Reducing Cycle Times and Work in Process Management Costs

AEROSPACE AND DEFENSE INDUSTRY

In Aerospace and Defense environments, the longer work stays in process, the longer the field has to wait for necessary equipment. Tracking Work in Process (WIP) is critical, yet the traditional way is challenging — managing it manually with clipboards and spreadsheets. This approach severely limits visibility into the status of WIP, and slows down the delivery of the equipment to the field.
Cycle Times and Cost Challenges

With manual WIP processes, valuable time is spent searching for lost or misplaced equipment, instead of making progress on jobs. Even when skilled people know the physical location of equipment, they may not know its status, requiring more investigation into what work has already been completed and what’s next.

Moreover, the difficulty of gathering complete data — and centralizing access to that information — keeps valuable data in the hands of only a few. In turn, managers cannot make timely decisions about Maintenance, Repair and Overall Operations (MRO).

These obstacles delay cycle times and increase costs. Aerospace and Defense organizations must have a real-time view into the physical location and status of all equipment and supplies in order to stay on time and competitive.

Today, radio frequency technology (RFID) has the power to transform Work in Process.

Real-Time Visibility and Locating Advantage

Real Time Locating Systems (RTLS) technology by Zebra Technologies gives teams and managers complete visibility into the physical location and status of all WIP. Zebra is a leader in Real-Time Personnel and Asset Visibility and Management Solutions that optimize the flow of goods in complex logistical operations.

Using RFID to track assets, Zebra technologies addresses the WIP challenges through automation and streamlines the process of tracking equipment, ensuring you always know the exact location of valuable equipment.

Additionally, Real-Time Locating Systems (RTLS) enables all teams to remain on the same page regarding WIP, with features such as electronic messaging, automatic alerting and shared real-time visibility — reducing communication delays and search time.

By centralizing all asset information, RTLS also provides actionable data to decision-makers throughout the manufacturing value chain. You can identify and address sources of waste in materials management and manufacturing, improving cycle times and use of high-value resources.
RTLS Impact on WIP

WITH COMPLETE VISIBILITY INTO PROPERTY LOCATION AND STATUS, OPERATIONS IMPROVE EVERY PHASE OF WIP.

Automate WIP Tracking
Track WIP in real-time at one location or across multiple sites. Zebra Enterprise Solutions uses radio frequency to track assets, and collect and disseminate data efficiently. By automating asset location information, RTLS reduces the manpower needed to collect and distribute data. In turn, all members of the production team have actionable information on multiple asset classes at all times, empowering them to make better decisions.

The solution also automates exception management, providing alerts and reports based on asset dwell times and location. Aerospace and Defense teams thereby monitor more data points, get immediate notifications and minimize the time to find exceptions.

Locate Constrained Supplies Quickly
Improve your ability to locate constrained supplies such as custom castings, high-value electronics and complex assemblies. Continuous tracking of the physical location of these assets keeps the line from stalling, enables timely replenishment and reduces overstocking.

Expedite MRO Decisions
Make more informed decisions just in time about MRO with RTLS. Zebra Technologies automatically capture real-time data from WIP and equipment for work groups and constrained facilities — reducing human error and cycle times.

Find Mobile Assets
Keep the lines moving by reducing search time for mobile assets such as specialized test equipment and tooling, which represent considerable capital expenses. RTLS also supports mandates for periodic calibration and accurate inventory of government-furnished equipment.

Receive Alerts Automatically
Instantly collect the information you need for transportation, quality inspection or line-side replenishment. RTLS uses various asset location trigger methods to deliver information and alerts to you automatically.

RTLS also reduces team effort to initiate actions and communication delays. Additionally, managers and lean process teams have a historic record of request volumes and response times, improving work flow and asset allocation, and minimizing delays.

Manage from a Flexible Interface
The Zebra Technologies web-based Resource Manager software provides an intuitive, flexible user interface to solve specific business problems. Plus, you can easily integrate it with production control systems.
RTLS Benefits
The Zebra Technologies RTLS infrastructure provides increasing return on investment as you apply it to more business processes.

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<th><strong>Direct Labor Savings</strong></th>
<th>Save time gathering WIP data for production control and searching for tools and test equipment.</th>
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<tr>
<td><strong>Shorter Manufacturing Time</strong></td>
<td>Reduce cycle time with precise location of assets.</td>
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<tr>
<td><strong>Right-sized Inventory</strong></td>
<td>Stay stocked with critical components to avoid expediting transportation and reduce inventory-carrying costs.</td>
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<tr>
<td><strong>Less Process Time</strong></td>
<td>Reduce process time for transportation or inspection, and minimize waste by roving inspectors and forklifts.</td>
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<td><strong>Better Decisions</strong></td>
<td>Automate data capture to improve process control, save time for industrial engineers, and give them more accurate, richer data for decisions.</td>
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For more information about Reducing Cycle Times and Work in Process Management Costs, visit [www.zebra.com](http://www.zebra.com)