



# Inventory Management

Good Issue training



# Training Rules

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- **Be punctual**
- **Turn off your mobile phone**
  - In case you need to attend a call, please go out training room or use coffee breaks
- **Participate actively**
  - In case of questions ask

**Any Other??**



# Training Summary

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- **Description:** What is behind obsolete management. Tool to be used for item management. Process flow and reporting



- **Duration:** 2 hours



- **Target group:** Requester, Warehouse Responsible



- **Topics:** Good Issue management



- **Tools:** SAP MM.

# Objectives of the Training

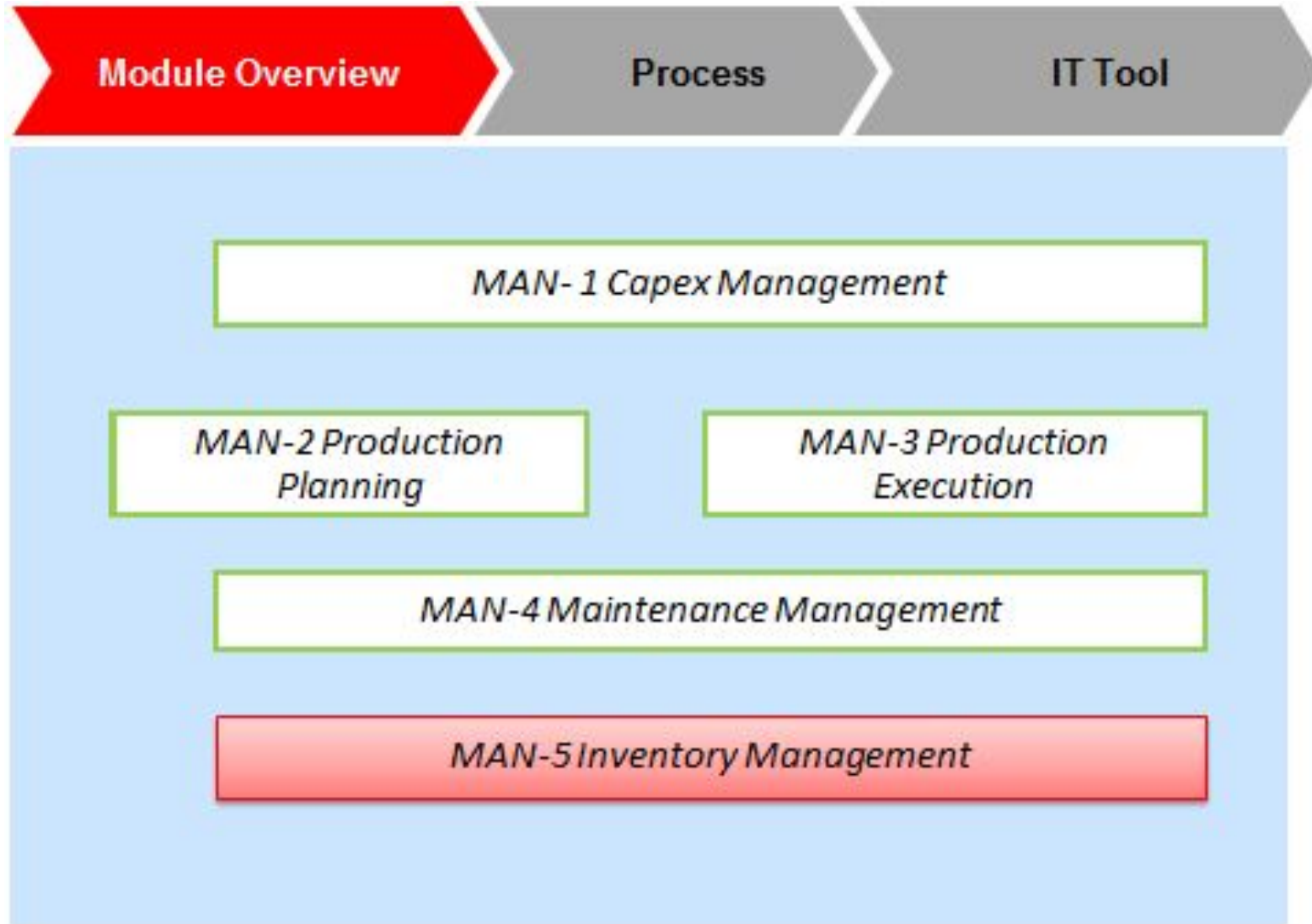
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At the end of the training, you will be able to:

- Know how the organizational elements and Master Data, used for Inventory Management are defined.
- Understand all EBM Inventory Management (IM) processes in the Material transfer business process
- Manage transfers of material between different stock entities in SAP
- Understand the tools designed for material transfer process

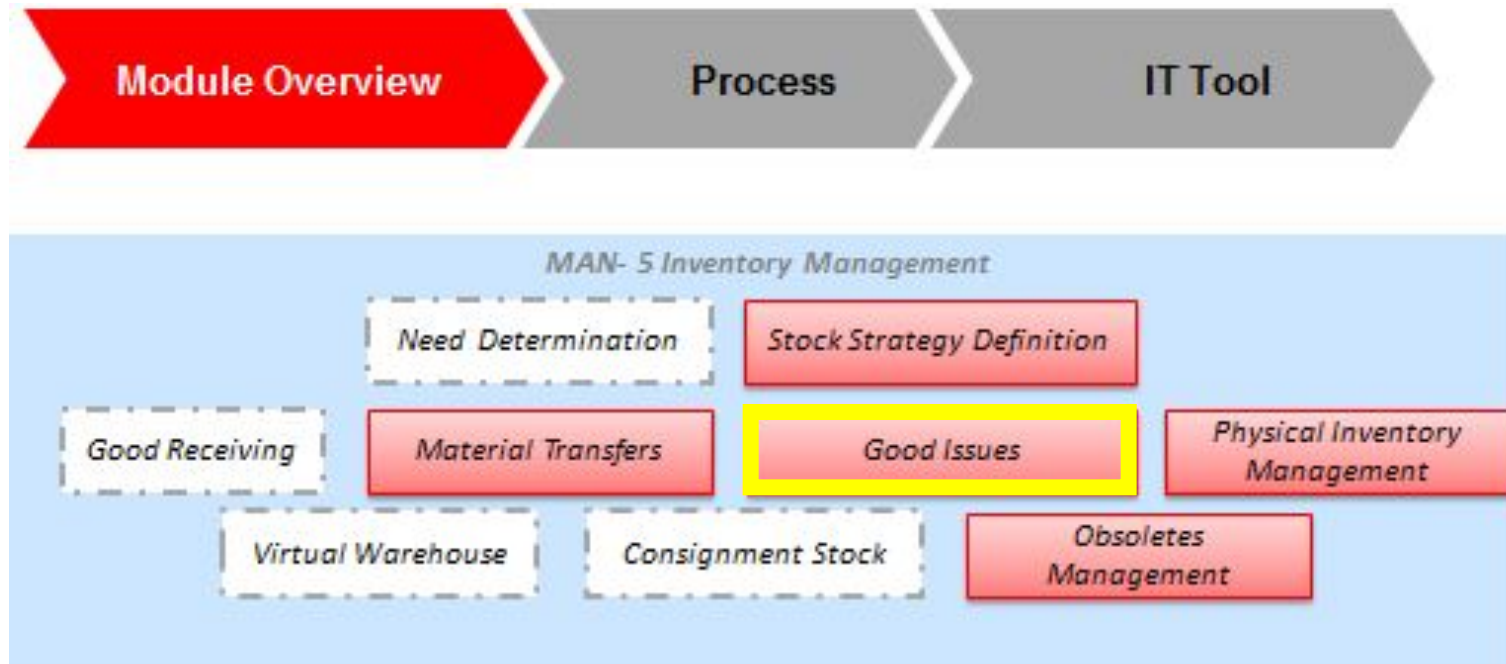
# 1.Manufacturing Process Overview

## Cement Manufacturing Scenarios (Level 1)



# 1.Manufacturing Process Overview

## Cement Manufacturing Business Processes (Level 2)



# Organizational Elements: Plant

Object	EBM Concept
Plant	<p>The plant represents a physical location within LafargeHolcim where products are manufactured, received or distributed. <b>In EBM, a plant could be a:</b></p> <div data-bbox="476 514 1740 654" style="border: 1px solid green; padding: 5px; margin: 10px 0;"> <p><b>Manufacturing plant</b> (e.g. cement plant, grinding station, blending station, AFR unit, MIC plant, quarry, pit, RMX plant (fix/mobile), asphalt plant...)</p> </div> <p>And also:</p> <ul style="list-style-type: none"> <li>• <b>Shipping point / terminal / storage location</b>, when it is not located in the same physical location as the production plant and transportation costs must be added to the cost of products</li> <li>• <b>Office / head quarters / trading plant</b>, when they are not located in a production plant</li> <li>• <b>Third parties (suppliers)</b>: O2C tech.&amp; legal requirement to create them as virtual plants (just 1 per country)</li> <li>• <b>Power generation plants</b>: just if it is <u>not</u> located next to a CEM plant (*)</li> <li>• <b>Mixed plants</b>: LHARP rule 11.1 2.2.2.5 to be followed (**)</li> </ul> <p>The material stocks will be managed and valuated at plant level.</p>

