



Asept InMed

Wholesaler experience in France

Elancourt/Paris, September 2006

Jean-Luc MAURAT – *Asept InMed*

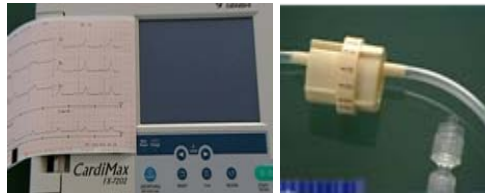


The global language of business

www.gs1.org



- Manufacturer and distributor of medical devices
 - Founded in 1991
 - Subsidiary of the Medi-Globe group (formerly of the Teleflex group)
 - Located in Toulouse
 - 40 employees
 - Turnover 14 M€
- Customers
 - Public and private hospitals, clinics...
 - Purchase pool companies



DIGESTIVE TRACTS

- . gastrostomy catheters
- . endoscopic instruments
- . biliary and pancreatic stents



VENOUS TRACTS

- . sterile protective case
- . ambulatory pumps
- . flow regulators



URINARY TRACTS

- . 1-way or 2-way bladder irrigation set
- . endoscopic examination devices



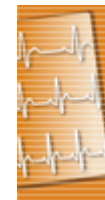
SUCTION

- . vacuum stop valves
- . suction tubes
- . decontamination systems



HYGIENE/SAFETY/COMFORT

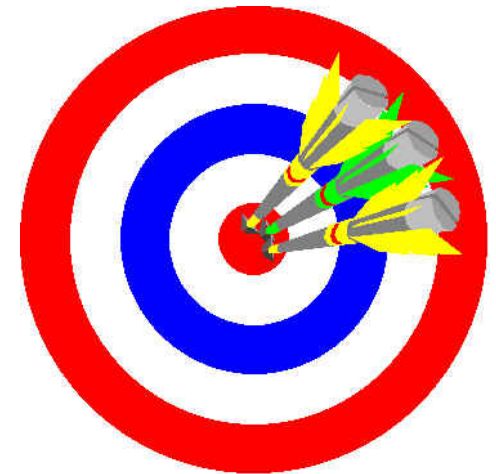
- . single use brushes
- . antibacterial carpets
- . fibroscope protective covers



MEDICAL ELECTRONICS

- . electrocardiographs
- . dopplers, echographs
- . surgical knives, electrodes
- . gel, recording paper

- **A new shareholder (MediGlobe)**
 - **New facilities**
 - **New logistics and data processing organization**
- **Main objects to be pursued by the Supply Chain Management :**
- Accuracy and reliability of stocks
 - Improvement of customer service ratio
 - by shortening delivery times
 - by reducing errors in order preparation
 - Reduction of storage surface
 - Flexibility
 - Efficient tracking and tracing
 - Return on investment after maximum two years
 - No additional hiring
- **Decision to implement a WMS (Warehouse Management System)**





Traceability of medical devices in a French SME



Trace and act !

- The reliability and the efficiency of traceability depends on
 - The quality of data acquisition all along the logistic process
 - The rapidity of data treatment and analysis in order to act as soon as a defective device is detected
- Part I : process
- Part II : simulation example



Data Acquisition

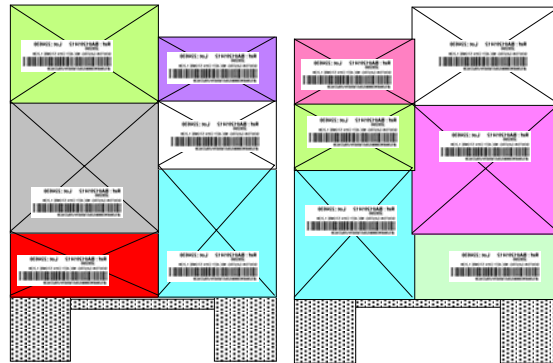
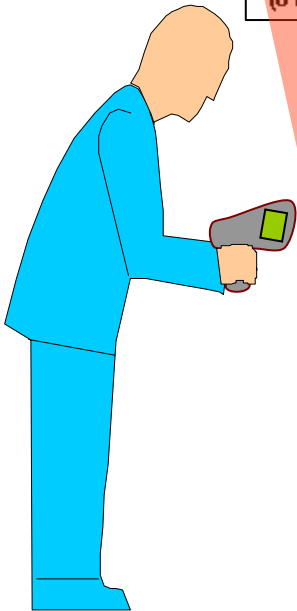
- The acquisition of data related to traceability is made at every step of the supply chain
 - Reception and incoming inspection
 - Storage (put-away)
 - Picking replenishment
 - Picking operations
 - Consolidation and packing
 - Shipping
 - Follow up until final destination



