



MM0005

MM Inventory Management



Goods Receipt
Storage
Movement of Goods

Goods Issue
Consumption
Reprocess Goods



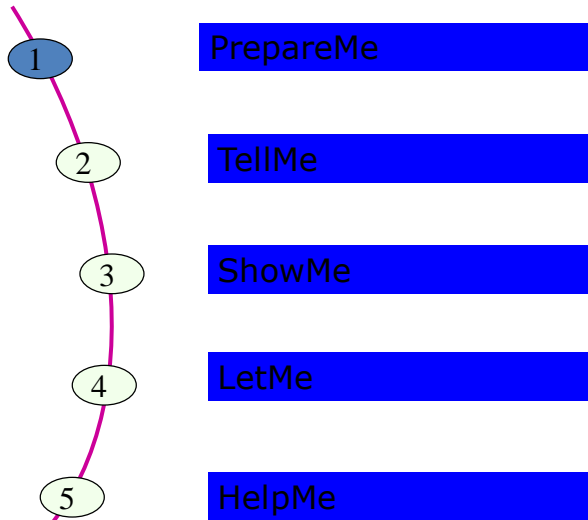
This In-house course was developed to meet the needs of SAP R/3 Consultants working at Capgemini

This course is designed to present a high level view of Materials Management Inventory management and to provide the Consultants with basic information about how to use this Functionality

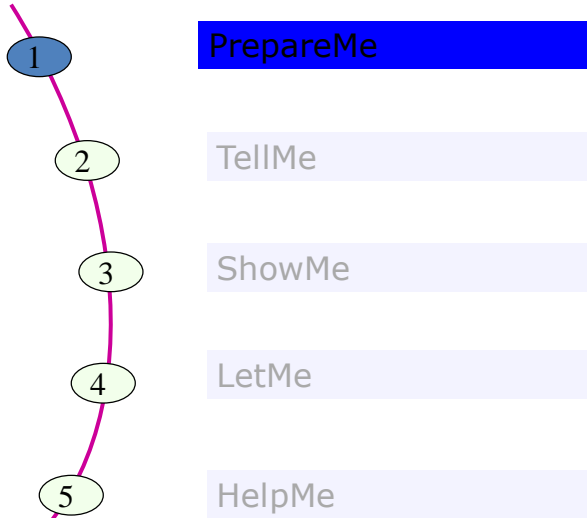
More in-depth courses have been developed to train Consultants in specific areas discussed during this course

Your comments at the conclusion of this training session are appreciated and will help us better tailor future courses to meet your training needs

Inventory Management



Inventory Management



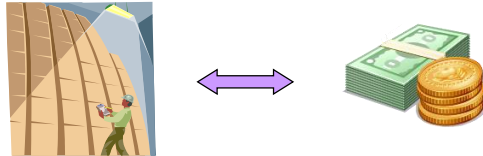


Course Objective

- Overview of Inventory management and its usability.
- Enter goods movements, including goods receipts, goods issues.
- Describe the procedure for the initial entry of stock balances in the SAP system, enter a goods receipt without a purchase or production order, Goods receipt in different stock type,.
- Enter a return delivery for goods receipt and subsequent delivery, Purchase order with a returns item and post the goods issue, goods movement posting reversal.
- Tolerances and Delivery Completed Indicator.
- Procedure for a stock-to-stock transfer posting, material-to-material transfer posting, one-step and two-step procedures for stock transfers, stock transfer from storage location to storage location, stock transfer between plants of a company code using the one-step and two step procedures. Stock Transport Orders. Movement types.
- Shelf life expiration.
- structure of a reservation and the information it contains, reservation creation manually, with and without a reference.
- Tips & Tricks
- Test Your Knowledge & Answers

PrepareMe

- In an organization ,an inventory is a is a list of goods and materials held available in stock by a business
- A stock is basically cash held in disguise

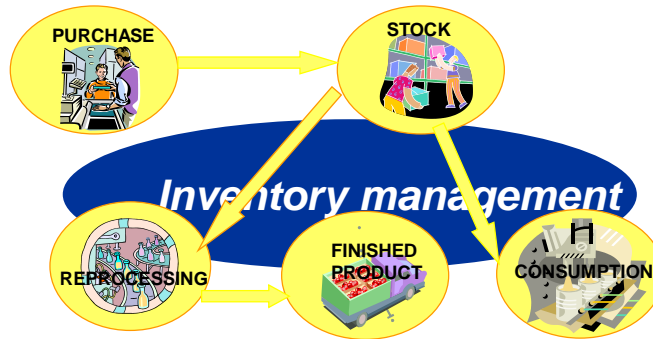


- For an organization Inventory may be termed as "for sale" or "for processing" or "not for sale"

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- For an organization , accountants or the financial counterpart often discuss inventory in terms of goods for sale
- For other organizations which are manufacturers,service providers and not-for-profits organizations - also have some inventories (fixtures, furniture, supplies, ...) that they do not intend to sell, that which they intend for their own consumption to keep other important machines in running condition
- Those are also inventory because they cost the organization for procuring it
- Manufacturers',distributors, and wholesalers' inventory tends to cluster in warehouses.Retailers' inventory may exist in a warehouse or in a shop or store accessible to customers.
- For such cases, inventory is actually hard cash ,which they can earn by selling or by processing it.
- Inventories not intended for sale to customers or to clients may be held in any premises an organization uses.

Purpose



- Inventory Management deals with the management of stock on a value basis or on a quantity basis or both
- Inventory management also deals with movement of goods from one area to another within the same plant or between different plant which is logistically and physically located apart from each other
- It also deals with reprocessing of stock to a different material or consuming it within the organization

Use

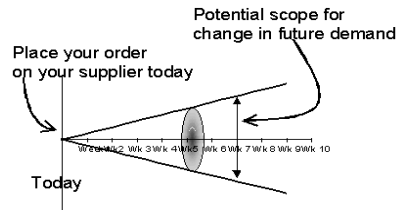


- Inventory Management deals with Goods Receipt from vendors, Goods Issue and consumption
- Through Inventory management an organization can actually track its level of inventory, i.e in true business terms it can calculate its inventory holding cost
- Through Inventory management a stock item can actually be planned for procurement, i.e we can actually do materials planning
- Inventory management also facilitates stock movements between two locations within the plant or two facilities within the same plant or different plant, i.e it makes stock transfer possible
- Inventory management also tracks special forms of procurement, such as Subcontracting (where although the material belongs to the organization but physically lies at a vendor's premises), Consignment and Pipeline

The most important elements in terms of Inventory Management are (a) the types of Goods Movement (b) the results of Good movement (c) the types of stock that it can handle.

Challenges

Large business houses or organizations deal with a huge volume of inventory on a daily basis and there are different departments within the same organization working on the same, for example- purchasing, stores, processing, logistics



- Wrong inventory management usually arises due to wrong forecasting or wrong materials planning (as shown above), purchase procures a higher quantity due to a bulk discount given by supplier, not accounting for the actual losses or in transit losses
- Unchecked poor inventory management will manifest into a number of problems like –
 - Cost will rise.
 - Service level will fall.
 - Rise in quality issues

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• Large levels of inventory generally require places to store them, people to look after them and staff to order as well as count them, and hence increase in cost

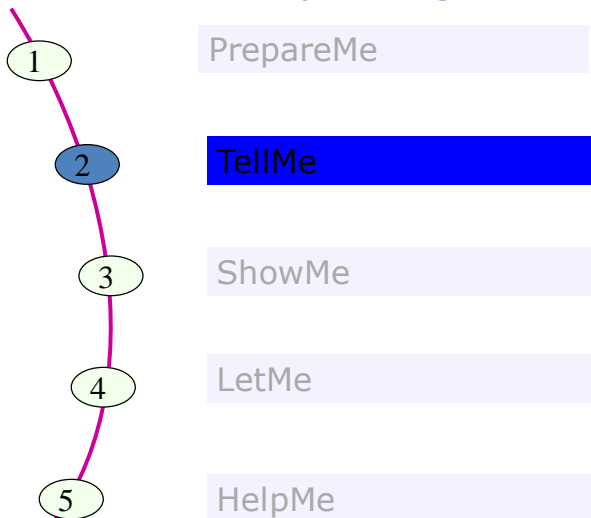
• Poor inventory management will lead to fall in service level, because simply having more inventory is never the answer to delivering better service, as too often the inventory held is the wrong inventory or you cannot get to or see the correct inventory because the wrong inventory is in the way

• Quality issues often arise as people use material that is there as opposed to the correct material or otherwise sometimes the material that is in stock is there because purchasing has done a good discount for a bulk deal

• The vicious circle is that costs rise and service levels fall as quality fails



Inventory Management



Inventory Management – Stock type



- Unrestricted Use Stock
- Quality Inspection Stock
- Blocked Stock
- Restricted Use Stock(If batch management status is active)

Valuated Stock

There are basically three types of stock types, unrestricted use, quality inspection stock and blocked stock.

Unrestricted-use stock:

This is company's own stock that is physically located and is valuated, and is free for use.

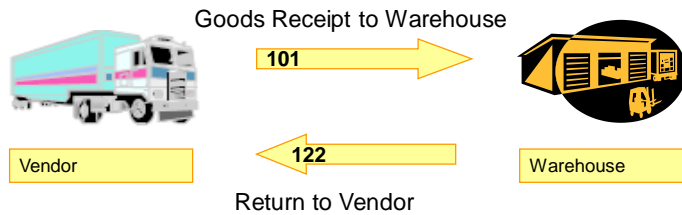
Quality inspection stock:

This is also company's own stock that is in quality inspection, and is valuated, but is not for free use.

Blocked stock:

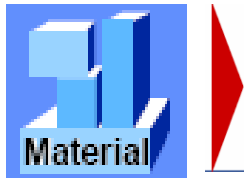
This maybe company's own stock , but cannot be used for Inventory management.