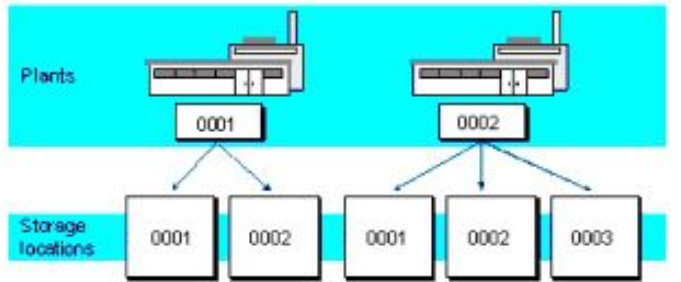
(\*) If the power generation plant is located next to the CEM plant, only 1 plant code will be created in SAP for both CEM and power plant.

(\*\*) If the secondary business is below 20% of cash cost and below 1 Mio. USD, only 1 plant is created, assigned to the main business segment and secondary business is treated as by-product. If the thresholds are achieved, 2 plants should be created and assets properly split.



# Organizational Elements: Storage location

Object	EBM Concept	ALL SEGMENT (CEM, AGG, RMX, AFR)
Storage Location	<ul style="list-style-type: none"> <li>Organizational unit that allows to differentiate between various types of stock within a plant.                             <ul style="list-style-type: none"> <li>Storage locations are created at plant level</li> <li>Inventory Management is carried out at storage location level (Goods movements)</li> <li>Stocks are managed only on a quantity basis and not on a value basis at storage location level</li> <li>Simplification of goods movements (Receipts, issues, transfers,...) management</li> <li>Physical inventories are carried out at storage location level</li> </ul> </li> </ul>	





# Organizational Elements: Storage location

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Object	EBM Concept
Storage Location	<div>ALL SEGMENT (CEM, AGG, RMX, AFR)</div> <ul style="list-style-type: none"><li>▪ It has a 4 digit coding, where the first digit identifies the usage of the storage location and the remaining 3 are sequential numbers<ul style="list-style-type: none"><li>- F: For finished/semi-finished products</li><li>- G: For general materials (maintenance materials, production materials – fuels, raw materials, packing,...)</li><li>- H: Handling Unit Storage Location (packed waste)</li><li>- V: For virtual/central warehouse</li></ul></li></ul>

# Organizational Elements: Storage location

		Plant segment			
		CEM	AGG	RMX	AFR
<b>Material types</b>	<b>Finish and semi-finish</b>	F001 F900 ( <i>stock in transit</i> ) F002 ( <i>quarry with internal transfer</i> ) F00X ( <i>ship / train loadings</i> )	F00X F900		F001
	<b>Production and Raw</b>	G100 G106 ( <i>Intermediate stock</i> )	G1XX	G100	G100
	<b>Maintenance</b>	G200 G2XX ( <i>special-legal storages</i> ) G299 ( <i>obsoletes</i> )	G200 G2XX G299	G200 G2XX G299	G200 G2XX G299
	<b>Virtual</b>	V200	V200		
	<b>Packaged</b>				G101 G161
	<b>Handling</b>				H101 H161

# Key Process Description: Good Issue

- “Goods Issues”: Term used in inventory management to describe a reduction in warehouse stock due, for instance:
  - To a withdrawal of stock or the delivery of goods to a customer (The data required for goods issue posting is copied from the outbound delivery into the goods issue document)
  - To a consumption of a spare part into a maintenance order or Capex project
  - To a consumption of a production material into a process order
  - To a consumption of a material into other different cost receivers (Cost Center, asset,...)

Material document will be generated and checked (TRX MB03)

GI form can be printed

Information (stock) updated in real-time and can be viewed by other functional areas in the business.