Reception and incoming inspection

Ref : **BA01201412** Lot : **224630**
200290
BOUTON GASTRO. MIC-KEY CH14 STOMIE 1.2CM

(01)30609038006520(17)050701(10)224630



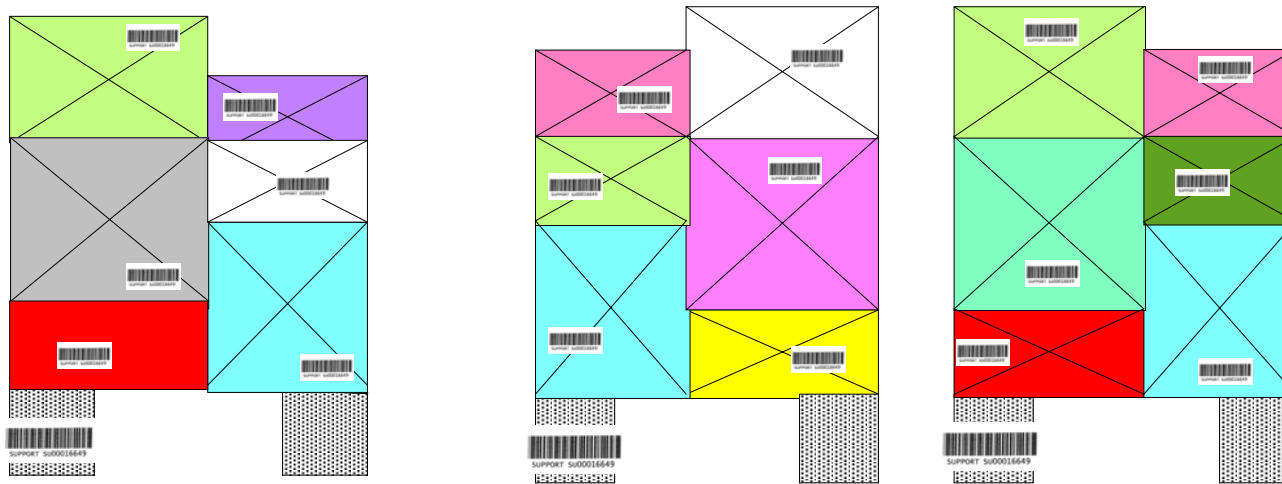
- Data acquisition during reception is at the root of traceability :
 - Supplier code
 - Purchase order number
 - Bill of lading number
 - Article number
 - Lot or serial number
 - Expiration date
 - Quantities

