

# Real-Time Modeling System



The next generation of biomanufacturing analysis

“We need to be able to understand the vast number of production variables and then know what changes to make to improve production.”

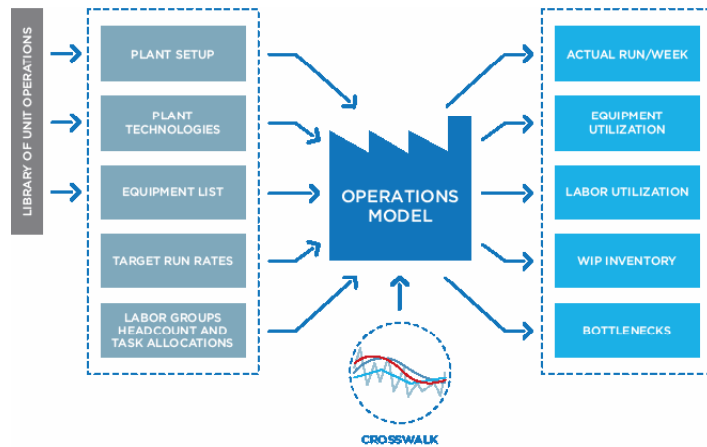
Manager at a Large Biotechnology Firm

“The focus is titer, titer, titer but most biotechnology firms don’t understand how to manage the variables associated with making biotechnology products. Optimizing... it is not all about the yields and titers... it’s building a whole process that is optimal.”

Process Development Engineer, Top 10 Biopharmaceutical Manufacturer

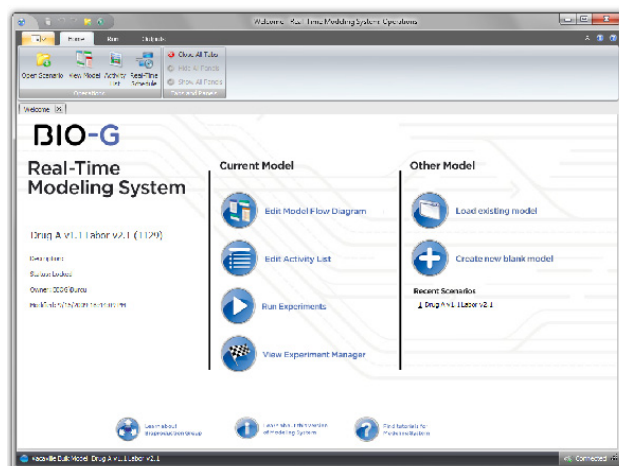
“It’s all very complicated suppliers, people, schedule and tons of data in different formats. There’s a great need for organization around the whole manufacturing process.”

Supply Chain Manager Global Biotechnology Manufacturer



Complexity is a major challenge for biopharmaceutical manufacturing professionals. Complex technology, complex processes and systems, and high variability present great difficulties for those responsible for producing quality products in volume. Bioproduction Group understands the constant struggle our customers face to achieve results while remaining flexible under the constrictions of GxP validation and regulation.

Bioproduction Group’s powerful, proven, patent-pending modeling platform is based on developments and advances in mathematics, operations research and modeling over more than 20 years. The platform allows customers to understand complexity, accommodate variability, find bottlenecks, maximize production and understand the implications of any change in the manufacturing process.

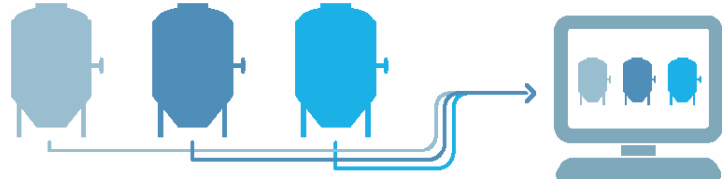


The software integrates biotech operations with tactical and strategic decision making into one powerful platform designed to drive systemic change across the organization. Linking to enterprise platforms (SAP, automation systems) the Real-Time Modeling System provides unprecedented visibility into the biomanufacturing supply chain and the underlying processes which define it.

# BIO-G

## DESIGNED FOR BIOPHARMACEUTICAL OPERATIONS

The Real-Time Modeling System is a modeling environment specifically designed for biopharmaceutical operations. That means our software is custom-built for the challenges of biomanufacturing: from late stage product development, to clinical, to large-scale production. The toolset has been developed in partnership with some of the world's largest biopharmaceutical manufacturers.



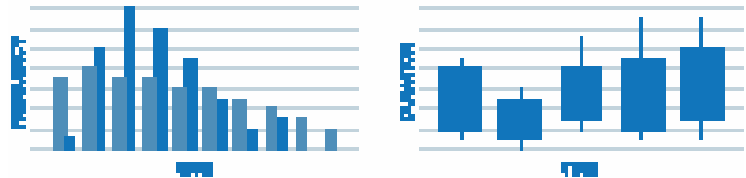
## LINK MODELS TO ANY DATABASE DATA

The Real-Time Modeling System can link to data from any database, from shop-floor automation systems like DeltaV to enterprise resource planning systems like SAP. That means your model reflects the reality of what's actually happening in the facility: not just an estimate. And, the data remains accurate so your model isn't using stale data 6 months from now.



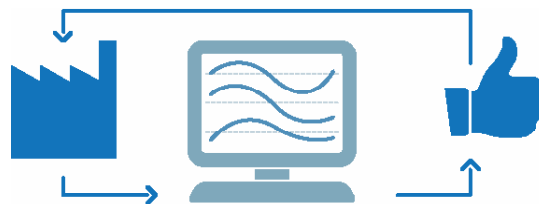
## ACCOUNT FOR VARIABILITY

Bio-G's software architecture uses variability at its lowest building block. That means your models will be aware of inherent biological variability, and able to see its effect on manufacturing operations.



## FASTER RESULTS, MORE ANALYSIS POWER

The Real-Time Modeling System delivers results faster than any other modeling framework. Our modeling platforms incorporates patent-pending technology to allow you to create highly complex models and analyze them in a fraction of the time of other analysis toolsets. This makes "what-if" analysis practical, getting you to better decision making and optimization, faster.



## A PROVEN TRACK RECORD

Bioproduction Group's Crosswalk and Modeling tools and services are used by the world's leading, global biomanufacturing firms. We deliver to these clients literally millions of dollars in savings, every year.

For more information visit:  
[www.bio-g.com](http://www.bio-g.com)

