

Reading Sample

This sample chapter describes the process of goods receipt in the warehouse, from the creation of an inbound delivery to using transfer orders. It also provides real-world business examples to accompany the step-by-step instructions.

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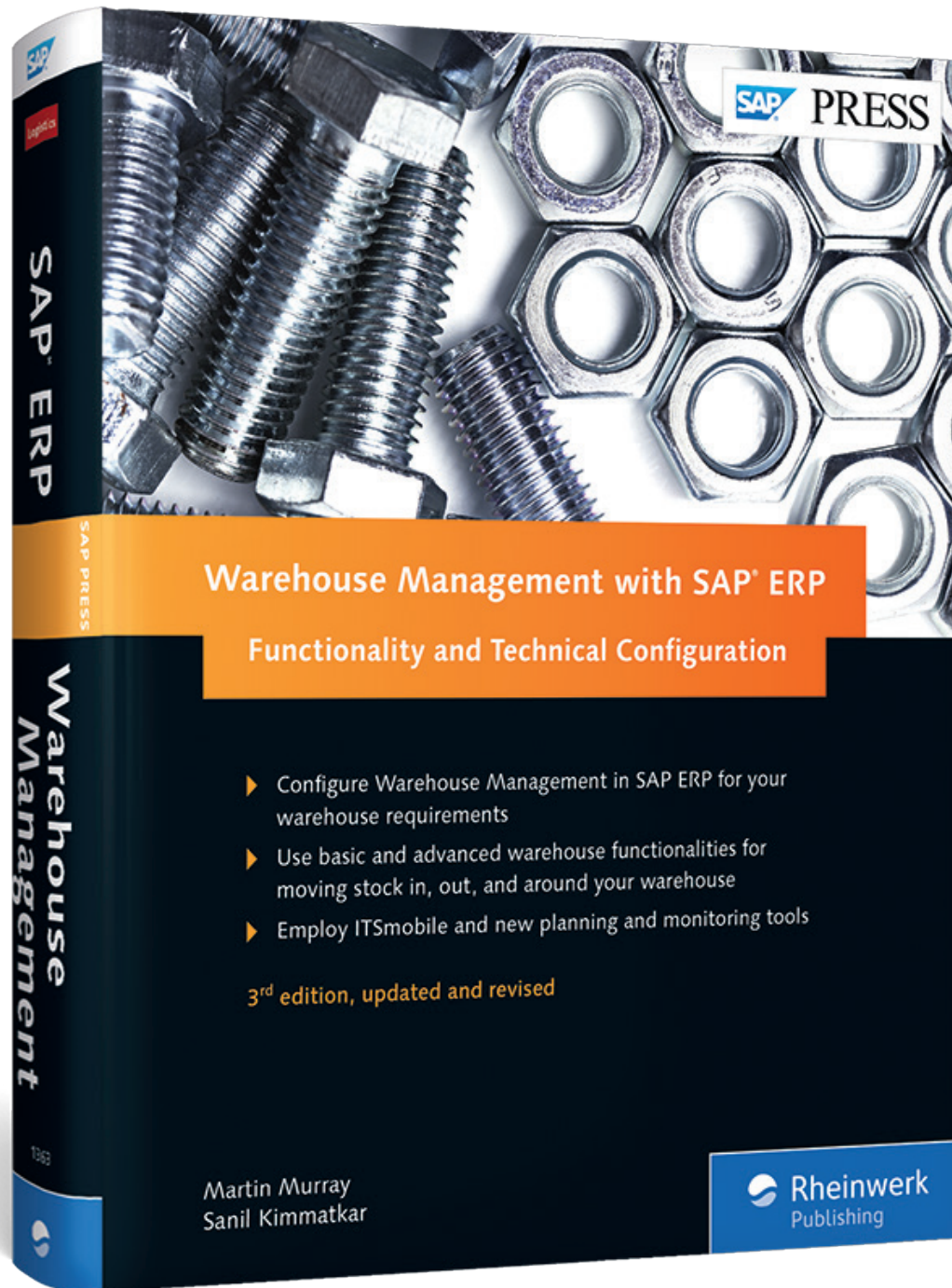
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The warehouse receives the material, and most of the material is received into IM, which creates a transfer requirement and then a transfer order in WM. It is important to ensure that the material is moved into the warehouse stock correctly.

4 Goods Receipts

In warehouse management, a goods receipt is the movement of material into the warehouse from an external source, such as a supplier, another manufacturing site, a distribution center, or customer returns, and it could also be from a production or work order, and so on. The warehouse management functionality checks the goods receipt for accuracy and then processes it, moving the material into the warehouse and increasing the stock levels of the material received. A goods receipt into the warehouse is triggered by one of two documents:

- ▶ A goods receipt posting in inventory management or production planning
- ▶ An inbound delivery if handling unit management, or an external system is used

Now that we have introduced the concept of goods receipts, we can go on to discuss in detail the goods receipt process with inbound deliveries.

4.1 Goods Receipt with Inbound Delivery

An inbound delivery is a document containing all the data required for building and completing the inbound delivery process. This process starts upon receipt of the material at the receiving dock and ends with the putaway of the material in a storage bin in the warehouse.

An inbound delivery can be created for several processes:

- ▶ Purchase order
- ▶ Stock transport order
- ▶ Customer return

Let's now jump into the first steps of creating an inbound delivery.

4.1.1 Creating an Inbound Delivery

To create an inbound delivery, a confirmation control key needs to be assigned to every line item of the associated purchase order. Once the confirmation control key is assigned to an item, additional goods receipt is not possible for that item. The confirmation control key monitors the behavior of the confirmation type, for example, order acknowledgment, rough GR, or shipping notification. A new confirmation key is configured by following the menu path IMG • MATERIALS MANAGEMENT • PURCHASING • CONFIRMATIONS • SET UP THE CONFIRMATION CONTROL KEY.

Figure 4.1 shows the creation of the confirmation control key; once configured, the next step is assigning it manually or automatically based on the combination of document category, document type, plant, and storage location. Configuration can be maintained following the path IMG • LOGISTICS EXECUTION • SHIPPING • DELIVERIES • DEFINE ORDER CONFIRMATIONS FOR INBOUND.

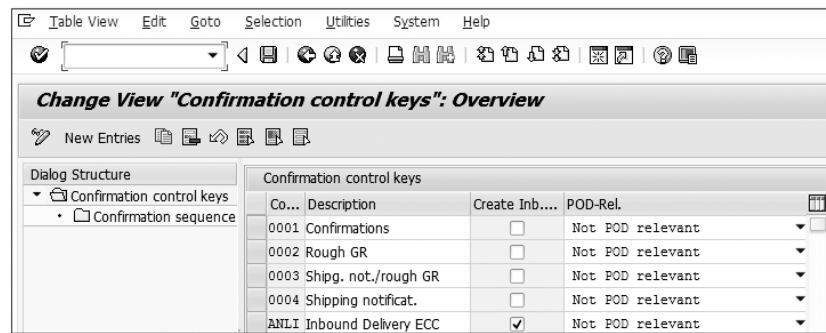


Figure 4.1 The Configuration of the Confirmation Control Key

Figure 4.2 shows the assignment of a confirmation control key to a purchase order. Here, you can see that an inbound delivery is required prior to receiving the materials. Goods receipt to a purchase order is no longer possible because we assigned this confirmation control key to the purchase order.

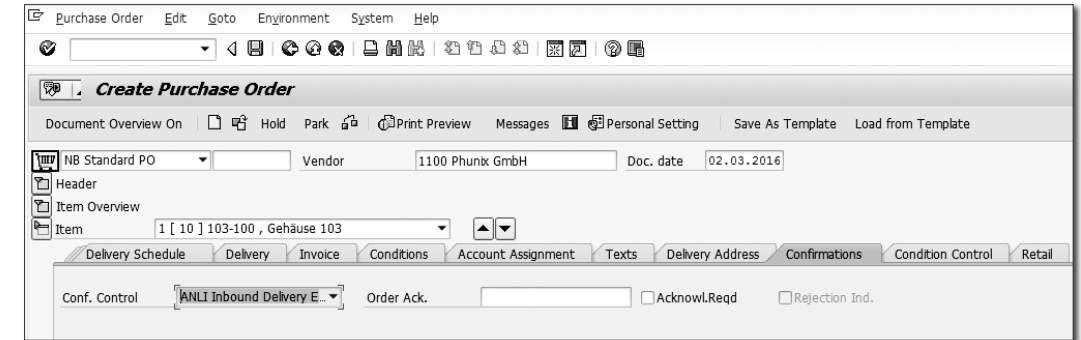


Figure 4.2 Assignment of the Confirmation Control Key to the Item

Figure 4.3 shows how you can also create an inbound delivery manually using the information from a vendor regarding a single purchase order for which the vendor is supplying the material. The transaction to create a manual inbound delivery is Transaction VL31N, which you can find by following the menu path SAP • LOGISTICS • LOGISTICS EXECUTION • INBOUND DELIVERY • INBOUND DELIVERY • CREATE • SINGLE DOCUMENTS.