GS1/EAN 128 standard makes data acquisition easier, faster and more accurate



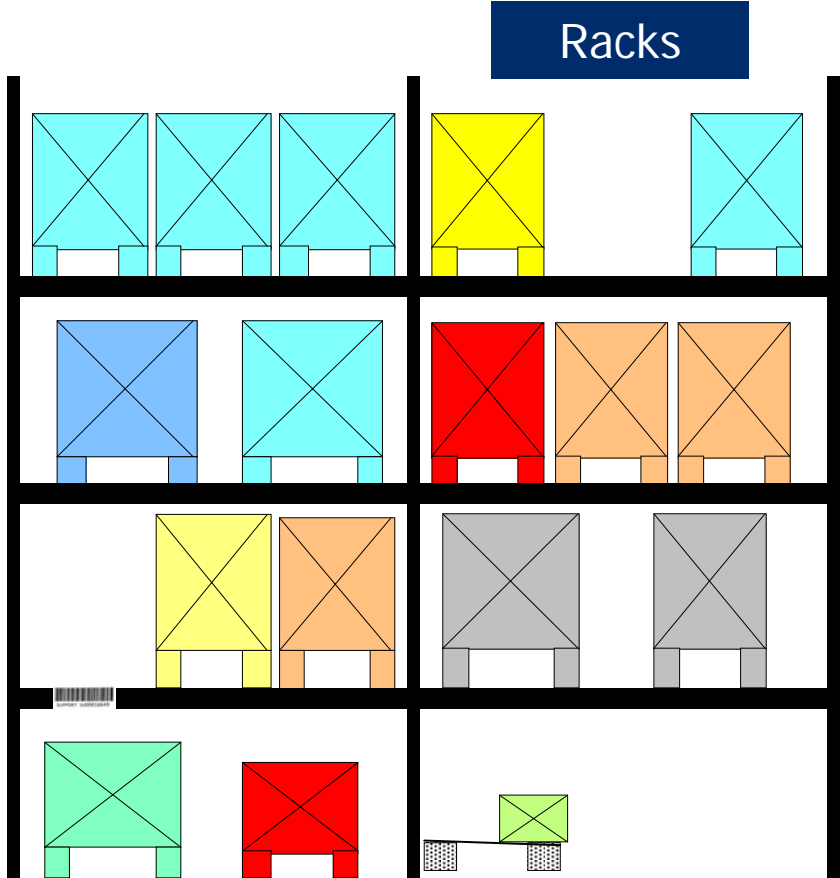
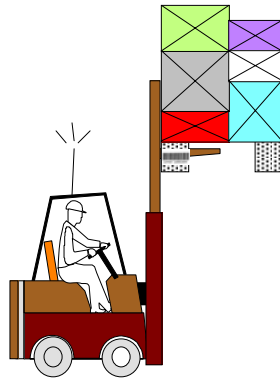
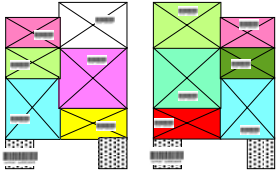
Palletization

Reception area



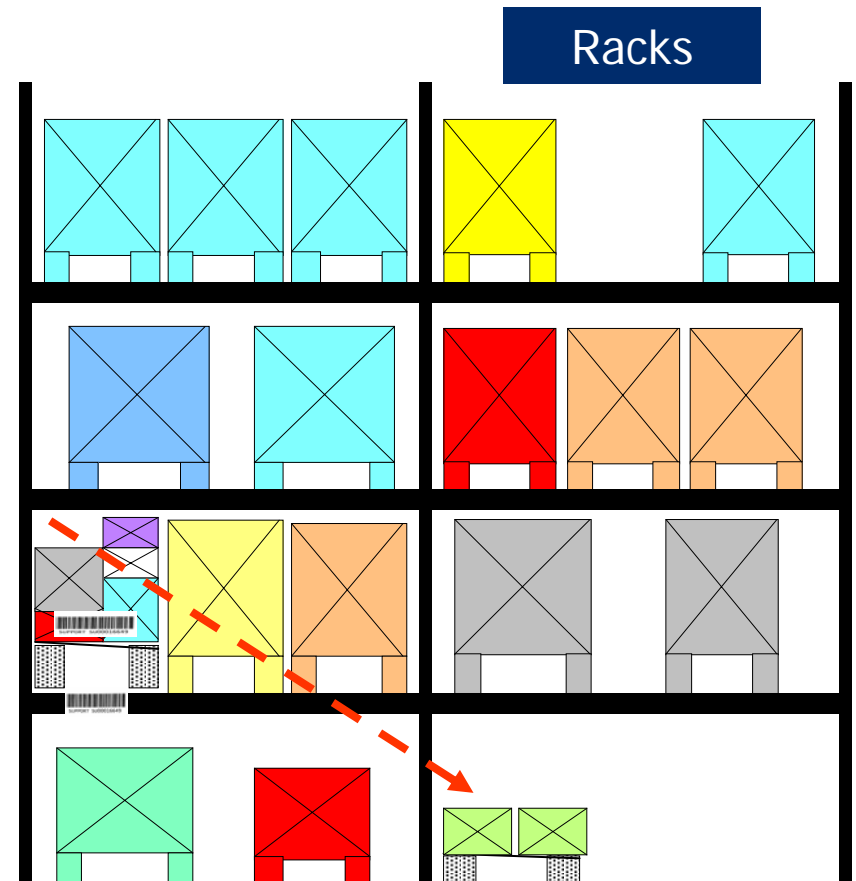
- The empty pallet is given a bar code which progressively acquires the reception information related to each case

Reception area



- The WMS proposes a suitable location for the pallet, the forklift operator checks both pallet and location bar codes then confirms automatically the pallet transfer (and consequently its whole content)

