



Floor Layout for New Product Line, Large Air Handling Manufacturing

Background Story: One of the United States largest manufacturer of large air handling units for warehouses and large data centers introducing a new product line

i3 was retained to create a floor layout and work process to facilitate the introduction of a new product line which consisted of six various sizes of a relatively standard, yet configurable, product offering. i3 implemented consistent processes and procedures to eliminate waste and ensure a consistent, high quality product in a greatly reduced lead time, and process across all organizations

identify

A detailed analysis was performed with key findings and recommendations based on i3 experience and industry standards for Lean Manufacturing. In collaboration with the client, the most critical areas for improvement were identified, a detailed business optimization roadmap was developed. Six Value Stream Maps were created identifying work flow improvements, and a potential work floor layout to improve efficiency.

innovate

To address key optimization opportunities the i3 team worked with representatives from four functional groups to:

- Create consistent processes, procedures, roles, responsibilities and accountabilities
- Develop a Daily Management Scheduling board for each function to ensure communication of schedules and expected completion dates
- Develop a floor layout to minimize material movement and maximize safety, productivity, and quality

implement

An implementation plan with a floor layout, coaching and mentoring plan included:

- Implementation of several time and labor saving devices including jigs to reduce the time spent performing repetitive measurements, and documented processes to ensure consistent assembly for all sections which is not dependent on "tribal knowledge"
- Design and implement "Built for Purpose" carts to facilitate moving kits of material and reducing "lost" fabrications

Bottom-line Results

- Reduce lead time from 16-18 weeks to 8
- Reduce "lost" material by 75 percent
- Reduce overtime and improve on time delivery

