

CASE STUDY: LEAN TRANSFORMATION

SITUATION ANALYSIS:

A manufacturing facility was embarking on the lean journey to reduce waste, increase throughput, eliminate defects, and decrease current costs.

IMPROVEMENTS IDENTIFIED:

A facility assessment was conducted to generate understanding of current state and establish the transformation plan. The plan was to transform the facility in 14 months. The site established the leader and cross site team with guidance and support of Racca Solutions Group. The teams executed on the following initiatives:

- Cleaning and establishing accurate system data
- Implementation of kanban systems to eliminate/reduce material shortages in machining, weld and assembly areas
- Establishing flow between cells
- Implementing 6S Lean (Sort, Set in order, Shine, Safety, Standardize and Sustain)
- Deploying a setup sequencing on machine centers to reduce setup times at the centers
- Establishing appropriate levels of point of use inventory within the cells
- Developing and deploying an open order report to support daily cell labor planning
- Training and developing the shop floor to maintain new processes

OVERALL RESULTS:

The lean transformation took 15.5 months and included the following results:

- Elimination of raw material stock outs
- Machine run time efficiency increased by 18%
- 90% reduction of expedited signals to the critical machining centers
- Increased overall inventory accuracy
- 50% reduction of lead time in the machine shop

Overall the client obtained a 14X ROI on the project; which translated to savings of approximately \$3.05M, in addition to the following:

- 13% reduction of total fabrication cost per unit
- Projected reduction of regular and OT hours is respectively
 - Weld: 13% and 27%
 - Assembly: 32% and 71%