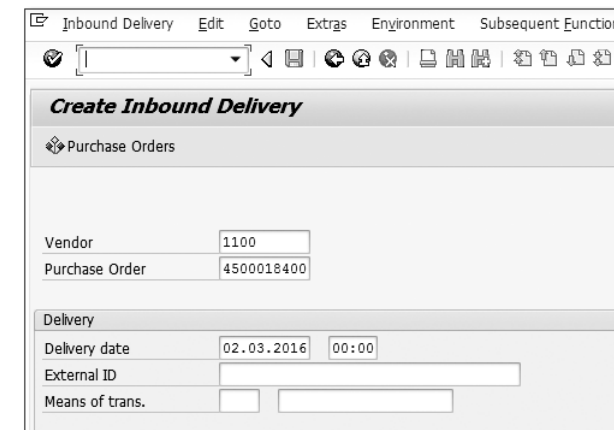


Figure 4.3 Initial Screen for Manually Creating an Inbound Delivery: Transaction VL31N

Figure 4.4 shows the item overview for the inbound delivery being created. The delivery quantity and the item number have been entered, with the purchase order entered in the reference document field. The delivery item category field

has been filled with ELN, which is used for inbound deliveries. The system proposes this value, but you can change it. The value determines how the line item is processed.

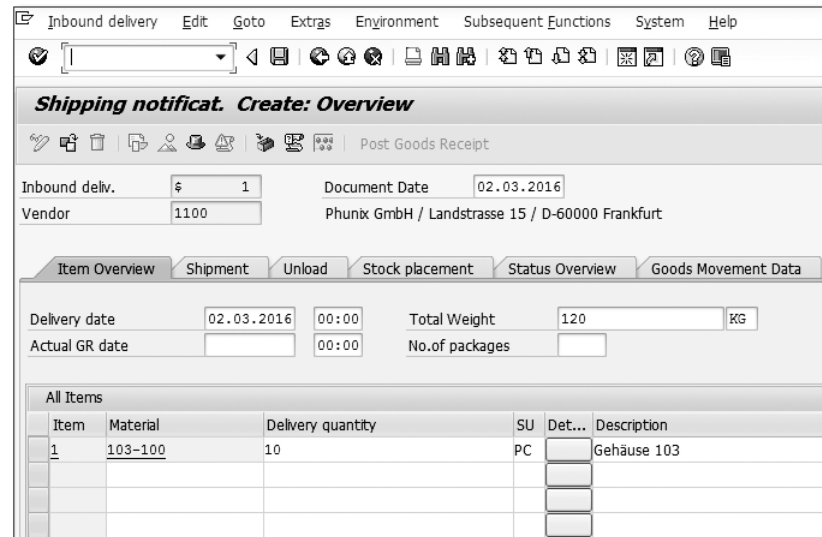


Figure 4.4 Item Overview Screen for Creating an Inbound Delivery: Transaction VL31N

Figure 4.5 shows the successful determination of the warehouse number for the receiving storage location and the triggering of the WM processes to put away the material in the warehouse.

If the receiving storage location is warehouse managed, the OVERLLWM status field gets updated with one of the status indicators. There are a total of four types of status indicators, as follows:

- ▶ Not relevant (blank): If the receiving storage location is not warehouse managed, the field will be blank.
- ▶ Not yet processed (A): No warehouse activity has been started, and the transfer order is yet to be created.
- ▶ Partially processed (B): Either the transfer order is created for only a partial inbound delivery document, or an open transfer order exists. The field will show partially processed until putaway is performed, and all the line items of the transfer order are confirmed.

- ▶ Completely processed (C): Once the putaway is performed and all the line items in the transfer order for the inbound delivery are confirmed, the status of the indicator gets updated to C.

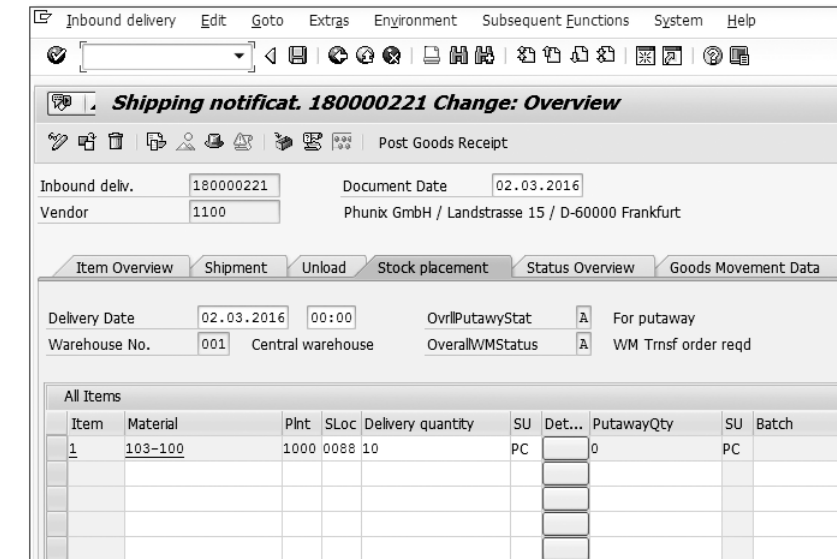


Figure 4.5 Stock Placement in Inbound Delivery

From this screen, the inbound delivery can be processed further, and an inbound delivery number is returned to the screen after posting.

4.1.2 Creating a Transfer Order for an Inbound Delivery

Once the inbound delivery is created, the transfer order needs to be created with reference to the inbound delivery document. The transfer order can be created either directly from the inbound delivery document or by following the menu path SUBSEQUENT FUNCTIONS • CREATE TRANSFER ORDER.

You can also use Transaction LTOF to create a transfer order for an inbound delivery. You can find the transaction by following the menu path SAP • LOGISTICS • LOGISTICS EXECUTION • INBOUND PROCESS • GOODS RECEIPT FOR INBOUND DELIVERY • PUTAWAY • CREATE TRANSFER ORDER • FOR INBOUND DELIVERY.

Figure 4.6 shows the initial screen to create a transfer order for an inbound delivery. The warehouse number and inbound delivery fields are required.

Figure 4.6 Initial Screen for Creating a Transfer Order for Inbound Delivery: Transaction LTOF

4.1.3 Using the Inbound Delivery Monitor

If you do not know the inbound delivery when using Transaction LTOF, you can use the inbound delivery monitor to display open and completed deliveries. You can also use the monitor to process inbound and outbound deliveries.

You can access the inbound delivery monitor through Transaction LTOF by clicking the DELIVERY MONITOR INB. DELIVERIES button on the initial screen. Otherwise, execute the inbound delivery monitor via Transaction VL06I or by following the menu path SAP • LOGISTICS • LOGISTICS EXECUTION • INFORMATION SYSTEM • GOODS RECEIPT • INBOUND DELIVERY LISTS • INBOUND DELIVERY MONITOR.

In Figure 4.7, the monitor offers several options. In this section, we are creating transfer orders based on goods receipts. Therefore, you should select FOR GOODS RECEIPT on the monitor.

Figure 4.7 Initial Selection Screen for Inbound Delivery Monitor: Transaction VL06I

Figure 4.8 shows the selection fields that can be filled in to search for particular inbound deliveries based on the following search criteria. These are as follows:

- ▶ **PO DATA**
A range of the purchase order and purchase order item
- ▶ **TIME DATA**
The delivery date entered into the inbound delivery document
- ▶ **PUTAWAY DATA**
The storage location and warehouse number, with an option to check at the header level (LIKP) or at the item level (LIPS)
- ▶ **PARTNER DATA**
Vendor number or the range of vendor numbers from whom the delivery is supposed to be received.
- ▶ **DOC. DATA**
Can be a range of inbound delivery number or vendor ID number.

