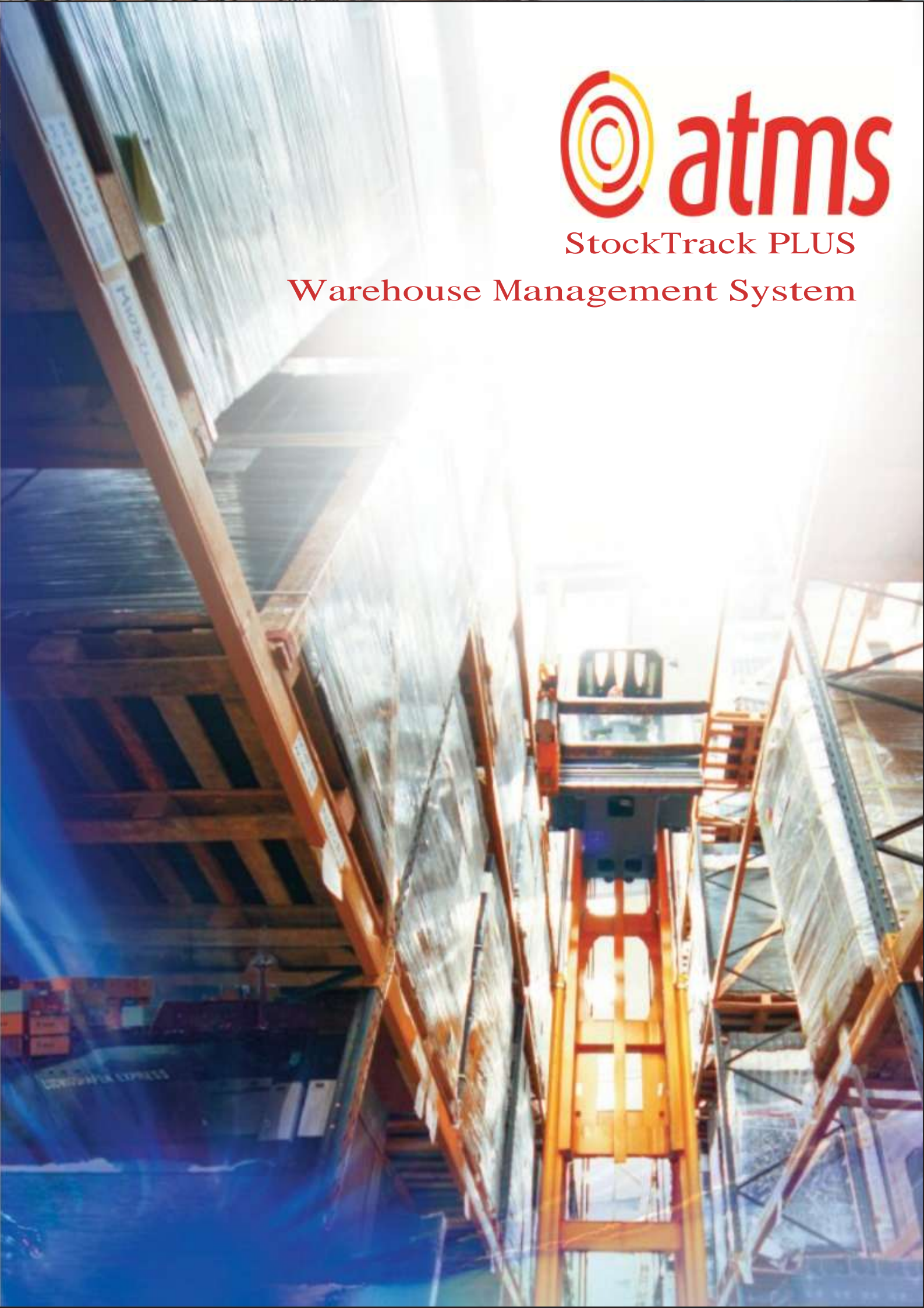




StockTrack PLUS

Warehouse Management System





Contents

StockTrack PLUS (STP) Warehouse Management System	3
Functional Overview	5
System Overview	6
The System in Operation	7
StockTrack PLUS Core Features	8
Goods Receipt	8
Putaway	10
Task Management	12
Stock Taking	12
Quality Control	13
Pick Face Replenishment / Pallet Consolidation	13
Order Entry	14
Booking in Diary	15
Picking and Despatch Control	15
Returns	16
Management Reporting	16
Technical Architecture	17
StockTrack PLUS Core Options	18
StockTrack PLUS Extended Features	23
Advanced Picking / Packing	23
Asset Manager	24
Charging Module	25
Custom Label Design	26
Customs / Bond Manager / CFSP	27
Dashboard / Control Tower	28
Business Event Management	29
Kitting / Assembly	30
Load / Drop Management	31
Warehouse HeatMap	32
Proof of Delivery (POD)	33
Yard / Dock Manager	34
Serial Tracking	35
the Global Track suite	36
Global Track: Remote Labelling Module (RemLab)	37
Global Track: Remote Warehousing Module (RemStock)	38
Global Track: Web Portal (STPi)	39
Global Track: AssetTrack	39
Open Integration - DataHub	40



StockTrack PLUS (STP) Warehouse Management System

StockTrack PLUS (STP) is an enterprise warehouse management software package, established as a leading global solution within supply chain execution.

STP is currently managing warehouse functions within 80 sites across with world and growing. Deployments range from manufacturing, distribution, fulfilment and third party logistics.

The agility of STP is designed to provide atomic traceability for every action and event within warehouse management, leading to comprehensive management reporting and metrics integral to today's demands within the Supply Chain.

STP's highly configurable implementations yield fast returns on investment and provide improved efficiencies within warehouse control by best meeting the business needs and goals of the customer, their facilities and their clients.

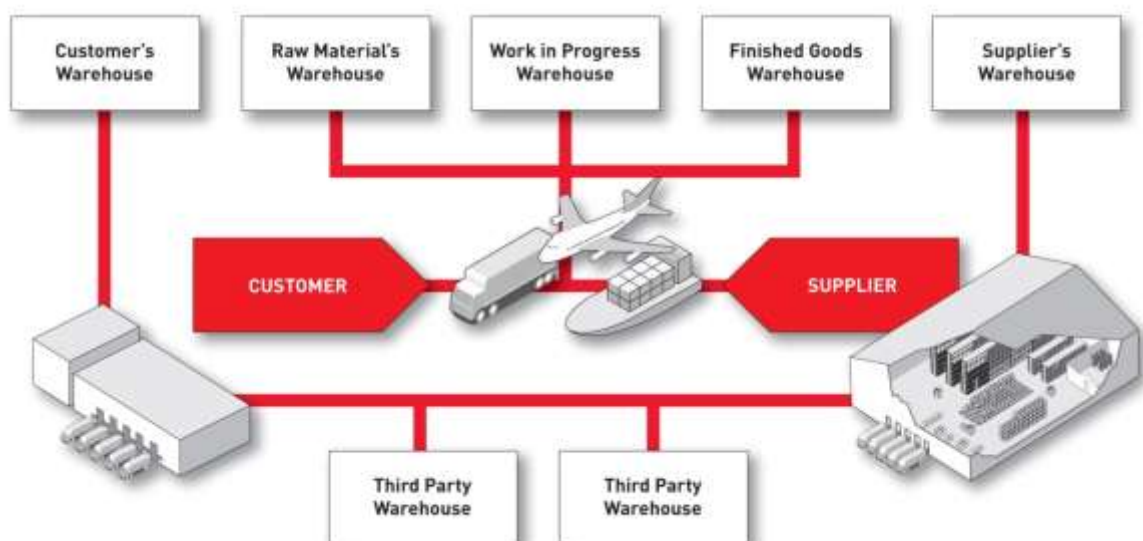
Core STP can provide:

- improved stock control, therefore reducing stock shortages and allowing stock levels to be optimised
- improved stock location allowing for optimum use of people and material handling equipment for put-away, picking and other warehouse operations
- elimination of lost stock
- perpetual inventory and greater stocktaking accuracy leading to reduced costs and downtime
- improved traceability of product – systems can provide total two way traceability
- improved quality control – individual items or complete batches can be quality held and isolated – preventing held product from reaching customers
- fewer mistakes – the use of bar coding ensures that mistakes and their associated rectification
- costs are minimized, total stock accuracy is achievable
- improved management information – ATMS systems provide full, concise and relevant management information, in real time where required. Information which can be used to further improve the operation of the business
- reduced clerical work – the costs of clerical work are reduced, information is more accurate and is up to date
- improved stock rotation – the system can ensure that oldest stock is used first thus minimizing out of date stock
- improved warehouse utilisation – the system makes the most efficient use of the available warehouse space
- provide high quality labelling of despatched product, bar coded to customer requirements
- improved costing of warehouse processes and activities



