

Warehouse Control System

The Warehouse Control System provides real-time validation and updating of the manufacturing database and offers a paper-less system for operating a high volume warehouse operation. The Warehouse Control System integrates with the **MAX data Collection Monitor** to provide programmed cycle counts and automated order fulfillment.

Order Fulfillment

Order Picking Queues.

Picking Queues will represent sales order tables (Master and Details) sorted according to the following rules :

Orders will be sorted by customer and ship to destination. The queue sequence will be based on routing specifications which may include product weights and physical locations. The warehouse manager will be able to control the queue sequence by maintaining the priorities.

- Operators can be assigned to specific orders for controlled picking. The Queue status for the order will be changed to "A".
- Carrier specific sequence can be set. Carrier codes will be entered in the Sales Order as shipvia code.

The "Picking Queue Maintenance" screens will allow maintenance by Customer, by Order, By Operator, and by Date of the picking priority and operator. The "Queue" will be a view of the Sales Order tables filtered and sorted according to the rules. For example ,assignment of an operator to a specific order will cause that operator to see those orders assigned to him/her first in the queue.

Alternate start . The operator may need to start an order pick other than at the immediate item in the queue, because a certain location is crowded or someone else is also picking the order. The operator will be able to skip through lines in the queue to get to the desired item/location.

An operator may need to override the default pick location.

A skid scan sheet will be printed with the detailed contents of the skid. All units of measurement will be in the sales unit of measure and pick quantity. This will be triggered by a "New Skid" button on the data collection devices. The skid sheet will contain the ship to information, a skid number will be assigned by the system as a six digit number , the date, and an itemized list of the contents showing the customer PO # ,part ID , number of cartons, and quantity.

The inventory that is picked for a skid will reside in a skid specific location which can be maintained as regular inventory.



Picking / Shipping

Picking will be processed as a transfer to a Stock ID = e.g. "SKID9999" representing the skid being packed. The SKID # is assigned by the system when a new skid is processed. When the item has been picked a balance of picked quantity will be maintained on the sales order detail. The SKID number must be either a new number or empty of any inventory when it is started. If not empty the operator will have to select another SKID # before starting.

Picking will be done normally by carton or bundle. If the quantity ordered is less than a full carton the location should automatically change to an off-line location where broken bundles are kept. The off-line location should be maintained as the stockid on the order.

Shipping

Shipping of inventory will occur when the packing list is produced. Prior to this, pulled stock should be counted as finished goods. The shipping function removes Inventory. When orders are posted Invoices are created and all of the accounting entries are made to inventory and COGS.

Programmed Cycle Counting

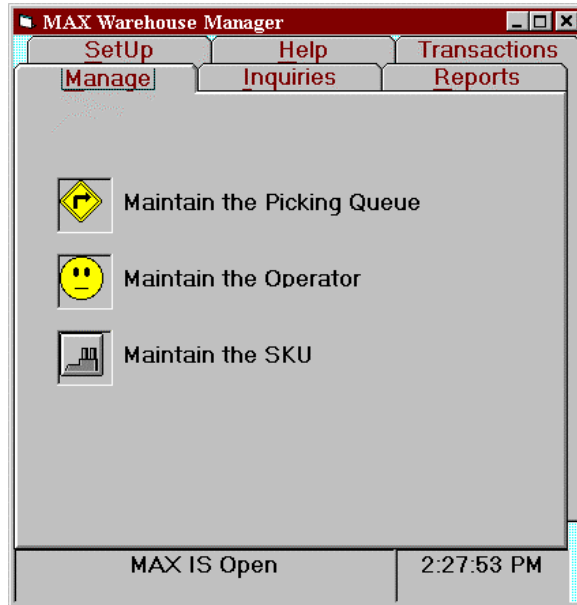
The purpose of this function is to provide the ability to prioritize the parts to be cycle counted dynamically. When an operator selects the Cycle Count function on the data collection device he will be prompted to count a specific part at a specific location. Cycle frequency is determined by the Cycle Count Code entered on the Part Master. When a part is due, all known locations will be prompted to the operator. The operator will also be able to do a "generic" count of a part in an unknown Stock ID. A cycle count can be requested by SKU for all of its locations at any time. When an item goes below safety stock a cycle count by SKU will be triggered. The Cycle Count Queue is a view of the Part Master parts which need to be counted based on the rules. A priority code can be assigned to each part to further sequence the programmed counts. Operators must be authorized to conduct Cycle Counts and can start with any part by skipping to a specified location or part.

