Internal SAP MM STO Workflow

Internal SAP MM STO Workflow:

The Internal Stock Transport Order (STO) Workflow within SAP MM enables the seamless transfer of materials between two plants within the same company. This process, known as Intra STO, facilitates the movement of goods via a delivery mechanism without involving billing procedures. The Intra STO Process is alternatively referred to as the MM-SD Integration Cycle.

To execute the Intra STO Process successfully, collaboration with an SAP SD Consultant is essential. The SD Consultant plays a pivotal role in establishing the necessary configurations. One of the key steps involves the creation of a customer code specifically for the Receiving Plant.

SUPPLYING PLANT

RECEIVING PLANT

PURCHSAE
ORDER

Unrestricted use

Stock In-Transit

Unrestricted use
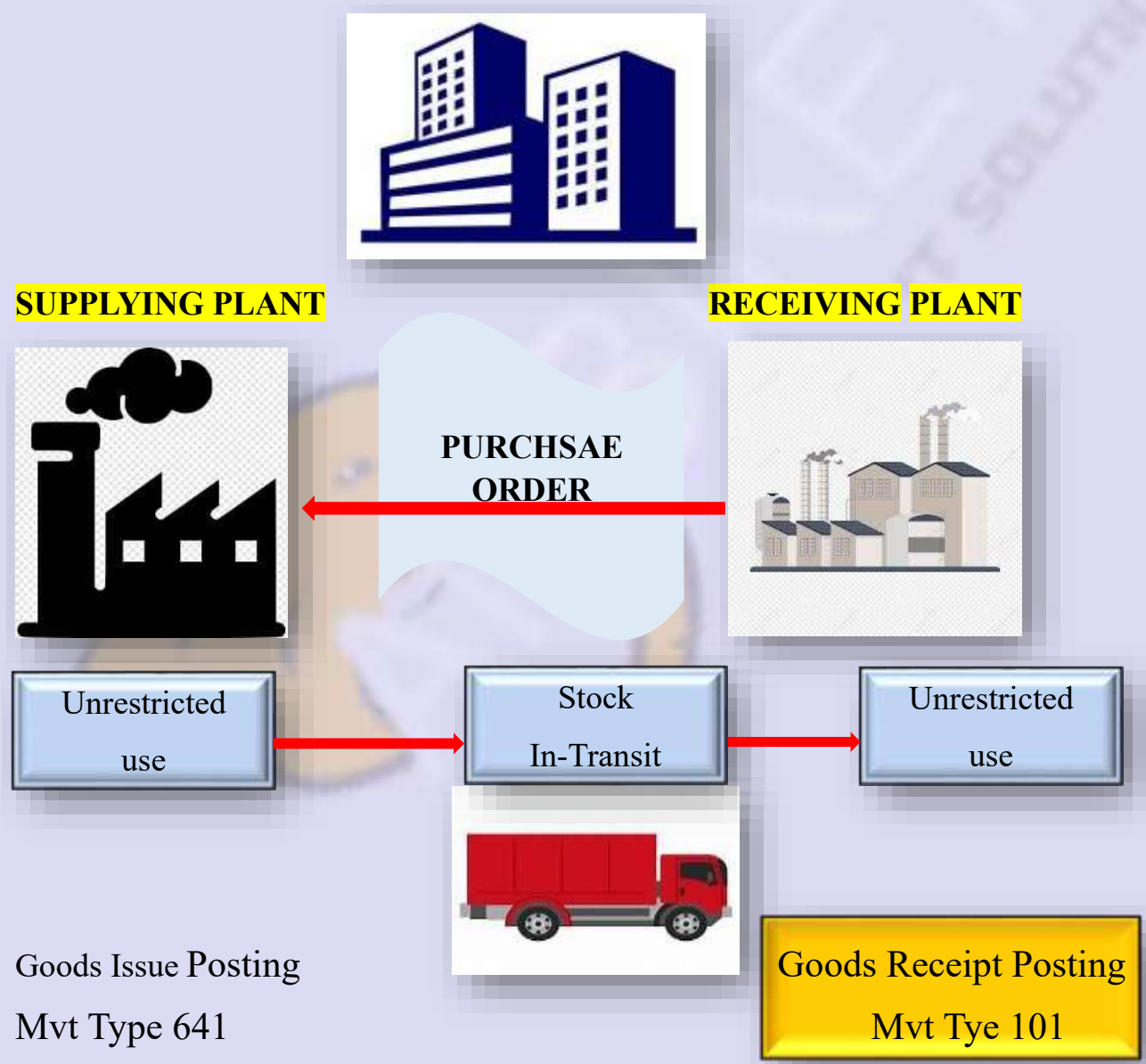
Goods Issue Posting

Mvt Type 641

Goods Receipt Posting

Mvt Tye 101

Subsequently, the Receiving Plant initiates the workflow by generating a stock transport order (STO), which is then forwarded to the Supplying Plant. The Supplying Plant then fulfills the order by delivering the requested material to the Receiving Plant, thus completing the internal stock transfer.

COMPANY

Here are the steps involved in the intra STO process in SAP MM:

1. Create a stock transport order (STO) in the receiving plant.
2. Send the STO to the supplying plant.
3. The supplying plant delivers the material to the receiving plant.
4. The receiving plant posts a goods receipt.