IM – Movement type



- The movement type is a very important control function in SAP, and it is defined by a three digit alpha numeric key
- The movement type is used to differentiate various goods movement within an organization, for example- goods receipt, goods issue and transfer postings
- The movement type controls which Financial stock or consumption account are to be updated. (this is also called automatic account determination)
- The movement types control various screen settings while doing various goods movements

IM – Views in Mat Master Required



Material master
Views

Warehouse
Management Views

Purchasing View

Plant Storage view

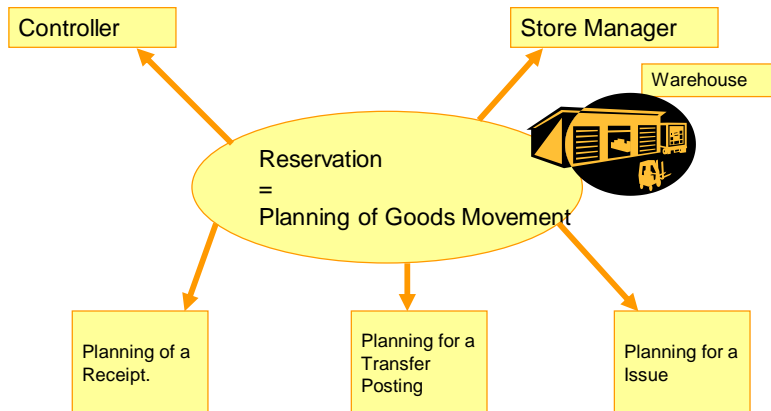
Accounting View

Costing View

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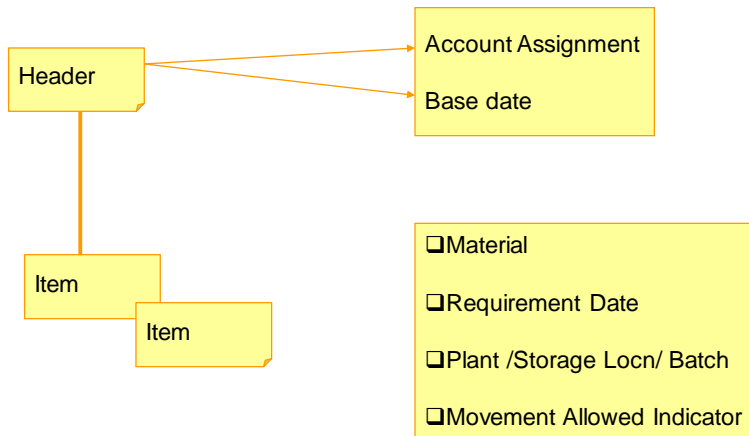
- Also Basic Data view is required
- In addition to the above views for stockable material, quantity and value updation should be activated for material type settings in customizing

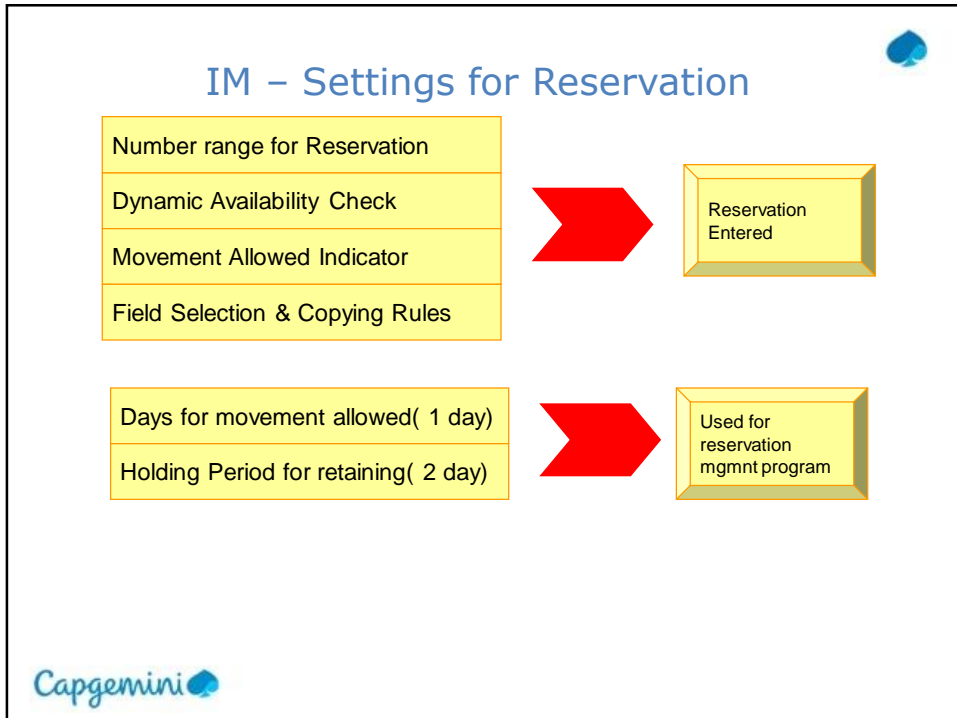
IM Management - Reservation



- Reservations are request to the Warehouse/plant for making a material ready for issue at a later date for a a particular purpose
- A reservation ensures that a material is available at a particular date
- Creation of a reservation in SAP generates a reservation number
- A reservation is used to plan also an inward movement in advance

IM – Reservation Structure



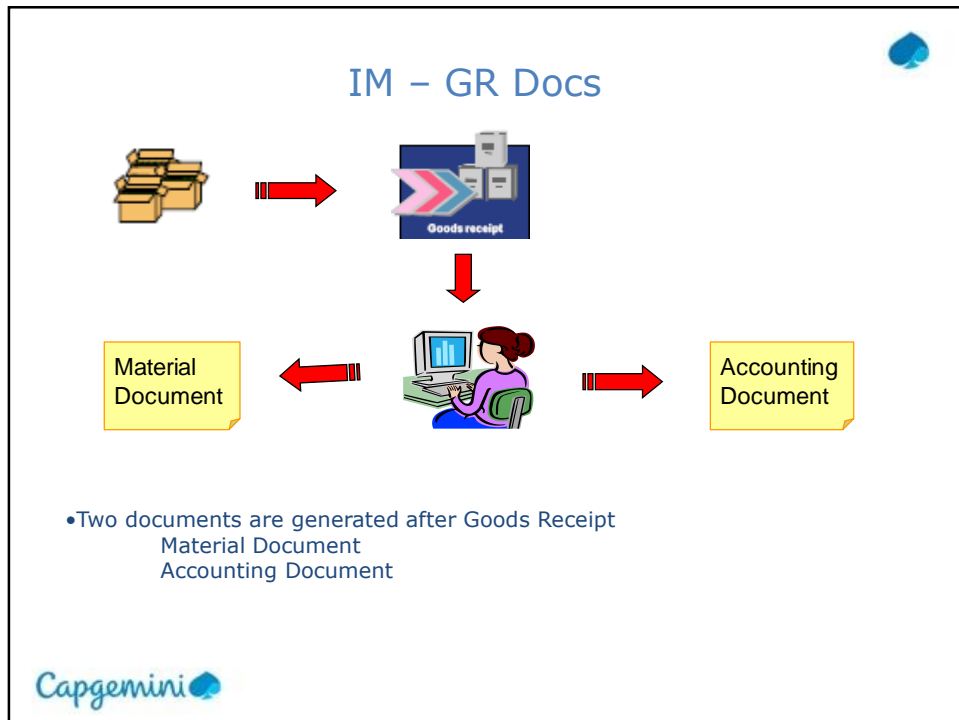


If requirement date \leq Current date +1 day , the n in the reservation management programme movement indicator is set.

IM – Goods Receipt



- Goods Receipt is done usually with reference to a Purchase Order which has been created by the procurement department
- More than one Goods Receipt can be entered for a single Purchase Order
 - This applies to the case where there is a staggered delivery from a vendor
- The goods receipt generates an internal document which is updated in the Purchase Order history
- The above is a very simple pictographic example where a simple goods receipt takes place, although actual business scenario may be a little complex.
- Goods Receipt updates the material stock in a plant, and value for a valued material



- A material document is created soon as Goods Receipt , which is basically a proof of the transaction
- If accounting are affected by the material movement, then accounting document is created in addition to the material document as an integration aspect that FI books are also affected
- It is to be noted that as soon as a goods movement is posted, the quantities, material, movement type and organization structure (such as POrg, PGroup) can no longer be changed
- If a document is to be corrected for errors , then a new document has to be created , by canceling/ reversing the incorrect document, which again will generate a reversing document number

IM – Effects of a Goods Receipt

Material delivery



Goods
Receipt

- Stock and Material Value gets updated
- PO History and PO record gets updated
- Material Document and Accounting Document gets generated
- GR slip(Hard Copy) is generated
- If Quality management is activated then, creation of an Inspection Lot to trigger quality inspection
- Stock and Consumption account (for a consumable material) gets updated
- Notification of Goods Receipt electronically to vendor.(may be not for all situations)

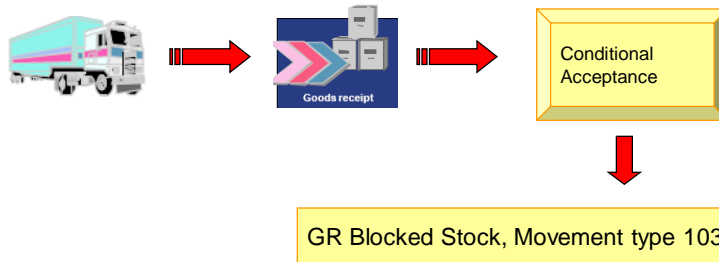
IM – GR without reference to PO



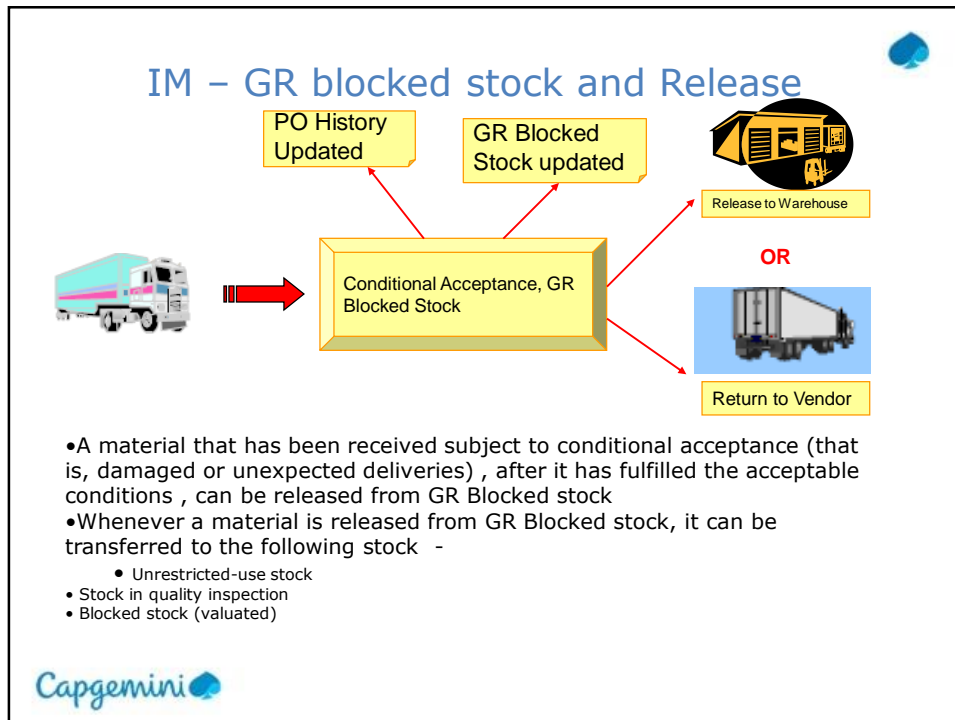
- ☐ Initial stock entry
- ☐ Returns of defective product from customer
- ☐ Receipt Without PO or production order
- ☐ Requirement Date
- ☐ Free goods receipt

