Every business day manufacturers face the challenge of effectively managing warehouse operations and material handling that align with shop floor requirements and customer needs. Costly material handling errors interfere with meeting customer expectations for proper labeling, quality and on-time delivery. Errors also increase industry and regulatory compliance risk, which can result in penalties and expensive expedited freight. Inefficient inbound receiving and production replenishment processes may delay component delivery to the manufacturing floor and cause production stoppage. Inaccurate inventory data results in excessive inventory levels and related costs. Manual workarounds introduce errors, prohibit a rapid response to meeting material requirements and lead to unwanted compromises. Leading manufacturers accomplish inventory reduction and accuracy through automated data collection and paperless shop floor instructions – leading to more agile and effective material flow processes.

HOW CAN MANUFACTURERS ELIMINATE MANUAL MATERIAL HANDLING PROCESSES?

Manufacturers that rely on manual processes fail to maximize supply chain performance and suffer from poor inventory handling and lack of shop floor visibility, causing production stops and missed shipments. Material handling data collection results in more real-time and error-free transactions that improve inventory accuracy and increase the speed of operations.

HOW DO YOU ENSURE MATERIAL HANDLERS AND WAREHOUSE STAFF FOCUS ON THE RIGHT TASK?

Warehouse workers are often overwhelmed with conflicting tasks that interfere with identifying the best storage location and finding the optimal travel path. Automated material movement enhances visibility into the priority for each activity and ensures workers focus on the right task. This improves efficiency, maximizes warehouse space and reduces the time required for onboarding.

HOW ARE COMPLIANCE, REGULATORY AND QUALITY ISSUES ADDRESSED?

Manufacturers are under pressure to comply with industry regulations and quality standards. Recalls, returns and customer complaints negatively impact the business. Tracking lot numbers, serial IDs and quality attributes is complicated. Data collection and barcoding eliminate information gaps, improve material tracking, ensure quality standards and help address standards such as MMOG/LE and FDA requirements.
Outcomes

With pressure to increase efficiency, cut costs and maintain quality, manufacturers benefit from automating material handling processes, which ensures inventory accuracy and improves agility across the warehouse and shop floor. Typical business improvements include:

**REDUCE**
- costs of labor required to capture transactions

**ELIMINATE**
- costly errors through real-time validation

**REDUCE**
- down time, missed shipment and labeling errors

**MAXIMIZE**
- warehouse space utilization

**CUT**
- inventory levels and obsolescence costs

**REDUCE**
- the training time required for new personnel

Key Strengths

QAD Automation Solutions tightly links with [QAD Manufacturing](#) to improve operational visibility, control and accuracy throughout the internal supply chain, from inbound to production to outbound activities.

**Data Collection Framework** captures data for inbound receiving, inventory, production and shipping processes through simplified ERP transactions using a radio frequency (RF) scanner, tablet or a stationary shop floor personal computer or terminal.

**Label Printing Services** automatically selects the right label format and prints labels associated with operations performed by the operator (receiving, production reporting or shipping) based on manufacturer, supplier and customer specified formats and rules.

**Warehousing Extensions** enable task and business rules driven warehouse operations, optimization of warehouse space and measuring performance of material handlers.

Core Capabilities

Provides out-of-the-box transactions for inbound, outbound, production, inventory management and packaging

Simplifies material and production transaction development through configuration of Data Collection transactions utilizing QAD Service Interface APIs (SIAPI)

Ensures failure free transaction processing through SIAPI processing and interactive record locking management

Monitors labels for specific business requirements and provides a log of which labels were printed and when

Provides real-time warehouse monitoring to track picking, packing and truck loading

For more information on how QAD Automation Solutions can help your company, please view [Akebono case study](#), [Hendrickson case study](#) or [QAD Automation Solutions webinar](#).