Figure 4.8 Inbound Delivery Monitor for Goods Receipts Selection Screen

The other two radio buttons in this area refer to warehouse checks at the header or item level.

If the CHECK AT HEADER LEVEL radio button is selected, then the system will find only inbound deliveries that have warehouse numbers in the header that meet the selection criteria.

If the CHECK AT ITEM LEVEL radio button is selected, then all deliveries that include at least one item that meets the warehouse number criteria are selected. Let's take a look at these criteria next.

Once all the search criteria have been entered into the search, you can execute the transaction by choosing PROGRAM • EXECUTE or pressing **F8**.

After the data is entered into the selection criteria, the resulting inbound deliveries, shown in Figure 4.9, are found to have met those criteria. You can create a transfer order from a chosen inbound delivery by selecting SUBSEQUENT FUNCTIONS • CREATE TRANSFER ORDER.

Delivery	Deliv.date	Vendor	Name of vendor
180000209	11.10.2015	100495	texas vendor1
180000210	12.10.2015	100495	texas vendor1
180000211	12.10.2015	100495	texas vendor1
180000212	13.10.2015	100495	texas vendor1
180000213	14.10.2015	100503	ABC Trader
180000214	14.10.2015	100495	texas vendor1
180000215	30.10.2015	100503	ABC Trader
180000216	13.11.2015	100495	texas vendor1
180000217	13.11.2015	100495	texas vendor1
180000218	13.11.2015	100495	texas vendor1
180000219	13.11.2015	100495	texas vendor1
180000220	13.11.2015	100495	texas vendor1
180000221	02.03.2016	1100	Phunix GmbH

Figure 4.9 Search Results for Goods Receipt for Inbound Deliveries from Inbound Delivery Monitor

If you are trying to create a transfer order for an inbound delivery, from the inbound delivery monitor screen, it will take you to Transaction LTO3 instead of LTOF. Figure 4.10 shows Transaction LTO3, which works exactly the same as Transaction LTOF; the main difference is that Transaction LTOF has additional section parameters that do not exist in Transaction LTO3.

Figure 4.10 Creation of the Transfer Order from Inbound Delivery

Once you have selected a parameter, the process of creating a transfer order is performed in the background. If the transfer order is created, the system generates a message that the transfer order either has or has not been created successfully.

If the transfer order has been created, you can see the document flow for the inbound delivery by selecting the inbound delivery from Figure 4.8 and choosing ENVIRONMENT • DOCUMENT FLOW.

Figure 4.11 shows the original inbound delivery. The transfer order has been created for the inbound delivery and is shown as an element of the document flow.

Document	On	Status
Delivery/shipping notification 0180000221		Completed
WMS transfer order 0000000223	02.03.2016	Completed
GR goods receipt 5000000943	02.03.2016	complete

Figure 4.11 Document Flow for Inbound Delivery 0100000720 Showing Created Transfer Order Number 81

Transaction LT21 enables the display of the transfer order, noted in the document flow for the inbound delivery.

Figure 4.12 shows the transfer order created for the inbound delivery. The system sets the confirmation flag because the transfer order was confirmed when it was created in the inbound delivery monitor.

Now that we have examined the goods receipt process with inbound deliveries, let's look at what happens when goods receipts are made without inbound deliveries.

Item	Material	C.. C.	Typ	Stor. Bin	Dest. qty	A... R...	Dest.storage unit
1	103-100	001	03-09-05		10	PC	

Figure 4.12 Display of Transfer Order Created for Inbound Delivery: Transaction LT21

4.2 Goods Receipt without an Inbound Delivery

A goods receipt without an inbound delivery can occur when the material arrives at the receiving dock without any former notification or inbound delivery. The goods receipt occurs in IM, and a transfer requirement is created for the movement of the material in the warehouse.

4.2.1 Goods Receipt in IM

Goods receipts relevant to a warehouse management system can be produced by the arrival of a material at the plant from a purchase order with a vendor.

A goods receipt is a formal way of receiving the inventory in the own stock. The goods receipt can be executed mainly by a purchase order, stock transport order, and customer returns order. Goods receipts can be valued, or non-valuated goods receipts depend on the type of movement, which is controlled by movement type.

The goods receipt can be executed via Transaction MB31 or MIGO, which you can access via the menu path SAP MENU • LOGISTICS • MATERIALS MANAGEMENT • INVENTORY MANAGEMENT • GOODS MOVEMENT • GOODS RECEIPT • FOR PURCHASE ORDER • GR FOR PURCHASE ORDER.

Figure 4.13 shows the goods receipt for a purchase order of material 1157. It also shows the quantity of material that will be receipted into plant 1000 and the goods receipt type 101, which represents a goods receipt for a purchase order.

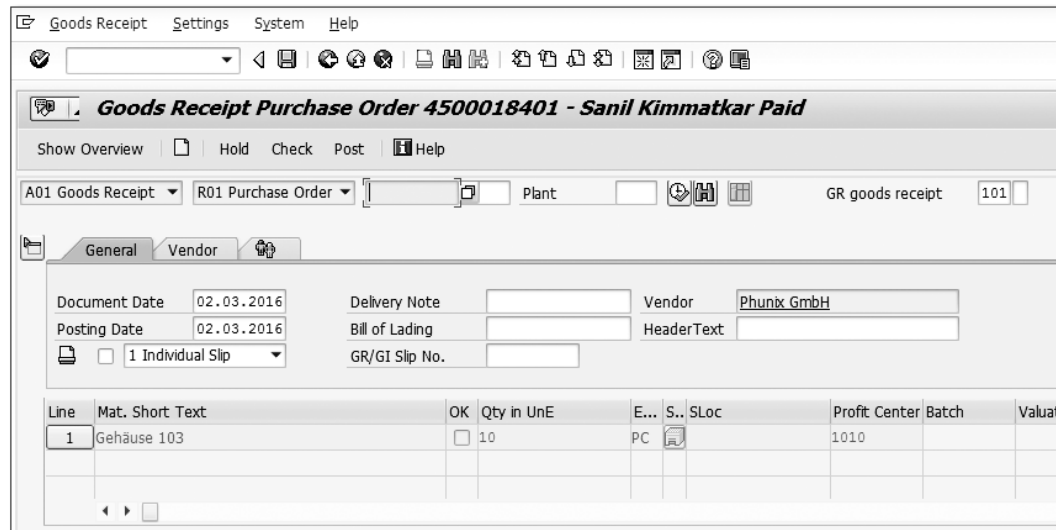


Figure 4.13 Goods Receipt for Purchase Order in IM: Transaction MIGO

Based on the configuration of warehouse assignment to the storage location, if the system determines that the receiving storage location is warehouse managed, it opens an additional WM tab in the item details.

Figure 4.14 shows the opening of a WM tab. Additional WM fields are now visible, which play a very important role in controlling the warehouse processes.

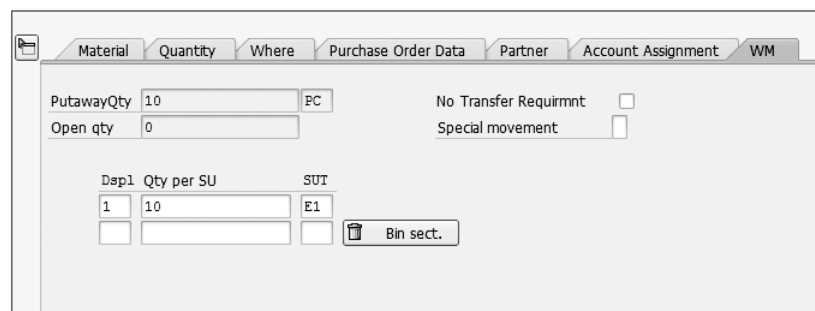


Figure 4.14 Warehouse Management Tab on Transaction MIGO

4.2.2 Reviewing the Material Documents

After all the relevant details, such as storage location, batch number, and so on, have been added to the goods receipt transaction, the goods receipt can be posted. If the goods receipt does not return any error messages, the transaction will post and display the number of the material document for the movement of the material.

To view the material document, use Transaction MB03, which you can find by following the menu path SAP MENU • LOGISTICS • MATERIALS MANAGEMENT • INVENTORY MANAGEMENT • MATERIAL DOCUMENT • DISPLAY. On the initial screen, enter the material document number displayed after the goods receipt posted and the year, as shown in Figure 4.15.

