



Spare parts in the CERN Cooling and Ventilation group

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Asset and Maintenance Management Workshop
CERN, 13-15 November 2013

AGENDA



Store overview

- Staff and Locations
- Different Users
- Statistics
- Problematic

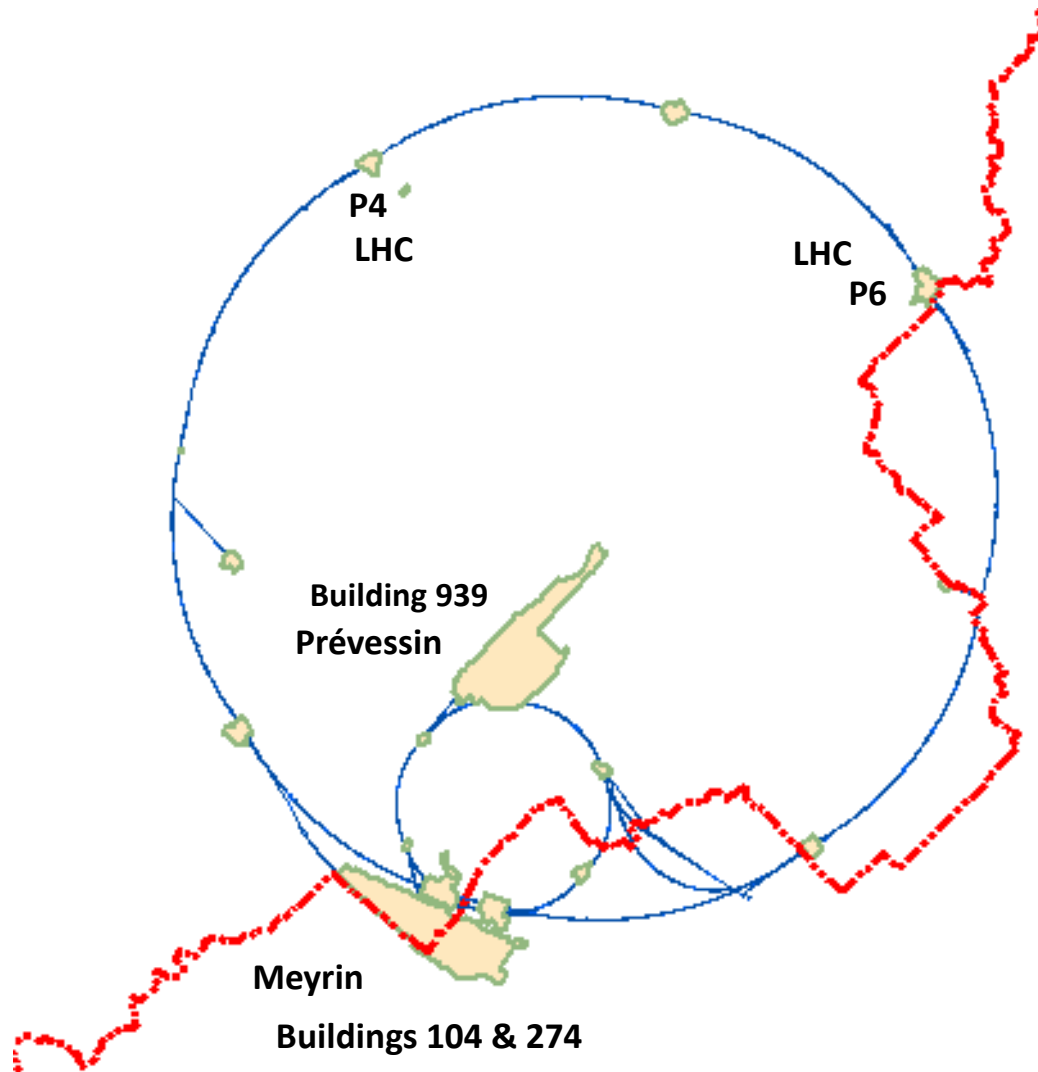
Spare Part Workflow

Store Management

- KPI's
- Order quantities
- Assets management
- Standardisation
- Future Improvements

Summary

Store staff and locations



Store Users

EN/CV

Cegelec



Dalkia



SPIE

Store Statistics 2013 (Jan to Oct)



Total number of references : 31 795

Number of active references : 25 422

Number of active references currently in stock: 11 647 (46%)

