

Technical Specification

Parameter	Specification
Dimensions (L × W × H)	Main Engine: 750 × 430 × 476.5 mm; Rack: 306.5 × 206 × 98 mm
Weight	Main Engine: 50 kg; Rack: 2.5 kg
Power Supply	AC 220 V ±10%, 50/60 Hz, 600 W
Housing Materials	ABS & SS304
Operating Environment	Designed for operation under Class A cleanroom environment
Minimum Installation Footprint	L 1,200 × W 500 × H 500 mm
Sterilization Tolerance	75% alcohol wipe-down, UV irradiation, or VHP
Pump Speed	0-300 rpm
Pump Accuracy	± 1 rpm
Rack Transfer Speed	50-100 mm/s
Rack Capacity	96 vials per rack
Compatible Cryovials	2 mL/ 4 mL/ 5 mL cryovials with screw caps and anti-rotation base
Filling Throughput	8 vials per cycle
Decapping & Recapping Throughput	16 vials per cycle
Filling Volume	0.1-5 mL
Filling Volume RSD	≤ ±0.1 mL or ±5% whichever is greater
Throughput	Up to 1,000 vials/h
Minimum Filling Feed Volume	≥ 50 mL

Ordering Information

Model	Product Name	Specification
vivaFILL	3D FloTrix™ vivaFILL Cryovial Filling System	1 main engine
vivaMIX	3D FloTrix™ vivaMIX Intelligent Cell Mixing Module	1 set
FILL-01-01	3D FloTrix™ vivaFILL Cryovial Filling Tubing Kit	1 set, silicone & PVC & male luer
FILL-00-01	3D FloTrix™ vivaFILL Cryovial Filling System - Rack	1 unit, capable of holding 96 vials per rack
R020-PVC-01	3D FloTrix™ Single-Use Storage Bag (1L)	1 pc/bag, 1 PVC & female luer, 1 C-Flex & male luer
R020-PVC-02	3D FloTrix™ Single-Use Storage Bag (3L)	1 pc/bag, 1 PVC & female luer, 1 C-Flex & male luer
R020-PVC-03	3D FloTrix™ Single-Use Storage Bag (5L)	1 pc/bag, 1 PVC & female luer, 1 C-Flex & male luer



Contact Us on WhatsApp



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Streamlined Cryovial Filling

