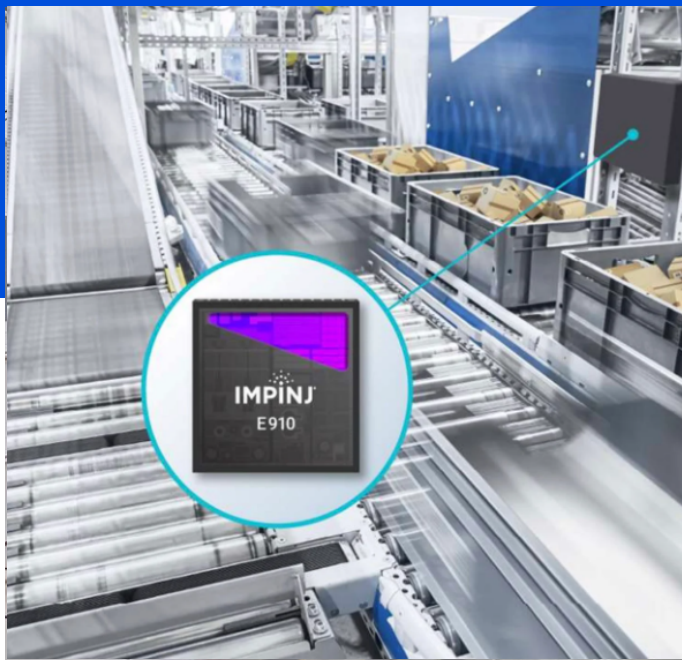


RFID-Powered Smart Manufacturing



MADE POSSIBLE BY:



PRESENTED BY:



Pioneering Operational Excellence in the Age of Smart Factories

Today's sophisticated manufacturing landscape demands the infusion of groundbreaking technologies to streamline operations, heighten product quality and sharpen strategic direction. One technology with a history spanning almost seven decades stands out for its transformative influence: Radio Frequency Identification (RFID). This seasoned technology is helping to redefine the manufacturing realm, ushering in a new era of smart factories characterized by peak production efficiency, improved inventory control, efficient asset management, stringent quality checks and fortified security – all at competitive costs.



ELEVATING MANUFACTURING WITH PRECISION, EFFICIENCY AND INSIGHT

Through RFID and intelligent applications, manufacturers can adeptly:



Track Tools

Locate tools in real time



Automate Checkout

Ensure swift, error-free tool transitions



Optimize Inventory

Monitor stock levels, curtail costs and ensure prompt replenishment



Enhance Data Analytics

Derive insights from tool and material usage trends



Boost Production

Guarantee timely and accurate material placements



Reduce Loss

Identify and retrieve missing tools and materials



This eBook uncovers how industry leader Xemelgo is revolutionizing manufacturing. Discover cutting-edge solutions and learn how they can help drive transformative changes in your operations.

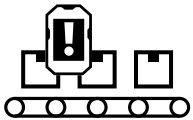
Modernizing Manufacturing for the Contemporary Era

Industry 4.0 introduces seamlessly integrated technologies that monitor conditions, relay vital real-time data and help manage inventory. Xemelgo's cloud-based applications cater to unique manufacturing requirements. By leveraging the might of IoT to enhance operational efficiency and minimize waste, manufacturers gain real-time perspectives on almost every facet of the manufacturing processes:



Grab-and-go for raw materials

Make it easy for team members to grab what they need when they need it while sensors continuously monitor inventory levels to ensure the right materials are always available.



Google Map-like functionality for work-in-process tracking

Give production teams mapping tools to track orders as they move through various work cells and departments. Get real-time alerts about bottlenecks and more.



Real-time visibility of vendor-managed inventory

Keep updated about finished product inventories at offsite warehouses where products are held until they are shipped to customer locations.



Door Dash-like approach to tracking shipments

Track shipments as they leave the manufacturing facility and get real-time data as they arrive at their destinations.



Find my phone-like features for asset tracking

Access valuable capabilities for tracking calibrated equipment, chemicals, blueprints and other critical assets that are stored throughout the operations.



Pioneering Profitability from Raw to Refined

The Xemelgo suite of solutions was developed with leading manufacturers to improve efficiency, reduce waste and boost profitability. From raw materials to finished goods, the company's award-winning solutions transform operations with real-time visibility.

