

# Design Document

## Material Management Release Procedure



**COMPANY : Xyz group**

**Release Procedure**

**PROJECT : Support**

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Submitted To

Sl. No	XYZ Group	XYZ	Prepared by	Date	Signature
1.				21.10.2016	



COMPANY : Xyz group

Release Procedure

PROJECT : Support

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## 1.0 BUSINESS REQUIREMENT

The procurement department of Xyz group consists of many buyers who are responsible for buying goods from the market. There is a hierarchy of people like the operator or the buyers who create the order/request and Procurement Head to Other Department and control the procurement process.

Xyz group needs approval process for different area like Purchase requisition, purchase order and also they have required approval proceed at Goods receipts (Quality approval) and Invoice verification (Park Invoice).

## 2.0 Release Procedure for Material Management

The release strategy defines the approval process for purchase requisitions or external purchasing documents. The strategy specifies the release codes necessary and the sequence in which releases have to be affected. In Xyz group, one release code defines for Purchase requisition and one release code for Purchase Order.

The release codes are basically controlled via a system of authorizations (authorization object M\_EINK\_FRG). The user with specific release code assigned can perform a respective release in a purchase order/ Purchase Requisition. When the purchase order is saved or checked, system will trigger the Release Strategy for that document depending on the defined criteria. In the purchase order which is required to be released by a higher level user, there will be a Release Strategy tab on header of the PO document.

- Release code P8 for Plant Head (Purchase Requisition)
- Release code m4 for Procurement Head (Purchase Order)

- **Characteristics:** - In this step, you create characteristics for a release procedure with classification. Classification characteristics constitute the criteria for a release condition. If the criteria of a release condition are satisfied, the associated release strategy is assigned to the purchase requisition / Purchase order.

For Purchase Requisition

PR_PLANT	Plant
PR_PRTYPE	Document type
PR_PURGRP	Purchasing Group

For Purchase Order



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PO_PLANT	Plant
PO_DOCTYPE	Document type
PO_DOCATG	Purchasing document Category

- **Class:** - In this step, you create classes for a release procedure for purchase requisition / purchase order. You use a class to group together characteristics that are to constitute a release condition for a release strategy.

For Purchase requisition

PR Release	PR_RELEASE
------------	------------

For Purchase Order

PO Release	PO_RELEASE
------------	------------

The assignment of the release strategy to a requisition or a purchasing document is based on the release conditions.

Release code, release strategy for Purchase requisition and Purchase Order

	Purchase Requisition	Purchase Order
Release group	PR	PO
Release code	P8	R4
Release strategies	R8	R4

## 2.1 SAP Standard Feature “Quality Approval and Park invoice”

In standard SAP, Quality Approval and park invoice already there. Quality department of xyz group user is recording the accurate result in QA32 transaction code, and also putting the acceptance of decision. There is standard feature in SAP for quality approval.

Park invoice is standard feature in standard SAP, Account Head approve the document after completion of park invoice.

