

Navigation Material Movements

Navigation is a full-function transaction handling data collection system designed to simplify the collection of data for your company's business systems. *Navigation* enables any user to simply and easily capture information associated with the movement of materials throughout the operation from Goods Receipt through to Customer Shipping. All levels of detail can be recorded down to lot, location, user, date and time for each transaction, to ensure that full auditability and traceability is provided.

Seamless integration with your ERP system is provided with a real time update of information, thereby removing any potential "black holes" in the operational areas. This ensures that all production data is available immediately for inquiry or analysis using the tools provided by the ERP system. Any error messages displayed to the user are those of the ERP application itself. Simplicity and ease of use is ensured by providing a "one question at a time" approach rather than completion of a complex screen of data; also where practical prompting for Yes/No answers or the scanning of bar coded labels. *Navigation* does not require any changes to the ERP software thus minimising the impact and cost of system validation.

Navigation MM Functionality

Receiving at Goods Inwards
Miscellaneous Receipts
Physical Location Transfer
Split Pallet / Containers
Download Production Orders
Picking For Production
Receiving from Production
Download Customer Orders
Shipping
Cycle Counting
Label Printing
Inquiries

Receiving at Goods Inwards

In order to provide the ultimate flexibility allowing data capture to take place at the point of operation i.e. on the receiving dock itself, *Navigation* is designed to work with hand-held or vehicle-mounted Radio Frequency units or PC's with a bar code scanner attached.



The user has a number of ways of providing the system with the correct PO number: -

- Scan the PO details from Vendor labelled receipts.
- Key in the PO number.
- Select from a list of open PO's based on Vendor name or resource number.

Once the correct PO number is established the remaining details are entered with the user being prompted on a "question by question" basis. Once completed a transaction is sent real-time to the ERP system for validation. Any error messages are returned to the user's RF unit. *Navigation* then prints bar-coded labels to identify the product/lot when required for later transactions.

Miscellaneous receipts are performed in an identical manner except that no PO is entered.

Transfer of material from Location to Location

This function is used to move material from one location to another. The user scans the identifying pallet label followed by the 'To' location. The ERP system is updated with the new location. As a result, the locations of all identified materials are known. Material may also be tracked to the sub-pallet level using the following Split Pallet / Container functionality: -

Split Pallet / Containers

Navigation provides a facility to label each pallet and each container on a pallet when received, therefore the Split Pallet/Container function may be used to transfer a quantity of material from one pallet to another or from

one container (Box, Drum etc) to another. This function may be used during picking if the total quantity of a container is not being picked and it is required to re-label the container with the new quantity.

Download Production Orders

Navigation downloads Production Orders from the ERP application to ensure that physical production can continue should the ERP application become unavailable, whether scheduled or unscheduled to do so.

Picking For Production

Based on the production orders released by the ERP system and downloaded to *Navigation* the pick lists and instructions are displayed to simplify the task for the Warehouse user.

Following selection from a list of orders, a list of items is displayed to the user along with the status of each line item. When an item is selected, the user is prompted to scan the barcode label of the pallet along with the detailed item information, e.g. lot and quantity bar-coded on the container labels. If reservations are used, *Navigation* prompts the user with the relevant information.

A Transaction is then sent to the ERP system updating it with the details picked.

Receipt from Production

This function is used to record goods at the end of a production run. The user is prompted to scan the bar-coded information, identifying the production order, item and lot and to enter the quantity produced. A production transaction is sent to the ERP system; once this has been validated an identifying label is printed.

Download Customer Orders

Customer Orders are downloaded to *Navigation* to ensure that the physical processing of orders can continue if the ERP system is unavailable.

Cycle Counting

Navigation downloads cycle counting instructions to the user's hand held or vehicle mounted RF device. These can then be sequenced either by product or location and the physical count is uploaded to the ERP system.

Picking for Shipping (Despatch)

A variety of picking methods are available dependent on the processes to be covered e.g.:

- From Customer Order download
- Direct to container/consignment without Customer Order download

Depending on the process type, the customer orders are displayed to the user along with customer number, quantity, product code, lot No. etc. The user selects a load and assigns consignments and customer orders to it. To ensure that the correct items are being loaded on the container a system barcode label is created for each container. As each item is loaded this label is scanned for verification. All transactions are validated real-time by the ERP system, thus providing complete visibility into the actual "real-time" shipping status with full audit tracking and traceability to container level.

Label Printing

One of the major sources of fast and accurate data entry for *Navigation* is created by the use of bar-coded system labels.

Navigation provides system label production for Receiving, Internal Tracking, Pallet Production, Shipments etc.

A program for vendors to create labels for attachment to containers and/or pallets is also provided.

Inquiries

Numerous standard reports and inquiries are available as standard. Customised reports can be generated using for example Crystal Reports, a 'de facto' report writer.