R&D Lab Optimization
Philips Ultrasound

One-page Project Summary

The Research and Development (R&D) lab at Philips Ultrasound was to be redesigned with the goal of optimization. The company desired a more efficient layout while maintaining all current equipment and the existing amount of space. The goals were to improve workflow, and maintain 6S compliance in the Lean Factory environment. Additionally, lab technicians were in need of more storage for the materials that are required for their assigned projects. Constraints included existing plumbing and ventilation for the many machines that require one of the two, as these machines will not be able to be relocated. Workflow was observed and technician’s preferences were taken into consideration during the concept selection phase, in which QFD, AHP and decision matrices were used. Deliverables within the scope of this project included a new layout plan, an implementation plan, and a final report. The budget for this project was $1000. Responsibilities were divided amongst the members of the team in order to complete tasks efficiently. A project management Gantt chart was created to keep the project on track. Frequent communication (at least once per week) with the sponsor, as well as six visits, were scheduled so that the team could satisfy the sponsor’s requirements. The final layout includes more storage space, co-location of equipment that is used simultaneously, technician workbenches located near equipment they use most frequently, and 6s compliance responsibilities grouped together. Implementation of the new layout will require no outside machinery or help.