Warehouse Manager X3

Datalinx have been providing Sage users with warehouse solutions for in excess of 25 years. In line with other Datalinx systems, we analysed the functionality within the core Sage X3 package against the values and requirements of the Sage X3 user. This enabled us to deliver a system that meets users' needs, is warehouse centric and fully Sage X3 compliant.

The result of this is a warehouse management system integrated into the business processes of Sage X3. Warehouse Manager allows the operatives in the warehouse to be wirelessly connected to the central system utilising the latest wireless hardware and dedicated Warehouse Manager screens designed by people who understand warehousing.

Datalinx Warehouse Manager X3 provides the Sage user with cost effective solutions that are designed and developed to deliver the key warehousing functionality that today's businesses require. The application is written for and embedded within Sage X3, ensuring a business is not compromised since control remains within Sage.

Efficiency and cost reduction is key to business success; modern warehouse systems must meet the demands of the supply chain for faster turnaround times with minimal errors and better management of returns.

Increase stock location accuracy by 25%

Receiving products into a warehouse against purchase orders, is part of the routine of all warehouses. Utilising the user friendly hand held terminal not only is the stock file instantly updated with quantities, but the location across multiple bins is also recorded.

Warehouse Manager hand held barcode scanners can be used to rapidly capture batch and serial numbers for those companies with varying levels of requirement for traceability.

Inventory accuracy of 99%

Accuracy of receipt, put away, and picking, improves from 90% with a paper based system to 99.9% when using Datalinx systems. The associated reduced requirements for stock take and stock reconciliation, provide a realistic return on investment of less than 12 months.

Increase the speed of picking by 25%

Combining Sage X3 and Datalinx Warehouse Manager X3 delivers a solution that minimises errors, and quantifiably measures the increased throughput of the individual pickers.

Provide 75% stock count efficiency gains

Carried out by multiple operators, the hand held devices guide users to the relevant locations and request details of the product being counted, together with the actual item count. This information is compared and checked in real time against the expected figures within Sage X3.

Typically company confidence in stock figures increase to a point where a move to random or cyclic stock takes is a realistic option.

Warehouse Manager X3

sage X3

Key business processes include:

Shipment Preparation/Picking

Product Status Change

Pack and Despatch Bench

Purchase Order Receipts

Location Transfers

Enquiries

Stock Count

Inter-site Transfers

Consolidated Picking

Works Order Receipts

Miscellaneous Receipts

Works Order Pick

Miscellaneous Issues

Datalinx Warehouse Manager X3

Sales · Finance

Purchasing · Manufacturing

Inventory · Project

WMS

Multi-legislation · Multi-company · Multi-site · Multi-language

Web application server · Connected Services

SAFE X3 Platform

Visual Processes · Business Intelligence · Development tools · Search Engine

Workflow · EDM · Web Portal

The combination of Sage X3 and Datalinx Warehouse Manager X3 provides a seamless solution with in depth reporting for greater control and business accountability.

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Sage X3 Integration

Datalinx Warehouse Manager X3 is seen as a module within the core Sage X3 application. This in depth and tight integration is a key differentiator between Datalinx and other warehousing systems.

This direct integration is a core principle of all Datalinx Warehouse Manager systems. With Datalinx the data used for the Sage X3 inventory database and records is also the database and records for inventory within the warehouse and this is always seen live and in real time.

For example, if a person in the purchasing office is seeing 100 bookmarks in stock, then the warehouse operator will also see 100 bookmarks in stock.

When the Datalinx Warehouse Manager application is installed, in line with Sage ISV developers guidelines, a number of additional data fields associated with products and locations (for example) are applied, together with additional business logic that allows the Datalinx Warehouse Manager system to provide the functionality that warehouse users require within the core package.

Parameter Values

 "Parameter Values" within Sage X3 are a powerful tool and are used to change and configure the functionality of the system.

Unlike other systems Warehouse Manager X3 uses Sage Parameter Values to provide end users with the flexibility to change the way the system is configured to match their warehouse and business processes.