# Good issue types

Sub-process	SAP Movement Type	Movement Type Description
Consumption	201	Consumption for cost center from warehouse
	202	Consumption for cost center from warehouse - reversal
	221	Consumption for project from warehouse
	222	Consumption for project from warehouse - reversal
	241	Consumption for asset from warehouse
	242	Consumption for asset from warehouse - reversal
	251	Consumption for sales from warehouse
	252	Consumption for sales from warehouse - reversal
	261	Consumption for order from warehouse
	262	Consumption for order from warehouse - reversal
	291	Consumption for all account assignments from warehouse
	292	Consumption for all acctt assignmts from warehouse - reversal
	531	GI by-product
	541	GI whse to subc.stck
Outbound Delivery	542	RE subctrStck toWhse
	543	GI issue sls.ord.st.
	544	GI receipt sls.or.st
	551	Withdrawal for scrapping from unrestricted-use stock
	552	Withdrawal for scrapping from unrestr.-use stock - reversal
	601	GD goods issue:delvy
	602	RE goods deliv. rev.
	631	GI consgmt: lending
	632	GI consgmt:ret.delvy
	641	TF to stck in trans.
	642	TR to stck in trans.
	643	TF to cross company
	644	TR to cross company
	653	GD returns unrestr.
	654	GD returns unr. rev.

- Cancellation of a movement type is done using the 'reversal movement type.
- Each movement type will have an specific reversal movement

# Goods Issues: Some examples of Consumptions

- Process Order (PP): Goods issues of components of a process order are posted during the process order confirmation step.

*Process Order Information System: Object Overview*

Order	PInt	Material	Material description	Order quantity	Delivered quantity	Basic star	Basic fin.	Syste
100000970	1101	1301964	CLINKER FOR GRAY CEMENT	68.584,000 TO	48.691,050 TO	01.06.2009	30.06.2009	TECO

**Documented goods movements**

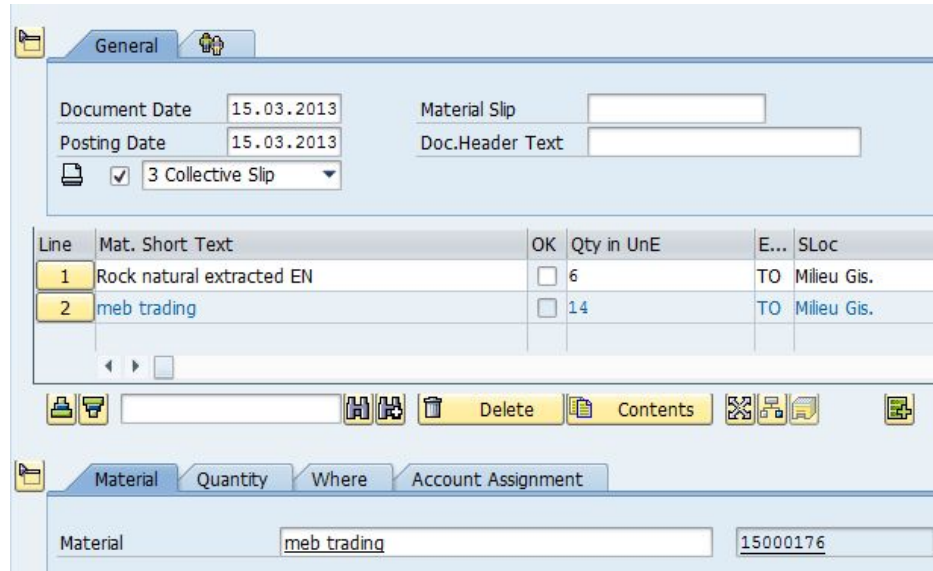
Material	Material description	Qty in UoE	SLOC	MvT	Mat. doc.	Pstg date
1004730	Urea in soluzione al 40%	529,420 TO	6010	261	4902205569	30.06.2009
1006613	Ammoniaca soluzione al 24%	17,410 TO	6010	261	4902205569	30.06.2009
1301964	CLINKER FOR GRAY CEMENT	48.691,050 TO	F020	101	4902205499	30.06.2009
1301965	RAW MEAL	74.629,140 TO	F020	261	4902205569	30.06.2009
1700456	Liquids of recovery #0	155,400 TO	6041	261	4902205569	30.06.2009
1700461	DSS (sewage sludge) #0	580,500 TO	6041	261	4902205569	30.06.2009
12000250035	Bitume	297,973 TO	6040	261	4902205569	30.06.2009
12000250119	Liquidi di recupero (Grassi A)	247,820 TO	6041	261	4902205569	30.06.2009
12000250350	Coke di petrolio tipo A	4.050,396 TO	6040	261	4902205569	30.06.2009
12000250435	Emulsioni	285,080 TO	6041	261	4902205569	30.06.2009
12000250479	Bitume Viscopflex 2000	264,917 TO	6041	261	4902205569	30.06.2009