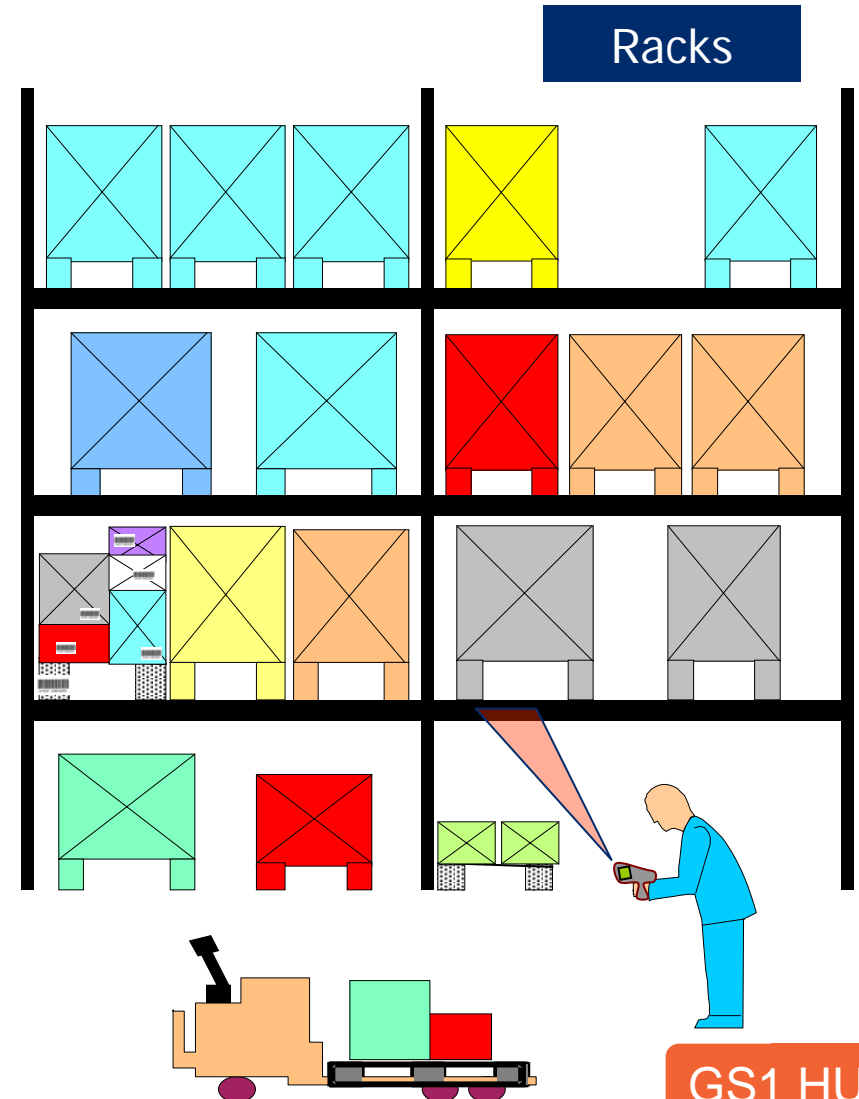
- Multiple orders are grouped into waves
- the WMS compares the ordered quantities within the wave with the remaining quantities in picking locations.
- Replenishment is automatically requested with respect to FIFO (or FEFO)