This is achieved by applying a given functionality at company, folder or user level and can be adjusted by a Sage Business Partner or trained on- site personnel.
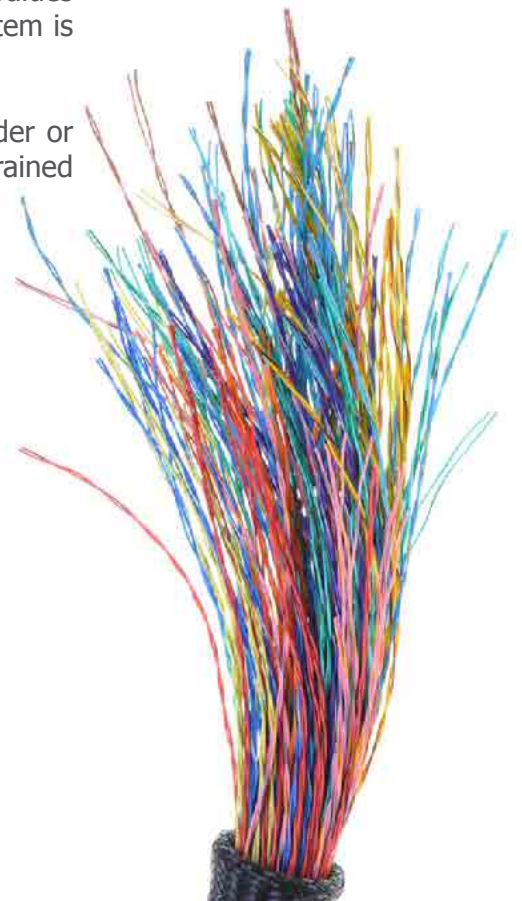
The Receipt Process

It is typical that a warehouse system focuses on the booking in and receiving of product via hand held scanners and barcodes. Datalinx programs allow for the receiving of product via the hand held by scanning codes on the products or by selecting the lines from a purchase order.

Occasionally the Sage X3 screens may be the best place to book in the product being received, and with this in mind Datalinx Warehouse Manager X3 functionality extends the standard Sage X3 "Purchase Order Receipts" and "Miscellaneous Receipts" Screens.

Users may follow standard booking in processes within Sage X3 and the added Datalinx functionality will produce the relevant transactions, create Licence Plates (pallet numbers) and enable labels to be printed, ready to be attached to the product being received into stock.

This seamless linking of Datalinx Warehouse Manager X3 and Sage X3 removes the need to book product in twice and also removes the possibility of decoupling operations occuring when product is booked into the "business system" and additionally into the "warehouse system."

Datalinx software provides us with the ability to run the warehouse within Sage X3 and extends the functionality to do all of our activities.

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Miscellaneous Receipts

"Miscellaneous Receipts" is the business process that is used to carry out the receipt of products into the warehouse without a corresponding transaction such as a purchase order or works order to receive the product against.

Datalinx Warehouse Manager X3 allows the receipt of product to be recorded. Whilst completing the receipt, the application checks and validates to ensure that the product code exists and if relevant, captures additional information such as serial and batch numbers together with date related details such as best before or use by dates.

The resulting transaction is used to update Sage X3 with the receipt as if the transaction had been completed within Sage X3. The history record will also attribute the transaction details complete with date and time to the individual logged on at the hand held terminal.

Purchase Order Receipts

For many companies the majority of receipts will be against purchase orders previously raised within Sage ERP X3, be this raw materials for manufacturing or pallets of products for distribution.

At the point of receipt and using the wireless hand held scanners, the warehouse operative has a number of options to identify the specific purchase order to record the receipt against; from keying or scanning the purchase order number when advised on the documentation, to searching the purchase order file against various criteria to find the correct reference.

Having identified the purchase order and product, not only will the quantity be recorded but if required the operator will be prompted for serial and batch references.

