



Eagle Update

Eagle Consulting & Development • 135 Kinnelon Road • Suite 204 • Kinnelon, NJ 07405 • USA • 1-973-838-5006

Eagle Consulting & Development is the leading provider of online, real-time automated data collection and bar coding solutions to users of QAD MFG/PRO enterprise applications worldwide. Eagle provides "plug-and-go" bar coding and automated data collection capability to 800 QAD MFG/PRO customers at 3,000 sites worldwide. For more information, visit www.eaglecondev.com or contact Bill Paone at 1-973-838-5006 ext. 119.

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Eagle Adds Value

Eagle Consulting's product, RF Express™ for MFG/PRO®, sets the standard worldwide for quality, performance, flexibility and "plug-and-play" integration with QAD MFG/PRO. In addition, here are a few of the many ways in which Eagle has gone beyond product functionality to add value for its customers in the last year.

INTEGRATION WITH QAD AIM (Advanced Inventory Management)

In 2003, Eagle once again worked with QAD's R&D staff to provide added value to our mutual customers. Advanced features in both RF Express for MFG/PRO and AIM have been fully integrated, providing a seamless look and feel.

Users can now make use of best-in-class data capture and warehouse management capabilities from a single handheld unit.

In addition, AIM and RF Express for MFG/PRO utilize consistent and compatible hardware, which means significant savings for our mutual customers.

WIRELESS SECURITY

In 2003, Eagle began offering wireless security analysis and solutions to users of RF Express for MFG/PRO. Although wireless technology brings many benefits, including mobility, accuracy and cost-

effective data collection, it is essential to know whether your wireless communication system is secure, and to take steps to protect it if needed.

RFID READY

Regardless of what kind of product you manufacture, RFID (Radio Frequency Identification) technology is almost certainly heading your way. Trade magazines, corporate white papers and even the mass media have picked up on the potential – and the implications – of this potent technology. Even without item-level tagging, RFID can work for you on the pallet, at the receiving dock, in the warehouse, in the shipping area

and on the factory floor. Eagle and Intermec are ready to assist with support for your RFID requirements.

**20 countries, 800 customers,
3,000 sites:
Eagle delivers value.**

WORLDWIDE SUPPORT

Since last year, Eagle Europe and Eagle Asia/Pacific are more and more in evidence at local conferences and events around the world. Local presence and local relationships have been part of this year's effort to add value for our customers across the spectrum of our product, our services and our people.





Eagle At Explore

Eagle and QAD will provide a joint presentation entitled, *Closing the Gap Between Factory Floor and Warehouse*.

This presentation will provide MFG/PRO users with a new option in meeting their warehouse management and automated data collection needs. The combination of QAD AIM (Advanced Inventory Management) and Eagle Consulting's RF Express for MFG/PRO provides a fully integrated approach to closing the gap between factory floor and warehouse.

To learn more about the Eagle solution:

AMERICAS

Eagle Consulting & Development
1-973-838-5006

ASIA/PACIFIC

Eagle Asia/Pacific
+65-6827-9091

EUROPE

Eagle Europe Ltd.
+44(0)-1451-812266

Eagle web site:
www.eaglecondev.com

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Devices Supported by Eagle Consulting

- RF handheld networks (TCP/Serial)
 - IEEE 802.11B Direct Sequence
 - Spread spectrum (2.4 GHz)
 - Spread spectrum (900 MHz)
 - Narrow band
- Fixed shopfloor stations with wands and laser scanners
- RF ID tags
- Fixed RF printers
- Portable RF printers
- Scales
- Industrial ink jet sprayers
- Thermal transfer printers
- Bumpy bar codes

And the Tools of e-Business

- Handheld computing devices (PDA)
- Laptop
- Mobile phone

Check out the latest news about Eagle and its partners at the Eagle Newsroom:
www.eaglecondev.com/newsroom.htm

LISTENING TO OUR CUSTOMERS

Through careful review and analysis of current contracts and projects, Eagle continues to learn about customer requirements. Here is how one of our customers is using RF Express for MFG/PRO to meet its needs.

