DATA COLLECTION INTERFACE

There are many applications of data collection. Many of them can be performed without using bar coding; however, performing these activities with bar code technology has a number of advantages:

**Speed** - a bar code label can be scanned in the time it takes to perform two keystrokes.

**Accuracy** - for every 1000 characters keyed, there is an average of 10 keying errors. Bar code systems only produce one error in 3 million characters scanned.

**Data Integrity** - number of substitution errors for every 3,400,000 characters entered:
- Keyboard - 10,000
- Bar Coding - 1

The Macola ES Bar Code module allows users of Macola ES's Inventory Management (I/M), Order Entry (O/E) and Purchase Order (P/O) modules to automate data collection for inventory transactions, shipping transactions and receiving transactions. The Macola ES Bar Code module acts as an interface between the Macola ES modules (I/M, P/O, and O/E) and the data collection software and hardware provided by any data collection vendor the user chooses.

The Macola ES Bar Code module is designed to support real-time radio frequency (RF) or batch data collection technology. In an RF environment, information such as quantities, item numbers, order numbers, and serial numbers are validated against the Macola ES data files at the time the information is scanned. Once validated, the bar code reader translates that scanned data to an ASCII file that is sent to the Macola ES Bar Code module via radio waves. The bar code module has a polling feature that can be set to automatically import transactions that reside in the bar code interface file. The polling routine ensures that data being collected is passed to Macola ES the moment the Bar Code module interface is populated with new data. In an environment using batch technology, the bar code reader stores transactions in a hand-held computer as they are processed. Once all transactions have been processed, the user plugs the hand-held computer into a PC via a serial port. Information is then downloaded into a directory that can be imported into Macola ES by the import application in the Macola ES bar code.

**Symbology**
The grouping of parallel bars that is associated with bar coding is referred to as symbology. The Macola ES Bar Code module is not symbology dependent. As long as the data collection vendor can translate the symbology and pass the information to the ASCII import, the Macola ES Bar Code Module can process the information.

There is only one Bar Code module for distribution; however, there are several Bar Code/Import programs which automate existing standard Macola ES processes.

**Inventory transaction processing**
The module duplicates the functionality of the inventory applications located under the TRX menu. It allows for the following transactions to be performed in Macola ES using data collection technology:
- Issues
- Receipts
- Transfers
- Physical & Cycle Count Processing

Additional features supported include:
- Serial numbers
- Lot numbers
- Multi bin
- Multiple locations
Shipping (Quick Ship)
Allows users to eliminate filing customer orders by hand keying shipping transactions. In an environment that uses data collection, the shipping process begins with printing a pick ticket. The order number, item number, quantities to ship, stocking location, and, if required, serial or lot numbers associated with the item are scanned from the bar coded labels or pick ticket. Macola allows the user to determine when quantities on hand are updated. The user defines when inventory is updated during Macola Order Entry module set-up. The user can choose one of the following methods:

- Confirm Bill - Inventory is relieved when invoices are posted in Macola.
- Confirm Ship - Inventory is relieved when the order is shipped.

Purchase order receiving processing (quick receipt)
The receiving process is much like the shipping process. The user prints a bar coded copy of the purchase order. The purchase order number, item number, quantities to ship, and stocking location are scanned from the bar coded labels or purchase order. If an item requires inspection, the item is moved to an inspection location. If no inspection is required, the item is moved to a stocking location.

- Receiving Transactions
- Supports Lot numbers & Serial Numbers
- Supports Multi Bins
- Receiving Inspection
- Landed Cost

Printing
Macola Forms Designer in System Manager supports the printing of ¼” bar codes (symbology) on forms. Clients are not required to purchase the Bar Code module to print bar codes on forms. Forms that support the printing of bar codes are:

- Purchase Orders (receivers)
- Return Authorization
- Picking Tickets
- Labels

Macola Forms Designer supports Code 3 of 9, Code 39 and UCC 128. Other symbologies are supported by bar code labeling packages sold by Macola’s third party solution partners.

More Information
For more information on Macola ES, please visit www.adamtechonline.com or call ADAM Technologies, Inc. 1.619.446.6542 your Exact/Macola Business Partner.

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