Finally, if required, pallet and product labelling may be triggered and printed to static or mobile printers.
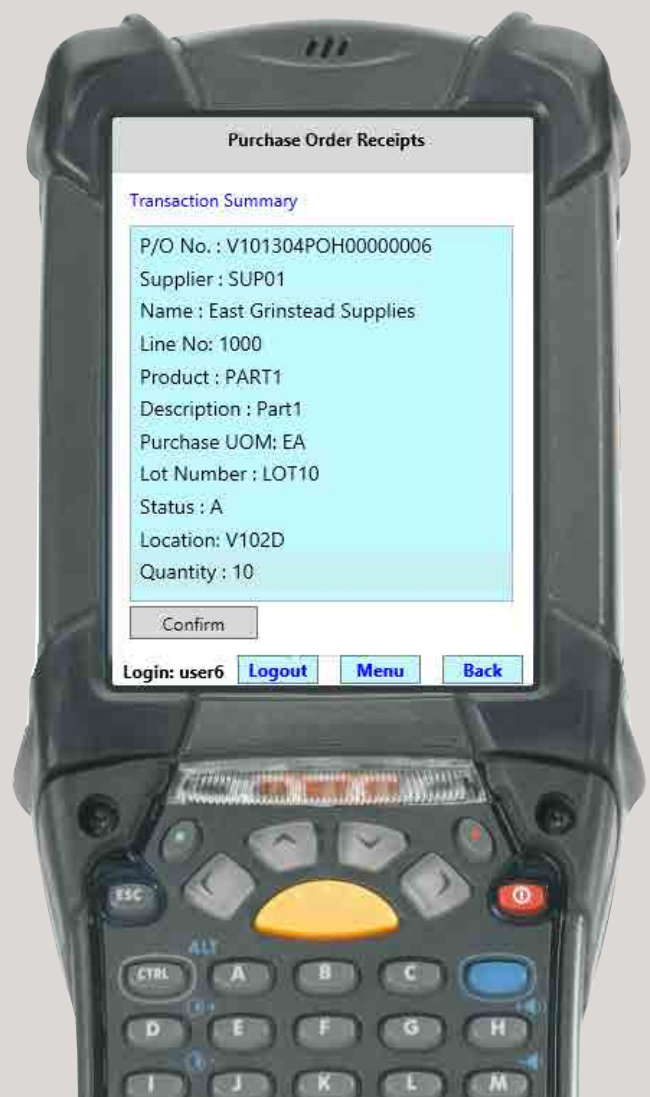
Pick to Carton

Pick to Carton increases the speed at which orders can be despatched by minimising double handling and scanning of product.

The Datalinx Warehouse Manager application delivers the ability to "Pick to Carton" within a warehouse. Product is picked from the relevant location, typically a pick face, and placed directly into the container or box that it will be shipped in.

As content labels can be generated at the same time as the cartons are packed, these can be printed via mobile printers or generated at a static printer for application at the end of the pick. Or pre-printed labels may be scanner, again saving the user time.

This is another example of the Datalinx Warehouse Manager X3 application expanding the capability of the Sage X3 system.

Zones

Datalinx Warehouse Manager X3 adds the functionality of "Zones" within a warehouse increasing the scope of the warehouse set up. The advantage of zones is that it allows an "overlay" of the locations within a warehouse which can group specific processes together.

For example, a warehouse may have a set of picking bins on different levels of mezzanine floors and the pick list has to present to specific pickers only those picks that are within their zone.

By utilising Datalinx Warehouse Manager X3, it is possible at a warehouse level to apply zone handling without affecting the standard Sage X3 pick list creation.

Replenishment

Replenishment of locations within a warehouse is critical to ensure that product is available to meet the picking process. Within Sage X3 there are replenishment planning capabilities.

Datalinx Warehouse Manager X3 delivers an immediately actionable replenishment process whereby a warehouse operative is able to walk an area of the warehouse and where locations are low in stock, they can scan the location and will be advised where additional free stock is available in the warehouse, which they can then transfer to replenish the rack or bin.

Allocations within Sage X3

When orders are processed within Sage X3 there are two fundamental states that a given line within an order reaches prior to being passed to the warehouse.

1. A "Detailed Allocation" where due to prior Preparation Planning of the sales order Sage X3 has dictated which product/batch/location that the product is to be picked from. In this situation the picker will be guided to the specified location and whilst the Datalinx Warehouse Manager X3 application will route the operator around the warehouse in the most efficient route, it will not give the operator any choice as to the "lot" or "Batch" which may be picked.