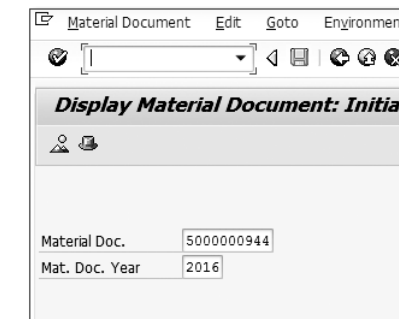


Figure 4.15 Initial Screen for Displaying a Material Document: Transaction MB03

The material document can also be viewed using Transaction MIGO. On the initial screen, set TRANSACTION/EVENT to A04 DISPLAY and REFERENCE DOCUMENT to R02 MATERIAL DOCUMENT, as in Figure 4.16. SAP keeps the material document number in the buffer; if not, the material document number needs to be entered. Click EXECUTE.

Based on the configuration of number ranges of the material document, you can have same material document number exist in more than one year. Therefore, SAP may ask you to select/enter the year.

Figure 4.16 displays the material document created from the goods receipt. Since the receiving location is warehouse managed, it opens a WM tab on the line item detail section for displaying values for warehouse processes, as shown in Figure 4.17.

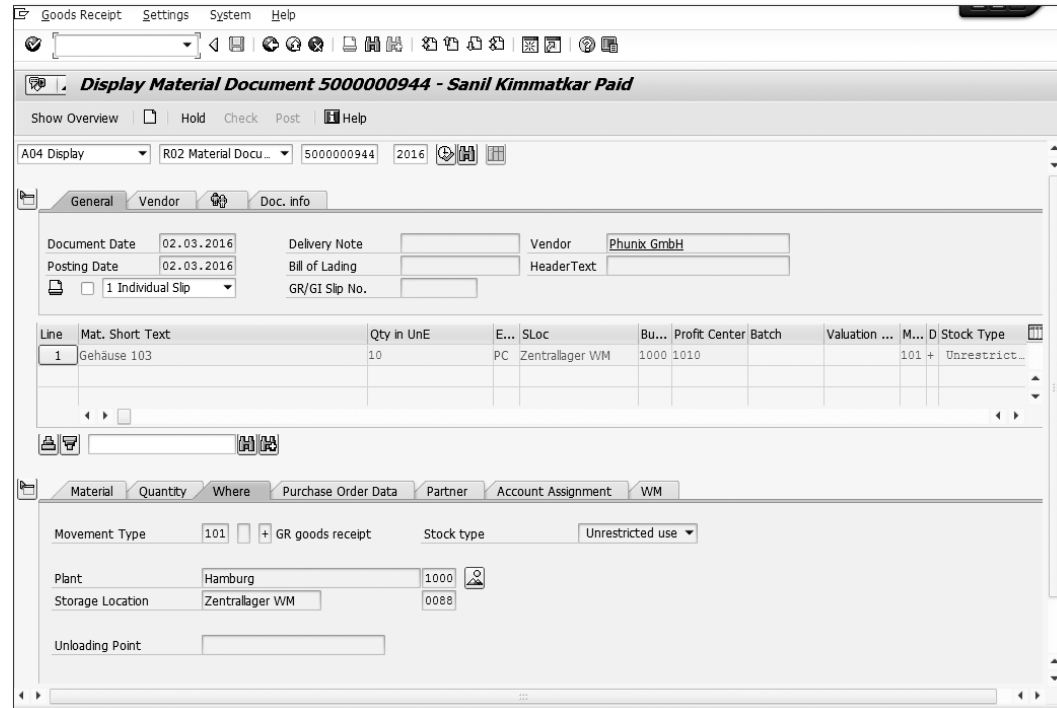


Figure 4.16 Display Material Document in the Transaction MIGO

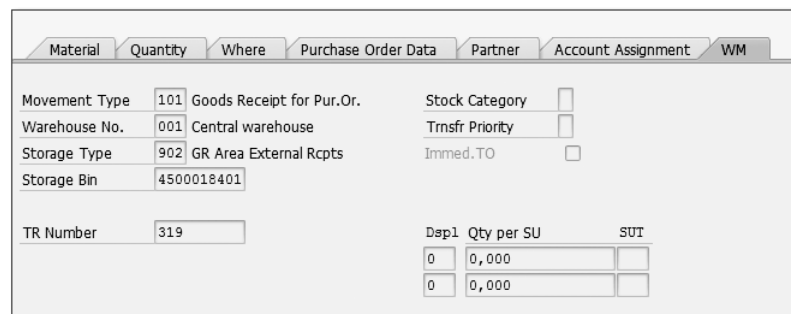


Figure 4.17 Display of the WM Tab in the Material Document

Figure 4.17 shows the WM tab displaying values for warehouse processes. Let's discuss each value in detail:

- ▶ **MOVEMENT TYPE**
Warehouse management movement type assigned as the part of the configuration of the inventory management movement type to the warehouse management movement type.
- ▶ **STOCK CATEGORY**
Category of the stock received, i.e., stock in quality control, returns, blocked, or available stock.
- ▶ **TRNSFR PRIORITY**
Priority selected from the reference WM movement type assigned: the smaller the number, higher the priority. The priority will be copied over to the transfer order.
- ▶ **IMMED.TO**
If the immediate TO is checked, the system will create a TO immediately upon the posting of the goods receipt.
- ▶ **WAREHOUSE NO.**
Warehouse number determined by SAP based on the assignment in table T320.
- ▶ **STORAGE TYPE**
Interim storage type determined from the warehouse movement type. It is the interim location where the stock is currently stored until the putaway to the warehouse is completed. Normally, this is the receiving dock of the warehouse.
- ▶ **STORAGE BIN**
The interim storage bin determined from the WM movement type. This is the storage bin in the interim storage type.

After the material document number and the fiscal year have been entered, the material document can be displayed.

Figure 4.18 shows the material document that was created during the processing of the goods receipt for a purchase order. The material document shows the material, plant, storage location where the material will be stored, purchase order number, batch number of the material being receipted, and movement type of the goods receipt that produced the material document.

In addition, the material document contains an option to show the accounting documents created because the material was received at the plant and moved into stock. The company, therefore, assumes financial liability for the material.

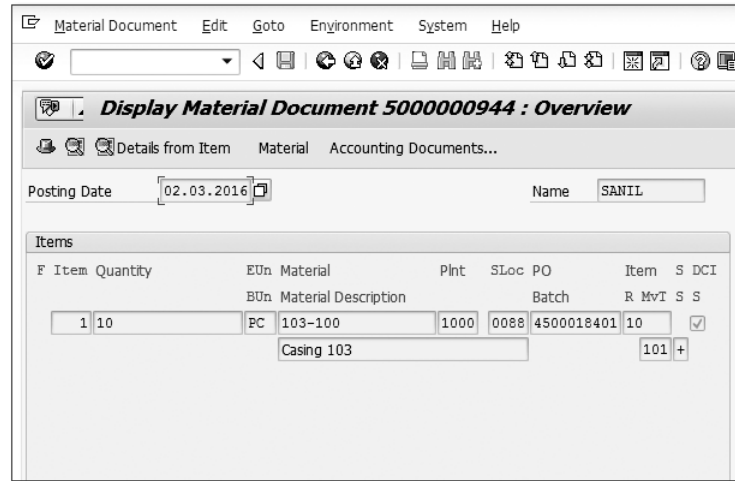


Figure 4.18 Display of Material Document Created by Goods Receipt for Purchase Order

To display the financial document, you can either go directly from the material document by clicking the accounting document on the top right-hand side of the screen, or execute Transaction FB02, which can be accessed via menu path SAP MENU • ACCOUNTING • FINANCIAL ACCOUNTING • ACCOUNTS PAYABLE • DOCUMENT • DISPLAY.

Figure 4.19 shows the accounting document relevant to the goods receipt of the material from the purchase order.