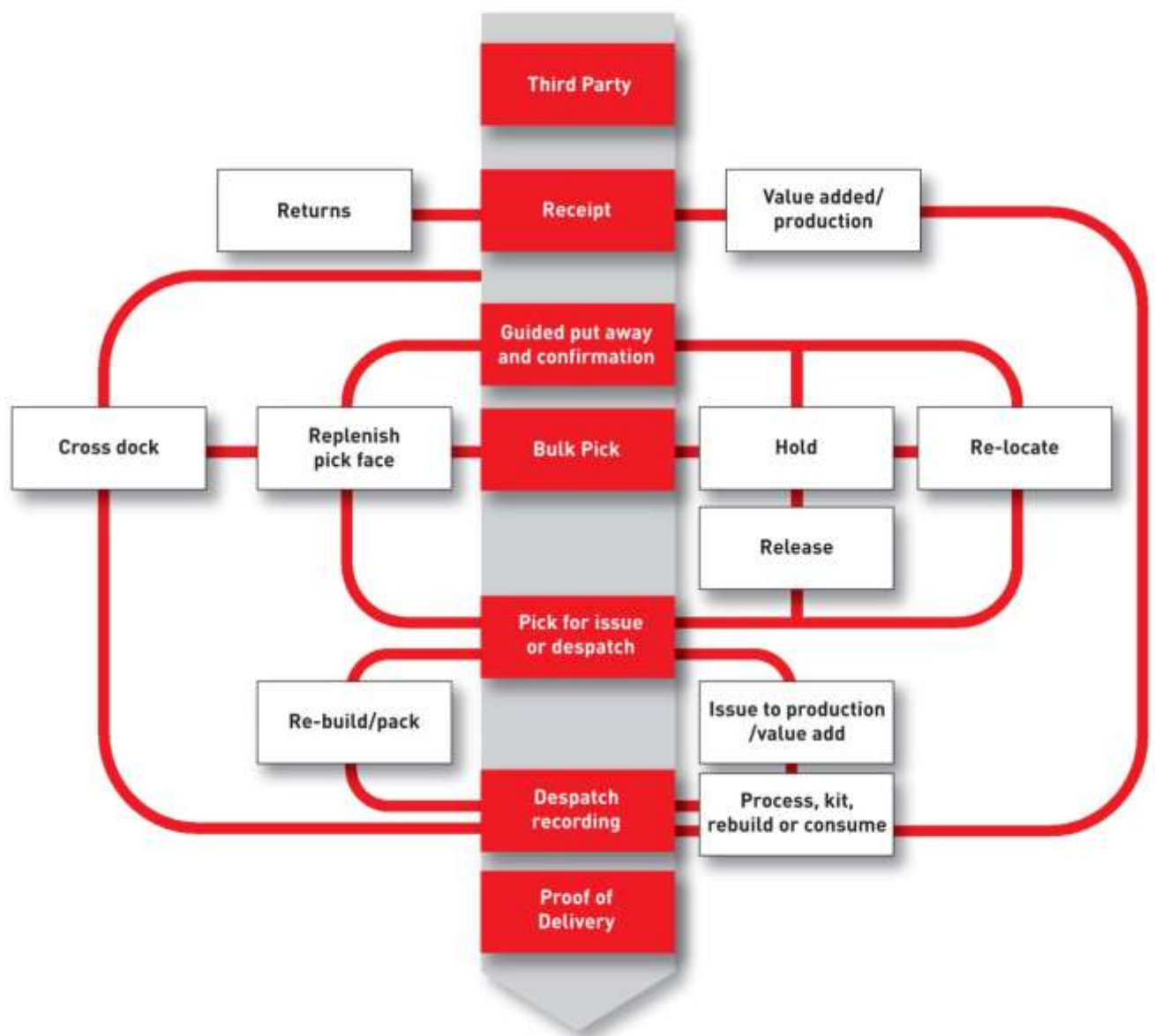
Optional modules can provide:

- improved charging for pallet storage, pallet movements and warehouse services using the Charging module
- reduced transport costs using the Load Builder module
- the means to exchange electronic information with suppliers, customers and trading partners using the Datahub
- on-line snapshots of current and outstanding warehouse activities using the Dashboard
- automation of warehouse tasks (including PI) using the Event Manager and Scheduler
- remote access using the Web Viewer
- improved packing during or after the picking process for customer kits or product rationalization using the advanced Picking/Packing module
- improved productivity of warehouse operatives; all tasks are time and date stamped against the user allowing areas for improved training to be identified
- complete supply chain visibility
- control of the areas surrounding the warehouse using Yard/Dock manager
- tracking of returnable capital equipment including pallets, stillages and other non stock items using Asset manager
- easy assembly of materials or kits for production or 3PL environments using the Kitting/Assembly module
- a live, visual representation of the warehouse using the Warehouse Window
- accurate data recording and documentation for customs, excise and VAT using the Customs/Bond Mgr/CFSP module
- customized labels and documentation using Bar-Tender software linked to STP





Functional Overview





System Overview

- goods receipt – identification – putaway
- task management
- stock movement – quality control – stock taking
- load building
- pick face replenishment – bulk picking – order picking – complete traceability
- despatch control
- management information, productivity information





The System in Operation

This section describes a typical system in operation. By way of example, the system looks at a warehouse where the product arrives in cartons or packs on pallets. The pallets can be of different sizes. The system can be used to control pallets, reels, cartons and individual items. Bin store control is provided for small items.

Despatch can be whole pallets, re-built pallets and individual cartons and items. The warehouse can have racked and block stacked areas as well as bin stores. The system supports multiple warehouses. The system controls stock ownership throughout. Stock can be simply transferred from one owner to another, an operation that can be used with Third Party Logistics and for consignment stock.



StockTrack PLUS Core Features

Goods Receipt

This operation:

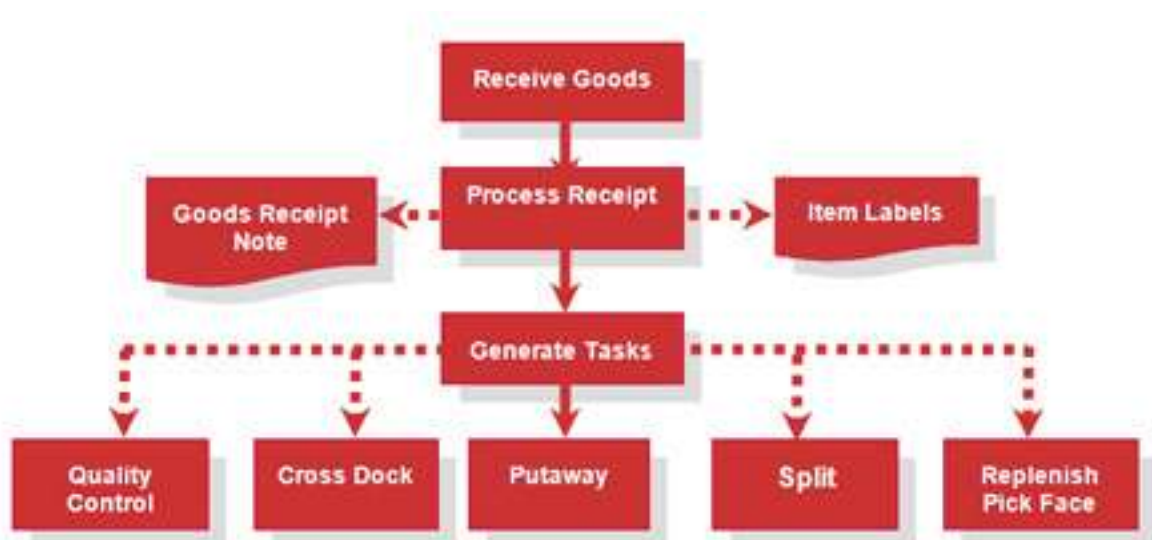
- identifies product
- books product into stock
- allocates a location (if appropriate)
- allows for quality checks

When pallets or items arrive at goods receipt bay they need to be identified. STP can do this in several ways – by reference to a purchase order, by reference to a production / value added services order or by direct entry of the product code. If the

product is bar coded then the scanner facility can be used.

The system then generates a unique identification label (birth certificate / tracking label) for the pallet, carton, container, dolly etc – unless the item has been suitably labelled by the supplier or within the production area.

The 'birth certificate' label carries a 'licence plate' bar code. This bar code contains a unique serial number against which the system holds all pallet or item details together with the ongoing history of the pallet or item.





The system can hold information against this product code such as pallet type(s), standard pallet quantity, sell by/best before calculation, quality control requirements (e.g. positive release).