<mark>Prerequisites:</mark>

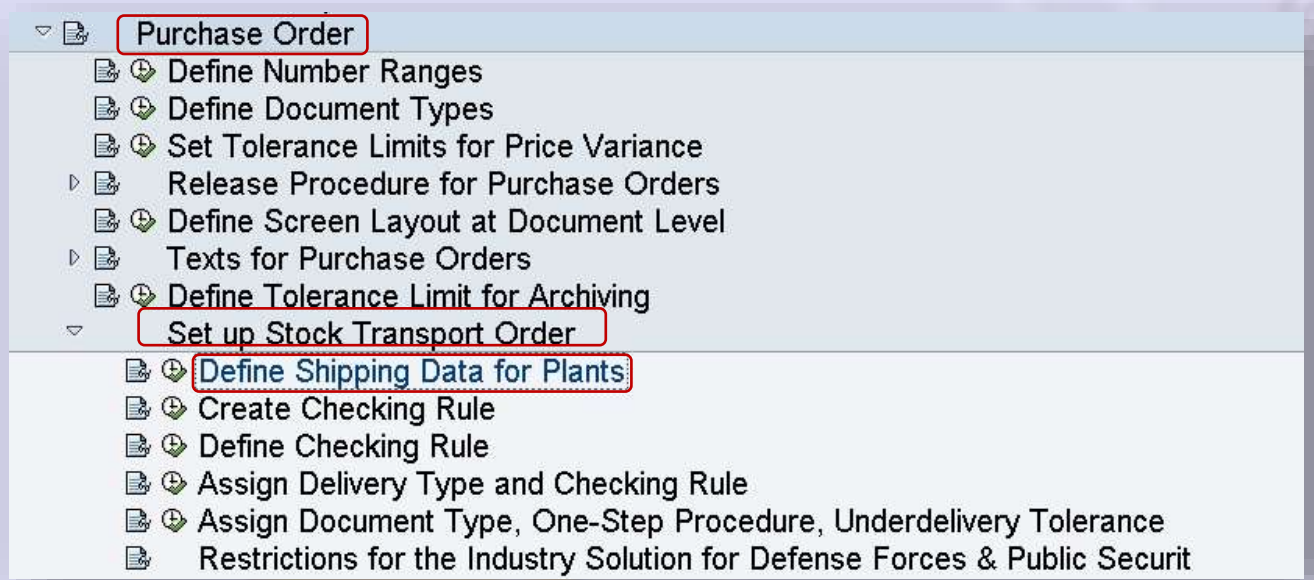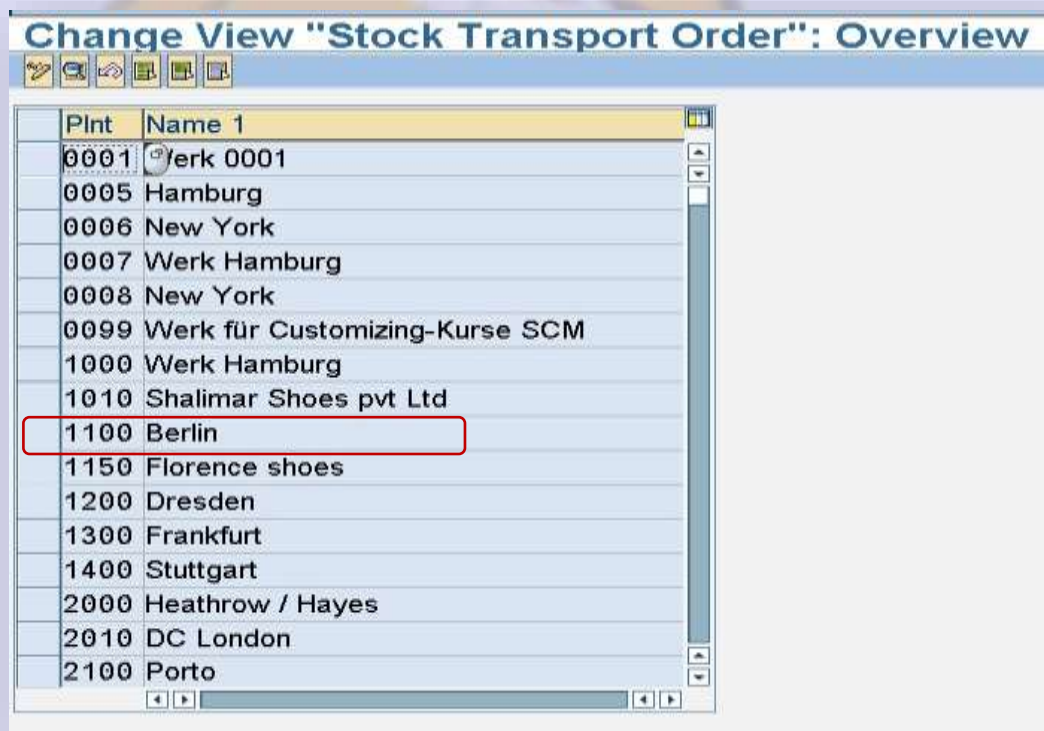|	
Supplying Plant: 1100	Receiving Plant: 100
Customer Code: 1185	Purchase Org: 1000
Sales Organization: 1000	Storage Location: 0001
Distribution Channel: 10	
Division:10	

Back End Setting for Intra STO

Step 1: Define Shipping Data for Plants

OLME → PURCHASE ORDER → SET UP STOCK TRANSPORT
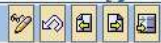ORDER → DEFINE SHIPPING DATA FOR PLANTS

Execute the Define Shipping Data for Plants

Select the Supplying Plant 1100

Assign Sales Org, Distribution channel & Division to the Supplying Plant

Change View "Stock Transport Order": Details

Plant   1100   Berlin

Detailed information

Customer no. - plant

SlsOrg.Int.B.	1000	Germany Frankfurt
DistChannelIB	10	Final customer sales
Div.Int.Billing	00	Cross-division

Language for stock transport order texts

Language Key   DE   German

Select the Receiving Plant 1000 & Assign the Sales Org, Distribution channel & Division and Customer Number

