

Robust modular High Performance Virus Filtration - Reliability, Simplicity and Economy

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Maximizing both virus filter speed and capacity while maintaining high viral safety is critical to overall bioprocess cost of goods reduction. In order to provide high flow, protein capacity and robust virus retention we have applied surface geometry to the *upstream* side of a virus filter membrane. This enhances the available surface area, maintaining the high flow for a longer time without affecting the high retention at the *downstream* side. Modules have been developed for both stainless steel and single use applications, taking sizing and design space into account applicable to both batch and continuous manufacturing, yielding reliable, simple and economical solutions at all process scales.