Item Receipt & Label Print

Receipt Type: ☐ Unshipped Supplier ☐ Mixed ☐ Delivery Ref: 123456

Supplier: MORRIS Morris Plastics Limited
 Address Line 1
 Address Line 2
 Address Line 3
 Address Line 4

Batch Code: 123456

Product Code: PLASTIC001 Blue Plastic Sheetting 1000mm x 1200mm

Size: 1000 x 1200

Driver Organisation: Depot A

Full Units on Item: 1.00 Unit Quantity: 5 Odd Sub-Unit Qty: 0.000

Manufacturer Date: 09/08/2005 Monday, 8th August 2005 Tish Batch:
 Use By Date: / / 7 Days: Supplier

Hold? ☐ Reason Code:
 Supplier Batch Code:
 Supplier Item Ref:
 Number of Pallets: 1
 Memo:
 Settings Options... OK Cancel

The label can also contain human readable information such as the product code, product description, batch code, production line or supplier, date of manufacture, quality details, week number, put away location. The label can also include bar code details required by the company's customers including GS1-128 standard bar code details. Labels can be pre-produced if necessary, for instance against advanced ship note information or against production plans.

The system is RF-ID (radio tag) ready and conforms to the latest EPC standards for RF-ID.

Work with Product

Item	Product Code	product description	product short description	Internal product barcode	EAN traded unit
	CARD001	GREETING CARD 001	GREETING CARD 001		
	CARD005	GREETING CARD 005	GREETING CARD 005		
	CARD001a	GREETING CARD 001a	GREETING CARD 001a		
	CARD002	GREETING CARD 002	GREETING CARD 002		
	CARD003	GREETING CARD 003	GREETING CARD 003		
	CARD004	GREETING CARD 004	GREETING CARD 004		
	CLOTH001	Blue Cloth 1000mm wide	Blue 1000mm x 1200mm		
	CLOTH002	Red Cloth 1000mm wide	Red 1000mm x 1200mm		
	CLOTH003	Black Cloth 1000mm wide	Black 1000mm x 1200mm		
	GV285	Green Plastic Bags 1000mm x 1200mm	GV454		
	GV775	Red Plastic Bags 1000mm x 1200mm	GV454		

Product Details: GV285

Internal product barcode: GV285
 EAN barcode: 0000000000000
 Standard unit qty: 1.000
 Minimum stock: 100.000
 Reorder level: 1.000.000
 High stock warning level: 1.000.000
 Container load code: Flexible
 Unit code/short desc: Flexible
 Maximum order quantity: 0.000
 Weight value: 0.000
 Date last checked: 23/07/2004
 Production Date Type: 0
 Use By Days: 0
 Date Remaining: 0
 Status: 23/07/2004
 Last operation: ATMS
 Creation date: 23/07/2004
 Creation value: 0.00
 Manufacturer quantity: 0.00

Product Details: GV454

Internal product barcode: GV454
 EAN barcode: 0000000000000
 Standard unit qty: 1.000
 Minimum stock: 100.000
 Reorder level: 1.000.000
 High stock warning level: 1.000.000
 Container load code: Flexible
 Unit code/short desc: Flexible
 Maximum order quantity: 0.000
 Weight value: 0.000
 Date last checked: 23/07/2004
 Production Date Type: 0
 Use By Days: 0
 Date Remaining: 0
 Status: 23/07/2004
 Last operation: ATMS
 Creation date: 23/07/2004
 Creation value: 0.00
 Manufacturer quantity: 0.00



Putaway

The put-away process:

- provides the optimum put away location using the rules/preferences configured by the user
- verifies that the product has been correctly put away

The pallet put away location can be controlled by the system or by the operator. This alternative can be specified for each product code, product group, pallet build, pallet type or each location type.

The system can 'cross dock' received product directly to the despatch area if it is required for an order/load. The system can provide multi-stage put away operations including, for instance, the control of pick up

and deposit (p & d) locations in a narrow aisle warehouse.

STP has powerful in-built rules. Many rules can be set up and fine tuned by the warehouse system supervisor including:

- 'must' rules – e.g. a product belonging to product group XYZ must be stored in the cold storage section of the warehouse
- 'must not' rules – e.g. liquid product must not be stored above solid product
- capacity rules – a product can only be placed where there is physical capacity (length, width, height, weight)

Location code	Warehouse code	Location type code	Location group code	Flow	position	location full	time last checked	User location description	location short description	M e m	Last update time	Creation operator	Time	Location code	Location type code	Aisle	Tier	Check digits	date last checked	Number Visits	location description	Date	Last operator	Creation date
AA01k	main	RACK	STANDARD	13	1		12:09:54		Standard Rack		12:34:23	ATMS	14:06:08	AA01k	RACK	16	2	0	21/12/2003		Standard RackLocation	22/01/2004	ATMS	31/07/2003



STP then goes one stage further by providing preferences. Preferences establish the optimum location within the warehouse, which meets the above rules. The warehouse system supervisor can put a 1 to 99 priority rating against each preference.

Preference might be:

- product groups deemed as fast moving should preferably be located at the front of the warehouse
- product requiring a pick location should preferably be located above the pick location
- pallets of a particular build type should preferably be located in certain locations

Once the system has calculated the best location the operator will be required to confirm the location. This can be achieved in several ways:

- scanning the location bar code with a bar code scanner linked to a portable terminal or radio data terminal
- keying in a location check digit into a portable data terminal or radio data terminal
- recording the check digit on a peel off/tear off pallet bar code which will be subsequently entered into a computer terminal

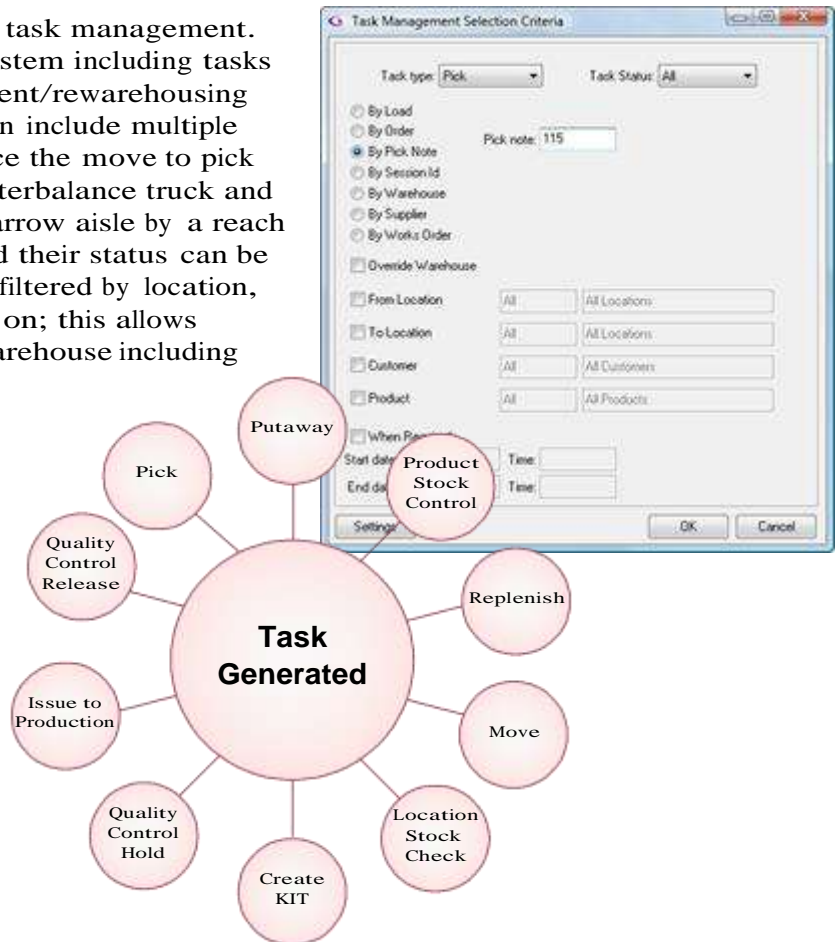
All transactions are time and date stamped against the user ID, for traceability, auditability and productivity analysis purposes.

The system allows locations to be frozen by an authorized user. This is useful when an area is unable to be used.



Task Management

StockTrack PLUS incorporates full task management. Tasks are generated within the system including tasks for put-away, picking, replenishment/rewarehousing and perpetual inventory. Tasks can include multiple staging of operations – for instance the move to pick up and deposit location by a counterbalance truck and then the subsequent move into narrow aisle by a reach truck. Tasks can be prioritised and their status can be viewed at all times. Tasks can be filtered by location, truck type, operation type and so on; this allows flexible optimization within the warehouse including the provision of dual cycling.



Stock Taking

The system is designed to allow for perpetual inventory. A suite of perpetual inventory/cycle counting functions is provided within the system. Full use can be made of radio data terminals for stock taking. The user benefits from configurable selection criteria to allow greater flexibility over task creation.





