



Materials Management Material Handlers MM_HI_300



Introduction



- Content
- Objectives



Course Content



- Unit 1 – Organizational Structure and Master Data
- Unit 2 – MIGO Functions and Features
- Unit 3 – Basic Inventory Concepts and Processes
- Unit 4 – Goods Receipts
- Unit 5 – Reservations & Goods Issues
- Unit 6 – Transfer Postings
- Course Summary



Learning Objectives



- At the conclusion of this course you should be able to:
 - ♦ Understand the relationship between the organizational structure and master data
 - ♦ Use the MIGO transaction to execute various goods movements in SAP
 - ♦ Create a personal favorites list of frequently used movement types
 - ♦ Understand the relationship between goods movements and movement types
 - ♦ Execute goods movements in SAP

Learning Objectives cont'd



- At the conclusion of this course you should be able to:
 - ♦ Cancel/ reverse goods movements
 - ♦ Execute a return to vendor transaction, issue goods to cost centers, reservations and scrap
 - ♦ Transfer materials from one location to another
 - ♦ Pick and issue materials to reservations
 - ♦ Differentiate between a stock material and non-stock material

Unit 1



Organizational Structure and Material Master

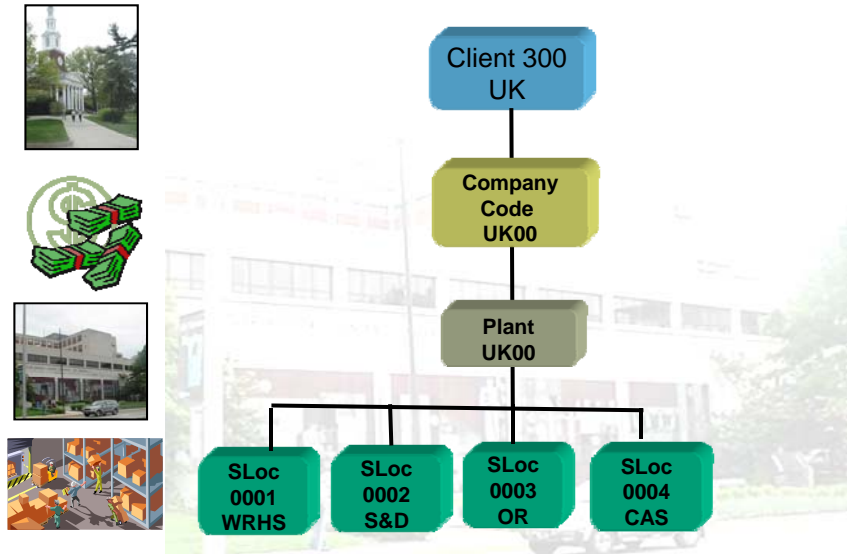
Learning Objectives



- At the conclusion of this unit you should be able to:
 - ♦ Understand the organizational structure from an inventory management viewpoint
 - ♦ Display a material master plant and storage location views
 - ♦ Determine which materials are stock and non-stock



UK Enterprise Structure



Material Master



- UK manages the basic data on all its materials in the material master
- The material master stores all the relevant data needed to procure, consume and store a material
- Data in the material master is organized by levels (client, plant, storage location, etc.)
- Materials are also grouped together using material types
- Material types group together materials with similar attributes
- UK Hospital Inventory is using three material types:
 - ♦ ZIBE - Stocked hospital supplies
 - ♦ ZIEN - Services
 - ♦ ZLAG - Non-stocked hospital supplies



Display a Material - MM03



Select the "views" to be displayed by selecting the box to the left of the view

Based on the views selected, organizational values are required

Material Master – Basic Data 1



Material: 50024 INSTRUMENT, CVD KELLY 5 1/2

UKY Data

Patient Chargeable Haz. Mat Latex
Materials CDM: 77000003

General data

Base Unit of Measure: EA Each Material Group: 136
Old material number:
Division:
Product allocation:
X-plant matl status:
 Assign effect. vals

Valid from:
GentemCatGroup: NLA6 Non-stock material

- UKY Data: Displays information specific to UK materials
- General data: The *General Item Category Group* is used to flag a material

Purchasing View



- The Mfr part number is the actual vendor part number and will be printed on the purchase order

Material: 50024 INSTRUMENT, CVD KELLY 5 1/2
Plant: UK08 University of Kentucky

General data

Base Unit of Measure: EA Each Order Unit: CV Var. OUn:
Purchasing Group: 016 Material Group: 136
Plant-sp. matl status: Valid from:
Tax ind. f. material: Qual. f. FreeGoods/Dis:
Material freight grp: Autom. PO
 Batch management

Purchasing values

Purchasing value key: 3 Shipping instructs.
Reminder 1: 1 days Underdel. tolerance: 0.0 percent
Reminder 2: 3 days Overdeliv. tolerance: 0.0 percent
Reminder 3: 10 days Min. del. qty in %: 0.0 percent
Std del. time var.: 0 days Unitd overdelivery Acknowledgment reqd

UKY Manufacturer Data

Mfr part number: 12345 Mfr part profile:
Orig. Mfr part number: 12345 Orig. Mfr: 101580

Material Master – Plant/Storage Data 1



- The Storage bin field is used to identify the location of the material in the Storage Location (WRHS-166)

Display Material 50024 (Stocked Hospital Supplies)

Material: 50024 #0 Character Description
Plant: UK00 University of Kentucky
Stor. Loc.: 0001 Warehouse

General data

Base Unit of Measure	EA	each	Unit of issue	
Storage bin	WRHS-166		Picking area	
Temp. conditions			Storage conditions	
Container reqmts			Haz. material number	
CC phys. inv. ind.		<input type="checkbox"/> CC fixed	Number of GR slips	0
Label type		Lab form <input type="checkbox"/>	Appr batch rec. req.	
<input type="checkbox"/> Batch management				

Shelf life data

Max. storage period	0	Time unit	
Min. rem. shelf life	0	Total shelf life	0
Period ind. for SLED	0	Rounding rule SLED	
Storage percentage	0		

Material Master – Plant Stock



- Plant Stock displays the stock situation within the plant (UK00)

Display Material 50024 (Stocked Hospital Supplies)

Accounting 2 Plant stock Stor. loc. stock

Material: 50024 #0 Character Description
Plant: UK00 University of Kentucky

General data

Base Unit of Measure	EA	each	Inventory blocking	<input type="checkbox"/>
Current period	08 2006	Previous period	07 2006	
Invent. corr. factor	1.00000			

Plant stocks in the current period

Unrestr.-use stock	200	Unrestr. consignment	0
Restricted-use stock	0	Restr. consignment	0
In quality insp.	0	Cnsgt in inspection	0
Blocked	0	Blocked consignment	0
Returns	0		
Stock in transfer	0	Stock in transit	0
In transfer (plant)	0		

Plant stocks in the previous period

Unrestr.-use stock	0	Blocked	0
Restricted-use stock	0	Returns	0
In quality insp.	0	Stock in transfer	0

Material Master – Storage Location Stock



Display Material 50024 (Stocked Hospital Supplies)

Plant stock | Ster. loc. stock

Material: 50024 d0 Character Description
Plant: UK90 University of Kentucky
Stor. Loc.: 0001 Warehouse

General data
Base Unit of Measure: EA esch Inventory blocking:
Current period: 08 2006 Previous period: 07 2006
Invent. corr. factor: 1.00000

Storage location stocks in current period			
Unrestr.-use stock	192	Unrestr. consignment	0
Restricted-use stock	0	Restr. consignment	0
In quality insp.	0	Cnsigt in inspection	0
Blocked	0	Blocked consignment	0
Returns	0		
Stock in transfer	0		

Storage location stocks in previous period			
Unrestr.-use stock	0	Blocked	0
Restricted-use stock	0	Returns	0
In quality insp.	0	Stock in transfer	0

- Storage Location Stock displays the stock available within the storage location (0001)
- Stock in transfer is also displayed

Summary



- You should now be able to:
 - ♦ Understand the organizational structure from an inventory management viewpoint
 - ♦ Display material master views
 - ♦ Determine which materials are stock and non-stock





Inventory Management Overview

Learning Objectives

- At the conclusion of this unit you should be able to:
 - ♦ Understand the high level process overview
 - ♦ Understand the goods movement concept in SAP
 - ♦ Describe different kinds of goods movements in SAP and their relationship to movement types



Key Process Changes -



Before SAP	In SAP
DEPTREQ	MIGO/MB1A - Goods Issue 201
REFILL	MB21 - Create Reservation
PROCFORM/FILLSTK	ZMM_PICKT MB26 ZMM_SHORT
REFILL - RECVREFL	MIGO - A09 Remove from storage 313 MIGO - A10 Place in Storage 315 MIGO - A08-Transfer Posting 314
POINQ	ME2M - By Material ME2L - By Vendor
Maintain/Refill Emergency Supply Carts	MB1A

Goods Movements



- A Goods Movement is movement of inventory that changes inventory balances in a given location
- Goods movements are represented by movement types
- Movement types are 3 digit numerical codes that describe the inventory transaction
- All material movements require the use of a combination of material master data and movement types
- You will not be able to perform some movement types if there is not inventory in the plant or storage location
- Material documents and accounting documents are generated real-time providing an audit trail for the goods movement

