

Model-based strategy for optimizing biopharma processes

Case study: Fed-batch operated bioreactor

- Development of a digital twin
- Establishment of a model-based operating strategy for optimized process performance
- Design of real-time algorithms:
 - Soft sensors
 - Model predictive control for disturbance mitigation
 - Model-based algorithms for fault detection and classification
 - Human-in-the loop to support operator decision-making
- Real-process application