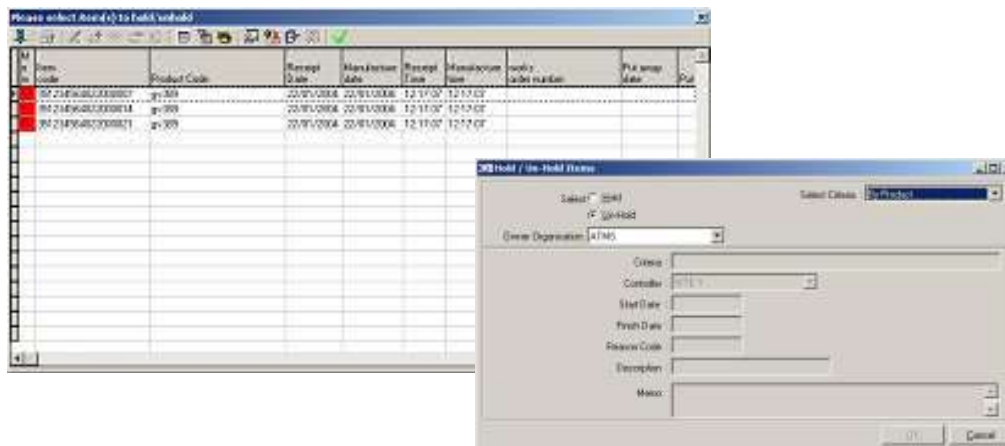
Quality Control

The system has an in-built QC facility. In addition the system provides full two way traceability – including where used and where from information. This makes the system ideal for food, drink, packaging, consumer electronics, chemicals, pharmaceuticals industries etc.

- hold by pallet and/or batch
- positive release/incubation on receipt
- multi-stage release
- provide information regarding held stock by age by location

The quality control module of the system provides the above functions – helping to ensure that held product is clearly identified and actioned. Once on hold the system will not allow the product to be picked or despatched.

Quality control functions can be restricted to authorised users. Full password protection can be provided.



Pick Face Replenishment / Pallet Consolidation

The purpose of this function of the system is:

- to ensure that designated product pick faces are replenished in an optimum manner
- to ensure that the minimum number of part pallets of any one product are kept in stock

The system can interleave these movements with put away and picking movements to ensure optimum use of material handling equipment and manpower. Pick face replenishment can also take account of the demand profile for each SKU to allow replenishment in line with incoming and forecasted orders.



Order Entry

Despatch requirements are received from the company's business system and can be entered manually or received via EDI.

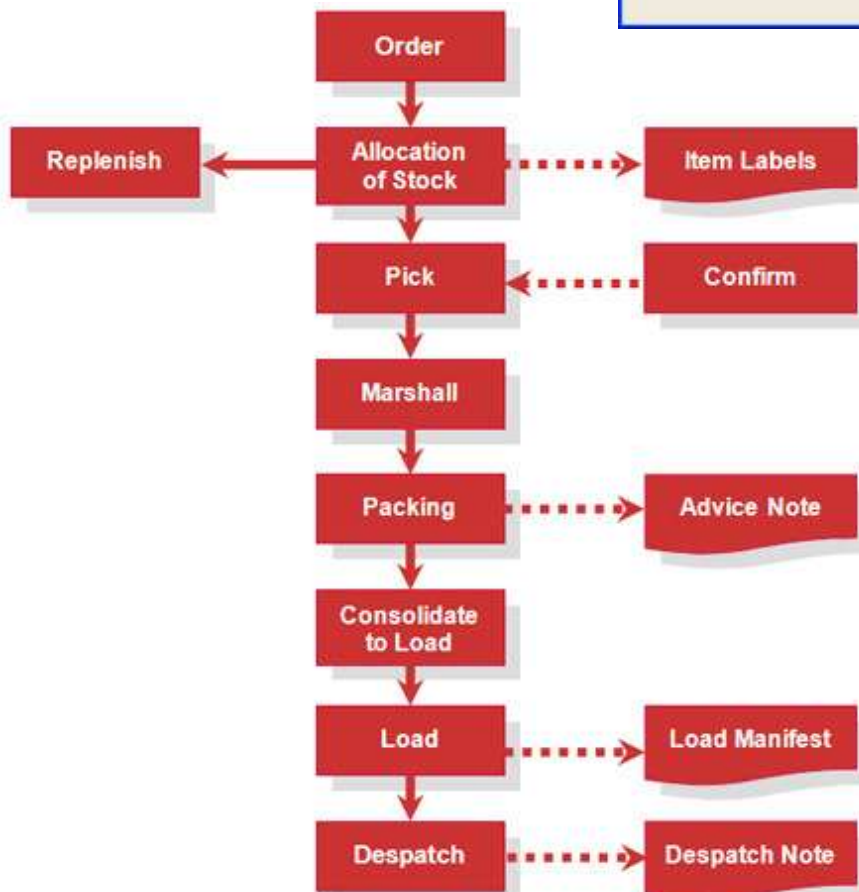
Output Requests

Type: Customer Despatch Despatch With: ATMS 1 Stock Owner: ATMS

Customer: Despatch Address:
 Name: Name:
 Address: Address:
 Order Type: Postcode: Country:
 Trailer Code: Sales Order Ref:
 Service Code: Priority: 80
 Customer Ref: ☐ Enter Earliest/Latest
 Required Date: / / Time: : :

Sales Order Line: Pick Type:
 Product Code: Description:
 Customer Product: Description:
 Unit: ☐ Enter Min/Max
 Quantity:
 Special Instructions: Memo:

OK Cancel





Booking in Diary

The Expected Receipts Diary provides a swift overview of planned current and impending warehouse receipts and despatches thus allowing management to quickly review and plan any necessary actions.



Picking and Despatch Control

The picking and despatch control function ensures that:

- product correctly matches the order
- stock is picked in an optimum manner
- stock is picked 'oldest first' where appropriate
- QC held product is not picked
- traceability details are maintained (batch numbers, serial numbers)

ATMS systems can control this operation in a paperless manner, where required, using radio data terminals. The system can allow for wave picking and bulk picking.

Where loadbuilder is not used then the facility is provided for orders to be released in a controlled manner from an order well.

The system can control picking and packing operations and picking to mixed pallets. Carton and/or pallet labels can be provided and content lists produced, both electronically and on paper.

Items can be picked and despatched in one operation or picked, staged and despatched. The despatch control process allows items to be scanned onto the despatch vehicle and validated. A load list or trailer manifest can be produced which can then form the basis of an advanced shipping note to be communicated, for example, via EDI.



Returns

A facility is provided for booking returned items back into stock. Full quality control and product re-grading is provided at this stage.

Management Reporting

ATMS works with its customers to ensure that a full suite of management and operational reports are provided. Reports can be on screen, printed or file based.

We ensure that reports are concise, relevant and accurate.

Reports typically include:

- goods receipt by product / batch/ order / production line
- stock by location
- stock summary by product
- stock age analysis stock at risk analysis (e.g. near sell by date)
- scrapped product report
- held stock summary
- traceability report
- despatch by product / batch/ order
- warehouse utilisation report
- warehouse movements report

In addition a range of end user report writing tools including Crystal Reports are available to allow system users to generate their own reports.

The system has an in-built browser which allows users to configure the way data is presented to meet their own needs. Profiles

can be stored against the user ID. Columns of information can be resized and re-ordered, in a similar way to Microsoft Excel or Outlook. Information can be filtered and sorted. The user can also create specific browses and drill-downs of information.

Stock	Units	Costs
Expected	291,000	308,719
Actual	291,000	308,719
Variance	0	0

Product Code	Item Code	Number of	Receipt Date	Manufacture date	Receipt Time
TOY001	3512345640000000	160,000	05/05/2003	03/12/2003	09:36:09
TOY001	351234563337000009	10,000	05/05/2003	03/12/2003	09:36:09
TOY001	351234563337000000	100,000	05/05/2003	03/12/2003	09:36:09
TOY001	351234564000000000	57,000	20/07/2004	20/07/2004	13:57:09
TOY001	351234564000000017	57,000	20/07/2004	20/07/2004	13:59:22
TOY001	351234564000000003	500,000	05/05/2003	02/02/2004	11:02:07
TOY001	351234564000000000	7,350,000	28/10/2004	23/10/2004	12:52:11
TOY001	351234564000000000	7,350,000	28/10/2004	28/10/2004	09:40:41
TOY001	351234564000000083	100,000	23/07/2004	23/07/2004	12:01:14
TOY001	351234564000000079	100,000	23/07/2004	23/07/2004	12:01:14
TOY001	351234564000000006	100,000	23/07/2004	23/07/2004	12:01:14



Technical Architecture

STP provides:

- full relational database, providing data integrity and the basis of powerful reporting
- roll forward recovery enabling complete recovery after a system crash
- the ability to synchronise other servers, often geographically remote, giving the ultimate level of disaster prevention
- full Web browser facility
- a stable base for any system resulting in greater reliability compared to many systems written in older languages
- ease of end-user menu and report generation
- multi platform support with no code changes including, Unix, IBM-AIX, HP-UX, Windows NT, Windows 2000/3
- multi-lingual capability
- full end user reporting including ODBC and SQL based reporting (including Crystal Reports)
- file import and export, gateways and/or links to Oracle, Informix, IBM AS/400, C-Isam, SQL, ODBC



StockTrack PLUS Core Options

System options will be discussed and agreed with the customer during the proposal and specification stage.