Essex Group, www.superioressex.com, headquartered in Ft. Wayne, IN, is the largest manufacturer of magnet and winding wire in North America. Essex Group has deployed the RF Express for MFG/PRO Inventory Management and Enhanced Shipping modules at its Ft. Wayne and Columbia City, IN, and Franklin, TN, sites.

Essex moves component products from raw material sites to final assembly manufacturing plants. At the component sites, the Link Item to Container (LNK) transaction is used to create an abs_mstr container record. This container record allows for simplified, single-scan movement and shipment using the Container Move (CMV) and Load Truck (LTR) transactions. In addition, the Link Containers (CTN) transaction is used to link first-level containers together for master level container creation.

Eagle Worldwide Hardware and Technology Partners

- CGI
- Hewlett-Packard
- IBM
- Intermec Technologies Corporation
- PICS
- Progress Software Corporation
- RCM Technologies
- Zebra Technologies

Eagle Marketing Assistance Partners

These organizations provide sales and support to RF Express for MFG/PRO users.

CGI

Ph: 1-416-862-0430
www.cgi.com

MDSS

Ph: 1-216-514-5141
www.mdss.net

Minerva Industrial Systems (UK)

Ph: +44-1242-211211
www.minervapl.com

MPS Associates

Ph: 1-856-371-8307
www.MPSassociates.com

PICS*

Ph: 1-609-702-3900
www.pics.com

QAD South Africa

Ph: +27-11-807-6660
www.qad.com

RCM Technologies

Ph: 1-248-426-1200, ext. 200
www.rcmt.com

SIG

Ph: 1-800-433-7174
www.strategic.com

SYS-TEC

Ph: 1-734-854-3000
www.sys-tec.com

** In addition to sales and support, PICS also provides implementation services for RF Express for MFG/PRO.*



AUTOMOTIVE UPDATE

AMAK Brake, LLC, www.akebonobrakes.com, manufactures automotive brake components and systems at its facilities in Glasgow, KY. AMAK Brake uses the RF Express for MFG/PRO Inventory Management, Advanced Repetitive, and Enhanced Shipping software modules. When raw materials are received, the vendor-supplied label is scanned to quickly perform a purchase order receipt (POR) transaction. The Eagle POR transaction is performing the same update as 5.13.1 in real time to the QAD MFG/PRO database. Since AMAK uses internal kanbans for product movement, the Eagle POR transaction can generate the appropriate kanban if the vendor label is insufficient.

In the production area, planners use the Eagle Kanban Maintenance screen (rfkan.p) to generate electronic kanbans that reference the item being produced (pt_part), production line, machine, operation, ship-to (if known), item quantity, and container item. The electronic kanban (8-digit number) generated by Eagle is bar coded and applied to the existing AMAK shop floor kanbans.

On the floor, operators use the Eagle Kanban Backflush to report production by scanning their employee ID and the kanban number. At final packaging, the kanban is used to report production, relieve components and generate the appropriate finished goods label.

In shipping, the finished goods labels are scanned and attached to a shipper via Load Truck (LTR). Item and quantity validation is achieved by creating this shipper in advance via the QAD MFG/PRO Picklist/Pre-shipper Automatic function (7.9.1).

As the truck is loaded, the Verify Load (VLD) transaction provides quick single-scan verification that the proper containers for that shipper are being placed on the truck. The operator receives an "All Containers Verified" ticket for the verification audit trail.

Grakon International, www.grakon.com, manufactures new vehicle lighting systems and trim components. With headquarters in Seattle, WA, Grakon operates a manufacturing facility in Hong Kong and a distribution facility in Seattle.

Real-time RF backflushing will be used to report production and print container labels in Hong Kong. Resulting containers will be scanned onto shippers through RF Load Truck. Shipper data, including container detail, will be transmitted from Hong Kong to Seattle via an Advance Ship Notice (ASN). ASN data will be used to receive the containers into the Seattle database upon receipt of the shipment. Containers will be scanned into putaway locations in the Seattle warehouse using the highly efficient two-scan RF Container Move.

When product is ready to ship to the final end customer, users will merely scan the label applied in Hong Kong during the production reporting process. If required, new customer-specific labels will be automatically printed with the same exact container ID as the

original Hong Kong labels. Maintaining the same container ID across multiple databases is a key element in production-to-end-customer lot tracing.