Warehouse Monitor

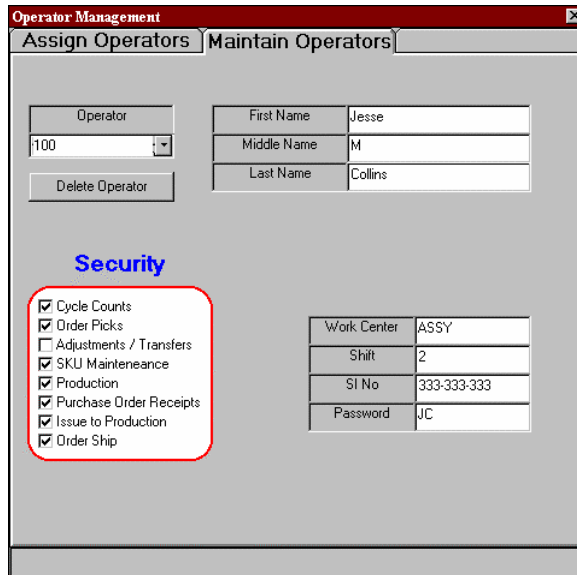


Integrated Warehouse Control System for MAX

This application typically will be run in the warehouse supervisor's office and is used to manage the system data.



Main Menu



This screen is used to maintain operators.



Integrated Warehouse Control System for MAX

Queue Management

Customers Orders Carriers Queue

Query View Sequence
Queue Rebuild Order # Employee # Print Queue

Operator	CustID	DueDate	Q Prio	Carrier	ShipCode	PostCode	Order
666	JEWELL	7/15/96		01		34567	204238
666	JEWELL	7/29/96		01		34567	204239
666	JEWELL	9/5/96		01		34567	204241
666	JJ	9/5/96		01		5757575	204242
666	JJ	10/3/96		01		5757575	204243
666	JEWELL	10/3/96		01		34567	204244
	JEWELL	9/20/96		01		34567	204245
TIM	ACME	9/20/96		01		60688	204246
	JEWELL	9/20/96		01		34567	204247
	JJ	9/20/96		01		5757575	204248
	E0100	9/20/96		01		454646	204249
TIM	JJ	9/20/96		01		5757575	204250
	E0100	9/20/96		01		454646	204251
	E0100	9/20/96		01		454646	204252
	ACME	9/20/96		01		60688	204253

Order Count: 18 Orders

The Sales Order Picking Queue is maintained through the warehouse manager. The Queue consists of the Sales Orders which are open, sorted by due date, customer and carrier. Each order can be assigned to a specific operator (multiple operators can also be placed on an order).

Operator Management

Assign Operators Maintain Operators

Due Date: 9/20/96 Query Select an Operator: TIM

Current Sales Orders: 204246 ACME PRODUCTS Assign to Operator Logout Operator

Sales Order	Customer Ship To
204246	ACME PRODUCTS
PO #	22 E MAIN ST
Carrier	SUITE 23
Pick Status	LOMBARD , IL 60688
	US

Operators Assign to this Order

Operator	Login Date	Time
666	9/20/96	4:46:41 PM
TIM	9/20/96	3:19:01 PM

This screen is used to maintain the Picking Queue by individual order and to monitor multiple operators.

SKU Maintenance

Part Master Cycle Count Rules

Part ID: BOXED CAKE Commodity: CAKE
Description: CHEESE CAKE IN A BOX

Standards
Weight: 0 Volume: Putup: Pick Method: EA Length: 12 Width: 12 Height: 1

Inventory
Tot OnHand: 3000 Primary LOC: COLD Type: 0 Last Trans: 970319 Planner: 000

Units of Measure
Warehouse: EA Factor: Cycle Counting: Last Cycle: 970115 Time Freq: W Usage Freq:

This screen is used to maintain SKU data which is used by the Warehouse Control System.



Integrated Warehouse Control System for MAX

The screenshot shows a software window titled 'SKU Maintenance' with two tabs: 'Part Master' and 'Cycle Count Rules'. The 'Cycle Count Rules' tab is active. It displays the following information:

Part ID: CHEESE CAKE IN A BOX
BOXED CAKE

Last CC Date	CC Frequency	On Hand	Default Stock ID
970115	w	3000	COLD

Exceptions	Multiple	Planner ID	Commodity Code
12	0	000	CAKE

Priority (0 - 9): B

Buttons: Set for Cycle Count, Clear Exception Counters

This screen is used maintain Cycle Count parameters.