Arrivals

- Unplanned and planned receipts
- Link delivery with purchase orders
- Record unique delivery reference / consignment note numbers
- Receive from end of production line
- Track receipts through pre-put-away stages
- Text note to deliveries
- EDI pre-advice
- Works order pre-advice
- Receive against Purchase Order and Works Order
- Product accuracy and quality check
- Returned goods

Receiving

- Allow blind or sighted checking
- Record receipt (and return) of storage media by (optional) serial number pallets, bins etc)
- Auto quarantine/positive release
- Best before/batch/production date
- Serial number recording
- Individual item attribute recording (e.g. multiple reels on a pallet)
- Proof of receipt/documentation
- Allow receipts without documentation

Storage Rules

- Velocity / ABC
- Environmental (temperature, humidity, hazardous material)
- Product and code mix
- Demand level
- Type of demand (broken case, full case, pallet)
- Dimensions cube and weight
- Batch / lot / serial / control, batch date
- Type of storage device
- Replenishment thresholds
- Different rules for same product depending on quantity
- Stack height, Carton life, Pallet life,
- Hanging, Top up, Pick up and deposit (P and D, e.g. narrow aisle) control



Putaway

- System selects best location
- System selects normal location
- Truck driver selects location
- Movement via P and D/feeder
- Auto / priority direct to picking
- Auto / priority direct to outgoing orders
- Identification via stock code or unique pallet / container ID
- Prevent put away in block stacking area currently being used for picking
- Interleaving of pick, replenishment, putaway
- Flexible putaway verification
- Flexible performance reporting
- Container types and stocking factors - zones (frozen, chilled, ambient, ABC)
- Bulk / pick /marshalling areas
- Location access constraints
- Temperature levels
- Pick-faces
- Urgent order handling
- User selected
- Automated storage

Storage Types

- Drive in
- Drive through
- Block

- APR
- Double deep
- Flow through
- Mobile
- Narrow aisle
- Very narrow aisle
- Bins
- Carton glide
- Hanging

Pick Face Replenishment

- Minimum stock balance in location following allocation (allow multiple pallet positions for fast moving product)
- Dynamic picking locations for slow moving product automatically or manually initiate replenishment
- Top up replenishment by case, layer, full pallet dynamic pick face replenishment
 - Product definition (seasonal, cyclical, normal)
 - Current demands
 - Storage capacity
 - Stock availability
 - User defined rules
 - Handling categories
 - Selectable number of days for historical analysis
 - Selectable number of days storage



Quality Control

- Sampling requirements specification
- Product re-grading
- Q C hold - reasons
- Incubation - curing
- Best before / sell by
- Scrap – reason / history
- Product test
 - Min / max against user defined criteria
 - Pass / fail decision for pallet / batch
- Barcode verification - case, item
- Hold by product, date, location, batch

Full Pallet / Container Retrieval

- System identifies pallet to be retrieved
- Truck driver identifies pallet to be retrieved
- Retrieved via P and D.
- Tracking to destination
- Interleaved with put away
- Retrieved by oldest / batch / required date / nearest / order number

Item Retrieval / Picking

- Auto replenishment
- Consolidated picks
- Heavy / large picks first
- Retrieved by oldest / batch / required date / nearest / order number
- Order pooling

- Rationing / back orders
- Product Substitution
- Promotional product differentiation
- Serial number recording
- Analyse order pool and optimise
- Pick activity based on pick rates, available equipment available manpower, available stock
- Pick wave planning
- Orders classified by overdue, due X days
- Order by customer
- Order by delivery zone
- Pick accuracy
- Orders picked per man per hour
- Items picked per man per hour

Despatch Control

- Record actual truck departure
- Record serial numbers if not recorded
- Record catch weights etc
- Record chargeable containers / pallet
- Order staging prior to despatch
- Creation of shipping labels, documents manifest
- Transfer of orders/carriers
- Stage in reverse drop sequence
- Scan onto vehicle
- Generate trailer map
- Generate despatch documentation
 - Total weight, total cube



Returns

- QC hold
- Pre - advice/clearance of returns
- Returns documentation
- Part used returns (e.g. reels, pallets returned for production)
- Re-grade

Stock Check

- Cycle counting
 - By time
 - Movement history
 - Mandatory, counting interval stock
- Blind counts
- More than a defined number of location visits since last count
- More than x months since last count

Stock Hierarchy / Coding

- Vehicle / load
- Pallet
- Layer
- Case
- Inner
- Single
- Allow for product grade, product configuration, customised products
- Units of measure, e.g. metres, Kg etc

Stock Ownership

- Own stock
- Customers stock

- Suppliers stock
- Quarantined stock

Reports

- Stock by owner
- Stock by sell by date
- Stock movement
- Stock scrapped
- Stock by batch/ rotation
- Stock by product code
- Stock by product group
- Low stock, zero stock
- Slow moving stock
- Stock transfer

Traceability

- Lot / batch/ serial number/ pallet / purchase order/works order

Physical Warehouse

- Multi site
- Multi warehouse
- Multi zone
- Multi location
- Super PI
 - user configurable criteria

Material Handling Equipment Interface etc.

- PLCs
- ASRs
- Weighscales



Management Reports

- Despatch throughput
- Warehouse stock
- Warehouse utilization
- Items / orders picked
- Items / orders dispatched

Miscellaneous Requirements

- Invoicing for S H and D
- Space occupied
- Movement / handling activity
- Operations charging
- Event handling
- Event scheduler

General Requirements

- Support RDTs, PDTs, peel off labels
- Record variable items on pallets (e.g. reels)
- Record serialized items on pallets
- Provide general bin store control (fifo traceability)
- Provide traceability
- Allow multiple and different units of measure
- Multi client
- Multi warehouse
- Mix of products, owners, batches, expiry date, lots, stock condition
- Conversion / packaging operations



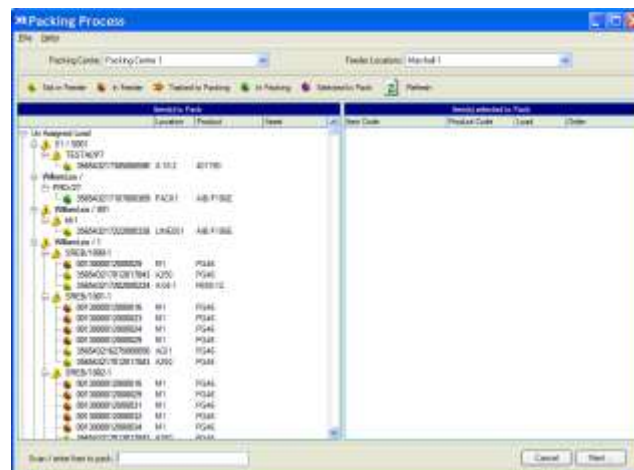
StockTrack PLUS Extended Features

Advanced Picking / Packing

This module allows users to pack or re-pack products after or during picking. This can be for building customer kits or for rationalisation into smaller cartons/bags/packs.

Products can be packed during the picking process or directed to packing benches where the user can select individual products to pack or consolidate. This is particularly useful where postage costs are significant or where the customer demands that products are packed in specific ways.

- Pick by RDT or label
- High efficiency and accuracy through built-in safe guards
- Rules based to eliminate picking and packing errors
- Wave pick for timed/scheduled despatches
- Consolidated pick for multiple orders
- Dynamic label production during picking/packing process
- Tailored packing, to meet customer requirements
- Shipping consolidation
- Utilises a mix of technology (label and radio frequency) where emphasis on checking and product consolidation are required.
- Allows integration to Carrier Based labelling systems to greater enhance efficiency and lower costs even further, by using Rate shopping





Asset Manager

Asset Manager provides the means to control the use of returnable capital equipment within the distribution chain. The module provides the traceability of these 'non-stock' units such as returnable media used for storage and distribution, e.g. stillages, drums, totes, towers, and plastic pallets.

- Reports and views provide details on availability, history and location of all assets
- Lifecycle monitoring ie usage and longevity.
- Allows user to select preferred media
- The asset can also be used as a unit to pick or move a quantity of product
- Link to pallet ID/despatch address/customer
- Allows assets to be tracked at owner level
- Track by item count or serial number
- Offers the ability to generate and process asset based PI (Perpetual Inventory) stock checks with full reporting





Charging Module

The Charging Module provides a comprehensive facility for the generation and tracking of charging data within virtually any warehouse operation but extensively applicable within Third Party operations.

