



Flexible Modular Manufacturing Ready to Use, Fully Integrated BioProcessing Suite



Total Solution Providers

The Combination of Complementary Expertise for the Next Generation of Flexible, Single-Use Manufacturing Concepts

Clean Room Workspace of 450 Sq. Ft.

- Ample Working Space for Multiple Personnel
- Can Accommodate Large Pieces of Process Equipment
- 'Dual Pod' Configuration Doubles Space to 900 Sq. Ft.



Flexel 3D Pallettank®

- Containment of Flexel 3D Single-Use Bag Systems
- Designs Available for Mixing, Storage, and Handling of Process Solutions
- Robust Stainless Steel Construction
- Available with Integrated Load Cells and Temperature Control Jacketing

Benefits

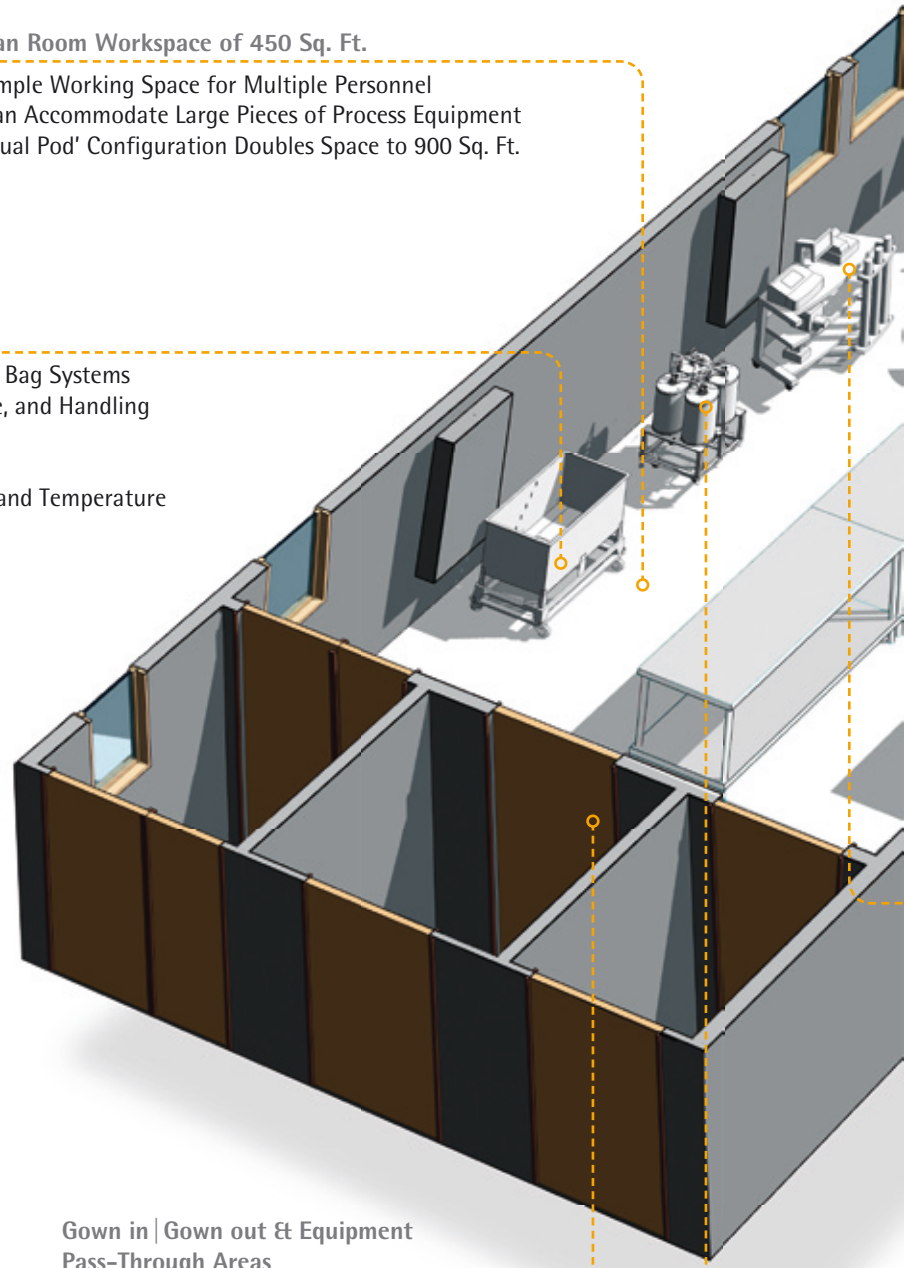
- Lower Cost of Growth
- Lower Complexity of Growth
- On Demand Scalability
- Requires Only Large "Gray Space" - Shell Construction
- Enables Fast-Track Construction
- Fraction of the Cost of Traditional Builds
- Pods Arrive Fully Commissioned with a Compliant Engineering Turnover Package
- Predictable Cost & Timeline
- Ideal for Multiple Technologies and Products
- Uses State-of-the-Art Design Tools