Change View "Stock Transport Order": Overview

Plnt	Name 1
0001	Werk 0001
0005	Hamburg
0006	New York
0007	Werk Hamburg
0008	New York
0099	Werk für Customizing-Kurse SCM
1000	Werk Hamburg
1010	Shalimar Shoes pvt Ltd
1100	Berlin
1150	Florence shoes
1200	Dresden
1300	Frankfurt
1400	Stuttgart
2000	Heathrow / Hayes
2010	DC London
2100	Porto

Change View "Stock Transport Order": Details

Plant   1000   Werk Hamburg

Detailed information

Customer no. - plant	1185	Werk Hamburg 1000
		Hamburg
SlsOrg.Int.B.	1000	Germany Frankfurt
DistChannellB	10	Final customer sales
Div.Int.Billing	00	Cross-division

Language for stock transport order texts

Language Key	DE	German

Then Save it

Step 2: Assign Delivery Type & Checking Rule
OLME PURCHASE ORDER SET UP STOASSIGN DELIVERY TYPE &
CHECKING RULE

▽ 📄 Purchase Order
    📄 ⊕ Define Number Ranges
    📄 ⊕ Define Document Types
    📄 ⊕ Set Tolerance Limits for Price Variance
   ▷ 📄   Release Procedure for Purchase Orders
    📄 ⊕ Define Screen Layout at Document Level
   ▷ 📄   Texts for Purchase Orders
    📄 ⊕ Define Tolerance Limit for Archiving
   ▽   Set up Stock Transport Order
     📄 ⊕ Define Shipping Data for Plants
     📄 ⊕ Create Checking Rule
     📄 ⊕ Define Checking Rule
     📄 ⊕ Assign Delivery Type and Checking Rule
     📄 ⊕ Assign Document Type, One-Step Procedure, Underdelivery Tolerance
     📄   Restrictions for the Industry Solution for Defense Forces & Public Securit

Select Assign Delivery Type& Checking Rule

Select the Document Type as UB for Intra STO Process and Assign the Delivery type as NL &
Checking Rule as 01 for both the Supplying & Receiving Plants.

Change View "Stock Transfer Data": Overview

New Entries

Ty.	DT Dscr.	SPI	Name 1	DlTy.	Description	CRI	Description of	Sh.	Ro	Deliv	Deliv	DT	A	Req. Pr
UB	Stock transport o0008		New York	NL	Replenishment dlv.	A	SD order	☐	☐					
UB	Stock transport o1000		Werk Hamburg	NL	Replenishment dlv.	01	Checking rule 01	☐	☐					
UB	Stock transport o1100		Berlin	NL	Replenishment dlv.	01	Checking rule 01	☐	☐					
UB	Stock transport o1200		Dresden	NL	Replenishment dlv.	RP	Replenishment	☑	☐					
UB	Stock transport o1300		Frankfurt					☐	☐					
UB	Stock transport o1400		Stuttgart					☐	☐					
UB	Stock transport o2000		Heathrow / Haye:					☐	☐					
UB	Stock transport o2010		DC London					☐	☐					
UB	Stock transport o2100		Porto					☐	☐					
UB	Stock transport o2200		Paris					☐	☐					
UB	Stock transport o2210		Lyon					☐	☐					
UB	Stock transport o2220		Centre de Distrib					☐	☐					
UB	Stock transport o2230		Centre de Distrib					☐	☐					
UB	Stock transport o2240		Centre de Distrib					☐	☐					
UB	Stock transport o2300		Barcelona	NL	Replenishment dlv.			☐	☐					
UB	Stock transport o2400		Milano Distributio					☐	☐					

Then Save it.

Step 3: Assign Document Type, One-Step Procedure, Underdelivery Tolerance

▽ ▤ **Purchase Order**
    📄 ⊕ Define Number Ranges
    📄 ⊕ Define Document Types
    📄 ⊕ Set Tolerance Limits for Price Variance
  ▷ 📄   Release Procedure for Purchase Orders
    📄 ⊕ Define Screen Layout at Document Level
  ▷ 📄   Texts for Purchase Orders
    📄 ⊕ Define Tolerance Limit for Archiving
  ▽   Set up Stock Transport Order
    📄 ⊕ Define Shipping Data for Plants
    📄 ⊕ Create Checking Rule
    📄 ⊕ Define Checking Rule
    📄 ⊕ Assign Delivery Type and Checking Rule
    📄 ⊕ Assign Document Type, One-Step Procedure, Underdelivery Tolerance
    📄   Restrictions for the Industry Solution for Defense Forces & Public Securit

Then, Execute it.

Assign the Supplying & receiving Plant & Document Type & untick the one step procedure unless it will be defining as one step procedure

Then Save it.

Process:

```
                    ┌──────────┐
                    │ Co Code  │
                    └──────────┘
         ┌──────────────┼──────────────┐
         ▼              │              ▼
   ┌──────────┐         │         ┌──────────┐
   │   1100   │         │         │   1000   │
   └──────────┘         │         └──────────┘
  Supplying Plant       │        Receiving Plant
```