Number of active pieces currently in stock: 87 707

Number of work orders with transactions : 5 090

Number of different references moved : 1 966

Number of pieces moved : 37 865

Issues

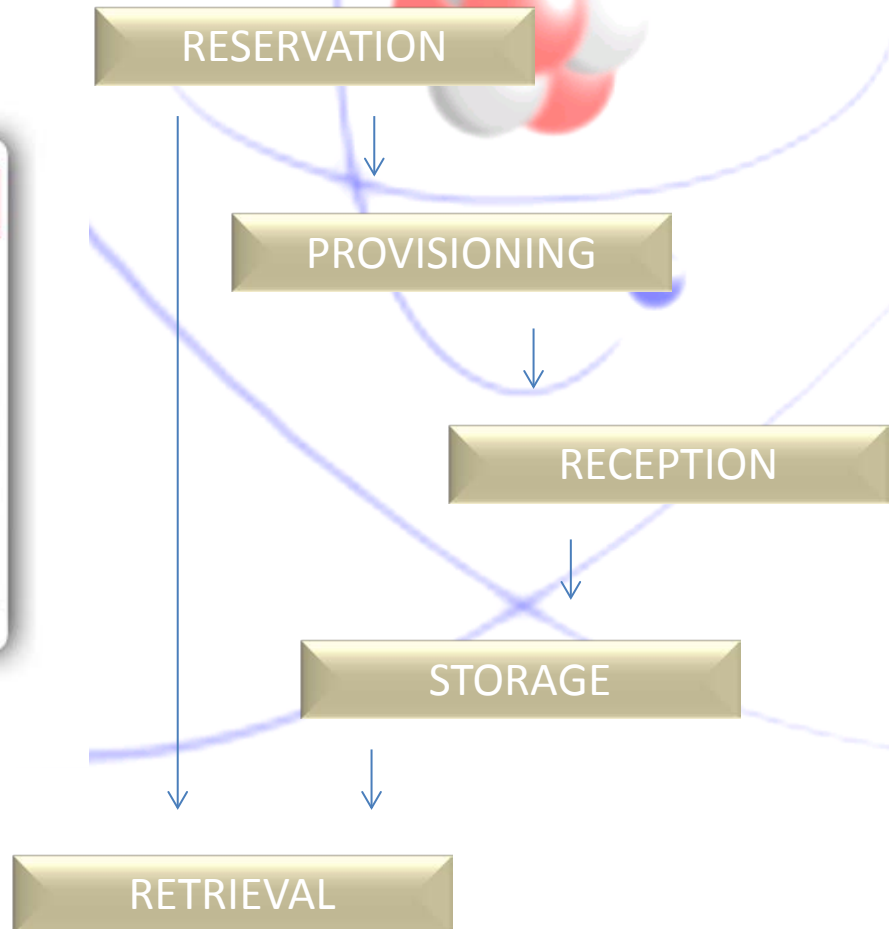


- Quantity of CV installations
- Installations still in operation that were build since 50's
- Obsolete spares
- Long replies to quote requests & delivery time
- Wrong deliveries
- Part deliveries in France and Swiss
- Administrative delay
- Internal procedures
- Badly defined requests / communication
- Resources

SPARE PART WORKFLOW



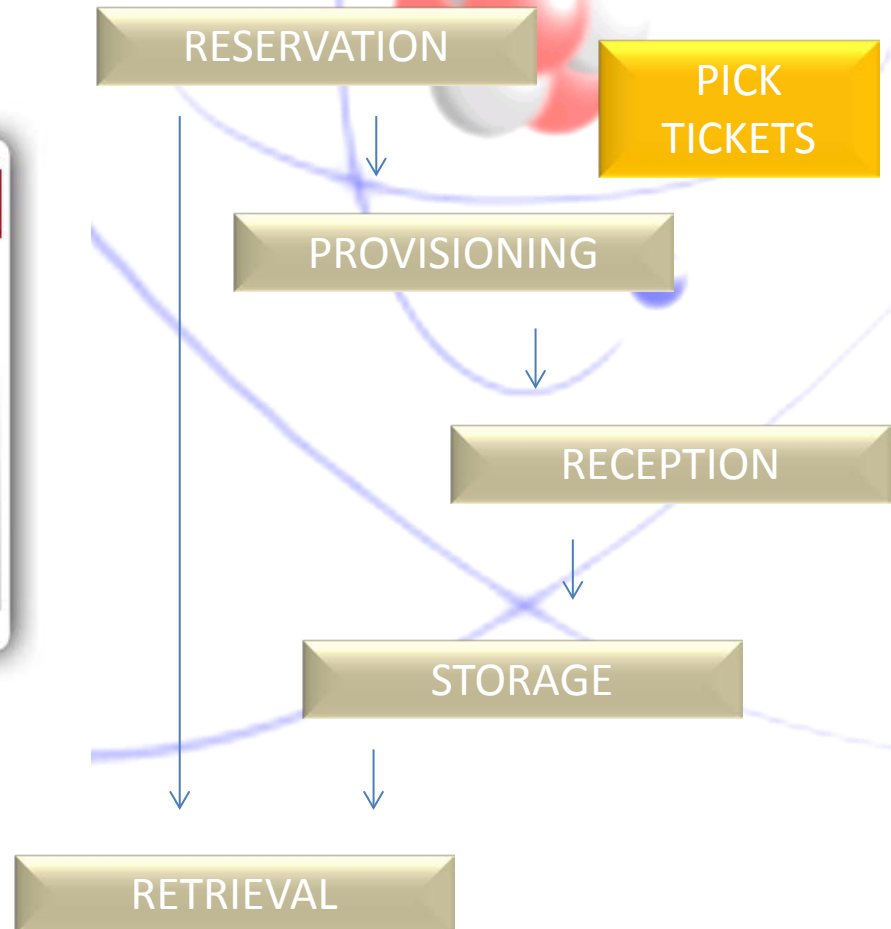
The screenshot shows the Infor Enterprise Asset Management login interface. It features a red header with the Infor logo and the text "Enterprise Asset Management". Below the header, there are two input fields: "User ID:" and "Password:". A "Log In" button is positioned below the password field.



