

Virtual Warehouse

EBM Template / Cement / Inventory Management

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1. Introduction

This is the document that provides all the necessary information to enable the End User to perform their daily activities of SAP and no SAP systems, related with Virtual Warehouse, on the respective go-live date, in line with the following criteria:

- Speed of execution of tasks
- Quality of data entry
- Compliance with management rules
- Maximum user ease

Throughout this document explains in detail each of the activities necessary to carry out the process of Virtual Warehouse.

Virtual Warehouse process has been put in place regionally in Eastern Europe, improving the Naming Convention. Virtual Warehouse in Eastern Europe has been recognized as best practice to improve inventories of maintenance materials at plant and regional level.

SAP ECC6.0 is the system, and more specific MM module, to support the Virtual Warehouse. This process follows the standard inventory management and procurement flows in SAP MM.

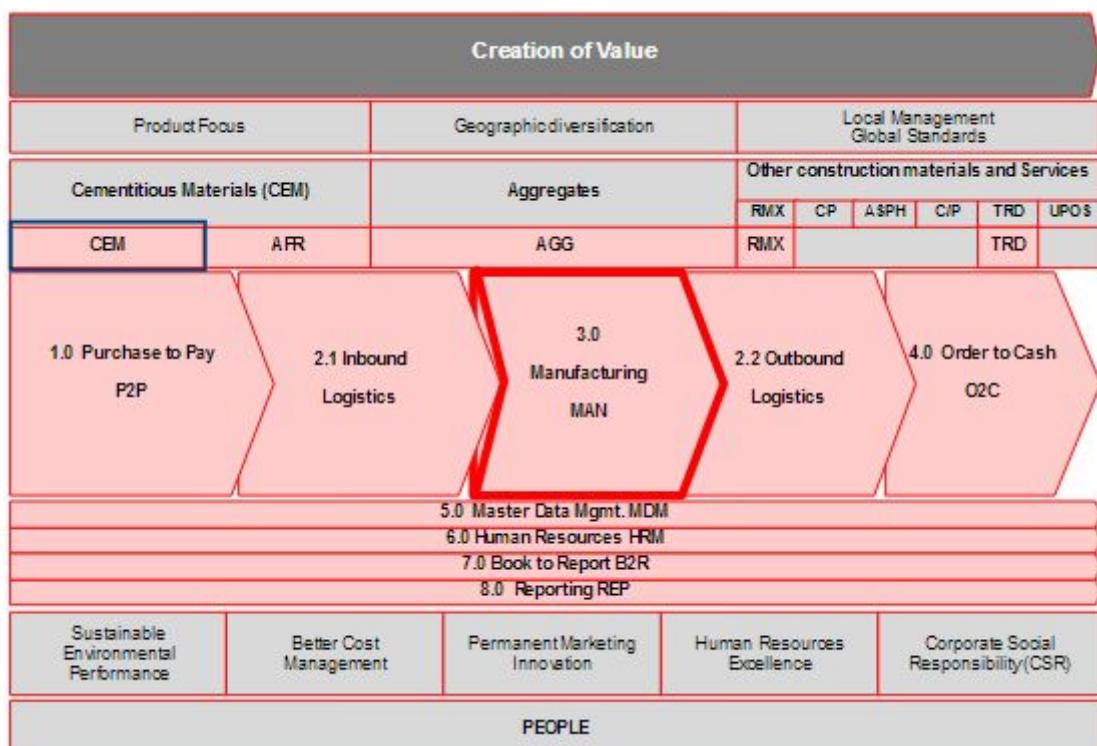
1. Material Master definition: MRP views of material master are updated with the standard MRP parameters (e.g. MRP Type, Lot Size, Reorder point, MRP controller,...) These MRP values in the material master are pre-requisites for the correct execution of the MRP run
2. Reservation Creation: Usage of standard SAP reservations. The system will create a reservation number with the following information:
 - a. Movement Type
 - b. Receiving plant and storage location
 - c. Material ID, quantity and unit of measure
 - d. Supplying plant and storage location

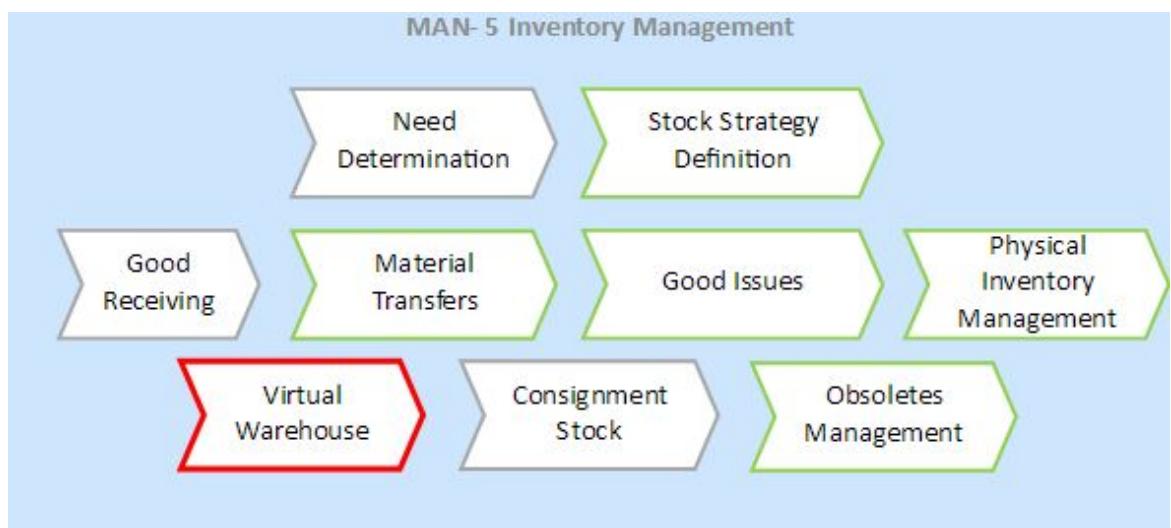
Once the reservation is created, the stock is updated in both plants

3. MRP Running: In order to execute the MRP at regional level, it is necessary to define the MRP Planning scope. This MRP planning scope includes the list of plants of the region in which virtual warehouse is performed.
 - a. MRP runs by selecting the MRP controller
 - b. The MRP program takes into account the reservations made for other Plants (included the ones from other companies).
4. Standard Procurement flow of purchase requisition, purchase order, goods receipt for the requested plant and goods issue for the supplying plant. In case the material stock transfer is between plants not belonging to the same legal entity (SAP Company code) the inter-company process flow is triggered.
5. Specific storage location is defined in SAP at plant level for Virtual Warehouse. Materials are created in the physical storage location (Where is physically located the material) and in the virtual warehouse storage location.

In a regular MRP process the provider is a third party (vendor), in virtual warehouse the provider of the material will be centralized in a LafargeHolcim plant.

As part of the virtual warehouse process as a variant of it we should consider the Spot transfer from one plant to another. In this case material is not provided by the nominated LafargeHolcim plant. The trigger will be a manual search in all V200 (virtual warehouse) storage location in order to localized the desired material in a plant, and opposite that in the central warehouse process (where a material is always provider by the same Holcim plant) this process has to be run in an manual way asking for material in a selected plant once the search in all EMEA plant V200 storage location has been done.





Glossary & Abbreviations

The table below lists all the abbreviations used in the document with their complete description.

Abbreviation	Description
VW	Virtual Warehouse
MRP	Material Requirement Planning
PM	Plant Maintenance
PR	Purchase Request
PO	Purchase Order
GR	Good Receipt
GI	Good Issue
CEM	Cement
O2C	Order to Cash

2. Organizational Elements

2.1 Organizational Elements used in Virtual Warehouse Management

2.1.1 Plant

2.1.1.1 General Concept

The plant represents a physical location within LafargeHolcim where products are manufactured, received or distributed.

In EBM, a plant could be:

- **Manufacturing plant:** cement plant, grinding station, blending station, AFR unit, MIC plant, quarry, pit, RMX plant (fix/mobile), asphalt plant, etc.
- **Shipping point / terminal / storage location:** when it is not located in the same physical location as the production plant and transportation costs must be added to the cost of products.
- **Office / headquarters / trading plant:** when they are not located in a production plant
- Third parties (suppliers): O2C tech.& legal requirement to create them as virtual plants (just 1 per country).
- **Power generation plants:** just if it is not located next to a CEM plant. If the power generation plant is located next to the CEM plant, only 1 plant code will be created in SAP for both CEM and power plant.
- **Mixed plants:** LHARP rule 11.1 2.2.2.5 to be followed. If the secondary business is below 20% of cash cost and below 1 Mio. USD, only 1 plant is created, assigned to the main

business segment and secondary business is treated as by-product. If the thresholds are achieved, 2 plants should be created and assets properly split.

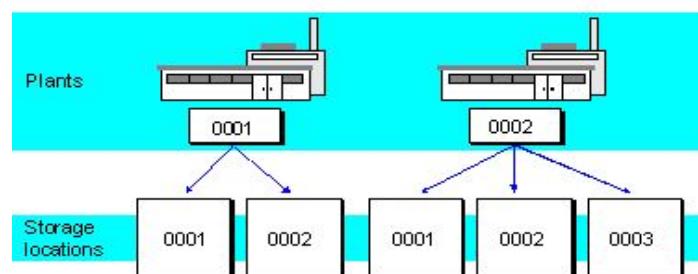
The material stocks will be managed and valued at plant level.

2.1.2 Storage Location

2.1.2.1 General Concept

Organizational unit that allows to differentiate between various types of stock within a plant.

- Storage locations are created at plant level.
- Inventory Management is carried out at storage location level (Goods movements).
- Stocks are managed only on a quantity basis and not on a value basis at storage location level.
- Simplification of goods movements (Receipts, issues, transfers,...) management .
- Physical inventories are carried out at storage location level.



2.1.2.2 Coding

It has a 4 digit coding, “**XXXX**”, where the first digit identifies the usage of the storage location and the remaining 3 are sequential numbers

- **F:** For finished/semi-finished products
- **G:** For general materials (maintenance materials, production materials – fuels, raw materials, packing,...)
- **V:** For virtual warehouse

 Possible Entries: Storage locations

	Maint.	Plant	SLoc	Stor. Loc. Descr.
		8101	F001	Finish./Semif
		8101	G001	General
		8101	G002	Spare Parts
		8101	G003	Lubricants
		8101	HU01	Raw Mater. Packe
		8101	V200	Virtual WH
		8102	F001	Finish./Semif
		8102	F002	Tank
		8102	G001	Raw Material
		8102	G002	Retur Raw Mater.
		8102	HU01	Raw Mater. Packe
		8102	HU02	Retur RawMatPar
<input type="button" value="Choose"/> <input type="button" value="Cancel"/> <input type="button" value="Maintenance status"/>				

3. Virtual Warehouse Overview

3.1 Objectives

The objective of the Virtual Warehouse are:

- Reduction of Net Working Capital through a better management of procured inventory, by implementing a program for improving the way procured inventory is managed whilst assuring and maintaining the plant availability
- Consolidate and Share spare parts to reduce inventories
- Keep safety stocks for several countries and not for each plant
- Improve the sourcing
- Improve procure inventory management
- Assure and maintain the plant availability
- Spot transfer from one plant to another

3.2 Process overview

Virtual warehouse storage location is available in all plants. All users with the respective authorization rights have the visibility of all materials stored in V200 in- or outside the OpCo.

Using the classification system defined in the standard naming convention it is possible to search for materials within all plants which are in EBM.

We can define **two main scenarios** related to the material transfer:

- a. **Automated transfer:** Material is available in a centralized managed warehouse (today Senec). If the material is stored in the centralized warehouse the transfer of materials is from only one plant to different plants inside or outside the same OpCo. It is a so called 1 to N relation. The processes in this setup can be completely automated including reservation, MRP, etc. The setup of master data and all the parameters are already set accordingly to support this automated process.
- b. **Spot transfer:** Material is available in another plant and can be transferred when needed. In this case, we are talking about a manually managed spot transfer. This transfer can be to a plant in the same OpCo or to a different OpCo.

In both scenarios there are two main processes related to the plant relationship.

If the company that send the material belongs to the same company that the receiver plant it is considered an **INTRACOMPANY PROCESS**

If the company that send the material does NOT belong to the same company that the receiver plant it is considered an **INTERCOMPANY PROCESS**

Main differences between both process are the purchase order type and involvement of other processes related to P2P, B2R and O2C.

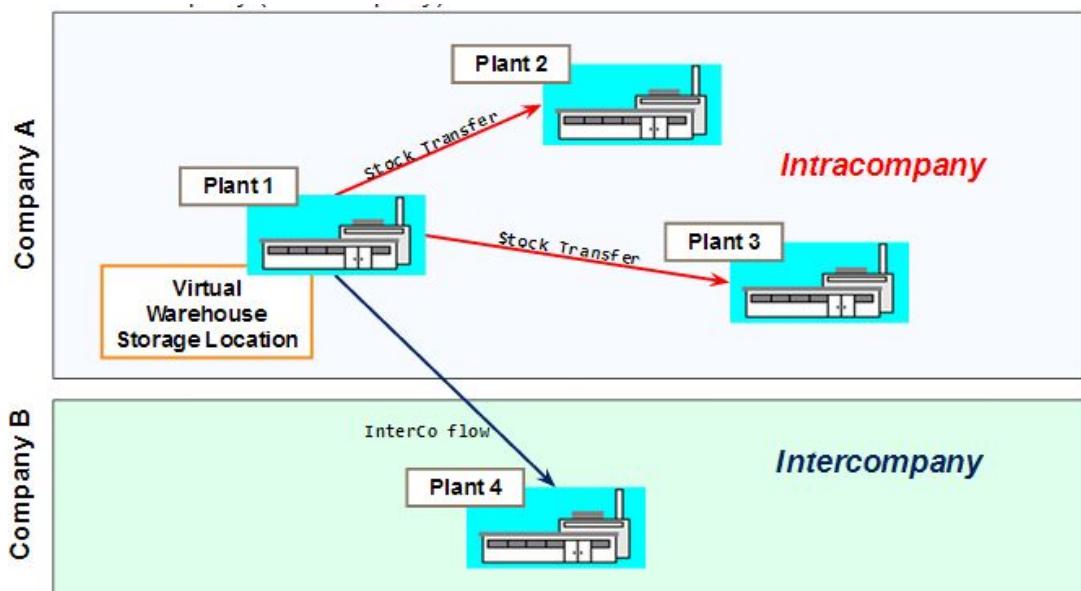
In case of intra company process invoicing is not needed for material transfer. As additional step for the intra company flow if transport cost should be invoice a standard PO can be created for invoicing just the transport. Adding condition price to the Purchase order

In case of intercompany a invoices process is including

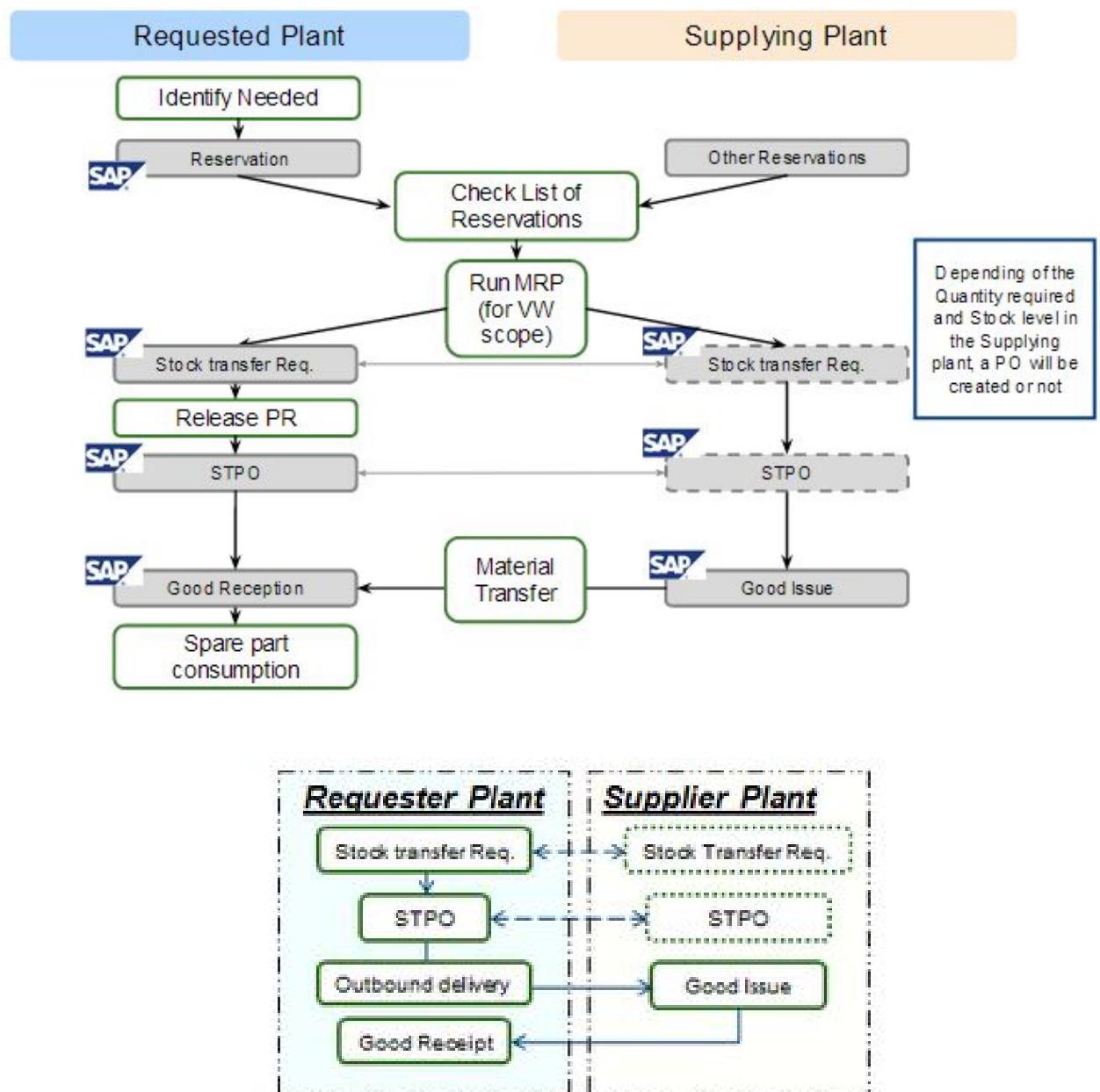
Some changes concerning Intra/Intercompany flows

	IntraCompany	InterCompany
Purchasing	Stock Transfer PO	Standard PO (NB)
Invoicing	-	Required between companies

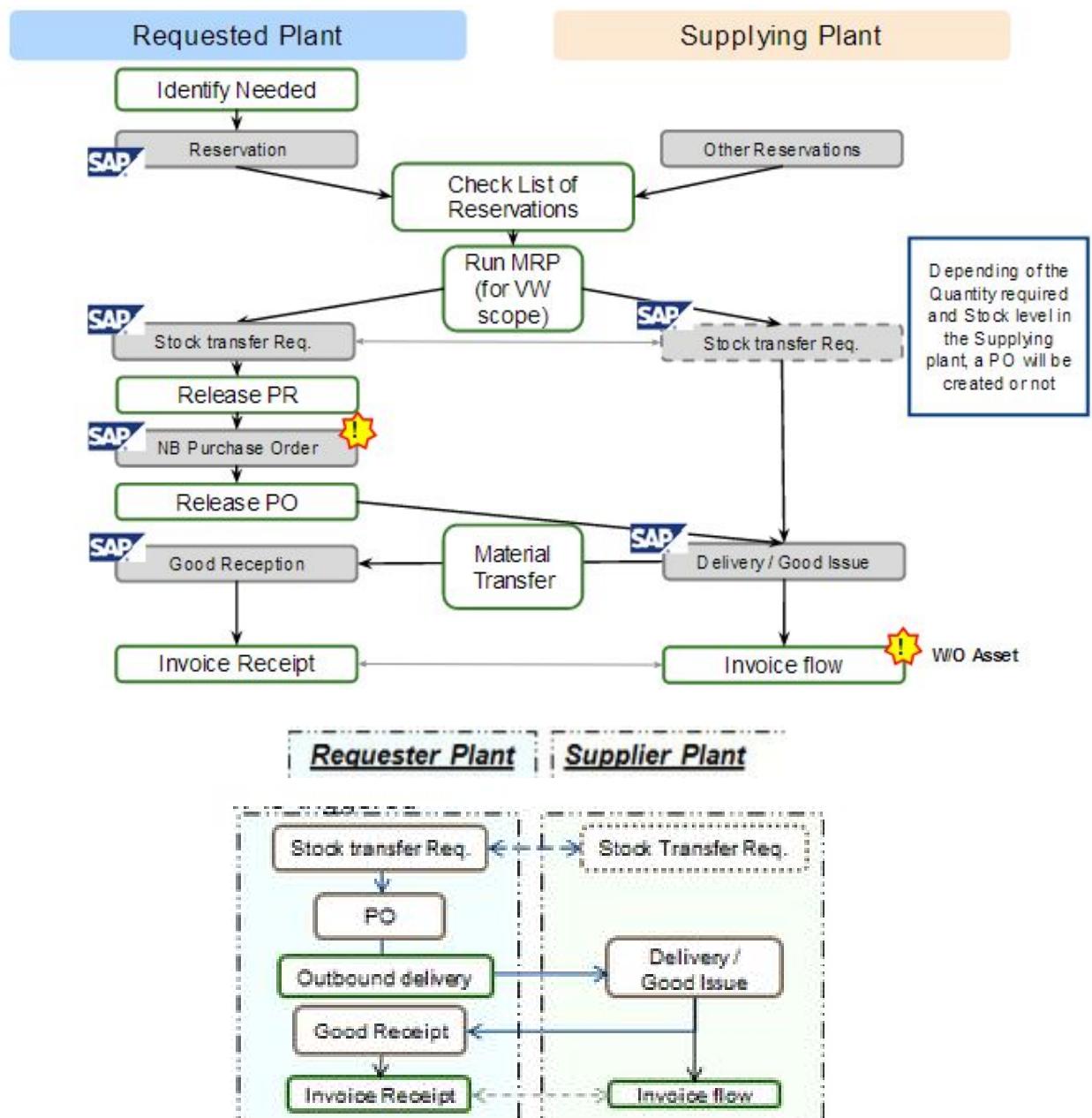
A: Automatic transfer scenario



INTRACOMPANY PROCESS



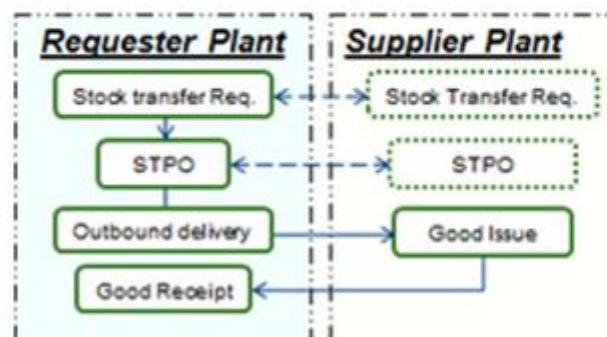
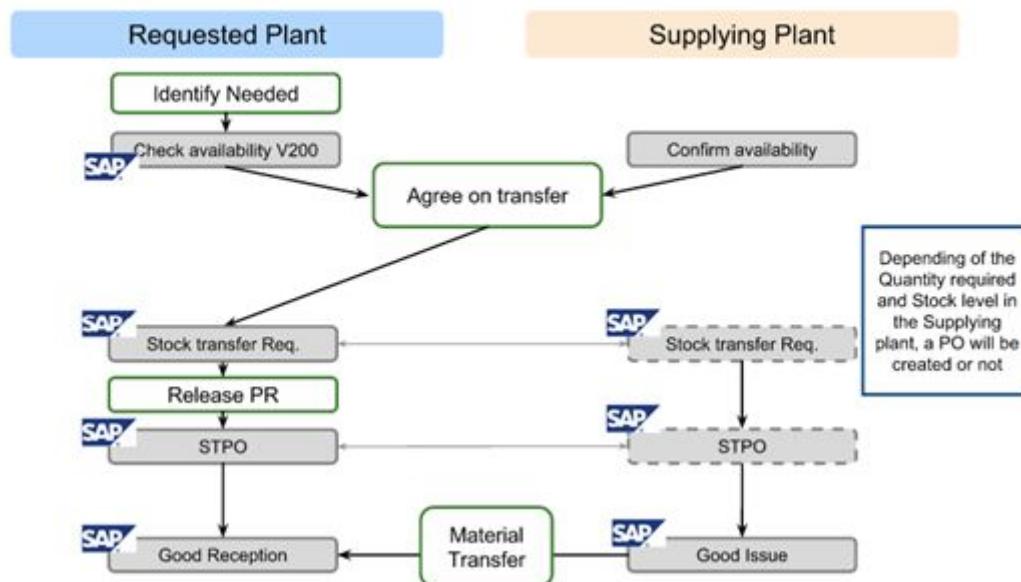
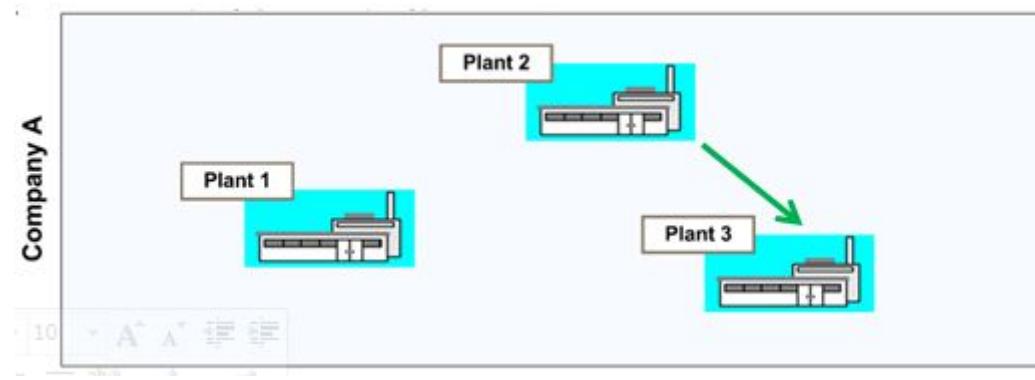
INTERCOMPANY PROCESS