Material Movements – Examples



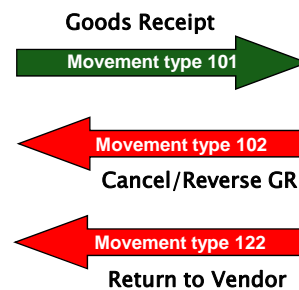
These are examples of typical material movements:

- Goods Receipts
- Goods Issues
- Stock Transfers (One Step or Two Step)
- Transfer Postings

**UK uses other movement types for Physical Inventory



Movement Types



Goods Receipts



- Goods receipts for stock material increase inventory
- A packing slip is required at time of receipt with a purchase order number on the document
- Stock/Non-Stock materials have the same movement type
- The referenced purchase order is updated to reflect the material as delivered

Stock Material (101)



Goods Issues

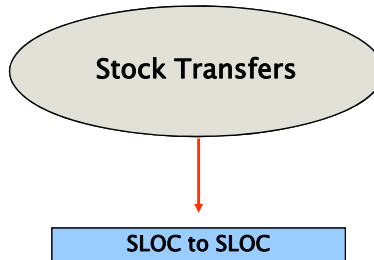


- Goods issues move inventory from one account to another (from an inventory stock account to a departmental account)
- Each type of goods issue is represented by a different movement type
- Examples of goods issues are:



Reservation (201)
Cost center (201)
Scrap (551)

Stock Transfer Types



- Stock Transfers
 - ♦ Physical goods movement
 - ♦ Stock transfers can have one or two steps.

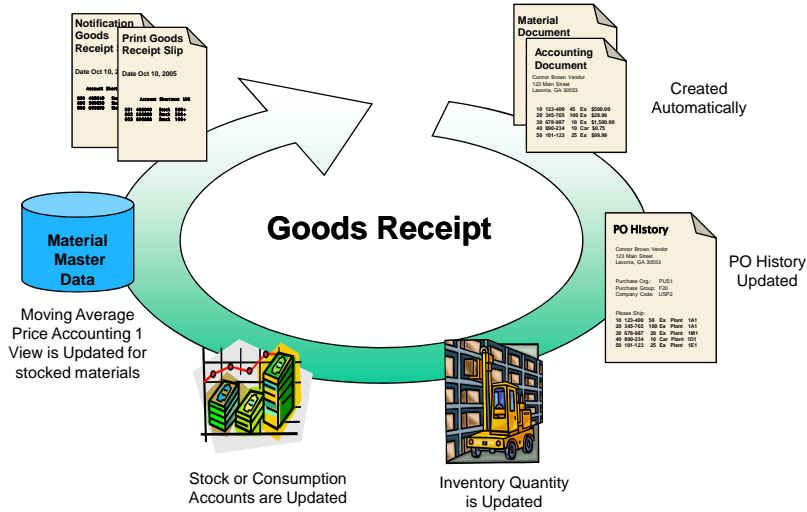
Material / Accounting Documents



- Material documents provide an on-line audit trail of the goods movement type executed
- Each movement type and reversal movement type will generate a material document
- An accounting document will provide an on-line audit trail of the associated dollars with the movement type
- Not all transactions generate an accounting document: for example a material is moved between storage locations

Material Document		Accounting Document	
Connor Brown Vendor 123 Main Street Lavonia, GA 30553		Connor Brown Vendor 123 Main Street Lavonia, GA 30553	
Received By: Helen Lee			
10	123-400 50 Ea Plant 1A1	10	123-400 45 Ea \$500.00
20	345-785 100 Ea Plant 1A1	20	345-785 100 Ea \$29.99
30	878-987 20 Ea Plant 1E1	30	878-987 10 Ea \$1,500.00
40	890-234 10 Car Plant 1M1	40	890-234 10 Car \$0.75
50	101-123 25 Ea Plant 1D1	50	101-123 25 Ea \$99.99

Effects of Goods Receipt



Summary



- You should now be able to:
 - ♦ Explain the use of movement types
 - ♦ Understand the relationship between transaction and reference documents
 - ♦ Understand the relationship between movement types and transaction





MIGO Features & Functions

Learning Objectives

- At the conclusion of this unit you should be able to:
 - ♦ Explain a transaction variant
 - ♦ Understand the relationship between transaction variants and reference documents
 - ♦ Understand the relationship between movement types and transaction variants
 - ♦ Create a Personal List for frequently used movement types



MIGO Structure



The screenshot displays the SAP MIGO transaction interface. On the left, a 'My Documents' tree is highlighted with a red box, containing 'Purchase Orders' and 'Material Documents'. The main area is divided into three sections: 'Header' (top right), 'Item Overview' (middle), and 'Line Item Detail' (bottom right). The 'Header' section shows 'A01 Goods Receipt' and 'R01 Purchase Ord.'. The 'Item Overview' section shows a table with columns for Line, Material ShortText, OK Qty in Line, E, Stor Loc, Batch, Valuation T, M, Stock Type, and Print. The 'Line Item Detail' section shows a table with columns for Material, Quantity, and Where.

Transaction Variants



- Transaction variants describe the type of goods movement and must correspond to the appropriate goods movement
- SAP defaults the last transaction variant executed by the user and ***may need to be changed*** for the current goods movement
- All MIGO transaction variants can be accessed using the transaction code: MIGO-Goods Movement

The screenshot shows the SAP MIGO transaction interface with a dropdown menu open for the transaction variant. The menu lists the following options: A01 Goods Receipt, A09 Remove from Storage, A07 Goods Issue, A03 Cancellation, A04 Display, A10 Place in Storage, A05 Release GR blocked stock, A02 Return Delivery, A11 Subsequent Adjustment, and A06 Subsequent Delivery. The main area shows the 'A01 Goods Receipt' variant selected, with a table for 'Item Overview' and 'Line Item Detail'.

Reference Documents



- Reference documents are linked to Transaction Variants
- Examples of reference documents are:
 - ♦ Purchase Orders
 - ♦ Reservations
- Only certain reference documents are allowed for each transaction variant
- SAP will display Error Messages in the event a user tries to use the wrong combination of Transaction Variant and Reference Document

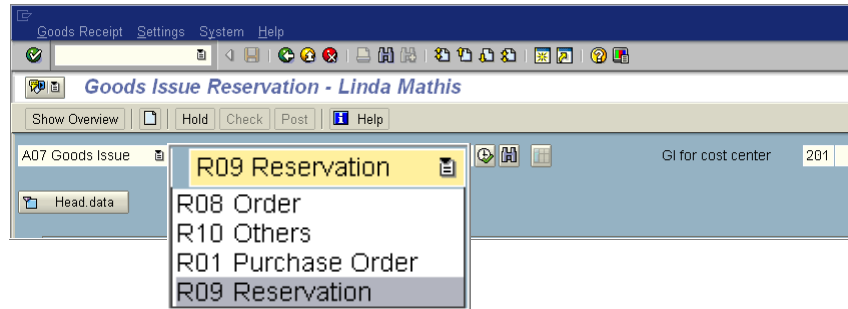
Goods Receipt Reference Documents



The screenshot shows the SAP 'Goods Receipt Reference Documents' selection screen. The title bar reads 'Goods Receipt Purchase Order - Linda Mathis'. Below the title bar, there are buttons for 'Show Overview', 'Hold', 'Check', 'Post', and 'Help'. The main area is divided into two panes. The left pane, titled 'A01 Goods Receipt', contains a 'Head data' section with a table with columns 'Line' and 'Material S...'. The right pane, titled 'GR goods receipt 101', contains a table with columns 'Qty in UnE', 'E...', 'Stor.Loc', 'Batch', and 'Valuat'. A dropdown menu is open over the 'R01 Purchase Order' entry in the right pane, listing the following transaction variants: R04 Inbound Delivery, R08 Order, R10 Others, R05 Outbound Delivery, R01 Purchase Order (highlighted), R09 Reservation, R06 Transport, and R07 Transport ID Code.