## 2.2 Preparation of required objects for Release Strategy in SAP

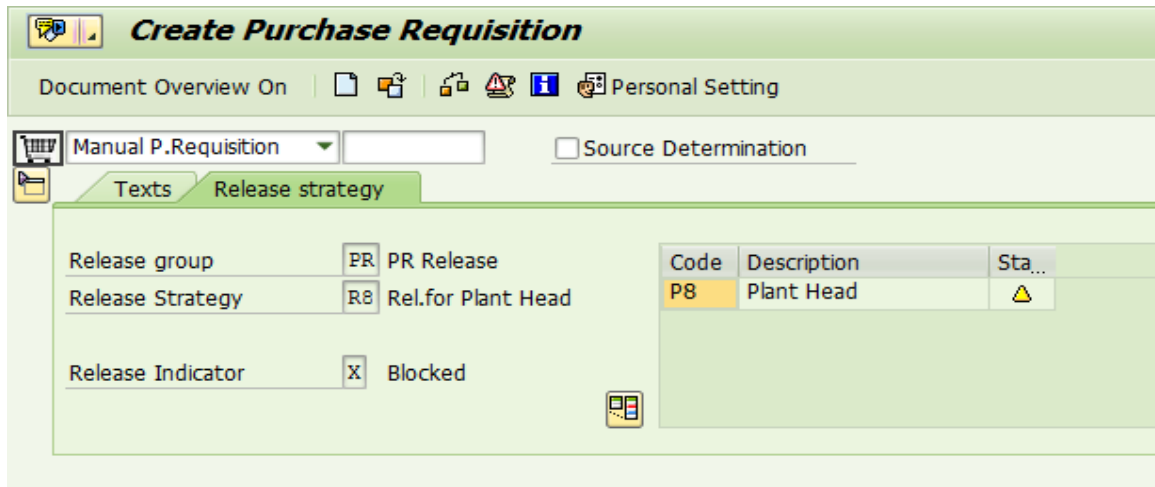
Before we start configuring release strategy in SAP, we need to define the combination of parameters to trigger the release. This triggering criterion can be a combination of Plant, Document type, and document category along with value depending on which the number of release codes are assigned when the document is created. In SAP we have a run time structure with name CEBAN (for Purchase Requisition), CEKKO (for Purchase order) (Communication Release Strategy Determination Purchase Document) which provides all the possible list of fields using which a release strategy can be configured. To view all this fields of the structure you can use transaction code SE12. In SE12 screen, in the database field provide the structure name CEKKO, CEBAN and click on Display button.

## 3.0 Release procedure for Purchase Requisition

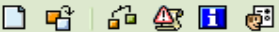
Purchase Requisition (PR) is an internal purchasing document in SAP ERP. A user creates a PR to notify the responsible department, usually the purchasing/procurement department, about his requirement of materials and/or external services. After creation of Purchase requisition Plant head release the document.

If we release a PR, all items in that PR will be released and then can be processed to be Purchase order. If we don't release it, none of its item will be released nor can be processed to be Purchase order.

Step1. Release Purchase Requisition (Transaction code ME54N)