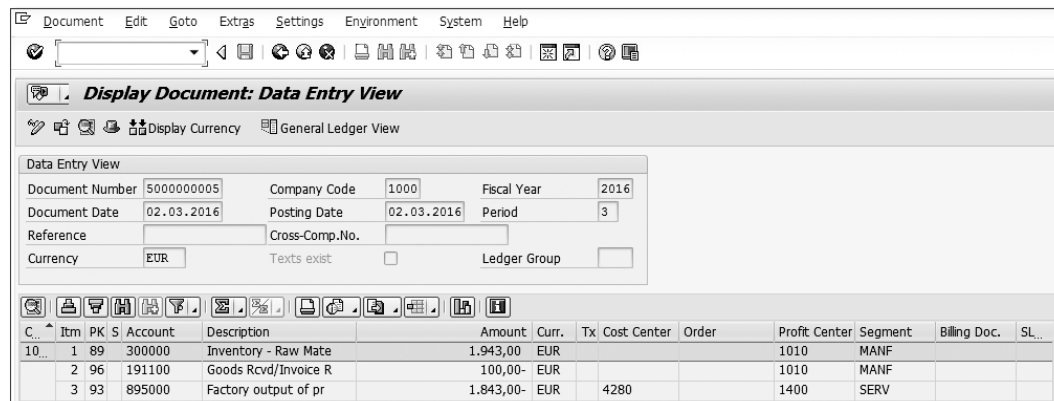


Figure 4.19 Display of Accounting Document Created as Part of Goods Receipt of Purchase Order

4.2.3 Reviewing Stock Levels after Goods Receipt

Once the goods receipt of the purchase order into inventory is complete, you can perform a stock overview to show the material in stock. To execute the stock overview, use Transaction MMBE, which you can access via the menu path SAP MENU • LOGISTICS • MATERIALS MANAGEMENT • INVENTORY MANAGEMENT • ENVIRONMENT • STOCK • STOCK OVERVIEW.

The stock overview screen shows the material that has been posted as a result of the goods receipt. The information regarding material 103-100 is shown in the stock overview, as you can see in Figure 4.20.

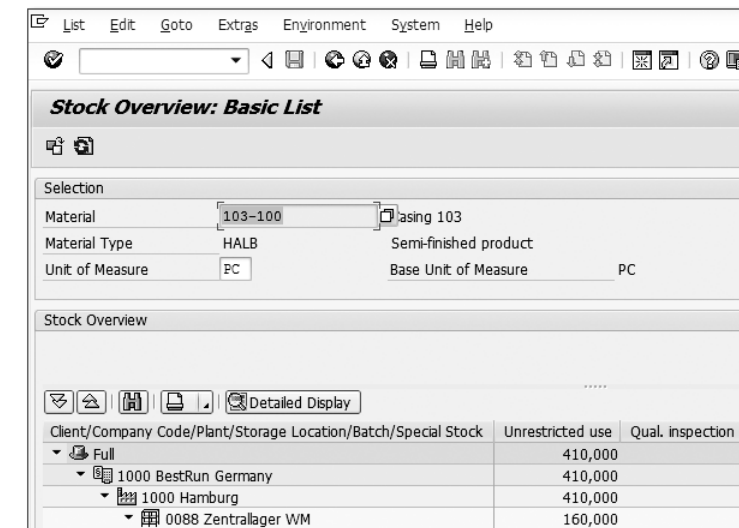


Figure 4.20 Stock Overview of Material in All Stock Locations: Transaction MMBE

4.2.4 Displaying the Transfer Requirement

The goods receipt of the material from the purchase order has been receipted into stock, as shown by the material documents and the stock overview program. This information reflects the movement into the stock location relevant to IM, but not the movement relevant to WM.

When the movement into the storage location was made, a transfer requirement was created, as the storage location is warehouse managed. You can find the transfer requirement by using Transaction LB11, which allows for a search of the

transfer requirements for the material document. To find this transaction, follow the menu path SAP MENU • LOGISTICS • LOGISTICS EXECUTION • INTERNAL WAREHOUSE PROCESSES • TRANSFER REQUIREMENT • DISPLAY • FOR MATERIAL.

Figure 4.21 shows the initial screen of Transaction LB11. Enter the material document, year, and warehouse number. By default, the system remembers the material document number in the buffer; if there is no material document number in the buffer, you can go to the Transaction MB51 to find it.

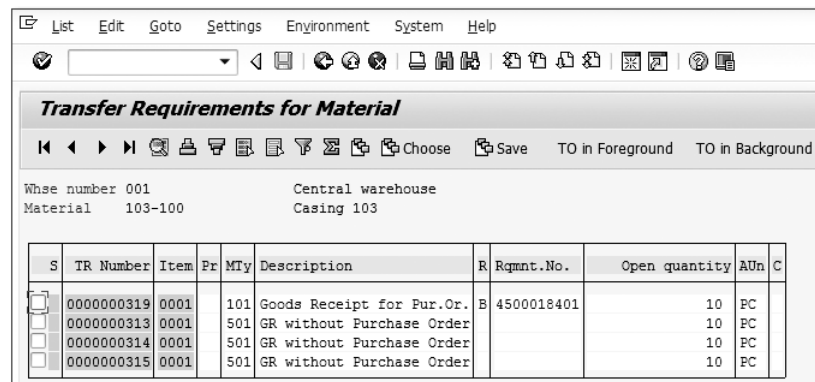


Figure 4.21 Display of Transfer Requirements for Single Material: Transaction LB11

Figure 4.22 shows the transfer requirement found using the material document number. The transfer requirement has been created as a result of the goods receipt for the purchase order. The line item shows the transfer requirement number, movement type, and description that created the transfer requirement, the purchase order number that has been receipted into stock, and the quantity of the transfer requirement.

Now that we have identified the transfer requirement, we can convert it to a transfer order. As Figure 4.22 shows, there are two ways to do this. You can create a transfer order in the foreground or the background.

To convert to a transfer order in the foreground, click the TO IN FOREGR. button or press [F8]. You can also create the transfer order by selecting TO IN FOREGROUND. To convert a transfer order in the background, click TO IN BACKGR. or press [F7].

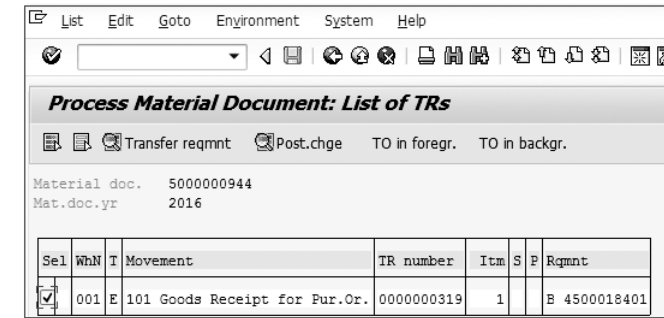


Figure 4.22 Create Transfer Requirement into Transfer Order

Figure 4.23 shows the first screen displayed after you click the TO IN FOREGROUND button. You can put away the stock in the foreground or background. If you wish to put away manually in the foreground, click PUTAWAY IN FOREGROUND or press [F5]. You can enter the storage type, section, and bin manually. If you want the system to put away based on defined putaway strategies, you can click PUTAWAY IN BACKGROUND or press [F6].

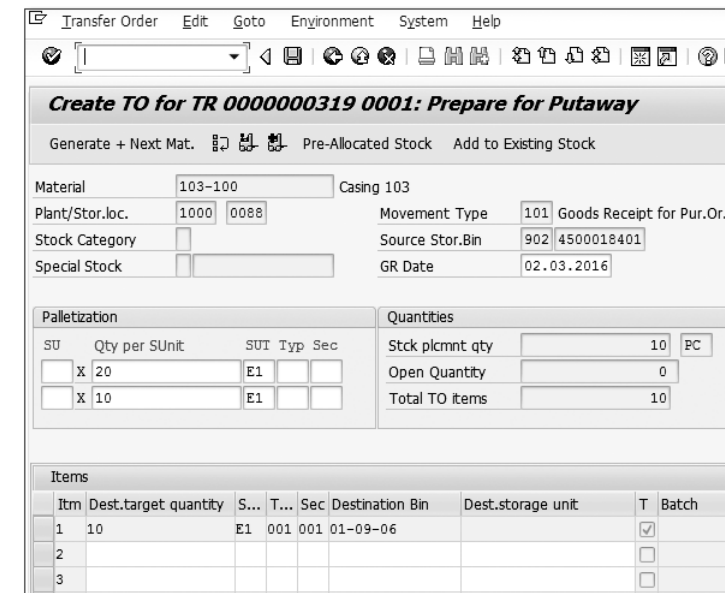


Figure 4.23 Conversion of Transfer Requirement to Transfer Order: Transaction LB11

You can review and change the information if necessary and then click the **GENERATE + NEXT MAT.** button to complete the line item.

