Cell Clarification (Post Centrifugation)

The Challenge

A principal scientist at a vaccine contract manufacturer (CMO) was commissioned to address a downstream challenge. An improper sterile filtration system set-up impeded their recovery process following cell culture harvest post centrifugation. This process was frequently clogged during this cell clarification step increasing CMO's bioprocess time and also at the expense of reduced product yield. Saint-Gobain was asked to develop a sterile cell clarification (post centrifugation) and recovery chamber that would mate to their existing cylindrical flat bottom tanks.

The Saint-Gobain Collaborative Design Services' Solution

Saint-Gobain Design Services visited the CMO's facility to understand their bioprocess cell clarification challenge. Following this visit, a Sartorius Stedim 2-stage sterilizing filter was sourced and integrated into a single-use system design that featured Sani-Tech® STHT®-C silicone tubing. Also, dimensional review of customer's 200L flat-bottom cylindrical tank took place to ensure recovery chamber best fit.

Customer Experience

After implementing the newly designed cell clarification (post centrifugation) and recovery chamber from Saint-Gobain, the CMO improved their bioprocess efficiencies with reduced downtime, reduced labor, quick turn-around time, and greater product integrity assurance.