Basic order picking

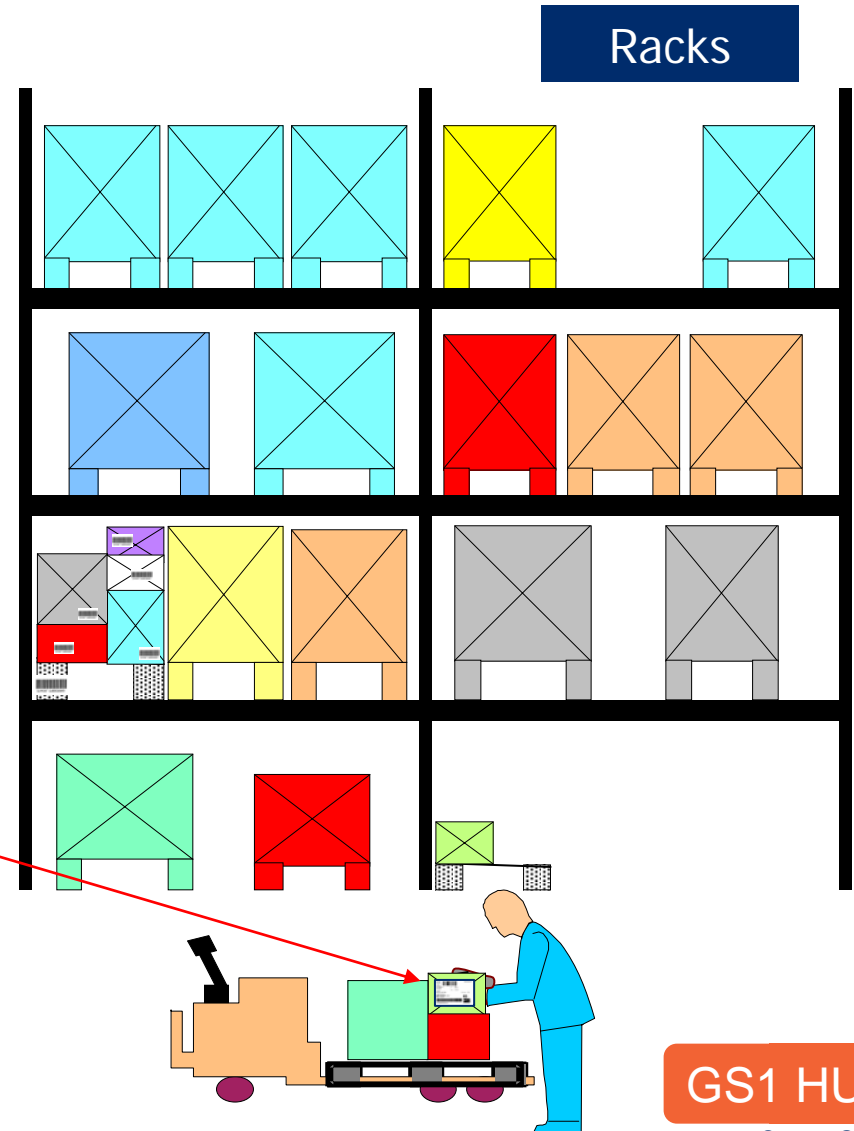
- The order picker picks one order at a time following an optimized route (calculated by the WMS), up and down each aisle until the entire order is picked.
- Before picking the pieces (or cases), the operator checks the location by scanning its barcode.
- The barcode terminal transmits article number, lot number and quantity to pick. After validation, the inventory level is modified at real time
- The order picker can choose manually another lot number (the WMS checks the validity of this lot for this article)
- When using GS1/EAN standard, the operator only reads the bar code printed on the case.





Cases batch picking

- The order picker picks all orders within the batch in one pass using the shipping labels pre-printed (number of labels per article = quantity ordered / PCB) and sorted by location.
- He scans the shipping label SSCC (one label per case), the terminal transmits location, article number and lot number (FEFO).
- The operator sticks the label on the case, the traceability information is automatically linked to the case next to the delivery note



HAYS DX TOULOUSE 05 61 29 31 14		40059030040373
Expéditeur : ASEPT INMED 9, avenue MERCURE ZA ECOPARC 1 31130 QUINT	CLT : 40059 BL : 030040373	DATE : 10/02/2004
Destinataire : HOPITAL FONT PRE	N° Bon Prepa : 130000	
CAMSP QUAI EST 1208 AV. COLONNEL PICOT 83056 TOULON	83	H12
 (00)336608690300403739		

SSCC



Shipping

Carrier bar code (Delivery note #)

HAYS DX
TOULOUSE
05 61 25 31 14

Expéditeur :
ASEPT INMED
9, avenue MERCURE
ZA ECOPARC 1
31130 QUINT

CLT : 40059
BL : 000040373
DATE : 10/02/2004

Destinataire :
HOPITAL FONT PRE

N° Bon Prepa : 130000

CAMSP QUAI EST
1208 AV. COLONNEL PICOT
83056 TOULON

(00)336608690300403739

40059030040373

83
H12

SSCC

- Cooperation with the carrier
 - Carrier shipping label printed and stuck by Asept with SSCC added
 - Accurate case weight provided by Asept
- In order to save time and money :
 - By avoiding weighing and labelling, the carrier defers truck loading and allows Asept to enter and pick orders during one more hour
 - With SSCC, in case of loss or damage, Asept is able to identify the missing case (and its content with the whole traceability information), inform the customer and replace the case