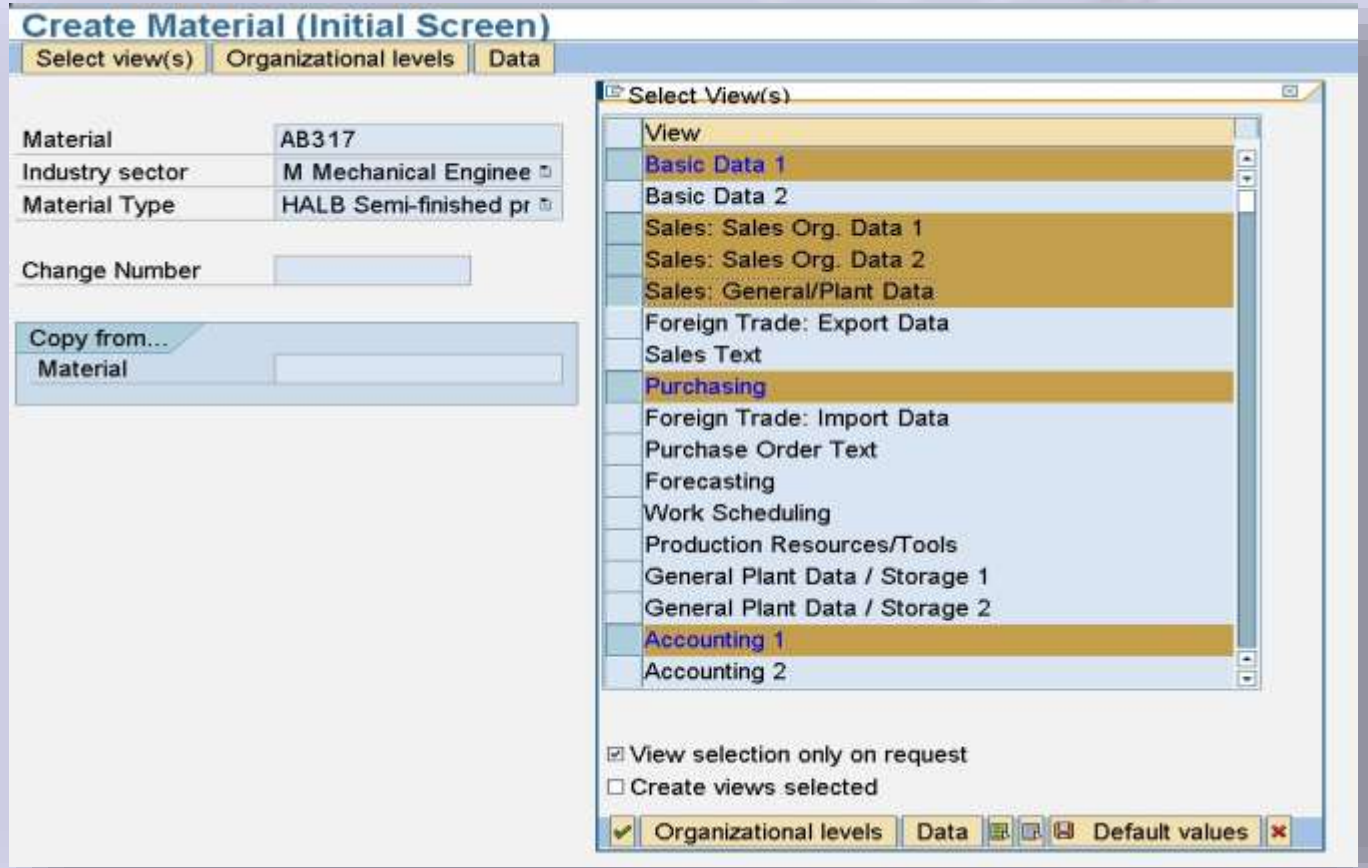| Supplying Plant		Receiving Plant
2. OBD _ VL10D		**1. PO- Doc.Type _ UB with Item category- U**
3.PGI _ VLO2N Mat.Doc with Mvt Type-641	SIT MB5T	**4.GR W.R.T.OBD Mat.Doc with Mvt Type-101**

Step 1: Creation of Material along with Sales views –MM01

Assign the Plant, Sales Org. and Distribution Channel

Change Material AB317 (Semi-finished product)

Additional data | Organizational levels | Check screen data

Sales: sales org. 1 | **Sales: sales org. 2** | Sales: General/Plant | Foreign trade export | Sale

Material	AB317	Intra-Co STO With Delivery W/O Billing
Sales Org.	1000	Germany Frankfurt
Distr. Chl	10	Final customer sales

Grouping terms

Matl statistics grp		Material pricing grp	
Volume rebate group		Acct assignment grp	
Gen. item cat. grp	NORM	Standard item	Item category group	NORM	Standard item
Pricing Ref. Matl		
Product hierarchy		
Commission group		

Material groups

| Material group 1 | | Material group 2 | | Material group 3 | |
| Material group 4 | | Material group 5 | | |

Product attributes

☐ Product attribute 1   ☐ Product attribute 2   ☐ Product attribute 3
☐ Product attribute 4   ☐ Product attribute 5   ☐ Product attribute 6
☐ Product attribute 7   ☐ Product attribute 8   ☐ Product attribute 9
☐ Product attribute 10

Change Material AB317 (Semi-finished product)

Additional data | Organizational levels | Check screen data

Sales: sales org. 2 | **Sales: General/Plant** | Foreign trade export | Sales text | Purchasing

| Material | AB317 | Intra-Co STO With Delivery W/O Billing |
| Plant | 1100 | Berlin |

General data

Base Unit of Measure	PC	piece(s)	Replacement part	
Gross Weight		KG	Qual.f.FreeGoodsDis.	
Net Weight			Material freight grp	
Availability check	01	Daily requirements	☐ Appr.batch rec. req.
☐ Batch management			

Shipping data (times in days)

| Trans. Grp | 0001 | On palettes | LoadingGrp | 0001 | Crane |
| Setup time | | Proc. time | | Base qty | | PC |

