



Summit OG, LLC

Delivering Experience, Performance and Success!

\$170M Blood and Blood Products Manufacturing, Testing Laboratory, Cord Blood Bank, Red Cell Reference Lab and support services

Background

Third largest US independent blood bank purchased a new facility to provide expansion opportunity, logistical improvement and efficiency and implement Lean Six Sigma design for all operations.

Objectives

Design Lean Six Sigma workflows and equipment and supplies placement for all (receiving, manufacturing, testing, distribution and storage) operations based on three year strategic plan, incorporating current and future growth needs. Comply with FDA and European Union regulatory requirements. Determine and contract vendors to provide cold storage and temperature and humidity controls. Prepare requirements for case goods current and future.

Goal

- Ensure all business units current and future strategic plans are incorporated.
- Meet all regulatory requirements.
- Build, design and integrate up-stream and down-stream processes with Lean Six Sigma workflows
- Enable “pull” product flow systems
- Ensure vendor services and provisions are technologically scalable for current and future needs
- Educate staff on “just in time” Lean workflow and project opportunities for continuous improvement

Process Analysis

- “Hidden” additional, current capacity based on machine and staff cycle time
- Lack of fixed asset and supplies inventory controls
- Inadequate cold storage
- Constrained and bottle-necked process workflows

Solution

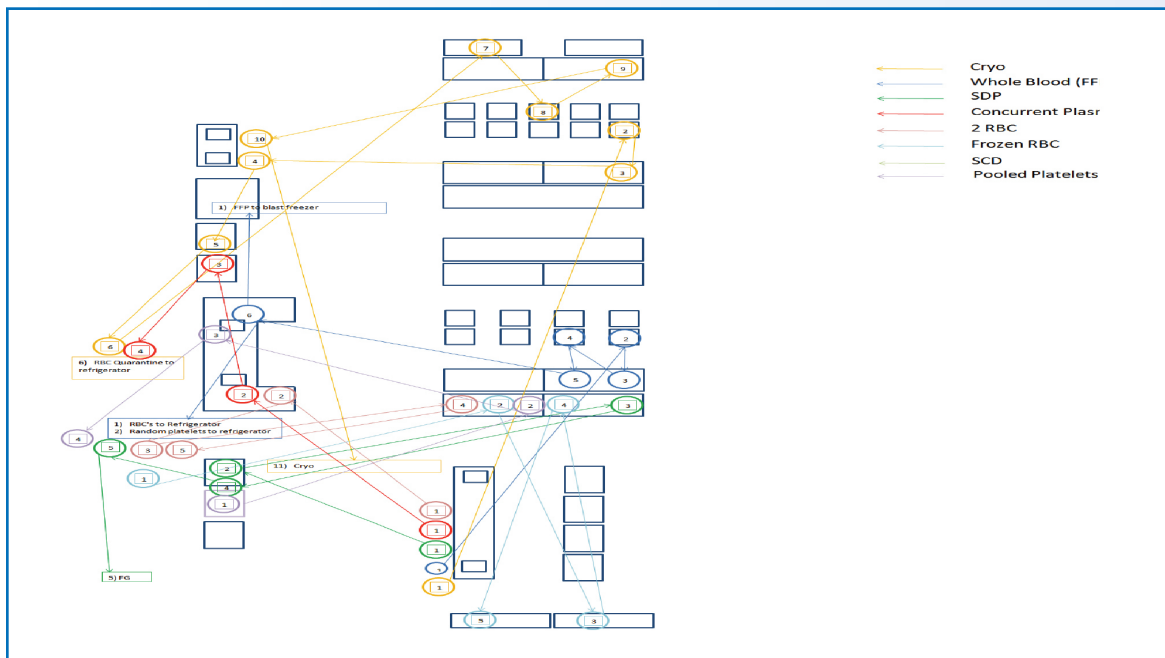
- Calculate current and future state capacity and equipment needs vs. utilization including seasonal variables
- Design floor plan to facilitate Lean Six Sigma (LSS) workflows for receiving, manufacturing, testing and distribution for both up-stream and down-stream processing
- Integrate multi-floor processing
- Ensure regulatory compliance as part of the LSS workflow



Results

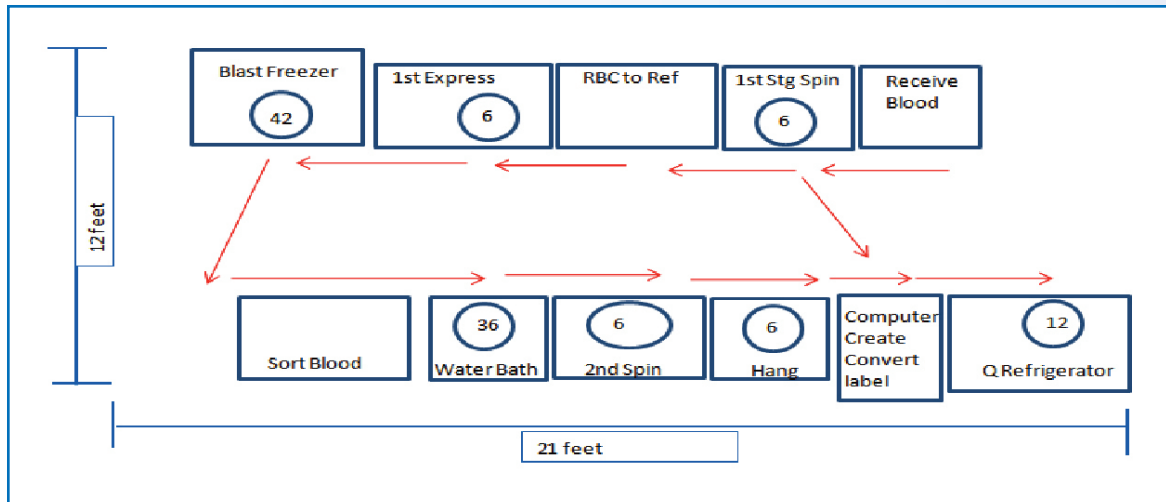
- Efficient support services with “just in time” equipment and supplies utilization
- Integration of up-stream and down-stream workflows to support manufacturing and testing operations
- Build and utilization of required, based on three year strategic plan, finished goods and services projection to enable current workflow and future growth workflow and equipment and supplies placement
- Design plan of all equipment, case goods, cold storage, temperature and humidity controls, nitrogen storage and support functions delivered to architects
- Compliance with regulatory requirements

Example from Summit Lean Design work files: Documented current manufacturing operations spaghetti diagram depicting constrained and bottlenecked workflows.





Below is the new workflow for the cryo work cell in manufacturing operations as an example.



Contact Summit (1-877-SUMITOG or 1-877-786-4864) for detailed information on completed designs due to the proprietary nature of this case study.