**Create Purchase Requisition**

Document Overview On  Personal Setting


Manual P.Requisition  ☐ Source Determination

Texts Release strategy

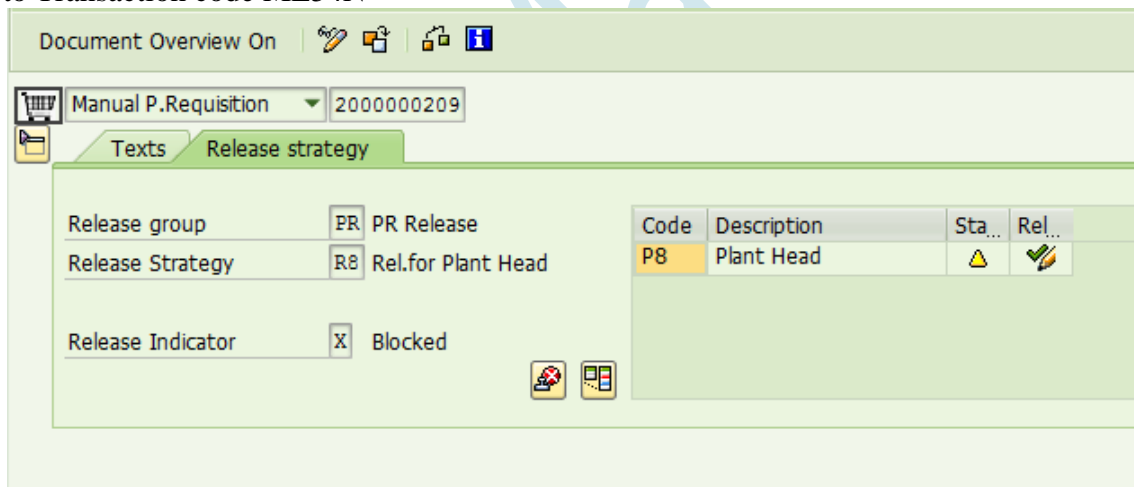
Release group  PR Release

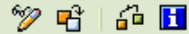
Release Strategy  Rel.for Plant Head

Release Indicator ☒ Blocked

Code	Description	Sta...
P8	Plant Head	

Go to Transaction code ME54N



Document Overview On 



Manual P.Requisition  ☐ Source Determination

Texts Release strategy






Release group  PR Release


Release Strategy  Rel.for Plant Head


Release Indicator ☒ Blocked


Code	Description	Sta...	Rel...
P8	Plant Head		


Click on Release button 

Document Overview On      Personal Setting


Manual P.Requisition  2000000209

 Texts Release strategy


Release group	PR PR Release	Code	Description	Sta...	Rel...
Release Strategy	R8 Rel.for Plant Head	P8	Plant Head	✓	

Release Indicator 2 RFQ/purchase order 


☒ Release effected with release code P8

Save the document 

Manual P.Requisition  2000000209

 Texts Release strategy

Release group	PR PR Release	Code	Description	Sta...
Release Strategy	R8 Rel.for Plant Head	P8	Plant Head	✓

Release Indicator 2 RFQ/purchase order 

☒ Purchase requisition 2000000209 changed

Document successfully released.  
Now Purchase requisition is ready for RFQ or Purchase order.

## 4.0 Release procedure for Purchase Order





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Purchase order is an instruction or order from a purchasing organization to a vendor or a plant to supply or provide a certain quantity of goods by a certain point in time. After creation of Purchase order, Procurement head Approval / Release the document for order the goods from respective vendor or party.

Purchase order is a legal document and it goes outside the company to the vendor, it is very much important to control the process to avoid any errors or unauthorized transaction. When the Purchase order is processed further for goods receipt and invoice verifications, there will be accounting entries generate and it creates Accounts Payable entries.

Because of this reason and legal implications of Purchase orders, it is very much required to control the procurement process by introducing approvals. For the same, SAP has provided a concept of release strategy. In release strategy, there are different released codes which are used for designated users. The release code is a two character ID allowing a person to release (clear, or approve) a purchase requisition or an external purchasing document.

#### Step1. Release Purchase Order (Transaction code ME29N)

Go to the transaction code ME29N



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**Release Standard PO 4500000251**

Document Overview On Print Preview Messages Personal Setting

Standard PO 4500000251 Vendor 20000000 ABC Vendor Doc. date 21.10.2016

Delivery/Invoice Conditions Texts Address Communication Partners Additional Data Org. Data Status Release strategy

Release group PO PO Release  
Release Strategy R4 PO Rel.  
Release indicator 1 Blocked

Code	Description	Sta...	Rel...
M4	Procurement Head		

Click on Release button

**Release Standard PO 4500000251**

Document Overview On Print Preview Messages Personal Setting

Standard PO 4500000251 Vendor 20000000 ABC Vendor Doc. date 21.10.2016

Delivery/Invoice Conditions Texts Address Communication Partners Additional Data Org. Data Status Release strategy

Release group PO PO Release  
Release Strategy R4 PO Rel.  
Release indicator 2 Release

Code	Description	Sta...	Rel...
M4	Procurement Head		

Release effected with release code M4

**Standard PO 4500000251 Created by MGMMCONS**

Document Overview On Print Preview Messages Personal Setting

Standard PO 4500000251 Vendor 20000000 ABC Vendor Doc. date 21.10.2016

Delivery/Invoice Conditions Texts Address Communication Partners Additional Data Org. Data Status Release strategy

Release group PO PO Release  
Release Strategy R4 PO Rel.  
Release indicator 2 Release

Code	Description	Sta...
M4	Procurement Head	

Save the document

☒ Standard PO 4500000251 changed

Purchase order successfully released.

Now Purchase order document is ready for Goods receipts.

## 5.0 Quality Approval at Goods receipts (MIGO)

Goods receipt is the process of receiving materials against the Purchase order in to the Madina.