B: Spot transfer scenario

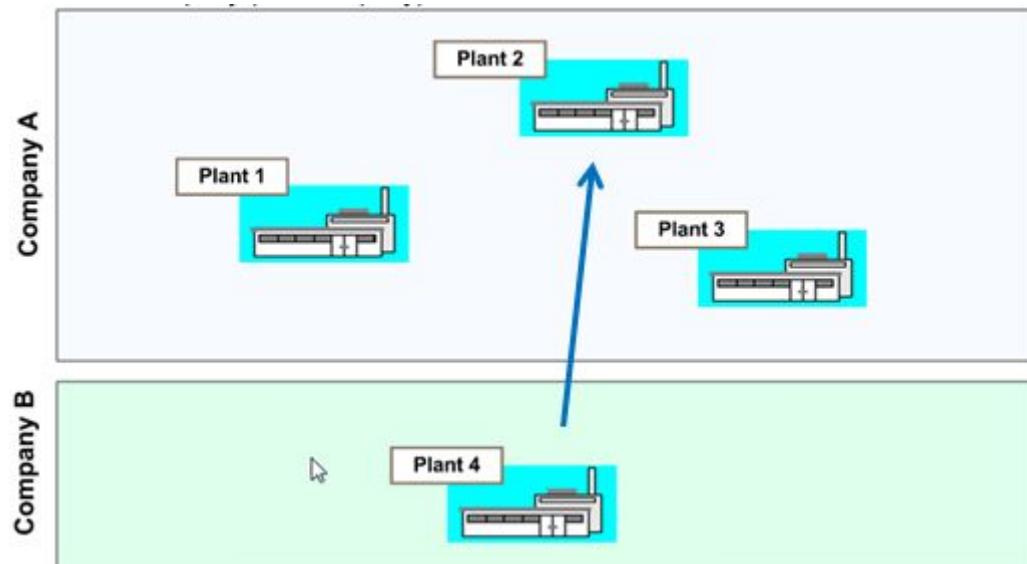
During a search for available material Plant 3 finds that the requested material is available in plant 2. In this case the material is an Intracompany transfer.

INTRACOMPANY PROCESS

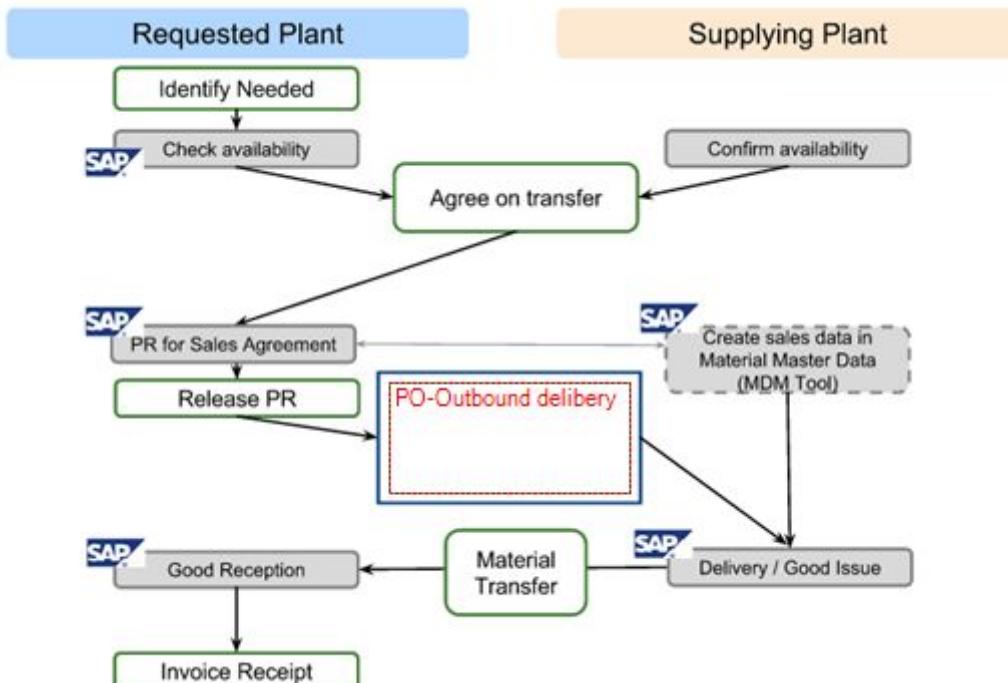


INTERCOMPANY PROCESS

Plant 2 is looking for a material stored in VW and finds it in plant 4 which is in another OpCO. We are talking about an Intercompany process.



In this case the transfer is more complex as it needs additional documents and involvement of other streams (P2P, B2R, O2C).



In this case some material master data has to be checked and aligned before the transfer process can start.

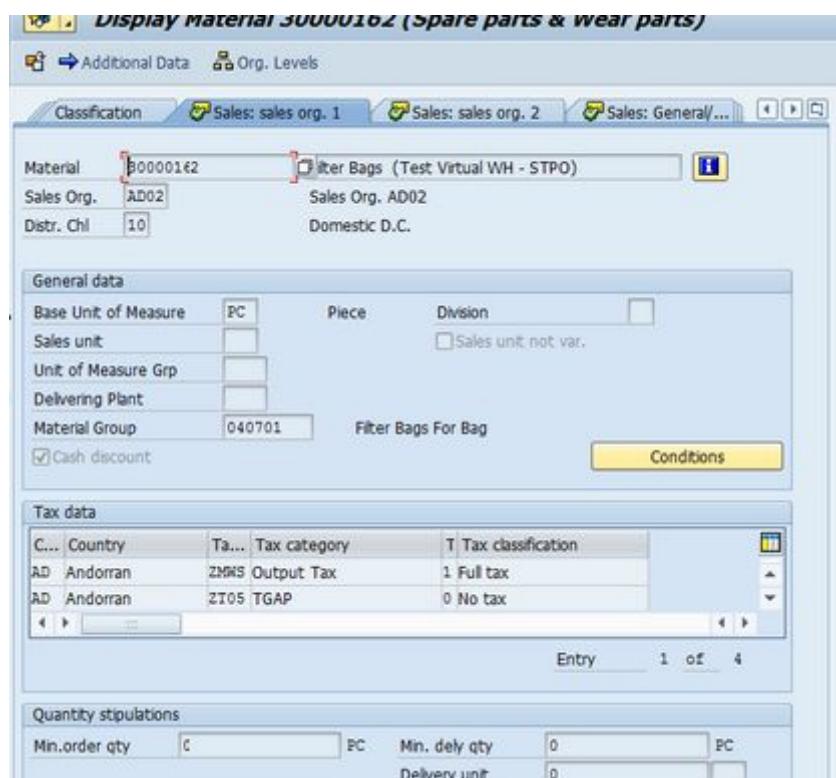
MDM – Material Master Data

In order to sell a material it is necessary to include in the MDM of the sending plant the sales view.

These sales view values in the material master are pre-requisites for the correct execution of the procurement flow. Materials should be created at Sales organization level

Sales organization Depending of Supplying plant
 Distribution Chanel 10 - Domestic D.C.

(the process is the same as in central warehouse but the only difference is that sales organization is not known in advance, and only after storage location V200 search it will be able to define which plant will be the supplier plant)



The screenshot shows the SAP Material Master Data (MDM) interface for Material 300000162. The top navigation bar includes tabs for 'Classification', 'Sales: sales org. 1' (selected), 'Sales: sales org. 2', and 'Sales: General/...'. The main area displays material details: Material ID 300000162, Sales Org. AD002, and Distr. Chnl 10. Below this, the 'General data' section shows Base Unit of Measure (PC), Piece (checkbox), Division (checkbox), Sales unit (checkbox), Unit of Measure Grp (checkbox), Delivering Plant (checkbox), Material Group 040701 (labeled 'Filter Bags For Bag'), and a 'Conditions' button. A 'Cash discount' checkbox is checked. The 'Tax data' section lists tax categories for Andorran: ZMKS Output Tax (1 Full tax) and ZT05 TGAP (0 No tax). The 'Quantity stipulations' section shows Min.order qty (0), Min. delay qty (0), and Delivery unit (0).

If the material ID is not available in the requesting plant, the extension has to be requested using MDM tool by the requesting plant.

3.3 Process Steps definition

3.3.1 Virtual Warehouse: Building Process

No	Step Name	Input	Description of Step	Output
1	SAP Analysis for proposed commodity	<ul style="list-style-type: none"> Materials with high value and low turnover Safety regional stock Safety OpCo stock 	<ul style="list-style-type: none"> Analysis of historical records and current ones for the list of materials. PCS groups: refractory, grinding media and bearings had the 	<ul style="list-style-type: none"> List of materials suitable to be shared

			<p>requirements for naming convention creation. The new material ID's were created directly by regional procurement</p> <ul style="list-style-type: none"> • Rest of the PCS groups required templates for data collecting 	
2	Create template for data collection	<ul style="list-style-type: none"> • List of materials 	<ul style="list-style-type: none"> ▪ Define the template (excel based) with the technical information for data collection ▪ Templates defined for the following set of materials <ul style="list-style-type: none"> • Filter bags: • Conveyor belts: • Specific belts: • Idlers: • Electric motors: • Gear motors: 	<ul style="list-style-type: none"> • Technical values registered for each material
3	Template filling: Technical data to be collected for each item	<ul style="list-style-type: none"> • Technical information (Characteristics to be identified/collected) 	<ul style="list-style-type: none"> ▪ Preparation of template with relevant Collection of technical data ▪ Filter bags: data were collected with suppliers help (in each location was performed a site audit) ▪ Conveyor belts: data collected from warehouse stock ▪ Specific belts: data collected from warehouse stock ▪ Idlers: data collected from warehouse stock and from technical documentation ▪ Electric motors: data collected from warehouse stock / motor nameplate ▪ Gear motors: data collected from warehouse stock / gear motor nameplate and from suppliers websites ▪ Variable Speed Drive: data collected from vendors to program the cards 	<ul style="list-style-type: none"> • Template with data collected
4	Data collection/validation/ensure naming convention	<ul style="list-style-type: none"> • Template completed with technical data 	<ul style="list-style-type: none"> ▪ Validation of data collected 	<ul style="list-style-type: none"> • File completed following naming convention

5	Data Validation for material ID's creation	<ul style="list-style-type: none"> Template completed 	<ul style="list-style-type: none"> Validate the templates with data collected in order to ensure the naming convention and SAP compliance: (e.g. Data collected as “Ø” was replaced as “Dia” from diameter / no special symbols are allowed in SAP; Small letters were replaced with caps letter) 	<ul style="list-style-type: none"> Validated data needed for unique material ID creation
6	Basic Data creation	<ul style="list-style-type: none"> Collected data 	<ul style="list-style-type: none"> Update of material master into SAP MM 	<ul style="list-style-type: none"> All sites with unique Material ID
7	Mapping between old material/New material created	<ul style="list-style-type: none"> Material ID's (old and new codes) 	<ul style="list-style-type: none"> Link between old material ID codes and the new “unique” material ID 	<ul style="list-style-type: none"> Identification of old material codes with new one
8	Material ID fully maintained for each plant	<ul style="list-style-type: none"> Material Master data at plant level 	<ul style="list-style-type: none"> Update material master with values/info at plant level 	<ul style="list-style-type: none"> Material master update with parameters at plant level
9	Material Transfer	<ul style="list-style-type: none"> Material ID's and quantities 	<ul style="list-style-type: none"> Stock transfer from material to material 	<ul style="list-style-type: none"> Goods movement done (From material to material). Stock for new material ID's updated
10	Regional Stock Optimization		<ul style="list-style-type: none"> Optimize stock levels 	<ul style="list-style-type: none"> Inventory values optimized
11	Bi-weekly report	<ul style="list-style-type: none"> Potential materials to be part of the Virtual Warehouse 	<ul style="list-style-type: none"> Follow up / Monitor / Enhancement of list of materials to be included in the Virtual Warehouse 	<ul style="list-style-type: none"> Updated list of materials included in the Virtual Warehouse

3.3.2 Virtual Warehouse: Reservation and MRP

No	Step Name	Input	Description of Step	Output
1	Identify Requirement (Receiving plant)		<ul style="list-style-type: none"> Identification of the need of spare part 	<ul style="list-style-type: none"> Material needed identified
2	Create reservation (Receiving plant)	<ul style="list-style-type: none"> Material ID and requested quantity Plant and storage location receiver 	<ul style="list-style-type: none"> Create reservation in SAP for the requested plant. 	<ul style="list-style-type: none"> Reservation created
3	Reservation List		<ul style="list-style-type: none"> Edit reservation list 	<ul style="list-style-type: none"> List of reservations for the plant

4	Check reservation List	<ul style="list-style-type: none"> List of reservations for the requested plant 	<ul style="list-style-type: none"> Check list of reservation in transactional system (SAP) 	<ul style="list-style-type: none"> List of reservations for the plant
5	Execute MRP	<ul style="list-style-type: none"> Reservations (for the requested plant with the supplying plant from “special procurement type”) 	<ul style="list-style-type: none"> Run MRP for the Virtual Warehouse Scope 	<ul style="list-style-type: none"> After the MRP has been launch the system creates Purchase Requisitions for a stock transfer PO in the supplying plants (based on the special procurement type).
6	Purchase Requisition (Release process)	<ul style="list-style-type: none"> Purchase requisitions 	<ul style="list-style-type: none"> Release the purchase requisition according to standard release strategy process 	<ul style="list-style-type: none"> Purchase requisition released
7	Check/Assign Purchase Requisition	<ul style="list-style-type: none"> Purchase requisition released 	<ul style="list-style-type: none"> Assign purchase requisition 	<ul style="list-style-type: none"> Purchase requisition assigned
8	Create Stock Transfer Purchase Order	<ul style="list-style-type: none"> Purchase requisition 	<ul style="list-style-type: none"> Create stock transfer purchase order referenced to purchase requisition 	<ul style="list-style-type: none"> Stock Transfer Purchase Order created
9	Initiate intra-company transfer	<ul style="list-style-type: none"> Stock Transfer Purchase Order 	<ul style="list-style-type: none"> Stock transfer movements from supplying plant to receiving plant (stock-in-transit) Goods issue of material in supplying plant 	<ul style="list-style-type: none"> Stock transfer done
10	Spare part reception/consumption	<ul style="list-style-type: none"> Intra-company process (Stock Transfer Purchase Order) 	<ul style="list-style-type: none"> Execute goods movement Goods receipt of material in the requested plant (from stock-in-transit) 	<ul style="list-style-type: none"> Goods movements done (GR/GI) in the respective plants Stock updated

Two different RACI matrix are described in this section. The first one refers to the implementation of the Virtual Warehouse and the different steps needed to put in place the process. The second one refers to the reservation and MRP steps to be run during the usage of the Virtual Warehouse process.

3.3.3 **Virtual Warehouse: Spot transfer**

No	Step Name	Input	Description of Step	Output
1	Identify Requirement (Receiving plant)	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> Identification of the need of spare part 	<ul style="list-style-type: none"> Material needed identified

2	Check via classification system if material is available in other plant	<ul style="list-style-type: none"> • Material ID and requested quantity • Plant and storage location possible supplying plant 	<ul style="list-style-type: none"> ▪ Receiving plant calls supplying plant and asks for availability 	• Material is available
3	Include sales view in MMD via MDM Tool	<ul style="list-style-type: none"> • Company code, plant code, • Invoicing company 	<ul style="list-style-type: none"> ▪ Change MMD 	• Material ready in supplying plant
4	Extend material ID via MDM tool	<ul style="list-style-type: none"> • If material ID not ready extend 	<ul style="list-style-type: none"> ▪ MDM administrator extends 	• Material ID ready in receiving plant
5	Receiving plant create PR	<ul style="list-style-type: none"> • Create PR via WO 	<ul style="list-style-type: none"> ▪ Release PR 	• PR ready to be transferred in PO
6	Procurement of receiving plant creating PO	<ul style="list-style-type: none"> • Include transport costs as cost condition in the PO (ZFL*) 	<ul style="list-style-type: none"> ▪ Release PO 	• PO ready
7	Creation of the outbound delivery	Include custom document for non EU countries (intercompany)		• Outbound delivery
8	Outbound delivery process	<ul style="list-style-type: none"> • Picking creation 	<ul style="list-style-type: none"> ▪ Through the PO can access to the outbound delivery 	
9	Good issues	<ul style="list-style-type: none"> • Delivery process 	<ul style="list-style-type: none"> ▪ Automatically in outbound delivery management 	
10	Good received		<ul style="list-style-type: none"> ▪ Standard good receive through MIGO transaction 	

Virtual Warehouse: Building Process

#	Step Name	Regional Procurement	Regional Maintenance	Head RMSO	Local Warehouse	Local Maintenance	Master Data Administrator
1	SAP Analysis for proposed commodity	A, R	C				
2	Create template for data collection	C	A,R				
3	Template filling-Technical data to be collected for each item	I	A		C	R	
4	Data collection/validation. Ensure Naming convention appliance	C	A, R	I		I	
5	Data validation for material ID's creation (Naming convention,...)	A, R	C				
6	Basic data creation	A, R	I				I
7	Mapping between old materials and new materials created	I	I		R	A, R	C
8	Material ID fully maintained for each plant	I	I		I	I	A, R
9	Material transfer	I			R	A	I

10	Regional stock optimization (Min/Max defined)	R	R	A	I	R	I
11	Bi-weekly report	R	A, R	I	I	I	I

Virtual Warehouse: Reservation and MRP process

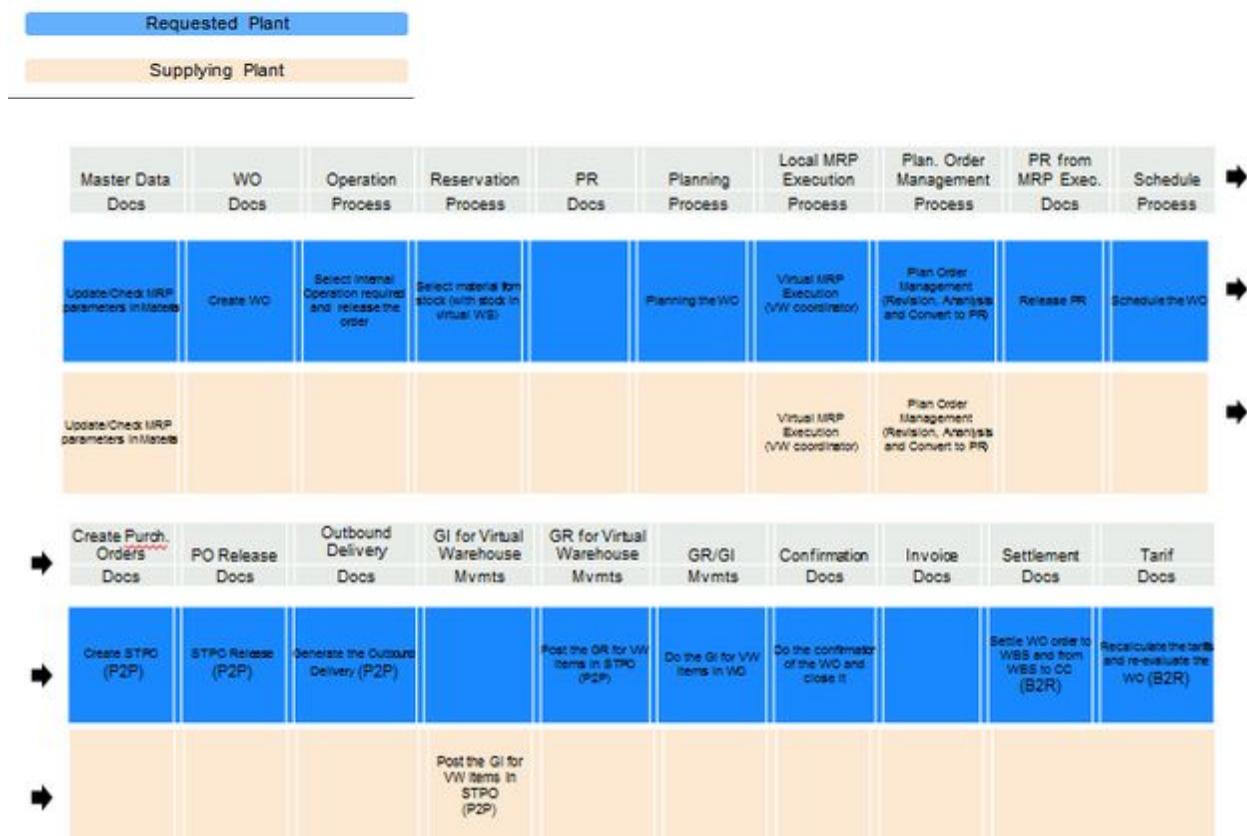
#	Step Name	Maint.Planner / Local Warehouse (1)	Maint.Planner / Local Warehouse (2)	Regional Warehouse	Plant Manager / RMSO	Buyer
1	Identify requirement	A, R				
2	Create reservation	R	I	A		
3	Reservation list			A, R		
4	Check reservation list	I	I	A, R		I
5	Execute MRP	I	I	A, R		I
6	Purchase Requisition (Releasing process)		I	A	R	I
7	Check/assign purchase requisition					A, R
8	Create purchase order					A, R
9	Material reception		A, R	I		I
10	Initiate intra company transfer			A, R	C	
11	Spare part reception/consumption	A, R	I	C		

Virtual Warehouse: Spot transfer

#	Step Name	Maint.Planner / Local Warehouse (Receiving plant)	Maint.Planner / Local Warehouse (Supplying plant)	Procurement (Receiving plant)	SD (Supplying plant)	B2R (Receiving plant)	Local MDM administrator
1	Identify requirement	A,R					
2	Check material availability through classification system	R	I				
3	Adapte material master data (sales view)	I	A				R
4	Extend material MDM tool	A	I				R
5	Creation Purchase Requisition	A	I	R			
6	Creation of PO	I	I	A,R	I		
7	Creation of Outbound delivery	I	I		A,R		
8	Good Issue from Outbound delivery	I	A,R		I		
9	Good receipt (PO)	A,R	I		I		

1 0	Spare part reception/consumption	A,R	I						
1 1	Invoicing	I						A, R	

INTRACOMPANY



INTERCOMPANY



3.4 Key Processes in SAP

In this document the following key processes for Inventory management are described:

- **Material Master MRP Settings**
- **Create reservation**
- **MRP Execution**
- **Purchase Requisition**
- **Stock Transfer Purchase Order**
- **Transfer postings**

4. Virtual Warehouse Process – Intra company Flow

4.1 Material Master MRP Settings

MRP views of the material master are updated with the MRP parameters described below.

