

Automated Filling & Draining of a Nunc Cell Factory™

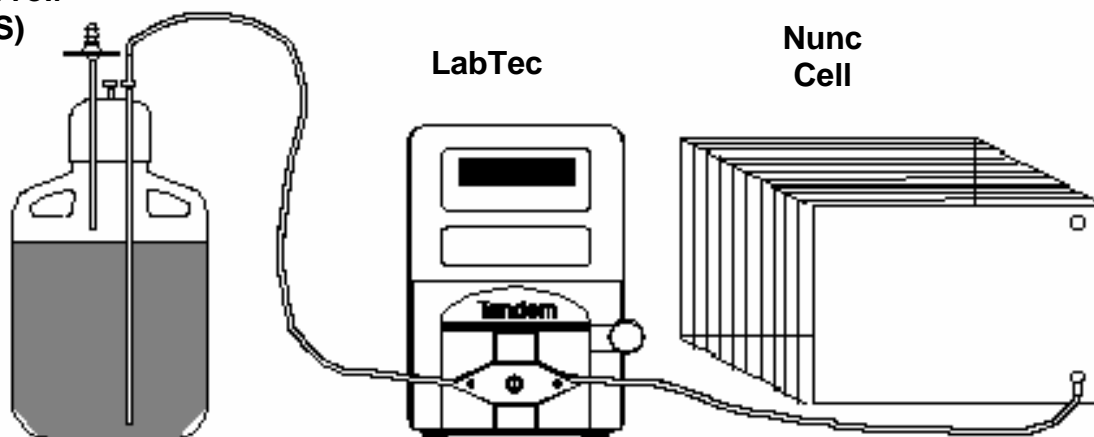
LabTec™ Peristaltic Dispensing System:

The LabTec Peristaltic Dispensing System automates, optimizes and documents the filling and draining of a Nunc Cell Factory. The LabTec can accomplish this in two different manners:

Volumetric Dispensing: Programmable batch-volume dispensing, e.g. the LabTec fills the Cell Factory with 2000 ml in less than a minute with a typical precision of better than 1% using Thick-walled #35 silicone tubing. It is very easy to enter and change the fill quantity if needed. The LabTec includes a program that reverses the pump direction, which will drain the unit to facilitate your harvest.

Weight Dispensing: The LabTec can be interfaced with an electronic balance for dispensing solutions by weight rather than by volume. Dispensing liquids by weight eliminates the need for pump calibrations while, at the same time, providing a high level of accuracy, precision and documentation

Reservoir (ADS)



Autoclavable Diluent System:

Autoclavable Diluent System (ADS) is available with 10 or 20-liter polypropylene carboys. System includes 10 or 20 liter autoclavable carboy with handles and special filling and venting closure with two built-in ¼" hose bars. One bar is fitted with a sterile venting filter (0.22µ), a second bar is fitted with a six foot section of thick-walled #35 Platinum cured Silicone tubing to go directly to your LabTec peristaltic dispensing pump and the Cell Factory.

Minimize Handling & Contamination: The whole system, as well as your diluent, can be sterilized in one step, and can be repeatedly autoclaved. Sterilize pump tubing, carboy, vent filter and diluent solution all at one time. Replace venting filter and pump tubing once every three autoclaves. Please note: The Cell Factory is shipped sterile, and cannot be autoclaved.

LabTec™ Performance Validation: #172

OBJECTIVE: Validation of the LabTec™ Volumetric Dispensing Mode using a Tandem 1082 and #35 Silicone tubing to fill a Nunc Cell Factory with distilled water.

HARDWARE: LabTec™ CP-200 Pump with a 600 rpm motor and Tandem 1082 Pump Head, and Mettler balance SW060 was used to determine the dispensed volumes, readability = 1.0 gr., balance reading error = +/- 0.5 gr.

SOFTWARE: Version 1.82DILU: Volume EDIT Parameter Settings: Dispensed Volume, 2000 ml; Pump Rate 100%; Slow Factor, 10.0; Sniffle, 0.0;

METHOD: #35 Silicone Tubing and distilled water were used for all Dispensed Volumes. Two sets of five (5) Nunc Cell Factories were filled. The average dispensed volume as well as the standard deviation (SD) and relative deviation (%RSD) was determined for each set of fills.

Trial	Data Set 1	Data Set 2
1	2001	2001
2	2000	2000
3	2002	1999
4	2001	2000
5	2000	1999
Ave	2000.8	1999.8
SD	1.00	0.08
RSD	0.05 %	0.04 %
Time	54 sec.	54 sec.

The LabTec includes a program that reverses the pump direction, which will drain the unit to facilitate your harvest.

ORDERING INFORMATION: SciLog Customer Service: 1-800-955-1993

CATALOG#	DESCRIPTION:
100-1682DILU	Labtec CP200 Smart Dispenser/Diluter. Mounted with a TANDEM 1082 dual channel peristaltic pump head, compatible with thick-walled tubing #15, #24 and #35. Ready for use with the Autoclavable Diluent Sterilization (ADS) System for sterile dispensing. One RS-232 port for use with an optional scale platform. Second RS-232 port for use with a SciLog serial printer or PC hook-up. Includes factory installed dispensing software.
400-800	Autoclavable Diluent Sterilization System, 10-liter carboy. Ready to use system includes: 10 liter autoclavable carboy (Nalge™ polypropylene), special filling and venting closure, sterile venting filter (0.22µ), and a six foot section of thick-walled #35 silicone tubing.
400-135	#35 Platinum-Cured Silicone Tubing, 25ft package.

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