Packaging material data

| Matl Grp Pack.Matls | |
| Ref. mat. for pckg | |

General plant parameters

☐ Neg.stocks   Profit Center ____   SerialNoProfile ____   DistProf ____

Then, Extend the material to the Receiving Plant
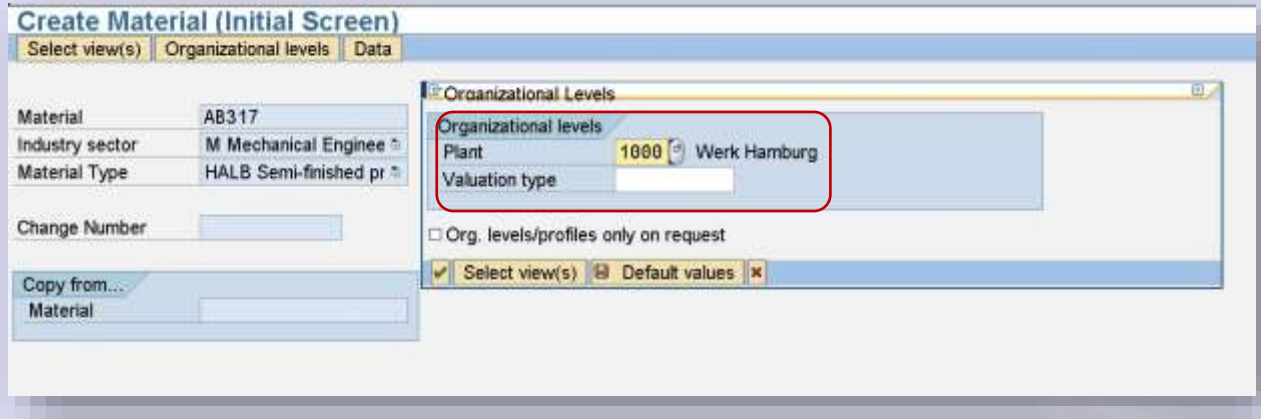
Step 2: Creation of Purchase Order –ME21N
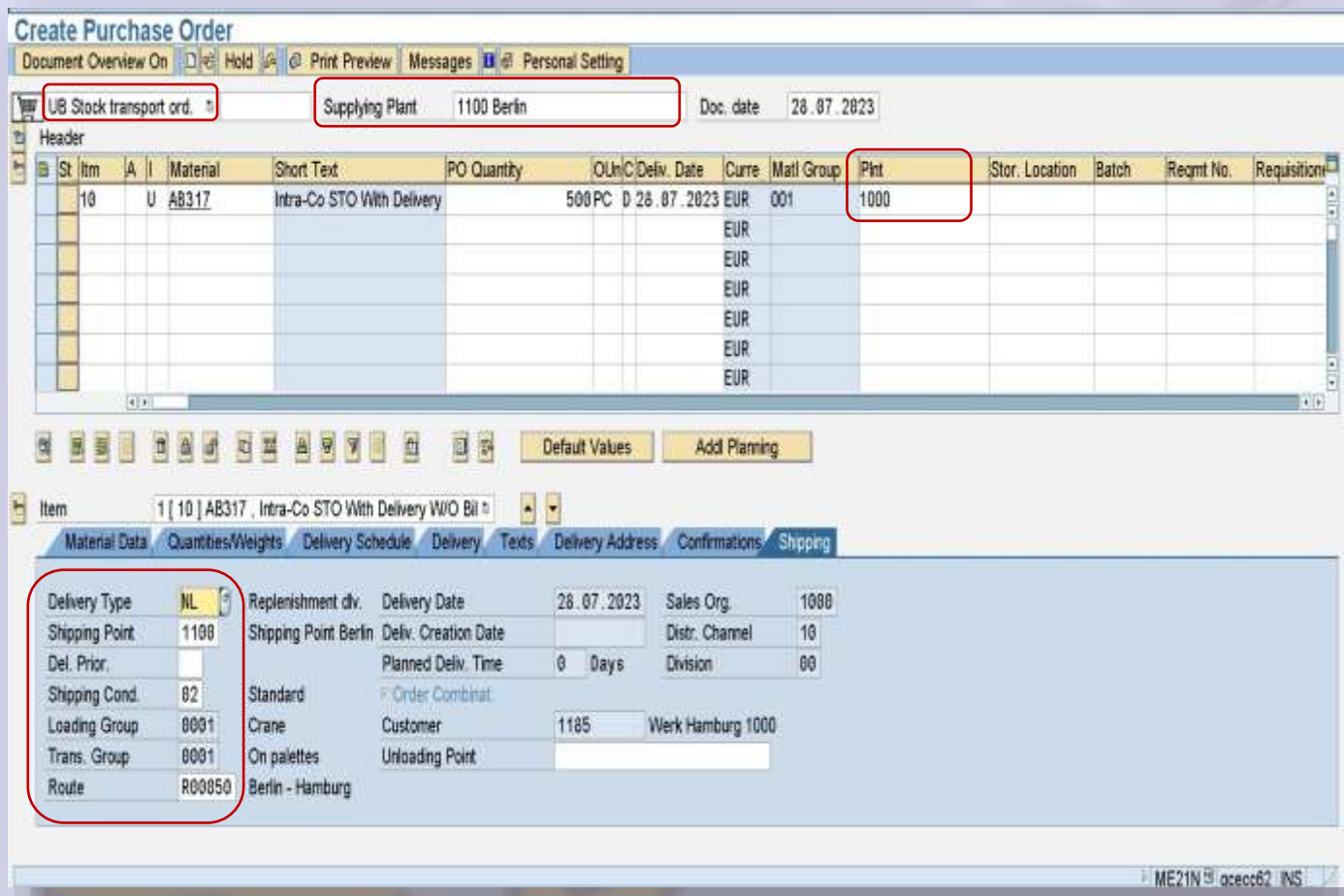
Stock transport ord. created under the number 4500017405
Have to Select the Doc Type ad UB for INTRA STO Process
Here we have to enter the Supplying Plant. In Standard Process we have to maintain the vendor.
The Shipping Tab appeared in PO Item details as we defined the delivery type as NL in the backend configuration

Step 3: Creation of OBD –VL0D
The VL10D transaction can be used to create outbound deliveries for purchase orders and It also allows you to specify the shipping conditions

Purchase order items

⊕ ❚ ☎ Collective Processing Logs

Shipping Point/Receiving Pt		⊡	to	
Deliv. Creation Date	28.07.2023		to	29.07.2023
CalcRuleDefltDlvCrDt	2			