Receiving goods with reference to Purchase order. When goods are received, inventory will be increased.

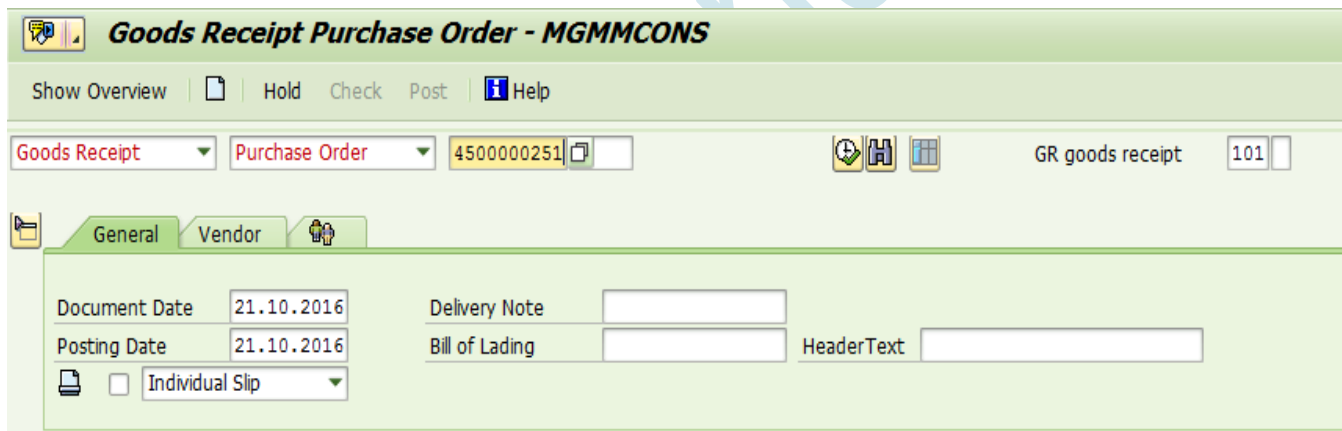
During the material movement, material document is generated for all movements. Relevant accounting and controlling documents are also created for relevant movement types.

After that stock is shown at Quality stock, Quality department Release/ QA the stock from quality inspection stock to unrestricted stock.

Following steps for Quality Approval:-

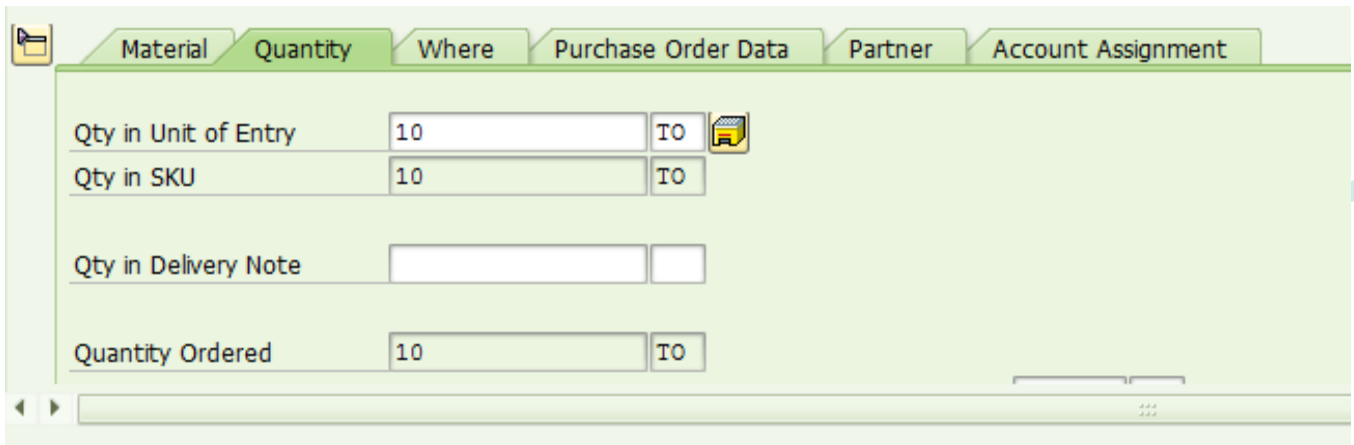
Step1: - Goods Receipts against Purchase Order (MIGO) with Movement type 101(GR goods receipt).

