

Elimination of Internal Supply Chain and Manufacturing Downtime

World Class DOD

Company Overview:

Arguably the most admired defense and aerospace systems supplier through world-class people and technology. This company is a technology leader specializing in defense, homeland security, and other government markets throughout the world.

With a history of innovation spanning more than 80 years, they provide state-of-the-art electronics, mission systems integration, and other capabilities in the areas of sensing; effects; command, control, communications and intelligence systems, as well as a broad range of mission support services. 73,000 employees worldwide: \$20.3 billion in 2006 sales. This division has been awarded the Shingo Shingo award for excellence in manufacturing.

Business Challenge:

As part of the corporate Six Sigma and Lean Manufacturing initiatives this division determined internal supply chain and manufacturing downtime as directly proportional items requiring systemic solutions. While maintaining the highest levels of productivity, their operations team needed to improve inventory control, kit quality and inventory accuracy across all facets of the internal supply chain and manufacturing cycle.

The challenge was to integrate a Warehouse Management, Inventory Control System into the existing host ERP suite which could allow planners to focus on front end planning / MRP activities and eliminate their shop floor inventory management / recovery activities and eliminate the manufacturing downtime associated with internal material related issues.

Objective:

Define run rules to address kit and build consolidation while improving costs associated with kit activities by 10%. Eliminate the need for Planners to “chase parts” due to unknown inventory issues and data inaccuracy and timeliness. Replace an antiquated paper based, data entry intensive pick from shelf picking process utilizing wireless, barcode technology as well automated storage techniques to enhance the receipt, put-away, pick, order fulfillment and ship processes. The divisions operations needed to become more cost effective, more efficient while becoming flexible to meet increased customer requirements and government directives. These efficiencies needed to begin with their internal supply chain by improving inventory accuracy as well as reduce the cost of doing business (i.e. reduce overtime activities and cost of quality).

Solution:

Archon Interactive and WaveTrakWMS were chosen as the WMS provider for a this division and ultimately as a corporate solution. WaveTrak was chosen as the corporate WMS resolution for its designed modular structure and the flexibility it provided. The tremendous support and quick solutions that were provided allowed the customer to also look into ways to have Archon Interactive utilize WaveTrakWMS in various other venues such as:

- Supplier Managed Inventory
- Whole Life Support
- Management of Government owned material
- Engineering material controls for new product development

All implementation could be scheduled by individual task and therefore managed by independent teams as required. Each link in the internal supply chain had unique design requirements that WaveTrakWMS was ideally suited to support. The ability to implement in modules also allowed for aggressive transition to the automated system. Another key component to the Archon Interactive solution is their ability to incorporate ALL aspects of the material handling functionalities. This meant automated Storage and Retrieval systems, as well as conveyer systems all intertwined to work seamlessly with the current ERP host. The experience of the Archon Interactive team in all facets of systems integration relieved pressure from the customers own operations and MIS teams thus compressing the installation timeline.

Results:

The end users as well as external auditors have all been very impressed with all of the improvements this division has made with the installation of WaveTrakWMS (Warehouse Management System). It truly has been instrumental to the success since it was installed in July 2005. WaveTrakWMS has been the catalyst to almost all of the operations continuous improvement efforts and has been a key contributor to the Shingo award. The great success achieved in the initial installation has led to the implementation/training of WaveTrakWMS in 3 other divisions in 2006. There is also a goal for 2007 to have it installed in an additional 3 more divisions / sites.

The system is incredibly reliable and user friendly and all sites have responded with cost savings exceeding their estimated ROI. The cost is minimal compared to the savings provided and there is such flexibility to customize the system to the way each site does business.

Savings to date in the initial implementation have been in excess of \$725,000 and a breakdown in this savings can be provided by process and function if requested.