

Enzene unveils next-generation of fully-connected continuous manufacturing technology for biologics

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A further evolution of the company's fully-connected continuous manufacturing platform



Enzene, a fully integrated contract development and manufacturing organisation (CDMO) with services spanning discovery, development and commercial supply, is launching its new EnzeneX 2.0 technology at the CPHI Milan show in Italy, being held from October 8 - 10, 2024.

The patented technology is a further evolution of the company's fully-connected continuous manufacturing (FCCM) platform for commercial biologics supply.

The EnzeneX 2.0 platform provides uninterrupted processing, from perfusion to final drug substance. By employing high titer clones, productivity and target protein concentrations are improved, production can be streamlined, and risks associated with batch-to-batch transfers are mitigated.

Additionally, EnzeneX 2.0 will leverage optimised cell media to boost cell productivity and efficiency, while also incorporating process analytical technology (PAT) to enable real-time monitoring and control for consistent quality and optimized processing.

Himanshu Gadgil, CEO of Enzene said "Lower operational costs and higher productivity can enable up to 50% reductions in overall production cost per gram, and we are on target to achieve a game-changing benchmark by 2025. We expect that our FCCM will be able to deliver 40 kilograms per thousand-liter batch at \$40-per-gram."

First developed at Enzene's facility in Pune, the EnzeneX 2.0 platform reduces the equipment footprint compared with conventional fed-batch systems. It is capable of clinical phase cGMP supply from as low as 30-liter scale, and its modular design with variable bioreactor capacity accommodates scale-on and scale-out expansion. Enzene's launch of a new state-of-the-art \$50-million manufacturing facility in Hopewell, New Jersey, ensures new opportunities for the biotech industry as the company introduces fully-connected continuous manufacturing in the US. The facility is expected to be fully operational by Q1 2025.