

Experimenting with RFID for Chemical Manufacturing

Real-time tracking with leading-edge technology

PMC Biogenix (PMC) is a global manufacturer and marketer of specialty chemicals produced from renewable resources with facilities in the Americas, Europe and Asia. The company develops solutions for a broad range of markets including plastics, consumer products, electronics, paints, packaging, personal care, food, automotive and pharmaceuticals.

Located on 50-acres in Memphis, Tennessee, the PMC Biogenix campus is an integrated oleochemicals and derivatives manufacturing site that is the cornerstone of its product, process and development efforts. The campus includes a technical center that houses functional laboratories for product development, process development, application testing, instrumental analysis and wet analysis. PMC also has an 8,000 square foot pilot scale manufacturing facility that develops new processes and produces scale-up quantities for their customers.

A Matter of Substance: Controlling Inventory, Labor, and Quality

With several buildings on their campus producing a multitude of products on a daily basis, tracking finished goods was a monumental task that was still being handled with manual processes. Each morning, employees spent hours manually counting and managing the products manufactured the previous day, and spent even more time entering the data into their Oracle ERP system.

Optimizing efficiencies in their operations and increasing accuracy were two areas where Frederick Lee, Manager,

Infrastructure at PMC Biogenix, needed some help. He knew he needed a way to automate key processes but wasn't exactly sure how to go about selecting the right technology and system that would integrate with their current ERP. Lee contacted MSM Solutions for advice.

Key Elements of Automating Inventory Management

After analyzing PMC's work environment, current processes and inventory management challenges, MSM recommended its RFID solution. Coupled with PortalTrack, MSM's tracking software application, RFID provides faster throughput and greater flexibility for workers. "RFID technology seemed to be the best fit for PMC," said David Summers, RFID Systems Integrator at MSM Solutions. "Based on the products they produce, their production volume and current workflows, it made sense to offer them a technology that could keep up with the pace of their business," Summers added.

With RFID applications, RFID tags or labels are placed on products, bins or pallets and automatically read when they pass by an RFID reader – fixed, antenna or handheld. The reader captures the data for an individual item or large volume of products in bins or pallets, creating more efficient workflows and increasing inventory accuracy. To manage their operations, PMC installed over 40 Zebra FX9500 8-port RFID readers, ceiling-mounted antennas and several Zebra MC3190 Handheld Mobile Computers.

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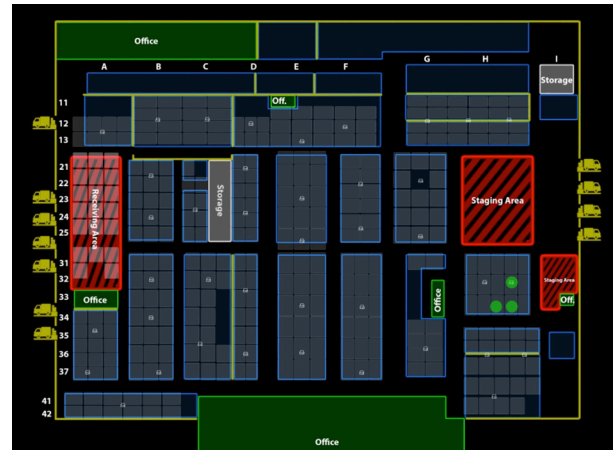
David Summers, RFID Systems Integrator at MSM Solutions



A Chemical Reaction

At the core of any RFID application is the software that powers it. MSM Solutions' PortalTrack software gathers data from the RFID readers and delivers it to PMC's Oracle ERP system. PortalTrack is a cloud-based tracking software, allowing PMC to continuously manage its production operations and capture critical data such as locations, batch numbers, quantities, weight, time stamps and product workflows. In addition, PortalTrack provides a real-time view of the 8,000 sq. ft. warehouse floor with marked zones so workers can locate exact location of product by batch number, expiration date, and more on the warehouse floor.

"This solution has been a game changer for our business," said Lee. "The visibility we've gained has enabled us to make informed decisions in real-time, so we are always operating at optimal efficiency. It's much easier now for us to manage product moving in and out of our buildings, see when products have been transferred to a trailer, track orders being shipped, and so on," he added.



Perfect Chemistry

The system paid for itself in under 24 months by reducing product write-offs, enhancing quality control and reducing inventory as well as providing faster stock count and shipping verification. Although RFID is PMC's dominant tracking technology, barcoding is also part of the landscape for productivity. Cycle counting is conducted on a monthly basis using Zebra mobile computing devices. "We used to cycle count once a year and it took several days to finish," said Lee. "Our Zebra RFID system is so fast and easy to use our cycle counts now take just a couple of hours and the data is much more accurate," he said.

"We appreciate our relationship with MSM Solutions. They listen to us, they understand what we need and they are here to assist. With a decade of experience together, we know we can always count on them."

"Our Zebra RFID system keeps our data so current our cycle counts now take just a couple of hours"

Frederick Lee, Manager, Infrastructure

Are you tired of experimenting with technology on your own?

MSM Solutions is the perfect compound for your business.

Contact us today to schedule a facility assessment.