The goods receipt transaction variant controls what documents can be referenced (used) for the goods receipt

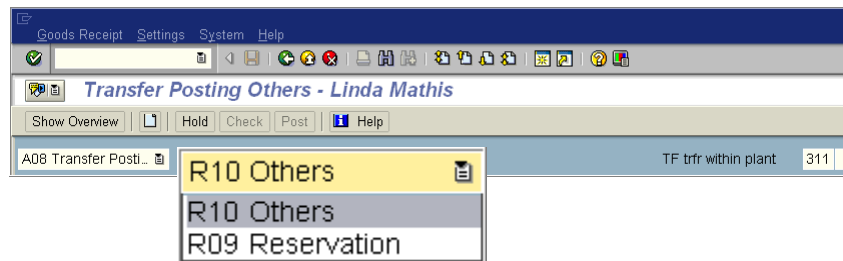
Goods Issue Reference Documents



The reference documents for a goods issue are different than those for a goods receipt

Based on the reference document selected, SAP will prompt the user for the appropriate document number

Transfer Posting Reference Documents



The combination of transaction variant and reference document also determines the appropriate movement types for the transaction

Movement Types



Movement Types:

- Represent the type of goods movement
- Control how the goods can be moved
- Determine how the screen looks and what information must be entered
- Movement types must be used **anytime** material is received, issued or transferred

MVT	S	Text
101		Goods receipt for purchase order into warehouse/stores
102		Goods receipt for purchase order into warehouse - reversal
103		Goods receipt for purchase order into GR blocked stock
104		Goods receipt for purchase order -> GR blkd stock - reversal
105		Release GR blocked stock for warehouse
106		Release GR blocked stock for warehouse - reversal
122		Return delivery to vendor
123		Reversal of ret. delivery
124		Return delivery from GR blocked stock
125		Return delivery from GR blocked stock - reversal
161		Returns for purchase order
201		Consumption for cost center from warehouse
201	K	Consumption for cost center from consignment stores
201	P	Consumption for cost center from pipeline
202		Consumption for cost center from warehouse - reversal
202	K	Consumption for cost center from consignment - reversal
202	P	Consumption for cost center from pipeline - reversal
221		Consumption for project from warehouse
221	K	Consumption for project from consignment
221	Q	Consumption for project from project
222		Consumption for project from warehouse - reversal
222	K	Consumption for project from consignment - reversal
222	Q	Consumption for project from project - reversal
231		Consumption for sales order from warehouse
231	E	Consumption for sales order from unrestrict. sales order stock
231	K	Consumption for sales order from consignment stores
231	Q	Consumption for sales order from unrestricted project stock
232		Consumption for sales order from warehouse - reversal
232	E	Consumption for sales order from unrestrict. sales order - reversal
232	K	Consumption for sales order from consignment - reversal
232	Q	Consumption for sales order from unrestrict. project - reversal
241		Consumption for asset from warehouse
241	K	Consumption for asset from consignment

Personal List Favorites



GR goods receipt 101



To display list of movement types click or you can press the F4 key to display

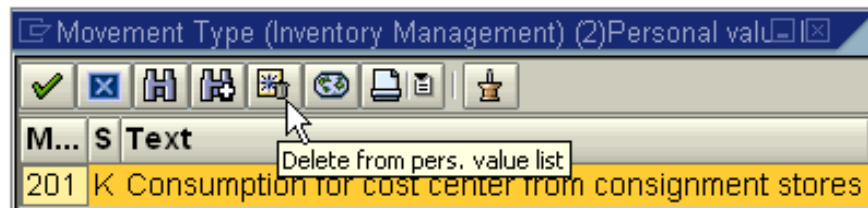
1

3

M...	S	Text
101		Goods receipt for purchase order into warehouse/stores
102		Goods receipt for purchase order into warehouse - reversal
103		Goods receipt for purchase order into GR blocked stock
104		Goods receipt for purchase order -> GR blkd stock - reversal
105		Release GR blocked stock for warehouse
106		Release GR blocked stock for warehouse - reversal
122		Return delivery to vendor
123		Reversal of ret. delivery
124		Return delivery from GR blocked stock
125		Return delivery from GR blocked stock - reversal
161		Returns for purchase order
201		Consumption for cost center from warehouse
201	K	Consumption for cost center from consignment stores

M...	S	Text
201	K	Consumption for cost center from consignment stores

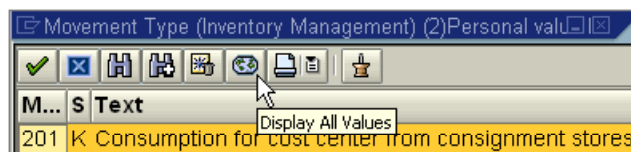
Delete Line Items From Personal List





To delete a line item from your Personal list:

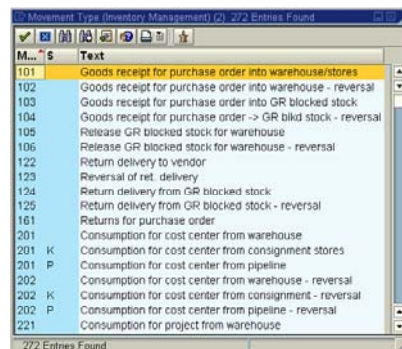
1. Select the line item
2. Click on the *Delete from pers. value list* icon

Display All Values



To display all movement types:

1. Click on the *Display All Values* icon
2. SAP will display all movement types 
3. Scroll down to display all movement types 



Exercise



Exercise 3.1

- Navigate to the MIGO
- Create a personal favorite list for movement types: 101, 102, 201, 202, 221, 222, 313, 314, 315
- Click on the different transaction variants
- Link transaction variants to reference documents

Summary



- You should now be able to:
 - ♦ Explain the use of transaction variants
 - ♦ Understand the relationship between transaction variants and reference documents
 - ♦ Understand the relationship between movement types and transaction variants
 - ♦ Create a Personal List for frequently used movement types
 - ♦ Post a goods movement





Goods Receipts

Learning Objectives

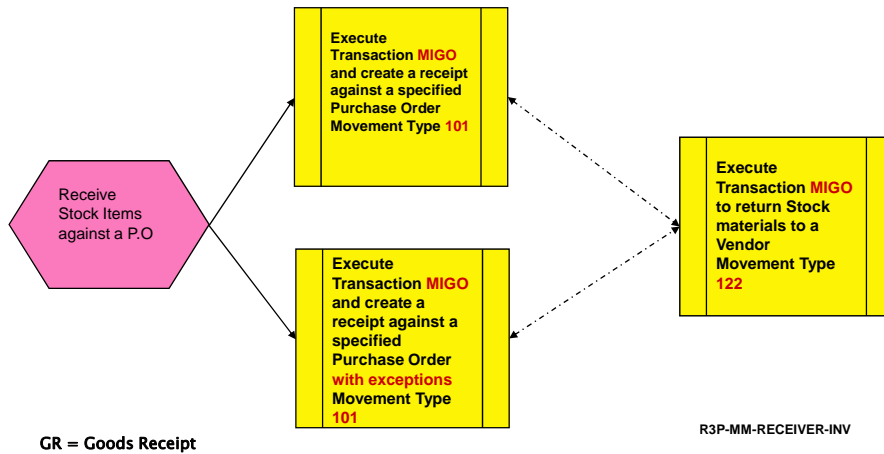
- At the conclusion of this unit you should be able to:
 - ◆ Post goods receipts for:
 - A single purchase order
 - Multiple line item purchase order
 - A partial delivery
 - ◆ Cancel / Reverse a goods receipt
 - ◆ Display the material documents
 - ◆ Understand the impact of a goods receipt
 - ◆ Return a material to a vendor



Process Flow: GR for Stock Materials



Receive Stocked Items Against a P.O



GR = Goods Receipt

R3P-MM-RECEIVER-INV

Goods Receipt for Purchase Order



Goods Receipt | Purchase Order | 4500014605 | GR goods receipt | 101

Document Date: 09/22/2005 | Delivery Note: | Vendor: C.F.R.BEHLN
 Posting Date: 09/22/2005 | Bill of lading: | Header tit: |
 Individual Slip: | GR/IR Slip No.:

Line	Material ShortText	OK Qty in Unit	E. Stor Loc	Batch	Valuation T.	M. Stock type	Inet	S. Customer
1	test	50	PC Materiallager			101 - Qual. Ins.	Werk Hamb.	

Movement Type: GR goods receipt 101 | Stock type: Quality inspection

Plant: Werk Hamburg 1000
 Storage Location: Materiallager 0001
 Goods Receipt: |
 Unloading Point: |

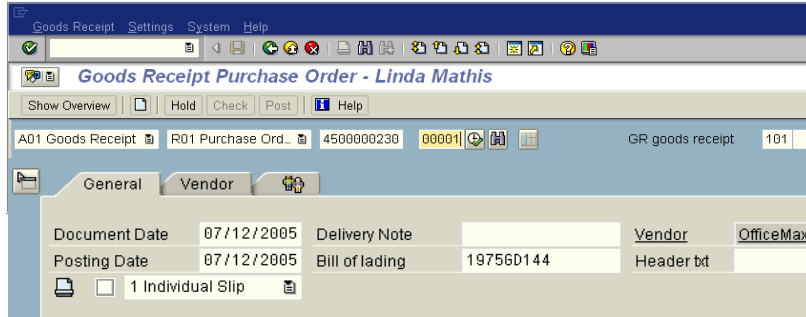
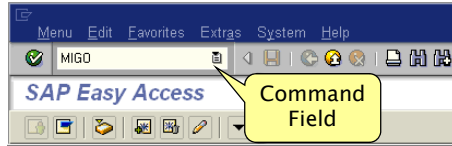
Text: |

Transaction Variant = Goods Receipt

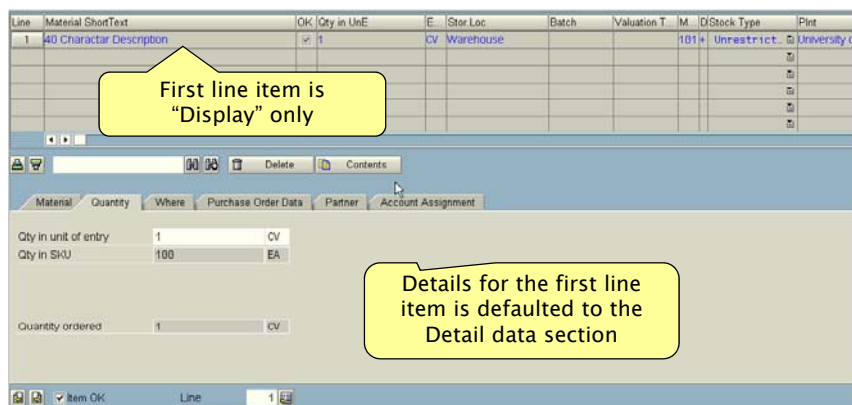
Referencing Document = Purchase Order

Movement Type = 101

MIGO Process - 1



MIGO Process - 2



MIGO Process – 3



Material **Quantity** Where Purchase Order Data Partner Account Assignment

Qty in unit of entry	1	CV
Qty in SKU	100	EA

Quantity ordered 1 CV

Line 1

This is the Item Detail section

Quantity?

