



A complex, dispersed, supply chain demands discrete manufacturers know more about their materials, products and resources in production; where they are, what they are, and how many there are in order to meet customer demand. The Brooks RFID solution is an electronic tag identification system that tracks items throughout the manufacturing process, storing the information in a temporal data repository, from one to multi-site locations, ensuring that the right product is at the right place for the right operation to address market demands. The Brooks RFID solution provides a comprehensive set of software to link RFID readers into the Brooks Sense Decide Respond™ real-time solution set.



RFID-enabled, collaborative manufacturing systems collect product data while providing material consumption information needed for planning and demand-based scheduling.

time-based, data repository containing extensive information about a product or part. This data helps ensure that the right product is at the right location for the right operation in the manufacturing sequence. The Brooks RFID solution provides real-time visibility into the production flow enabling immediate decisions that will reduce cycle times and variability in the day-to-day operation.

AUTOMATED CORRECTIVE ACTION

The Brooks RFID software evaluates activity in the factory and initiates operational actions, corrective actions or proactive measures without the need for human intervention. Brooks senses operational changes where events and exceptions trigger decisions that select the best course of action using automation or exception handling jobs. The Brooks RFID solution identifies defective parts or non-conformant materials that need to be removed from production and identifies the correct replacement that should be used in the assembly. This ensures consistent process and product quality.

PROVEN INDUSTRY APPLICATIONS

Brooks is experienced in the deployment of RFID technology having provided passive RFID systems to discrete manufacturers for over 10 years. Brooks' software runs in 7x24 mission critical facilities worldwide. Brooks' strong service implementation experience helps manufacturers to quickly get their RFID systems up and running by mitigating risk and improving decision-making with regard to RFID, including layouts and lessons learned. Brooks has direct global operations in North America, Asia and Europe.

BENEFITS:

- > Optimize production flow and reduce inventory levels
- > Improve accuracy of production data
- > Increase in product quality and profitability
- > Reduce operating expenses
- > Ensure and reduce the costs of regulatory compliance
- > Reduce the cost of rework and diminish scrap
- > Reduce operational variability
- > Reduce expansion costs through scaleable solution

RESOURCE IDENTIFICATION IMPROVES EFFICIENCY

The RFID tag is attached to products or conveyance devices to identify the physical location of the materials throughout the facility. The Brooks RFID solution allows manufacturers to reduce internal product movement, ensure effective allocation of WIP and avoid misappropriation of jobs while optimizing inventory levels. RFID tags can also be used to track any moveable equipment in the facility. This reduces internal costs, ensures effective use of production equipment, and increases equipment utilization.

PRODUCTION DATA COLLECTION

Brooks RFID solution offers distinctive benefits over other RFID solutions. Automated readers derive data and store it in a centralized temporal,

Brooks Software is a leading provider of real-time RFID manufacturing solutions with thousands of readers, tags and solutions implemented worldwide. Brooks is a member of the EPCglobal organization.

Brooks Software is a leading provider of real-time manufacturing applications for collaborative, complex manufacturing operations. Our products, solutions, and global service infrastructure deliver competitive advantage to many of the world's Fortune 500 manufacturers in aerospace & defense, automotive, high tech, life sciences and semiconductor manufacturers worldwide.

TRACKING AND PRODUCT TRACEABILITY

The Brooks RFID solution has full component genealogy, complete tracking and extensive traceability, from raw materials to finished goods. The stored data includes information on materials, products and carriers from inventory to staging, production and warehousing. This detailed data for a unit, batch or lot, including subassembly information, can be attached to products and passed to the upper level assembly for a complete 'As Built' history record of a "finished good." The result of this integrated solution is improved quality, reduced cost of compliance, reduced warranty costs and improved operational efficiency.

POINT-IN-TIME CONSUMPTION VIEWS

Tag information is combined and cross-referenced with the state of the facility and the added dimension of time providing a single real-time process view enabling complex business questions to be answered about manufacturing problems and productivity. The temporal data repository supports real-time extraction and reporting of states, activities, and changes on the shop floor providing a vital glimpse into manufacturing operations and the ability to rollback "moment in time" data to get a snapshot for root cause analysis. Only Brooks RFID reporting solution shows a complete operational view at any instant in time.

RESPONDING TO PRODUCTION PROBLEMS

The system will sense event changes or production activity and execute automated decisions or exception handling actions based upon asynchronous events. Key performance indicators are extracted in real-time from the temporal data repository allowing for rapid decision-making. This enables operations' activities to be proactive and predictive rather than reactive.

DATA STORAGE AND RETRIEVAL

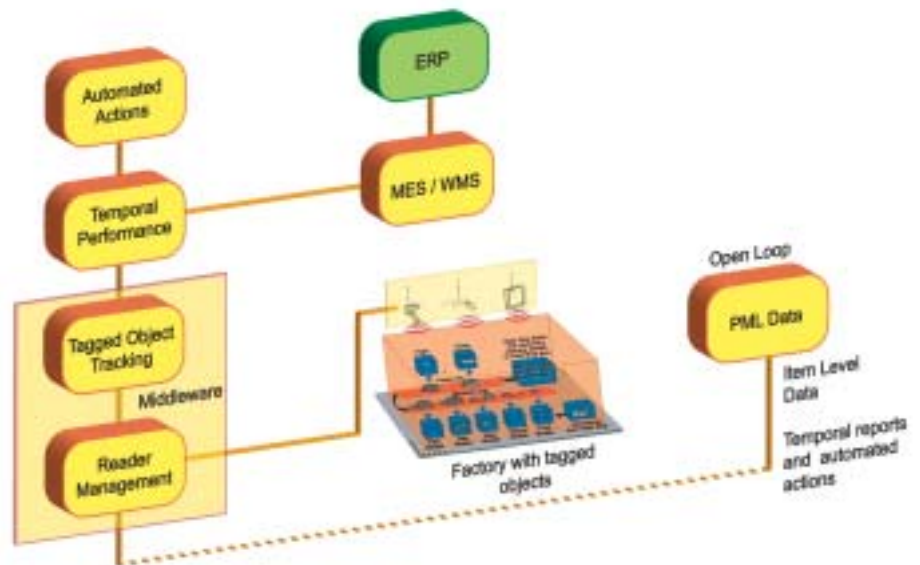
Gathering and assembling pieces of the manufacturing data into a common place is the first step toward process improvement. Data from RFID readers, ERP, or Warehouse Management Systems (WMS) are collected in the high speed, temporal data repository. This enables complex business questions to be answered, through data retrieval, about problems and productivity in the facility in real-time.

RFID THIRD PARTY READERS

The complete Brooks RFID solution provides communication to Brooks readers or supports readers from other manufacturers. The RFID middleware provides reader and event management; write capability to higher capacity tags and tracks relationships between tagged or virtual objects throughout the facility. This capability reduces the cost of expansion or integration of third party products with the Brooks RFID solution.

CONSULTING SERVICES

BrooksSoftware consulting services are designed specifically to aid the customer in RFID implementation, and to assist in managing issues that develop from planned or unplanned growth and evolution of their production environments. These services come with a wealth of experience in RFID implementation that helps customers to get the utmost value from their IT investment.



The RFID solution reduces manual handling of objects and automatically identifies materials and parts, while facilitating production control and waste reduction, resulting in higher quality and increased profitability.

BrooksSoftware

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