Figure 4.24 shows the transfer order that has been created from the information shown in Figure 4.23. You can post the transfer order by selecting **TRANSFER ORDER • POSTING** or pressing **Ctrl+S**.

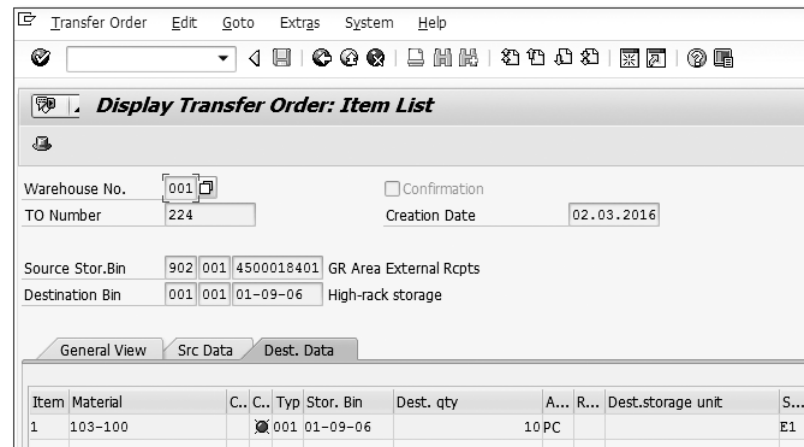


Figure 4.24 Display of Transfer Order Created from Transfer Requirement

Once the transfer order has been posted, the system returns to the display of transfer requirements, as shown in Figure 4.22, and the transfer order number is displayed at the bottom of the screen.

4.2.5 Background Transfer Order Creation

A transfer order can be created immediately after the posting of the goods receipt or automatically using the background report. In both cases, you can have the mail control configuration for sending the message in the case of an error; this way, you can have the system inform the document user who posted the goods receipt or other users.

Immediate Transfer Order Creation

If you decide to create a transfer order in the background, the system will try to create a transfer order directly after the goods receipt posting. This means that

system will not only try to create a transfer requirement, but also subsequently try to create a transfer order. An immediate transfer order can help promote continuity of the warehouse movements. You may decide to use this process during the configurations of assigning the warehouse management movement type to the reference moment type table (T321) via the menu path **IMG • LOGISTICS EXECUTION • WAREHOUSE MANAGEMENT • INTERFACES • INVENTORY MANAGEMENT • DEFINE MOVEMENT TYPE**.

Figure 4.25 shows the table where immediate TO creation can be activated. To activate immediate TO, select option **A** from the dropdown menu in the **IMMED TO CREATION** field.

The screenshot shows the SAP 'Table View' window with the title 'New Entries: Overview of Added Entries'. The table below is the configuration table for activating immediate TO creation.

W..	R...	SpStInd	M...	S	SpMvID	S...	M...	T..	C...	Imm...	Ma...	GR D...	Add...	Ship-to pa...
001	101		B					101	X	<input type="checkbox"/> A				
001	101		B	E				101	X	<input type="checkbox"/> A				
001	101		B	K				101	X	<input type="checkbox"/> A				
001	101		B	Q				101	X	<input type="checkbox"/> A				

Figure 4.25 Table for Activating Immd TO Creation

If the value **X** is selected in the **IMMED TO CREATION** field, the system will call the transfer order creation screen upon the posting of a goods receipt. This will not create a transfer order, but will take you to the create transfer order screen Transaction **LT04** upon the posting of goods receipts.

Automatic Transfer Order Creation

If you decide to use automatic TO creation, the system will not create transfer orders immediately but will wait for the schedule background report **RLAUTA10** to run and convert the transfer requirements to transfer orders. This delay process is based on the frequency of the background job. The system first sets the predefined indicator in the transfer requirement. This predefined indicator is passed over from the warehouse management movement type to the warehouse document, for example, transfer requirement. To activate the **WM** movement

type for automatic TO creation, the AUTOMATIC TO indicator need to be configured and assigned to the WM movement type. Figure 4.26 shows the creation of the AUTOMATIC TO indicator.

To configure the AUTOMATIC TO indicator, follow menu path SAP IMG • WAREHOUSE MANAGEMENT • ACTIVITIES • TRANSFER • SET UP AUTOM.TO. CREATION OF TRS/POSTING CHANGE NOTICE.

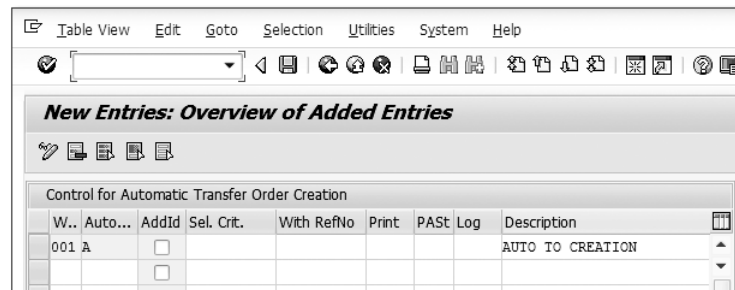


Figure 4.26 Configuration of Automatic TO Indicator

To assign the AUTOMATIC TO indicator, located under BACKGROUND PROCESSING, to the warehouse management movement type, use menu path SAP IMG • LOGISTICS EXECUTION • WAREHOUSE MANAGEMENT • ACTIVITIES • DEFINE MOVEMENT TYPE.

Upon the posting of the goods receipt, the system creates a transfer requirement with a WM movement type. If the WM movement type has an AUTOMATIC TO indicator, the system assigns the indicator to the AUTOMATIC TO field (LTBK-AUTTA) in the header data of the transfer requirement, as shown in the Figure 4.27.

Lastly, the automatic transfer order report (RLAUTA10) needs to be scheduled to run periodically in the background. A variant needs to be set up for each occurrence. This way, separate repetitive cycle and starting times can be defined for each indicator. Once the job runs for a specific variant, it checks for all open transfer requirements for the AUTOMATIC TO indicator assigned in the variant and converts it into a transfer order. Refer to Chapter 13 for more on the background jobs and variants.

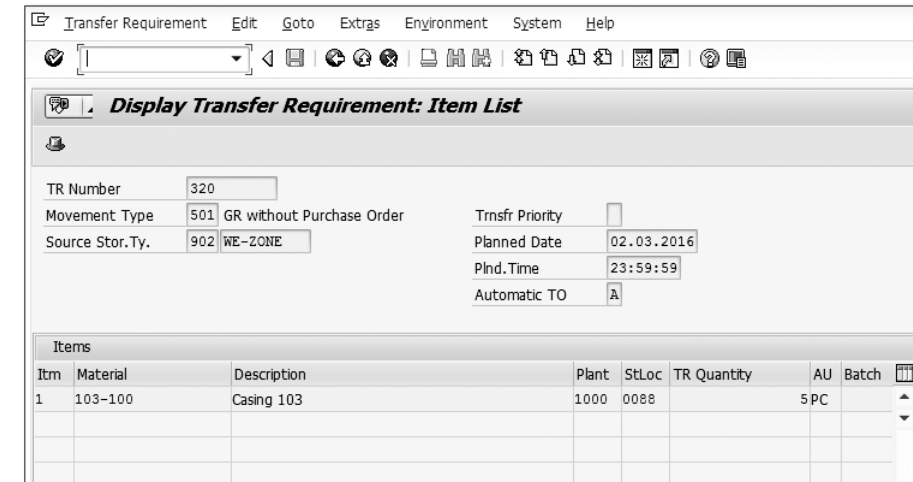


Figure 4.27 Display of Transfer Requirement with the Automatic TO Indicator

The following are the options available for converting transfer requirement into transfer orders:

- ▶ The system can create a transfer order for each transfer requirement.
- ▶ You can use a user exit to create a transfer order that meets a certain criterion, for example, a specific date or time.
- ▶ You can use the user exit for grouping the transfer requirement with certain criteria and create a transfer order for a group.

4.2.6 Displaying the Transfer Order

If you know the transfer order number, you can see the transfer order created by the conversion of the transfer requirement to a transfer order with Transaction LT21. If you know only the material, use Transaction LT24 or follow the menu path SAP MENU • LOGISTICS • LOGISTICS EXECUTION • INTERNAL WAREHOUSE PROCESSES • STOCK TRANSFER • DISPLAY TRANSFER ORDER FOR MATERIAL.