SPARE PART WORKFLOW



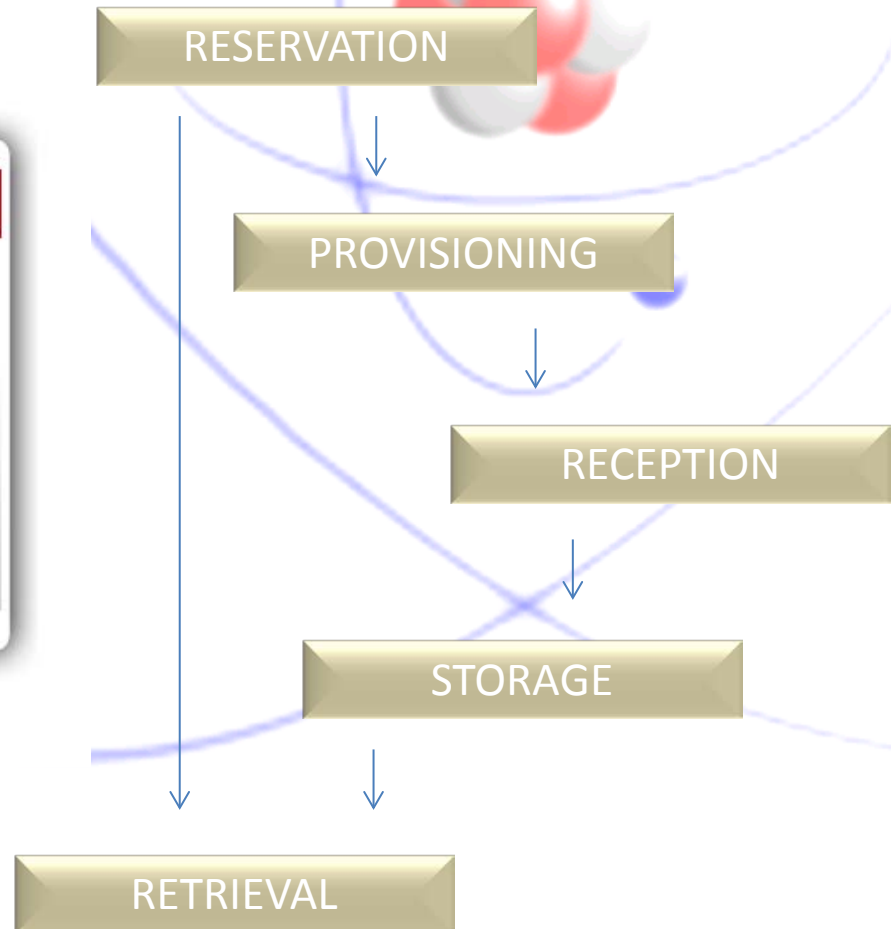
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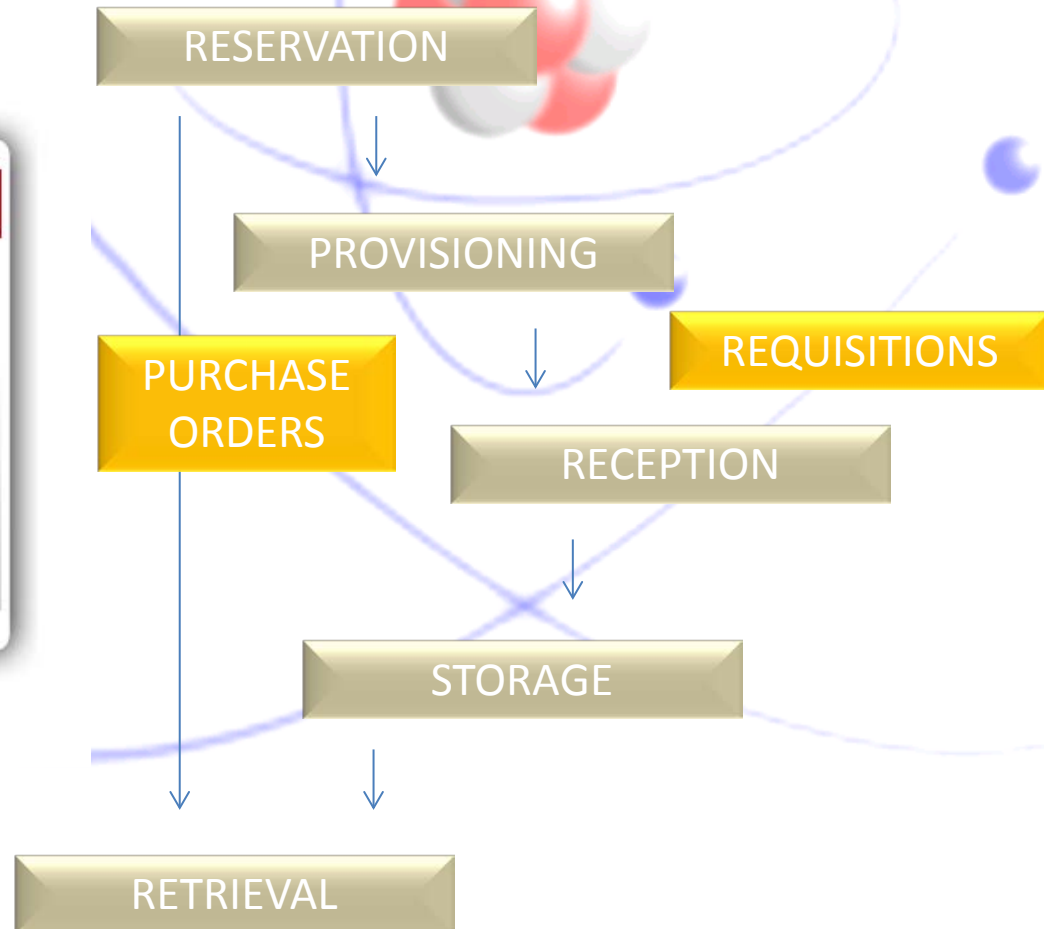