How much is being received (open order qty. defaults)

Material Quantity **Where** Purchase Order Data Partner Account Assignment

Movement Type GR goods receipt 101 Stock type Unrestricted use

Plant University of Kentucky UK00

Storage Location Warehouse 0001 Storage bin WRHS-166

Goods Recipient

Unloading Point

Text

Line 1

Where?

Plant (UK00) & Storage Location (0001)

MIGO Process – 4



Line	OK	Item	Order quantity	OUn	Material	Cost Center	G/L Accou...	Material ShortText
1	<input checked="" type="checkbox"/>	1	5	EA		1016614800	530120	Dell Latitude D600
2	<input type="checkbox"/>	2	5	EA		1016614800	530120	Dell 19" Flat Panel Monitor

Line 1

The "Item OK" indicator must be selected for each line item

Goods Receipt Settings System Help

Goods Receipt Purchase Order 450000230 - Linda Mathis

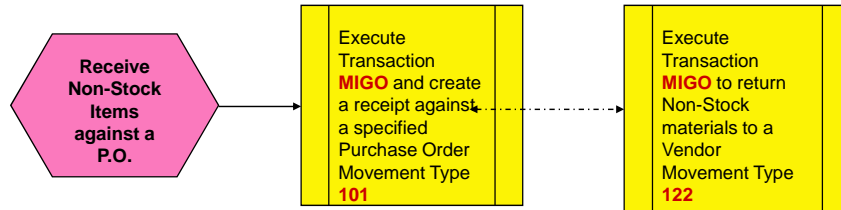
Show Overview Hold Check **Post** Help

Post the goods movement by clicking on either of the Post icons

Goods Receipt for Consumables



Receive Non-Stocked Items Against a P.O



- Non-Stocked materials are not inventory managed - they do not go into inventory upon receipt.
- Non-Stocked materials are “consumed” by a cost center, an order, or WBS element

Goods Receipt for a Cost Center



Material	Quantity	Where	Purchase Order Data	Partner	Account Assignment
Movement Type		GR for acct assgmt	101	+ Stock type	Unrestricted use
Plant		University of Kentucky	UK00		
Goods Recipient		J. Hines			
Unloading Point		Office #2			
Text					

- The **Goods Recipient** and **Unloading Point** let the Material Handler know where to deliver the goods.

Goods Receipt for Multiple Line Item PO



Line	Material ShortText	Qty in UOE	E	Site Loc	Batch	Valuation T	M	Check Type	Plant
1	ARWAY_ORAL DISP 70MM (#2)	10		DV Warehouse		101H		Unrestrict.	University o.
2	BAG, PAPER BROWN	50		DV Warehouse		101H		Unrestrict.	University o.
3	BEDPAN STACK TEAL COMMOD PLSTC	25		DV Warehouse		101H		Unrestrict.	University o.

The "Item OK" indicator ***MUST*** be selected for all line items that are part of the goods receipt

GR for Multiple Line Item PO cont'd



Line	Material ShortText	Qty in UOE	E	Site Loc	Batch	Valuation T	M	Check Type	Plant
1	ARWAY_ORAL DISP 70MM (#2)	10		DV Warehouse		101H		Unrestrict.	University o.
2	BAG, PAPER BROWN	50		DV Warehouse		101H		Unrestrict.	University o.
3	BEDPAN STACK TEAL COMMOD PLSTC	25		DV Warehouse		101H		Unrestrict.	University o.

Item "OK"



Item OK Line 1

You have not flagged any items as OK

Item OK Line 1

Material document 4900000526 posted

All items **must** be checked "OK" to be posted in SAP

Partial Goods Receipts



Purchase Order

Connor Brown Vendor
123 Main Street
Lavonia, GA 30553

Purchase Org.: UK00
Purchase Group: 020
Company Code: UK00

Please Ship:
10 123-400 50 Ea Plant 1A1

Example:

Ordered Quantity = 50

Goods Receipt Quantity = 20

Open Order = 30

Partial goods receipts are allowed in SAP

Partial goods receipts mean that *receipt quantity is less than the ordered quantity.*

The open order quantity (quantity still to be received) is displayed on the purchase order line item

Any number of partial goods receipts can be recorded for a PO line item up to the ordered quantity.

Over deliveries are not allowed in the system!

Partial Goods Receipts cont'd



Material	Quantity	Where	Purchase Order Data
Qty in unit of entry	3		CV
Qty in SKU	1,000		EA
Quantity ordered	10		CV

Material	Quantity	Where	Purchase Order Data
Qty in unit of entry	7		CV
Qty in SKU	700		EA
Quantity ordered	10		CV
Received quantity	3		

1st Receipt:

Quantity ordered = 10
1st receipt quantity = 3



2nd Receipt:

Open order qty. = 7
The open order quantity is displayed for the next receipt



GR for PO Number Unknown



- If the PO number is not on the accompanying paperwork for the goods receipt, you may search for the PO using the F4 (possible options) key

Click on the List Selection icon and SAP displays a list of all possible search criteria

Under/Over-Delivery Tolerances



- The Under- and Over-delivery tolerances are set in the purchase order.
- SAP will issue warning and/or error messages for under- and over-deliveries
 - ♦ Under-tolerance - soft warning message
 - ♦ Over-tolerance - hard error message

Typ	Item	Message text	LText
	1	PU Ordered quantity exceeded by 5 EA : UK00	
	2	Deficit of PU Ordered quantity 2 EA : UK00	

Printing Goods Receipts Slips



- Goods receipts transactions can be printed to a pre-defined printer
- Select (3) Collective Slip - Includes all items in the goods receipt

Goods Receipt Purchase Order 450000233 - Linda Mathis

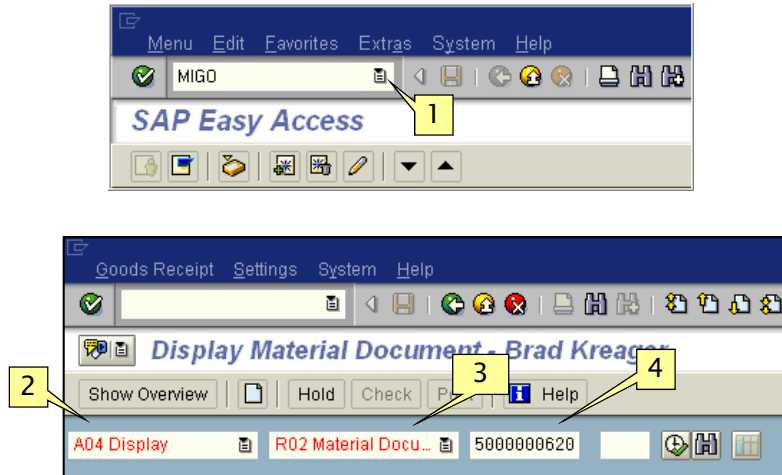
AD1 Goods Receipt R01 Purchase Ord... GR goods receipt 101

General

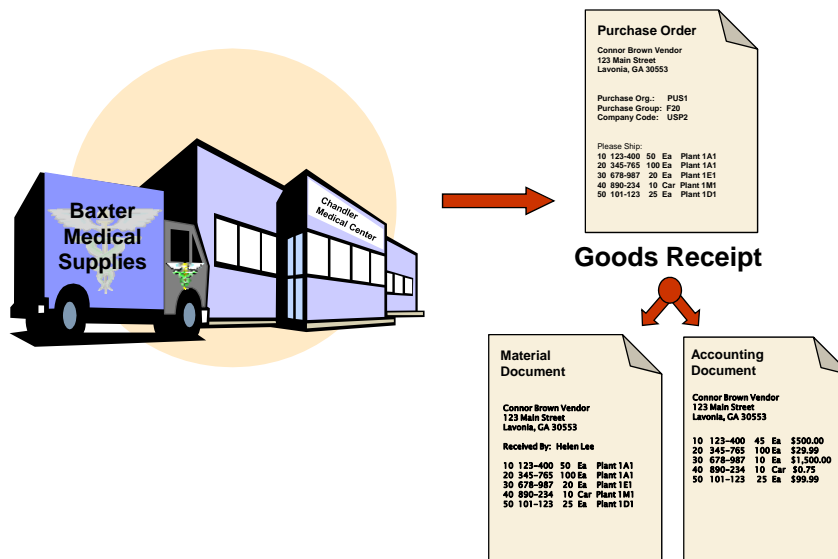
Document Date 02/26/2006 Delivery Note Vendor Owens & Minor
Posting Date 02/26/2006 Bill of lading Header txt