Figure 4.28 shows the initial selection criteria screen for displaying transfer orders. All the transfer orders can be displayed for a material in a warehouse. In this example, the transfer order created for the goods receipt of material 103-100 is being searched for, and the selection criteria reflect this.

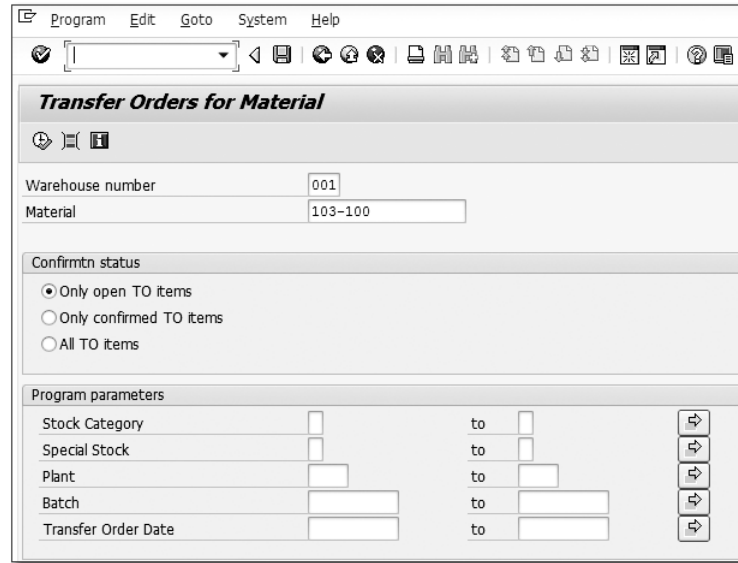


Figure 4.28 Initial Screen for Displaying a Transfer Order by Material Number: Transaction LT24

Figure 4.29 shows the transfer order that has been created for a purchase order that was receipted into the plant. A transfer requirement has been created to start the putaway in the warehouse. The conversion of the transfer requirement to the transfer order and the confirmation of the transfer order have moved the 10 units of material into warehouse storage bin 01-01-01 in storage type 002.

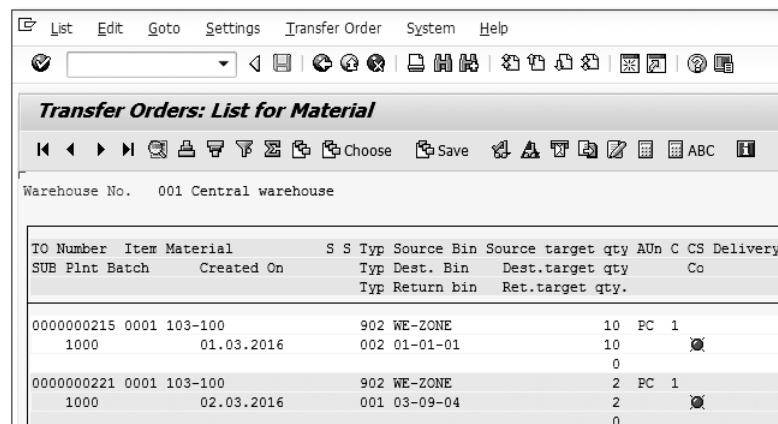


Figure 4.29 Display of Transfer Orders Available from Selection Criteria: Transaction LT24

Note
If you double-click the transfer order number, it will take you to the display transfer order screen, Transaction LT21.

4.2.7 Displaying the Transfer Order for the Goods Receipt

You can review the information in the transfer order by using Transaction LT21 to display the contents of the transfer order or following the menu path SAP MENU • LOGISTICS • LOGISTICS EXECUTION • INTERNAL WAREHOUSE PROCESSES • STOCK TRANSFER • DISPLAY TRANSFER ORDER • SINGLE DOCUMENT. The transaction requires that just the warehouse number and the transfer order number be entered to display the transfer order details.

Figure 4.30 shows the details of the line item in the transfer order created for the goods receipt. The material has been moved from storage type 902, storage section 001, and storage bin WE-ZONE to storage type 002, storage section 001, and storage bin 01-01-01. Note that the quantity of 10 has not been confirmed because the system has not selected the confirmation checkbox next to the warehouse number.

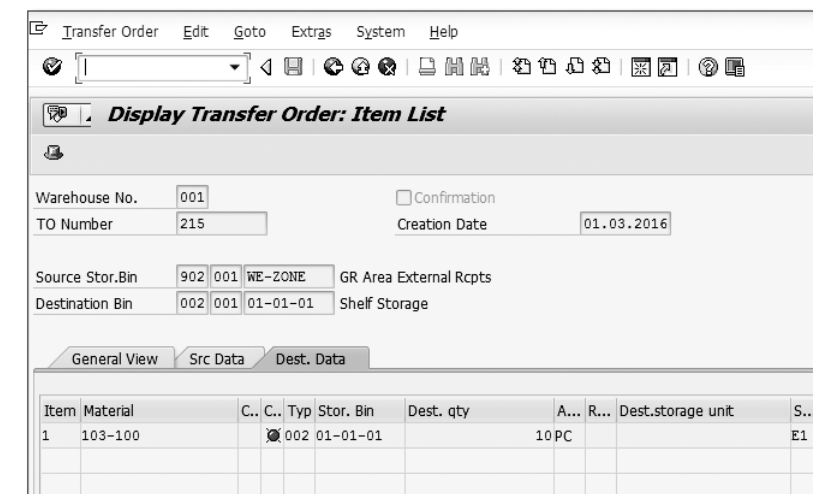


Figure 4.30 Display of Transfer Order Created for Material Goods Receipt without IM: Transaction LT21

4.2.8 Displaying the Stock Levels

Prior to the posting of the transfer order and the receipt of the material into the warehouse stock, you can review the stock levels for the material in the warehouse. To do this, use Transaction LS24 or follow the menu path SAP MENU • LOGISTICS • LOGISTICS EXECUTION • INTERNAL WAREHOUSE PROCESSES • BINS AND STOCK • DISPLAY • BIN STOCK PER MATERIAL.

Figure 4.31 shows the initial screen for Transaction LS24, which allows selections to be made to report on the stock levels for the material required. In this example, the display for stock levels of material 103-100 is limited to warehouse number 001, but for all storage types.

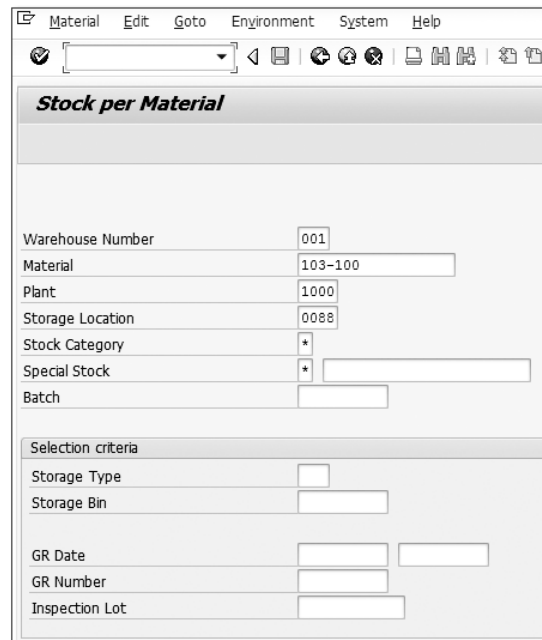


Figure 4.31 Initial Screen to Display a Transfer Order by Material

Figure 4.32 shows the stock levels for material 103-100. It shows that the material is located in the 902 receiving area that is not yet moved to storage type 002 and placed in bin 01-01-01. Therefore, the transfer order should be confirmed using Transaction LT12 or by following the menu path SAP MENU • LOGISTICS • LOGISTICS EXECUTION • INTERNAL WAREHOUSE PROCESSES • STOCK TRANSFER • CONFIRM TRANSFER ORDER • SINGLE DOCUMENT • IN ONE STEP.