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SPARE PART WORKFLOW

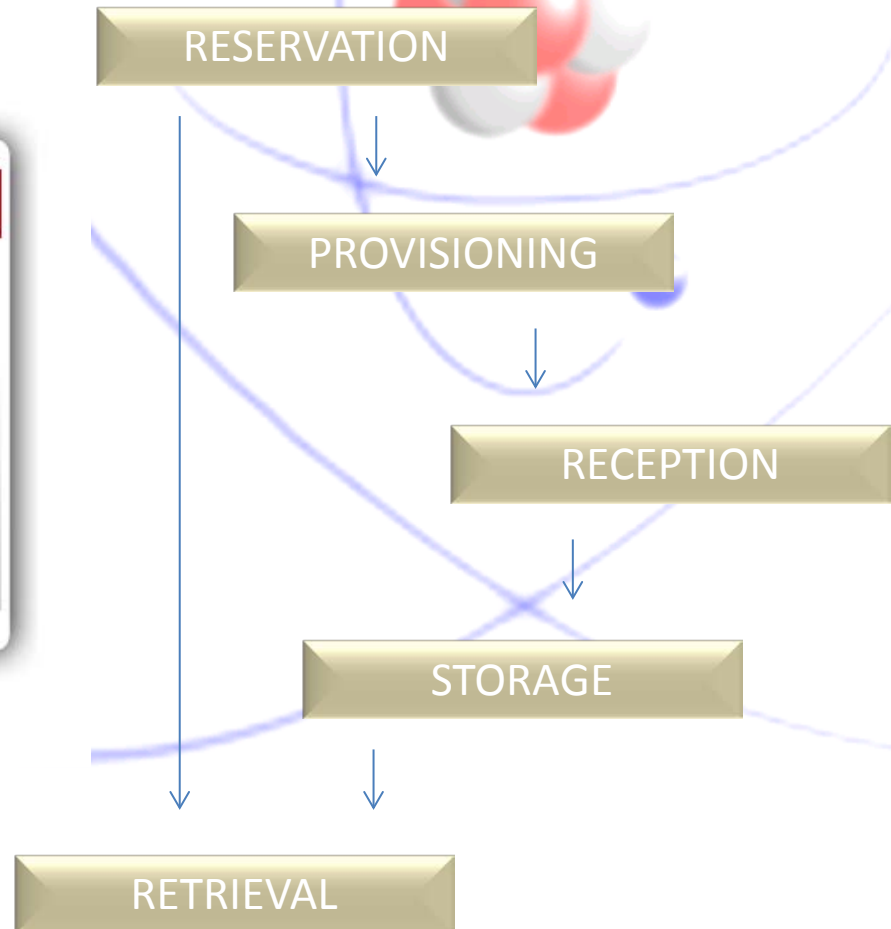
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SPARE PART WORKFLOW



