Managing Consignment Sales (ALC)

# Intro:

Empire has agreed to ship to ALC on consignment. In essence, Empire ships finished goods inventory to ALC’s warehouse in sufficient quantity and lead-time so that ALC can consume inventory when they require it. Invoices are not generated until the inventory is pulled out of the warehouse by ALC. This requires additional coordination at the plant, namely:

* Figuring out how much to ship and when in order to maintain a buffer of inventory at the warehouse.
* Generating an ASN to the customer when inventory is shipped to the warehouse.
* Transferring inventory to the warehouse so that it no longer shows as on-hand from a scheduling perspective but is available to pull from when invoicing.
* Consuming the warehouse inventory and generating an ASN when the customer indicates inventory has been pulled from the warehouse.
* From time to time, reconciling the inventory at the warehouse with the customer.

This is currently being handled manually in and out of the system. For example, inventory transfers are done manually in Monitor, but shipping paperwork is generated manually outside of the system. Invoices are generated manually in the system, including “picking” the FIFO inventory to consume from the warehouse.

# Proposed Solution:

We intend to provide a four-piece solution to deal with these requirements. First, we will provide an order maintenance screen that the scheduler can use to maintain Monitor’s Blanket Order Headers, including details about how warehouse stocking levels will be determined and shortcuts for setting up a new or rework revision level. Second, we will provide a Transfer Shipment Scheduling Screen that allows the scheduler to schedule transfer shipments to the customer’s warehouse. Transfer shipments will behave exactly the same as normal shipments up to the point of ship-out, at which point inventory will be transferred to the warehouse instead of consumed. Third, we will provide an invoicing screen that allows a scheduler to create an invoice by entering a set of quantities and corresponding part numbers. The system will automatically create the shipper header and shipper detail records, stage by FIFO the warehouse inventory, and perform the ship out. Finally, we will provide an inventory reconciliation screen. The scheduler will be able to view and adjust the inventory that is at the warehouse. Adjustments up or down will be treated the same as cycle count transactions.

All parts of this solution will be provided as a web application that will be available in Honduras and Troy to onsite schedulers or offsite schedulers utilizing a VPN.

## Consignment Order Maintenance Screen:

Schedulers will be able to view and modify existing consignment orders as well as create new ones. The following information will be required:

* Destination (ship to), Warehouse Code (may be the same as ship to), Empire Facility (i.e. Troy, Alabama, El Paso), Empire Part, Customer Part, etc.
* Warehouse buffer:
  + X Days on hand
  + Y Minimum inventory
  + The transfer shipper requirements will reflect *both* of these settings. I.e., the scheduler can decide to keep 3 days on hand with a minimum quantity of 200 pieces and the transfer shipper requirements will consider both.
* EDI Flag indicating whether the customer’s EDI reflects required shipments to the warehouse or expected consumption.

The system will generate two related blanket orders, called the Shipping Order and Invoicing Order. The Shipping Order will originate at the Empire Facility and deliver to the Warehouse Code, while the Invoicing Order will originate at the Warehouse Code and deliver to the Destination. Transfer ship outs will update requirements on the first blanket order, while invoices will be recorded against the second.

The system will also provide a “one-click” option to generate a new pair of orders for a new revision or rework level.

## Transfer Shipment Scheduling Screen:

While the standard Monitor Global Shipping Scheduler screen could be used, it could also be confusing since it would show both requirements from the Shipping Order and the Invoicing Order. To simplify things and prevent errors, a new shipment scheduling screen will be provided that allows the scheduler to generate a Transfer Shipper for shipments from the Empire facility to the Warehouse. All of the standard shipment header information (carrier, transportation mode, scheduled ship date, FOB, etc.) will be provided and the scheduler will select the releases on the Shipping Order to schedule.

The scheduled shippers will be processed in Shipping Dock and RF Staging using standard applications, however the shipout transaction will be modified to recognize the transfer shippers and relocate the inventory to the warehouse instead of deleting the inventory.

## Invoicing Screen:

A new screen will be provided that allows the scheduler to generate Monitor Invoices for consignment inventory. The scheduler will enter the Destination and the set of quantities and part numbers that are being invoiced. The system will create the necessary shipper header and shipper detail records, stage warehouse inventory (FIFO, breakout if necessary) to the shipper, and ship out to generate the invoice.

## Inventory Reconciliation Screen:

A new screen will be created to view and reconcile inventory at a customer’s warehouse. Parts and quantities will be listed for each warehouse, and the scheduler will be able to increase or decrease the quantity with notes. Corresponding transaction will be generated in audit trail to feed into the GL.

# Cost Breakdown for CAPEX

The following breakdown is an estimate of the work required

* Four screens detailed above, including underlying data definitions and transactions: 80 hours or $10K
* Modify incoming EDI processing to correctly update the Shipping Order and Invoicing Order: 20 hours or $2.5K
* Modify ARS and MPS to ignore Invoicing Order requirements. ARS and MPS will rely on requirements in the Warehouse Order when exploding requirements: 8 hours or $1K
* Modify shipout transaction for transfer shipper so that the correct orders are updated and Warehouse Order accums are maintained separately from Invoice Order accums: 8 hours or $1K