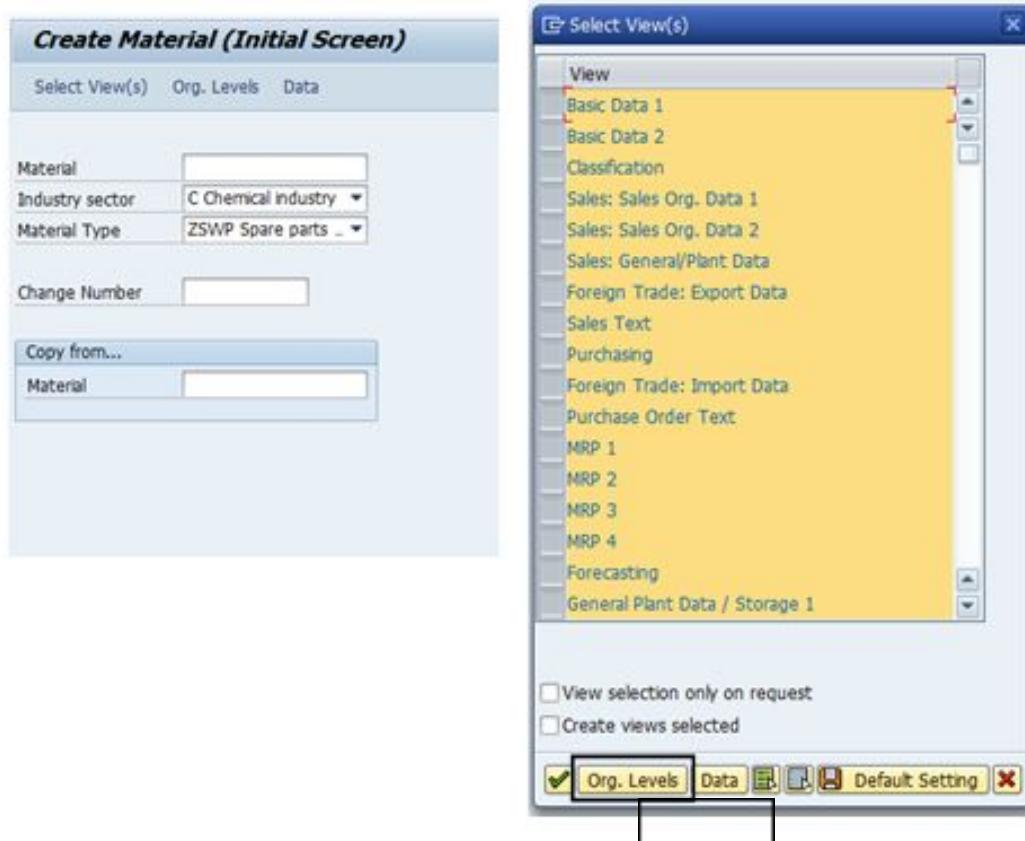
These MRP values in the material master are pre-requisites for the correct execution of the MRP run for the Virtual Warehouse execution.

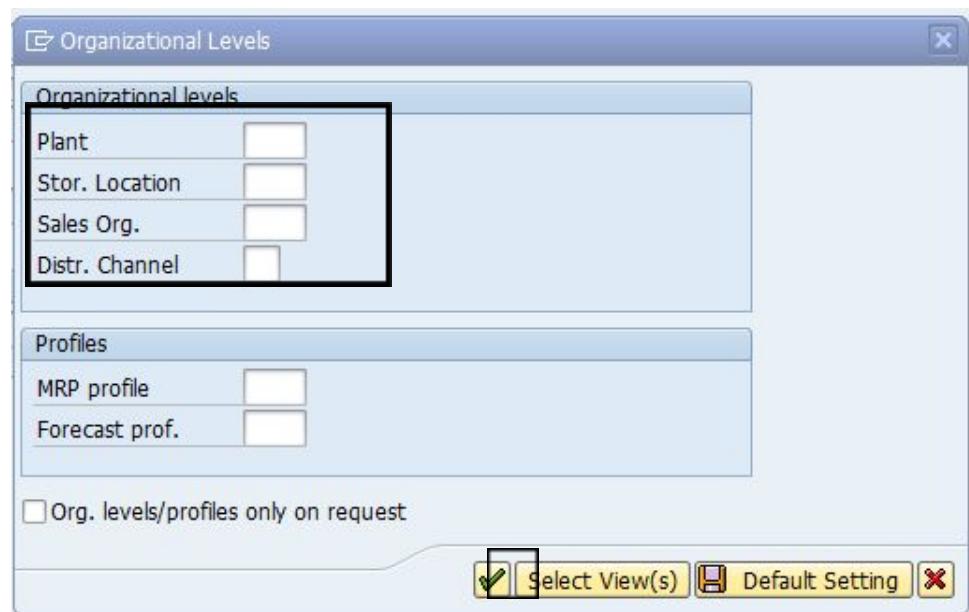
4.1.1 Creation of Spare parts for Virtual Warehouse Plant – where stock is maintained

Main Menu	<i>Logistic > Material Management > Material Master > Material > Create (General)</i>
Transaction Code	MM01

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Modification can be done using transaction MM01/MM02 but authorization is restricted to consultant roles. request has to be done by ZMM_MASIMO and only MDM team can make xtensions/changes on NC materials

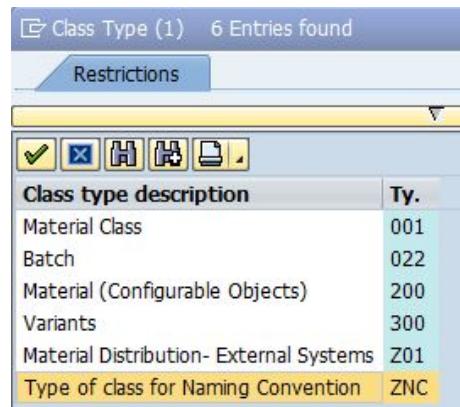




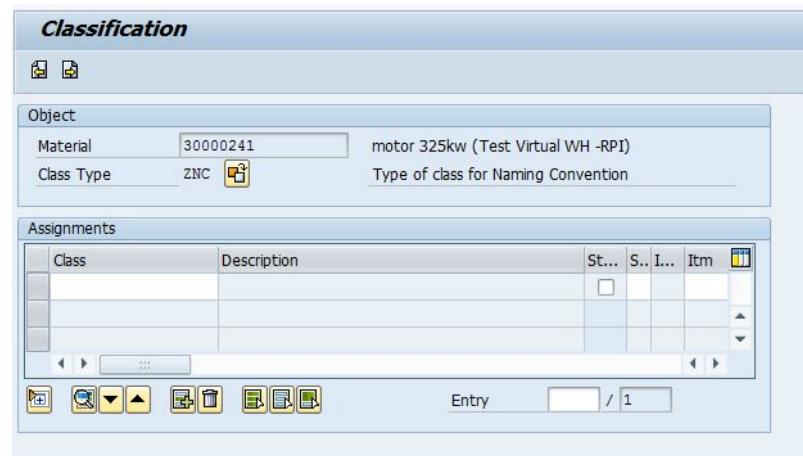
Important Fields to fill in:

- **Classification view**

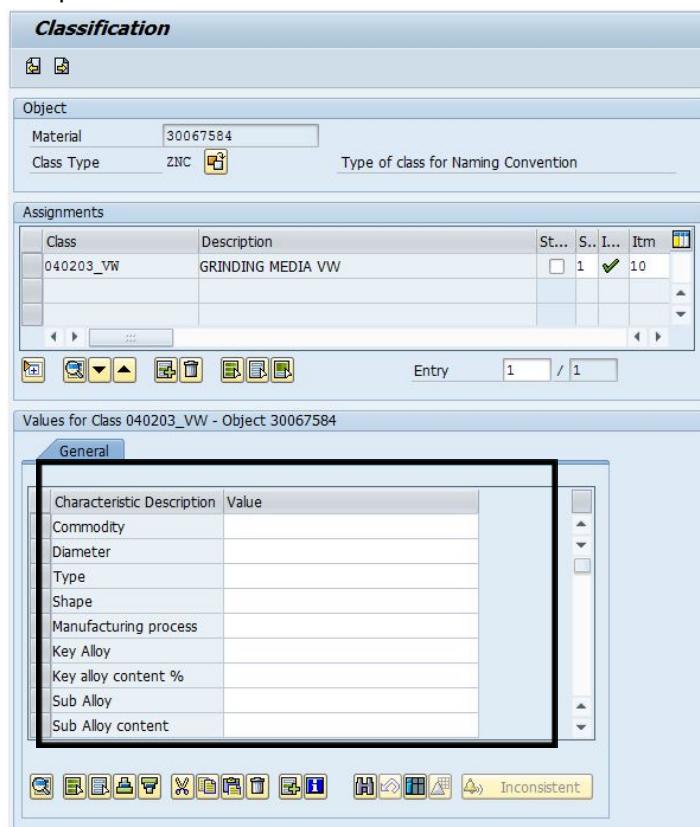
Field	Description
Class type description	Select the Type of Class for Naming Convention, "ZNC"



Then select the class of by the PCS code.



Complete the Characteristics of selected class.



The screenshot shows the SAP Classification interface. At the top, there's a toolbar with icons for search, refresh, and save. Below it is a header bar with 'Classification' and other tabs. The main area has two sections: 'Object' and 'Assignments'. In the 'Object' section, 'Material' is set to 30067584 and 'Class Type' is set to ZNC. The 'Assignments' section shows a table with columns: Class, Description, St..., S.., I..., and Itm. One row is visible: 040203_VW, GRINDING MEDIA VW, with checkboxes for St... (unchecked), S.. (checked), I.. (checked), and Itm (checked). Below the table are several icons for navigation and saving. A sub-dialog titled 'Values for Class 040203_VW - Object 30067584' is open, specifically the 'General' tab. This dialog contains a table with 'Characteristic Description' and 'Value' columns. The first row, 'Commodity', is highlighted with a black border. Other rows include Diameter, Type, Shape, Manufacturing process, Key Alloy, Key alloy content %, Sub Alloy, and Sub Alloy content. At the bottom of the sub-dialog are more icons for saving and exiting.

- **MRP 1 View**

(DOES NOT APPLY FOR SPOT TRANSFER PROCESS)

Field	Description
MRP Type	Set to "PD" In order to use a reorder point of zero
MRP Controller	V01 To select all materials managed by virtual warehouse in MRP Run (user exit: Z01 – Select materials by MRP Controller)
Reorder Point	Set to zero in the requesting plants

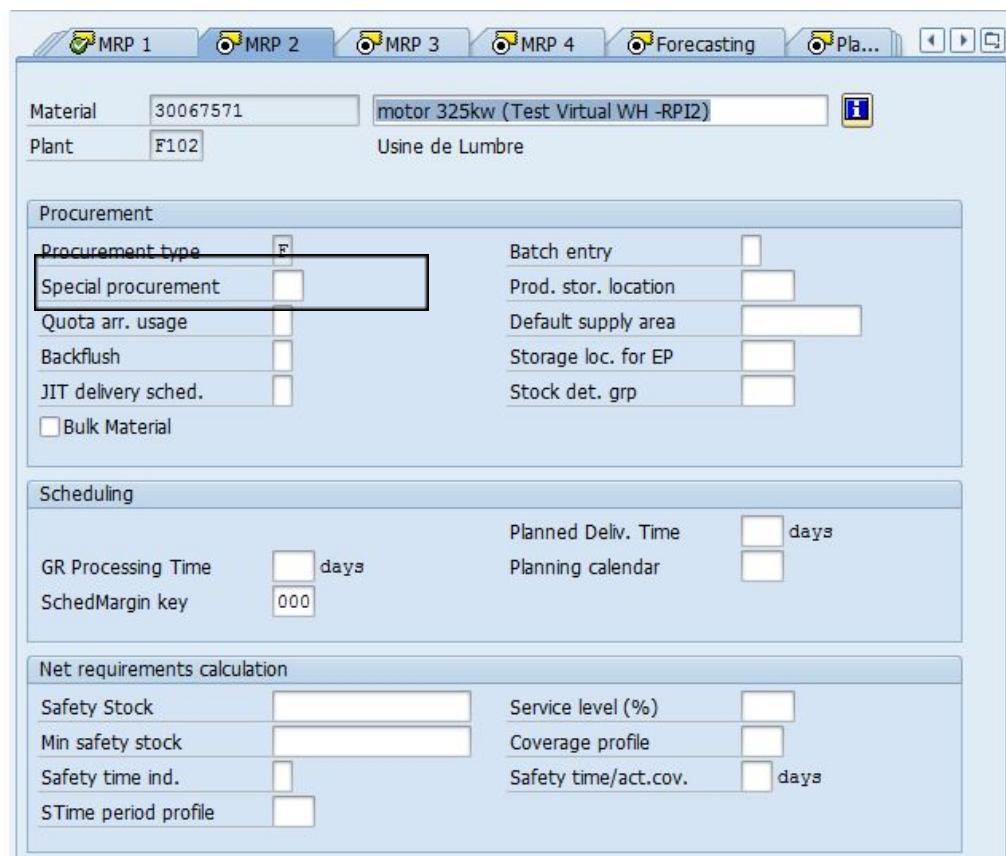
Purchase order text MRP 1 MRP 2 MRP 3 MRP 4

Material	30067571	motor 325kw (Test Virtual WH -RPI2)	<input checked="" type="checkbox"/>
Plant	F102	Usine de Lumbre	
General Data			
Base Unit of Measure	PC	Piece	MRP group
Purchasing Group	F00		ABC Indicator
Plant-sp.matl status			Valid from
MRP procedure			
MRP Type	PD	MRP	
Reorder Point		Planning time fence	<input type="checkbox"/>
Planning cycle		MRP Controller	<input checked="" type="checkbox"/> V01
Lot size data			
Lot size	EX	Lot-for-lot order quantity	
Minimum Lot Size		Maximum Lot Size	
Fixed lot size		Maximum stock level	
Ordering costs		Storage costs ind.	<input type="checkbox"/>
Assembly scrap (%)		Takt time	<input type="checkbox"/>
Rounding Profile		Rounding value	
Unit of Measure Grp			

- **MRP 2 View**

Field	Description
Special Procurement	This parameter must be fill in "blank" in the supplying plant of the material. In the receiver plant should be filled with the procurement type created for each sender plant

- Example:
- 40 Stock transfer (proc.from alter:k151)
 - 41 Stock transfer (proc.from alter:F103)
 - 42 Stock transfer (proc.from alter:R101)
 - 43 Stock transfer (proc.from alter:S101)



The screenshot shows the SAP MRP (Material Requirements Planning) interface for material 30067571 (motor 325kw). The top bar includes tabs for MRP 1, MRP 2, MRP 3, MRP 4, Forecasting, Planning, and navigation icons.

Procurement:

- Procurement type: F (Special procurement)
- Batch entry:
- Prod. stor. location:
- Default supply area:
- Storage loc. for EP:
- Stock det. grp:
- Bulk Material

Scheduling:

- GR Processing Time: days
- Planned Deliv. Time: days
- SchedMargin key: 000
- Planning calendar:

Net requirements calculation:

- Safety Stock:
- Service level (%):
- Min safety stock:
- Coverage profile:
- Safety time ind.:
- Safety time/act.cov.: days
- STime period profile:

- **Sales views**

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

These Sales values in the material master are pre-requisites for the correct execution of the procurement flow. Materials should be created at Sales organization level

- Sales organization Depending of Supplying plant
- Distribution Chanel 10 - Domestic D.C.

Display Material 30000162 (Spare parts & wear parts)

Additional Data Org. Levels

Classification Sales: sales org. 1 Sales: sales org. 2 Sales: General/Plant

Material: 30000162 Filter Bags (Test Virtual WH - STPO)

Sales Org.: AD02 Sales Org. AD02

Distr. Chl: 10 Domestic D.C.

General data

Base Unit of Measure	PC	Piece	Division
Sales unit	<input type="checkbox"/>	<input type="checkbox"/> Sales unit not var.	
Unit of Measure Grp	<input type="checkbox"/>		
Delivering Plant	<input type="checkbox"/>		
Material Group	040701	Filter Bags For Bag	
<input checked="" type="checkbox"/> Cash discount		Conditions	

Tax data

C...	Country	Ta...	Tax category	T Tax classification
AD	Andorran	ZMMS	Output Tax	1 Full tax
AD	Andorran	ZT05	TGAP	0 No tax

Entry 1 of 4

Quantity stipulations

Min.order qty	<input type="text"/> 0	PC	Min. delay qty	<input type="text"/> 0	PC
Delivery unit	<input type="text"/> 0				

Change Material 30000162 (Spare parts & Wear parts)

Errors (Posting) Additional Data Org. Levels Check Screen Data

Sales: sales org. 1 Sales: sales org. 2 Sales: General/Plant Foreign trade ...

Material: 30000162 Filter Bags (Test Virtual WH - STPO)

Sales Org.: AD02 Sales Org. AD02

Distr. Chl: 10 Domestic D.C.

Grouping terms

Matl statistics grp	<input type="text"/> 0	No update	Material pricing grp	<input type="checkbox"/>	CR Maintanc...
Volume rebate group	<input type="checkbox"/>		Acct assignment grp	<input type="text"/> 46	Other stockab...
Gen. item cat. grp	<input type="text"/> ZST0	Other stockab...	Item category group	<input type="text"/> ZST0	Other stockab...
Pricing Ref. Matl	<input type="checkbox"/>				
Product hierarchy	<input type="checkbox"/>				
Commission group	<input type="checkbox"/>				

Material groups

Material group 1	<input type="checkbox"/>	Material group 2	<input type="checkbox"/>	Material group 3	<input type="checkbox"/>
Material group 4	<input type="checkbox"/>	Material group 5	<input type="checkbox"/>		

Product attributes

<input type="checkbox"/> Product attribute 1	<input type="checkbox"/> Product attribute 2	<input type="checkbox"/> Product attribute 3
<input type="checkbox"/> Product attribute 4	<input type="checkbox"/> Product attribute 5	<input type="checkbox"/> Product attribute 6
<input type="checkbox"/> Product attribute 7	<input type="checkbox"/> Product attribute 8	<input type="checkbox"/> Product attribute 9
<input type="checkbox"/> Product attribute 10		

4.1.2 Extend Material for other plants - where stock is not maintained

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Main Menu	<i>Logistic > Material Management > Material Master > Material > Create (General)</i>
Transaction Code	MM01

Extend a material, that has been created before, has to be done through the transaction MM01.

But it is needed that the “Material ID” field must be filled in with the Material number that you want to extend, with this the new material will be created with same number.

As well, the field of “Copy from...” has to be filled with material number, with this all fields of the different views will be completed with same values used in the material created.

Create Material (Initial Screen)

Select View(s)	Org. Levels	Data			
Material	30067571				
Industry sector	C Chemical industry ▾				
Material Type	ZSWP Spare parts ... ▾				
Change Number	<input type="text"/>				
Copy from... <table border="1"> <tr> <td>Material</td> <td>30067571</td> <td><input type="button" value="X"/></td> </tr> </table>			Material	30067571	<input type="button" value="X"/>
Material	30067571	<input type="button" value="X"/>			

Organizational Levels

Organizational levels		Copy from
Plant	f104	f102
Stor. Location	V200	V200
Valuation type		
Sales Org.	FR10	FR10
Distr. Channel	10 <input checked="" type="checkbox"/>	10

Profiles	
MRP profile	
Forecast prof.	

Org. levels/profiles only on request

Select View(s) Default Setting

Complete the Material Views:

(DOES NOT APPLY FOR SPOT TRANSFER PROCESS)

MRP 1 view

Field	Description
MRP Type	Set to "PD" In order to use a reorder point of zero
MRP Controller	V01 To select all materials managed by virtual warehouse in MRP Run (user exit: Z01 – Select materials by MRP Controller)
Reorder Point	Set to zero in the requesting plants

Purchase order text MRP 1 MRP 2 MRP 3 MRP 4

Material	30067571	motor 325kw (Test Virtual WH -RPI2)	<input type="button" value="i"/>
Plant	F104	Usine de Lumbre	
General Data			
Base Unit of Measure	PC	Piece	MRP group
Purchasing Group	F00		ABC Indicator
Plant-sp.matl status	<input type="checkbox"/>		Valid from
MRP procedure			
MRP Type	PD	MRP	
Reorder Point			Planning time fence
Planning cycle			MRP Controller <input checked="" type="checkbox"/> V01
Lot size data			
Lot size	EX	Lot-for-lot order quantity	
Minimum Lot Size			Maximum Lot Size
Fixed lot size			Maximum stock level
Ordering costs			Storage costs ind.
Assembly scrap (%)			Takt time
Rounding Profile			Rounding value
Unit of Measure Grp			

MRP 2 view

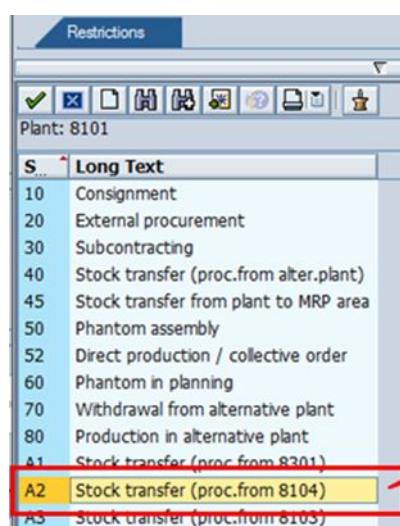
Field	Description
MRP Type	Set to "PD" In order to use a reorder point of zero
MRP Controller	V01 To select all materials managed by virtual warehouse in MRP Run (user exit: Z01 – Select materials by MRP Controller)
Reorder Point	Set to zero in the requesting plants

MRP 1 MRP 2 MRP 3 MRP 4 Forecasting Pl... □ □ □

Material	30067571	motor 325kw (Test Virtual WH -RPI2)	<input checked="" type="checkbox"/>
Plant	F104	Usine de Dannes	
Procurement			
Procurement type	<input checked="" type="checkbox"/>	Batch entry	<input type="checkbox"/>
Special procurement	40	Prod. stor. location	<input type="checkbox"/>
Quota arr. usage	<input type="checkbox"/>	Default supply area	<input type="checkbox"/>
Backflush	<input type="checkbox"/>	Storage loc. for EP	<input type="checkbox"/>
JIT delivery sched.	<input type="checkbox"/>	Stock det. grp	<input type="checkbox"/>
<input type="checkbox"/> Bulk Material			
Scheduling			
GR Processing Time	<input type="checkbox"/> days	Planned Deliv. Time	<input type="checkbox"/> days
SchedMargin key	000	Planning calendar	<input type="checkbox"/>
Net requirements calculation			
Safety Stock	<input type="checkbox"/>	Service level (%)	<input type="checkbox"/>
Min safety stock	<input type="checkbox"/>	Coverage profile	<input type="checkbox"/>
Safety time ind.	<input type="checkbox"/>	Safety time/act.cov.	<input type="checkbox"/> days
STime period profile	<input type="checkbox"/>		

Field	Description
Special Procurement	Select the “Special procurement type” depending on the warehouse, where the material is managed (Virtual Warehouse) This parameter must be set only in the requesting plants of the material.

In case that several plant will be used as supplying plant, a special procurement types have to be customized.



4.2 Stock of Virtual Warehouse

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

In case of stock adjustment in some cases is needed transfer of material to another storage location or to another material code can be done using standard SAP transfer.

As an example below is explained how material can be transfer from one material ID to another material ID

For storage location transfer please see related documentation

https://docs.google.com/a/holcim.com/presentation/d/15ccDopUCkrfhZvLctjkl6WhXTpHoJTEbL784YJWPavg/edit?usp=drive_web

4.2.1 Transfer Stock to VW material

Main Menu	<i>Logistic > Material Management > Inventory Management > Good Movement</i>
Transaction Code	MIGO

Fill in the following fields:

Field	Description
Executable Action	Fill in with “Good Transfer” value.
Reference Document	Fill in with “Other” value.
Movement type	Fill in with the movement type “309”, Transfer posting Material to Material.
Posting Date	Select the posting date, that is the date which is used when entering the document in Financial Accounting or Controlling
Destination Material	Select the material ID created for the Virtual Warehouse.
Destination Plant	Select the plant where the stock is going to be maintained.
Destination Store Location	Select the storage location where the stock will be storage and maintained.
Form Material	Select the old material that will be transferred.
Form Plant	Select the plant where the stock have been maintained previously.
Form Store Location	Select the storage location where the material have been storage.
Quantity	Select the quantity in units that will be transferred.

