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MK&Associates

Material Scanning System for XA

(What are <u>your</u> actual requirements?)

General Overview

MKA's Material Scanning System for XA is a material movement system that integrates with XA Production Monitoring & Control and Inventory Management. The system's primary function is to provide material movement and material validation processes via Radio Frequency Terminals or other scanning devices. Inquiry capability provides real-time status to various users. The system supports barcode scanning of materials. There are several considerations for using bar code scanning with XA. Some of these are mentioned on following pages.

Key Features of the Material Scanning System

- Multiple warehouses
- Inventory inquiry by item number or location
- Support for 24 XA transactions, including the following key transactions:

RP	Receipt to purchase order
TW	Inventory Transfer
IS	Miscellaneous Issue
IP	Planned Issue
RC	Miscellaneous Receipt
RM	Receipt to Manufacturing Order
PH	Physical Inventory
VR	Vendor Return
IU	Unplanned Issue
RS	Return to Stock
QC	QC Inspection
SS	Scrap from Stock

"Scrap" may require separate transactions to capture multiple "reason" codes (such as if 100 pieces are scrapped: 10 for Reason A, 50 for Reason B, and 40 for Reason C.)

- Any valid Inventory Management transaction can be added except IA.

- All XA validations for Batch Lot control where coded by item.

- Standard RF screen size – 15 lines x 24 characters across

Prerequisites:

- XA PM&C and Inventory Management
- Barcode print software (TL Ashford)
- Barcode printers, scanners, and related RF or scanning equipment

CONSIDERATIONS for Using Bar Code Scanning

Almost all companies want to use bar code scanning, but most don't know exactly HOW they want to use it because they don't understand the various options, issues, and ramifications that go along with bar code scanning. Companies think that there is "one" way to do things and thus they assume that a single "canned" software solution will meet all their needs and rules. But it really isn't that simple. There are many options, issues, and ramifications with bar code scanning. Let's consider some of these.

By the way, the options of how you implement the Material Scanning System are driven by your processes and decisions. Bar code software must be used for your PARTICULAR processes and decisions. The five areas described below are common things that companies often want to accomplish or realize with barcode scanning. However, there are considerations that must be taken into account for each of these areas.

1. Tracking inventory movement: scanning materials

Scanning materials (even produced material that will go into inventory) is a common request and one of the first things that companies want to do. This is relatively straight-forward and fairly simple. You basically have to ensure that everything is labeled with a proper bar code. Thus, you'll need bar code printers and scanners. There are no modifications to XA. You will need XA PM&C and TL Ashford Bar Code software.

2. Batch lot control

This requires the discipline of turning on "lot control" in XA and using it (by item number). There are two ways to do scanning: non-serialized and serialized. With non-serialized, you must separately scan the part #, QTY, Batch/lot #, location #, ... and the PO# (if you are doing Receiving). Thus, the user must perform a single scan per piece of "data." There's another discipline if you serialize. If you serialize, you will need to generate a label with a unique # to identify each label; all the data related to the item is contained in one bar code #. Thus, you only need to scan one number (label), which refers to everything else (that is, the part#, lot, QTY, ... are identified by the number (label)).

IF YOU DON'T HAVE A LOT OF DISCIPLINES CURRENTLY IN PLACE, non-serialized is the easier way to go. You would think just the opposite--that the serialized approach is easier. However, it takes a lot more data setup to use the serialized approach. IF you want to scan a label from your customer or supplier, the first approach (non-serialized) is much easier. With the serialized approach, you will need an internal label, too, to "match and verify" the labels. Remember that if you want to get into Supplier Requirements Management (via the web), you will eventually need to have your suppliers provide bar code labels (this is an entirely separate issue). It will be easier to do this with a non-serialized approach.

3. Understand how the bar code label is used (that is, if “quantity” or “lot information” is not in human readable form, can you scan and verify the data?)

This is a common question that gets confused with the MKA Smart Label System (which is primarily used by automotive suppliers). Let’s clarify. When you scan a bar code label, the results show on the screen (a display or hand-held device). Thus the user can visually verify (see) what they've scanned. There are AIAG (Automotive Industry Action Group) rules for bar code; that is, the beginning of a bar code has a prefix defining what the data is (such as, "Q" for quantity, "P" for Part Number, etc.). However, scanning a label and then seeing it on a screen is NOT what "scan to verify" means.

The MKA Smart Label System allows you to scan an item for SHIPMENT and have the data on the label verified back to the data in the EDI release so that you know that you are SHIPPING what you are supposed to be SHIPPING. Thus, the scan (for Shipping) is VERIFIED back to the actual EDI release before sending the ASN. Again, this is primarily for the automotive supplier industry.

4. Scrap control per process (input quantity and scrap codes)

To use a “scrap code” transaction, there is a "reason code" in XA that you will need to define and use if you want to use scrap codes. It is optional in XA. MKA tailors the Material Scanning System to use your reason codes (this is easy to do). Scanning for scrap control would also depend on the types of controls that you want. Again, this is going to require an added discipline by the user (which we can enforce by requiring a reason code be put in with a SCRAP transaction). However, we can't force a user to put in the CORRECT reason code. We can force them to select a VALID code, but not necessarily the correct one!

5. Receiving of goods

There are many options for receiving goods. Receive against a PO#? Not against a PO#? Will you require suppliers to use a bar code label? What if they don't? Will ordering and Receiving go together? There are options that need to be defined by you as to how you want to do business and which processes you will use.

SUMMARY: The ROADMAP

The prior five areas are just a few of the most common scenarios that need to be taken into account before starting a scanning project. "Scanning" isn't simply scanning. There are many issues that need to be evaluated and then decisions need to be made. MKA can help XA users do whatever needs to be done with bar code scanning, but there are usually different approaches, decisions, and "rules" that must be defined per your company's industry and particular business needs. These can also vary depending on your requirements and your use of XA. Education and training are important, but perhaps the most important thing that needs to be done is to DEFINE and DOCUMENT exactly what it is that you want to do and HOW you want to do it.

That requires experience and a process.

MKA has a lot of experience and a proven "ROADMAP" process to help companies do this—DEFINE and DOCUMENT how you want your scanning system to work with XA so that you meet your needs and objectives and streamline processes. When you create this definition, there are then documented specifications to meet your needs. You will know what your processes need to be in place in order for scanning to be successful in your environment. When objectives and requirements are documented, the rate of implementation success is very high.

MKA's Roadmap process identifies and documents your company's scanning requirements and any unique or special needs you may have due to industry requirements or other factors. This is also critical so that a scanning project can be planned with the needs and costs more accurately identified. MKA goes to your company on-site for a day or to conduct the Roadmap process.

We spend time with you to identify key objectives, users, requirements, hardware needs, integration, your processes, and the functionality needed for a successful project. At the end of the Roadmap project, MKA can then prepare a detailed project plan based on your specific requirements that are documented in the Roadmap definition.