- Maintenance Order (PM): Goods issue of Maintenance Materials from warehouse to a work order

*Display PM Order: List of Goods Movements*

S	Order	Doc. date	Material	Material description	Quantity	BU	Σ	Loc. curr. amount	MvT
								<b>1.961,49</b>	
	91092855	08.06.2009	12000266750	RELE'SPRECHER SCHUH CS1-A220V50HZ	1	ST		114,75	261
	91092855	05.06.2009	12000277277	PRESSOSTATI TIPO ACW-8M12	1	ST		98,44	
	91092855	11.06.2009	12000258096	FILTRI NORGREN 17-816-999 (SCAR	1	ST		91,65	

# How to print (only apply for EE)



The screenshot shows the SAP MB90 Good Issue form. The 'General' tab is active, displaying fields for Document Date (15.03.2013), Posting Date (15.03.2013), and a dropdown for '3 Collective Slip'. Below these are fields for Material Slip and Doc.Header Text. A table lists two lines of materials: Line 1 (Rock natural extracted EN) with quantity 6, and Line 2 (meb trading) with quantity 14. Both are moving from 'Milieu Gis.' storage location. The bottom section shows the 'Material' tab with 'meb trading' and storage location '15000176'.

- Good Issue form can be automatically once the document is created (stock transfer between storage location and between materials)
- With transaction MB90 GI form can be reprinted

## GOOD ISSUE

Document number: 490210486  
 Posting date: 27.02.2013  
 Date of issue: 27.02.2013  
 Ref. Document: 4500001168

Created by: Clara Vigil

Item	Material ID	Material description	Mov. Type	Unit	Quantity	Unit price	Total Price	Currency	Cost Center	Plant	Storage Loc
0001	10000484	7_MAHHLILFE / DIETHYLENGLYCOL ab 07		311 TO	3	10	30	EUR	BG101M001	G100	G101
0002	10000484	7_MAHHLILFE / HEA 296 Grace ab 2007		311 UN	2	20	40	EUR	BG101M001	G100	G101

Issued by:

Received by:



# IT Tool

Goods Issues processes are covered by two main IT applications:

- SAP ECC 6.0 (Inventory Management)
- Mobisys (Bar Coding Solution) (not applicable for ACM)