TOP TEN DIFFERENTIATORS

1. **Proven success**
2. **Consistent ability to execute**
3. **Industry experience**
4. **Integration with QAD MFG/PRO**
5. **Scalability**
6. **Functional breadth**
7. **Single source accountability**
8. **Viability**
9. **Worldwide presence**
10. **Availability of support**

AUTOMOTIVE UPDATE

The Grakon implementation was performed with essentially standard RF Express for MFG/PRO functionality. Grakon's requirements were primarily accommodated by manipulating Eagle's table of configurable switches – called 'rfvalues' – which features in excess of 1,600 site-maintainable configuration switches. Modifications to the table can be loaded, tested, and implemented in a matter of minutes, without changing any code.

Lear Furukawa Corporation,

www.lear.com and www.furukawa.co.jp, produces and distributes vehicle wiring harnesses and systems at its North American facilities in Cd. Juarez, Chihuahua, Mexico; El Paso, TX; and Columbus OH. Lear Furukawa has deployed the RF Express for MFG/PRO Inventory Management, Advanced Repetitive, Enhanced Shipping and Honda "Bolt-On" software modules. At the manufacturing plant, the company uses the Eagle "container label as kanban" functionality to allow for advance label creation. At the end of the production line, this label is scanned to report the production via kanban backflush. Additional prompting has been provided to capture individual finished goods serial numbers for traceability inside of the container.

The containers are moved easily to the distribution center using the Eagle Container Move (CMV) transaction. Eagle provides finished goods labeling capability with EDI integration. At the distribution center, the Eagle Load Truck transaction is used to add the containers to a shipper. The Honda "Bolt-On" module provides the picklist item and quantity validation specified by Honda in its Star, Delta, GPCS and VC2 requirements.

MacDonald Industrial Products,

www.macdonald-enterprise.com, manufactures metal and plastic door handles and trim pieces for the automotive and consumer appliance industries. MacDonald successfully implemented the RF Express for MFG/PRO Advanced Repetitive and Enhanced Shipping modules at its Grand Rapids, MI; Kentwood, MI; and Spencerville, OH, production facilities. Production reporting at MacDonald is now accomplished in real time with minimal data entry using the RF Backflush and RF Kanban Backflush transactions. Automotive Industry Action Group (AIAG)-style industry-compliant labels are also printed through RF Express for MFG/PRO. Shippers are easily created by scanning a single bar code on the AIAG labels using RF Load Truck. The RF Load Truck transaction validates each entry against a picklist created through QAD MFG/PRO. If all validations are satisfied, container records are automatically linked to the Shipper. When the user receives the "Shipper Picked Complete" message, the Shipper is ready for the QAD MFG/PRO Confirm and ASN Export.

Shanghai Eaton Engine Components Company Ltd. (SEECO),

www.eaton.com, manufactures engine valves for automotive and industrial applications at its Shanghai, China, facility. SEECO has successfully implemented RF Express for MFG/PRO Inventory Management, Advanced Repetitive and Enhanced Shipping transactions on an Oracle database. SEECO is part of Eaton Corporation's ongoing global RF Express for MFG/PRO rollout, with successful deployment at Eaton facilities in North America, Europe, Africa and Asia.

SEECO can easily process its shop floor transactions in real time through mobile terminals on an RF network using RF Express for MFG/PRO. In order to adapt RF Express for MFG/PRO for users in China, the RF Express for MFG/PRO code was configured to properly handle simplified Chinese double-byte characters. RF Express for MFG/PRO menu and transaction prompts were translated to display in Chinese on the handheld terminals. Real-time inventory labels are printed to represent inventory created through Purchase

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Order Receipt, Work Order Receipt and Advanced Repetitive modules. All labels are generated on Intermec printers with a combination of hard-coded and variable QAD MFG/PRO database Chinese character data and company logos.

TS Tech North America, www.tstna.com, headquartered in Reynoldsburg, OH, manufactures automotive seating systems. TS Tech is using the RF Express for MFG/PRO Inventory Management, Advanced Repetitive, Enhanced Shipping and Honda “Bolt-On” software modules at its facilities in Boaz, AL.