- Visibility of transactions by owner or customer
- Multiple owners/organisation configurations
- Configurable charge periods including monthly, bi-weekly, weekly and daily
- Multiple charging categories which include RH&D, by pallet, CBM, location
- On screen views of storage and handling with drill down to pallet level
- Banded charge rates, e.g. reduced cost first week
- High Point calculations
- Ad hoc charges defined by users for value added services, e.g. kitting, re-packing, labelling
- Output can be sent to external business systems
- Non 3PL operations can use this module to assess the warehouse as a profit centre

Charge Date	Charge Type	Charge Code	Item Code	Pallet Code	Warehouse Code	Location Code	Storage Pallet Code	Charge Amount	Charge Period
10/12/2007	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	1.00000	0.00000
10/12/2007	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	1.00000	0.00000
10/12/2007	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	1.00000	0.00000
10/12/2007	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	1.00000	0.00000
10/12/2007	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	10 10 10 10 10	1.00000	0.00000



Custom Label Design

ATMS can provide the Bar-Tender label design package to work in conjunction with STP. The package works with most brands of label printers, including laser printers and is supplied with a licence for up to 5 printers.

- Design and print customised labels
- Use for compliance labelling e.g. GS1-128, Sainsbury, Nestle
- Create customised documentation e.g. despatch notes
- Edit formats to suit customer-specific stationery
- Reduce costs associated with bespoke label and documentation design
- In-house control

Customer JEWSON LTD	
Despatch Date 17/08/2007	
Haulier Mill Ltd	
Drop	
03	
 (00)351234567225000294	
Load Code A50377	
Desp Code 21130F31	
JEWSON LTD JEWSON LTD CARR WOOD ROAD GLASS HOUGHTON CASTLEFORD WEST YORKSHIRE WF10 4SP	Package number of Drop 1 Package Ref 25000294



Customs / Bond Manager / CFSP

Customs – allows the recording of Bill of Entry information and captures essential data such as voyage/vessel/document details for goods arriving from abroad, and retains the information at item level.

Bond Management – looks after excise duty, customs duty and VAT. Excise documents produced include W5D, W8, AAD plus a monthly W1 document detailing inputs, outputs, and stock balance by product type. Customs documents include C88A and C88E.

CFSP – transmits C88A (free circulation) information directly to CHIEF to reduce delays in despatching goods.

- Records and processes all essential data required for full duty management
- Enables payment of duty to be deferred where applicable
- Reduced delays in despatching goods (via direct link to CHIEF) means faster invoicing and optimised cash flow
- Automates electronic document production
- Reduces administration costs and associated mistakes
- Suitable for wet and dry bonded goods
- SAD (Single Administrative Document) compliant
- Single point of data entry
- Works across Europe



Dashboard / Control Tower

The Dashboard module delivers a constant on-line snapshot of outstanding and current tasks in the warehouse as well as performance against user definable targets.

The data displayed allows managers to see vital real-time information and enables them to react quickly to control the flow of work in the warehouse and provides up to date information on current activities.

- Real time display
- Monitoring of key performance indicators
- Modifiable targets
- Information provided can aid workload planning
- Productivity monitoring
- Pictorial and graphical display of receipt and despatch loads
- Monitor supplier performance
- Monitor operator performance
- Load balancing and optimisation
- Highlights areas of good performance and identifies bottlenecks in the operation



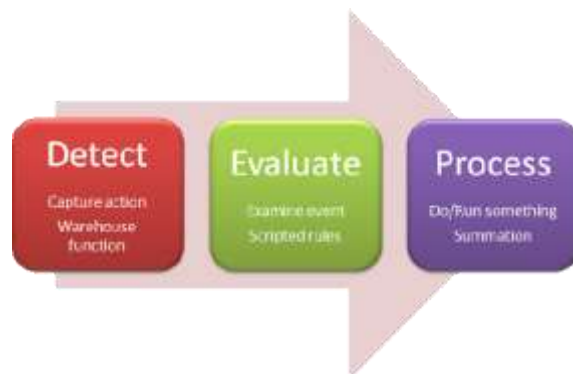


Business Event Management - Advanced Perpetual Inventory

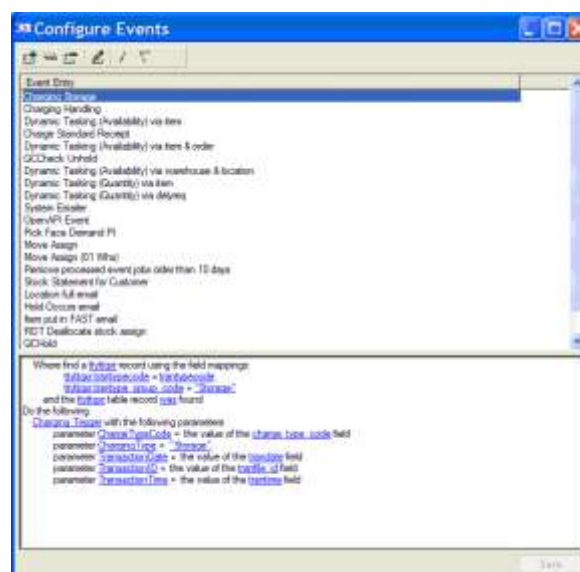
Each and every event that is recorded in STP as the result of a warehouse function can be configured to be processed by the STP business event manager.

As each event is processed, scripted business rules, STP business functions or external API's may be executed in order to evaluate its relevance and criteria.

Resultant actions may be as simple as sending an email, summation of results against formulae on the data warehouse repository (used for KPI dashboards) or more complex actions as running STP functions or external procedures.



- Automates tasks of many types including operational and administration
- Offers improved labour utilisation
- Batch or dynamic task creation
- User configurable events and responses, e.g. if X occurs then generate action y
- Pro-active stock management
- Eliminate monthly, quarterly and annual stock takes
- Automate stock checks by location, product type, pick rates etc
- For Third Party warehouses this module provides the basis for generating charging data based on individual client configurations
- Monitors and creates alerts where events are outside of normal parameters





Kitting / Assembly

This module is useful both for manufacturing operations and for 3PL environments.

Production – enables raw material feeds to the lines dynamically via works order (i.e. push) or Kanban type calls (i.e. pull).

3PLS – Allows kitting (Bills of Material) to be included as a value added operation either on or off-site in line with customer requirements.

- Can be controlled via the business system or manually entered as required
- Full traceability of raw materials and sub-assemblies issued against works

orders including components and recipes

- Ensures a continuous flow of materials in fast moving production environments
- Can be used in conjunction with the Charging Module when provided as a value added service
- Single level Bill of Materials retained in STP
- Allows for rework of products
- Help to control/monitor outwork operations

KANBAN Call

Location Code: LINE001
 Reference:
 Product Code:
 Description:

Build Code	Traded Unit Code	Box Quantity	Boxes Per Pallet
GKN24x10	10	10	24

Box Quantity: Pick Owner:
 Boxes/Pallet:
 Issue Quantity: No/Items:

Pick Type:



Load / Drop Management

Leveraging the benefits of visualising pins on a road map, the load / drop management gives an instant representation of the location and sequence of each drop assigned to a transport load.

- Reduce transport costs
- Group despatches by route/zone/drop
- Schedule despatches against order book
- Plan loads to optimise picking
- Maximise vehicle fill by weight or volume, full loads, part loads and LTL (less than truck loads)
- Accurately schedule transport requirements
- Zone, route and haulier configuration at order line level
- Inter-warehouse transfer flexibility
- Interface to haulier and route scheduling systems
- Hypothetical loads to aid planning and physical vehicle requirement prior to carrying out the actual task, thus eliminating wasted time
- Validation of shipments to the correct vehicle





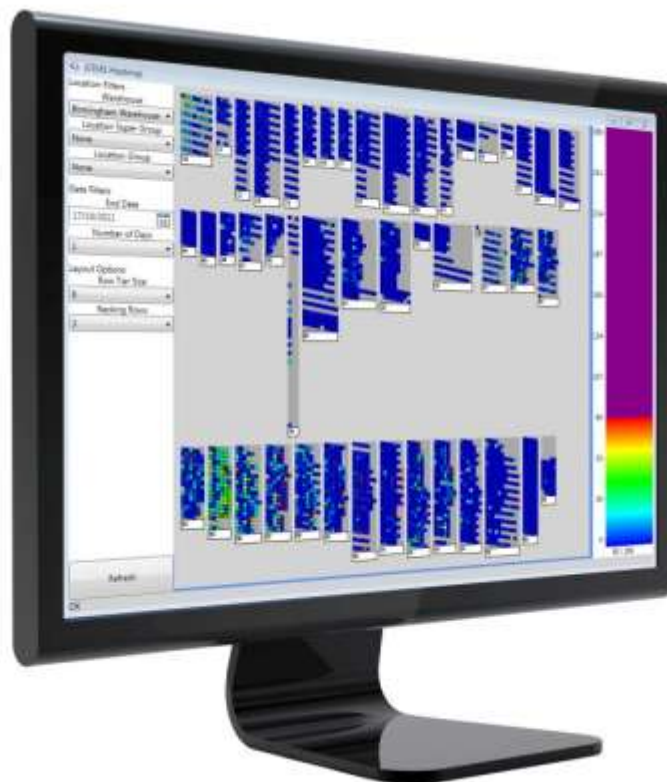
Warehouse HeatMap

The heatmap is a 2D representation of the warehouse where locations highlight hot spots based upon number of picks. This way the module gives the warehouse manager the ability to quickly and easily see hot locations and provides the information needed to plan and re-organise the warehouse layout.