Manage Inventory Wherever You Are

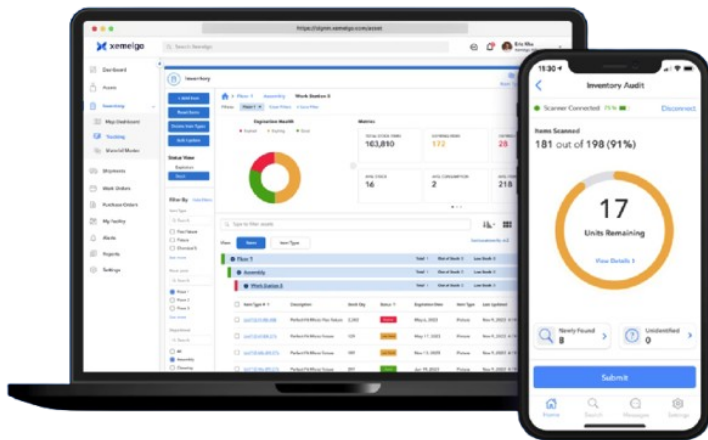
Many manufacturers are harnessing the power of vendor-managed inventory (VMI) to enhance supply chain efficiency and inventory precision. By managing and replenishing inventory at customer sites, the manufacturer minimizes on-site storage, orders only necessary items, streamlines operations, cuts costs and prevents stock shortages.

With Xemelgo's advanced solutions, manufacturers can manage inventory with astonishing ease and unprecedented accuracy. The inventory management software leverages RFID solutions to eliminate manual cycle counting, automate transactions and alert teams before issues occur. Xemelgo ensures clarity on stock status, usage patterns and restocking needs, all while decreasing human intervention in inventory management and offering unparalleled reliability.



XEMELGO AUTOMATED INVENTORY MANAGEMENT

Experience the future of inventory monitoring across all client locations, eliminating the hassles of traditional onsite checks.



HOW IT WORKS

Automated Sensing

Track inventory's exact location at external sites without needing onsite manual counts.

AI-Powered Recommendations

Determine restocking quantities based on historical consumption patterns.

Instant Mobile Alerts

Receive notifications immediately about low stock and expired materials and ensure the supply consistently meets demand.

SUCCESS STORY: HISCO

See how Hisco reduced inventory audit time by 85%

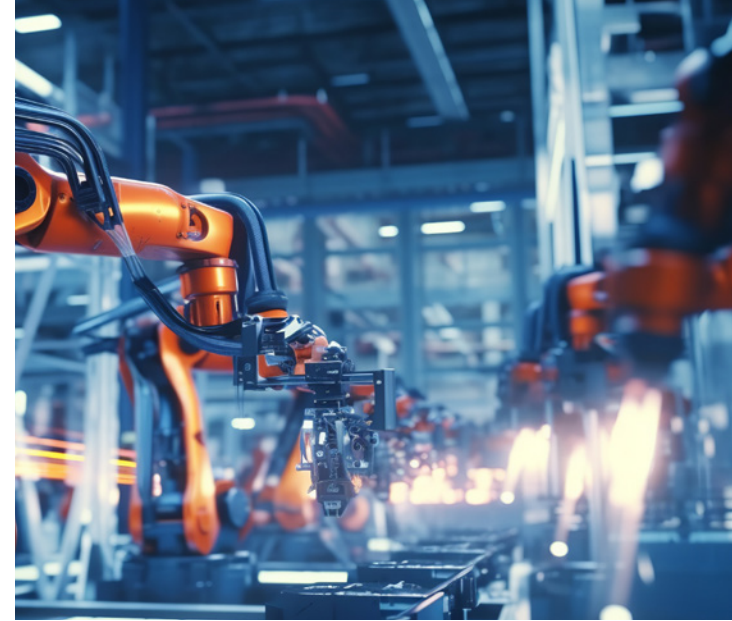
Hisco, a distributor catering to the electronic assembly, aerospace and industrial sectors, sought a method to monitor inventory in real time across their client locations. Arrowhead provided a sensor-driven solution from Xemelgo that delivers instant notifications for items nearing expiration, efficient RFID site cycle counts and monitoring of high-demand items to minimize overstocks.

[VIEW SUCCESS STORY >](#)

See What's Happening on the Factory Floor

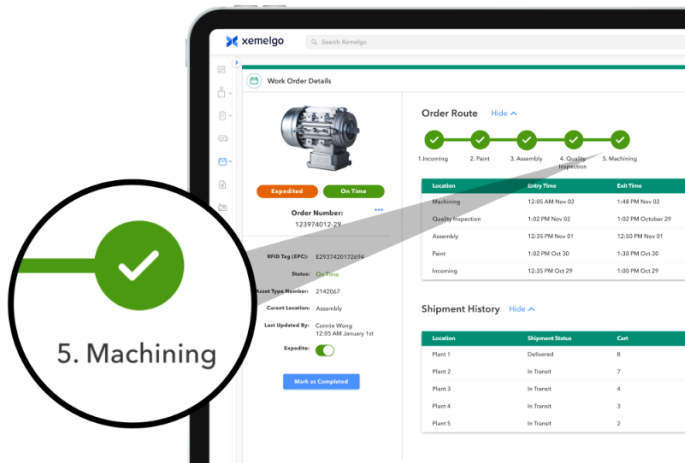
Assembly of multiple components in manufacturing involves intricate steps and adherence to strict criteria before final assembly. By integrating RFID technology into the work-in-process (WIP) tracking process, manufacturers gain instant real-time location data on essential production components, overseeing their progression through the manufacturing process.