GI in Mobisys

1. GI Cost center/reversal
2. GI Maintenance order/reversal
3. GI Reservation
4. GI WBS element

## 1. MOBISYS MSB (Bar Coding System)

- Mobile application to enter the goods movements

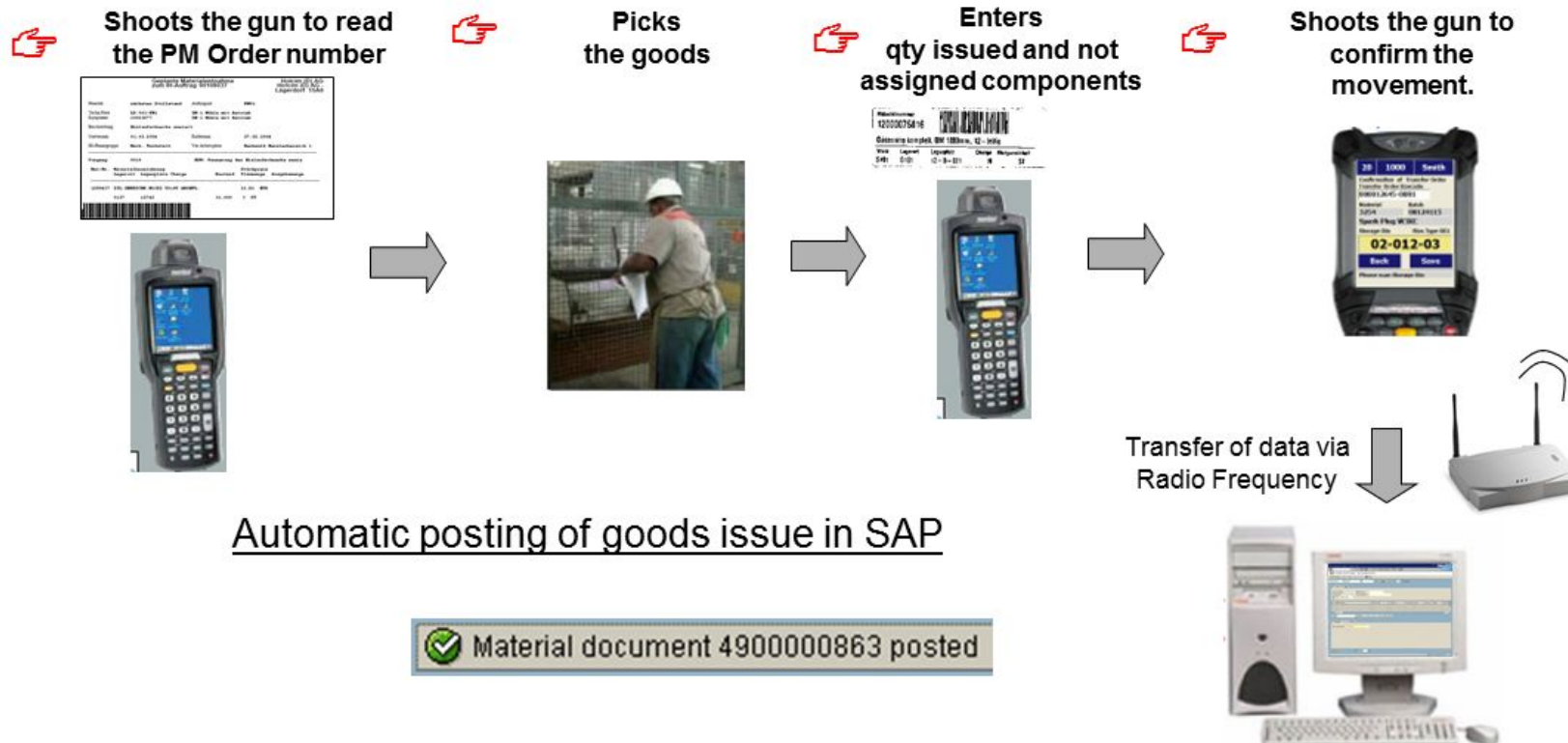


Mobisys has been selected as the standard software to support the EBM Barcode Solution

# IT Tool

## Item taking

The Warehouse or Maintenance responsible:



# IT Tool

The first screenshot shows the main menu with options: 10 Goods Receipt, 20 Stock Transfer, 30 Goods Issue (highlighted), 40 Print Labels, and 60 Inventory in IM. A red arrow points to the second screenshot, which shows a list of functions: 31 GI Cost Center (highlighted), 32 GI Cost Center Reversal, 33 GI Maint.Order, 34 GI Maint.OrderReversal, and 35 GI Reservation. A blue arrow points to the third screenshot, which shows a detailed data entry screen for '31 GI Cost Center: B100AG000'. The screen includes fields for Material (30025314), Batch, Vendor, Storage bin, Stock (0 M), Val, and Qty (1 M). It also has 'Cancel' and 'Continue' buttons and a prompt 'Please enter Quantity'.

The screenshot shows a transaction screen with the following elements and callouts:

- ESC-button:** This button behaves like an ESC button on the PC keyboard. It deletes input fields or exits in the menu.
- Headline:** Here you can see the current transaction.
- Display fields:** These fields are only display fields. You can do no inputs in these fields.
- Edit fields:** Here you can do manual inputs. According to the field model only numerical or alphanumeric inputs are allowed. With so-called scan fields the bar code scanner is also active. In addition to manual input over the keyboard you can read also bar codes in these fields.
- Registration button:** Here you can see the current user who has logged on the mobile device.
- Info line:** Here you can see, what is to be done.
- Message line:** Here you see booking messages or messages which are no error messages. If there are no messages the field is invisible.
- Button:** The function of these buttons is described in each case in the context of the masks.

The screen itself displays: 11 GR External Supplier, PD-Number 4500015565, Supplier: 1000, C.E.B. BERLIN, Berlin, DNr: 5463828-091, DHTxt: MA-PP 6672, and buttons for Back and Continue.

# Summary

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## Questions / Doubts

## Comments



# CONGRATULATIONS



# THANK YOU FOR YOUR ATTENTION



**LafargeHolcim**