General Data | Purchase Orders | Material | User Role

General Data

Delivery Priority		to	
Shipping Conditions		to	
Route		to	
Ship-to party		to	
Unloading Point		to	
Sales Document Type		to	
Sales Organization		to	
Distribution Channel		to	
Division		to	
Goods Issue Date		to	

After Execute, Have to Select the checkbox and select the Background to run the outbound process of the material

Activities Due for Shipping "Purchase order items"

	OriginDoc. Sold-to pt SaTy						
⚠	Item GI Date	DB Material	Open qty	BUn	CumQty	SU
	🗁 4500017405	UB				
☐ ○△◇	10	AB317	500	PC	500	PC

Activities Due for Shipping "Purchase order items"

	OriginDoc. Sold-to pt SaTy						
⚠	Item GI Date	DB Material	Open qty	BUn	CumQty	SU
	🗁 4500017405	UB				
☐ ○△◇	10	AB317	0	PC	0	PC
☐ ○○◾	10	AB317	0			PC

Outbound Delivery is Created 80015183
Check the ODB in Purchase Order History in ME23N

Stock transport ord. 4500017405 Created by User

Document Overview On | 🗋 📝 🛅 🖶 Print Preview | Messages 🔢 🗗 Personal Setting

| 🛒 | UB Stock transport ord. | 4500017405 | Supplying Plant | 1100 Berlin | | | Doc. date | 28.07.2023 |

Header

☐	St	Itm	A	I	Material	Short Text	PO Quantity	OUn	C	Deliv. Date	Curre	Matl Group	Plnt		Stor. Location	Batch	Reqmt No.	Requisition
		10	U		AB317	Intra-Co STO With Delivery	500 PC	D	28.07.2023	EUR	001	1000					

Addl Planning

Item   1 [10] AB317 , Intra-Co STO With Delivery W/O Bil

Material Data | Quantities/Weights | Delivery Schedule | Delivery | Purchase Order History | Texts | Delivery Address | Confirmations | Shipping

Sh.	MvT	Material Docu	Item	Posting Date		Quantity	Delivery cost quantity	OUn		Amount in LC	L.cur		Qty in OPUn	DelCostQty (OPUn)	O
Lfs		80015183	1	28.07.2023		500	0	PC		0.00	EUR				
Tr./Ev. Delivery note						500		PC		0.00	EUR				

Step 4: Creation of PGI _VL02N

Change Outbound Delivery

Post Goods Issue

Outbound Delivery   80015183

Replenishment dlv. 80015183 Change: Overview

Post Goods Issue

| Outbound deliv. | 80015183 | | Document Date | 28.07.2023 |
| Ship-to party | 1185 | | Werk Hamburg 1000 / Schillerstrasse 13 / 22767 Hamburg |

Item Overview | Picking | Loading | Transport | Status Overview | Goods Movement Data

| Pick Date/Time | 28.07.2023 | 00:00 | OvrllPickStatus | A | Not yet picked |
| Warehouse No. | | | OverallWMStatus | | No WM tmsf ord reqd |

All Items

Itm	Material		Plnt	SLoc	Deliv. Qty		Un	Picked Qty	Un	Batch		B	P	WStag. Date	Matl	Val. Type	Description
1	AB317		1100	0001	500		PC	500	PC				A	28.07.2023 00:00			Intra-Co STO With Delivery W/O Billing