- A Goods receipt can also be carried out when a Purchase Order is not there, for example – Cash Purchase or small item purchase like flowers etc.
- Movement type 501 is used for that
- Both material document and accounting document is created (for a valued and stock keeping material), where the valuation is done based on moving average price of a material
- Initial uploading of stock entry movement type 561 is a type of GR without PO

IM – GR blocked stock



- A material that has been received subject to conditional acceptance (that is, damaged or unexpected deliveries) are usually posted to goods receipt blocked stock, depending upon the policy of the organization
- Whenever a material is posted to GR blocked stock -
 - Quantities are posted to stock
 - The material is not valuated ,i.e. no accounting doc is generated
 - The transaction is entered in the purchase order history



- If the goods are to be sent back to the vendor, we can send them back directly from GR blocked stock
- This movement creates a material document and updates the purchase order history
- Whenever a material is released from GR blocked stock the following happens:
 - Material and financial accounting documents are created
 - Total valuated stock is updated
 - Purchase order and purchase order history are updated
 - The G/L accounts are updated

IM – Goods Receipt in Quality Inspection



Quality Inspection Indicator is set in the following

In Material Master



In Purchase Order



Purchase Order

At the time of Goods Receipt



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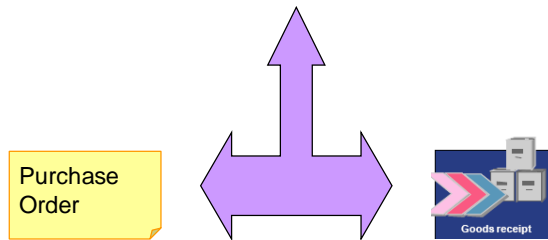
We can post goods receipts from vendors to quality inspection stock for the following reasons:

- If the material master has got the quality inspection indicator set, then a material always has to undergo quality inspection before it is used.
- If a material is received from a particular vendor for a first time and has to undergo quality inspection first.
- At the time of goods receipt that the material has to undergo quality inspection, for example, because you established that the packaging is damaged and suspect that the goods were also damaged during transportation.

IM – Setting the Delivery Completed Indicator



Setting the “Delivery Completed Indicator”



- A Delivery Completed Indicator can be set at the time of creation of Purchase Order or at the time of Goods Receipt

IM – Under delivery and Over delivery



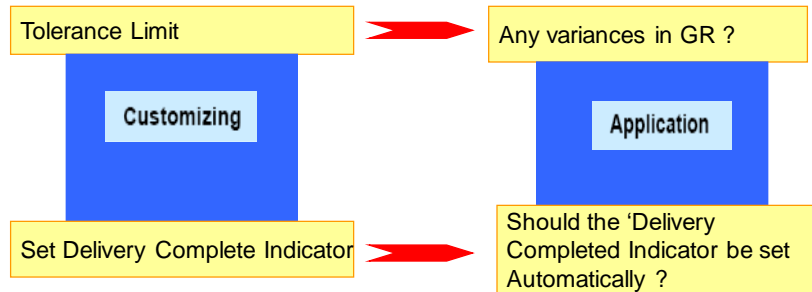
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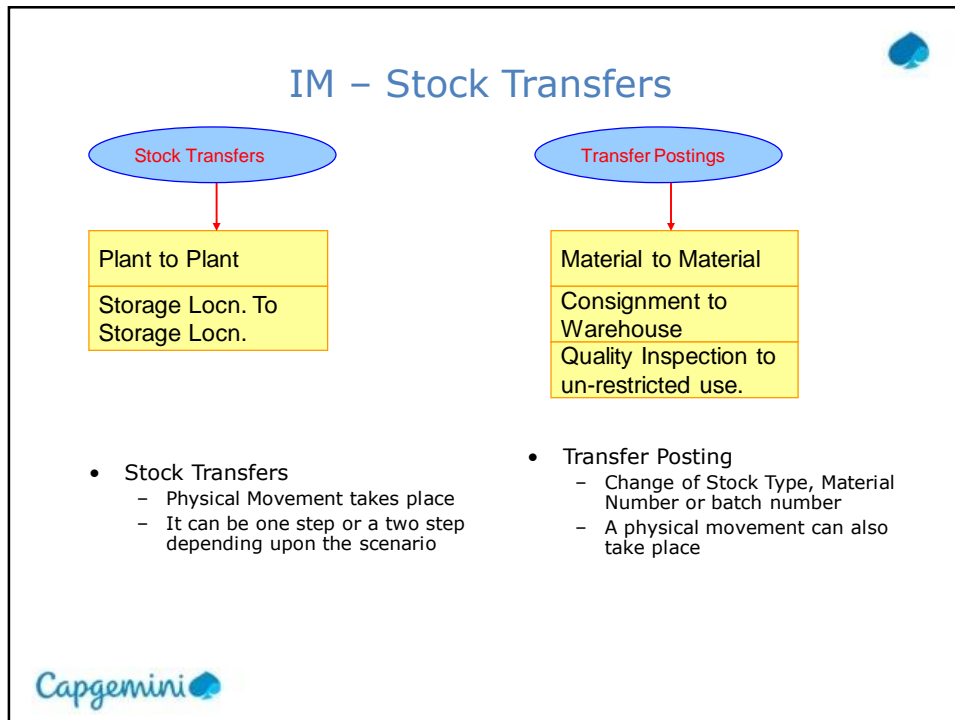
- Whenever a Goods Receipt is done , SAP compares the GR quantity with the quantity in the open purchase order and thereby identifies underdeliveries or overdeliveries
- If the quantity of goods received is smaller than the ordered quantity minus the underdelivery tolerance, this is interpreted and accepted as a partial delivery
- If over-deliveries are to be allowed, we can specify a percentage overdelivery tolerance in the order item.

IM – Under delivery and Over delivery Customizing & Application



- The following configuration can be set as per the requirement





Examples of transfer postings include release from quality inspection or transfer from consignment material to company's own stocks.

The R/3 System creates a material document so that the transaction can be entered. Documents in Financial Accounting (FI, CO, CO-PC) are created only if there is a stock change involving valuation (for example, goods are transferred from one plant to another).

IM – Stock Transfers- Storage Location to Storage Location



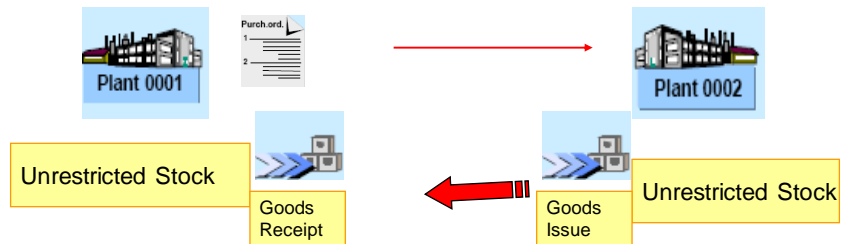
Unrestricted Stock



Unrestricted Stock

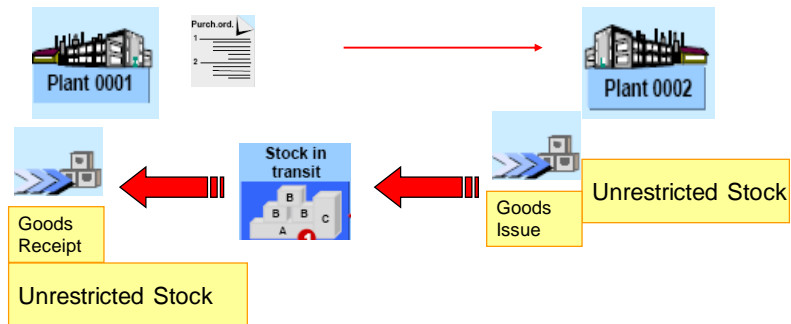
- This type of transfer always takes place within a plant
- Material document is generated, but no accounting document since there is no change in valuation
- There is only a physical movement of stock

IM – Stock Transfers- Plant to Plant- One step



- This type of transfer always takes place from a plant to another plant
- Goods issue is being done from the despatching plant
- Material and accounting document is generated as because there is change in valuation
- As and when Goods Issue is done in the despatching plant, the receiving plant stock increases at the same time

IM – Stock Transfers- Plant to Plant- Two step



- This type of transfer always takes place from a plant to another plant.
- Goods issue is being done from the despatching plant.
- Material and accounting document is generated as because there is change in valuation.
- As and when Goods Issue is done, the stock goes into a in-transit stock.

