Project Description

Project Background:
Dresser Rand (D-R) is one of the largest global suppliers of rotating equipment solutions, turbines, compressors, and expanders. Their manufacturing facility in Olean, NY specializes in compressor assembly. The workers at this plant are enthusiastic to bring aboard their second group of RIT student engineers, to help assist with their much needed process improvements. The previous project team (P09457) implemented lean principals in the Piping and Packaging assembly line. As well as improved the work flow to reduce cycle time. These improvements continue to be implemented. Our task is to continue process improvements, but with the VECTRA® Gas Turbine assembly area. Other sub-projects may be complete depending upon priority.

Problem Statement:
The primary objective of this project is to improve the VECTRA® assembly area for a second build stand, while enhancing the work flow. In addition safety and ergonomics in this area require a thorough review.

Objectives/Scope:
1. Expand Floor space for second build stand.
2. Cost analysis of expanding current area vs. moving to 990 area.
3. Improve assembly worker safety.
4. Implement tool storage devices.
5. Improve material and work flow.
6. Improve safety for plant workers.
7. Provide documentation for future RIT MSD projects.

Deliverables:
- Improve layout of VECTRA assembly area.
- New designs, drawings, flow models
- Justification for removal of oven
- Cost analysis for proposal

Expected Project Benefits:
- Improved production assembly
- Consistent projection time
- D-R reputation increases
- Cost Savings
- Safety improvements

Core Team Members:
- Patrick Muldoon (Project Manager, ME)
- Aditya Manjrekar (Chief Engineering, IE)
- Scott Cody (IE)
- Matthew Kremers (ME)
- Nathan Netsch (ME)
- Barrett Zeinfeld (IE)

Strategy & Approach

Assumptions & Constraints:
1. Capital budget limit
2. Union present at D-R plant

Issues & Risks:
- D-R Olean Facility is a 2 hour commute from RIT, which impacts the amount of actual time spent on the project.
- Priorities of customer needs are oriented towards Industrial Engineering. Furthermore, D-R has additional subprojects are better suited for Mechanical Engineering.
- Completing and viewing all projects implemented with in 22 week time frame.
- Long lead items
- Facility is engineering order company; therefore assembly flow is special each time.