Transfer Posting Other - Rodrigo Pitarch

Show Overview | □ | Hold | Check | Post | Help

A08 Transfer Posti... □ R10 Other □ TR tfr ps.mat.to mat 310 □

General

Document Date: 21.03.2012 | Material Slip:
 Posting Date: 21.03.2012 | Doc.Header.Text:
 2 Individual Slip with...

Transfer Posting

Dest	From
Material: <input type="text"/>	<input type="text"/>
Plant: <input type="text"/>	<input type="text"/>
Stor. Loc.: <input type="text"/>	<input type="text"/>
Spec.Stock: <input type="checkbox"/>	<input type="text"/>
Qty in UnE: <input type="text"/>	<input type="button"/>

Line: 1

When you have completed all fields, please, click on **Check**, to check all value, if all is correct a message will appear,

 Document is O.K.

Then, click on **Post** button, and save,

 Material document 4900022079 posted

4.2.2 Check Material Stock Overview

Main Menu	Logistic > Material Management > Inventory Management > Environment > Stock
Transaction Code	MMBE

Complete the material ID that you want to check.

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

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



Database selections

Material	30067571		
Plant	<input type="text"/>	to <input type="text"/>	
Storage location	<input type="text"/>	to <input type="text"/>	
Batch	<input type="text"/>	to <input type="text"/>	

Stock Type Selection

Also Select Special Stocks
 Also Select Stock Commitments

List Display

Special Stock Indicator	<input type="text"/>	to <input type="text"/>	
Display version	<input type="text" value="1"/>		
Display Unit of Measure	<input type="text"/>		
<input checked="" type="checkbox"/> No Zero Stock Lines			
<input type="checkbox"/> Decimal Place as per Unit			

Selection of Display Levels

Company Code
 Plant
 Storage Location
 Batch
 Special Stock

Then click on “Execute” button, .

Stock Overview: Basic List

Selection

Material	30067571	Motor 325kw (Test Virtual WH -RPI2)
Material Type	ZSWP	Spare parts & Wear parts
Unit of Measure	PC	Base Unit of Measure PC

Stock Overview

Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock	Consgt ...
Full	40,000	15,000				
FR01 Holcim (France) SAS	40,000	15,000				
F102 Usine de Lumbre	25,000					
V200 Virtual WH	25,000					
F104 Usine de Dannes	10,000	10,000				
V200 Virtual WH	10,000					
F106 Usine d'Héming	5,000	5,000				
V200 Virtual WH	5,000					

4.3 Create Reservation

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

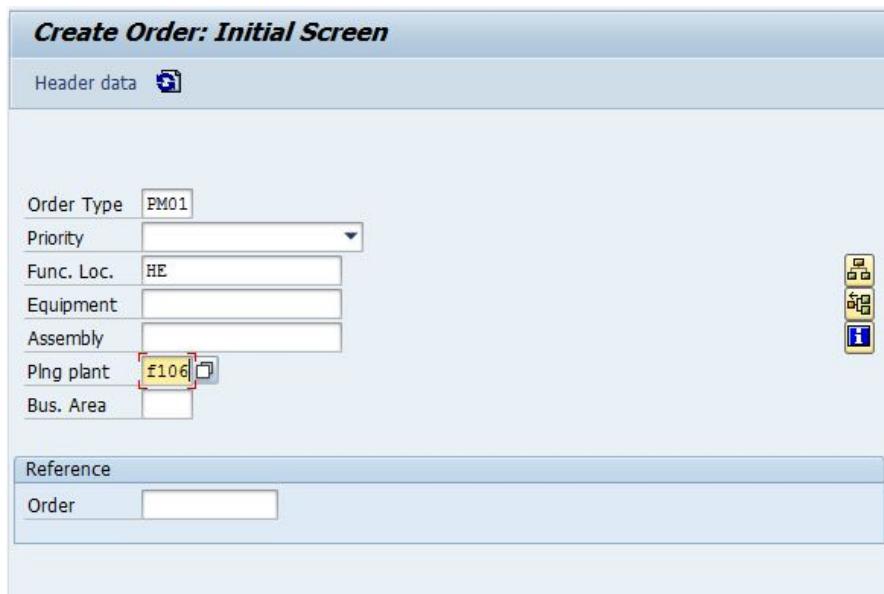
To do the reservation of the material, of the supplying plant by the receiving plant, it is done through a PM work order.

4.3.1 For PM Order

4.3.1.1 Creation of PM Work Order

Main Menu	<i>Logistics > Plant Maintenance > Maintenance Processing >Order</i>
Transaction Code	IW31

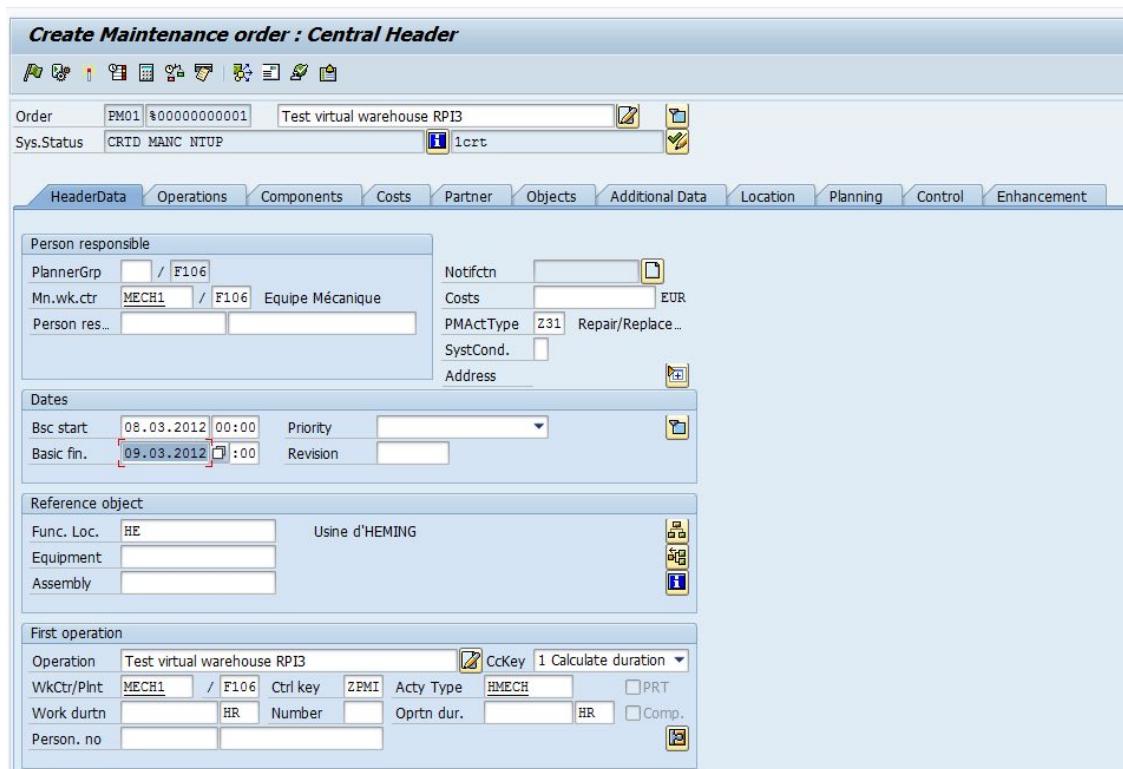
Complete the Order Type, Functional Location and Planning Plant (receiving plant) fields.



On the “Header Data” tab, fill in the following fields:

Field	Description
Description	Complete the description for the work order.
Main Work Center	Complete the field with the work center that will be in charge of the work order.
PM Activity Type	Complete the field with the activity type for the work order.
Dates	Complete the Basic Start and Finish date for the work order.

Create Maintenance order : Central Header

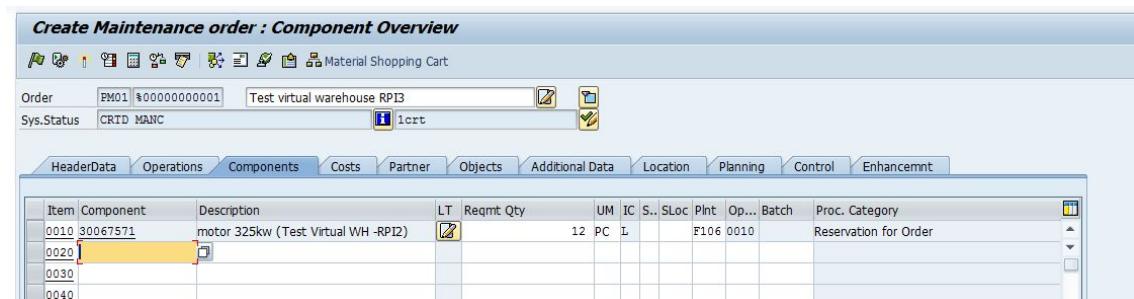


The screenshot shows the 'Create Maintenance order : Central Header' interface. The 'Components' tab is selected. Key fields include:

- Order:** PM01 \$0000000001, Test virtual warehouse RPI3
- Sys.Status:** CRTD MANC NTUP
- Person responsible:** PlannerGrp / F106, Mn.wk.ctr MECH1 / F106, Equipe Mécanique
- Dates:** Bsc start 08.03.2012 00:00, Priority, Basic fin. 09.03.2012 00:00, Revision
- Reference object:** Func. Loc. HE, Usine d'HEMING, Equipment, Assembly
- First operation:** Operation Test virtual warehouse RPI3, WkCtr/Plnt MECH1 / F106, Ctrl key ZPMI, Acty Type HMECH, Work durtn HR, Oprtn dur. HR, Person. no

On the “Component” tab, complete the material ID, and the quantity needed for the receiving plant.

Create Maintenance order : Component Overview



The screenshot shows the 'Create Maintenance order : Component Overview' interface. A table lists components:

Item	Component	Description	LT	Reqmt Qty	UM	IC	S.	SLoc	Plnt	Op...	Batch	Proc. Category
0010	30067571	motor 325kw (Test Virtual WH -RPI2)		12	PC	L			F106	0010		Reservation for Order
0020												
0030												
0040												

Press on Save button 

 Order saved with number 90000156

4.3.1.2 Release the PM Work Order

Main Menu	Logistics > Plant Maintenance > Maintenance Processing > Order
Transaction Code	IW32

Complete the Work order number, and press enter key.

Change Order: Initial Screen

Header data Operations Components Costs Additional data Planning Control 

Order

90000156

First, check that all field are correctly completed, then, click on Release button, 

Change Maintenance order 90000156: Central Header

Order PM01 90000156 Test virtual warehouse RPI3  

Sys.Status CRID MACM PRC 1crt 

HeaderData Operations Components Costs Partner Objects Additional Data

Person responsible

PlannerGrp / F106
 Mn.wk.ctr MECH1 / F106 Equipe Mécanique
 Person res...

Notifctn 
 Costs EUR
 PMActType Z31 Repair/Replace...
 SystCond.
 Address 

Dates

Bsc start 08.03.2012 07:30 Priority
 Basic fin. 08.03.2012 07:30 Revision 

Reference object

Func. Loc. HE Usine d'HEMING 
 Equipment
 Assembly

First operation

Operation Test virtual warehouse RPI3  CcKey 1 Calculate duration 
 WkCtr/Plnt MECH1 / F106 Ctrl key ZPMI Acty Type HMECH PRT
 Work durtn HR Number Oprtn dur. HR Comp. 

After release the order, press on Save button 

 Order saved with number 90000156

4.4 MRP Run for Virtual Warehouse

(DOES NOT APPLY FOR SPOT TRANSFER PROCESS)

4.4.1 Process overview

Within the stock transfer procedure, materials are procured and delivered **within a company**. The plant that is to receive the materials (**receiving plant**) orders the goods internally from another plant that is in a position to deliver the materials (**issuing plant**). The dependent requirements for the components to be transferred are determined in the receiving plant.

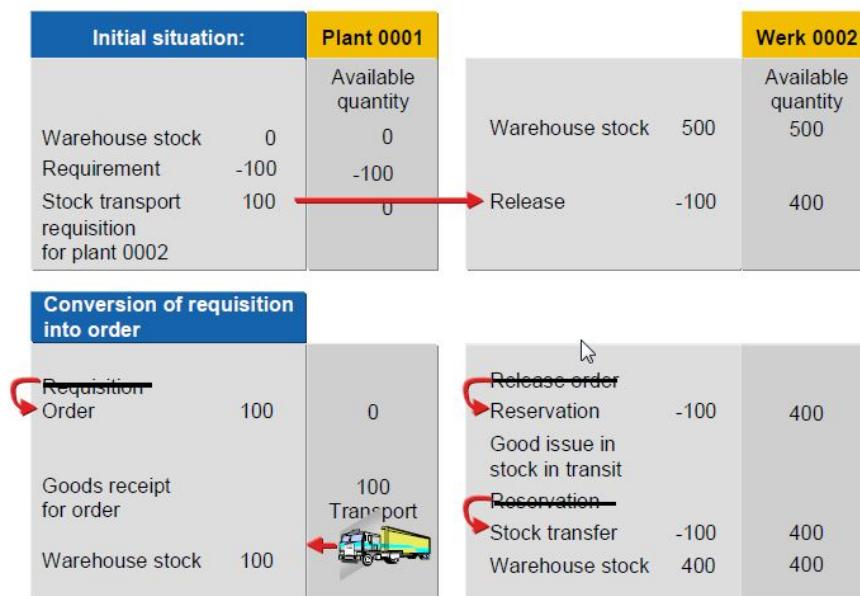
4.4.1.1 Prerequisites

- You have maintained a special procurement key for *stock transfer* in Customizing for MRP, in the IMG activity *Define special procurement type* and you have entered the delivering plant there.
- You have assigned this special procurement key to the material in the material master of the receiving plant (*MRP 2 view*).
- You have created a material master for the material in the issuing plant (some material code).

4.4.1.2 Process Flow

The following example shows the stock transfer procedure in MRP:

Stock Transfer from Plant to Plant



4.4.2 Run MRP

Main Menu	<i>Logistics > Materials Management > Material Requirements Planning > MRP > Planning > Total Planning</i>
Transaction Code	MD01

MRP Run

Scope of planning	VWVB	ALWAYS enter 3 planned order
Plant		
MRP control parameters		
Processing key	NETC*	Net Change in Total Horizon
Create purchase req.	2	Purchase requisitions in opening period
Schedule lines	3	Schedule lines
Create MRP list	1	MRP list
Planning mode	1	Adapt planning data (normal mode)
Scheduling	1	Determination of Basic Dates for Planned
Planning date	08.03.2012	
Process control parameters		
<input checked="" type="checkbox"/> Parallel processing		
<input type="checkbox"/> Display material list		
User exit: select materials for planning		
User exit key	Z01	
User exit parameter	v01	

Field	Description
Scope of Planning	Complete this field with scope selected for you region", for the virtual warehouse. When the MRP run, it will be execute for the planning sequence(*), that is the group of plants that use Virtual Warehouse.
User exit key	Fill in with the User exit key with "Z01", select materials by MRP Controller or 'Z02' for PCS code.
User exit parameters	To select all materials managed by the various virtual warehouse plants in the MRP Run. Fill in with this field with the MRP controller "V01", then MRP run will include only materials with this MRP controller. Or filter suing PCS codes in this cases MRP run will include only materials with this PCS codes

Press 3 times Enter key to run MRP

(*)Note: Planning Sequence

Scope of planning: VIWH		
Description: Virtual Warehouse CHE		
Sequence	Plant	Name
1	0001	Plant 1
2	0002	Plant 2
3	0003	Plant 3
4	0004	Plant 4

Planning Sequence

The plants that are combine in a scope of planning are planned together in a total planning run. This has the advantage that all the Virtual Warehouse Plants can be planned together.

4.4.2.1 Special Case

In Case that the supplying plant does not have enough stock, the process to follow is described below:

- Run MRP for Scope of planning definition, then Outcome will be:

• Results in Supplying Plant

A..	Date	MRP ...	MRP element data	Rescheduli...	E..	Receipt/Reqmt	Available Qty	Su...	Iss...
	21.03.2012	Stock					34		
	21.03.2012	PRqRel	0010000161/00010				10-	24	F104V200
	26.03.2012	PurRqs	0010000186/00010				11	35	
	26.03.2012	PRqRel	0010000185/00010				35-	0	F106V200

Purchase Request for the Supplying Plant (exceed quantity in the stock)

• Results in Receiving Plant

A..	Date	MRP ...	MRP element data	Rescheduli...	E..	Receipt/Reqmt	Available Qty	Su...	St...
	21.03.2012	Stock					0		
	21.03.2012	OrdRes	000090000189				35-	35-	
	26.03.2012	PurRqs	0010000185/00010 *	21.03.2012	10		35	0	F102V200

Purchase Request for the Receiving Plant

- Release the Purchase Requests in Supplying Plant

As far as in the supplying plant there is no enough stock, MRP will trigger a planned order that will be transferred into a purchase request and a PO. Once the Good receive is done transfer to the demanding plant can be done.

Stock/Requirements List as of 16:34 hrs

Show Overview Tree

Material	30067571	motor 325kw (Test Virtual WH -RPI2)						
Plant	F102	MRP type	PD	Material Type	ZSWP	Unit	PC	
A.	Date	MRP ...	MRP element data	Rescheduli...	E.. Receipt/Reqmt	Available Qty	Su...	Iss...
	21.03.2012	Stock				34		
	12.03.2012	PRqRel	0010000161/00010			10-	24	F104V200
	26.03.2012	PurRqs	0010000186/00010			11	35	
	26.03.2012	PRqRel	0010000185/00010			35-	0	F106V200

3. Create the Purchase Orders from the PR's

● Purchase Order in the Supplying Plant

Create Purchase Order

Document Overview Off | Hold | Print Preview | Messages | Personal Setting

Document overview

Vendor/SupplySrc/Category/Object

- /Not Assigned
- Open Requisitions
- 10000186

Delivery/Invoice

NB Standard PO Vendor 1000777 PARDUYN SA Doc. date 21.03.2012

Payment Terms FMO6 Currency EUR Exchange Rate 1,00000 Exch.Rate Fixed

Payment in days %
Payment in days %
Payment in days net

Incoterms N/A GR Message

S..	Itm	A	I	Material	Short Text	PO Quantity	O...	C Delv. Date	Net Price	Curr...	Per	O...	Matl Group	Print
	10			30067571	motor 325kw (Test Virt...	11 PC	D	21.03.2012	140,00 EUR	EUR	1	PC	Motors, Dire... Usine de I	
										EUR				
										EUR				
										EUR				
										EUR				
										EUR				
										EUR				
										EUR				
										EUR				
										EUR				
										EUR				

Item

1 [10] 30067571 , motor 325kw (Test Virtua...

Material Data

PO Quantity 11 PC Order Unit <-> Ord. Price Unit 1 PC <-> 1 PC
PO Qty in SKU 11 PC Order Unit <-> SKU 1 PC <-> 1 PC

Net Weight KG /1 PC Net weight 0 KG /Item
Gross Weight KG /1 PC Gross weight 0 KG /Item
Volume /1 PC Volume 0,000 /Item
Points /1 PC Points 0,000 /Item

Stock/Requirements List as of 16:37 hrs

Show Overview Tree

Material	30067571	motor 325kw (Test Virtual WH -RPI2)						
Plant	F102	MRP type	PD	Material Type	ZSWP	Unit	PC	
A.	Date	MRP ...	MRP element data	Rescheduli...	E.. Receipt/Reqmt	Available Qty	Su...	Iss...
	21.03.2012	Stock				34		
	12.03.2012	PRqRel	0010000161/00010			10-	24	F104V200
	21.03.2012	POItem	4500000284/00010	26.03.2012 15		11	35	
	26.03.2012	PRqRel	0010000185/00010			35-	0	F106V200

4. Check Material Stock overview after PO

Stock Overview: Basic List

Selection

Material	30067571	motor 325kw (Test Virtual WH -RP12)
Material Type	ZSWP	Spare parts & Wear parts
Unit of Measure	PC	Base Unit of Measure

Stock Overview

Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock	Consgt ...
FR01 Holcim (France) SAS	54,000	65,000			56,000	
F102 Usine de Lumbre	34,000		65,000		11,000	
V200 Virtual WH	34,000					
F103 Usine d'Altkirch	10,000	20,000			10,000	
V200 Virtual WH	10,000					
F104 Usine de Dannes	10,000	10,000				
V200 Virtual WH	10,000					
F106 Usine d'Héming		35,000			35,000	
V200 Virtual WH						

5. Good Receipt in the Supplying Plant

Goods Receipt Settings System Help

Goods Receipt Purchase Order 4500000284 - Rodrigo Pitarch

Show Overview | Hold | Check | Post | Help

A01 Goods Receipt R01 Purchase Order GR goods receipt 101

Document Date	21.03.2012	Delivery Note	<input type="text"/>	Vendor	PARDUYNS SA
Posting Date	21.03.2012	Bill of Lading	<input type="text"/>	HeaderText	<input type="text"/>
<input type="checkbox"/> 1 Individual Slip					

General

Line	Mat. Short Text	OK	Qty in UnE	E...	S...	SLoc	Batch	Valuation ...	M...	D...	Stock Type	Plnt	S...	Customer
1	motor 325kw (Test Virtual WH -RP12)	<input type="checkbox"/>	11	PC					101	+	Unrestrict...		Usine de Lu...	

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

Material	motor 325kw (Test Virtual WH -RP12)	30067571
Vendor Material No.	<input type="text"/>	
Material Group	031001	EAN in Order Unit <input type="text"/>
		EAN Check <input type="checkbox"/>

Line 1

6. Check Material Stock Overview

Stock Overview: Basic List

Selection

Material	30067571	Motor 325kw (Test Virtual WH -RPI2)
Material Type	ZSWP	Spare parts & Wear parts
Unit of Measure	PC	Base Unit of Measure PC

Stock Overview

Detailed Display

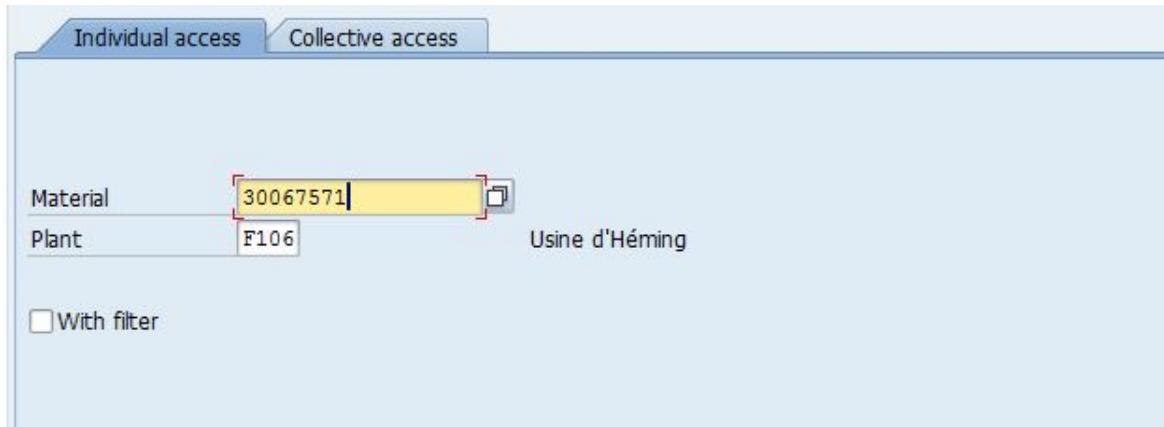
Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock	Consgt ...
Full	65,000		65,000		45,000	
FR01 Holcim (France) SAS	65,000		65,000		45,000	
F102 Usine de Lumbre	45,000					
V200 Virtual WH	45,000					
F103 Usine d'Altkirch	10,000		20,000		10,000	
V200 Virtual WH	10,000				10,000	
F104 Usine de Dannes	10,000		10,000			
V200 Virtual WH	10,000					
F106 Usine d'Héming			35,000		35,000	
V200 Virtual WH					35,000	

Then, when in the supplying plant there is enough stock, the process of the virtual warehouse can continue.

