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Univercells Technologies Launches Miniaturized scale-XÃ¢â??Â¢ Nexo Bioreactor to Accelerate Cell Culture Process Development

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Designed for efficient scalability and cost reduction, the new scale-XÃ¢â??Â¢ nexo bioreactor offers a compact, 0.5 mÃ?Â² growth surface for streamlined bioprocessing, enabling researchers and biopharma companies to swiftly transition from lab to commercial production.



Univercells Technologies by Donaldson, a global leader in bioprocessing technologies, proudly announces the launch of its latest innovation, the scale-X™ nexo bioreactor. This cutting-edge addition to the scale-X portfolio introduces a miniaturized, fixed-bed bioreactor offering a 0.5 m² growth surface, designed for efficient cell culture process development across multiple modalities. Engineered for seamless scalability, the scale-X nexo bioreactor reduces process development timelines, driving down costs for researchers and biopharma companies alike.

As the smallest member of the scale-X family, the tiny but mighty scale-X nexo bioreactor ensures consistent cell distribution and high cell density, laying the groundwork for efficient, scalable biomanufacturing. Its direct scalability to the scale-X carbo (10-30 m²) and nitro bioreactor (200-600 m²) makes it a powerful tool for companies aiming to move swiftly from lab to commercial production while minimizing costs.

“Cost efficiency and direct scalability are crucial for research institutions and biopharma companies in early-stage development aiming at reducing risks and accelerating time to market. The scale-X nexo bioreactor allows researchers to efficiently optimize cell density and process conditions, paving the way for optimal performance from the start,” said Marie Jourdan, Director of the Bioprocess Product Portfolio at Donaldson.

The scale-X nexo bioreactor is designed to dramatically reduce media and reagent consumption, thanks to its low-volume, low-surface-area approach. This efficiency not only minimizes resource needs use but also reduces seed train efforts – resulting in a streamlined, cost-effective bioprocess offering up to a 60% reduction in cost1 per run compared to other entry-level fixed-bed bioreactors. Its versatile, ready-to-use manifolds enable rapid setup and precise screening for a variety of process conditions and applications such as cell and gene therapies, and vaccines, among others. Additionally, it will integrate with the Skaia™ vision application software, an innovative approach that estimates cell numbers inside the scale-X bioreactor without the need for direct cell sampling, further enhancing productivity and operational efficiency.