3 Collective Slip

Display Material Document - MIGO



Goods Receipts Documents



Exercise



Exercise 4.1

- GR for POs:
 - Single Item
 - Consumable
 - Multiple items
 - Partial receipts
- Display a material document

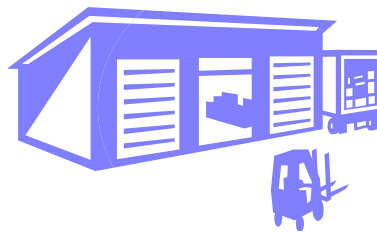
Cancel a Goods Receipt



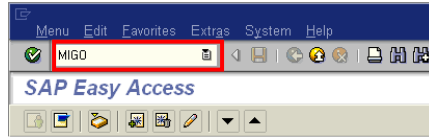
- Canceling a goods movement in SAP is very common
- Cancel is the method SAP uses to correct an incorrect goods movement
- The basic rule to cancel any goods movement in SAP is to take the originating movement type number and add "1" to equal new movement type number
- For example:

◆ Goods receipt : $101 + 1 =$

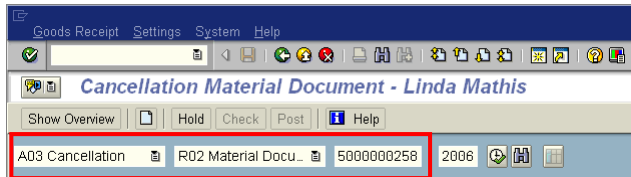
◆ Goods receipt reversal: 102



Cancel a Goods Receipt Process – 1



- From the SAP Easy Access menu, enter MIGO in the Command field and press the Enter key.
- SAP will navigate to the MIGO transaction



- Select the transaction variant (A03) “Cancellation”
- The reference document (R02) Material document defaults
- Enter the material document for the GR and press the Enter key
- SAP will display the details of the material document

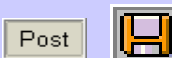
Cancel a Goods Receipt Process – 2



- Click on the Where tab – The movement type is 102
- Click in Text field and type reason for cancellation
- Select the Item OK checkbox



Click on the Post button or the Post icon



Cancel a Goods Receipt Process – 3



- When the transaction is posted, SAP will update the Open Order quantity on the purchase order
- The vendor can resend the correct material

Item 1 [1] 50024 , INSTRUMENT, CVD KELLY 5 1/2															
Material data		Quantities/weights		Delivery schedule		Delivery		Invoice		Conditions		Account assignment		Purchase	
S.	C	Delivery date	Scheduled qty.	Time...	Stat. del. d...	GR qty	Purch. req.	Req...	N...	Open quantity					
	D	03/01/2006	20		03/01/2006		20								
Before cancellation															

Item 1 [1] 50024 , INSTRUMENT, CVD KELLY 5 1/2															
Material data		Quantities/weights		Delivery schedule		Delivery		Invoice		Conditions		Account assignment		Purchase	
S.	C	Delivery date	Scheduled qty.	Time...	Stat. del. d...	GR qty	Purch. req.	Req...	N...	Open quantity					
	D	03/01/2006	20		03/01/2006					20					
After cancellation															

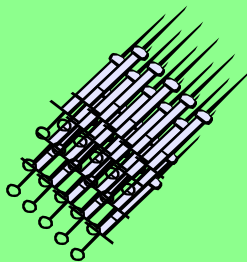
Return to Vendor



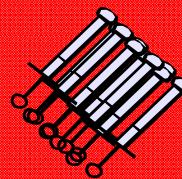
GR = 2 CV
(case)

Material	Quantity	Where	Purchase Order Data
Qty in unit of entry	2		CV
Qty in SKU	200		EA

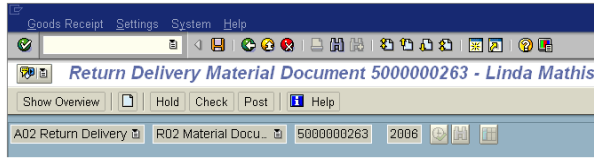
1 CV is OK - we will keep it



1 CV does not have needles and we need to send it back to the vendor



Return to Vendor Process – 1



Transaction Variant = (A02)
Return Delivery
Reference Document = (R02)
Material Document for
original GR

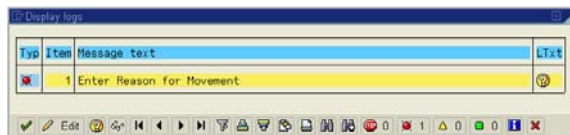
Material	Quantity	Where	Purchase Order Data
Qty in unit of entry	2		CV
Qty in SKU	200		EA

SAP defaults the GR quantity

Material	Quantity	Where	Purchase Order Data
Qty in unit of entry	1		CV
Qty in SKU	100		EA

Quantity *can be* changed to
return **ONLY** the damaged
quantity (1 CV)

Return to Vendor Process – 2



Return to Vendor
transaction require a
Reason code

Material	Quantity	Where	Purchase Order Data	Partner	Account Assignment
Movement Type	RE return to vendor	122	Stock type		Unrestricted use
Plant	University of Kentucky		UK00		
Storage Location	Warehouse		0001	Storage bin	WRHS-166
Goods Recipient					
Unloading Point					
Reason for Movement	3	Damaged			
Text					

Click on the
Where tab
Use the F4
Possible
Options key s to
select the
appropriate
reason for the
return

***Note the movement type is a 122**

Return to Vendor Process – 3



- Select the Post button or the Post icon



Return to Vendor Process – 4



- When the transaction is posted, SAP will change the Open Order quantity on the purchase order
- The vendor can resend “good” material

Item 1 | 1 | 50024 , INSTRUMENT, CVD KELLY 5 1/2

S	C	Delivery date	Scheduled qty.	Time	Stat. del. d.	GR qty	Purch. req.	Req. N.	Open quantity	Sc...	R.
		02/21/2006		10	02/21/2006		5		5		

Before Posting

Item 1 | 1 | 50024 , INSTRUMENT, CVD KELLY 5 1/2

S	C	Delivery date	Scheduled qty.	Time	Stat. del. d.	GR qty	Purch. req.	Req. N.	Open quantity	Sc...	R.
		02/21/2006		10	02/21/2006		4		8		

After Posting

Exercise



Exercise 4.2

- Cancel/Reverse a single line item GR
- Cancel/Reverse a multiple line item GR
- Return to Vendor

Summary



- You should be able to:
 - ♦ Post goods receipts for:
 - A single purchase order
 - Multiple line item purchase order
 - A partial delivery
 - ♦ Cancel / Reverse a goods receipt
 - ♦ Display the material documents
 - ♦ Understand the impact of a goods receipt
 - ♦ Return a material to a vendor





Goods Issues & Reservations

Learning Objectives

- At the conclusion of this unit you should be able to:
 - ♦ Understand the concept of goods issues in SAP
 - ♦ Understand what reservations are and why they are used
 - ♦ Post goods issues using MIGO and MB1A for:
 - Cost centers
 - Reservations
 - WBS Elements
 - To scrap



Learning Objectives cont'd



- At the conclusion of this unit you should be able to:
 - ♦ Use custom transactions to mass process reservations:
 - ZMM_PICKT
 - MB26
 - ZMM_SHORT
 - ♦ Cancel / Reverse Goods Issues
 - ♦ Print goods issues material documents



Reservations



Reservations are:

- Requests to the warehouse or stores to keep a material ready for issue at a future date for a certain purpose
- Placeholders in SAP used to ensure that a material is available when required
- Created manually or automatically via MRP

Reservation

Material: 50024
Req. Date: 05/01/06
Quantity: 20 ea.

