

Single-Use Bioreactors with Unparalleled Mixing, Scalability, and Ease of Use

PBS Biotech has emerged into the growing single-use bioprocessing space with an offering truly unlike any other: elegant, powerful, and incredibly easy-to-use bioreactors. A commitment to quality and innovation is evident in every design element of PBS Biotech's Pneumatic Bioreactor System™. The proprietary Air-Wheel™ agitation mechanism powered by gas buoyancy provides unparalleled mixing performance for cell cultivation. The result is rapid liquid mixing, efficient mass transfer, and significantly lower shear stress — all of which remain consistent across the broad range of bioreactor scales offered.

The PBS Biotech platform of fully integrated, modular, single-use bioreactors includes bench-top R&D systems at 3 L and 15 L, pilot-lab systems at 80 L and 500 L, and manufacturing systems at 2,500 L and 5,000 L. The performance and elegance of design in these systems are only rivaled by the simplicity of their controls. The proprietary controller's architecture is logical and well conceived and is combined with an intuitive human interface. Thus, operation is greatly simplified, and the chance for human error is minimized. From across the lab or across an ocean via secure remote



Intuitive graphical user interface (GUI)



PBS 3-L benchtop bioreactor

access, vital information is clearly visible and easily accessible. Like the Air-Wheel agitation, the control system is also constant across this platform from 3 L up to 5,000 L.

PBS Biotech bioreactors feature solid-state hard drives, redundant sensors, integrated auto-sampling, and easy networking to increase reliability and usability. Each unit is built to order and can be customized to specific requirements for pumps, probes, ports, sensors, and more. Control can be autonomous or tied in to your existing supervisory control system. By nature of the fully integrated and preconfigured modular design, PBS bioreactors arrive ready to use: Just uncrate and connect power and gas lines.

Single-use bioreactors have enabled greater process efficiency and flexibility. To this, PBS Biotech bioreactors now add unparalleled mixing, scalability, and ease of use.

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