**Annual (Periodic) Inventory in Warehouse**

**Applies to:**
Logistic Execution-Warehouse Management system- 4.6B or higher. (The scenario carried out in ECC 6.0)

**Summary**
Annual Physical inventory is a process were all the enterprise’s stocks are physically counted on the balance sheet key date at warehouse level. Every material has to be counted. During counting, the entire warehouse must be blocked for material movements.

The main purpose of this article is to list down all possible steps with screen shots that are required to carry out the Annual inventory in a warehouse. This article will help understand the entire flow of Annual physical inventory with detailed steps shown at each point with screen shots and required notes.

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Preparation prior to the Annual inventory

Before carrying out the physical inventory process, following needs to be taken care:

- No stocks lying in interim bins:

Steps to check stocks in interim bins:

Go to Lx03:

Enter warehouse number and Storage type from 900 to 999:

The list will show the stocks in 900-999 bins.
All interim stocks lying in 901,902,904,921,922,911,914 needs to be cleared before carrying out the inventory process.

- All open transfer requirements needs to be processed:
  
  Go to LB10

  Enter warehouse number and tick on:

  Status open

  Partially delivered.
List of unprocessed /partially processed TR will come.

These TR's needs to be processed to move stocks to bins through transfer orders.

Once processed the list will be empty:
- Check for open posting change Notifications (PCN)

Go to Lu04
Enter Warehouse number and tick on Status :Open and Part completed.
List of unprocessed PCN will be displayed:

The open PCN needs to be processed by creating Transfer orders. Once PCN converted to TO's the list is cleared.

- Check for open Transfer orders. This is extremely important before going for Physical inventory. NO open Transfer orders needs to be present.

Go to LT22 to check for unprocessed transfer orders:
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The list of unprocessed TO’s will be listed.

Clear the list by confirming TO’s. Once cleared, no list will appear.
• Check for open /partially processed Physical inventory document
  
  Go to Lx22

If data exists delete it before Physical inventory.

To delete the Physical inventory document:

Go to LI02N
Enter WH no and the record number to be deleted.

Select the delete from the Physical inventory menu and delete the record.

Click on Yes.
Inventory record deleted.
• Check batch jobs concerning IM and WM movements and stop them before carrying out the Physical inventory process.

Go to SM37 transaction to check jobs.
• Bins Master list needs to be checked and updated.

Check the Master bin list for each warehouse. The added bins after last year count needs to be updated once carrying out the count for the next fiscal year. The entire active bins needs to be included.

Annual Inventory process

Annual inventory is the stocktaking of all stock in a company on a fixed date (usually at the end of the fiscal year). There are no transfers in the warehouse on this day.

The procedure for annual inventory has following steps:

Step 1 Run Report for Stock Comparison at IM/WM report

• Run the report LX23 (stock comparison IM/WM) to see if there are variance between IM and WM.

Select the Plant and the warehouse to check for the variance in the stock, if any. Only plant/storage location, plant/warehouse or warehouse number allowed

Select the ALL MATERIAL DATA option.

With this output option, you select all the stock records for a material, including the material/batch/special stock indicator/ supplier combinations that have no differences and whose stock is greater than zero. Because of the extensive information offered, this helps in detecting errors.
The result shows NO variance in the stock between WM and IM. This means MMBE and LS24/LS26 are in sync for the Material Batch combination. The total stocks in storage bins + Interim Bins correspond to stock in IM.

**Step 2 Block the Storage Type**

1. Block the affected storage types for put away and stock removals. The block will restrict the movement in the storage type for the warehouse.

**PROCEDURE**

In the SAP Menu, choose Logistics → Logistics Execution → Internal Whse Processes → Physical Inventory → In Warehouse Management → Block Storage Type.

**Transaction code LI06**

Click on Position tab. Another Entry screen will appear. Enter the warehouse number and storage type.
Press Enter by clicking on green tick.