The module collects data automatically upon events and provides the functionality to customise the heatmap report, e.g. select the required date

range or warehouse / location group. With hovering over a location it also provides warehouse managers with further details (provides a breakdown of the products in the location and the picks from each).

Heatmap is a great tool to optimise process flows, warehouse layout and configuration without the need for analysing a large amount of data as hot spots can be spotted at first glance on the visualised report.

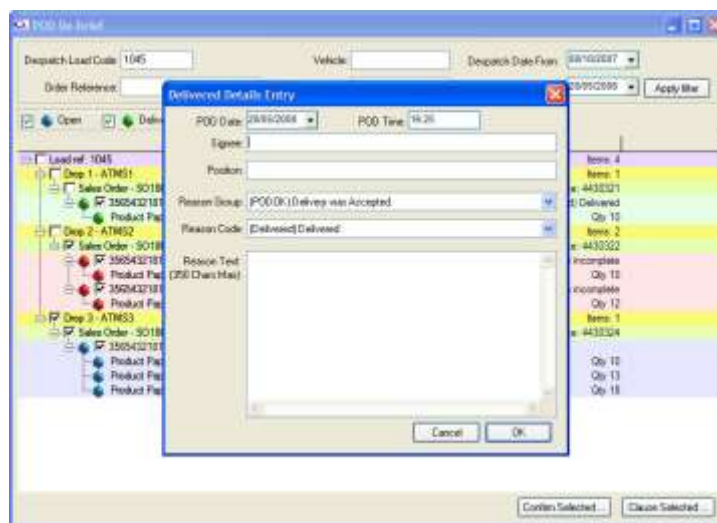




Proof of Delivery (POD)

The POD Module provides a comprehensive facility for monitoring all deliveries once they have left the warehouse.

- Confirm status of successful deliveries with details of signatory, reason codes and optional notes.
- Confirm closed (refused/not delivered) deliveries with reason codes and optional notes for items brought back to the warehouse.
- Colour coding for instant view of delivery status showing 'open', 'delivered' and 'closed' deliveries.
- The status of POD lines can be displayed at load, drop, sales order, and item level.
- Filter on date, load code, vehicle and order reference.
- Accurate information for customer reporting including KPI's.
- Timely information about the status of all deliveries.
- Free-text notes to allow additional information to be entered such as late delivery or new contact.
- Maintains traceability from load through order down to individual item level.
- Full historical data retained





Yard / Dock Manager

A module designed to extend beyond the areas immediately outside the traditional boundary of the warehouse, the Yard/Dock Manager will control the flow of traffic on site and maximise the use of loading bays.

- Fully integrates to booking diary
- Plan inbound/outbound vehicle/bays/loads
- Link to shipping advice (ASNs)
- Controls the allocation of vehicles to loading bays with ticket generation
- Allocate waiting vehicles to parking areas
- Instruct vehicle to move to loading bay
- Track arrival/departure of vehicles on/off site
- Comprehensive vehicle/load/order history with drill down
- RDT functionality including container open and close
- Drag and drop graphics
- Detachable drive units and trailers
- Real time updates of yard status
- Consolidated information across multiple systems
- Works in conjunction with Event Manager





Serial Tracking

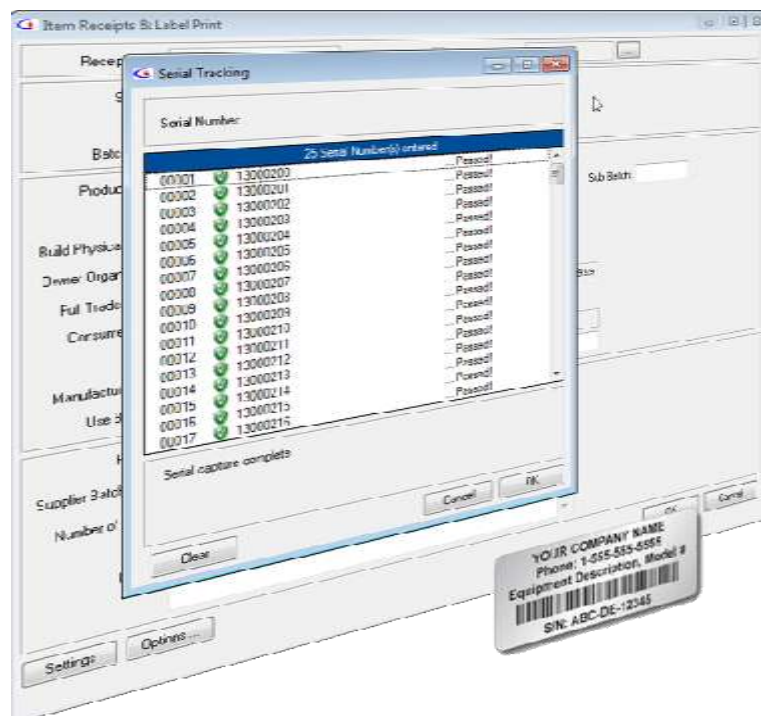
Serialised products are tracked throughout their lifecycle from birth at receipt through to death at despatch. All warehouse functions such as split or consolidation of logistics units, scrap / disposal and adjustments are tracked and validated at serial number.

Full traceability and reporting is possible down to individual serial number. Extensive use of serialised SKU processing, reporting and locating has been implemented for control of high

value stocks where full traceable audits are a necessity.

Serial management is integrated into desktop functions, RDT functions and the optional GPRS remote stock management functions.

Serial spot checks and range confirmations are used for perpetual inventory and housekeeping tasks.





the Global Track suite

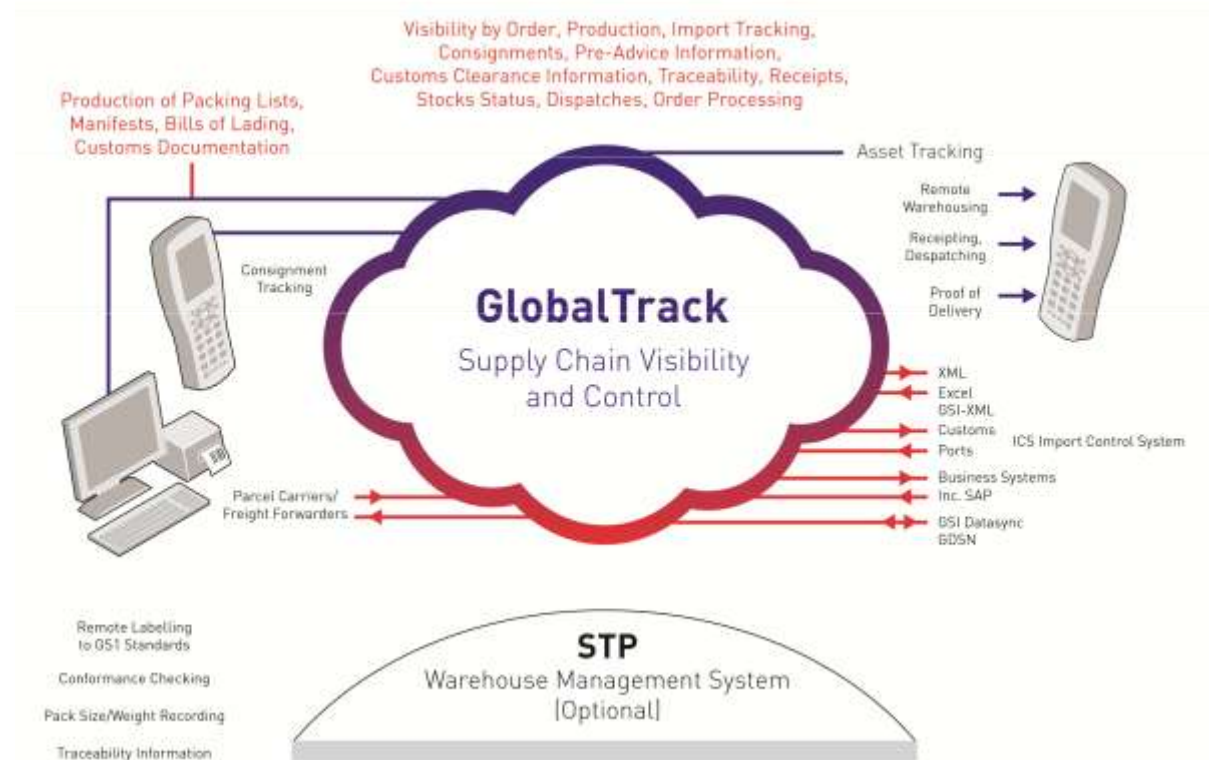
GlobalTrack is a suite of modules that work hand in hand with our STP Warehouse Management System, or can be provided to work with your existing in house systems.

