 x 1050 x 2300 mm	200 kg	
F04	60 L / 24 L / 100 L	1300 x 1500 x 2550 mm	350 kg	
F05	100 L / 40 L / 150 L	1350 x 1550 x 2750 mm	480 kg	
F06	150 L / 60 L / 200 L	1350 x 1550 x 3000 mm	520 kg	
F07	200 L / 80 L / 275 L	1400 x 1600 x 3350 mm	550 kg	
F08	300 L / 120 L / 400 L	1450 x 1750 x 3900 mm	650 kg	

Code	Version	Select
M	Semi-automatic	
A	Full automatic	

Code	Design	Select
S	Standard (S type)	
G	GMP (G type)	

Code	Vessel, Agitation & Accessories Options	Select
00	Oval sight glass	
01	Vessel insulation	
02	Agitation with magnetic coupling*	
20	Resterilizable gas filters	
24	Additional resterilizable product addition line	QTY: _____
25	Resterilizable product transfer line	QTY: _____
26	CIP devices	
27	Independent resterilizable sampling valve	
28	Oxygen line with mass flow meter	
29	CO ₂ or NH ₃ line with rotameter and automatic valve for pH control	
30	Nitrogen line with rotameter	
31	Exhaust gas condenser	
32	Double filtration on gas exhaust line	
33	Resterilizable bottom valve for harvesting*	

¹ Dimensions listed without control cabinet

* Included in base configuration for G type equipment

Additional equipment (peristaltic pumps, reagent flasks, autoclavable or SIP vessels, scales, CIP units) and customized design for specific applications and biological containment are also available on request.



Temperature Control

- Cultivation temperature automatically controlled by injection of plant hot or cold water into jacket
- Steam sterilization of empty vessel and media

Code	Temperature Control Options	Select
21	Jacket circulating pump	
22A	Cooling via chilled water circulation in jacket	
22B	Cooling via glycol water heat exchanger*	
23A	Heating via steam heat exchanger	
23B	Heating via electrical heater*	

* To be combined with option 21

Instrumentation

- Automatic control of temperature, speed, and pH
- Air flow-rate manually controlled via rotameter up to 2 VVM

Code	Vessel, Agitation & Accessories Options	Select
40	Air mass flow controller in replacement of the rotameter	
41	Automatic control of the head space pressure	
42	DO measurement and control	
43	Foam level control	
44	Vessel low level switch	
45A	Vessel weight measurement (Load Cells)	
45B	Continuous level measurement	
46	Temperature measurement on drain lines	QTY: _____
47	Feed back control of valve position	QTY: _____
48	Feed back control of agitator speed	
49	Printer	
50	Control of nutrient flow rate	
51	Optical density measurement	
52	O ₂ and CO ₂ exhaust gas analyzer	

Neptune Control System

- Micro PLC or PC based control with laptop or desktop interface or optional industrial touch screen panel
- Up to 32 configurable control loops for a wide range of process parameters
- Control types include PID, digital on/off, and cascade mode for advanced control strategies

Advanced Version

- Customized user access module complying with 21CFR Part 11 (iFix or InTouch versions only).
- Synoptic overview presenting all online measured values, actuator status, phase running, and alarms.
- Parameter editing module allowing operators to adjust set points and PID settings.
- Audit trail mode capturing all actions made with the software and providing a SQL database record of a batch with customized report generation (iFix or InTouch versions only).
- Trend module allowing data display in the form of trend or historic graphs.
- Profile module for controlling set points via imported or plotted data.

Expert Version

- Calculation module providing a means to do automatic calculations (RQ, OUR) in real-time. Values can then be logged or implemented as a new process control variable.
- Strategy module enabling a stepwise, interactive, and repeatable process definition.
- Additional features (such as secure SCADA server networked system), remote supervision, and maintenance on request.

Code	SCADA Configuration	Select
60La	Neptune Lab in Advanced version	
60Le	Neptune Lab in Expert version	
60Fa	Neptune SCADA iFix in Advanced version	
60Fe	Neptune SCADA iFix in Expert version	
60Ta	Neptune SCADA InTouch in Advanced version	
60Te	Neptune SCADA InTouch in Expert version	