Process Features

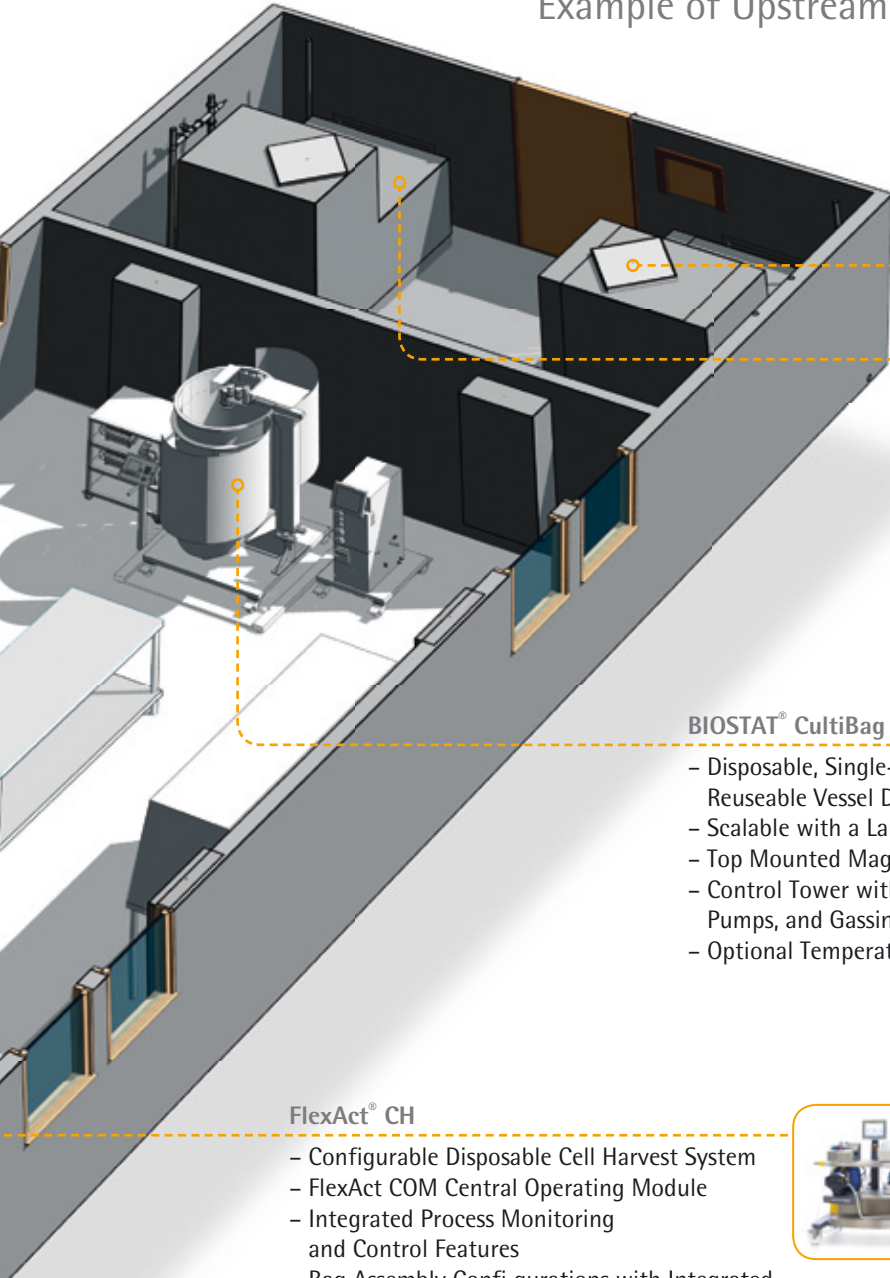
- Integrated with Sartorius Configurable Single-Use Systems
- Standardized Hardware Equipped with Flexible Pre-Sterilized Process Systems
- Pre-Engineered Solutions based on Sartorius Process4Success™ Platforms

Gown in | Gown out & Equipment Pass-Through Areas

- Provide Exquisite Control for Personnel Flow at Each Pod
- Optional (Adds an Additional 108 Sq. Ft. to Working Space if Removed)



Example of Upstream Process Suite



Redundant HVAC Systems On Board

- Automatic Failover for Continuous Operation
- Mechanical Systems are Accessed from the 'Gray Space'
- Easy to Service and Maintain
- On Board Controllers Integrate Mechanical Systems with Process & Building Management Systems

BIOSTAT® CultiBag STR

- Disposable, Single-Use Bioreactor in Traditional Reuseable Vessel Design
- Scalable with a Large Working Volume Range
- Top Mounted Magnetic Drive Agitation System
- Control Tower with Integrated Instrumentation, Pumps, and Gassing Module
- Optional Temperature Control



FlexAct® CH

- Configurable Disposable Cell Harvest System
- FlexAct COM Central Operating Module
- Integrated Process Monitoring and Control Features
- Bag Assembly Configurations with Integrated Sterilizing Grade Filter, Transfer Set, and Single-Use Pressure Sensor



Sartoclear® L-Drum Technologies

- Production Scale Depth Filters for Cell Clarification and Contaminant Removal
- Fully Disposable Fluid Pathway
- Does Not Require Expensive Clamping Systems
- Transportable Trolleys for Easy and Safe Handling



Can be Integrated into

- Greenfield and Existing Structures
- Pilot-Scale through Commercial-Scale Operations
- Multi-Product, Multi-Technology Concepts
- Scalable Commercial Facility

Pod Design Features

Structure

- Dimensions - 42 x 18 x 13 feet
- All Aluminum Construction

Transportable

- Deliverable to Any Site Worldwide
- Integrated Air Bearings for Onsite Mobility

BSL1 through BSL3 Designs Available

Cleanroom Design Standards

- Epoxy Floors and Walls
- HEPA Air Filters with Integrated Controllers
- Gown in | Gown out
- Full Range of Cleanroom Classifications Available

Contact Information:

Contact us to develop a preliminary conceptual design
for your future facility

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