4.4.3 Check Result after MRP Run

Main Menu	<i>Logistics > Material Requirements Planning > MRP > Evaluations</i>
Transaction Code	MD04

- Receiving Plant



Individual access Collective access

Material

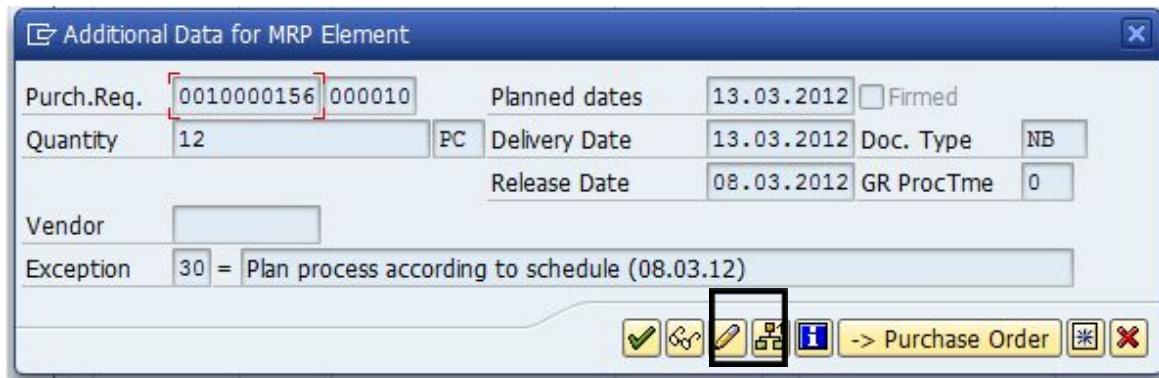
Plant Usine d'Héming

With filter

After performing the MRP Run in the receiving plant, a purchase requisition has been created in the receiving plant based on the special procurement type maintained in the material master.

Stock/Requirements List as of 18:33 hrs						
Material	30067571	Plant	F106	MRP type	ZSWP	Unit
A.. Date	MRP ...	MRP element data	Rescheduli...	E.. Receipt/Reqmt	Available Qty	
08.03.2012 Stock					5	
08.03.2012 OrdRes	000090000156				0	
08.03.2012 OrdRes	000090000156			12-	12-	
13.03.2012 PurRqs	0010000156/00010	08.03.2012	30		12	0

Click on Purchase Request, 



Additional Data for MRP Element

Purch.Req.	<input type="text" value="0010000156/00010"/>	Planned dates	<input type="text" value="13.03.2012"/>	<input type="checkbox"/> Firmed
Quantity	<input type="text" value="12"/>	PC	Delivery Date	<input type="text" value="13.03.2012"/>
			Release Date	<input type="text" value="08.03.2012"/>
Vendor	<input type="text"/>			
Exception	30 = Plan process according to schedule (08.03.12)			

-> Purchase Order

Purchase Requisition Edit Environment System Help

Change Purchase Req. 10000156

Document Overview On Personal Setting

NB Purchase Requisiti... 10000156 Source Determination

Texts

Header note	A...
1 Continuous-t...	

Default Values

St...	Item	A	I	Material	Short Text	Quantity	Unit	C Deliv. Date	Mati Group	Plant	Stor. Loc.	PGr	Requisnr.	Tracking...	Des.Vendor	Fix. Vend.
10				30067571	motor 325kw (Test Virtu...	12	PC	D 13.03.2012	Motors, Dir...	Usine d'Hém...	F00	RESP. EN...				

Item 1 [10] 30067571 , motor 325kw (Test Virtu...

Material Data Quantities/Dates Valuation Source of Supply Status Contact Person Release strategy Texts Delivery Address

Release group F8 EBM PReq FBNL. Code Description Processor Sta...

Release Strategy 07 CEM Stock Spare 1 F1 Maintenance Manager FLERCH

Release indicator X Blocked

Check the Item type “U- Stock Transfer”, and check that the Supply plant, storage location and purchase Organization have been completed with correct data.

St...	Item	A	I	Material	Short Text	Quantity	Unit	C Deliv. Date	Mati Group	Plant	Stor. Loc.	PGr	Requisnr.		
10				30067571	motor 325kw (Test Virtu...	12	PC	D 13.03.2012	Motors, Dir...	Usine d'Hém...	Virtual WH	F00	RESP. EN...		

St...	Item	Matl Group	Plant	Stor. Loc.	PGr	Requisnr.	Tracking...	Des.Vendor	Fix. Vend.	Suppl.Plt	POrg	Ag...		
10	Motors, Dir...	Usine d'Hém...	Virtual WH	F00	RESP. EN...					F102	FR01			

Press on Save button 

Stock/Requirements List as of 18:38 hrs

Show Overview Tree

Material	30067571	motor 325kw (Test Virtual WH -RPI2)	Plant	F106	MRP type	PD	Material Type	ZSWP	Unit	PC				
A..	Date	MRP ...	MRP element data	Rescheduli...	E..	Receipt/Reqmt		Available Qty	Su...	St...				
	08.03.2012	Stock							5					
	08.03.2012	OrdRes	000090000155					5-	0					
	08.03.2012	OrdRes	000090000156					12-		12-				
	13.03.2012	PurRqs	0010000156/00010 *	08.03.2012	10			12	0	E102V200				

- Supplier Plant

Stock/Requirements List: Initial Screen

Material	30067571	motor 325kw (Test Virtual WH -RPI2)
Plant	F102	Usine de Lumbre
<input type="checkbox"/> With filter		

After performing the MRP in the supplying plant, a MRP element (purchase requisitions for a "Stock Transfer PO" triggered from the requester plant) will appear indicating that provisioning needs has been created in a receiver plant.

Material	30147960	Bearing virtual warehouse C4 Training							
Plant	C102	MRP type	V1	Material Type	ZSWP	Unit	PC		
A.	Date	MRP ...	MRP element data	Rescheduli...	E.	Receipt/Reqmt	Available Qty	Su...	Iss...
	21.07.2014	Stock					88		
	21.07.2014	SafeSt	Safety Stock			1-	87		
	01.07.2014	Ord.DS	4500148266/00010			10-	77	C101G200	
	26.07.2014	Delvry				2-	75		
	26.07.2014	PRqRel	0010082598/00010			9-	66	C103G200	

As is described in the [chapter 4.4.2.1](#), if in the supplying plant is not enough stock available to fulfil the requested quantities, a regular purchase requisition for a PO is created for the missing quantity based on the MRP Parameters set in the material master.

4.5 Purchase Request

4.5.1 Create PR

(ONLY APPLY FOR SPOT TRANSFER PROCESS)

In the case of spot transfer, it is needed to created manually the PR,

If material is set up with MRP parameters. Once MRP is trigger for requester plant it will generate a planned order to be converted into a PR and PO

If material is not set up with MRP parameter the PR should be created manually.

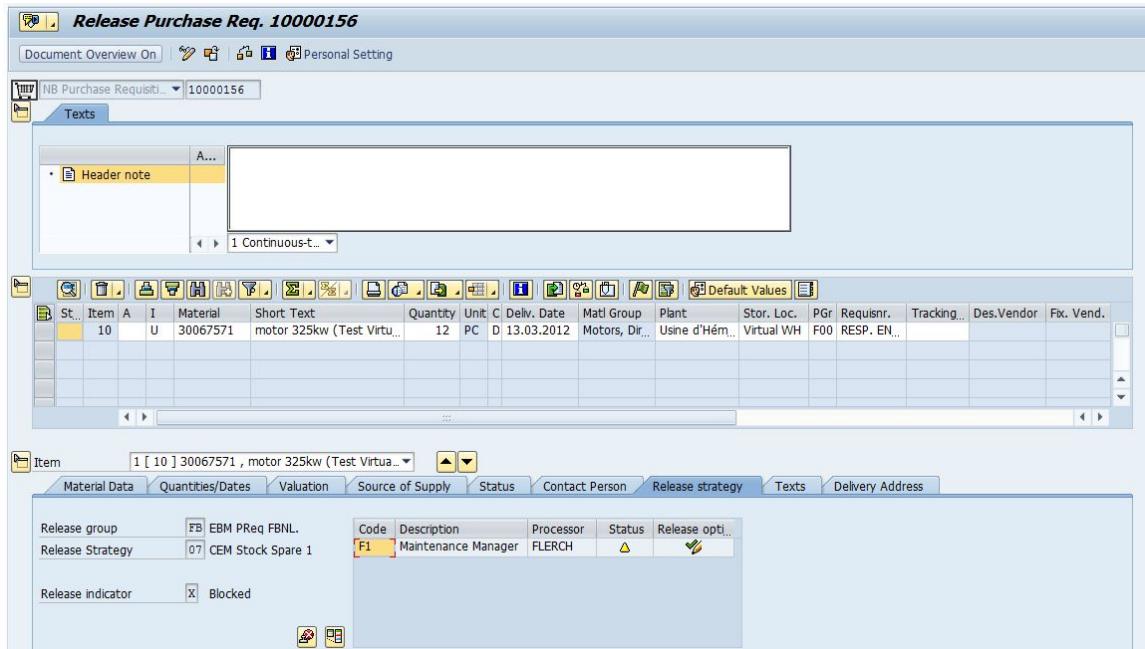
4.5.2 Release Purchase Request in Receiving Plant

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

After creation of Purchase Requisition, it has to be checked and if the data are correct, it can be released.

Main Menu	<i>Logistics > Material Management > Purchasing Requisition > Release</i>
Transaction Code	ME54N

Select purchase requisition number.



The screenshot shows the SAP ME54N transaction screen for releasing a purchase requisition. The top navigation bar includes 'Release Purchase Req. 10000156', 'Document Overview On', and various icons. The main area is divided into several tabs:

- Texts**: Displays a tree structure under 'Header note' with one node expanded.
- Item**: A table showing purchase requisition details:

St...	Item	A	I	Material	Short Text	Quantity	Unit	C	Deliv. Date	Matl Group	Plant	Stor. Loc.	PGr	Requisnr.	Tracking...	Des.Vendor	Fx. Vend.
10	U	30067571			motor 325kw (Test Virtua...	12	PC	D	13.03.2012	Motors, Dir...	Usine d'Hém...	Virtual WH	F00	RESP. EN...			
- Release strategy**: The active tab, showing release group (FB EBM PReq FBNL), release strategy (07 CEM Stock Spare 1), and release indicator (Blocked).

To release the Purchase request, the approver has to click on the Release option in the "Release Strategy" tab.

Source of Supply				
Code	Description	Processor	Status	Release opti...
F1	Maintenance Manager	FLERCH	⚠	

Source of Supply				
Code	Description	Processor	Status	Release opti...
F1	Maintenance Manager	FLERCH	✓	

After release the PR, press on Save button  .

Purchase requisition 0010000156 changed

4.6 Stock Transfer Purchase Order

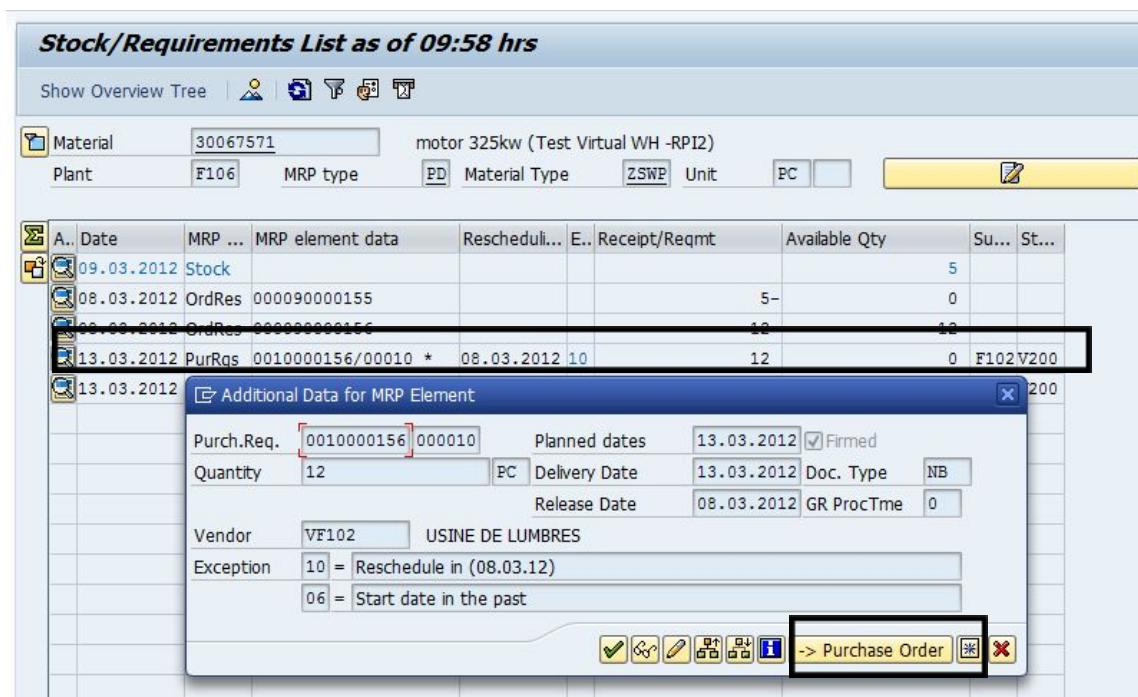
4.6.1 Create the Purchase Order

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

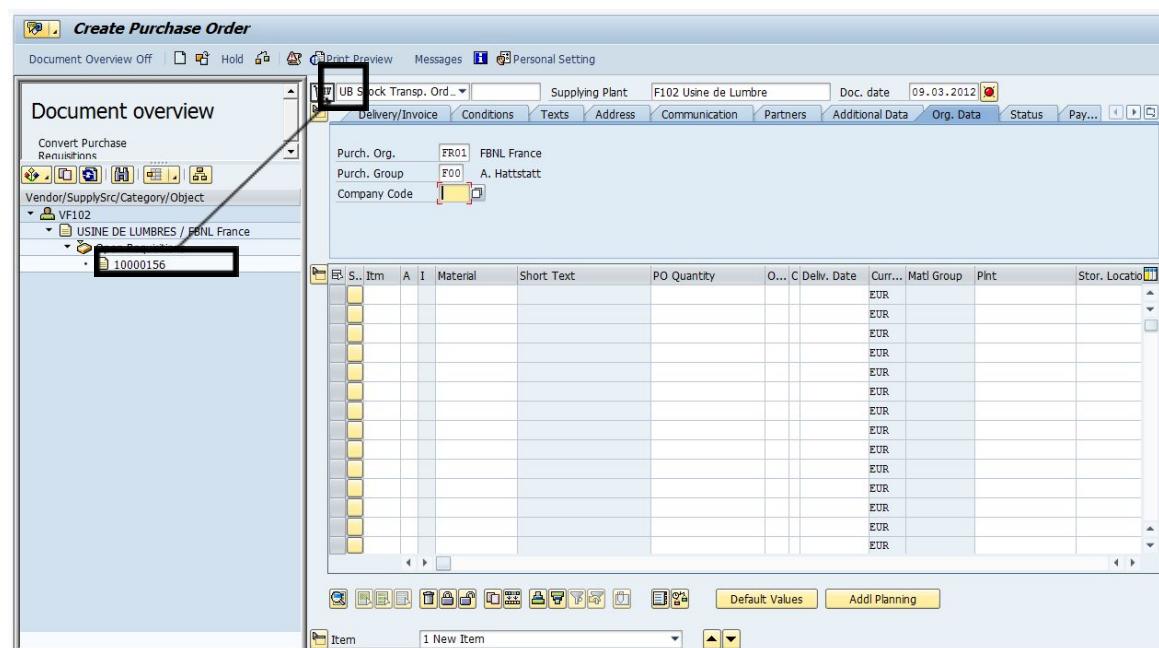
After the Purchase Requisition has been released, the purchasing department will create a Stock Transfer Purchase Order.

Main Menu	<i>Logistics > Material Management > Purchasing > Create</i>
Transaction Code	ME21N

Other transaction to create the purchase order from the purchase request released is MD04. Select the PR, and click on the button “Convert in Purchase Order”.

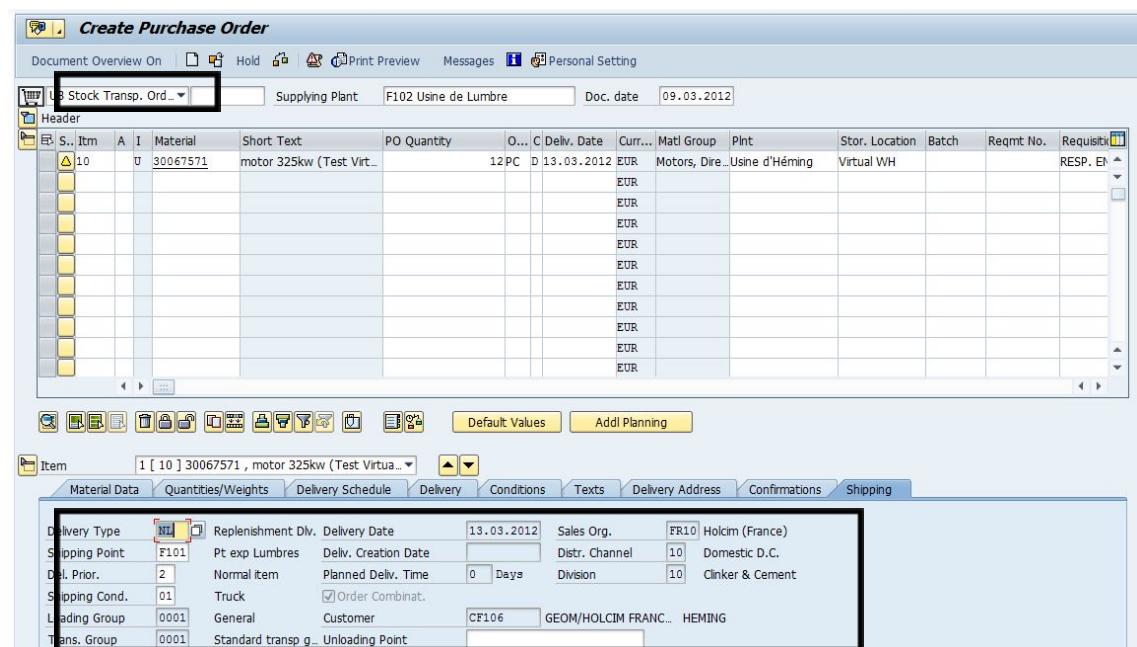


In the “Create Purchase Order” screen, select the purchase request and drag to the shopping cart.



The screenshot shows the SAP Create Purchase Order interface. On the left, the 'Document overview' pane displays a tree structure for purchase requisitions, with node '10000156' selected. The main area shows purchase header details: Purch. Org. FRO1 FBNL France, Purch. Group F00 A. Hattstatt, and Company Code F102. The table below lists purchase items with columns for S.., Itm, A, I, Material, Short Text, PO Quantity, O... C Deliv. Date, Curr..., Matl Group, Pint, and Stor. Location. The status bar at the bottom indicates 'Item 1 New Item'.

Then all data from the purchase request will be copied to the PO. Remember to select the "Stock Transfer Purchase Order".

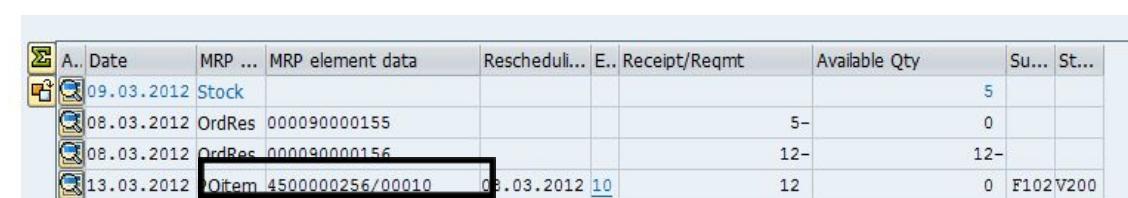


The screenshot shows the SAP Create Purchase Order interface with a selected purchase item (S.. Itm: 10, Material: U 30067571). The table rows show identical data for each item. Below the table, the 'Delivery' tab is selected in the ribbon, showing delivery details: Delivery Type F101, Replenishment Dv. 13.03.2012, Sales Org. FR10 Holcim (France), and so on. The status bar at the bottom indicates 'Item 1 [10] 30067571 , motor 325kw (Test Virtua...'.

Check all data, and press on Save button .

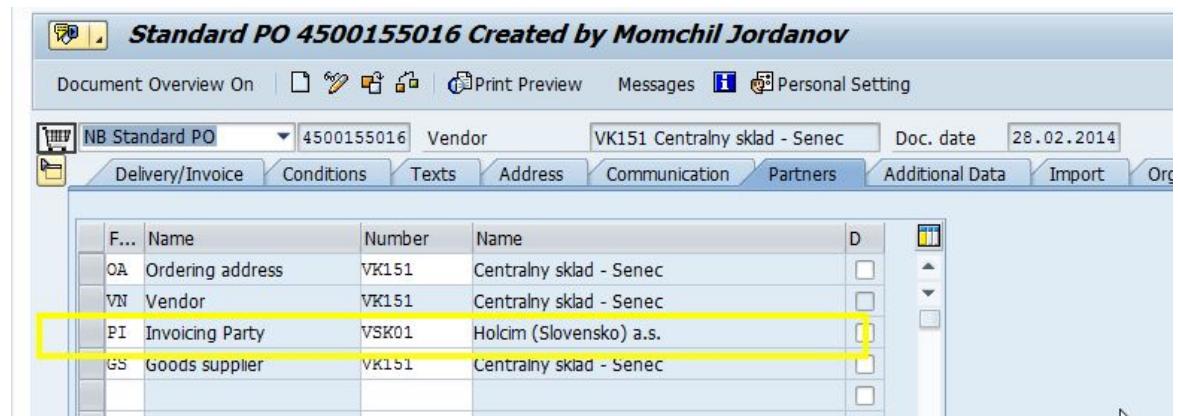
 Stock Transp. Order created under the number 4500000256

Now, if you refresh the purchase request is replaced by the "Stock transfer PO".

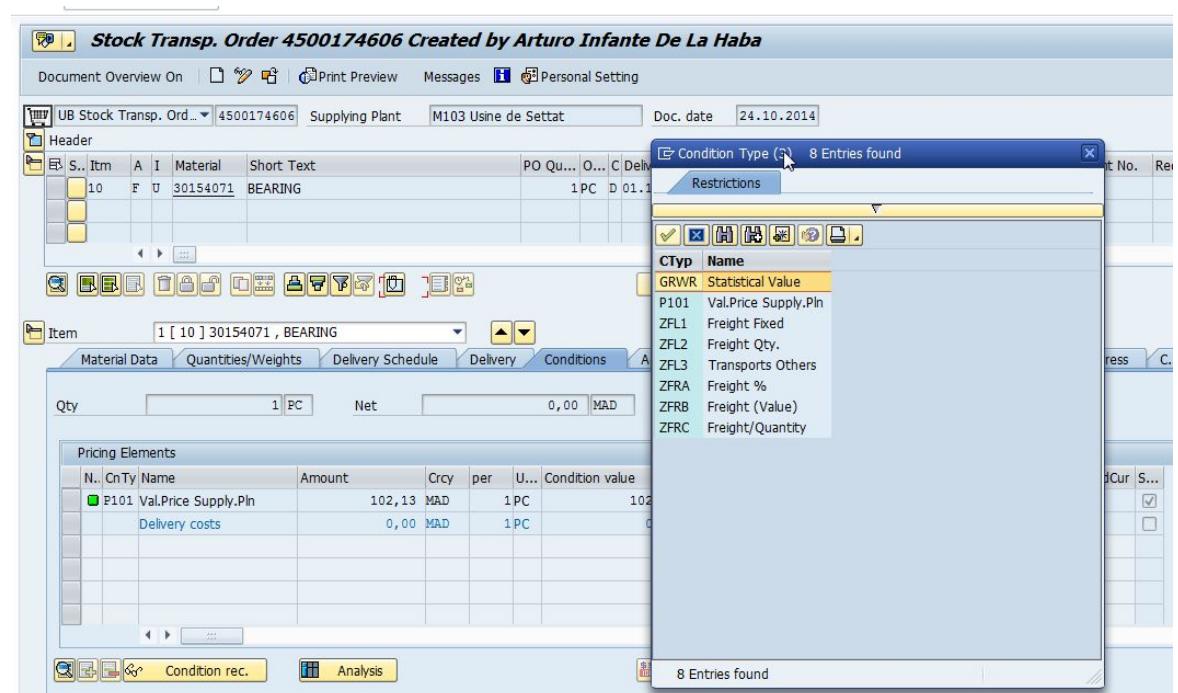


The screenshot shows the SAP Purchase Request screen. The table lists purchase requests with columns: A.., Date, MRP ..., MRP element data, Rescheduli..., E., Receipt/Reqmt, Available Qty, Su..., and St.... The last row, dated 13.03.2012, has its details highlighted: Item 4500000256/00010, Date 08.03.2012, and Available Qty 12.

