

## Success Story

# Improve Productivity and Reduce Risk with Biostat<sup>®</sup> RM

Generating an adequate number of cells for the inoculation of a production bioreactor is a time- and cost-intensive process. Using a typical batch seed train with common seed ratios of 1:12, it takes two steps, with five days each, to seed a final fed-batch culture. This presents several challenges, which a Sartorius customer was hoping to resolve. By introducing the Biostat<sup>®</sup> RM and the benefits of an intensified rocking motion bioreactor at 1 L scale, the customer reached a seed ratio of 1:120, saving four days of seed preparation time and enabling automatic transfers.

### Customer Challenge

- Low-cell-density batch seed cultures required intense manual handling.
- Missing the ideal transfer point increased the risk of deviating from the specified design space.
- Total process time limited high-throughput batches.

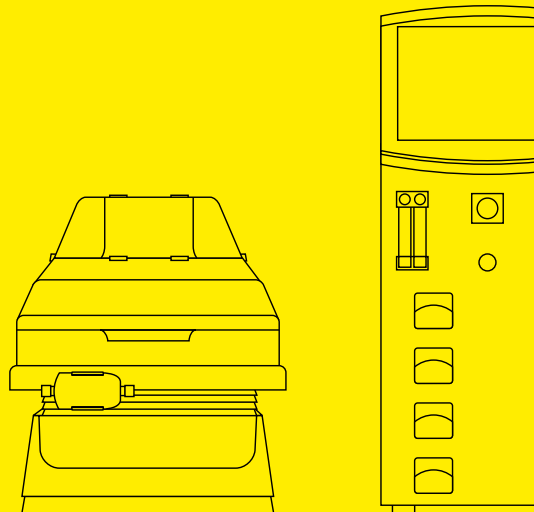
### Provided Solution

- Perfusion-enabled Biostat<sup>®</sup> RM led to high seed ratios, saving 4 days of culture time.
- BioPAT<sup>®</sup> ViaMass control provided automated and closed inoculum transfer

20% decrease  
in process time

10× higher  
seed cell concentrations

Reduced  
process risks  
by automating manual steps



### Case Profile

Company Type:  
Mid-to-large Biopharma

Related Molecule:  
Proteins, mAb

Process Steps:  
Cell Culture and Seed Expansion



### Before

- Two seed steps, each with a five-day culture time
- Manual sampling efforts to determine seed activities
- Risk of operator mishandling



### After

- Only one seed step, saving four days
- BioPAT<sup>®</sup> ViaMass identifies perfect transfer point
- Automatic transfer eliminates risk of operator mishandling