Go to the transaction Code MIGO, Enter Purchase order with respective field like quantity.



The screenshot shows the SAP MIGO transaction screen titled "Goods Receipt Purchase Order - MGMMCONS". The interface includes a menu bar with "Show Overview", "Hold", "Check", "Post", and "Help". Below the menu, there are dropdowns for "Goods Receipt" and "Purchase Order", followed by the PO number "4500000251". To the right, there are icons for "GR goods receipt" and a field for "101". The main area has tabs for "General" and "Vendor". Under the "General" tab, there are fields for "Document Date" (21.10.2016), "Posting Date" (21.10.2016), "Delivery Note", "Bill of Lading", and "HeaderText". There is also a checkbox for "Individual Slip".

Enter





The screenshot shows the SAP Material Management interface with the 'Quantity' tab selected. The fields are as follows:


Field	Value	Unit
Qty in Unit of Entry	10	TO
Qty in SKU	10	TO
Qty in Delivery Note		
Quantity Ordered	10	TO










If required then change the quantity as per business


**Goods Receipt Purchase Order 4500000251 - MGMMCONS**


Show Overview |  Hold Check Post  Help


Document Date 21.10.2016 Delivery Note  Vendor ABC Vendor  
 Posting Date 21.10.2016 Bill of Lading  HeaderText   
☐ Individual Slip

Line	St...	Mat. Short Text	OK	Qty in UnE	E...	SLoc
1		Clinker	<input checked="" type="checkbox"/>	5	TO	RM Shed - 1


     Delete  Contents    



 Material Quantity Where Purchase Order Data Partner Account Assignment

Movement Type 101  + GR goods receipt Stock type Quality inspection

Plant MCIL Unit-I 1010   
 Storage Location RM Shed - 1 RM01  
 Goods recipient   
 Unloading Point   
 Text

Check  & post  the document.

 Display logs

Typ	Item	Message text	LText
	1	Deficit of PU Ordered quantity 5 TO : 11000011 1010 RM01	

☒ Material document 5000000266 posted

Material document successfully posted.

Step 2: - **Quality Department** Approval the material as per there inspection in transaction code QA32  
Go to the transaction code QA32 for Quality Approval.  
Put material Number & Plant

### Inspection Lot Selection

My default

Inspection lot selection


Selection Profile	<input type="text"/>			
Lot created on	<input type="text" value="14.10.2016"/>	to	<input type="text" value="21.10.2016"/>	
Insp. start date	<input type="text"/>	to	<input type="text"/>	
End of Inspection	<input type="text"/>	to	<input type="text"/>	
Plant	<input type="text" value="1010"/>	to	<input type="text"/>	
Insp.lot origin	<input type="text"/>	to	<input type="text"/>	
Material	<input type="text" value="11000011"/>		<input type="text"/>	
Batch	<input type="text"/>	to	<input type="text"/>	
Vendor	<input type="text"/>	to	<input type="text"/>	
Manufacturer	<input type="text"/>	to	<input type="text"/>	
Customer	<input type="text"/>	to	<input type="text"/>	
Material class	<input type="button" value="Class selection"/>			
Maximum No. of Hits	<input type="text" value="100"/>			

Click on execute button 

### Change data for inspection lot: Worklist for Inspection Lots

Usage decision (UD) Defects Defects Results Inspection lot

Mon...	A Insp. L...	Material	Plant	Lot Qty	BU...	L...	S...	Start date	End Date	System Status
	10000...	11000011	1010	5	TO	0	0	21.10.2016	21.10.2016	REL CALC SPRQ

Click on results  Results , Put the required result

**Record Results: Characteristic Overview**

Defects... Inspection Method Control chart Histogram Run values (run chart)

Material 11000011 Clinker

Insp. Lot 10000000193

Oper./Act. 0010 Plnt 1010

General Summarized Indicators

Force Further details...