The system will take to storage type xxx for warehouse AAA.
Click on the box Plcmnt blo and Rmvl blo. This means that the entire storage type 001 will be blocked for stock placement and stock removal.

This is a very important step before carrying out the Physical Inventory count at WM level. If the boxes are not ticked the movements will take place at the storage type if carried out during PI.
Step 3 Create Annual Inventory Document

2. Select the storage bins for which you want to perform the physical inventory.

A Master list has to be prepared for the bins that needs to be selected to create the Physical Inventory document. However before working on these Master list, it should be made sure that NO BINS have been added after the last count and there no bins that are not existing in SAP. The work out must been done much before the Physical Inventory dates and the business must be updated with the changes made to the list.

In the SAP Menu, choose Logistics -----Logistics Execution ----- Internal Whse Processes ----- Physical Inventory ----- In Warehouse Management----- Physical Inventory Document ----- Create -- ----- Annual Inventory

Transaction code LX15

Because the annual inventory requires the system to process extremely large quantities of data, the system always creates a batch input session. The system creates and activates the system inventory record in the background.
The system lists all storage bins in which you were not able to perform an inventory under the totaled storage bin list.
Since the system usually creates several inventory documents due to the large volume of data, it is recommend to always assign a reference number. This reference number can be used to quickly find inventory documents again.
Enter Warehouse number, Storage type, storage bins to be counted, count data and the session name.
Select Activate Inventory list button.

Click on Process session
Batch input session generated

Select Background as run mode. Select extended log and Dynpro standard size in additional functions. Click on process.
Session transferred to background.

Click on display
Inventory record displayed.

Once the document is created make a note of it against the columns of Bins in the Master Excel sheet. This help in back tracing the records and checking if any bins are missed by comparing Master list and Inventory record number on the system.
Step 4 Print Physical Inventory Document

Print the physical inventory list

The printouts of the physical inventory document to perform the physical inventory of the storage bins.

A In the SAP Menu, choose Logistics ------ Logistics Execution ------ Internal Whse Processes ------ Physical Inventory ------ In Warehouse Management------Physical Inventory Document ------ Print Whse Invent. List.

Transaction LI04

![Physical Inventory List](image)

A confirmation is received that your inventory list is printed.

Carry out the physical inventory in the warehouse for the selected storage bins.

The Warehouse Inventory list for Annual Inventory has to be given to the counters responsible for entering the physical count. The person responsible for entering the count needs to check for the quantity for the respective material and batch. Following needs to taken care:

Once the counter identifies the Material in the bin as per the count sheet, he should enter the qty and the correct UoM. Counters will go to the bin listed on the sheet and enter the counted quantity in the space provided.
If the material printed on the sheet is not found in that location, the counter will enter 0 as the quantity.

If a different material is found in the bin, the counter will record that material and quantity on the found material sheet.

5. Step 5 Count

Once the counting is complete for the respective Inventory sheet physically, the inventory count results need to be entered in SAP.

Enter the count results

A From the SAP menu, choose Logistics ---- Logistics Execution ------ Internal Whse Processes -------- Physical Inventory ------ In Warehouse Management ---- Count Results   Enter.

Transaction code LI11N

The count sheet appears in SAP. Start entering counts based on the entry made by counters on the count sheet. Few scenarios to take care while entering the counts:
Scenario I:

The storage bin 03-10-01 was empty physically, the tick box “Z” is ticked.

The Z box is ticked when the bin is empty or when the material mentioned on the count sheet next to the bin is not found. Thus the tick marks shows that Means that the storage bin is empty or that the material does not exist in the storage bin.
Scenario II:

Case where the bin is empty as per SAP but there is found material on ground. In this case the counter on the FOUND MATERIAL SHEET will make an entry:

Ref to bin 03-10-26

To add Found Material in SAP, Click on the Single record entry
Single entry screen will pop. Below details need to be entered:

Enter Storage bin, Material, Plant, Storage location, counted qty and QR date and Inventory page

Once you have completed all the entries and try to Save, Material found, Old stock =0, pop will come at the bottom of the screen confirming the Material is added.