In the raw material area, TS Tech uses the Pallet Load (PLO) transaction to make component “kits.” Since these kits or pallets are moved to staging areas and then to a production line, the pallet functionality provides for single-scan movement, which saves time over individual transfer transactions. Once the component kits are moved to the production area, the Pallet Unlink (PDL) transaction is used for the final transfer (3.4.1) and removal of the pallet reference number.

In production, the Eagle Backflush transaction (BKF) is used to relieve component parts from the work center location and produce the subassembly or finished goods. A label routine integrated with the BKF automatically produces the WIP/Internal or finished goods label.

At shipment preparation, the Eagle Honda Picklist (rfhpick.p) automatically pulls scheduled order data and inbound EDI data from the QAD eCommerce turnaround tables. When the operator scans the container label, the proper item and quantity are verified against the picklist. The required Honda “Delivery Batch” and “Quick Receive” labels are generated automatically as part of the Honda Load Truck (HLT) process.

PROJECT UPDATE

Here’s an update of recent successful RF Express for MFG/PRO implementations:

NORTH AMERICA

David Yurman, www.davidyurman.com, designer of fine jewelry and luxury watches, has deployed the RF Express for MFG/PRO Inventory Management, Work Order Management and Warehouse Management software modules to support its New York City operations. The Eagle Inventory Management module provides integrated bar code labels during the component receipt process. The receipt label simplifies the staging and routing of components for a work order. The purchase order receipt document provides additional bar codes for simplified data entry into subsequent Eagle transactions. The Eagle pallet load functionality is used to link lot-controlled components to a license plate pallet number. With the creation of the license plate, follow-on transactions that move or issue the linked components can be completed with one or two scans. The work order component issue is performed by scanning the work order ID and then the pallet number. Components are validated against the bill of material. Production reporting is accomplished with the Work Order Receipt transaction. The Eagle Sales Order Pick and Detailed Allocation Pick transactions are used to select and verify the proper item to ship.

EUROPE

Saint Gobain Performance Plastics, www.plastics.saint-gobain.com, produces advanced-technology polymer products for demanding industrial applications. Saint Gobain continues to roll out RF Express for MFG/PRO at its sites throughout Europe. The latest sites to go live are at Gessil, France, and Kilrush, Ireland.



NEW CONTRACT AWARDS

NORTH AMERICA

BioForm, Inc.

www.bioforminc.com

Manufacturer of medical implant products.

BioForm, headquartered in Franksville, WI, will implement the RF Express for MFG/PRO Sales Order Shipping software module.

Handy & Harman

www.handyharman.com

Diversified industrial manufacturer; parent company of a family of materials engineering and specialty manufacturing companies.

Handy & Harman, a subsidiary of WHX Corporation, is headquartered in Rye, NY. Handy & Harman will implement RF Express for MFG/PRO Inventory Management, Advanced Repetitive and Shipping Management modules at multiple sites.

Lear Corporation

www.lear.com

Manufacturer of automotive instrument panels and trim components at its facilities in Monterrey, Nuevo Leon, Mexico.

Lear Corporation will use the RF Express for MFG/PRO Inventory Management, Advanced Repetitive and Enhanced Shipping software modules. RF Express for MFG/PRO will simplify production reporting with kanban label usage. The Eagle shipping transactions will enhance the finished goods labeling and product shipment processes. RF Express

for MFG/PRO will be rolled out to facilities in Toluca and Tlahuac, Mexico, later this year. In addition, RF Express for MFG/PRO will be used at its Plymouth, IN, distribution facility in conjunction with QAD Advanced Inventory Management (AIM).

Mark-Lynn Foods

www.mark-lynn.com

Manufacturer and packager of food service items.

Mark-Lynn Foods, headquartered in Bremen, GA, will implement RF Express for MFG/PRO Inventory Management, Work Order Management and Warehouse Management software modules for data accuracy and real-time inventory and customer order information.

Plydex-Division of Decoma International

www.magna.com

Manufacturer of bumper assemblies for the automotive industry.

