TMP 3 – Door and Frame Production

Overview
TMP Acquisitions, a subdivision of Tafco, manufactures walk-in freezers and refrigerators. TMP Acquisitions is currently producing one door/frame assembly every eight hours, double the industry standard of four hours. The company is unsure what is causing the production process to take twice as long.

Objectives
TMP 3 was tasked with identifying and making recommendations to eliminate the non-value added time of the production process.

Approach
- Our team took five site visits to perform time studies on the processes involved in producing the door and frame
- The excess four hours can be attributed to non-value added time
- The non-value added time was mostly attributed to reworking parts at various stages throughout the process
- The rework was attributed to lack of communication between the manufacturing and administrative employees, as well as a lack of training on lean manufacturing principles
- Our team recommended the implementation of an error reporting system that will document incidents of rework and require weekly meetings to address issues in the production process
- Our team also created a Lean Manufacturing Training Guide that will assist in training employees on principles such as Poke Yoke, JIT, and the 8 wastes of lean manufacturing

Outcomes
As a result of implementing our recommendations:
- TMP Acquisitions can eliminate approximately 10% of the non-value added time within the first month, which is approximately 0.5 more door/frame assembly produced per day
- Within six months, eliminate approximately 25% of the non-value added time
- Within the first year, eliminate approximately 50% of the non-value added time
- Eventually working towards eliminating 100% of the non-value added time in the following years