GlobalTrack is designed to provide visibility and control across your supply chain and logistics operation, whether that is around the globe, around your country or around your yard. Visibility of stock, of orders, of consignments, of despatches and of assets.

GlobalTrack can be a hosted 'Cloud' based solution or can run on your own IT hardware. Systems are designed to use Internet connectivity, including 3G / GPRS mobile communications.

Features include:

- Paperless production control
- Real time production and despatch recording
- Material movement recording (including pallet, reel, coil)
- Run time, set up time and downtime recording
- Material usage and wastage reporting
- Work in progress identification and control
- Productivity and utilisation information
- Traceability and quality control





Global Track: Remote Labelling (RemLab)

RemLab provides labelling and tracking of production, anywhere in the world. Production / call off information is sent electronically, labels are then produced by the manufacturer for each carton or unit. Conformance information including weights and quantities can be recoded. Cartons can be scanned into shipping containers, providing an electronic ASN (advanced shipping note) and container manifest.

RemLab provides visibility of global production and shipping in near real time. Receiving and container stripping operations are speeded up dramatically and accuracy improves considerably.

Labelling is to the global GS1 standard, and supports both 1D and 2D bar codes.

- The system links customers in the UK and elsewhere, typically with suppliers and logistics providers in the Far East and Eastern Europe across the Internet
- Suppliers have full visibility of production orders and call off requirements.
- The system can also be used to confirm carton dimensions (cube) and weight; conformance checks such as pack size, quality measurements etc can also be carried out and verified.
- The system can provide full traceability information and control over shelf life; expiry dates and best before information can be recorded.
- Full use is made of the GS1 global standards for labelling and identification.
- The system is proving to have benefits in terms of improved visibility of production and shipments, improved traceability, reduction in grey market/ counterfeit issues, reduced labour, improved accuracy, reduced errors.
- The system is, of course, fully multilingual.





Global Track: Remote Warehousing (RemStock)

RemStock is the stock tracking and recording module that centres around the use of the latest mobile hand held computers with in-built mobile phone Internet connections. Using a SIM card from any mobile phone network provider, the system works across 3G or GPRS networks. This means that zero IT infrastructure is required making the module ideal for the control of remote or temporary warehouses, open storage yards, unmanned stores, control of inventory at customer or supplier sites. Where WiFi access is available the module can automatically switch over to utilise this.

RemStock can be used for proof of delivery recording – using on screen signature capture, GPS location recording and where beneficial using the in-built camera provided by many hand held computers.

- RemStock is an intelligent mobile application that runs on a wide variety of mobile devices.
- RemStock supports all the usual warehouse processes receipt, put away, pick and despatch.
- It typically uses GPRS for communications but can seamlessly transfer to WiFi where this exists.
- Can be used in any warehousing environment, warehouses with no communications infrastructure and even warehouses with no power.
- Allows companies to take on temporary warehouses as and when required.
- Also allows small outlying stores to be controlled, even if they are not manned.
- The system makes full use of GS1 standards for labelling and identification
- The system is of course fully multilingual





Global Track: Web Portal (STPi)

Web Viewer provides greater accessibility to stock information from anywhere in the world.

Remote users are able to view real time data 24 hours a day, 7 days a week.

- Authorised users can access the data held within StockTrack PLUS via a standard internet browser
- Tailored stock and information views to suit customer requirements
- Enables clients and suppliers to remotely view stock status, receipts, despatches and transfers
- Remotely track an order from the moment it is placed right through to delivery to the customer
- Remote order entry and delivery requirements
- Secure access by authorised user only
- Easy to use, minimal training required

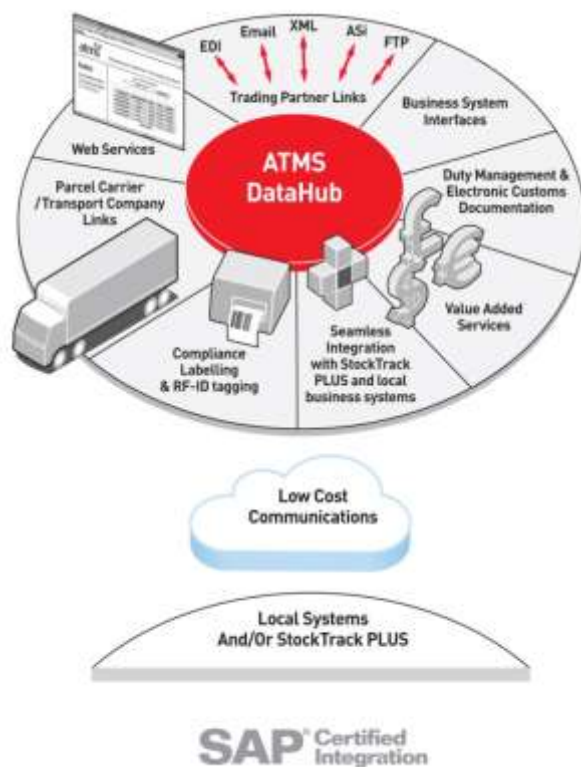
Global Track: AssetTrack

AssetTrack provides asset tracking and control using RFID or bar code asset identification. Hand held terminals or PC's with tethered scanners can be used to record and track the asset. The module provides asset history, location, traceability, quality status, recording of revisions and maintenance, recording of disposal. Asset location can be recorded using the inbuilt GPS sensor that is often available in the latest generation of hand held computers.



Open Integration - DataHub

Seamless integration of Warehouse management into systems that govern the business and extend across the supply chain is a key requirement in today's processes.



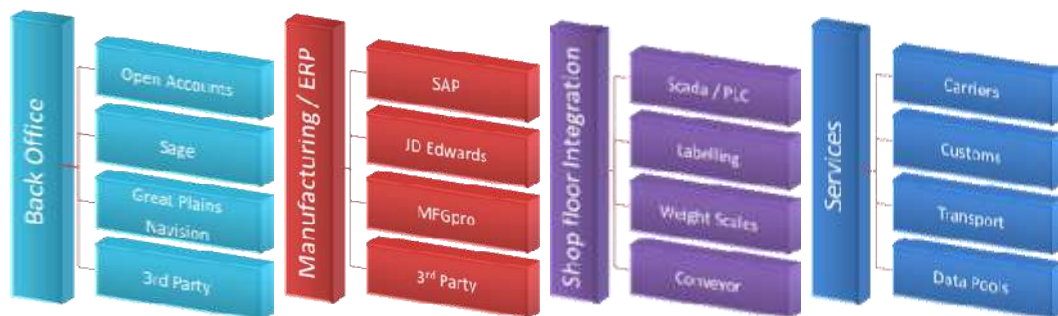
- Enables data to be shared between multiple systems and updated in real time
- Options for compliance labelling e.g. tailored GS1-128 and RF-ID tagging
- Provides a secure link to trading partners around the World e.g. for transmitting Advanced Shipping Notification
- Can be used in conjunction with Web Viewer to provide secure, remote access via the Internet
- Full data logging with complete audit trail and error reporting
- Re-processing and archive facility
- Multi partner configurable
- Processing can be real time, batch or ad hoc with complete validation of transactions into STP
- Plug-Ins available for many major systems including SAP, Great Plains
- Data can be exchanged in the form of transactions, tables or direct database access using EDI, XML, FTP and email amongst others

DataHub is an Open Integration product that allows the global integration and propagation of data between STP, incumbent and external systems regardless of age or complexity.





A library of proven integration adaptors make data connectivity possible and affordable eliminating the need for costly developments or for dual entry and subsequent transposition errors. Data transitions can easily be performed using the highly configurable mapping techniques from ASCII CSV format through to more complex XML structures.



Integration into shop floor and material handling equipment brings inherent efficiencies and accuracies in job processing, whilst data propagation provide a value added service to external bodies , further improving the response and integrity of supply chain execution

An ever growing library of certified carrier integrated solutions is available within STP. These provide consignment numbering and labelling that confirms to the individual carriers specifications covering both Domestic and Export.



Validation procedures ensure that selected carrier services are valid for the delivery destination and timescales based on individual carriers rules.

Labelling and barcoding is produced to each carriers specifications based on the chosen haulier and service.

19