Simulation example of a lot withdrawal process

- A hospital pharmacist points out a quality problem to Asept InMed RAQA :
 - Article number : 200321
 - Lot number : 235396
- Asept InMed RAQA manager decides to withdraw immediately the "defective lot"

Magistor exploitation - [Saisie/modification d'articles]

Connexion Edition Articles Réception Mouvements Préparation Expedition Blocage Destruction Visualisation Inventaires Statistiques Manuel Fenêtre Aide

EPX MAGISTOR

Saisie/modification d'articles 1001

Sélection | Détail | Conditionnement | Modèle de préparation | Contrainte de stockage | Etat du stock

Liste des emplacements pour l'article

Article	Libellé	Lot	Quantité	Support	Adresse	Pereption	Magasin
200321	BOUTON GASTRO. MIC-KEY CH18 STOMIE	1235396	1	810	MAG.02.07.02.06	01/10/2005	MAG (Magasin
200321	BOUTON GASTRO. MIC-KEY CH18 STOMIE	1239757	11	810	MAG.02.07.02.06	01/11/2005	MAG (Magasin

- One defective device remains in stock



Removal from stock

Magistor exploitation - [Blocage Total des lots ou des références]

Connexion Edition Articles Réception Mouvements Préparation Expedition Blocage Destruction Visualisation Inventaires Statistiques M

EPX MAGISTOR

Blocage Total des lots ou des références

Sélection

Code Article commence par 200321

Lot commence par 235396

Choix des éléments à bloquer

Code Article	Lot	Libellé
200321	235396	BOUTON GASTRO, MIC-KEY

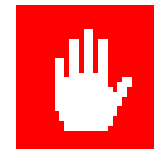
Motif : Blocage RAQA test

Tout sélectionner Bloquer Lot Bloquer référence

Cause

Lot or whole reference removal

- The WMS will be able to store this defective lot number and to avoid in the future :
 - any reception (supplier or customer return)
 - any delivery





Removal from stock

Magistor exploitation - [Saisie/modification d'articles]

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200321	BOUTON GASTRO. MIC-KEY CH18 STOMIE	239757	11	810	MAG.02.07.02.06	01/11/2005	MAG (Magasin

After removal, this device is no longer available (red line)



Customer tracing

Magistor exploitation - [Historique des préparations]

Connexion Edition Articles Réception Mouvements Préparation Expedition Blocage Destruction Visualisation Inventaires Statistiques Manuel Fenêtre Aide

EPX MAGISTOR

Historique des préparations 1923

Critères de sélection

N° Commande commence par []

Code Article commence par **200321**

Lot commence par **235396**

Date Péréemption [] 15/03/2004

Rechercher

Imprimer

6 Lignes trouvées

N° Commande	Code Article	Lot	Date Péréemption	Qte Prélevée	Date Expédition	Individu	Ref Client
137904	200321	235396	01/10/2005	1	15/01/2004 12:41:43	ARA.I.R.L.O.R. NANCY	203887
138003	200321	235396	01/10/2005	1	16/01/2004 07:56:58	LVL MEDICAL PARIS ET NORD	204000
138028	200321	235396	01/10/2005	1	16/01/2004 08:08:43	FONDATION PAUL PARQUET	204028
138534	200321	235396	01/10/2005	1	21/01/2004 14:27:15	CHU DE ST ETIENNE	204616
138737	200321	235396	01/10/2005	2	23/01/2004 10:08:29	DUROC MEDICAL	204849
138774	200321	235396	01/10/2005	1	23/01/2004 11:20:42	O.C.P. PARIS	204887

Total = 7

Customers to be contacted



Customer tracing details

Magistor exploitation - [Suivi de préparation commande]

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Suivi de préparation commande 1707

Présélection des commandes

N° Commande commence 137904 Code Société

N° Client Etat

Nb. Lignes

Poids

Le BP a-t-il été imprimé ? Oui

1 commande					Lignes de commande		Ordre de préparation		
N° Commande	N° Client	N° Tournée	Priorité	Nb. Lig	Lignes d'ordre de préparation	Lignes de prélèvement	Colis	Lignes de colis	
137904	16652		-1		N° Colis	Code article	Libellé article	Qté colis	Qté
					336608690400839117	200321	BOUTON GASTRO. MIC-KEY C1	1	1
					336608690400839117	200382	PROLONGATEUR DROIT EMB	10	10
					336608690400839117	200384	PROLONGATEUR SECUR LOC30	30	30
					336608690400839117	200379	PROLONGATEUR SECUR LOC20	20	20
					336608690400839117	200380	PROLONGATEUR SECUR LOC10	10	10
					336608690400839117	200385	PROLONGATEUR SECUR LOC30	30	30
					336608690400839117	200649	ETIQUETTES TIPS	101	101
					336608690400839117	200454	ADAPTATEUR NUTRITION B05	5	5