2. When a sales order line has "Global Allocation" status there is flexibility in the batch/lot/location that may be picked. In this situation Warehouse Manager will guide the user to a location to pick from, but at the point of picking all alternative locations may be displayed and picked from, or alternative batches picked from within the same location.

The benefit of this can be seen where a site may have a number of pallets of the same product in a given drive-in racking, but produced across several manufacturing lots. Using Warehouse Manager X3 the picker has the option to efficiently pick a pallet from the front of the rack rather than losing time moving product to select a pallet from the back of the rack.

Similarly, if a pick list calls for a component which is serial number tracked, the approach of using global allocated orders is applied. The picker is not directed to search for a system selected serial number, but at the time of picking the product they are asked to confirm by scanning, the serial number of the product they have selected.

This approach provides flexibility in the way that orders are picked and controlled by utilising the "Detail" and "Global" allocated orders at an order line level.

Location Transfers

There are many requirements to move product between locations, both at unit and pallet level. Using the "Transfers" option on the hand held is a simple action. The hand held terminal is used to capture the product code/tracking ID and if appropriate, the quantity. The destination location is used to complete the transaction at which point Sage X3 is updated.

Inter-site Transfers

Where a company has more than one site, then the tracking of inventory from one site to another is equally as important as tracking product within the business. The Datalinx Warehouse Manager X3 system enables product, be this at individual or pallet level, to be tracked and controlled as it is transferred from one location (as is defined within Sage X3) to another.

Consolidated Picking

Utilising and liberating the power of Sage X3, Datalinx Warehouse Manager X3 provides the user with the ability to consolidate a number of orders to be picked at the same time, be this Global or Detail Allocated orders. The user is directed to pick multiple orders in a single walk around the warehouse being guided by the hand held terminal through the process confirming each of the picks as they are completed.

Pack and Dispatch Bench

The pack bench functionality provides the warehouse with a number of functions. It can be used to confirm the correct products are being packed, or where consolidated picking has been used, it will guide the packers to identify the correct product and quantity per order. At the same time updating Sage X3 with the current order status.

Orders are selected on dedicated packing screens which are typically deployed on "touch screen" PC's. This allows each line of the order to be confirmed as packed. Once packed, the order may be dispatched, confirming the shipment in Sage X3 and parcel or pallet labels printed detailing each carton's contents.

Miscellaneous Issues

Stock issues from a warehouse may be referenced against a number of key transactions. Miscellaneous Issues allows for controls to be put in place whereby product is issued without the need to set up other transactions in Sage X3, for example, samples or consumable products. The information captured ensures that stock levels are correct and accountability of stock leaving the warehouse is maintained.

These transactions, when carried out using the Datalinx Warehouse Manager X3 application may be completed using a combination of scanning and keyboard entry on the hand held, providing a quick and efficient recording of the stock issue.

Works Order Pick

Typically where a business is running Sage X3 manufacturing, there will be Works Orders in operation. The Datalinx Warehouse Manager X3 application's core integration with Sage X3 ensures that the operator's hand held device displays the details of the Bill of Materials for a given Works Order and will guide the user to pick the correct materials as required for the manufacturing process.

At the time of picking, where relevant, factors such as batch numbers and use by dates are utilised and captured to ensure that product traceability is maintained within the manufacturing process.

The hand held scanner will record the issue of raw material and sub-assembles plus the completion of finished product into stock. As is standard with all Datalinx systems, details of the transactions are instantly updated and written in real time into Sage X3.

Works Order Receipts Completition

Once a product has been manufactured, assembled or repackaged, the Datalinx Warehouse Manager X3 system provides the ability to receipt and process the finished item into finished goods inventory within Sage X3.

Product Status Change

Within Sage X3 there is the concept of "Product Status". This enables a site to control product manufacture with reference to processes such as QA and Inspection. Datalinx Warehouse Manager X3 will allow the user, via the wirelessly connected hand held scanners to change the status of a batch, pallet or stillage of product.