For the invoicing process it will be necessary to include in the partners conditions the function PI with the company code of the vendor VYYYY (YYYY=Company code)



Include the transport cost if needed as condition under condition price tab

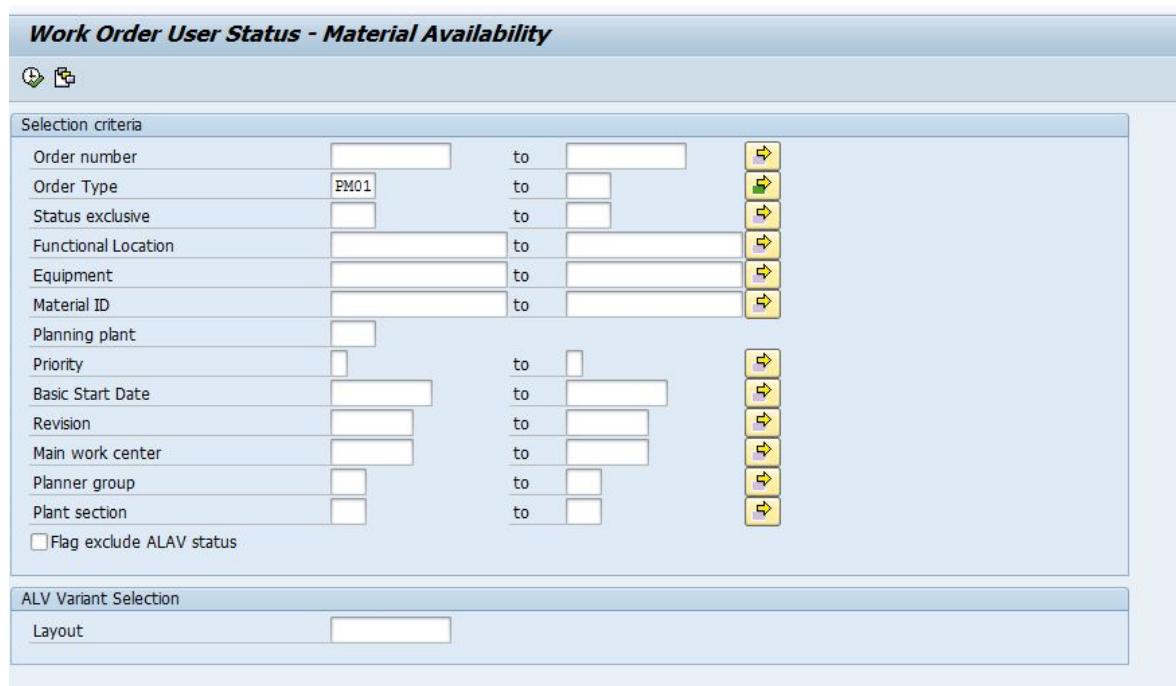


4.7 Check Material Availability in PM

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Transaction Code	ZPM002
-------------------------	--------

Through this transaction it is possible to check the material availability for the PM order.



The screenshot shows the SAP interface for checking material availability. At the top, it displays the Transaction Code ZPM002. Below this, the title "Work Order User Status - Material Availability" is visible. The main area is a grid-based selection screen. The first row contains "Order number" and "to" fields with a green arrow icon. Subsequent rows include "Order Type" (set to "PM01"), "Status exclusive", "Functional Location", "Equipment", "Material ID", "Planning plant", "Priority", "Basic Start Date", "Revision", "Main work center", "Planner group", and "Plant section". Each row has a "to" field and a green arrow icon. At the bottom left of the grid, there is a checkbox labeled "Flag exclude ALAV status". Below the grid, there is a section titled "ALV Variant Selection" with a "Layout" button.

Complete the selection fields:

Field	Description
Order Type	Complete the Order Type, in our case "PM01".
Material ID	Select the material which you want to check the material availability.
Planning Plant	Select the plant where you are going to do the material availability check.

Note: in case you need, complete the rest of selection fields.

Press Execute button, .

Once the report is running, based on the selection fields, all the components/materials of the selected orders will be displayed with a status (red, yellow or green).

Work Order User Status - Material Availability

Status	Order number	Requirement Date	BOM Item numb...	Material ID	Material Description	Required Quantit...	Item Catego...	Storage Location	Stock Quantity
OK	000090000022	20.02.2012	0010	30066172	GUIDE DE SUSPENSION PLATEAUX PLAN 4326	10,000	L		0,000
OK	000090000025	24.02.2012		30054231	PORTE DE VISITE PROMECAM Ø 200 2113311MT	1,000	L		1,000
OK	000090000031	24.02.2012		30060699	PIGNON DOUBLE 19 DENTS PAS 44.45	1,000	L		1,000
OK	000090000032	24.02.2012		40006162	HAULE TEXACO URSA SUPER LA30	208,000	L		259.584,000
OK	000090000034	20.02.2012			ATERNATEUR	1,000	N		0,000
OK	000090000035	24.02.2012		30042395	COURROIE TRAPEZ C22X14MM LONG PRIM 2300M	5,000	L		2,000
OK	000090000037	22.02.2012		30058720	RLX LISSE Ø133x425mm AXE 20x455 M14x10	1,000	L		12,000
OK	000090000038	24.02.2012		30054321	CLAPET ANTI-RETOUR 3"	1,000	L		1,000
OK	000090000039	22.02.2012		30050369	DENT POUR HERSE SMIDTH PLAN 5163	32,000	L		0,000
OK	000090000048	22.02.2012		40009285	POUDRE FLUORESCENTE JAUNE POUR DETECTION	2,000	L		10,000
OK	000090000049	20.02.2012		40004830	BOULON DE FIXATION + RONDELLE COURONNE F	5,000	L		19,000
OK	000090000050	20.02.2012		30051791	GODET Ac ELEVATEUR PERCE DE 4 TROUS PLAN	3,000	L		9,000
OK	000090000051	22.02.2012		40009285	POUDRE FLUORESCENTE JAUNE POUR DETECTION	4,000	L		10,000
OK	000090000055	23.02.2012		30050710	LAME DE RACLAGE PLAN 1539 DE CHAINE LOUI	4,000	L		76,000
OK	000090000058	23.02.2012		40007759	PNEU GENIC CIVIL 26.5R25 MICHELIN XLD D2	2,000	L		0,000
OK	000090000059	21.02.2012			RONDE DE 30MM	6,000	N		0,000
OK	000090000060	22.02.2012		40001674	PLAQUE 2000X1000X20MM P.E. HD1000	1,000	L		0,000
OK	000090000063	20.02.2012		30045733	CABLE C800 4 x 3mm ²	3,000	L		0,000
OK	000090000153	07.03.2012		30067571	motor 325kw (Test Virtual WH -RPI2)	0,000	L		10,000
OK	000090000154	07.03.2012		30067571	motor 325kw (Test Virtual WH -RPI2)	10,000	L		10,000

For our case there is not availability, so that will be indicated by a red light.

Status	Order number	Requirement Date	BOM Item numb...	Material ID	Material Description
OK	000090000007	09.02.2012	0000	30039855	ADAPTATEUR METAL TOUF MEPLAT EXT 30MM IN
OK	000090000182	21.03.2012	0010	30067571	motor 325kw (Test Virtual WH -RPI2)

4.8 Intracompany Transfer

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

4.8.1 Outbound Delivery

Main Menu	<i>Logistic> Sales and Distribution > Shipping and Transportation > Outbound Delivery > Collective Processing of Document Due for Delivery</i>
Transaction Code	VL10B

On the “Purchase orders” tab, fill in the following fields:

Field	Description
Shipping Point/ Receiving Plant	The physical location from which you ship the item.
Delivery Creation Date	Complete the delivery date interval where you want to create the delivery.
Purchase Document	Complete with the purchase order number on which you want to create the delivery

Purchase Orders, Fast Display

↳ ↻ ↺ Collective Processing Logs

Shipping Point/Receiving Pt	F101	to		↗
Delv. Creation Date	09.03.2012	to	15.03.2012	
CalcRuleDefltDlvCrDt	2			

General Data Purchase Orders Material User Role

Add. Criteria - Stock Transport Order

Purchasing Document	4500000256	to		↗
Supplying Plant		to		↗

Press Execution button, .

List Edit Goto Settings System Help

Background Activities Due for Shipping "Purchase Orders, Fast Display"

Light GI Date DPrio Ship-to Rout... OriginDoc. Gross WUn Volume VUn
COO 2 CF106 4500000256

Select the purchase order and click on "background" button,

 Background

Stock Transp. Order 4500148304 Created by Arturo Infante De La Haba

Document Overview On  Print Preview Messages 

UB Stock Transp. Ord... 4500148304 Supplying Plant C102 Zementwerk Siggenthal Doc. date 21.07.2014

Header

S..	Itm	A	I	Material	Short Text	PO Qu...	O...	C	Deliv. Date	Matl Group	PInt	Stor. Location	Batch	Reqmt No.	Requisitioner
10	U	30147960		ROULEMENT 7212	1RBI	9 PC	D	27.07.2014	Angular Con.	Zementwerk Unte...	Hauptmagazin			AINFANTE	

Item 1 [10] 30147960 , ROULEMENT 7212          

Material Data **Quantities/Weights** **Delivery Schedule** **Delivery** **Conditions** **Purchase Order History** **Texts** **Delivery Address** **Confirmations** **Shipping** **Retail**

Basic List

M...	Material Doc...	Sh. T...	Reference	It...	Pstrg Date	Σ Quantit...	O...	Σ Amount in...	L...	Σ Qty in O...	Order Price ...	Σ Amount	Cr...	Tr./Ev...	Entry Da...	Mate...
	805403043	Lfs		10	21.07.20...	9	PC	0,00	CHF						Delivery note 21.07.20...	

Add Planning

Details

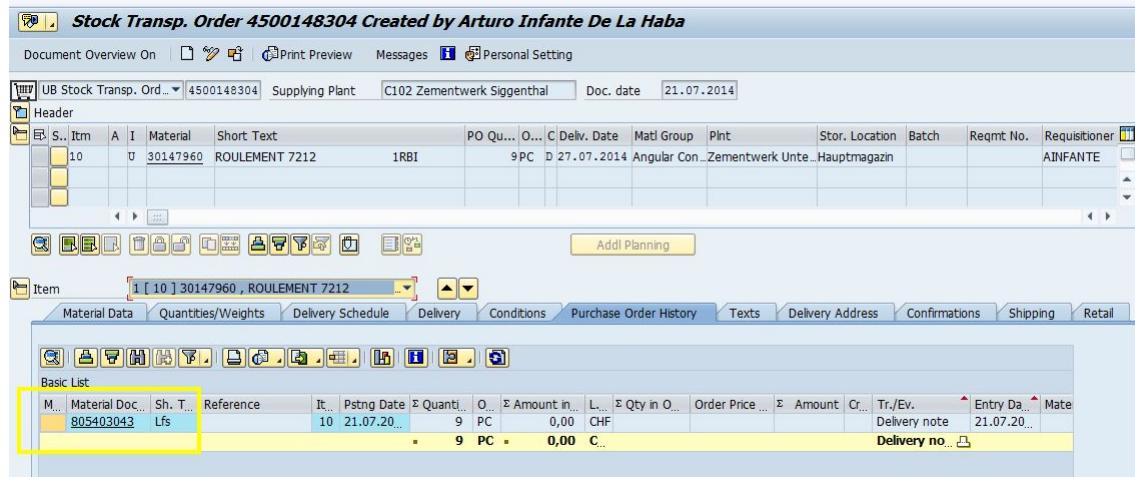
Group description	Cell Content
Group	5501778
Created by	AINFANTE
Created on	21.07.2014
Created documents	1
Number of errors	1
Shipping Point/Receiving Pt	C102
Time	16:19:30

4.8.2 Good Issue to the transport order

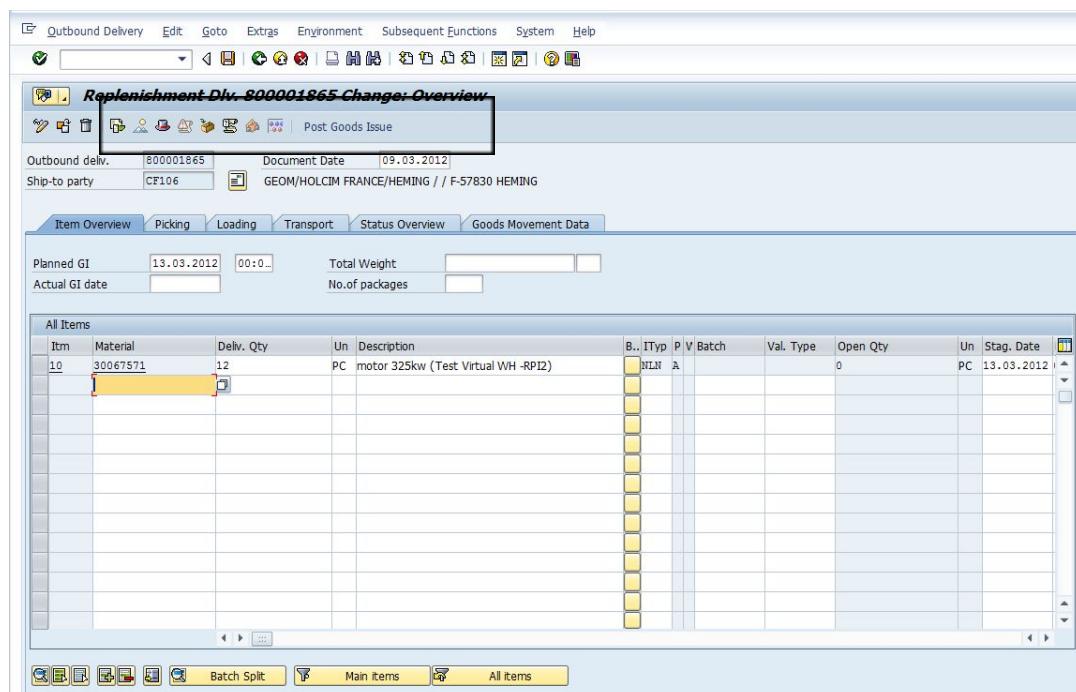
Main Menu	<i>Logistics > Inventory Management > Good Movements</i>
Transaction Code	MIGO

Note: other way to do Good Issue could be through the purchase order (Transactions: ME23N or MD04)

On the Purchase Order, if you go in the “Purchase Order History” tab you can check the delivery that has been created for the PO.



Clicking on the Delivery number, you go to screen where it is possible to do the good issue.



Fill in the storage location of the supplying plant and the quantity delivered and picked. Remember that these two quantities have to be the same.

Replenishment Dlv. 805403043 Change: Overview

Post Goods Issue

Outbound deliv. 805403043 Document Date 21.07.2014
Ship-to party CC103 Untervaz / . / CH-7204 Untervaz

Item Overview Picking Loading Transport Status Overview Goods Movement Data

Pick Date/Time 27.07.2014 00:0... OverallPickStatus A Not yet picked
Warehouse No. OverallWMStatus No WM trnsf ord reqd

All Items

Itm	Material	Plnt	SLoc	Deliv. Qty	Un	Picked Qty	Un	Batch	B..	P	V	Stag. Date	Matl...	Val. Type	Description
10	30147960	C102		9	PC		PC		A			27.07.2014	00:0...		ROULEMENT 7212

Click on,

Post Goods Issue

After that, on the purchase order history you display that a new material document has been created, for the good issue.

Stock Transp. Order 4500148304 Created by Arturo Infante De La Haba

Document Overview On Print Preview Messages Personal Setting

UB Stock Transp. Ord... 4500148304 Supplying Plant C102 Zementwerk Siggenthal Doc. date 21.07.2014

Header

S.	Itm	A	I	Material	Short Text	PO Qu...	O...	C	Deliv. Date	Matl Group	Plnt	Stor. Location	Batch	Reqmt No.	Requisitioner
10	U	30147960		ROULEMENT 7212	1RBI	9 PC	D	27.07.2014	Angular Con...	Zementwerk Unte...	Hauptmagazin			AINFANTE	

Add Planning

Item [10] 30147960 , ROULEMENT 7212

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

Basic List

M...	Material Doc...	Sh. T...	Reference	It...	Pstng Date	Quantit...	O...	Σ Amount in...	L...	Σ Qty in O...	Order Price ...	Σ Amount	Cr...	Tr./Ev...	Entry Da...	Mate...
6	4904243902	WA	0805403043	1	21.07.20...	9	PC	319,05	CHF					Goods issue	21.07.20...	
	805403043	Lfs		10	21.07.20...	9	PC	0,00	CHF					Delivery note	21.07.20...	
						9	PC	319,05	C...					Delivery no...		
								0,00	C...							

Clicking on the material document number you will go to the good issue document.

Display Material Document 4904243902 - Arturo Infante De La Haba

Show Overview | Hold | Check | Post | Help

A04 Display | R02 Material Docu... | 4904243902 | 2014 |

General Doc.info

Document Date: 21.07.2014 | Delivery Note: 0805403043
Posting Date: 21.07.2014 | Bill of Lading:
 1 Individual Slip | HeaderText:

Transfer Posting **Material** **Quantity** **Where** **Purchase Order Data** **Account Assignment**

From

Material:	Bearing virtual warehouse C4 Training
	30147960
Plant:	Zementwerk Siggenthal C102
Stor. Loc.:	Hauptmagazin G200

Dest

Material:	Bearing virtual warehouse C4 Training
	30147960
Plant:	Zementwerk Untervaz C103
	<input type="checkbox"/>

Spec.Stock:

Qty in UnE: 9 PC

Line: 1

In this screen you can check the "From" and "Destination" data for the stock transfer, and the Good Movement that is "641 – Stock transfer to Stock in Transfer"

4.8.3 Good Receipt in the stock of Receiving Plant

Main Menu	<i>Logistics > Inventory Management > Good Movements</i>
Transaction Code	MIGO

Fill in the fields:

Field	Description
Executable Action	Fill in with "Good Receipt" value
Reference Document	Fill in with "Purchase Order" value
Purchase Order ID	Fill in with the Purchase order number related with the transfer
Movement Type	Fill in with the movement type "101", Good Receipt for Purchase Order into warehouse/stores.

Goods Receipt Purchase Order 4500148304 - Arturo Infante De La Haba

Overview | Hold | Check | Post | Help

A01 Goods Receipt | R01 Purchase Order | GR goods receipt | 101

General	Vendor										
Document Date: 21.07.2014	Delivery Note:										
Posting Date: 21.07.2014	Bill of Lading:										
HeaderText:	HeaderText:										
1 Individual Slip											
Line	Mat. Short Text	OK	Qty in UnE	E...	SLoc	Profit Center	Batch	Valuation ...	M...	D Sto	
1	ROULEMENT 7212	1RBI	<input checked="" type="checkbox"/>	9	PC	Hauptmagazin	C103AG001		101	+ Un	
<input type="button" value="Delete"/> <input type="button" value="Contents"/> <input type="button" value="Print"/> <input type="button" value="Save"/>											
<input type="button" value="Material"/> <input type="button" value="Quantity"/> <input type="button" value="Where"/> <input type="button" value="Purchase Order Data"/> <input type="button" value="Partner"/> <input type="button" value="Account Assignment"/>											
Material		ROULEMENT 7212	1RBI	30147960							
Vendor Material No.											
Material Group		030201									
		EAN in Order Unit									
		EAN Check									

Click on **Check**,  Document is O.K.

Click on **Post**,  Material document 5003529973 posted

On the purchase order the good receipt is displayed.

Stock Transp. Order 4500148304 Created by Arturo Infante De La Haba

Document Overview On | Print Preview | Messages | Personal Setting

UB Stock Transp. Ord... 4500148304 Supplying Plant C102 Zementwerk Siggenthal Doc. date 21.07.2014

Header

S..	Itm	A	I	Material	Short Text	PO Qu...	O...	C Deliv. Date	Matl Group	Plnt	Stor. Location	Batch	Reqmt No.	Requisiti...
10	U	30147960	ROULEMENT 7212	1RBI		9 PC	D	27.07.2014	Angular Con...	Zementwerk Unte...	Hauptmagazin			AINFANT

Addl Planning

Item 1 [10] 30147960 , ROULEMENT 7212

Material Data Quantities/Weights Delivery Schedule Delivery Conditions Purchase Order History Texts Delivery Address Confirmations Shipping R...

Basic List

M...	Material Doc...	Sh. T...	Reference	It...	Pstng Date	Σ Quantit...	O...	Σ Amount in...	L...	Σ Qty in O...	Order Price ...	Σ ...	Amount	Cr...	Tr./Ev...	Entry Da...	Mat...
1...	5003529973	WE		1	21.07.20...	9	PC	0,00	CHF	9	PC	0,00	CHF	Goods receipt	21.07.20...		
6...	4904243902	WA	0805403043	1	21.07.20...	9	PC	319,05	CHF					Goods issue	21.07.20...		
	805403043	Lfs		10	21.07.20...	9	PC	0,00	CHF					Delivery note	21.07.20...		
						9	PC	0,00	C...					Delivery no...			

4.9 Material Availability check after stock transfer

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Transaction Code	ZPM002			
Work Order User Status - Material Availability				
 				
Selection criteria				
Order number	<input type="text"/>	to	<input type="text"/>	
Order Type	PM01	to	<input type="text"/>	
Status exclusive	<input type="checkbox"/>	to	<input type="text"/>	
Functional Location	<input type="text"/>	to	<input type="text"/>	
Equipment	<input type="text"/>	to	<input type="text"/>	
Material ID	<input type="text"/>	to	<input type="text"/>	
Planning plant	<input type="text"/>			
Priority	<input type="checkbox"/>	to	<input type="text"/>	
Basic Start Date	<input type="text"/>	to	<input type="text"/>	
Revision	<input type="text"/>	to	<input type="text"/>	
Main work center	<input type="text"/>	to	<input type="text"/>	
Planner group	<input type="text"/>	to	<input type="text"/>	
Plant section	<input type="text"/>	to	<input type="text"/>	
<input type="checkbox"/> Flag exclude ALAV status				
ALV Variant Selection				
Layout <input type="text"/>				

Complete the selection fields (Order Type, Material, Planning Plant....), and Click on Execute button, .

After done the good receipt in the Receiving plant, the material should be available to be used in the Work Order.

Status	Order number	Requirement Date	BOM Item numb...	Material ID	Material Description
CO	000090000007	09.02.2012	0000	30039855	ADAPATEUR METALLIQUE MEPLAT EXT 30MM IN
CO	000090000182	21.03.2012	0010	30067571	motor 325kw (Test Virtual WH -RPI2)

As well, if you check it in the Stock Overview transaction,

Main Menu	<i>Logistic > Material Management > Inventory Management > Environment > Stock</i>
Transaction Code	MMBE

Complete the material ID that you want to check.

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

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

Database selections

Material	30067571			
Plant	<input type="text"/>	to	<input type="text"/>	
Storage location	<input type="text"/>	to	<input type="text"/>	
Batch	<input type="text"/>	to	<input type="text"/>	

Stock Type Selection

Also Select Special Stocks
 Also Select Stock Commitments

List Display

Special Stock Indicator	<input type="text"/>	to	<input type="text"/>	
Display version	1			
Display Unit of Measure	<input type="text"/>			
<input checked="" type="checkbox"/> No Zero Stock Lines				
<input type="checkbox"/> Decimal Place as per Unit				

Selection of Display Levels

Company Code
 Plant
 Storage Location
 Batch
 Special Stock

Then click on “Execute” button, .