Reservations



- The following movement types are used when creating a reservation:
 - 201 - Issue material to a cost center
 - 311 - Goods transfer from one storage location to another storage location. These are created automatically by MRP
- A goods issue against the reservation will relieve the inventory from one location and consume it into another



Reservation Structure



Reservation Header

Information maintained at the header applies to all line items on the reservation

Item Overview

The item overview displays all line items on the reservation

Item Detail

Item details are specific for each line item. Each line item can have a different requirements date. System will default to today's date

Reservation Header:

Base Date Check against Cal.
Movement type Plant

Item Overview:

Cost Center Material
Quantity Storage Location
Movements Allowed

Item Details:

Requirements Date Recipient
Unloading point Text

Create a Reservation Process – 1



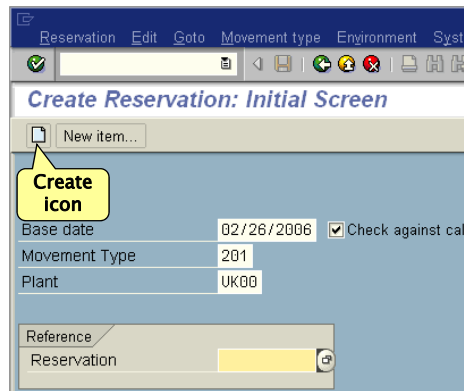
- From the SAP Easy Access menu, enter MB21 in the Command field and press the Enter key
- SAP navigates to the transaction

Base date: The date the material is required

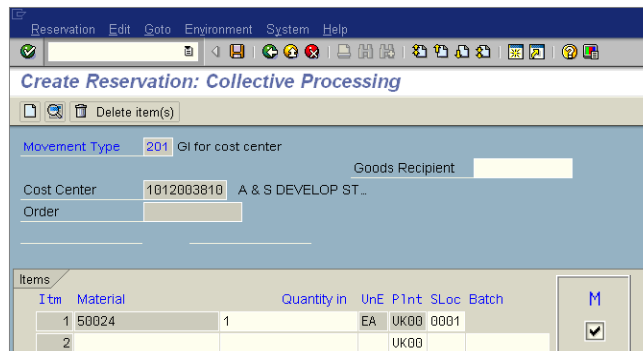
Movement type: The type of goods movement used to issue the reservation

Plant: UK00

Press the Enter key, or click on the New item button or the Create icon



Reservation Process – 2



Enter the Cost Center, material number, quantity and storage location

M = Movements Allowed (accept the default). Press the Enter key.

To display the details of the line item, double-click on the material number

Reservation Process – 3



SAP displays the item details for the material.

You may add or change existing information

Click on the Post icon to post the reservation

Note: Additional line items may be added by clicking on the New item button or Overview icon



List of Reservations– MB26



This transaction can be used to execute various lists to display reservations *before* posting goods movements

For the purpose of displaying a list of reservations, any combination of material(s), cost centers and requirements date can be used.

SAP displays the reservations that meet the selection criteria

Material	Description	Quantity	U.	Plant	Sto.	Batch	Valuation T.	O.	M.	S.
01	PAD, DUO-THERM	7EA	UK00					H	311	
04	PAD PREPPING 43.5X24IN LTX-FR	13EA	UK00					H	311	
07	GOWN SURG XL DISP LTX-FR STRL	162EA	UK00					H	311	
05	PAD SPNG 10X12IN #6 HVY DRNGE XTR THICK	8EA	UK00					H	311	
09	PACK HD NCK IV EENT LTX-FR STRL	8EA	UK00					H	311	

Exercise



Exercise 5.1

- Create a reservation for a cost center
- Use MB26 to execute a list of reservations

Goods Issues



- Goods issues typically move inventory from one G/L account to another (From hospital inventory stock account to hospital clinical laboratory)
- Each type of goods issue is represented by a different movement type in the system
- Examples of goods issues are:



Reservation (201)

Cost center (201)

Scrap (551)

ZMM_PICKT - 1



- The first step in reservation management is to execute a pick list
- This list will print at designated locations and lists all materials and their quantities that need to be picked from the storage location

Program ZMM_PICKTICKET

Selection Criteria

Reservation Number		to		
Status of Reservation	M			
Storage Location		to		
Required Date		to		

ZMM_PICKT has two selection criteria:
Status of Reservation: M or B
Required Date: Today's date

ZMM_PICKT - 2



- After executing ZMM_PICKT, SAP creates the pick ticket that will tell the storage location what materials to pick
- The list will print at designated printers

UNIVERSITY OF KENTUCKY
PICK TICKET
Warehouse

Reservation No: 1 Receiving Loc: 0002 S40
Status Type : M

Pick Ticket Date : 02/28/2008 21:14:32 Page: 1

Hosp Num	Primary Description	Manufacturer Code	Catalog	Bin Loc	Pick Qty	Iss UM	Qty
15	INSTRUMENT, MONOPTY BIO 18GA	100022	121816	H03-3	2	EA	_____
18	INSTRUMENT, MONOPTY BIO 20GA	100022	122020	H03-4	2	EA	_____

Total Number of Pages : 1
Total Number of Item(s) : 2
Pick From Location : 0001 Warehouse

Filled By : _____ Time: _____
Received By: _____ Date Received: _____


Posting Goods Movements – MB26



From the SAP Easy Access menu, enter MB26 in the Command field and press the Enter key

SAP navigates to the Picking List screen

Enter a selection criteria such as material, reservation number, or date

Click on the Execute icon  or press the F8 key

SAP displays the reservations that meet the selection criteria

Material	Description	Quantity	U...	Plant	Sto.	Batch	Valuation T.	D...	M...	S...
61	PAD, DUO-THERM	7EA	UK00					H	311	
64	PAD PREPPING 43.5X24IN LTX-FR	13EA	UK00					H	311	
67	GOWN SURG XL DISP LTX-FR STRL	162EA	UK00					H	311	
65	PAD SPNG 10X12IN #6 HVY DRNGE XTR THICK	8EA	UK00					H	311	
69	PACK HD NCK IV EENT LTX-FR STRL	8EA	UK00					H	311	

Picking List – 2



- Select the line items to be posted
- Click on the Stock Determination button to default the storage location
- Click on the Post icon to post the goods movements

Material	Description	Quantity	U...	Plant	Stor. Loc.
61	PAD, DUO-THERM	7EA	UK00	0001	
64	PAD PREPPING 43.5X24IN LTX-FR	13EA	UK00	0001	
67	GOWN SURG XL DISP LTX-FR STRL	162EA	UK00	0001	
65	PAD SPNG 10X12IN #6 HVY DRNGE XTR THICK	8EA	UK00	0001	
69	PACK HD NCK IV EENT LTX-FR STRL	8EA	UK00	0001	
70	PAD MATERNITY	1 PAC	UK00	0001	

Note: As soon as the transaction is posted, the inventory for the selected line items is reduced

Completion Indicator



Picking List

Batch determination Stock determination

Goods movements overview			
Material	Description	Quantity	U...
61	PAD, DUO-THERM	10 EA	

Reservation Qty. = 10

Picking List

Batch determination Stock determination

Goods movements overview			
Material	Description	Quantity	U...
61	PAD, DUO-THERM	7 EA	

Issued Qty. = 7

Scroll right as Completion Indicator Must Be Set

Compltd

Confirm Picked Quantities - ZMM_SHORT



Program Edit Goto System Help

Program ZMM_SHORTSHEET

Selection Criteria

Reservation Number 400 to

Status of Reservation M to

Storage Location to

Required Date to

Multiple selection

Multiple selections allow you to enter a list of reservation numbers instead of entering a range of reservation numbers



Multiple Selection for Reservation Number

9 Single vals Ranges Single vals Ranges

400
402
405
406
409
420
421
422
423

Multiple selection...

ZMM_SHORT



- After picking the materials from the warehouse, this transaction is printed and sent with the material
- It displays the requested quantity, the picked quantity and shortages (if applicable)
- The shortage quantity ***will not*** be filled at a later date (fill and kill)

UNIVERSITY OF KENTUCKY
SHORT SHEET

Reservation No: 401 Unloading Point:
Status Type : M Ordered By :

Charge Department: 1056714000 HOSP. PEDIATRICS
Pick Ticket Date : 03/01/2006 09:24:56 Page: 1

Hosp Num	Primary Description	Manufacturer Code	Catalog	Bin Loc	Reqst Qty	Iss Qty	Shor Qty
50024	INSTRUMENT, CVD KELLY 5 1/2	101580	12345		12 EA	7	5

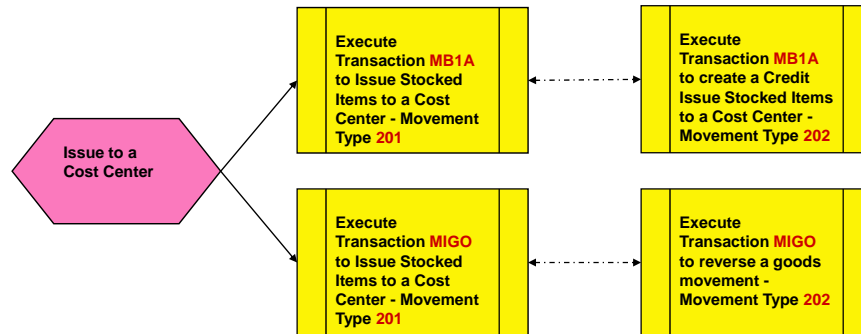
Exercise



Exercise 5.2

- Execute ZMM_PICKT
- Post goods movements using MB26
- Execute ZMM_SHORT

Process Flow: GI to a Cost Center



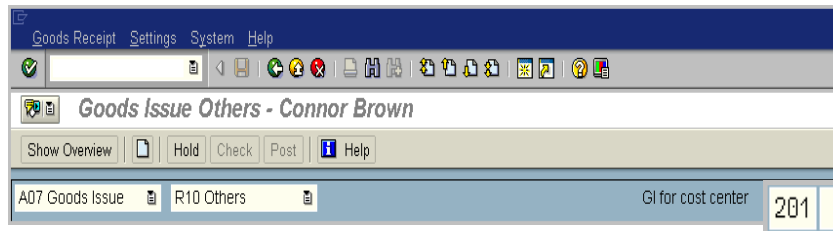
R3P-MM-ISSUER

Note: GI = Goods Issue

MIGO Goods Issue to a Cost Center - 1



- Transaction Variant = (A07) Goods Issue
- Reference Document = (R10) Others
- Movement Type = 201 *



***Must have Cost Center number**

MIGO Goods Issue to Cost Center – 2



Material Quantity Where

Material 50024 1.