SSCC (pointing to the first row of the table)

Magistor exploitation - [Ajout d'un article sur un support]

Connexion Edition Articles Réception Mouvements Préparation Expedition Blocage Destruction Visualisation Inventaires Statistiques Manuel Fenêtre Aide

EPX MAGISTOR

Ajout d'un article sur un support 1603

Sélection de l'emplacement

Magasin

- ECH (Echantillon)
- MAG (Magasin)
- ETG (Etagère)
- REB (Rebut - Stock I)
- QUA (Quarantaine - S)
- SAV (S.A.V.)

Meuble égal à 1
 Colonne égal à 1
 Niveau égal à 1
 Indice égal à 1

Emplacement à modifier

Emplacements				
Magasin	Meuble	Colonne	Niveau	Indice
▶ QUA (Quarantaine	1	1	1	1

Quantité à modifier sur l'emplacement

Emplacement : QUA . 1 . 1 . 1 . 1

Code Article : 200321

_Gestion de lot _Gestion de la DLV
 235396 01/10/2005

Quantité : 1

Motif : Retour

Support / Article trouvé

N° de support	Article	Lot	Quantité	Date Péremp.
▶ 2673	200000	A030947	20	01/12/2008
2673	200012	A030954	50	01/12/2008



Customer return / inventory

Magistor exploitation - [Saisie/modification d'articles]

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EPX MAGISTOR

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200321	BOUTON GASTRO. MIC-KEY CH18 STOMIE	1239757	11	810	MAG.02.07.02.06	01/11/2005	MAG (Magasin
▶ 200321	BOUTON GASTRO. MIC-KEY CH18 STOMIE	1235396	1	00002673	QUA.01.01.01.01	01/10/2005	QUA (Quarante

Customer return



Supplier tracing

Magistor exploitation - [Historique des réceptions]

Connexion Edition Articles Réception Mouvements Préparation Expedition Blocage Destruction Visualisation Inventaires Statistiques Manuel Fenêtre Aide

EPX MAGISTOR

Historique des réceptions 1922

Critères de sélection

N° Commande commence par []

Code Article commence par **200321**

Lot commence par **235396**

Date Péréemption [] 15/03/2004

Rechercher

Imprimer

1 Ligne trouvée

N° Commande	Code Article	Lot	Date Péréemption	Qte reçue	Date Réception	Code Fournisseur	Utilisateur
9199	200321	235396	01/10/2005	8	17/12/2003 09:56:20	401900	bs

1 in stock +
7 delivered



Conclusion 1

- Traceability can be easily implemented and handled even by a SME
- Traceability requires a global supply chain approach from suppliers to final customers requirements
- Traceability requires a limited investment (EDP systems and equipments, barcodes terminals...) with an estimated ROI < 2 years
- Traceability doesn't require so many data entries
- It's essential the supply chain actors use the same barcode standard (and not only for medical stuff)



Conclusion 2

- Traceability is a Key Success Factor for Supply Chain Management
- Asept InMed : some results within two years
 - Turnover : + 20% per year
 - Improvement of customer service ratio
 - Cycle time from order entry to shipping dock : from 5 days to one day (same day for orders received before 5.00 PM)
 - Whole orders delivered on time : 75 % to 93 %
 - Picking errors < 0,1 % (no statistics before)
 - Improvement of productivity
 - No additional hiring in the warehouse
 - Order entry employees : from 5 to 2 (reduction of picking errors, respect of delivery date, EDI with 30 hospitals)
 - Annual inventory (5 days) => Permanent inventory



2004 GENCOD/GS1 Trophy



- ***Asept Inmed*** was awarded the GENCOD/GS1 Trophy in 2004 for mastering the traceability of medical devices from the manufacturer to the end user.

Thanks for your attention...



Contact details

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The global language of business

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