Batch Split | Main items | All items

VL02N ⏷ eneco62 INS
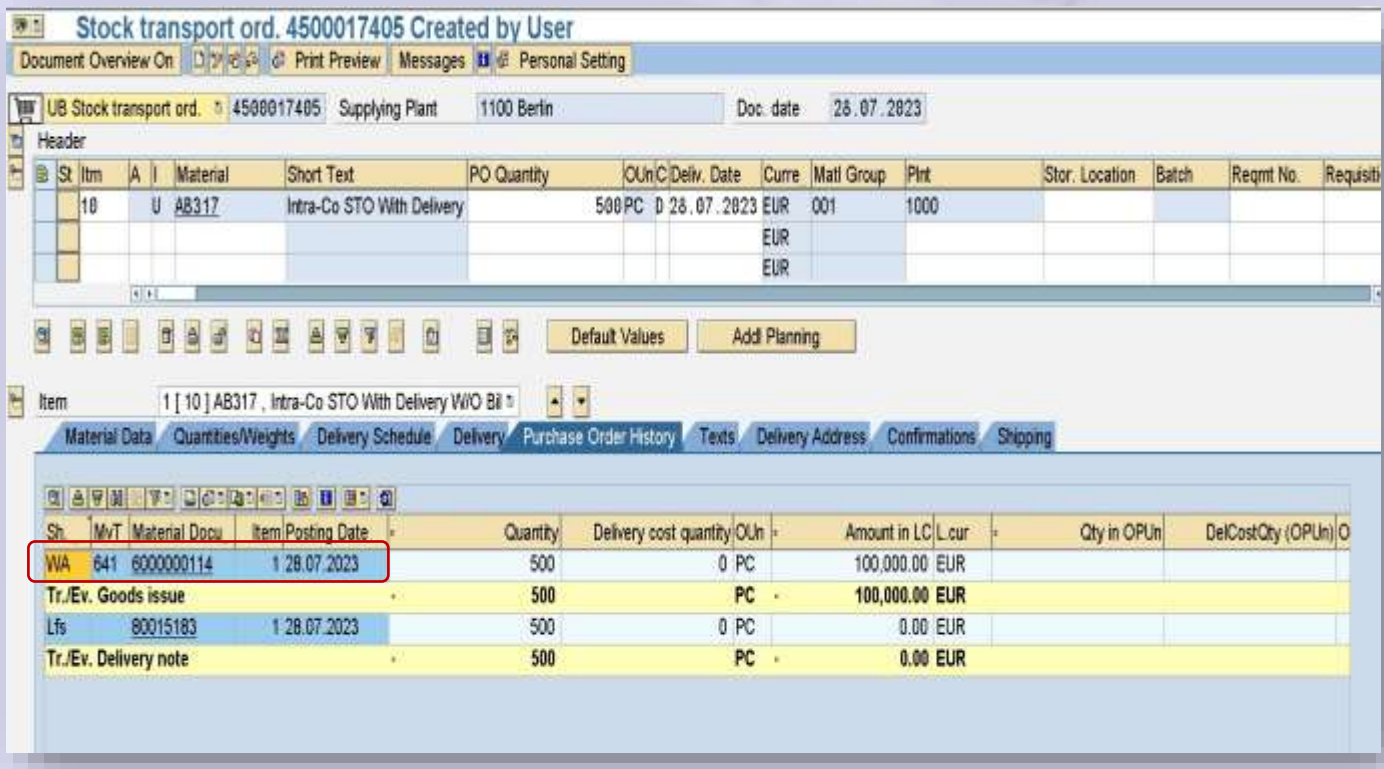
Select the Picking tab and Enter the Piced quantity Value
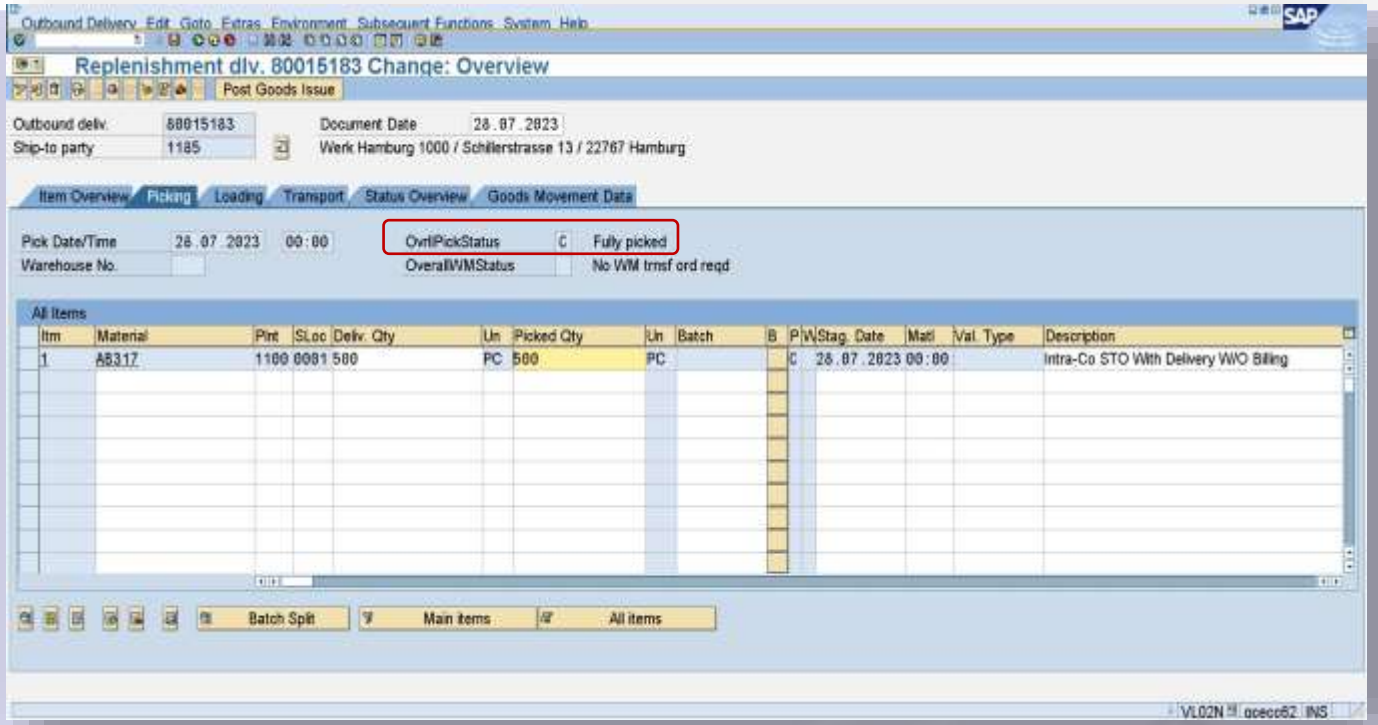
Now the Over all Status of the PGI is fully Picked if it is not fully picked the system throws the error.

After PGI, the Materials Placed in Stock in transit and it records the Movement Type as 641

Check the Material in Stock in Transit

Display Stock in Transit

Database Selections

Material	AB317			
Receiving Plant		to		
Receiving Plant Company Code		to		
Issuing Plant		to		
Special Stock		to		

☑ Stock Transfer Orders
☑ Cross-Company-Code
☐ Incl. POs w. Del. Cmpl. Status
☐ Incl. Deleted Purchase Orders

Display Options

Layout

Step 5: Goods Receipt - MIGO

Before Doing MIGO, we've to check the stock overview, On-Order Stock is 500 as per Created STO in the Plant 1000

Stock Overview: Basic List

Selection

|		
Material	AB317	Intra-Co STO With Delivery W/O Billing
Material Type	HALB	Semi-finished product
Unit of Measure	PC	Base Unit of Measure PC

Stock Overview

Detailed Display

Client/Company Code/Plant/Storage Location/Batch/Special St	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock	Consgt ordered S
Full	500.000				500.000	
1000 IDES AG	500.000				500.000	
1000 Werk Hamburg					500.000	
1100 Berlin	500.000					
0001 Auslief.Lager	500.000					

