



Passion. Innovation. Life.

# Trusted CDMO partner in your journey from lab to leash

[www.enzyme.com](http://www.enzyme.com)

Fully-connected continuous manufacturing™ (FCCM™) represents an innovative and progressive alternative to the conventional fed-batch processes, particularly in the production of complex biologics. It entails seamless and uninterrupted processing from initial cell culture to the final drug substance. This patented technique optimizes quality, efficiency, and flexibility in delivery.

# Advantages of EnzeneX™

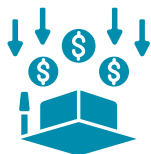


## Productivity

Up to **10x** higher than traditional fed batch

## Cost of Goods

Up to **50%** reduction in COGS



## Superior Quality

Minimized product contact with cell culture fluid reduces aggregation and degradation even for less-stable and difficult-to-express proteins



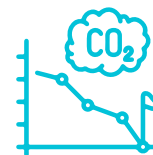
## Flexibility

Clinical phase GMP supply in **30-50L** scale & modular design with variable bioreactor capacity accelerates development with scale-on / scale-out approaches



## Sustainability

Up to **50%** decrease in carbon emission



## Accelerated pace

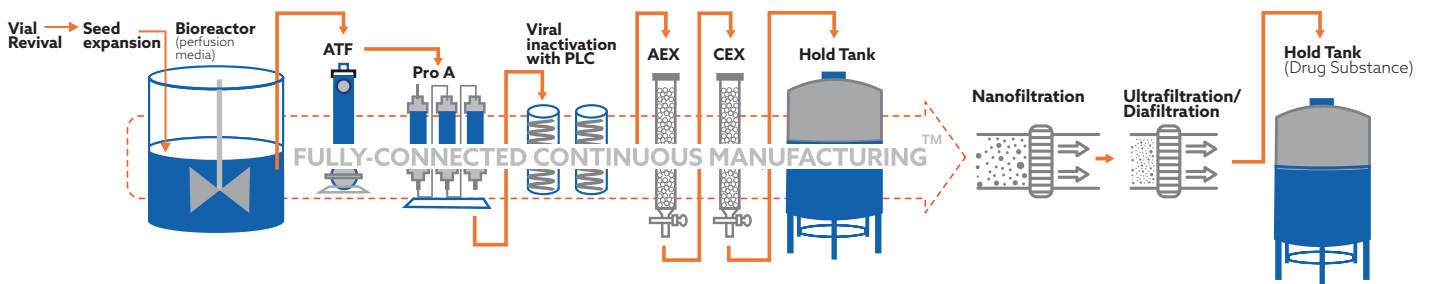
**~10** months from gene to phase 1

## Facility Footprint

Up to **70%** reduction in footprint



# Delivering significant cost advantage at higher productivity, quality and sustainability through EnzeneX™



## Enzene is changing the paradigm with EnzeneX™

With a vision to positively impact the global healthcare landscape by developing cost-effective therapeutics, Enzene has been at the forefront of disruptive innovation in the biotech space since 2016. Enzene's patented and commercially validated fully-connected continuous manufacturing™ technology - EnzeneX™ is the next step in revolutionizing the industry. And now, Enzene is expanding this vision to U.S. aiming to create access equity by providing cost-effective, high quality, sustainable manufacturing to animal health, small and mid size pharma companies.

## Launching our USDA designed facility in 2025

Enzene's new U.S. facility will be manufacturing its first animal health product in Q1, 2025, marking a significant milestone in the company's expansion efforts. With this inaugural product, Enzene is poised to make a meaningful impact on the animal health industry.

# Case study- Converting fed-batch to fully-connected continuous manufacturing™ (FCCM™) for an IgG1

## Molecule under study

Felimized monoclonal antibody

## Problem statement

The client wanted to evaluate the feasibility of converting their fed-batch process to a perfusion run using our FCCM™ platform.

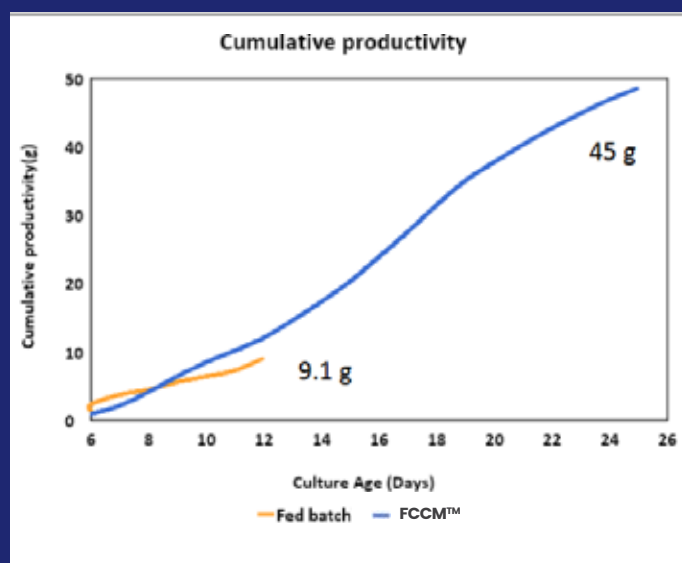
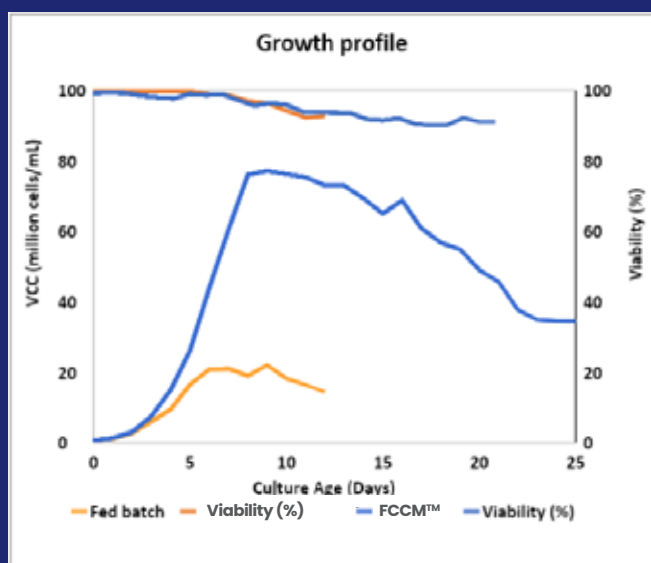
## Enzene's Approach

At Enzene, we performed both fed-batch and perfusion (using FCCM™) runs with the same clone and compared their productivity and quality side-by-side.

## Outcome

As indicated from the data, Enzene's FCCM™ platform outperformed fed batch in terms of quantity and quality.

A 5-fold increase was observed in cumulative productivity.



\*Our microbial and mammalian DS plants as well as our sterile fill & finish plant have received EU-GMP certification



Contact us today - [bd@enzene.com](mailto:bd@enzene.com) | [www.enzene.com](http://www.enzene.com)