Material Quantity Where Account Assignment

Qty in unit of entry 25.000 2.

Material Quantity Where Account Assignment

Movement Type GI for cost center 201 Stock type Unrestricted use

Plant University of Kentucky UK00

Storage Location SSD 0002

Goods Recipient

Unloading Point

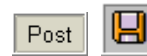
Text You can enter comments here for information only 3.

Material Quantity Where Account Assignment

Cost Center 1058714000 4.

Order

1. Enter the material number
2. Enter the quantity needed
3. Enter the plant and storage location of the issue
4. Enter the Cost center number
5. Post the goods issue



Goods Issue – MB1A



Goods Issue - Edit Goto Movement Type Environment System Help

Enter Goods Issue: Initial Screen

New Item To Reservation... To Order... WM Parameters...

Document Date 03/01/2008 Posting Date 03/01/2008

Material Slip

Doc Header Text

Defaults for Document Items

Movement type 201

Plant UK00

Storage Location 0001

Special Stock

Reason

Suggest

GR/IR Slip

Print

Individ.

Index

Collect

Goods Issue - Edit Goto Movement Type Environment System Help

Enter Goods Issue: Collective Processing

To Reservation... To Order...

Movement type 201 GI for cost center

Cost Center 1058714000 HOSP. PEDIATRICS

Order

Item	Material	Quantity	UnE	SLoc	Batch	Re	Plant
1	50024	10	EA	0001			UK00
2							UK00

- Enter Movement type, plant and storage location

- Enter Material number and quantity
- Several materials can be entered if they are going to the same cost center

Goods Issue - Reverse Charges



Document Date: 02/27/2006 Posting Date: 02/27/2006

Material Slip: _____
Doc Header Text: _____

Defaults for Document Items:

- Movement type: 202
- Plant: UK00
- Storage Location: _____

GR/IR Slip: Print

Enter Goods Issue: Collective Processing

Movement type: 202 RE for cost center
Cost Center: 1012003810 A & S DEVELOP ST...
Order: _____
Recipient: 2nd Floor

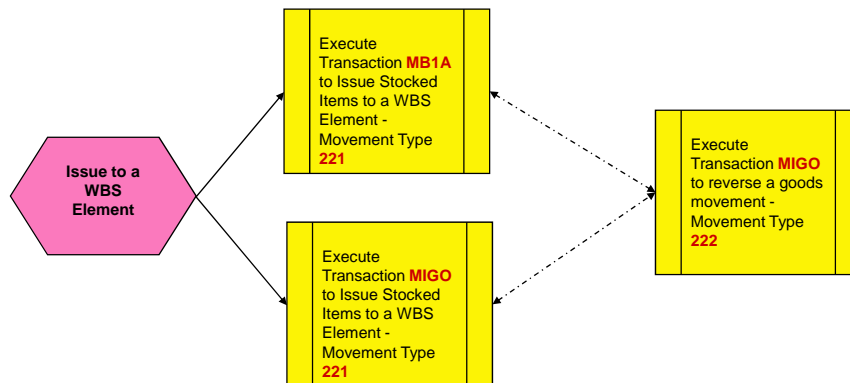
Item	Material	Quantity	UnE	S Loc	Batch	Re	P Int
1	50024	10	EA	0002			UK00

Movement type 202 will credit the cost center for the material quantity.

Process Flow: GI to a WBS Element



To a WBS Element



R3P-MM-ISSUER

Note: GI = Goods Issue

MIGO Goods Issue to WBS Element - 1



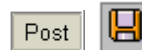
- Transaction Variant = (A07) Goods Issue
- Reference Document = (R10) Others
- Movement Type = 221*

*Must have WBS Element number.

Goods Issue to WBS Element - 2



1. Enter the Material number
2. Enter the quantity
3. Enter the plant and storage location
4. Enter the WBS Element number
5. Post the goods issue



Goods Issue to Scrap - 1



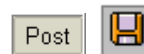
- Transaction Variant = (A07) Goods Issue
- Reference Document = (R10) Others
- Movement Type = 551*

*Must know the cost center used for scrapping.

Goods Issue to Scrap - 2



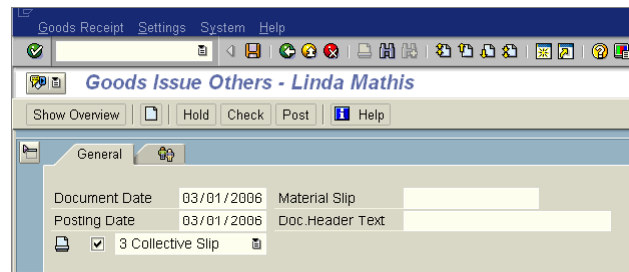
1. Enter the material number
2. Enter the Quantity
3. Enter the plant and storage location
4. Enter the cost center used for scrapping
5. Post the transaction



Printing Material Document



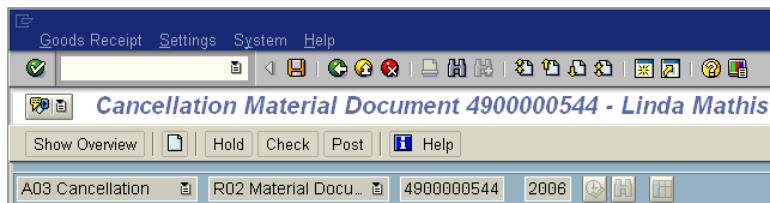
- Goods issue material documents can be printed by selecting the print checkbox and (3) Collective slip



Cancel Goods Issue - 1



- Transaction Variant = (A03) Cancellation*
- Reference Document = (R02) Material Document
- Movement Type = 202



*SAP can cancel the entire line item. Changes cannot be made (i.e. change quantity)

If the material document contains multiple line items, individual line items can be selected and cancelled.

Cancel / Reverse Goods Issue – 2



1. Enter the material number

2. Enter the Quantity

3. Enter the plant and storage location

4. See note below

5. Post the transaction

Post

Exercise



Exercise 5.3

- Post a Goods Issue using MIGO
- Post Goods Issue using MB1A
- Cancel a Goods Issue from one cost center and issue to another
- Print material documents

Summary



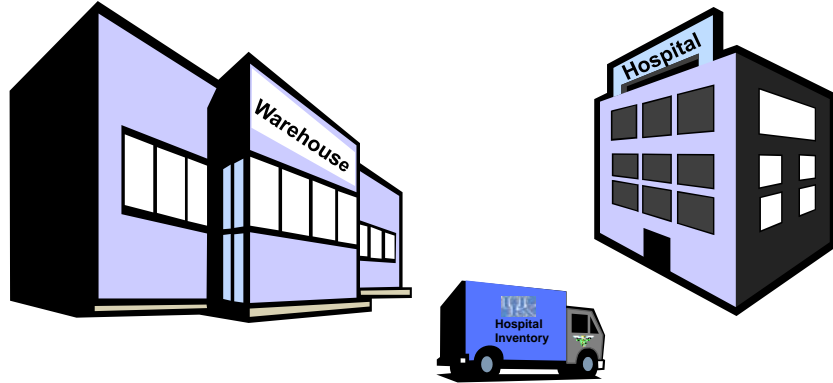
- You should now be able to:
 - ♦ Understand the concept of goods issues in SAP
 - ♦ Understand what reservations are and why they are used
 - ♦ Post goods issues using MIGO and MB1A for:
 - Cost centers
 - Reservations
 - WBS Elements
 - To scrap



Summary cont'd



- You should now be able to:
 - ♦ Use custom transactions to mass process reservations:
 - ZMM_PICKT
 - MB26
 - ZMM_SHORT
 - ♦ Cancel / Reverse Goods Issues
 - ♦ Print goods issues material documents



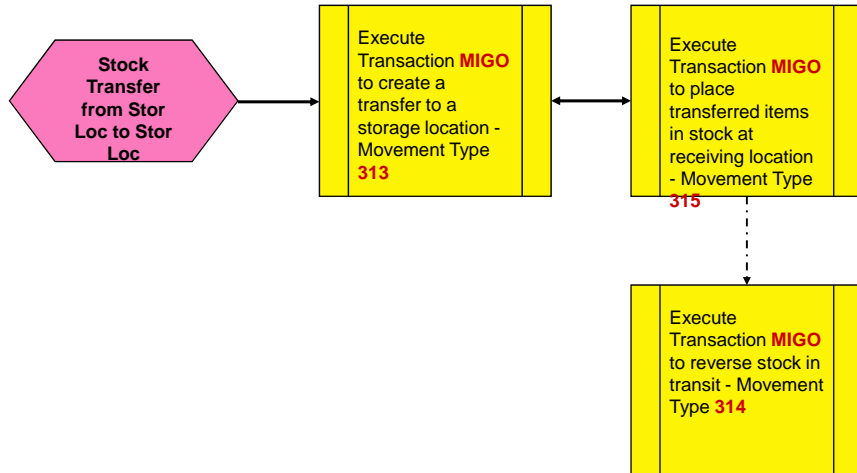
Transfer Postings

Learning Objectives

- At the conclusion of this unit you should be able to:
 - ♦ Execute a two step transfer posting
 - ♦ Display stock in transfer
 - ♦ Cancel a two step transfer posting