This updates the status of the product in line with the screen based options of Sage X3, thereby ensuring that all users have the same view of the product status.

Stock Count

A key operation for any warehouse is to be able to complete a stock take quickly but accurately, thus causing the minimum of disruption to the business.

The Datalinx Warehouse Manager X3 process allows a stock take to be carried out by multiple operators. The hand held devices guide the operators to the relevant locations and request details of the product and quantity found, and where required batch and serial number details.

This information is then compared and checked against the current figures within Sage X3. At which time the stock adjustment facilities within Sage X3 are used to review for recount or stock level adjustment.

Sales Order Picking

For many warehouses, particularly in distribution and the supply chain, sales order picking is utilised to prepare products for dispatch.

Combining Sage X3 and Datalinx Warehouse Manager X3 delivers a solution that will ensure high efficiencies and accuracies of picking and dispatching product with the associated reductions in costs. Pick Tickets and Lists are created and authorised within Sage X3 using the standard system functionality.

Once authorised for picking by Sage X3, the details of the pick ticket will be available for display on the hand held scanner within the warehouse. These units will guide the operative to the appropriate bin advising the quantity and product to pick. Once correctly completed on the hand held Sage X3 is updated as the action occurs in real time.

"Reducing errors on incoming orders through more accurate stock levels and reducing picking errors not only improves our efficiency but maximises our profitability."

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Enquiries

On the hand held devices there are a number of enquiry screens and functions available to assist in the daily operations within the warehouse. Functionality such as alternative batches to pick further empowers the users to achieve their daily tasks.

Wireless Connectivity

The Datalinx Warehouse Manager X3 application connects to the host Sage X3 application via an enterprise level wireless system. This ensures that operatives are connected and continuously update the central core system, ensuring that all within the company from order processing to accounts have the same real time view of the stock position.

Work Flow Management

One of the underlying powers of the Datalinx Warehouse Manager X3 application is the inbuilt "Work Flow" tool.

GS1 Enabled

GS1 is the global organisation for standards within generic barcoding and the supply chain. Datalinx Warehouse Manager X3 takes full advantage of these standards and is GS1 128 enabled. Products with GS1 barcodes or requiring GS1 barcodes on the outer packaging can be catered for within the Datalinx Warehouse Manager X3 application. This removes the need to re label and brings further efficiencies to the business.

GS1 UK | Bar Code Accredited

Multi Language Sets

In line with the international and multi-lingual capability of Sage X3, the Datalinx Warehouse Manager X3 system is able; from the initial user log-on, to present the application in a language relevant to that specific person.

This provides the Sage Business Partner with the ability to create and apply language sets for Sage X3 customers. These can be configured to specific users allowing a site to utilise multiple language sets simultaneously, providing their operators with a personalised experience and helping to reduce errors.

Graphical Menu's and Screens

As is expected of any modern warehouse system, it is important for the users to see touch screens with a "graphical" interface. Datalinx Warehouse Manager X3 uses the latest mobile devices in a format that will survive the rigours of the warehouse environment. This ensures that users are guided in simple and elegant screens with an ease of use that allows the operatives daily tasks to be completed without interruption.

Unit of Measure Conversions

Often within the warehouse products are supplied, stored and processes in shipping units e.g. boxed quantities or pallet loads. For instance, within sales order processing, items may be sold in "eaches". The Datalinx Warehouse Manager X3 application provides functionality which will allow units of measure conversions to be applied.

For example, if products are stored in boxes of 10, but a sales order requires 55 units, Datalinx Warehouse Manager X3 will guide the operator to pick boxes of 10 and also 5 single units to fulfil the line on the order.

Tracker ID

The Datalinx Warehouse Manager X3 application has within all of its processes the ability to utilise a Tracker ID. This is typically known as a "pallet ID" or "licence plate" and allows an individual item, a given quantity of items or typically a "pallet" of items to be identified with a unique tracking number.

This tracking number is then used to process that quantity or pallet of product.

> " The big driver for us with Datalinx was its tight integration with our Sage X3 software. "

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