Stock Overview: Basic List

Selection

Material	30147960		earing virtual warehouse C4 Training
Material Type	ZSWP	Spare parts & Wear parts	
Unit of Measure	PC	Base Unit of Measure	PC

Stock Overview

Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt
Full	13,000		13,000	13,000
CH01 Holcim (Schweiz) AG	13,000		13,000	13,000
C103 Zementwerk Untervaz	13,000		13,000	13,000
G200 Hauptmagazin	13,000			2,000

Now, in the receiving plant you have stock that can be used by the PM Work Order.

4.10 Spare part reception/consumption

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

4.10.1 Good Issue on the PM work order

Main Menu	<i>Logistics > Inventory Management > Good Movements</i>
Transaction Code	MIGO

Fill in the fields:

Field	Description
Executable Action	Fill in with "Good Issue" value
Reference Document	Fill in with "PM Order" value
PM Work Order ID	Fill in with the PM Work Order number.
Movement Type	Fill in with the movement type "261", Good Issue for Order.

Goods Issue Order 90207664 - Arturo Infante De La Haba

Overview | Hold | Check | Post | Help

A07 Goods Issue | R08 Order | GI for order

Documents

- Purchase Orders
 - 4500148304
 - 4500148290
 - 4500148289
 - 4500148288
 - 4500148216
 - 4500148215
 - 4500148130
 - 4500148129
 - 4500148128
 - 4500148127
- Orders
 - 90207664
 - 90000150
 - 90206441
- Reservations
- Blank
- Material Documents
 - 5003529973
 - 4904243902
 - 5003529941
 - 5003529939
 - 5003529938
 - 4904243654
 - 4904243653
 - 4904243572
 - 5003529754
 - 5003529753

General

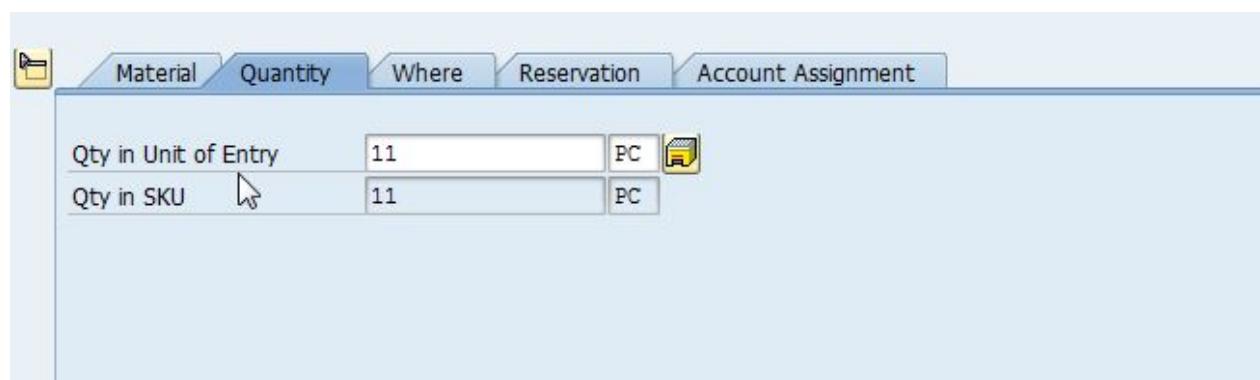
Document Date	21.07.2014	Material Slip	
Posting Date	21.07.2014	Doc.Header Text	
<input type="checkbox"/> 3 Collective Slip			

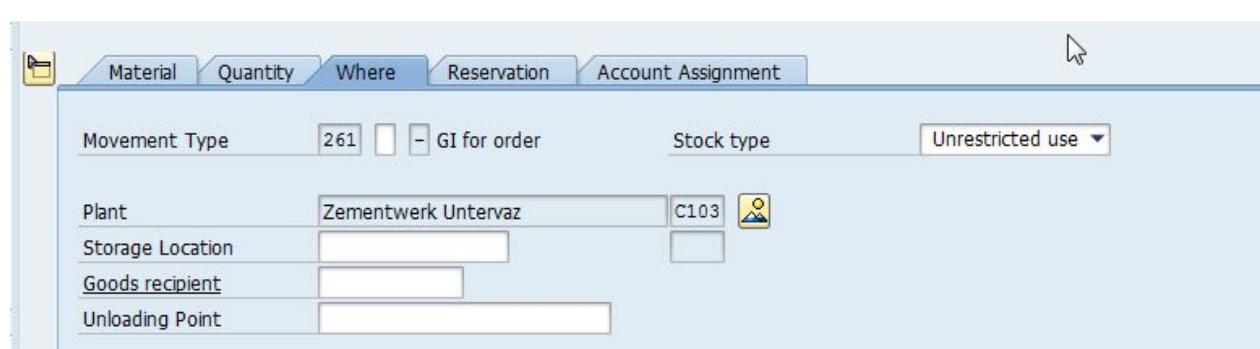
Line	Mat. Short Text	OK	Qty in UnE	E...	S..	SLoc	Order	Op...
1	Bearing virtual warehouse C4 Training	<input type="checkbox"/>	11	PC			90207664	0010 1

Material

Material	Bearing virtual warehouse C4 Training	30147960
Material Group	030201	

Check data of the rest of tabs, "Quantity", "Where", "Reservation" and "Account Assignment".



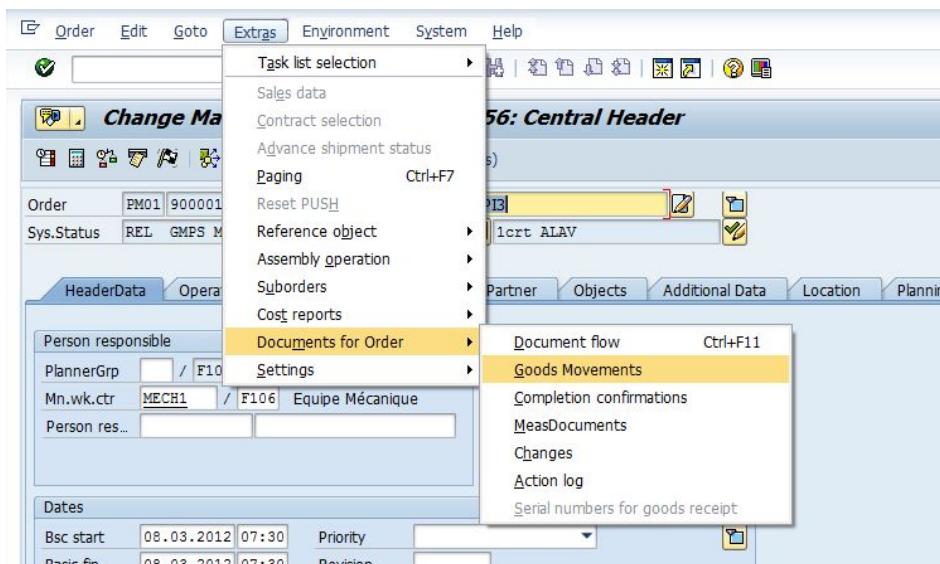


The screenshot shows two instances of the SAP Material Movement screen. The top instance has the 'Material' and 'Quantity' tabs selected. It contains fields for 'Qty in Unit of Entry' (11) and 'Qty in SKU' (11), both with 'PC' status. The bottom instance has the 'Where' tab selected. It includes fields for 'Movement Type' (261), 'Plant' (Zementwerk Untervaz), 'Storage Location', 'Goods recipient', and 'Unloading Point'. The 'Stock type' is set to 'Unrestricted use'.

When you have completed all fields, please, click on **Check**, to check all value, if all is correct a message will appear, **Document is O.K.**

Then, click on **Post** button, and save,  . **Material document 4900022407 posted**

You can check in the PM work order that the good issue has been done properly.



Display Document Flow

Display document 

Document	On	Status
Maintenance order 90000156	08.03.2012	Released Pre-costed Object created Goods movement
Operation 0010		
GI for order 4900022407 1	21.03.2012	Complete

CHANGE ORDER: List of Goods Movements

      Order  

S	Order	Material Doc.	Doc. Date	Material	Val. Type	Quantity	Unit	Amount in LC
	90000156	4900022407	21.03.2012	30067571		12	PC	1.200,00

4.11 Additional Steps

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

In case that you have not picked the full quantity of the material reservation, then please, repeat the process from point “4.8.1 – Outbound Delivery” to do the good issue and good receipt of the rest of spare parts.

Outbound Delivery

Stock Transp. Order 4500000256 Created by Rodrigo Pitarch

Document Overview On Print Preview Messages

Header

S...	Item	A	Material	Short Text	PO Quantity	O...	C Delv. Date	Curr...	Matl Group	Plnt	Stor. Location	Batch	Reqmt No.	Requisit...
	10	U	30067571	motor 325kw (Test Virt...	12 PC	D	13.03.2012	EUR	Motors, Dire...	Usine d'Héming	Virtual WH			RESP. EN
								EUR						
								EUR						
								EUR						

Item 1 [10] 30067571 , motor 325kw (Test Virtua...

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

Basic List

S...	M...	Material Do...	Item	Posting Date	Quantity	Σ Delivery cost quan...	O...	Amount in LC	L.cur	Qty in OPUn	DelCostQty (OPUn)	Or...
WE	101	5000000720	1	09.03.2012	8	0	PC	0,00	EUR	8	0	PC
Tr./Ev.	Goods receipt				8	0	PC	0,00	EUR	8	0	PC
WA	641	4900022090	1	09.03.2012	8	0	PC	800,00	EUR			
Tr./Ev.	Goods issue				8	0	PC	800,00	EUR			
Lfs	800001866	10	09.03.2012	4	0	0	PC	0,00	EUR			
Lfs	800001865	10	09.03.2012	8	0	0	PC	0,00	EUR			
Tr./Ev.	Delivery note				12	0	PC	0,00	EUR			

A new document will be created

S...	M...	Material Do...	Item	Posting Date	Σ	Quantity	Σ D
WE	101	5000000720	1	09.03.2012		8	
Tr./Ev.	Goods receipt					8	
WA	641	4900022090	1	09.03.2012		8	
Tr./Ev.	Goods issue					8	
Lfs		800001866	10	09.03.2012		4	
Lfs		800001865	10	09.03.2012		8	
Tr./Ev.	Delivery note					12	

Post Good Issue fo the rest of material quantity

Replenishment Div. 800001866 Change: Overview

Post Goods Issue

Outbound deliv.	800001866	Document Date	09.03.2012
Ship-to party	CF106	GEOM/HOLCIM FRANCE/HEMING // F-57830 HEMING	

Item Overview Picking Loading Transport Status Overview Goods Movement Data

Pick Date/Time	13.03.2012	00:0...	OvrlPickStatus	C Fully picked
Warehouse No.			OverallWMStatus	No WM trnsf ord reqd

All Items

Item	Material	Plnt	S Loc	Deliv. Qty	Un	Picked Qty	Un	Batch	B..	P	V	Stag. Date	Matl...	Va
10	30067571	F102	V200	4	PC	4	PC		C	13.03.2012	00:0...			

A new Good issue document is created with the quantity of material posted.

Item [10] 30067571 , motor 325kw (Test Virtua... ▾)

Material Data Quantities/Weights Delivery Schedule Delivery

Basic List

S...	M...	Material Do...	Item	Posting Date	Quantity	Σ Delivery
WE	101	5000000720	1	09.03.2012	8	
Tr./Ev. Goods receipt ▾ 8 ▾						
WA	641	4900022091	1	09.03.2012	4	
WA	641	4900022090	1	09.03.2012	8	
Tr./Ev. Goods issue ▾ 12 ▾						
Lfs		800001866	10	09.03.2012	4	
Lfs		800001865	10	09.03.2012	8	
Tr./Ev. Delivery note ▾ 12 ▾						

Then the good receipt has to be done, click on “Post” button and save.

Goods Receipt Purchase Order 4500000256 - Rodrigo Pitarch

Hide Overview | Hold | Check | Post | Help

A01 Goods Receipt | R01 Purchase Order | GR goods receipt | 101 | 101 |

My Documents

- Purchase Orders
 - 4500000256
 - 4500000252
 - 4500000253
 - 4500000251
 - 4500000249
 - 4500000247
 - 4500000223
 - 4500000224
 - 4500000226
- Orders
 - Blank
- Reservations
 - Blank
- Material Document
 - 5000000720
 - 4900022090
 - 4900022079
 - 500000687
 - 500000686
 - 500000685
 - 4900022031
 - 500000683
 - 4900022026
 - 4900022025
- Held Data
 - Blank

General | Vendor | 

Document Date: 09.03.2012 | Delivery Note: | Vendor: USINE DE LUMBRES | GR goods receipt | 101 |

Posting Date: 09.03.2012 | Bill of Lading: | HeaderText: |

1 Individual Slip

Line	Mat. Short Text	OK	Qty in UnE	E...	SLoc	Batch	Valuation ...	M...	D...	Stock Type	Plnt
1	motor 325kw (Test Virtual WH -RP12)	<input type="checkbox"/>	4	PC	Virtual WH		101	+	Unrestrict...	Usine	

   Delete 

Material | Quantity | Where | Purchase Order Data | Partner

Material: motor 325kw (Test Virtual WH -RP12) | 30067571 |

Vendor Material No.: |

Material Group: 031001 | EAN in Order Unit: | EAN Check: |

After that, a good receipt document is created with the remaining quantity.

Basic List

S...	M...	Material Do...	Item	Posting Date	Quantity	Σ Deliver
WE	101	<u>5000000721</u>	1	09.03.2012	4	
WE	101	<u>5000000720</u>	1	09.03.2012	8	
Tr./Ev. Goods receipt						
WA	641	<u>4900022091</u>	1	09.03.2012	4	
WA	641	<u>4900022090</u>	1	09.03.2012	8	
Tr./Ev. Goods issue						
Lfs		<u>800001866</u>	10	09.03.2012	4	
Lfs		<u>800001865</u>	10	09.03.2012	8	
Tr./Ev. Delivery note						

Now, if you try to repeat the step for outbound delivery (transaction VL10B), any delivery document will be created.

List | Edit | Goto | Settings | System | Help

Activities Due for Shipping "Purchase Orders, Fast Display"

Background | Light | GI Date | Dlv.Prior. | Ship-to party | Route | OriginDoc. | Gross weight | WUn | Volume | Volume unit

5. Virtual Warehouse Process – Intercompany Flow

5.1 Material Master MPR Settings

(DOES NOT APPLY FOR SPOT TRANSFER PROCESS)

Follow the material master MRP settings described in the VW Intra-company flow. ([chapter 5.1](#))

5.2 Create a Reservation

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

As in the VW Intra-company flow, the reservation of the material, of the supplying plant, by the receiving plant can be done through a PM work order.

Both process are described in the [chapter 4.3](#)

5.3 MRP Run for Virtual Warehouse

(DOES NOT APPLY FOR SPOT TRANSFER PROCESS)

Same process as described for Intra-company.

A needed requirement is that the planning sequence (the group of plants that use Virtual Warehouse) of the scope planning has to involve plants of different companies.

Scope of planning: VIWH		
Description: Virtual Warehouse CHE		
Sequence	Plant	Name
1	0001	Plant 1
2	0002	Plant 2
3	0003	Plant 3
4	0004	Plant 4

Planning Sequence

For the rest follow the [chapter 4.4](#)

5.4 Purchase Request

5.4.1 Create PR

(ONLY APPLY FOR SPOT TRANSFER PROCESS)

In the case of spot transfer, it is needed to created manually the PR, the MRP is not going to generate it ifnot MROP parameter are set in the material.

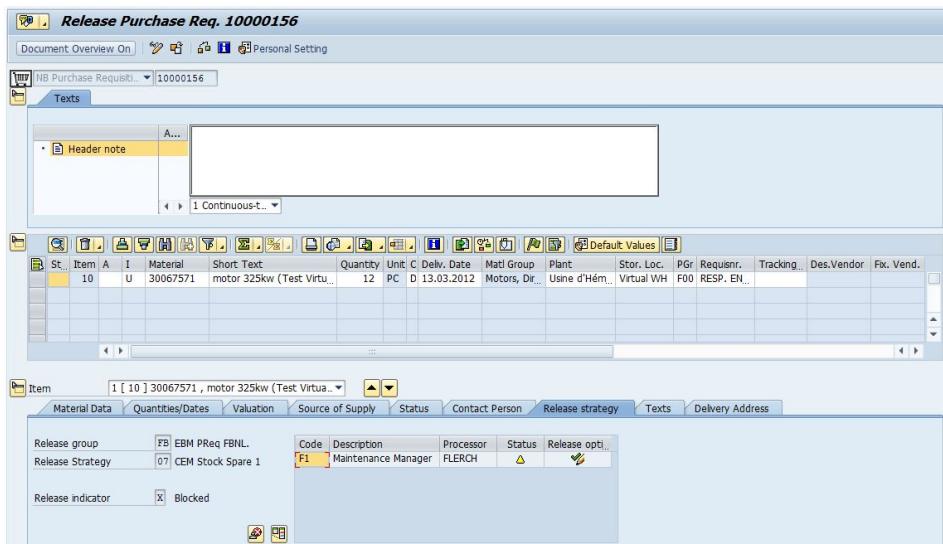
If material is set up with MRP parameters. Once MRP is triged for requester plant it will generate a planned order to be convert into a PR and PO

In this cases PR will be created manually thought the standard transaction . The vendor in the case of the intercompany should be the supplier plant and previously has to be created VXXX (XXXX is the plant code)

5.4.2 Release PR

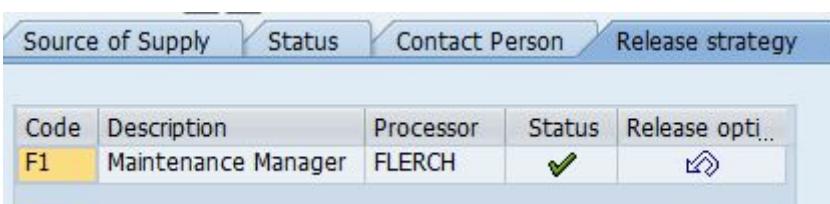
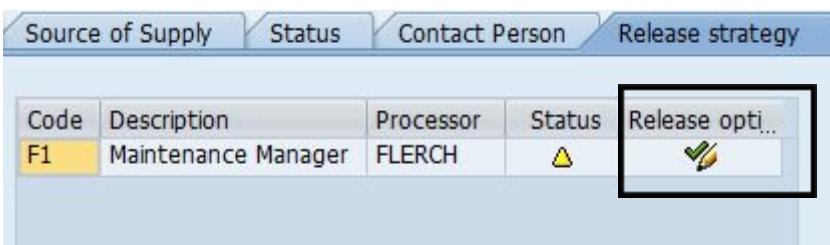
(ALSO APPLY FOR SPOT TRANSFER PROCESS)

After the MRP run, a purchase requisition for a “Stock Transfer PO” has been created.



To release the Purchase request, it has to be checked and in case that data are correct, it can be released (transaction ME54N).

The approves has to click on the Release option in the “Release Strategy” tab.



After release the PR, press on Save button .

For more information go to [chapter 4.5](#)

5.5 Stock transfer Purchase Order

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

After the Purchase Requisition has been released, the purchasing department will create a Stock Transfer Purchase Order.

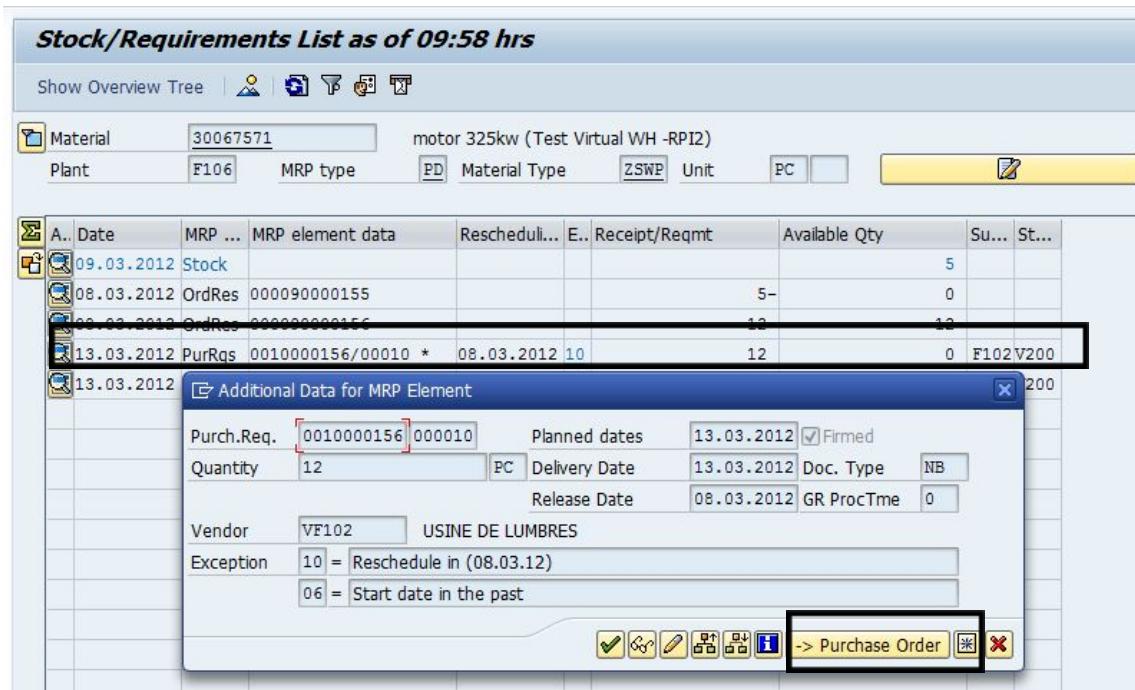
Main Menu

Logistics > Material Management > Purchasing > Create

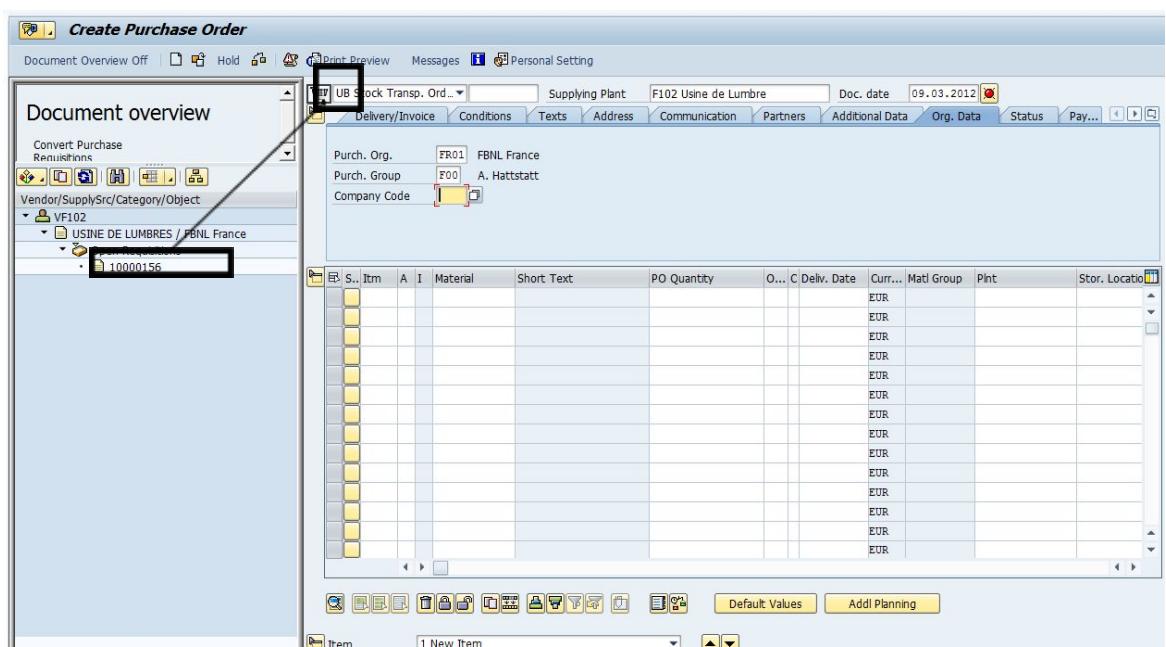
Transaction Code	ME21N
-------------------------	-------

Other transaction to create the purchase order from the purchase request released is MD04.

Select the PR, and click on the button “Convert in Purchase Order”.



In the “Create Purchase Order” screen, select the purchase request and drag to the shopping cart.