Record updated in count sheet.
Scenario III:

There may be a case where more than one material are found in the bin:

E.g. SAP has bin 03-10-10 as empty

To add more than one material on the bin, click on NEW ITEM icon:
Click on Enter. Enter the Inventory page number which correspond to page on which the bin found on count sheet and GR number. The GR number will be mentioned in the found sheet by the counter.

The material will be added to the Bin

Same way the entry is made for another material found in the bin.
Once the entry is made for second material also, to go back to the main screen click on Enter.

One can click on save button, in case want to exit the count:
To display Physical Inventory document:

SAP menu

Logistics—Logistics execution—Internal Whse processes—Physical inventory—Physical inventory document—count results—display

Transaction Code
LI13N
The document is displayed.

To go to the Inventory sheet back to complete the entry:

Transaction LI11N
Complete the data entry for other bins based on the count sheet:

Click on save once entry completed.
Step 6 Recount and Correction

Recount and Correction

- After the counts are entered, a variance report will be generated.
- Auditor and counters will check variances.
- If corrections are required Document Control will inform you that data will need to be reentered.

From the SAP menu, choose Logistics ---- Logistics Execution ------ Internal Whse Processes ----- Physical Inventory ------ In Warehouse Management ------ Count Results ----- change

Transaction LI12N

Enter Warehouse number, Inventory record number and count date.

Click on the overview

After recount correction is to be done for e.g. in the bin 03-10-25.
The qty is changed. In change mode qty and A Un can be changed.

Click on SAVE.
The single entry sheet screen pops in confirming qty updated.

The inventory record changed.

**Recount in SAP**

You may execute an inventory recount for all items in the system inventory record, for which the differences seem very high before carrying out the change in inventory records.

**Transaction code LI14**

*Logistics --- Logistics Execution --- Internal Whse Processes --- Physical Inventory --- In Warehouse Management --- Count Results --- Recount.*

Enter data as required. You can also enter a percentage or monetary value as a deviation threshold on this screen. Select the storage bins for which you want to carry out a recount.
Point to consider while entering Count:

While entering the count one very important thing to make note of is UoM. Once converting from one unit to another, special attention should be made to not to round the figure. However to avoid conversion put the same qty and UoM as the one in count sheet instead of changing it with the unit mentioned in SAP sheet while entering count.

This is extremely important as once the variance is cleared, the rounded off figures add or get removed from the inventory causing Physical inventory heels.

E.g. A material was counted as 990 lb (correct) converted to EA 18, whoever when entering the count the recorder entered the 18 ea in kg rounded the number from 449.46 kg to 449.50 kg. This will causes a heel of .04 Kg.

In simple term it means that the qty on ground is 449.46 Kg however due to wrong data entry it is 449.500 kg in SAP. This difference of .04 Kg needs to be written off from SAP, as it does not exist on ground.

The correct count and entry protocol is: if possible, count in packages, i.e. EA (or Dr or ST or PAIL) and accordingly enter the data in packages. This will avoid this type of Heel issues.

Step 7 Run the Variance Report

Logistics---Logistics execution---Information system----warehouse----Physical Inventory----With Bin Inventory Management---Different list of open Inventory Documents

Transaction Code LX17

The Finance department to check and reconcile the difference between the physical and book count runs this report.

If required based on the variance, recount is initiated and the physical count checked before investigating and clearing the difference.

To execute LX17, Enter

Warehouse number and Inventory record:
Click on execute

The variance list is displayed
Get the summation for the qty and price to analyze the variance

The variance needs to be analyzed for the difference in the qty at book and physical level. Once it is analyzed the changes can be done in the count sheet for Qty and UoM.