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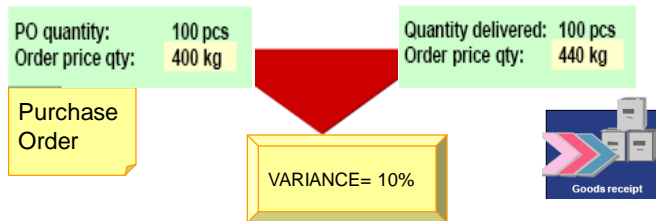
This process starts only after the issuing/ despatching plant receives a Purchase order from the receiving plant.

The issuing/ despatching plant then issues the material from its unrestricted use stock, against that PO.

Movement type 351 is generally used.

These types of Purchase Orders are usually called 'Stock Transport Order'.

IM – PO quantity variance



Possible reactions-

No message

Warning plus mail mess.

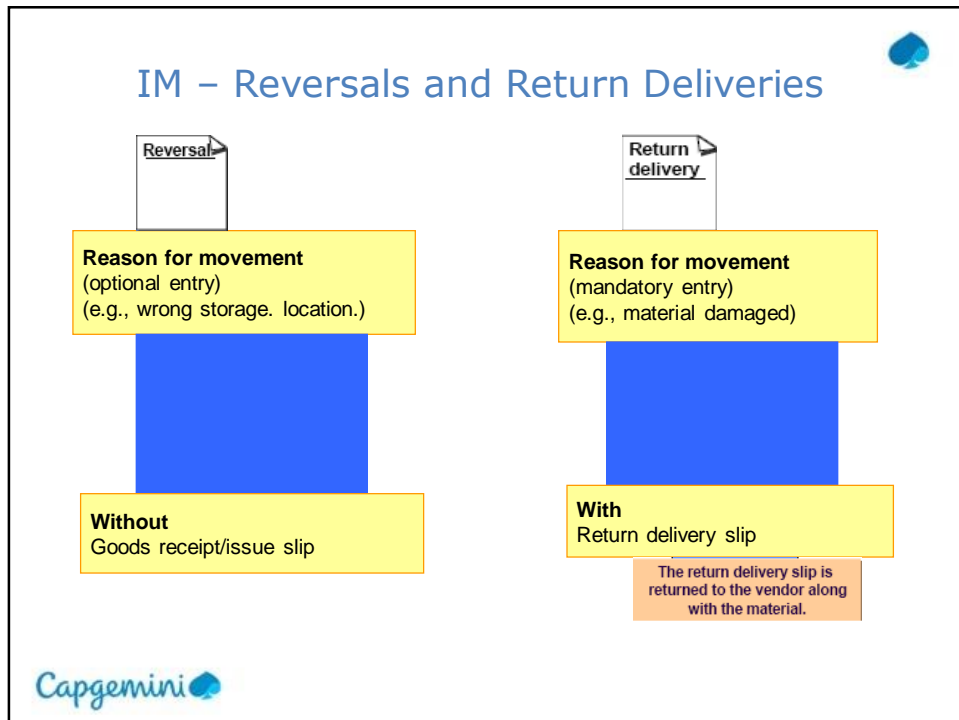
Error message

These are Dependent on B1 and B2 tolerances (Customizing)

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It is to be noted that Goods receipts are valued on the basis of the incoming quantities in the order price unit.

Invoice verification is also based on the GR quantity in the order price unit.



The “reason for movement” specified during a Goods Return can also be determined per movement type.

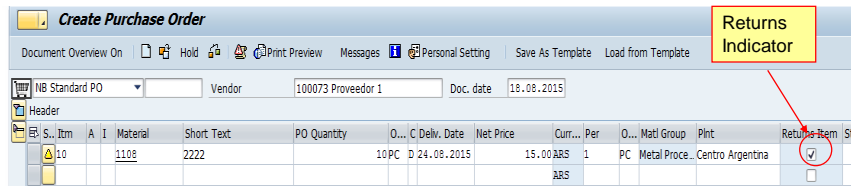
The “reason for movement” , can also be configured ,so as to enable an analysis and display of vendor problems (for example, damaged packaging).

Whenever there is a return of material to a vendor, we can specify a reason for movement individually for each item or enter a reason for movement on the initial screen for goods movements.

It can be configured that whether a goods receipt/issue slip or a return delivery slip is to be printed , depending on the movement type.

IM – Returns Purchase Order

The return PO indicator in a Purchase Order determines whether it is a Return PO as shown



The screenshot shows the SAP 'Create Purchase Order' screen. A yellow box labeled 'Returns Indicator' points to the 'Returns Indicator' checkbox in the 'Item' table, which is checked. The 'Item' table has the following data:

Item	Material	Short Text	PO Quantity	O... C Deliv. Date	Net Price	Curr...	Per	O... Matl Group	Plant	Return Item	St
10	1108	2222	10 PC	24.08.2015	15.00 ARS	ARS	1	PC Metal Proce...	Centro Argentina	<input checked="" type="checkbox"/>	

- Goods Receipt for such a PO will be with Movement type 161
- Such a Goods Receipt creates Material Document and an Accounting Document also

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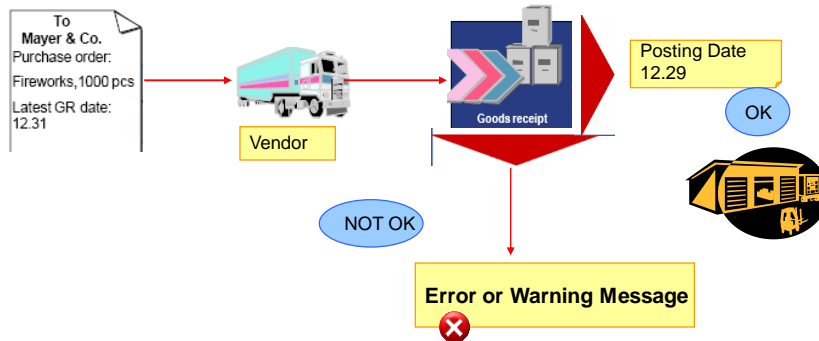
Returns to vendor are return deliveries of material from a plant to an external vendor.

For returns to vendor, we do not have to refer to the preceding document i.e the PO number in which it was purchased.

For movement type 161, configuration can be done so as to generate a PO in the background.

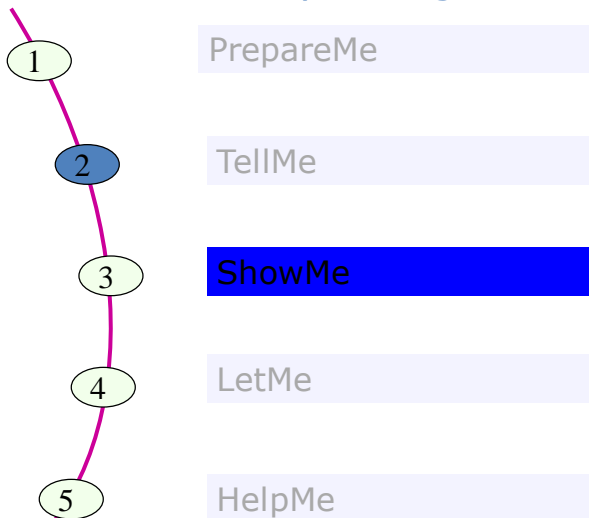
IM – Goods Receipt Message

- If latest acceptable Goods Receipt date has been entered in the PO, and Goods Receipt is being done after that date, SAP can be configured to give either an error or a warning message



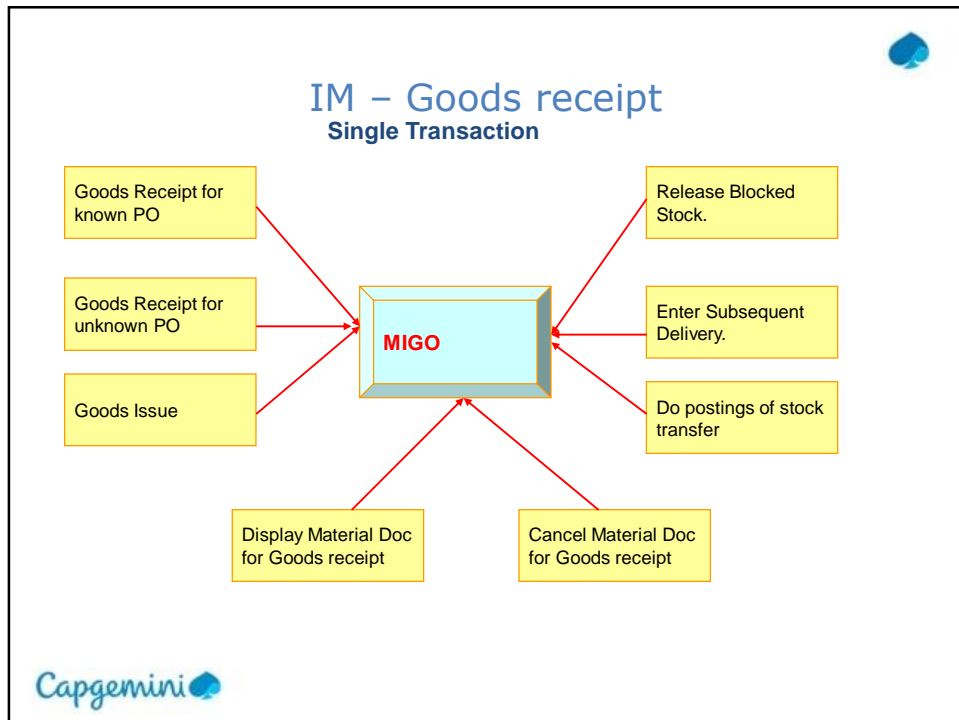


Inventory Management





Goods Receipt



In the MIGO ,we can use the following functionalities:

- . Goods receipt for known purchase order
- . Goods receipt for unknown purchase order
- . Enter return delivery
- . Release blocked stock
- . Enter subsequent delivery
- . Cancel material document for goods receipts
- . Change and display material document for goods receipts.

In Customizing for Inventory Management, we can define which fields appear on the which of the above transaction screen and how they appear, by choosing Goods Receipt ® Define Field Selection for Header/Detail Fields and Table Columns.



