

Lean principles and quality defect reduction drive improved culture, customer service



Our client, a **global defense manufacturer**, produces electronics for aviation and space programs for military and government customers across the globe. This client has repeatedly engaged Implementation Engineers over the years to solve tough challenges when internal resources were unable to do so.

This organization, like many others in the defense industry, was struggling to ramp up capacity to meet increased customer demand. Implementation Engineers was engaged to analyze the constraints to increasing production and develop an implementation roadmap to address.

The organization believed their problems stemmed from the following areas:

- Quality issues impacted their ability to plan & commit to a consistent schedule
- Staffing adequate resources was difficult in the current labor market
- Unclear and frequently changing customer requirements

- APPROACH**
1. During the analysis, value stream and process maps, focus interviews, and floor observations helped to **identify the key constraints to achieving on time delivery**.
 2. Initial issues were quickly identified in three broad areas:
 - **Overall capacity was inadequate** to achieve the desired production levels, and critical capacity was being absorbed by high levels of rework
 - The organization **lacked visibility of production issues**, and many units were delayed for days without leadership aware there was a problem
 - **Quality defects** were crippling the support staff and reducing their ability to implement continuous improvement initiatives
 3. Quality defect reduction projects, implementation of product **supermarkets** and **FIFO lanes**, **visual management**, and **High Performance Management (HPM)** were implemented. The solution created needed capacity, aligned resources, and reduced the rework and disposition of quality defects.
 4. IE **worked hand-in-hand with the client team** to validate findings, and develop an improvement roadmap. Teams were led jointly by client and IE personnel to drive improvements in quality, implement lean flow principals, and create a high performance management system and culture.

20%

Improvement in assembly and inspection time

50%

Reduction in overall rework hours

40%

Reduction in lead time for production units

As a result of the engagement, the client was able to consistently meet their committed deliveries, improving their customer relationships and helping to drive further future work