**Step 8 Clear difference at WM level**

Clearing the difference at WM level

Logistics---Logistics execution----Internal whse processes-----Physical Inventory------In warehouse management-----Clear difference-----warehouse management

The following two movement types are defined for handling differences:

For differences where the quantity does not exist in the storage bin but is recorded in the books, use movement type 711. In this case, the difference must be cleared from the warehouse and posted to the interim storage type for differences.

For differences where the quantity does exist in the storage bin but is not recorded in the books, use movement type 712. In this case the difference must be cleared from the interim storage type for differences and posted to the warehouse.

As soon as you have confirmed the transfer order item, the system posts the difference to the storage bin that has been specified for the respective difference indicator.

You must clear all the stock difference that you have corrected in the Warehouse Management system (WMS) from the WMS and then report them to inventory management (MM-IM).

The system posts the differences to the interim storage area for differences. In the standard system, storage type 999 is set up as the interim storage area for differences.

The system removes the storage bin block, so that the bins are available again for stock movements after the inventory is complete.

**Transaction code LI20**

Enter warehouse number and the Inventory record number

Note: Only one inventory record can be cleared at a time. This is a standard SAP functionality. However in case multiple records need to be cleaned, option needs to be analyzed for customized report.
Click on display icon

To see count details click on count information:
The detail for the counted qty and the book qty is reflected, giving the variance.

Once we try to clear the bin 03-10-10, movement type 712 will take place to put the stock from 999 to bin in which the found material was added in the count sheet.

Once the bin is cleared of the variance, the stock moves to interim bin 999, which is the SAP standard. To analyze the stock moved to 999, execute the transaction LX03 for bin status:
Enter warehouse number and storage type 999:

The stock lying in interim bin after the clearance of variance is shown in 999 interim bin:

Once the bins are cleared, Transfer order is created to move stock from/to interim bins 999 from source/destination bins
TO for second material
Step 9 Clear difference at IM level

Clearing the difference at 999 bins at WM level to match the stock in IM and WM

SAP menu

Logistics---Logistics execution----Internal whse processes------Physical Inventory------In warehouse management------Clear difference------Inventory management

Transaction code LI21

Enter warehouse number and the storage type 999. It is mandatory to enter storage type 999 and NOT ANY OTHER STORAGE TYPE. As explained earlier the differences are carried in interim bin 999 and the same needs to be cleared to maintain the stock at WM and IM. In case, wrong execution of LI21 is done and any other storage type selected instead of 999, the stock will move from that storage type e.g. 001 causing the major mismatch of inventory and major loss of currency. Thus extreme care should be taken before executing LI21.

The list displays the stocks in 999 needs to be cleared at IM level to match the stock at WM and IM. Storage bin takes the Physical Inventory number in this case 00000000002. Select the bin to be cleared.
Click on write off to clear the bin.
Material document created once the quant cleared. Click on the document to see the details of material movement.

**Log for Difference Posting in Inventory Management**

The following material documents were created:

<table>
<thead>
<tr>
<th>Mat. docum.</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>4007907998</td>
<td>2098</td>
</tr>
</tbody>
</table>

1 quant was cleared, 0 of them with errors

Go to MMBE to see the stock has moved at IM level:

This completed the process of clearing the difference at WM and IM level.

Following movement are initiated when stocks movement takes place in any other stock category apart from Restricted:

Block stock:

717/718 movements

Quality stock

713/714 movements

Return stocks

715/716

The PI does not include the Return stocks and thus they need to be cleared before carrying out the PI.

**Note:** It is noticed while executing LI21, own ID gets locked. This is due to the mass processing of LI21 records at one time where same material records are processed simultaneously. To minimize locked records, run the LI21 transactions by selecting small number of records 25-50 at one time.

Errors occurred during posting of the following quants:

0001270688 The plant data of the material is locked by the user.
Step 10 Run Report

After the physical inventory is complete for the fiscal year, reset the inventory data for storage bins and storage quants using the RLREOLPQ report. In the next inventory period, this helps to perform a new physical inventory for these storage bins or quants.
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