A...	R...	S...	Short text for the i...	Specifications	Inspect	Inspected	Si...	Result	Original V
<input type="checkbox"/>	<input type="checkbox"/>	0	Alumina Modulus	0.00 .. 2.00 %	1			2	
<input type="checkbox"/>	<input type="checkbox"/>	0	Di Calcium Silicate	0.00 .. 2.00 %	1			2	
<input type="checkbox"/>	<input type="checkbox"/>	0	Tri Calcium Alluminate	0.00 .. 2.00 %	1			2	
<input type="checkbox"/>	<input type="checkbox"/>	0	Tetra Calcium alumin...	0.00 .. 2.00 %	1			2	

Enter

Manual Valuation

Char. 10 Alumina Modulus

Make a decision:

☒ Accept

☐ Reject

Accept

Enter

### Record Results: Characteristic Overview

Defects... Inspection Method Control chart Histogram Run values (run chart) Results history

Material 11000011 Clinker


Insp. Lot 10000000193

Oper./Act. 0010 Plnt 1010

General Summarized Indicators

Force Further details...

A...	R...	S..	Short text for the i...	Specifications	Inspect	Inspected	Si...	Result	Original Va...	V...	Defect ...
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	Alumina Modulus	0.00 .. 2.00 %	1	1		= 2.000	2	✓	▼
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	Di Calcium Silicate	0.00 .. 2.00 %	1	1		= 2.000	2	✓	▼
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	Tri Calcium Alluminate	0.00 .. 2.00 %	1	1		= 2.000	2	✓	▼
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	Tetra Calcium alumin...	0.00 .. 2.00 %	1	1		= 2.000	2	✓	▼

Save the document 

☒ Results were saved for operation 0010

Usage decision

### Change data for inspection lot: Worklist for Inspection Lots

Usage decision (UD) Defects Defects

Moni...	A	Insp. L...	Material	Plant	Lot Qty	BUn	L...	S...	Start date	End Date	System Status
		10000...	11000011	1010	5	TO	0	0	21.10.2016	21.10.2016	INSP RREC SPRQ

Click on Usage decision  Usage decision (UD)



Usage decision

UD code

Quality score  From usage decision code

FollowUpActn

Put the UD Code

Decision Usage decisions

01 01 Goods receipt (warning)

- ▶ ☒ A Accept
- ▶ ☒ CR Conditional Release
- ▶ ☒ PA Partial quantity acceptance
- ▶ ☒ R Rejected

Select the UD code as per Quality Department

Usage decision

UD code    ACCEPT

Quality score  From usage decision code

FollowUpActn

Enter

Put the quantity

Quantity posted	To be posted	
Total 0	5	StLoc
To unrestricted use 0	<input type="text" value="5"/>	RM01
To scrap 0	<input type="text"/>	
To sample usage 0	<input type="text"/>	

Save the document

☒ Usage decision for lot 1010 010000000193 is saved

## 6.0 Park Invoice (MIR7) and Invoice verification (MIRO)



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- Madina user can park invoices or credit memos. This means that you enter the invoice data or credit memo data in the system and save it in a document and number has been generated, but the system does not post this invoice initially.
- Document Parking by More than One Accounts Payable Clerk.
- Madina user can change a parked document as often as you wish, for example, by adding or correcting data. The changes are logged.
- The process flow is organized in such a way that one employee parks invoices without checking them. Another employee then performs invoice verification and posts the parked documents, possibly after changing them.
- When you have finished changing the document, you can post the parked document. Only when you post an invoice or credit memo, does the system carry out the normal account movements and make the necessary updates.