Stock Transfers - 2 Step



R3P-MM-ISSUER

Transfer Postings

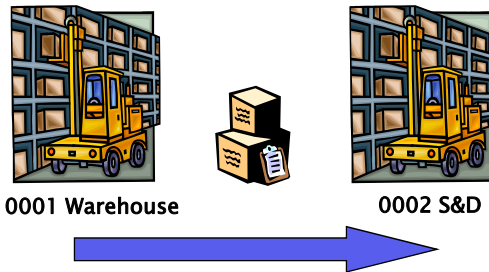


- Goods movements do not only occur in the form of goods receipts and goods issues. Internal stock transfers might also be necessary
- A stock transfer from storage location to storage location in the same plant causes an update of the stock quantities in both storage locations
- Stock transfers can be executed using a one-step or two-step procedure
- UK will use a two-step procedure

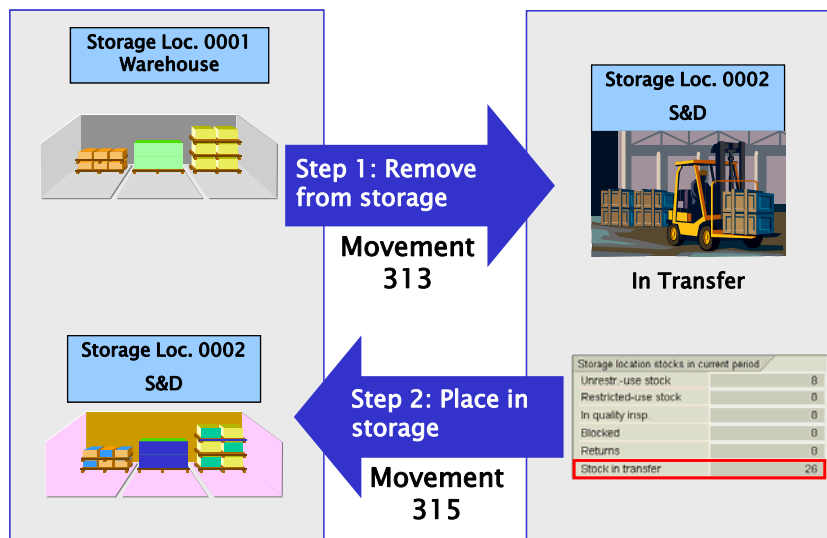
One-Step vs. Two Step-Transfer Postings



- The one-step procedure is entered in a single transaction. Material is removed from and placed in storage simultaneously
- The two-step procedure displays stock in transfer. After the goods issue is posted at the issuing point, the stock appears "in transfer" at the receiving location



Storage Loc. To Storage Loc. - Two Step



Step 1: Remove From Storage (313)



Goods Receipt Settings System Help

Remove from Storage Others - Linda Mathis

Show Overview Hold Check Post Help

A09 Remove from ... R10 Others TF rem.frn str.toSLoc 313

Head data

Transfer Material Quantity Where

From				Dest			
Material	INSTRUMENT_CVD KELLY 5 1/2			INSTRUMENT_CVD KELLY 5 1/2			
	50024			50024			
Plant	University of Kentucky UK00			University of Kentucky UK00			
Stor. Loc.	Warehouse	0001	StorBin WRHS - 166	S&D	0002		
Spec. Stock	<input type="checkbox"/>						
Unit of Entry	1		EA				

Stock in Transfer



Stock in Transfer is displayed in the Material Master - Storage Location Stock view

Storage location stocks in current period					
Unrestr.-use stock		34	Unrestr. consignment		0
Restricted-use stock		0	Restr. consignment		0
In quality insp.		0	Cnsgrt in inspection		0
Blocked		0	Blocked consignment		0
Returns		0			
Stock in transfer		1			

Step 2: Place in Storage (315)



Place In Storage Material Document 4900000551 - Linda Mathis

A10 Place in Stora... R02 Material Docu... 4900000551 2006

General

Document Date 03/01/2006 Material Slip
 Posting Date 03/01/2006 Doc. Header Text

Line	Material ShortText	Ok Qty in Unit	E Stor Loc	Batch	Valuation T.	M. IDock Type	Plnt	Customer
1	INSTRUMENT, CVD KELLY S 1/2	1	EA SSD			315+	University o	

Movement Type TF pl.in str.in SLoc 315 +

Plant University of Kentucky UK00
 Storage Location SSD 0002

Unloading Point
 Text

Display Storage Location Stock



Storage location stocks in current period					
Unrestr.-use stock		35	Unrestr. consignment		0
Restricted-use stock		0	Restr. consignment		0
In quality insp.		0	Cnsgt in inspection		0
Blocked		0	Blocked consignment		0
Returns		0			
Stock in transfer		0			

Stock in Transfer is cleared and added to Unrestricted stock

Cancel / Reverse Goods Movements



- The general rule to cancel a movement is to add “1” to the movement type that created the movement
 - ♦ A 102 cancels a 101
 - ♦ A 222 cancels a 221
 - ♦ A 314 cancels a 313
 - ♦ A 316 cancels a 315
- Cancellations are generally mistakes that are easily corrected in SAP with the corresponding movement type

Cancel / Reverse 313

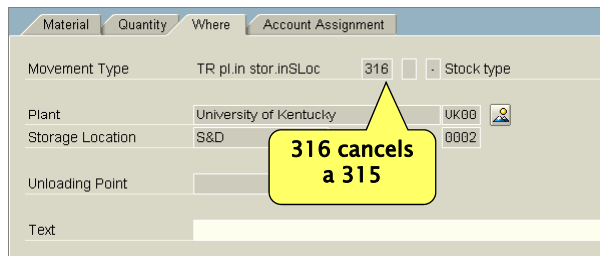


- To cancel / reverse a 313:
 - ♦ You executed a 313 to put material in transfer to S&D (0002). Before you posted the 315, you discovered that the material needs to go to OR (0003) instead
 - ♦ The 313 must be cancelled (314) to put the stock back in transfer status, then transferred to the correct storage location

Cancel/Reverse a Two-Step Transfer Posting

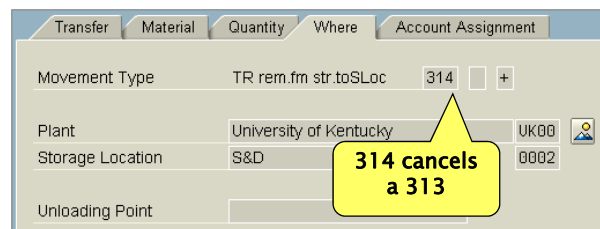
- To cancel the entire two-step transfer posting (313 and 315) you must cancel the 315 material document first **then** the cancel the 313 material document
- For example:
 - ♦ You executed a 313 to put material in transfer to S&D (0002). Then you posted the 315.
 - ♦ You discovered that the material needs to go to OR (0003) instead
 - ♦ The 315 must be cancelled (316) first
 - ♦ The 313 can then be cancelled with a 314
 - ♦ The material can then be transferred to the correct storage location

Cancel/Reverse: Process



The screenshot shows the SAP Material Document (MD) 316. The 'Movement Type' is 'TR pl.in stor.inSLoc' with '316' in the input field. The 'Plant' is 'University of Kentucky' and 'UK00'. The 'Storage Location' is 'S&D' and '0002'. A yellow callout bubble points to the '316' field with the text '316 cancels a 315'.

- 1st: Cancel the 315 material document



The screenshot shows the SAP Material Document (MD) 314. The 'Movement Type' is 'TR rem.fm str.toSLoc' with '314' in the input field. The 'Plant' is 'University of Kentucky' and 'UK00'. The 'Storage Location' is 'S&D' and '0002'. A yellow callout bubble points to the '314' field with the text '314 cancels a 313'.

- 2nd: Cancel the 313 material document

Summary



- You should be able to:
 - ♦ Execute a two step transfer posting
 - ♦ Display stock in transfer
 - ♦ Cancel / Reverse a two step transfer posting Post



Course Summary



- You should be able to:
 - ♦ Understand the relationship between the organizational structure and master data
 - ♦ Use the MIGO transaction to execute various goods movements in SAP
 - ♦ Create a personal favorites list of frequently used movement types
 - ♦ Execute goods movements in SAP
 - ♦ Cancel/ reverse goods movements



Course Summary cont'd



- You should now be able to:
 - ♦ Understand the relationship between goods movements and movement types
 - ♦ Execute a return to vendor transaction, issue goods to cost centers, reservations and scrap
 - ♦ Transfer materials from one location to another
 - ♦ Pick and issue materials to reservations
 - ♦ Differentiate between a stock material and non-stock material