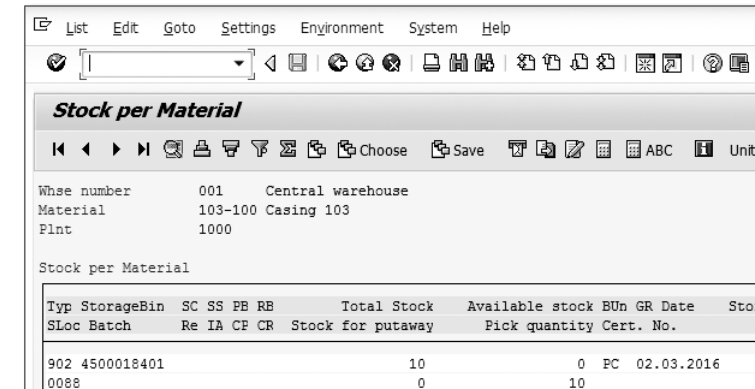


Figure 4.32 Display of Stock Levels for Material 1157 in Warehouse 001: Transaction LS24

Figure 4.33 shows the information required to confirm the transfer order and move the material from the goods receipt area to storage bin 01-01-01 in storage type 001.

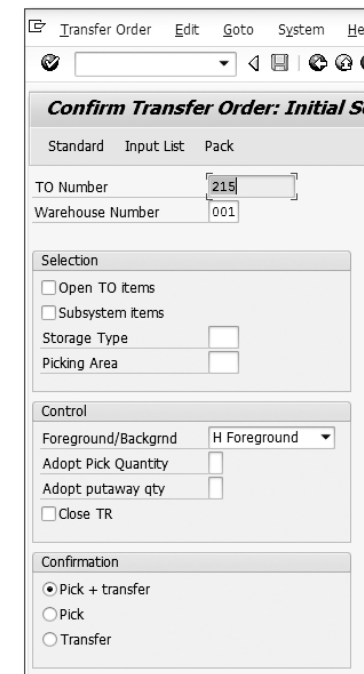


Figure 4.33 Initial Screen to Confirm Transfer Order: Transaction LT12

4.3 Business Examples: Goods Receipts

A goods receipt into the warehouse is a movement of material into the warehouse from an external source, which could be a production system, a vendor, and so on. The functionality checks the goods receipt for accuracy and then processes it, moving the material into the warehouse and increasing the stock levels of the material received.

4.3.1 Goods Receipt with Inbound Delivery

You can create an inbound delivery with reference to several processes, such as a purchase order, stock transport order, or customer return. Inbound deliveries are useful because they help the warehouse to find and allocate the storage bin in the warehouse and keep it ready before the material physically arrives in the warehouse. Once the materials arrive in the warehouse, a transfer order can be used, and putaway can be executed to the storage bin. Upon confirmation of the transfer order, a goods receipt can be posted to the inbound delivery. This helps to keep the inventory consistent between the warehouse and the inventory management.

For example, a manufacturer of elevator parts developed a goods receipt procedure for receiving raw materials used in its manufacturing process. Because the parts it manufactured had to pass strict quality control standards, the company had a goods receiving procedure that was equally as stringent. The raw material was received into a blocked stock area, where physical and chemical tests were performed. If the quality department approved the items, then the goods receipt was processed and received into the warehouse.

The process ensured that only materials meeting the specifications were received into the warehouse, but it was a lengthy process that only verified the results given to the company by the vendor. The length of the process was sometimes a problem because the material was needed for production orders that were about to commence. The production department became concerned that time and money were being wasted verifying the data supplied by vendors they had been working with for many years.

The supply chain management team reviewed the concerns of the production department and the purchasing and quality teams, who were equally apprehensive that items could be received that were not of sufficient quality.

The management worked with the most trusted vendors and proposed a revised procedure. Some vendors would allow testing of the parts at their facilities on a regular basis, and if the material passed, then inbound deliveries were created to expedite the goods receipt into the warehouse. The creation of an inbound delivery meant that the warehouse and quality departments spent less time and resources on receiving material that had already been tested.

4.3.2 Goods Receipt without an Inbound Delivery

A goods receipt for a delivery that is not an inbound delivery can occur when the vendor does not send any prior notification. Goods receipt without inbound delivery is recommended if the materials must be checked before putaway is executed in the warehouse. In this process, the stock is first goods-receipted in the inventory management, and then a transfer requirement and transfer order are created in the warehouse. This solution lacks synchronization between inventory and warehouse management because the stock is available in the storage location after goods receipt but not available in the warehouse until the putaway process is completed.

For example, a beverage company based in Austria purchased a small Polish regional beverage company. It was found that the vendor frequently sent late deliveries with quantities greater than the order quantity and a shorter shelf life. Warehouse staff was well aware of the issue, but due to the inbound process, goods receipt was still done after the transfer order was confirmed. It was extremely difficult and time consuming to remove the material from the warehouse and return it to the vendor after the stock was put away in the warehouse. The vendor was warned many times about the issues, but even after multiple warnings, the vendor still sent material that did not meet the company's standards. Finally, management decided to go with a zero tolerance policy.

The supply chain department decided to change the process and have the goods receipt executed before the putaway in the warehouse was executed. This process made sure that the bins were determined and allocated to the warehouse only after the stock was checked for quality, quantity, and delivery date. Only once the receiving stock met the standards could the transfer order be created.

The quality management module was interfaced with inventory management. Material masters were updated with tolerance limits for delivery date and quantity, and minimum shelf life was also assigned to the material masters. Once the

stock was received, the goods receipt was executed at the receiving dock that executed the quality process, and quantity, delivery date, and shelf life were checked to confirm whether they fell within the company's standards. Once all checks were successful, the putaway process was executed. If the receiving stock did not meet any criteria, an error message was generated, goods receipt was not possible, and stock was returned to the vendor.

4.4 Summary

The material is receipted into stock using purchase orders or production orders. The material can easily be goods-receipted using inventory management, but several steps are needed to move and store the material in WM. This chapter explained the procedures required when the material is brought into the warehouse, either as a normal receipt or as a receipt that involves handling units.

Chapter 5 will examine the opposite of goods receipt: goods issue. Moving the material from the warehouse involves a variety of procedures that you should understand clearly.

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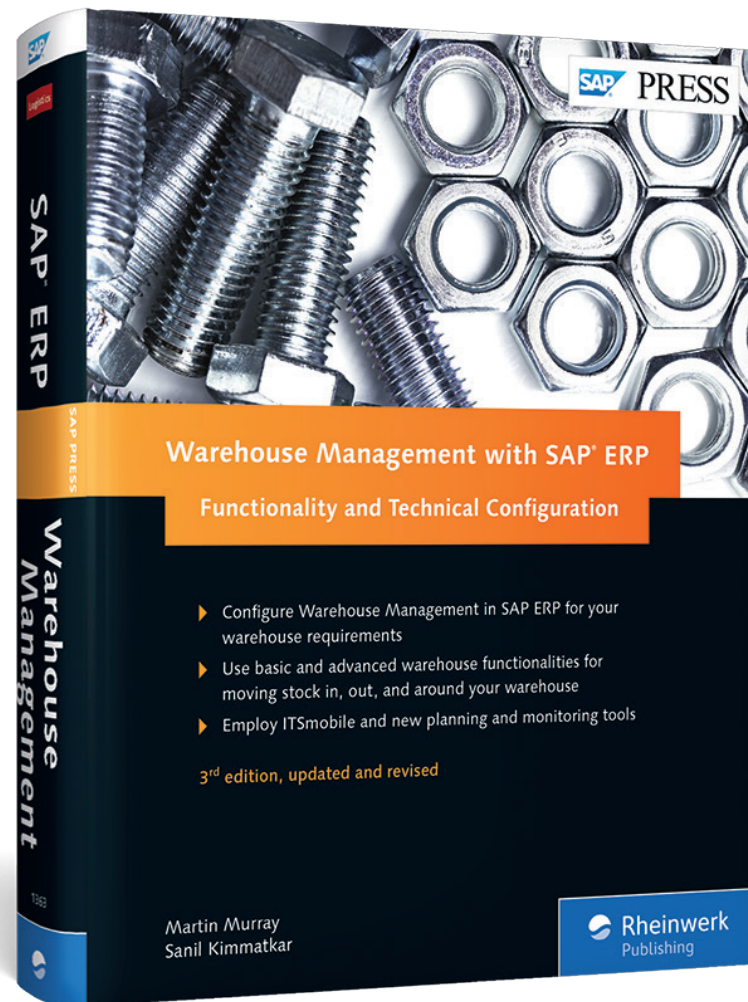
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