Plydex-Decoma, a Magna International company headquartered in Aurora, Ontario, Canada, will roll out the RF Express for MFG/PRO Inventory Management, Advanced Repetitive, Enhanced Shipping and Honda Shipping modules. Streamlined transactions and industry-compliant labels will be key elements of this implementation.

Scotsman Ice Systems

www.scotsman-ice.com

Manufacturer of commercial and residential ice machines.

Scotsman Ice, a division of Enodis, with headquarters in Vernon Hills, IL, will roll out RF Express for MFG/PRO at its Fairfax, SC, production and distribution facility. Scotsman expects to use the RF Express for MFG/PRO Inventory Management, Advanced Repetitive Management and Warehouse Management modules extensively – including WIP Lot Trace functionality. Phase 2 is already underway at the Enodis ICE-O-Matic facility in Denver, CO.

Stein Industries

www.stein-industries.com

Diversified manufacturing company whose products include retail store fixtures and display hardware.

Stein Industries of Brooklyn Park, MN, will implement RF Express for MFG/PRO Inventory Management and Work Order Management at one of its companies, Carlson JPM Store Fixtures. Phase 2 will include automating its cycle counting, physical inventory, inventory put-away and picking processes.

TOPY Corporation

www.topycorp.com

Manufacturer of steel and aluminum wheels for a variety of automotive manufacturers.

Located in Frankfort, KY, TOPY, a Tier 1 Ford supplier and a privately owned subsidiary of Japan's TOPY Industries, Ltd., has purchased the RF Express for MFG/PRO Enhanced Shipping software module.

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(New Contracts continued from page 7)

EUROPE

Albany International

www.albint.com

World's largest manufacturer of paper machine clothing.

Albany, headquartered in Albany, NY, has purchased the Inventory Management software module from Minerva Danmark AS for the firm's site in Halmstad, Sweden.

Enodis UK

www.enodis.com

Distributor of Enodis products in England.

Enodis UK will implement RF Express for MFG/PRO Inventory Management, Work Order Management and Warehouse Management software modules to improve inventory accuracy and visibility at its distribution site in Hayes, Middlesex, UK.

Invensys Controls UK Ltd.

www.invensys.com

Provider of product and control system solutions for energy efficient appliance control.

Invensys has added the Inventory Management module to its RF Express for MFG/PRO system at its Plymouth, Devon, UK, site to improve purchase order receipt and streamline other processes by ensuring all products are labeled for clear identification.

Timberjack (UK) Ltd.

www.timberjack.com

World's leading designer, manufacturer and distributor of forestry equipment.

Timberjack, a John Deere Company, has upgraded its user license to extend the use of RF Express for MFG/PRO throughout the company.

Tower Automotive

www.towerautomotive.com

Manufacturer of structures and components for major automobile manufacturers worldwide.

Tower Automotive will implement RF Express for MFG/PRO to provide the data capture system for its Volvo car body plant in Gent, Belgium. The rapid implementation schedule for the complete manufacturing cycle includes receipt, movements, backflushing and shipping, with special focus on:

- Reduced data entry
- Accurate weights on shipping documents
- Improved lot traceability
- Container management
- Improved validation for goods receipt
- Simplified parts set-up
- Simplified shipping process

Whatman plc

www.whatman.com

Designer and manufacturer of specialist membranes, filtration and chromatography media for the analytical, health care and bioscience markets.

Whatman is implementing RF Express for MFG/PRO Inventory Management, Work Order Management and Warehouse Management software modules at its sites in Banbury, Oxon, UK, and Scarborough, ME, in the US. RF Express for MFG/PRO will continue to be rolled out at the company's sites in Tilbury and Maidstone, UK, to improve inventory visibility and data capture accuracy.

ASIA/PACIFIC

Top-Flite/Callaway

www.topflite.com

Manufacturer of golf balls, clubs and accessories.

With the merger of Top-Flite and Callaway and the consolidation into one location in Melbourne, Australia, Top-Flite/Callaway is implementing RF Express for MFG/PRO Inventory Management, Work Order Management and Warehouse Management software modules to meet manufacturing and distribution needs.