IM – Goods Receipt

Stock Overview

Logistics -> Materials Management -> Inventory Management -> Environment
-> Stock -> Stock Overview
T Code- MMBE

Stock Overview: Company Code/Plant/Storage Location/Batch

Database selection

Material: 17 Plant: 0000 Storage Location: 0000 Batch: 0000

Stock Type Selection

☒ Active Stock (General Stocks)
☒ Active Stock (Batch Components)

Unit Display

☐ Special Stock Indicator
Display version: 1
Display Unit of Measure: 1
☒ No Zero Stock Lines
☐ Decimal Place as per Unit

Selection of Display Levels

☒ Company Code
☒ Plant
☒ Storage Location
☒ Batch
☒ Special Stock

Stock Overview: Basic List

Selection

Material: 17 External description: Raw materials
Material Type: RCH Raw materials
Unit of Measure: EA Base Unit of Measure: EA

Stock Overview

Full

Material: 17 Plant: 0000 Storage Location: 0000 Batch: 0000

Unrestricted stock: 179.000
Inspected stock: 179.000
Reserved stock: 179.000

IM – Goods Receipt

Goods Receipt

Goods Movement -> Goods Receipt -> For Purchase Order -> Goods Receipt from External Procurement

T CODE- MIGO

Movement type: 101- GR to unrestricted use stock

Movement type: 103- Goods Receipt to GR Blocked Stock

The screenshot displays the SAP MIGO transaction interface. The main window is titled 'Create Purchase Order' and shows a table with columns for Short Text, PO Quantity, Q., C, Chk, Date, Net Price, Cur., Per, Q., Net Group, Pkt, and Return Item. The table contains one row with the following data: Short Text: 2222, PO Quantity: 10PC, Q.: 24.03.2015, Net Price: 15.00000, Cur.: PC, Per: Metal Piece, Cntos Argentina, Q.: 24.03.2015, Net Group: 101, Pkt: 101, Return Item: 101. Below the table, there are buttons for 'Default Values' and 'Add Planning'. The bottom section shows the 'Items' tab with a list of items, including '101' and '103'. The right pane shows a list of movement types with their descriptions:

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 bldd stock - reversal
105		Release GR blocked stock for warehouse
106		Release GR blocked stock for warehouse - reversal
107		Goods receipt to valuated blocked stock
108		Goods receipt to valuated blocked stock - reversal
109		Goods receipt from valuated blocked stock
110		Goods receipt from valuated blocked stock - 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



IM – Goods Receipt

Goods Receipt- Initial Stock Entry

Goods Movement -> Goods Receipt -> Others, then choose **Movement type -> Receipt -> Initial stock entry (own) -> To unrestricted**.

T CODE- MIGO or MB1C

Movement type: 561

Enter Other Goods Receipts: Initial Screen

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

Document Date: 14.08.2015 Posting Date: 14.08.2015

Material Slip:

Doc.Header Text: GR/GI Slip No.:

Defaults for Document Items

Movement Type: 561 Special Stock: ☐

Plant: 7500 Reason for Movement:

Storage Location: 0001 ☐ ☐ Suggest Zero Lines

GR/GI Slip

☐ Print ☐ Individual Slip

☒ Indiv.Slip w.Inspect.Text ☐ Collective Slip

Enter Other Goods Receipts: Collective Processing

☐ To Reservation... To Order... To Purchase Order...

Movement Type: 561 GI entry of st. bals

Items

F	Item	Material	Quantity	UnE	SLoc	Batch	Re	Plnt
1		1108	50	PC	0001	0000000549		7500
2					0001			7500
3					0001			7500
4					0001			7500
5					0001			7500

IM – Goods Receipt



Display Material Document.

Material Document -> Display, then choose FI documents

T CODE- MIGO

Display Material Document 4900003051 - SDTRAINER3

Show Overview | Hold | Check | Post | Help

A04 Display | **RO2 Material Docu...** | 4900003051 | 2015 |

General | Doc info

Entered By: SDTRAINER3 | **FI Documents**
Created On: 14.08.2015 18:42:17
Transaction Code: Other Goods Receipts | MB1C

Line	Mat. Short Text	Qty in M/E	E...	SLoc	G/L Account	Batch	Valuation ...	M...	D
1	This is my material	50	PC	Materials	388999	0000000549	561	+	

Display Document: Data Entry View

| Display Currency | General Ledger View

Data Entry View

Document Number: 4900003051 | Company Code: 7500 | Fiscal Year: 2015
Document Date: 14.08.2015 | Posting Date: 14.08.2015 | Period: 8
Reference: | Cross-Comp.No.: |
Currency: ARS | Texts exist: | Ledger Group: |

CoCode	Item	P	Org doc.	PL	SG	Account	Description	Bill Date	Amount	Curr.	Tx
7500	1		89			300000	Inventory - Raw Mats		500.00	ARS	
	2		91			309999	Inventory Ising		500.00	ARS	

Clicking on the Accounting Document displays it, and we can view the GL/ac's that it has updated.

IM – Material to Material Conversion



- Material to Material transfers requires that both material is managed in same units of measure
- Material document is generated
- An accounting document is generated if the moving average price in the accounting view of both the materials is different , i.e. there is a change in valuation price

Movement type 309 is used and for reversing it movement type 310 is used.

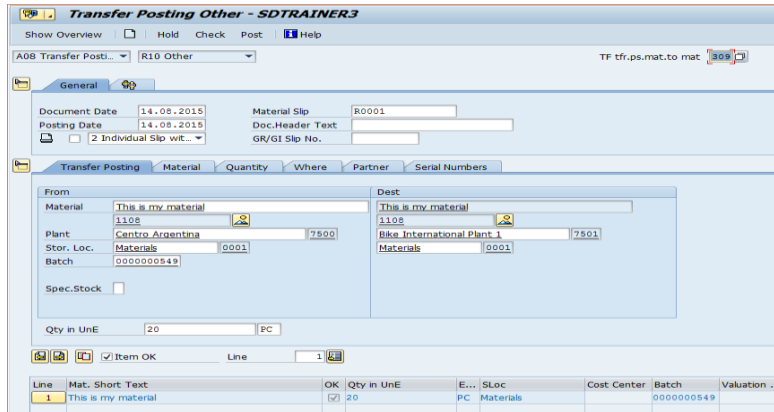
IM – Inter Product Movement

Inter Product Movement

T CODE- MIGO

Movement type: 309- Conversion of a material into a different material

Movement type: 310- Reversal of 309 movement



The screenshot shows the SAP MIGO 'Transfer Posting Other - SDTRAINER3' screen. The 'General' tab is active, displaying document details. The 'Transfer Posting' tab is also visible, showing 'From' and 'Dest' material data. The 'From' material is '1108' (Centro Argentina) and the 'Dest' material is '1108' (Bike International Plant 1). The quantity is 20 units. The screen includes a table at the bottom with columns for Line, Mat. Short Text, OK, Qty in UnE, E..., SLoc, Cost Center, Batch, and Valuation.

Line	Mat. Short Text	OK	Qty in UnE	E...	SLoc	Cost Center	Batch	Valuation ...
1	This is my material	<input checked="" type="checkbox"/>	20	PC	Materials		000000549	

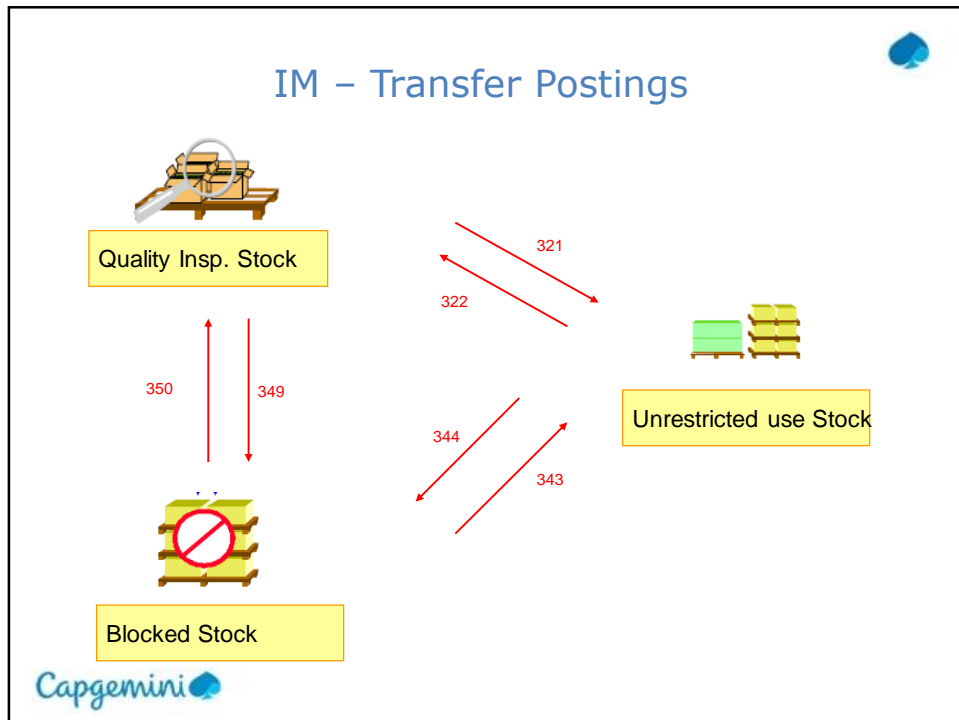
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Choose in the MIGO header screen-

‘A08-Transfer Posting’ and ‘R10-Others’.



Transfer Posting



- Whenever a transfer posting is carried out, the stock type, batch number is changed
- As discussed previously SAP creates a material document so that the transaction can be entered
- An accounting document is created if a change in material valuation is involved
- A transfer posting may also involve an actual physical stock transfer

IM – Transfer Posting



Storage Locn to Storage Locn

Goods Movement -> Transfer, then choose **Movement type -> Transfer posting -> Stor. loc. to stor. loc -> Unrestricted to Unrestricted**

T CODE- MIGO

Movement type: 311

Movement type: 312 – Reversal of that documents

The screenshot shows the SAP MIGO 'Transfer Posting Other - SDTRAINER3' screen. The 'General' tab is active, displaying fields for Document Date (14.08.2015), Posting Date (14.08.2015), Material Slip (R0001), Doc. Header Text, and GR/01 Slip No. The 'Transfer Posting' tab is also visible, showing Movement Type (311), Plant (Centro Argentina), Storage Location (Materials), and Unloading Point. The bottom section shows a table with one line item: Line 1, Mat. Short Text 'This is my material', OK, Qty in Unit 20, E... Sloc PC Materials, Batch 0000000549, Valuation ..., M... D Stock Type 311 -.