RFID minimizes manual data collection and helps ensure the right processes are completed at the right time. By integrating Xemelgo's advanced cloud software with RFID tags and sensors, manufacturers receive dynamic location tracking, visual workflows, AI-powered insights, real-time alerts and powerful reports.



XEMELGO WORK-IN-PROCESS TRACKING

Experience real-time tracking of every job on the production floor. Equip teams with insights for proactive decision-making.



HOW IT WORKS

Visibility through RFID

RFID sensors read tags, offering workers insights into every work order's location, status and priority.

Empowerment with Insights

Team members receive data that facilitates proactive decisions. Automated alerts guide teams to prioritize tasks, ensuring timely deliveries.

Live Mapping

Live map dashboards shed light on factory floor activities, helping avert bottlenecks, unnecessary reworks, excessive movements and more.

SUCCESS STORY: G3 BOATS

Discover how G3 Boats, a division of Yamaha Motors, gained "Google Maps" visibility across their facilities

G3 Boats, a recreational watercraft manufacturer in Missouri, sought a solution to modernize the tracking of boats throughout their production process. The RFID-driven solution from Xemelgo automates data gathering, offering instant insights into each hull and assembly. This system facilitates timely inventory management and enhances sequential deliveries to various dealers.

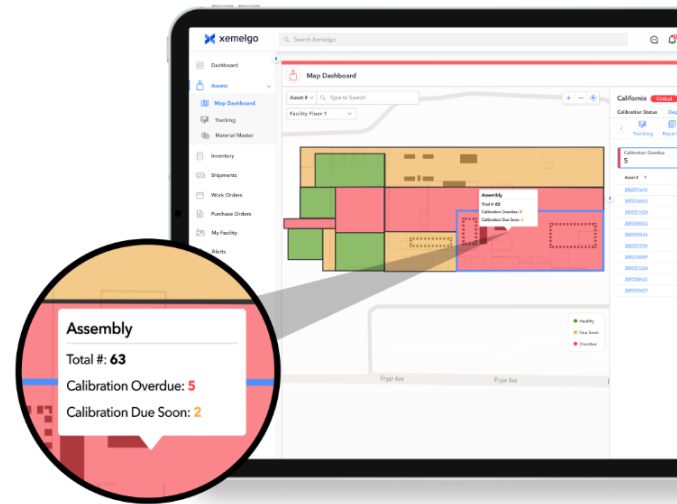
[VIEW SUCCESS STORY >](#)

Keeping an Eye on Critical Assets

The efficiency of manufacturing facilities hinges on the upkeep and accessibility of production assets. Modern operations utilize RFID tags on essential items – ranging from calibrated inspection equipment to production tools, maintenance instruments, blueprints and beyond. This aids in tracking and monitoring their location, ensuring workers have access to them at crucial moments.

XEMELGO ASSET TRACKING

Easily track assets from calibrated inspection equipment to production tooling, lab equipment, maintenance tools, IT assets, blueprints, bins and more.



HOW IT WORKS

Tagging Assets

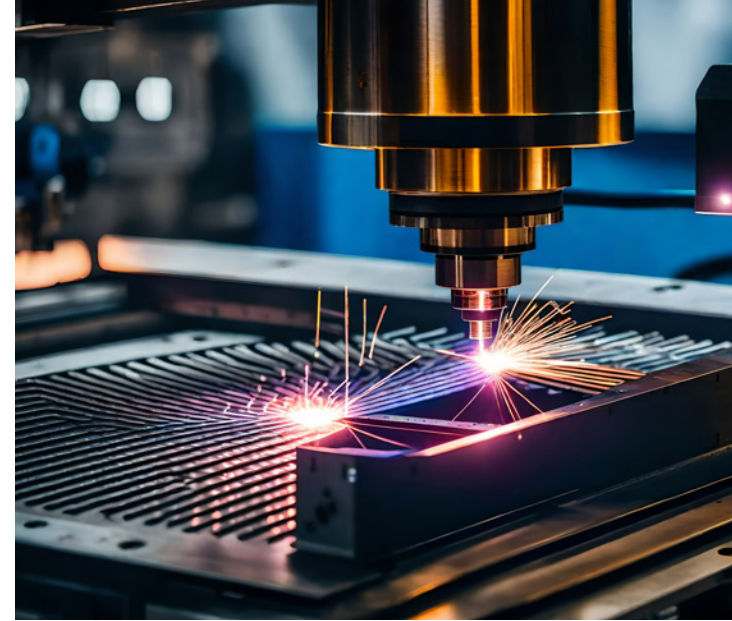
Xemelgo's system uses low-cost, application-specific tags with integrated chips and antennas attached to each asset.