Now, do **MIGO W.R.T.OBD**
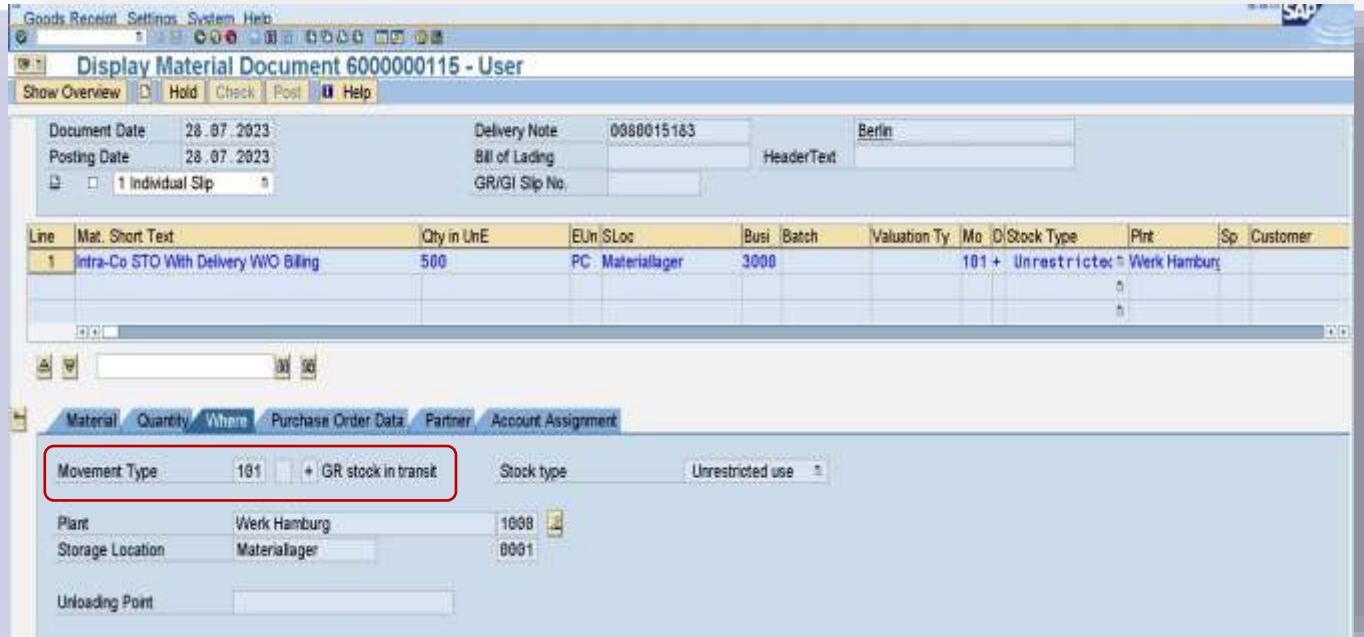
The System Records the Movement Type as 101, Now the On-Order tock quantity is stackable in unrestricted use in Plant 1000 and the Material in Plant 1100 is transferred to 1000
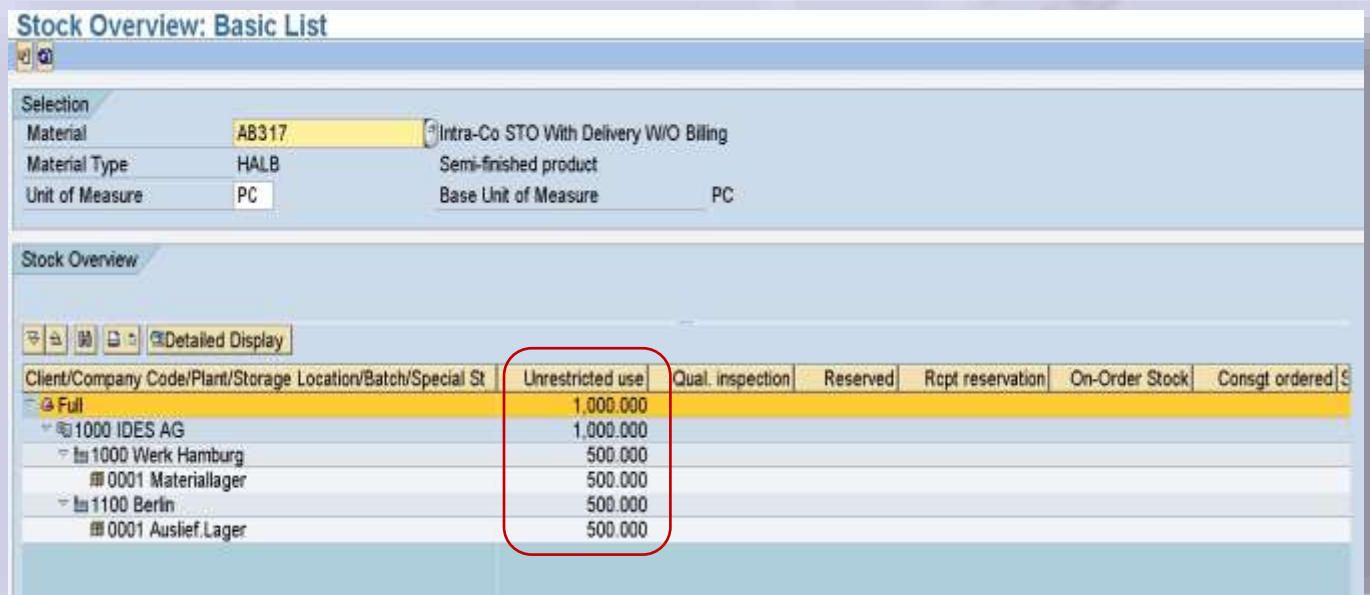
THANK YOU

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