Line	Mat. Short Text	OK	Qty in Unit	E... Sloc	Batch	Valuation ...	M... D Stock Type
1	This is my material		20	PC Materials	0000000549		311 -

Capgemini

Choose in the MIGO header screen-

‘A08-Transfer Posting’ and ‘R10-Others’

IM – Transfer Posting



Storage Locn Blocked to Unrestricted

Goods Movement -> Transfer, then choose **Movement type -> Transfer posting -> Stock to stock -> Blocked to unrestr**

T CODE- MIGO

Movement type: 343

Movement type: 344 - Reversal of 343, i.e unrestricted to block.

The screenshot shows the SAP MIGO 'Transfer Posting Other - SDTRAINER3' screen. The 'General' tab is active, displaying fields for Document Date (14.08.2015), Posting Date (14.08.2015), and Material Slip (R0001). The 'Transfer Posting' tab is also visible, showing Movement Type (343) and Plant (Centro Argentina). The 'Where' tab shows Storage Location (Materials) and Unloading Point. The 'Batch' tab shows Batch (0000000549). The 'Serial Numbers' tab is also present. The 'Line' tab at the bottom shows a single line item with Material (This is my material), Quantity (20), and Stock Type (343).

Capgemini

Choose in the MIGO header screen-

‘A08-Transfer Posting’ and ‘R10-Others’.



Reservation-Create & Change



IM – Reservation- Create

Create reservation

Inventory Management -> Reservation -> Create, then choose **Movement type -> Consumption -> For cost centre**

T CODE- MB21

Movement type: 201

Create reservation with reference to another

Inventory Management -> Reservation -> Create. In the *Ref. Reservation* field, enter the reservation from above

Create Reservation: Initial Screen

New Item...

Base date: 14.08.2015 ☒ Check against cal.

Movement Type: 201

Plant: 7500

Reference

Reservation:

Create Reservation: Details 0001 / 0001

New Item

Movement Type: 201 G/L for cost center

Plant: 7500 Centro Argentina

Material: 1105 This is my material

Stor. Location: Batch: 0000000408

Quantity in:

Unit of Entry: PC ☐ Qty is Fixed

Stockkeeping Unit: 2 PC

Further Information

Reqmt Date: 14.08.2018

☒ Mvt Allowed

Business Area: 7000

Cost Center: 6277 Assembly PC I

G/L Account: 400000

Recipient:

Text:

Unit. Point:

IM – Reservation- Change



Create reservation

Inventory Management -> Reservation -> Change, then choose **Go To -> Header Reservation -> By material**

We enter the material numbers in the *From* and *To* fields on the initial screen
Give movement type 201, and all issue reservations are listed for each material

T CODE- MB22

Change Reservation: Initial screen

Reservation: _____

Material: _____

Cost Center: _____

Order: _____

WBS Element: _____

Network: _____

Account: _____

Receiving Plant: _____

Receiving Slot: _____

Item Order: _____

Plant: _____

Request Date: _____

☐ With acct assign

☐ Open reservations only

Reservation List Inventory Management



Reservation	Item	Reqmt Date	MVT	Material	Requirement Quantity	Difference Quantity	Account assignment
-------------	------	------------	-----	----------	----------------------	---------------------	--------------------

IM – Auto PO Creation

It can be configured in IMG , such that for a particular movement type system generates a PO in the background.



Automatic PO Generation settings can be in following-

Customizing		MVT	Mvt type text	POauto.
Application		101	GR goods receipt	<input checked="" type="checkbox"/>
		102	GR for PO reversal	<input type="checkbox"/>
		102	GR into blocked stock	<input type="checkbox"/>
		161	GR returns	<input checked="" type="checkbox"/>
		 Material		
		 Vendor		

Capgemini

The valuation at the time of Goods Receipt in these cases are usually done as per the Purchase Info Record or the Material Master valuation price.

Automatic PO can be generated only for valuated material.

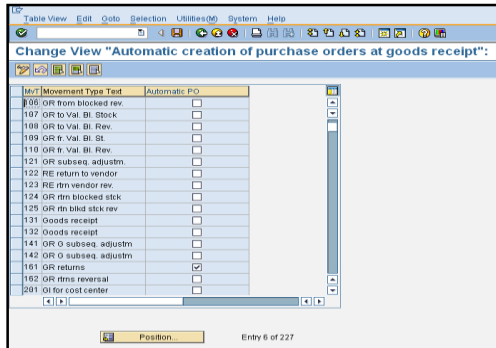
IM –Auto generation of PO



Customizing setting for Auto Generation of PO

Materials Management -> Inventory Management and
Physical Inventory -> Goods Receipt -> Create Purchase Order Automatically

Then click on the box against movement type for which Auto PO is to be configured



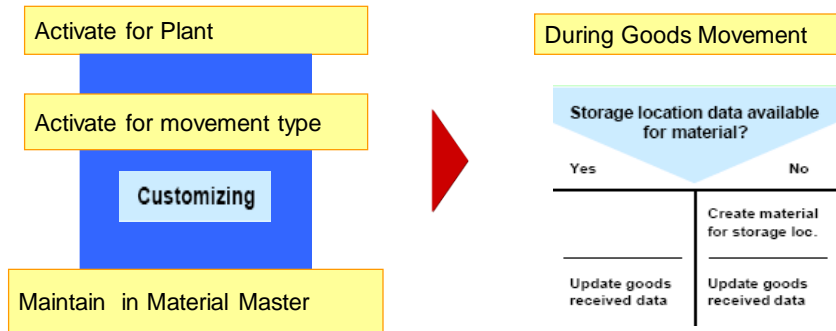
Also

Auto PO indicator has to be set in Material Master- Purchasing View.

IM – Creating Storage Locn Automatically



- The following settings are required for SAP for creation of Storage Location in the background



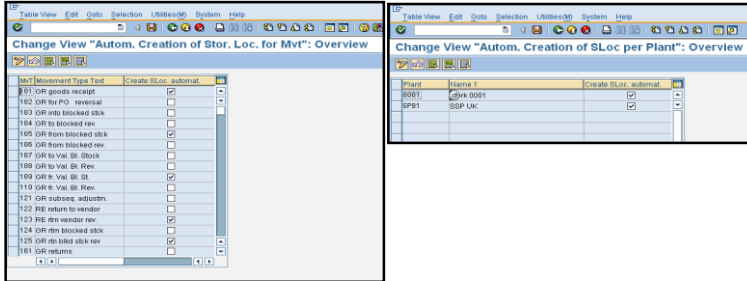
IM – Auto Create Storage Location



Customizing setting for Creation of Storage Location Automatically

Materials Management -> Inventory Management and
Physical Inventory -> Goods Receipt -> Create Storage Location automatically

Then click on the box against, either 'Plant' or against 'Movement Type'



IM – Creation of New Mvmnt type



Customizing setting for creation of a Movement Type

Materials Management -> Inventory Management and
Physical Inventory -> Movement types -> Copy change Movement type

Click on the icon and then select Movement type and press enter
Then select a movement type and then choose copy as,
Make desired entries and then click 'Save'

The image displays three screenshots of the SAP Movement Type configuration interface:

- Field Selection:** A dialog box for selecting fields to be copied. It includes checkboxes for Client, Movement Type, Debit/Credit Ind., QR blocked stock, Consumption posting, Print item, Account control, Account assignment of reservation, Selection parameter, Create SLoc. automat., Statistically relev., and Control Reason. Below the list is a 'Determine Work Area Entry' section with 'From' and 'To' fields.
- Change View "Movement Type": Overview:** A table showing the overview of movement types. The table has columns for Movement Type, Description, and various status indicators. The 'From' field is set to 101 and the 'To' field is set to 222.
- Change View "Movement Type": Details of Selected Set:** A detailed configuration screen for the selected movement type. It includes sections for 'Copying Structures' (with checkboxes for various structures), 'Status Control' (with checkboxes for various controls), and 'Internal Control (Phase On/Off Change)' (with checkboxes for various controls). The 'From' field is set to 101 and the 'To' field is set to 222.



Stock Transport Order – 2 step

IM – Stock Transport Order – 2 step



Setting for Stock Transfer Order 2 step

Logistics -> Materials Management -> Purchasing -> Purchase order -> Create -> Vendor/supplying plant known, then choose Stock transport Order

Post Goods Issue for Stock Transport Order

Movement type -> Transfer posting -> Plant to plant -> To stock in transit.
Note: On the initial screen, enter the purchase order number in the dialog box.
Movement type: 351

Post Goods Receipt for Stock Transport Order

In the above Goods Issue was done for the STO

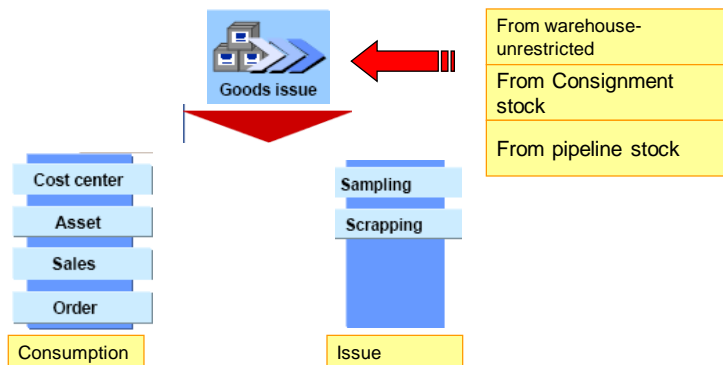
Logistics → Materials Management → Inventory Management → Goods Movement → Goods Receipt → For Purchase Order → PO Number Known

T CODE- MIGO
Movement Type- 101



Goods Issue

IM – Goods Issue



- Goods Issue can be done against cost centre, assets, sales order or an Internal Order
- In all the cases a material document gets created and an accounting document also
- In case of Accounting document, it will debit either to the expense account or an asset or a sales order or an internal order

IM – Goods Issue



Post Goods Issue

Movement type -> Goods Issue -> Select any one option
Four options can be chosen for Goods Issue as