RFID Reading

Assets are tracked in real-time using RFID readers that detect the location of each tagged item.

Software Integration

Paired with Xemelgo's award-winning software, the system offers intuitive management features, automated alerts and comprehensive insights into asset locations and statuses.



SUCCESS STORY: CENTRIX

See how Centrix achieved 100% on-time calibration of assets and a 67% reduction in search time

Centrix, a manufacturer of engineered fastening solutions for the aerospace industry, needed to improve its performance in the calibration of measuring and monitoring equipment. The Xemelgo Asset Tracking application improved the Centrix team's ability to find production tools and stay current with calibration. Now, the company can onboard hundreds of tools in a matter of hours.

[VIEW SUCCESS STORY >](#)

From Dock to Doorstep: Ensuring Seamless Shipment Tracking

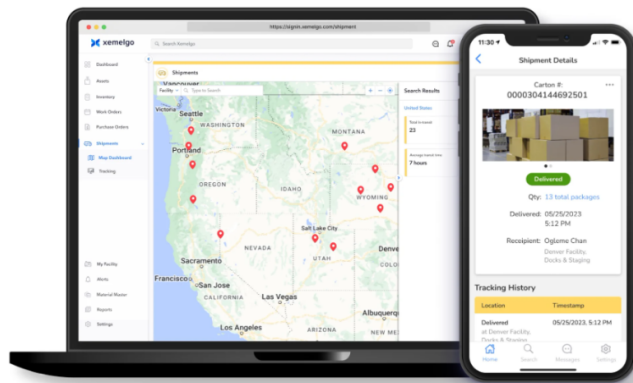
More than the production of quality finished products, manufacturers face complex challenges in getting those products to their final destinations. Regulatory compliance and traceability are priorities, requiring complete visibility into supply chains. Increasing logistics efficiency can go a long way in reducing costs and meeting customer expectations.

RFID tags, with their ability to be read quickly over long distances, provide an efficient method for tracking goods and their associated transport items, such as pallets and crates. This technology facilitates end-to-end shipment verification, ensuring the correct product is loaded onto the appropriate truck and confirming its departure from the dock.



XEMELGO SHIPMENT TRACKING

Experience the power of real-time monitoring, as every step of your shipment's journey is meticulously tracked and recorded.



HOW IT WORKS

Sensor Data Integration

Verify departure and destination quantities to avoid incomplete deliveries. Identify patterns, optimize routes and streamline logistics operations.

Intelligent Alerts

Receive notifications when shipments stray from the plan, allowing timely interventions.

Data-Driven Decisions

Utilize reliable shipment data to maximize the efficiency of internal resources and guarantee customer satisfaction.

SUCCESS STORY: SEKISUI AEROSPACE

Discover how Sekisui Aerospace eradicated lost shipments and boosted productivity

Sekisui Aerospace needed to improve its shipping and on-time delivery performance. By leveraging RFID technology and Xemelgo's Shipment Tracking application, the company eliminated missing shipments, improved on-time delivery and streamlined operations – increasing productivity by more than 125% without adding new staff.

[VIEW SUCCESS STORY >](#)

Leading Technological Transformation in Manufacturing and Supply Chain

In this modern era, smart factories stand ready to access instant information, receive intelligent notifications and derive comprehensive insights throughout the production lifecycle, ensuring optimized operations. Technology's role is undeniably transformative. Xemelgo stand as a testament to this transformation, leading the charge with groundbreaking solutions that have consistently enhanced operational efficiency, asset management and overall productivity. These trailblazers continue to set industry standards, driving innovation for a smarter future.



ABOUT ARROWHEAD

Now in its 32nd year, Arrowhead stands as a beacon of excellence, recognized as a certified service center. The company is renowned for expertly pinpointing the perfect hardware and software solutions tailored to customer needs, always underpinned by unparalleled customer service. Strategically located in Chandler, Arizona, Arrowhead's influence and reach are global.



ABOUT XEMELGO

Xemelgo offers app-based solutions to manufacturers that bring their factories into the 21st Century. Leveraging the power of IoT technology, the company enables businesses to eliminate waste and improve operational efficiency with real-time information, intelligent alerts and powerful insights into all stages of production.