**Step1. Park invoice MIR7**



Go to the transaction code MIR7, put Purchase order, and invoice date.

**Park Incoming Invoice: Company Code 1000**

Show PO structure Show worklist  Hold  Simulate  Save as Completed  Messages  Help


Transaction  Balance  BDT







Basic Data Payment Details Tax Withholding tax  

Unpl. Del. Csts  Currency  Exch. Rate  Doc. Type  Inv. Party  Bus. Area  Assignment  G/L  Header Text


Vendor 0020000000


Company  ABC Vendor BANGLADESH








 

  OI

PO Reference G/L Account Material

Purchase Order/Scheduling Agreement   Goods/service items + planned deli... Layout

Item	Amount	Quantity	O...	Purchase ...	Item	PO Text	Tax Code
1	1,000.00	5 TO		4500000251	10	Clinker	V0 (Inpu

Save & Park the document

Save Parked Document (Ctrl+S)




☒ Document number 5105600857 has been parked

Document successfully parked.


Step2. Invoice verification MIRO (Account Head approve the document)




Go to the transaction code MIRO


### Enter Incoming Invoice: Company Code 1000

Show PO structure Show worklist  Hold  Simulate Messages 


Transaction Invoice



Basic Data Payment Details Tax Withholding tax   

Invoice date  Reference

Posting Date 21.10.2016


Amount   ☐ Calculate tax

Tax Amount  V0 (Input Tax)

Text

Company Code 1000 Madina Cement Industries Dhaka



PO Reference G/L Account Material


Click on other invoice document 

#### Choose Invoice Document





Invoice Document No. 5105600857

Fiscal Year 2016

Click on tic 

**Change Parked Invoice Document 5105600857 2016**

Show PO structure |  Simulate |  Save as Completed |  Post | Messages |  Help

Transaction     Balance  BDT

**Basic Data** | Payment | Details | Tax | Withholding tax

Invoice date  Reference

Posting Date

Amount  BDT ☒ Calculate tax

Tax Amount

Text

Paymt terms

Baseline Date

Company Code

Vendor 0020000000

Company

BANGLADESH

**PO Reference** | G/L Account | Material

Purchase Order/Scheduling Agreement





Goods/service items

Layout

Item	Amount	Quantity	O...	Purchase ...	Item	PO Text	Tax Code
	1,000.00		5 TO	<input type="checkbox"/> 4500000251	10	Clinker	V0 (Input Tax)

Post the document

**Change Parked Invoice Document 5105600857 2016**

Show PO structure |  Simulate |  Save as Completed |  Post | Messages |  Help

Transaction: Invoice | 510 | Post (Shift+F11) | Balance: 0.00 BDT

**Basic Data** | Payment | Details | Tax | Withholding tax


Invoice date: 21.10.2016 | Reference: |  
 Posting Date: 21.10.2016 |  
 Amount: 1,000.00 | BDT | ☒ Calculate tax  
 Tax Amount: 0.00 | V0 (Input Tax) |  
 Text: |  
 Paymt terms: Due immediately  
 Baseline Date: 21.10.2016  
 Company Code: 1000 Madina Cement Industries Dhaka

Vendor 0020000000  
 Company: ABC Vendor  
 BANGLADESH









Invoice document was posted; blocked for payment

Go to Transaction code MRBR

**Release Blocked Invoices**



Selection of Blocked Invoices

Company Code	1000	to		
Invoice Document		to		
Fiscal Year		to		
Vendor		to		
Posting Date		to		
Due Date		to		
Purchasing Group		to		
User		to		



COMPANY : Xyz group














Release Procedure


PROJECT : Support

Click the flag  button with selected line item.



### Release Blocked Invoices

 Blocking Reason            

	Sta...	Doc. No.	Year	Crcy	TranslDate	Exchange rate	L.cur	T	Posting Date	CoCd	Invoicing Pty	Name
		5105600858	20...	BDT	15.11.2016	1.00000	BDT	RE	15.11.2016	1000	20000000	ABC Vendor