Post Goods Issue against Cost Centre

Movement type -> Goods Issue -> Others
Movement type- 201



Goods Issue Other - SDTRAINER3

Show Overview | ☐ HOLD | ☐ Check | ☐ Post | ☐ Help

ADT Goods Issue | R10 Other | GI for cost center: 201

Document Date: 14.08.2015 | Material: | Doc. Header Text:
Posting Date: 14.08.2015 | ☐ Individual Slip | SA/OT Slip No.:

Line	Mat. Short Text	OK	Qty in Unit	UoM	Cost Center (Bus. A)	Account	Batch
1	This is my material	<input type="checkbox"/>	1	EA			

Material: | Quantity: | Where: | Account Assignment:

Movement Type: 201 | ☐ GI for cost center | Stock type: Unrestricted use

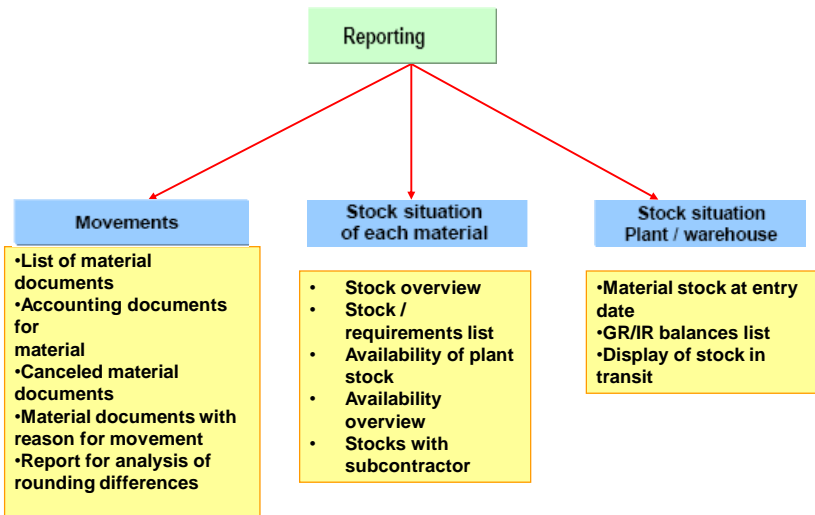
Plant: | Storage Location: | Goods Receipt: | Unloading Point: | Text:

☐ Item OK | Line: 1



Reporting

IM – Reporting



IM – Reporting MM



Following are the list of standard reports in MM

Note that some rely on LIS records, so it must be activated:

- MB51 Material Doc. List
- MB5L List of Stock Values: Balances
- MBBS Display valuated special stock
- MC\$G PURCHIS: Material PurchVal Selection
- MC\$I PURCHIS: Material PurchQty Selection
- MC.1 INVC0: Plant Anal. Selection: Stock
- MC.2 INVC0: Plant Anal.Selection, Rec/Iss
- MC.5 INVC0: SLoc Anal. Selection, Stock
- MC.9 INVC0: Material Anal.Selection,Stock
- MC.A INVC0: Mat.Anal.Selection, Rec/Iss
- MC.L INVC0: Mat.Group Analysis Sel. Stock
- MC48 INVC0: Anal. of Current Stock Values
- MC50 INVC0: Analysis of Dead Stock

IM – Reporting MM (cont)



Following are the list of standard reports in MM

- MCBA INVCO: Plant Analysis Selection
- MCBC INVCO: Stor. Loc. Analysis Selection
- MCBE INVCO: Material Analysis Selection
- MCBK INVCO: MatGrp Analysis Selection
- MCBR INVCO: Batch Analysis Selection
- MCE1 PURCHIS: PurchGrp Analysis Selection
- MCE3 PURCHIS: Vendor Analysis Selection
- MCE5 PURCHIS: MatGrp Analysis Selection
- MCE7 PURCHIS: Material Analysis Selection
- MCW3 PURCHIS: Evaluate VBD Header
- MCW4 PURCHIS: Evaluate VBD Item
- ME2L Purchase Orders by Vendor
- ME2M Purchase Orders by Material
- ME2N Purchase Orders by PO Number
- MIR6 Invoice Overview
- MMBE Stock Overview

IM – Tolerance Limit



Customizing setting for Tolerance Limit

Materials Management -> Inventory Management and
Physical Inventory -> Goods Receipt -> Set Tolerance Limits

Maintain Tolerance limit for Company Code for Tolerance Key B1,B2 and VP

Table with 2 columns: Tolerance Key, Description

Tolerance Key	Description
B1	Order price ab variance (OPUE-MDO)
B2	Order price ab variance (OPUE-MDO)
VP	Buying average price variance

Change View "Tolerance Limits": Details

Tolerance key: B1 Order price ab variance (OPUE-MDO)
Company Code: 5601 SAP Asia
Amounts in: SGD Singapore Dollar

Lower limit

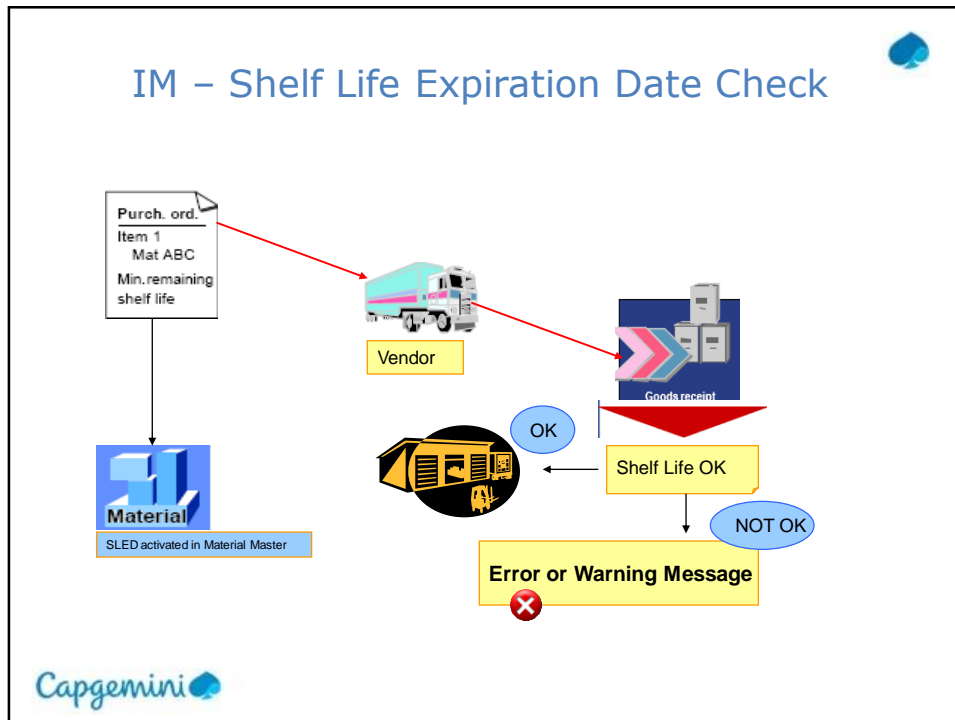
Percentage
☐ Do not check
☒ Check limit
Tolerance limit %: 10.00

Upper limit

Percentage
☐ Do not check
☒ Check limit
Tolerance limit %: 50.00



Shelf Life



- For the shelf life expiration date (i.e SLED in short form) to be activated, if all the following has been maintained :

The minimum remaining shelf life has been maintained in the material master or the purchase order

The minimum remaining shelf life value is the number of days that a material has to be usable in

order that the R/3 System will accept the goods receipt.

The shelf life expiration date check is active in the plant.

In the IMG configuration the shelf life expiration date check is activated for this movement type.

- If the shelf life expiration date check is activated, then at the time of Goods receipt we need to enter the expiration date or production date of the material .

- At the time of entering the goods receipt, the R/3 System checks whether the minimum remaining shelf life

meets the requirements entered in the purchase order or the material master.

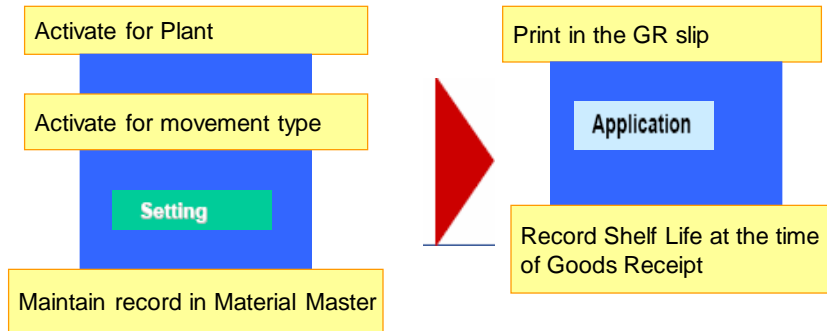
- The system then issues a warning message or error message, depending on how the message setting has been configured.

The shelf life expiration date can be printed on the goods receipt/issue slip.

IM – Shelf Life Setting



- The following settings are required for SAP to check the shelf life expiration date

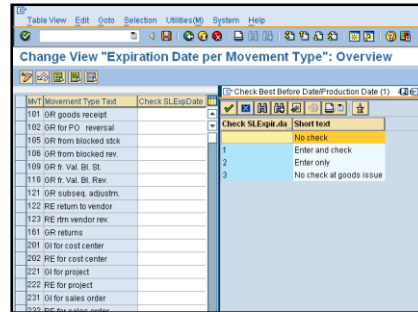
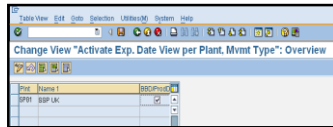
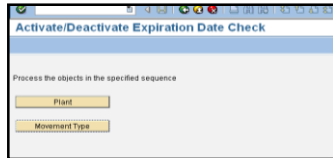


IM – Setting for Shelf Life

Customizing setting for Shelf Life check

Materials Management -> Inventory Management and
Physical Inventory -> Goods Receipt -> Set Expiration Date Check

Then click on the box against, either 'Plant' or against 'Movement Type'



Capgemini

The shelf life expiration date of a material can only be entered if the minimum remaining shelf life is maintained in the material master record.

The minimum remaining shelf life is the time the material must still be usable, so that the goods receipt is accepted by the system.