Boost Quality, Reduce Cost, and Ensure Compliance

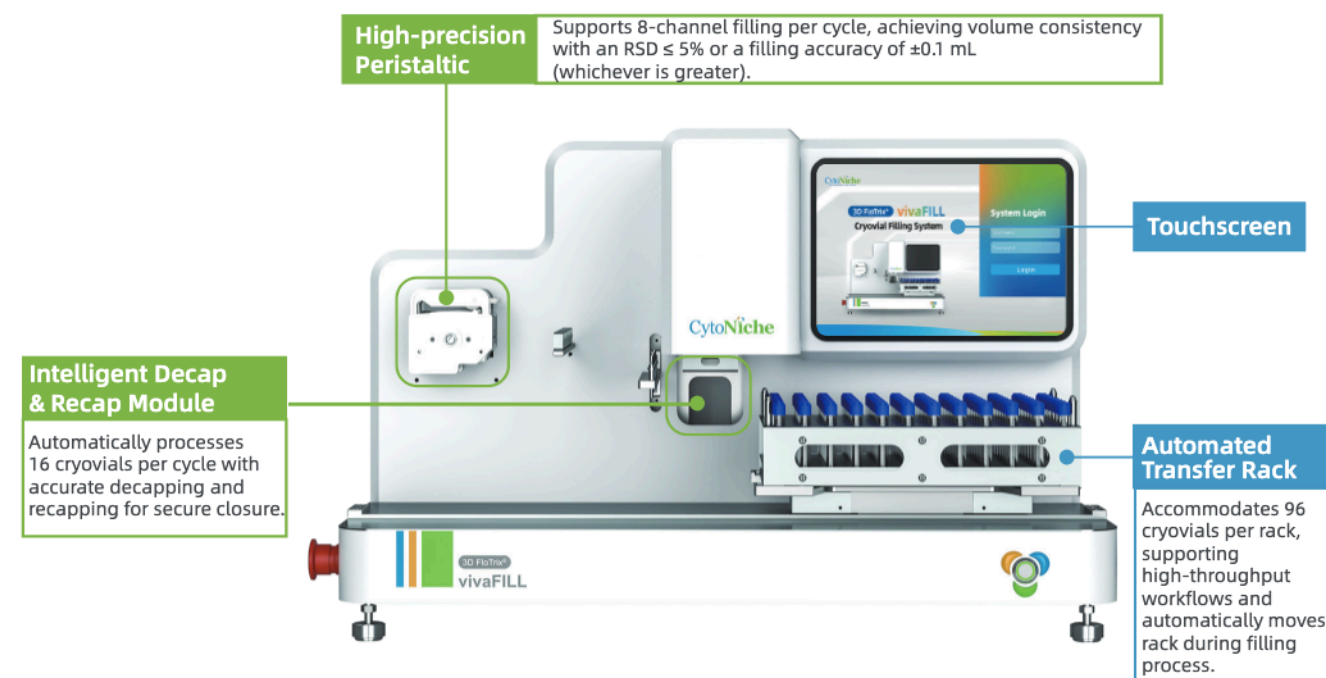


3D FloTrix™
vivaFILL Cryovial Filling System

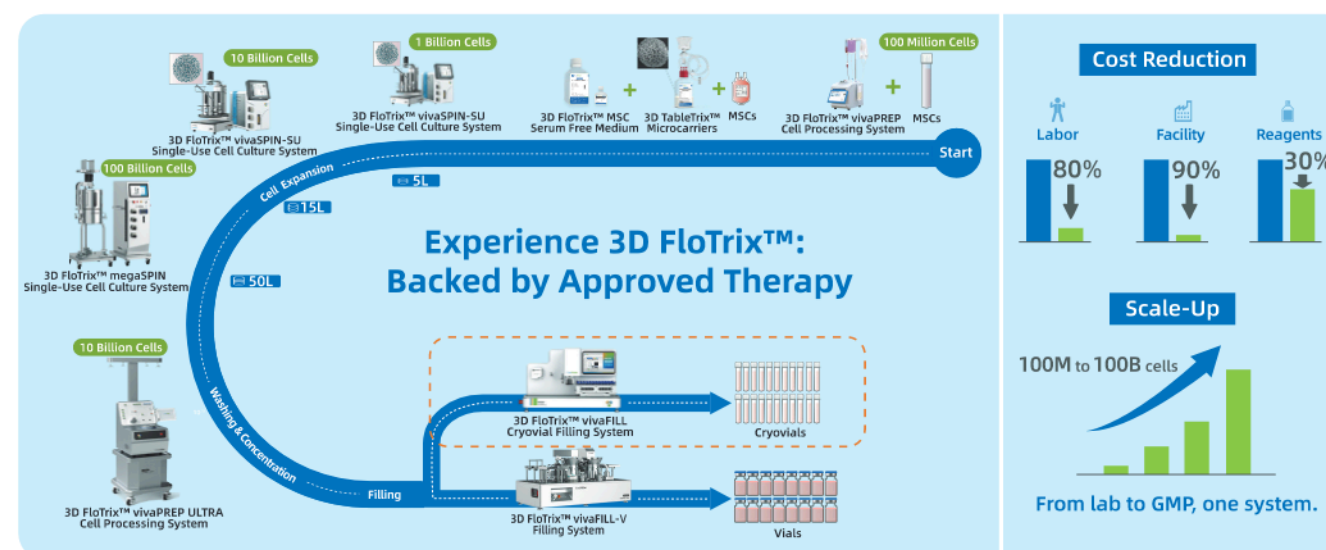
CytoNiche Biotech Pte. Ltd.

3D FloTrix™ vivaFILL Cryovial Filling System

3D FloTrix™ vivaFILL Cryovial Filling System addresses key challenges in the filling process of cells, including large filling volumes, complex intra-batch quality control, and high costs. This system enhances the accuracy, consistency, stability, and repeatability of cell/strain banking or final products, ensuring compliance with quality control standards for enterprises engaged in cell production.



Applications



- ◆ Master and Working Cell Bank (MCB/WCB) preparation.
- ◆ Strain preservation and banking.
- ◆ Aliquoting & packaging of critical reagents or bulk drug substances.
- ◆ Controlled-volume dispensing in QC, R&D, and production settings.

Product Features

Automated & Streamlined

Filling capacity up to 1,000 vials/h

- ▶ Decaps & recaps 16 vials per cycle.
- ▶ Dispenses 8 vials per cycle.
- ▶ Laser-guided alignment ensures synchronized decapping & recapping.



High-Precision Dispensing

Filling Volume RSD ± 0.1 mL or $\pm 5\%$ of target volume whichever is greater

- ▶ Coaxially controlled peristaltic pump enables uniform 8-channel filling.
- ▶ Low-shear design preserves cell viability, with initial viability loss maintained $< 5\%$.



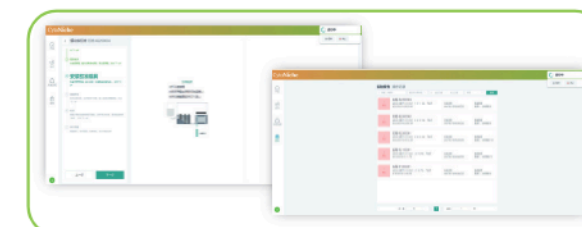
Compacted & Flexible

- ▶ Easily fits into dual-person BSC for convenient, ready-to-use installation.
- ▶ Built with durable materials resistant to UV exposure and VHP.



Safe & Convenient

- ▶ Full operation guided by graphical instructions via the integrated UI.
- ▶ Complies with 21 CFR Part 11 and GMPA 5 guidelines.



Broad Compatibility

- ▶ Flexibly adapts to external thread cryovials from multiple brands, as long as they feature screw caps and anti-rotation bases.
- ▶ Adjustable rack accommodates cryovials in 2-, 4-, or 5-mL sizes.