Then all data from the purchase request will be copied to the PO. Remember to select the “Standard PO”.

The screenshot shows the SAP Standard Purchase Order (PO) interface. The top navigation bar includes 'Document Overview On' (dropdown), Print Preview, Messages, and Personal Setting. The main header displays 'Standard PO 4500000562 Created by Rodrigo Pitarch'. Below the header, the document number '4500000562' is selected in a dropdown. The vendor is listed as 'Z8101 AD CEM Plant. 8101'. The document date is '09.04.2012'. The purchase order table lists one item: '10 30000141 motor 325kw (Test Virt...)' with a quantity of '10 PC'. The delivery date is '30.03.2012'. The net price is '832,00 ZAR'. The material group is 'PC Motors, Dire...ZA CEM Plant.' and the storage location is 'Virtual WH'. The bottom section shows the delivery schedule with 'Delivery Type' set to 'NLCC'. Other fields include 'Replen.Cross-Com...' (checkbox), 'Delivery Date' (30.03.2012), 'Sales Org.' (AD02), 'Sales Org. AD02' (checkbox), 'Shipping Point' (8002), 'Shipping Point 80...', 'Delt. Creation Date' (30.03.2012), 'Distr. Channel' (10), 'Domestic D.C.', 'Dtl. Prior.' (checkbox), 'Planned Delv. Time' (0 Days), 'Division' (10), 'Clinker & Cement', 'Shipping Cond.' (02), 'Train' (checkbox), 'Order Combinat.' (checkbox), 'Loading Group' (0001), 'General' (checkbox), 'Customer' (C9101), 'Plant' (9101), 'JOHANNESBURG', 'Trans. Group' (0001), 'Standard transp g...', and 'Unloading Point' (checkbox).

Check all data, and press on Save button

5.6 Material Availability Check (ALSO APPLY FOR SPOT TRANSFER PROCESS)

Transaction Code ZPM002

Through this transaction it is possible to check the material availability for the PM order.

Work Order User Status - Material Availability

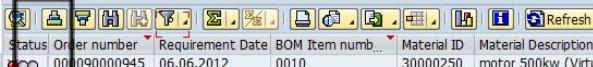
The screenshot shows the SAP Fiori interface for the "Work Order User Status - Material Availability" application. The top navigation bar has a blue background with the title. Below it is a toolbar with icons for search, refresh, and other functions. The main area is divided into sections:

- Selection criteria:** A grid of fields for filtering work orders. Each row has input fields for 'from' and 'to' dates, and a yellow arrow icon for filtering.
- ALV Variant Selection:** A section for selecting variants, currently showing 'Layout'.

Below the ALV section, there is a checkbox labeled "Flag exclude ALAV status".

Fill in the selection fields (Order Type, Material, Planning Plant...), and click on Execute button.



Work Order User Status - Material Availability											
											
Status	Order number	Requirement Date	BOM Item numb...	Material ID	Material Description	Required Quantit...	Item Catego...	Storage Location	Stock Quantity	Unit	
OKO	000090000945	06.06.2012	0010	30000250	motor 500kw (Virtual WH -Test RPI)	20,000	L		20,000	ST	

Material is not available in the Receiving plant, stock transfer has to be done.

5.7 Intercompany Transfer

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

5.7.1 Outbound delivery

Follow same process described for intra company transfer, [chapter 4.8.1](#)

Main Menu	<i>Logistic> Sales and Distribution > Shipping and Transportation > Outbound Delivery > Collective Processing of Document Due for Delivery</i>
Transaction Code	VL10B

5.7.2 Good Issue to Transport order

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Follow same process described for intra company transfer, [chapter 4.8.2](#)

Main Menu	<i>Logistics > Inventory Management > Good Movements</i>
Transaction Code	MIGO

Good Issues can be checked in the PO ("Purchase Order History" tab), if you click on the Good Issue number, you can go in detail of it.

Display Material Document 4900005392 - Rodrigo Pitarch

General		Doc. info											
Document Date	06.06.2012	Delivery Note	0080004862										
Posting Date	07.06.2012	Bill of Lading											
<input type="checkbox"/> <input checked="" type="checkbox"/> 1 Individual Slip		HeaderText											
Line	Mat. Short Text	Qty in UnE	E...	SLoc	Cost Center	Bu...	Profit Center	G/L Account	Batch	Valuation ...	M...	D Stock	T...
1	motor 500kw (Virtual WH -Test RPI)	10	PC	Virtual WH	8101AF001	1000	8101AF001	3209001			643	-	Unrest
<input type="button" value="Print"/> <input type="button" value="Save"/> <input type="button" value="Print"/> <input type="button" value="Save"/>													

Material **Quantity** **Where** **Purchase Order Data** **Stock Transfer** **Account Assignment**

Material	motor 500kw (Virtual WH -Test RPI)	30000250
Material Group	031099	

5.7.3 Good Receipt in the Stock of Receiving plant

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Follow same process described for intra company transfer, [chapter 4.8.3](#)

Main Menu	<i>Logistics > Inventory Management > Good Movements</i>
Transaction Code	MIGO

After that, you can check in the PO the received movements ("Purchase Order History" tab)

Clicking on the Good Receipt number, you can go in detail of it.

Display Material Document 5000001365 - Rodrigo Pitarch

Show Overview | Hold | Check | Post | Help

A04 Display | R02 Material Docu... | 5000001365 | 2011 |

General Vendor Doc. Info

Document Date	07.06.2012	Delivery Note		Vendor	P2P AD CEM Plant...
Posting Date	06.09.2011	Bill of Lading		HeaderText	
<input type="checkbox"/> <input checked="" type="checkbox"/> 1 Individual Slip					

Line Item Details

Line	Mat. Short Text	Qty in UnE	E...	SLoc	Bu...	Profit Center	Batch	Valuation ...	M...	D...	Stock Type	Plnt	S...
1	motor 500kw (Virtual WH -Test RPI)	10	PC	Virtual WH	1000	8104AG001		101 +	Unrestrict...		AD CEM Pla...		
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>													

Material Data

Material	motor 500kw (Virtual WH -Test RPI)	30000250
Vendor Material No.		
Material Group	031099	

5.7.4 Invoice

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

- Customer Invoice

Customer invoice (cross company invoice type ZNIC) to be done through **transaction VF01** and based on the outbound delivery already created

- Invoice receipt

Invoice receipt done through **MIRO transaction** referring to the PO already created. If transport cost are needed to be taken in account it can be done using PO price conditions type ZF*

For more detailed information please check training B2R documentation

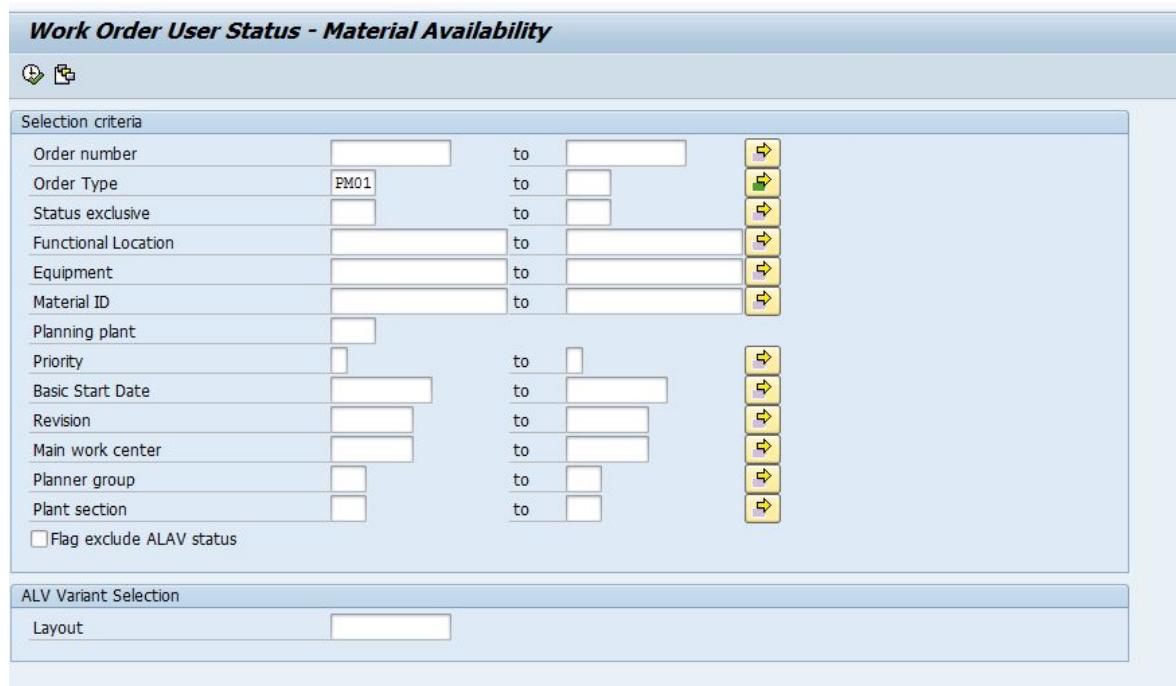
<https://sites.google.com/a/holcim.com/cp-ebm-training/b2r-training>

5.8 Material Availability Check

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Transaction Code	ZPM002
-------------------------	--------

Through this transaction it is possible to check the material availability for the PM order.



Complete the selection fields (Order Type, Material, Planning Plant...), and Click on Execute button, .

After done the good receipt in the Receiving plant, the material should be available to be used in the Work Order.

Work Order User Status - Material Availability												
												
Status	Order number	Requirement Date	BOM Item numb...	Material ID	Material Description	Required Quantit...	Item Catego...	Storage Location	Stock Quantity	Unit	Pending purchase Quantit...	...
OK	000090000945	06.06.2012	0010	30000250	motor 500kw (Virtual WH -Test RPI)	20,000	L		20,000	ST	0,000	

5.9 Spare Part Reception/consumption

(ALSO APPLY FOR SPOT TRANSFER PROCESS)

Same process as described in [chapter 4.10](#) for Intra-company.

6. Annexes

6.1 Naming convention

Starting 1st January 2014 the working mode is all maintenance and modification of materials master data under naming convention are performed by EMEA MDM Team for EBM platform Clusters.

The request for the creation of new material, modification or block, should be done via excel till June 2014 when the final solution will be implemented. The excel should be used for materials under **Naming Convention**, **Virtual Warehouse** and **Solid Fuels**

Below you can find the list of PCS that are under the scope mentioned above:

Grinding Media	Refractories	Motors
- 040203 Grinding Media Casted	- 040106 Magnesia Brick - 040107 Dolomite Brick - 040108 High Alumina Brick	- 031002 Slip Ring - 031003 Squirrel Cage - 031008 Gear Motor
VSD	Belts	Bearings
- 030907 Electronic Modules - 030913 Electronic components	- 040925 Spec_vw - 040925 Elev_vw - 040925 Conv_vw	- 030201 Angular Contact Ball B. - 030202 Barrel Bearings - 030203 Cylindrical Roller B. - 030204 Deep Grove Ball B. - 030205 Four Point Contact B. - 030206 Magneto Bearings - 030207 Needle Roller B. - 030208 Self-aligning Ball B. - 030209 Spherical Roller B. - 030210 Tapered Roller B. - 030211 Thrust Bearings - 030212 Y-Bearings
Solid Fuels		
- 020101 Coal, Anthracite, Bituminous, Sub-bit coal - 020102 Petcoke - 020103 Lignite		

Once you have identified which material that you need to create, modify, block, and if it is part of the Naming convention, Virtual Warehouse or Solid Fuels, you know that it should be requested via excel to the MDM Team, the next step is to fulfill the template.

The template will require some mandatory fields if the material is going to be part of the Standard Warehouse, and some additional mandatory fields of is going to be part of the Virtual Warehouse.

So the first step is to identify if the material is going to be part of the Standard or the Virtual Warehouse. For this purpose, you will have to check the excel template, which will give you the instructions to find to which Warehouse the material should be created:

- Select the tab of the material that you are going to create, for example, bearings



- Check the exact PCS of your material, for example 030201

030201_vw									
Characteristic Name	Commodity	Bearing Series code	Bore ref	Extention	Clearance	DIN/ISO code	Type	Warehouse Type	
Characteristic Technical Name	ZNC_COMMODITY	ZNC_BEARING_CODE	ZNC_BEARING_RING_DIA_METER	ZNC_BEARING_C_ODE_EXTENSION	ZNC_CLEARANCE	ZNC_DIM_ISO_CODE	ZNC_TYPE	ZNC_WAREHOUSE	
030201	M.	M	M	M	O	O	O	M.	
030201_vw	M	M	M	M	M	O	O	M	
Data type	Char	Char	Char	Char	Char	Char	Char	Char	
Number of Charts	7	15	4	20	2	30	30	2	
Decimal places	0	0	0	0	0	0	0	0	
Unit									
In Virtual Scope All regions (Taking as reasonable a value of 1200)				≥ 30					
Introduce values from the possible ones listed below									

- Follow the instructions to check if is part of the Virtual Scope, in the example above, if the “Bore Ref” is more or equal to 30, the material will be part of the Virtual Warehouse.
- If the material is part of the **Standard Warehouse** you will have to fill the mandatory fields of the line headed by 030201
- If the material is part of the **Virtual Warehouse** you will have to fill the mandatory fields of the line headed by 030201_vw
- In this tab, you will have to fill the values of the product that you are requesting to create depending if it is Virtual or Standard

Values for 030201								
Values for 030201_VW								

Also in the tab new material:

Volume unit	M3 by default
Organizational Data	
Plant	
Storage Location	
Sales Organization	
Distribution Channel	
Valuation type	
Classification	
Class type	001-Material Class 022-Batch 200-Material (Configurable Objects) 300-Variants Z01-Material Distribution in external systems
Class type - Naming Convention <small>PCS selected</small>	
<input type="text" value="ZNC-Type of class for Naming Convention"/> <small>040107_Dolomite Brick</small>	
<input type="button" value="Instructions"/> <input type="button" value="New Material"/> <input type="button" value="Change-Extend Material"/> <input type="button" value="Block Material"/> <input type="button" value="PCS list V 7.1"/> <input type="button" value="Material"/>	

You will need to fill all the information required for the creation of the material. Plant, Storage Location, MRP parameters, Sales parameters and any other info that you consider important.

Once you have filled the template, you have to send it to the EMEA MDM Team:

mdm.team-emea@holcim.com

6.2 Indicators

A solid, understandable and comparable base of performance measurements is needed if an organization wants to understand where the opportunities lie for improvement, wants to capitalize on those opportunities and wants to evade slipping back. Comparing performance indicators - along the time axis or between organizations - creates a learning challenge and gives management a tool to follow up on the progress of ongoing as well as on the sustainability of completed projects.

During the planning process of the work order several indicators will be impacted, on the following lines you will find main indicators affected by this step and how indicators interact during planning process

Maintenance relevant indicators are structured based on their intention and on the relevant requirements on the different management levels. Two different types of indicators are defined:

- KPI: Key Performance Indicators (K)

Key Performance Indicators are quantifiable measurements, defined upfront, that reflect the critical success factors of an organization. Key Performance Indicators usually are long-term considerations and the definition of what they are and how they are measured do not change often. KPI's are typical lagging indicators that reflect on a high level (e.g. management level 1 and 2) the historical performance of an organization.

A KPI is the necessary information to manage a particular part of the business on different management levels. In regards to maintenance relevant indicators, the maintenance KPI's shall focus on:

- Specific, uniform targets
- Long-term targets
- Shall be compared / benchmarked on a global level
- Typical lagging indicator (consequence of many leading indicators System and Process Performance indicator)

- SPI: System & Process Performance Indicators (S)

Complementary to the KPI's, the SPI's are an additional set of leading indicators in which the local management can select the appropriate one. The SPI's are therefore useful as short-term predictors of the performance. In addition they shall provide indications how well maintenance processes are in use in order to provide most effective support to the maintenance management system. The SPI's are mainly used by the direct responsible at plant level and shall focus on:

- Specific ranges or references
- Short-long term reference
- Local or regional review (e.g. audit)
- Reference to Quality of Maintenance
- MAC SAP standard compliance

The target and reference value define in this document has been defined based on LafargeHolcim experience. However some new indicators will need adjustment of target after analysis of actual results, for these indicators estimation has been discussed among LafargeHolcim maintenance

Number of Goods Issues by virtual Warehouse

MRP Usage: PR created through MRP tool/ Total number of PR

Planning accuracy: Number of material with different MRP types

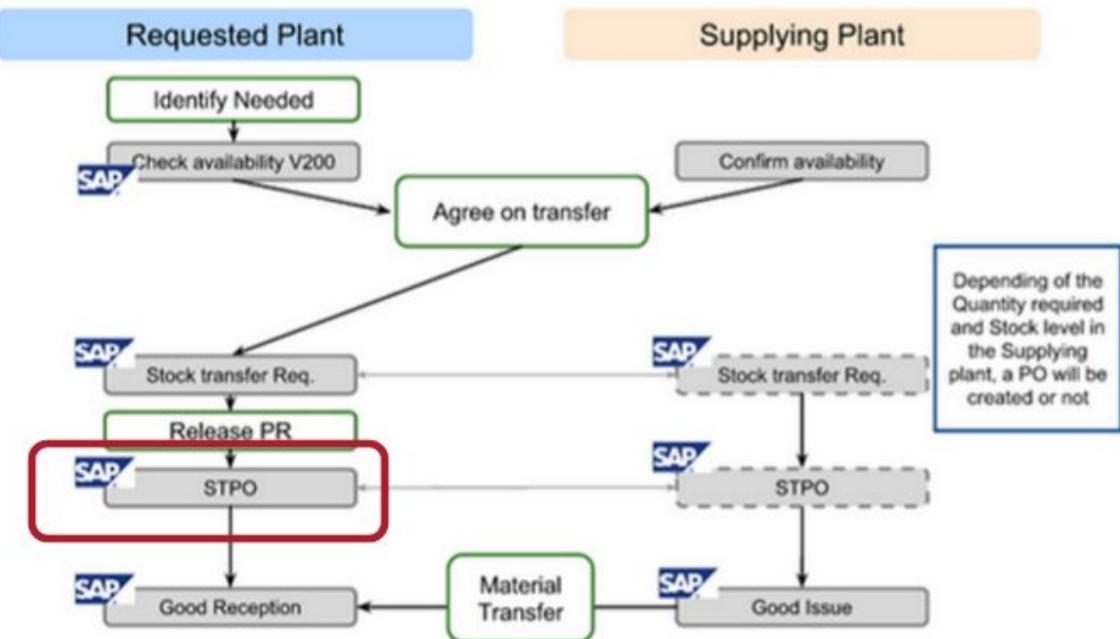
- Materials with MRP Type 'ND'
- Materials with MRP Type 'PD'
- Materials with MRP Type 'V1'
- Materials with MRP Type 'VB'
- Inventory value with MRP Type 'ND'
- Inventory value with MRP Type 'PD'
- Inventory value with MRP Type 'V1'
- Inventory value with MRP Type 'VB'

6.3 Special processes for Capitalized Spare Parts

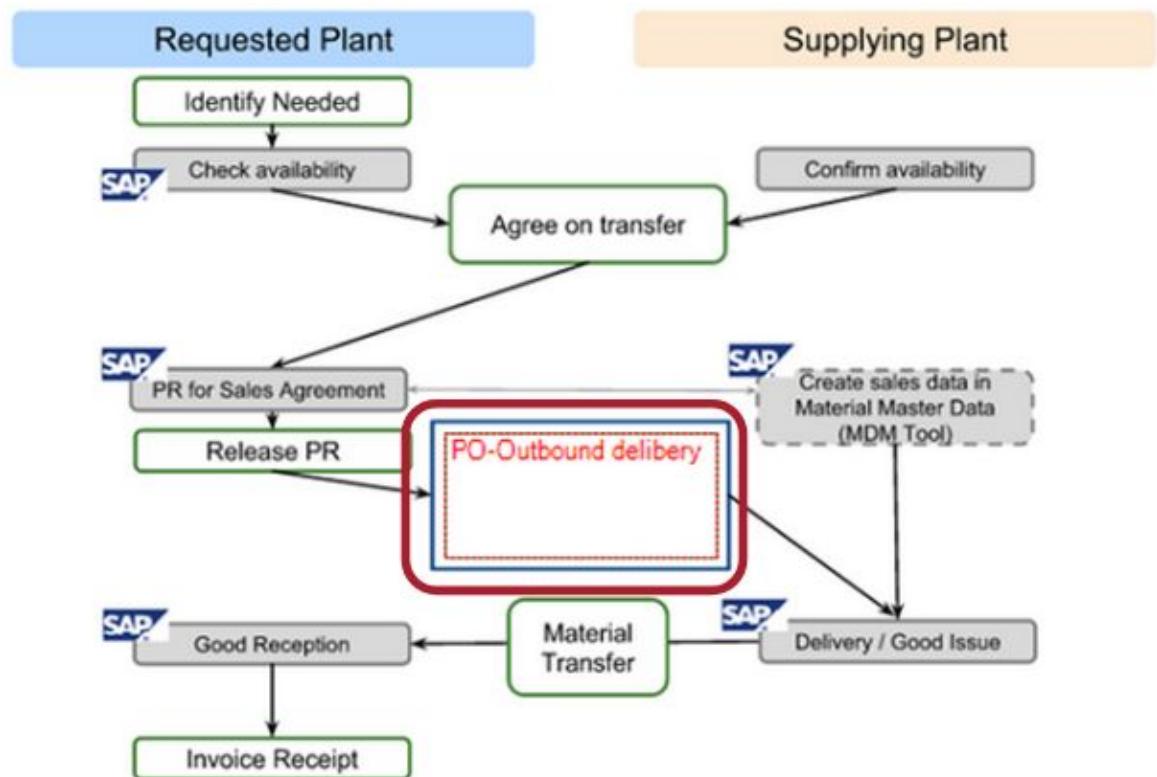
6.3.1 Transfer of capitalized spare parts (Intra / Inter-company)

Process must be exactly the same as included in Spot transfer scenario, but with the unique difference than the STPO or PO (Intra or Inter transfer) should contain the **account assignment "Q"** (project on stock)

Intracompany



Intercompany



6.3.2 Reparation of capitalized spare parts

Steps

1. Installed motor is asset with depreciation
2. Motor as project on stock is asset without depreciation, after installation depreciation starts
3. Broken motor has a remaining asset value, when it is dismantled. The depreciation stops with dismantling
4. Repair of motor has a cost and motor returns on project on stock. The costs for repair are charged on costs or
5. Capex depending on HARP rules
6. The asset value of the repaired motor will change according to repair costs (capitalized)
7. The repaired motor remains as project on stock without depreciation until usage
8. Check usage of PM orders for refurbishment of cap spare parts

6.3.3 Intercompany sales of Fixed Assets

In case one of the plants purchase FA which threshold meets the capitalization threshold it's CAPEX. It should be created HV project and be approved the same way and pass the same root as any other CAPEX project. In the field "Comments to Approval Request" it should be mentioned that the project is funded by Proceeds from sales of PPE interco.

In the OpCo package the impact will be eliminated CAPEX-Proceeds interco but your CAPEX FC will be increased and the approval for this you will receive when management approve your CAPEX request.

Example: FA sold from PL04 to PL12

Steps

1. create a High Value Capex project per plant of PL12, without defining the SCOPE (so that it was not fund by Capex envelope)
2. post there PR,PO and interco invoices,
3. finish the project by creating a "OT document" - document that allows to adopt FA on property of PL12 in all 3 books: 0L Group, L1 statutory and L2 fiscal
4. Financial Controller would report those projects separately and show them as "not Capex"

6.4 Table of transaction

Transaction	Description
MM01	Create a Material
MM02	Change a Material
MM03	Display a Material
MIGO	Good Movement
MMBE	Material Stock overview
MB51	List of Material Documents
MB52	Display Stock List
MB5T	Display Stock in Transit
MB5B	Display Stocks for Posting Date
IW31	Create a PM Work Order
IW32	Change a PM work Order
IW33	Display a PM work Order
MD01	Run MRP
MD03	MRP Singel-Item planning
MD04	Display Stock Requirement Situation
ME53N	Display a Purchase Requisition
ME54N	Release a Purchase Requisition
ME21N	Create a Purchase Order
ME23N	Display a Purchase Order
ME28N	Release a Purchase Order
VL10B	Outbound Delivery



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