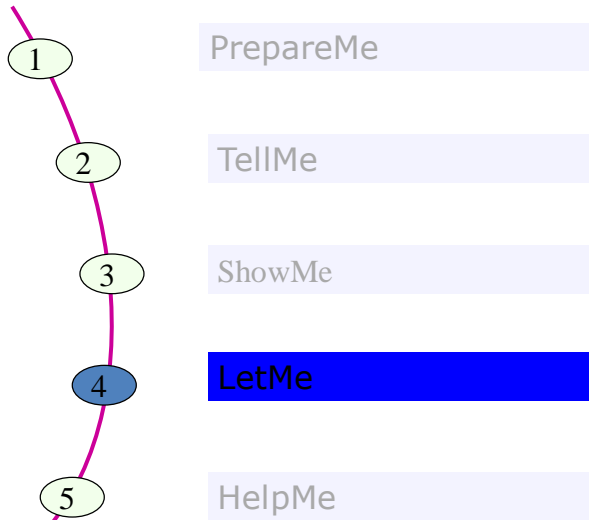
If the shelf life check expiration date check is active, we must enter the shelf life expiration date or the production date of the material at the time of a goods receipt.

At the time of goods receipt, the system checks whether the remaining shelf life is sufficient.

If this is not the case, a warning or error message is issued, depending on the system settings.

When the goods receipt is posted, the shelf life expiration date is recorded in the material document.

Inventory Management



Let me



Case Study

ABC Corporation has business setup in UK and India with its head quarter based in London.

It is in the business of manufacturing fast moving Food products, and has a very highly sophisticated warehouse, where all its products are being stored.

Its plant is located in London, and Glasgow in Scotland ,and both the plant procures material from various suppliers located all over the UK. Since this is a fast moving business , strict quality standards are being maintained, before and product is being taken in.

It has various storage locations named based on the Ambient temperature. For example meat is stored in a refrigerated environment, while bread is stored in an ambient environment.

Do the following-

Create a material master for chicken legs (for material Type ROH), such that it contains, basic Data, Purchasing, General Storage, Quality management, Accounting and Costing view

Update Initial Stock of 100 KG. Check the material and accounting documents generated

Create a PO for London plant 2000 KG, and then receive the material in quality

Check the stock overview, and after the material is released from quality check the stock overview

The Glasgow plant immediately requires 500KG, since it has run a stock out situation and its supplier will take another 10 days to deliver, due to some problem in his yard. Hence its has requested its London plant to send a stock of 500 KG.

Let me



Do the following-

- Extend the material chicken legs for Glasgow plant
- Create a Stock Transport order, where the supplier plant is London plant and receiver plant is Glasgow plant. Note down the PO No
- Use this PO Number to do a Goods issue to 'Stock-in-Transit'
- Check the material document and accounting document so generated
- The Glasgow plant has now received the consignment next day, but it has found that one crate containing 10KG seems damaged
- Receive 10 KG in GR blocked stock and the rest in quality stock
- Yesterday there was a Power Outage in one of the chilled area where Chicken Legs were kept in London plant. Hence the shop manager decided to move the stock of that storage location amounting to 250 KG to blocked stock
- Move the 250 KG to blocked stock and see the material and accounting document
- The sales department has got a huge order of 2500 KG chicken legs-tendered to be delivered to a customer after 15 days. They checks the stock and finds that it is below requirement and hence decided to raise an order for that quantity to the stores department
- Create a reservation of the remaining amount of stock



Let me

Task 1

Business requirement: You plan to transfer part of the stock of material (Which you have created) to another warehouse. You create a reservation manually to achieve this.

Do the following-

Step 1: Create a reservation for a transfer posting of 10 pieces materials (which you created and check stock availability) from plant 1000, storage location 0001, to storage location 0002. Check if Storage location 0002 exists. The stock transfer is to be executed in one week. Note the reservation number.

Step 2: You have just heard that the first stock transfer can only start in 2 weeks. Change the base date of the reservation from step 1-1 by one week to <today +14 days>.

Step 3: Display the reservation stocks of material in the stock overview.

Step 4: Enter the transfer posting in the system. Post reservations from task 1 in a document. All materials are withdrawn from storage location 0001. Only 5 pieces of material are transferred; the remainder is no longer needed. Manually set the Final issue effected indicator in the reservation.



Let me

Task 2

Business requirement: In the warehouse, a number of chemicals with the material number (Choose which you have created Say Material A) are found to be loose its characteristic. Make a transfer posting to other material (Created by you say Material B). First check what all pre-requisites need to be maintained?

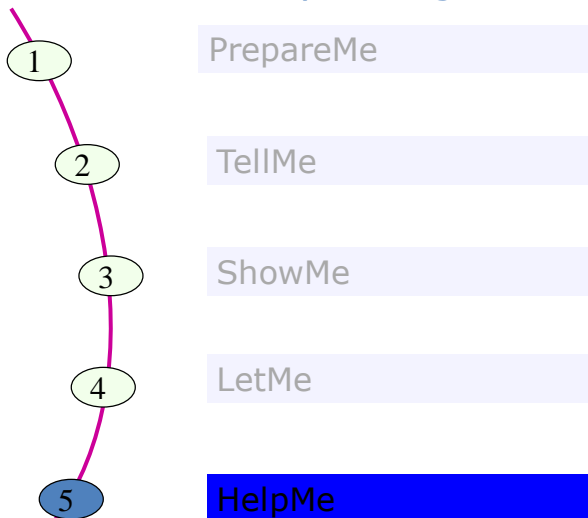
Do the following-

Step 1: Display the two materials and make a note of the base unit of measure.

Step 2: Transfer 10 pc from material A from plant 1000, storage location 0001, to material B Plant 1000, storage location 0001 (movement type 309).
Display the accounting document and make a note of the accounts to which postings have been made.



Inventory Management





About Tables

Some Standard SAP Tables-

Data are stored in tables in SAP, whenever a transaction data is being processed

Pressing the F1 key and then pressing the 'Technical Information' key will give the name of the field, but usually it gives the name of structure.

The enclosed document in MS-Word gives the list of Standard tables and some tables which are really useful.



Test Your Knowledge



1. For which functions can you use MIGO? *Choose the correct answer(s).*

- A Enter a goods receipt with reference
- B Enter a transfer posting without reference
- C Create a reservation
- D Display a purchase order
- E Display a material document
- F Delete a material document

2. Which master data must exist in the SAP system for the automatic creation

- A Bill of material (BOM)
- B Material master record
- C Outline agreement
- D Source list
- E Purchasing info record
- F Vendor master record

Test Your Knowledge



3. Which of the following statements regarding other goods receipts is correct?
Choose the correct answer(s).

- A Other goods receipts are receipts that cannot reference another document.
- B These goods receipts are always non-valuated.
- C The free-of-charge delivery does not belong to this form of goods receipt.
- D A initial stock balance entry is an other goods receipt.
- E You can enter a value manually for some of these goods receipts.

4. You enter a goods receipt against a production order. Which movement type do you choose if you wish to post the receipt to blocked stock? *Choose the correct answer(s).*

- A 105
- B 505
- C 525
- D 101
- E 501
- F 521

Test Your Knowledge



5. What prerequisites must be fulfilled for the automatic generation of purchase orders?
Choose the correct answer(s).

- A A reference purchasing organization must be assigned to the plant.
- B Automatic PO generation must be allowed for the movement type.
- C Automatic PO generation must be allowed for the plant.
- D A purchasing info record must exist for the combination vendor .material . standard purchasing organization.
- E The material must be managed as a valuated material.
- F The material must be managed as a non-valuated material.

6 . Which of the following statements is/are correct? Choose the correct answer(s).

- A A stock transfer between storage locations is not relevant to accounting.
- B A stock transfer changes the properties of the material.
- C You can enter stock transfers using the transaction MIGO.
- D You can only carry out stock transfers using the one-step procedure.
- E You can only carry out stock transfers using the two-step procedure.
- F When the material is removed from storage, it is posted to stock in transfer.
- G Stock in transfer is assigned to the issuing storage location.

Test Your Knowledge



7. Which of the following statements is correct? *Choose the correct answer(s).*

- A. For reservations, you can only post goods movements if the *Final issue indicator is not set*.
- B For reservations, you can only post goods movements if the *Final issue indicator is not set and the movement allowed indicator is set*.
- C For reservations, you can only post goods movements if the *Movement allowed indicator is set*.
- D Only automatically-created reservations are relevant for planning.

Answers



1 For which functions can you use MIGO?

Answer: A, B, E

With the MIGO transaction, you can enter goods movements (receipts/issues and transfer postings) with and without reference to reference documents. You can also display and cancel material documents (material documents cannot be deleted as they are used for the documentation of goods movements). You cannot process or display purchase orders and reservations directly with transaction MIGO; it is only possible to display material documents.

2. Which master data must exist in the SAP system for the automatic creation of a PO at the time of goods receipt?

Answer: B, E, F

For the automatic creation of a purchase order, the system needs the material master record for the plant and storage location, the vendor master record, and the purchasing information record for the standard purchasing organization.

3. Which of the following statements regarding other goods receipts is correct?

Answer: A, D, E

In the case of goods receipts without reference, initial entries of stock balances, GRs without POs, or GRs without production orders are valued if the movement involves a valued material. When we speak of a delivery free-of-charge, we mean that the goods are received from a vendor without having been ordered and do not have to be paid for. Therefore, there is no purchase order in SAP R/3 that can be referenced when you enter the goods receipt.

You can determine whether an .external amount in domestic currency. Can be specified via the field control for the movement type.

Answers



4. You enter a goods receipt against a production order. Which movement type do you choose if you wish to post the receipt to blocked stock?

Answer: D

In the case of a goods receipt against a production (or purchase) order, it is not the movement type that determines the stock type to which the posting is made. Instead, you have to additionally specify the stock type. In the standard

5. What prerequisites must be fulfilled for the automatic generation of purchase orders? Choose correct answer(s).

Answer: B, D, E

A standard purchasing organization must be assigned to the plant, not a reference purchasing organization (this is needed for special contracts in purchasing).

6. Which of the following statements is/are correct?

Answer: A, C, F

7. Which of the following statements is correct?

Answer: C