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STORES MANAGEMENT



Order Management

Store	Description	Stock Method
F006	MAGASIN CERN ST-CV 939	Reorder level

Order Details

Store: F006

Stock Class: ...

Preferred Supplier: KALT03 ...

Preferred Store: ...

Lead Time (Days):

ABC Class: ▼

Stock Method: Reorder level ▼

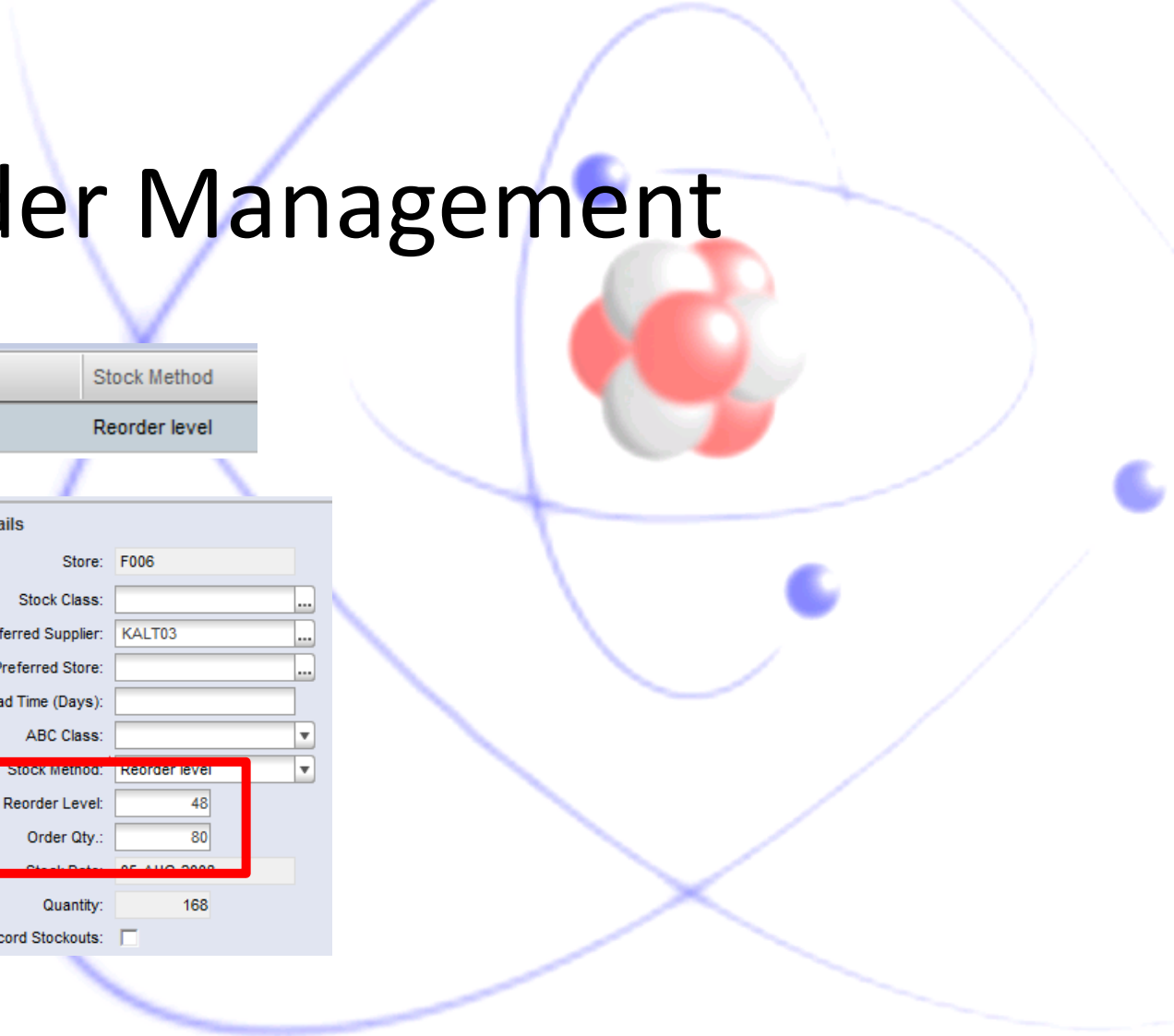
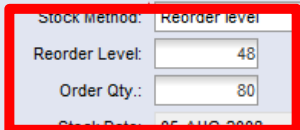
Reorder Level:

Order Qty.:

Stock Date: 05 AUG 2009

Quantity:

Record Stockouts:



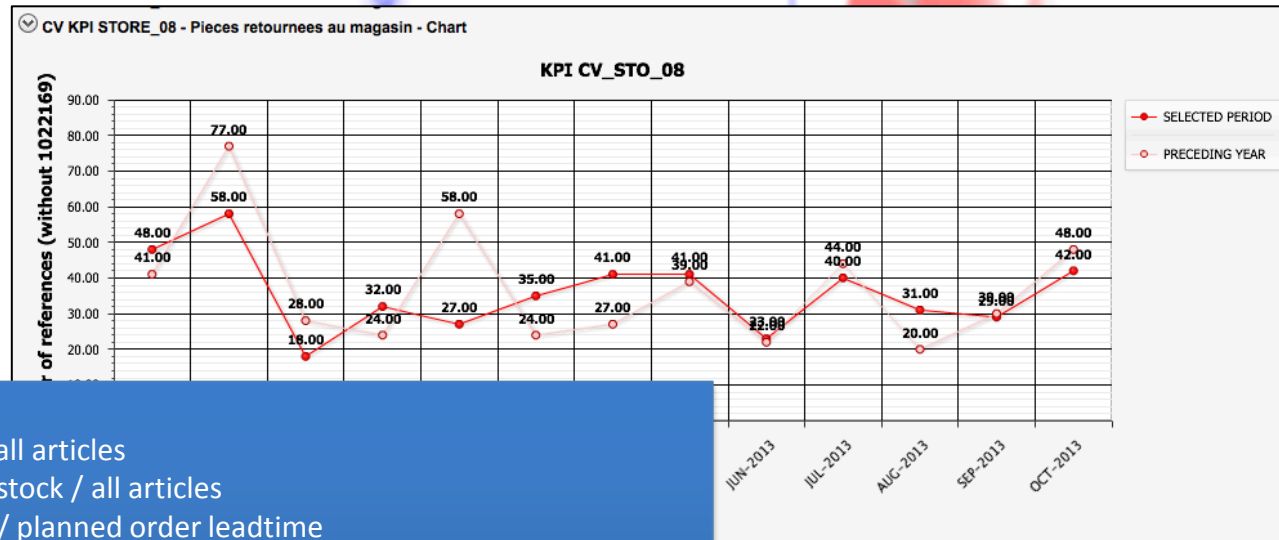
Key Performance Indicators

To follow :

- The trends of the spare part total and minimum quantities
- The part delivery times
- The time to process PO's and PT's
- Numbers of returns
- Most used parts

KPI's implemented in 2013, fully operational in 2014

Key Performance Indicators



10 different store KPIs:

- 01: Ratio STOCK MINI / all articles
- 02: Ratio references en stock / all articles
- 03: Ratio Real leadtime / planned order leadtime
- 04: Ratio number ODMs with transaction / total number of completed ODMs
- 05: Ratio number POs in CHF / number POs in EUR
- 06: Average duration PO from creation to reception in days
- 07: Average duration PT from created to closed (U->C) in days
- 08: Number of returned references/pieces
- 09: Sum of all top ten consumables
- 10: Sum of all top ten parts

Assets

Asset: FPOMP000002 Pompe Dn300 Department: FC01
Status: Installe et Maintenu

Asset: FPOMP000002 * Pompe Dn300 Status: * Installe et Maintenu
Department: * FC01

Equipment Details

Class: FPOM
Category: F1POMCNH
Cost Code:
Production:
Safety:
Profile:
Out of Service:

Commission Date: 24-JUN-2010
Equipment Value:
Assigned To:
Meter Unit:
Criticality:
State: Bon
cGMP:
Dormant Start:
Dormant End:
Reuse Dormant Period:

Hierarchy

Parent Asset:
Dependent:
Cost Roll-up:
Position: FQP-02051
Dependent:
Cost Roll-up:
Location: SF1
IMPACT facility:

Tracking Details

Manufacturer: ENSI
Serial Number: 0001241.00/2
Model: CN300
Revision:

Part Association

Part: FN-00649
Bin:
Lot: *

Linear Reference Details

Facility Details

Custom Fields

Détenteur (ID CERN):
Resp. Technique (ID CERN):
Année de construction:
Type of assembly:
Part of Mat/Batch used:
Number of parts in batch:
No de Fabrication:
Hauteur Manometrique: mCE
Debit 1: m³/h
Debit 2: m³/h
Percee pour vib. sensor:

CV - Part: FN-00649 * Pompe Dn300

Class: FPOM
Category: F1POMCNH
Tool:
Primary Manufacturer: ENSI

UOM: * pc
Commodity:
Secondary Commodity:
Primary Manufacturer Part Number: CN300-40

Track by Asset:
Track by Lot:
Repairable Spare:
Out of Service:

Standardisation

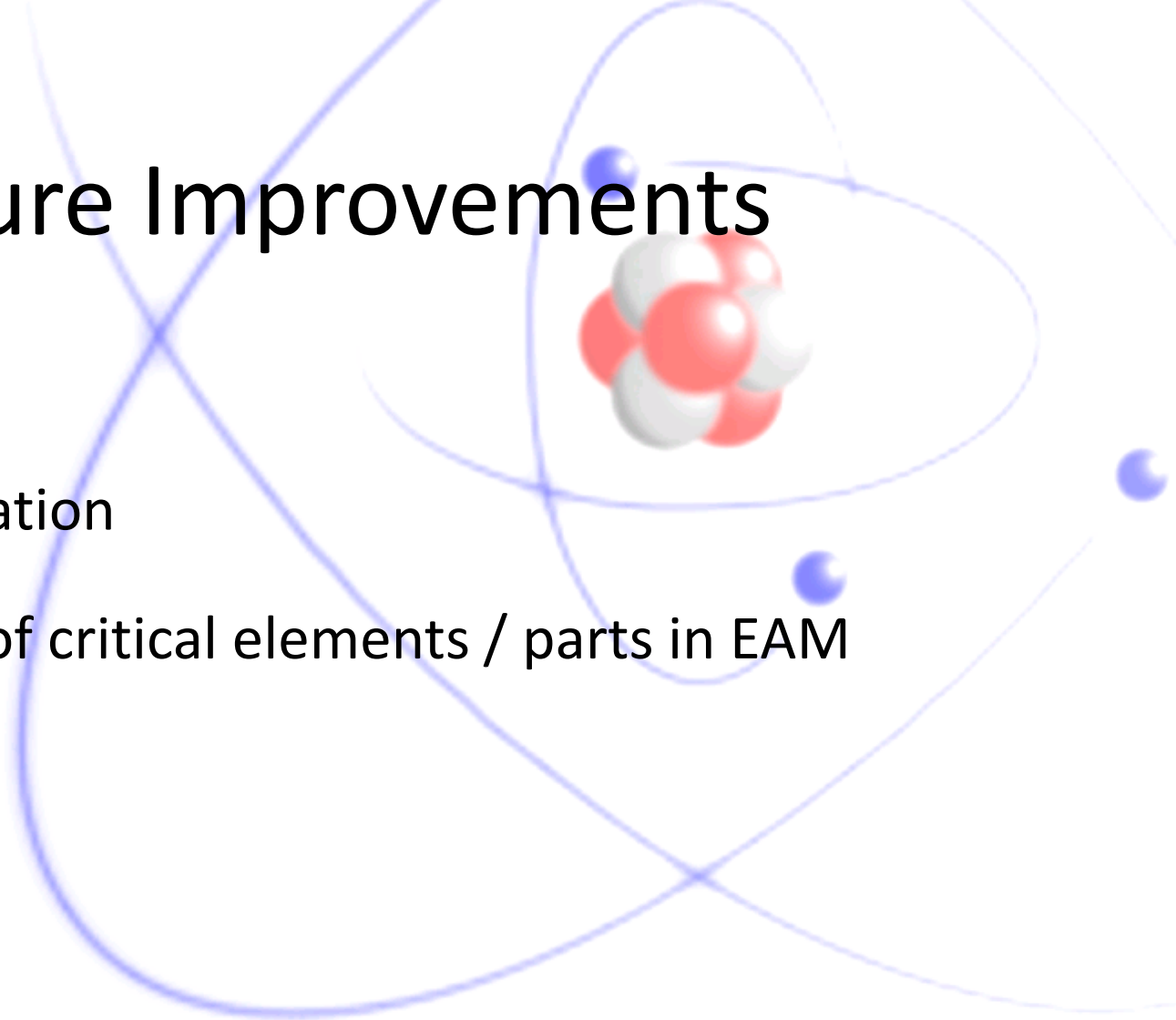


- Organising storage of spares according to their use
- GMAO : adding classes
- Informatics tools : pick tickets and purchase orders
- Procedures
- Equipment : instrumentation partially standardised
- Removing 'sleeping' spares from store

Future Improvements

Standardisation

Definition of critical elements / parts in EAM



Summary



Thanks to different forms of standardisation the work flow is fluent today with a good traceability

Thanks to the KPIs we'll have soon data to improve even more

Back-up slides

Reservations

Part Details & Planning

Part: F17-10-019 VOGEL ensemble pompe 64 BHE 14-13 inox + moteur 5.0

Planned Qty.: 1
Planned Source: Stock
Reserved Qty.: 1

Activity-Trade: 5 - ELECTRO-MECANICIEN
Store: F006
Available: 0
Allocated Qty.: 0

Pick Ticket: 14914

Pick Ticket: 14914 * Remplacement pompe 1

Pick Ticket Details

Store: F006
Status: Unfinished
Work Order-Activity: 19593593 - 5
Equipment: FTDP-00508
Deliver to Supplier:
Originator: CARHUERO
Approved By:
Total Value: 4,351.00 CHF

Date Required: 25-SEP-2013
Class: FPICK
Delivery Address:
Deliver to Employee:
Default Approver:
Date Approved:

Provisioning

List New DAI >>

Purchase Order: 12732 VOGEL 64 BHE 14-13

Purchase Order Details

Status: Approve Revision Number: 1

Store: F006 Buyer:

Originator: 67291 Alternate Delivery Address:

Due Date: 01-NOV-2013 Class:

Supplier Details

Supplier: VOGE25 Lead Time (Days):

Currency: CHF Contract:

Exchange Rate: 1

Language: LANGUAGE NOT APPLIC

Additional Info

Blanket Order - Release: - Printed:

Order Date: 25-SEP-2013

Approval

Default Approver: Date Approved: 14-OCT-2013

Approved By: CDZIN

User Defined Fields

DAI: 5431708 ELOG:

User Defined Field 01: User Defined Field 04:

User Defined Field 05:

Part	Description	Type	Status	Purchase Qty. (UOP)	UOP	Requested Qty. (UOM)	UOM	Price (UOP)	Currency
F17-10-019	VOGEL ensemble pompe 64 BHE 14-13 inox + moteur 5.5Kw 3x400V +(remplace 53TH12)	ARTICLES EN STOCK	Approve	1	pc	1	pc	4,351.50	CHF

Reception

PO Receipt: 11558 JUMO RECHANGE

PO Receipt:

Receipt Details

Purchase Order: Status:
 Supplier: Date Received:
 Store: Received By:
 Class:

Shipping Details

Ship Via: Freight:
 Location: Packing Slip:

Additional Info

Total PO Receipt Lines: Date Last Updated:
 Updated By:

All Packing Slip Lines

Line	Purchase Order	PO Line	PO Org.	Part	Description	Part Or	Supp. Catalog Reference	Outstanding Qty. (UOP)	UOP	Receipt Qty. (UOM)	Receipt Qty. (UOP)
5	11549		5 *	F09-08-127	JUMO pressostat 18 D Plage 0.5 S bar cat 0880300 ref TN00538797	*	TN00538797	2	pc	2	2
10	11549		10 *	F07-08-020	JUMO convertisseur de mesure de temp. type TM- Z2/2.001 0-50 deg.C 4-20m R1100	*		2	pc	2	2

Storage

Stock Details

Store:	F006	MAGASIN CERN ST-CV 939		
Bin:	939-63-F	Qty. on Hand:	3	pc
Lot:	*	Qty. for Repair:	0	pc




Retrieval




Pick Ticket - Print

data extracted on: 07 November 2013 - 17:29:48

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Pick Ticket	15164 Remplacement mano AD	
Store	F006	
Work Order	19683640 ED53 : pose de manos sur le réseau AD target	
WO Scheduled Start date	04/11/2013	
Activity	5	
Originator		
Default Approver		
Approved by	FCHERUBI	
Approval Date	05/11/2013	
Date Required	05/11/2013	
Equipment	FDED-00053	P
Status Pick Ticket	C	Closed

Bar Code Part	Part	Description	Price Part	Qty	Value	Qty Issued	Uom	Bin	Bin Qty	Manufacturer	Manufacturer Part
	F31-06-043	CERN robinet porte manometre 1/2G acier noir siege inox avec vis de purge	37.00	2	74.00		pc	939-25-C	1		
Total Value					74						